

**USMC Gender-Integrated Recruit Training Study
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Report Overview

Final Report

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Abstract

Background and Methodology: The U.S. Marine Corps requested an independent academic study to analyze current approaches to gender integration at recruit training, at the Marine Corps and other Services, and to provide alternate models that integrate men and women to the greatest extent possible while continuing to train Marines to established standards. An interdisciplinary team conducted a mixed-methods study. Social science, human and physical performance, and administrative data were collected at the Marine Corps Recruit Depots (MCRDs); and additional social science data were collected at the four sister Services and interviews with experts on gender integration and recruit training with alternate views from current Marine Corps practice were conducted.

Major Findings: Military Services and other stakeholders lack a common definition of gender integration at recruit training. There is no formal Marine Corps definition of gender integration at recruit training. The major benefits identified from gender-integrated training included: recruits learning to work in an integrated environment, dispelling gender biases and stereotypes, diversifying perspectives, exposure to leaders of both genders, developing trust and shared bonds, and increased motivation and competition. All study respondents described cultural challenges as the most pernicious and persistent challenge to gender integration. For the Marine Corps, this manifested in limited female representation in training and education materials, sexist and derogatory language in the training environment, and inconsistent privacy practices at the MCRDs. Male Marine Corps recruits surveyed showed benevolent and hostile sexism that were much higher than their female peers and male recruit counterparts. Because of the highly supervised nature of recruit training, respondents at all levels in all Services did not perceive sexual harassment and assault as a major consequence of gender-integrated training. Drill instructors are critical role models for recruits and set the tone for equity and respect in training. Mixed-gender drill instructor teams, as seen in the other Services and endorsed by participants interviewed for their alternate views, provide recruits examples of gender-integrated teams and demonstrate men and women as equals in their Service. The relatively small population of enlisted mid-career women may not be sufficient to meet Service demands for female drill instructors. Recruits desire training preparing them to work in gender-integrated units. There are similarities across the currently studied gender-integrated models regarding change in workloads and cortisol responses across recruit training. Internal workload metrics were consistent between males and females, however there were differences in stress, activity, and sleep metrics. At MCRD Parris Island, injury incidence during recruit training was higher in female as compared to male recruits in both cohorts studied.

Conclusions, Courses of Action, and Recommendations: The study team designed three alternate models which maximize the feasibility of implementation under current conditions: **Alternate model 1:** mixed-gender drill instructor teams in Integrated Company model; **Alternate model 2:** Integrated Company plus model, which increases the number and types of gender-integrated training events at or below the platoon level within the Integrated Company model; and **Alternate model 3:** integrated platoon model, in which recruits fall out into integrated training platoons after morning basic daily routine. The study team also provided a set of recommendations (strategic vision, evaluation and working groups, curriculum and education, culture and social norms, recruit experience, female population, and physical and human performance) to support current and future gender integration efforts at Marine Corps recruit training.

Executive Summary

Background and Methodology: The U.S. Marine Corps requested an independent, academic study to analyze current approaches to gender integration at recruit training, at the Marine Corps and other Services, and to provide alternate models that integrate men and women to the greatest extent possible while continuing to train Marines to established standards. An interdisciplinary team of research experts in physical performance, human performance, and sociology conducted a mixed-methods study on increasing gender integration at Marine Corps recruit training. Original data collected included interviews with military Service leaders and experts on gender integration and/or recruit training with differing views from the Marine Corps. At each of the Marine Corps Recruit Depots (MCRDs), data were collected through recruit surveys, recruit focus groups, training cadre and drill instructor interviews, recruit physical performance measurements, workload and sleep tracking and cortisol samples for recruits, collection of administrative data, document and material review, and hundreds of hours of ethnographic observation. Marine Corps recruits in three company configurations (Integrated Company, Series Track, and Male-Only) were studied at weeks 2, 7/8, and 11 (out of 13) in the training cycle. Data collection for the Army, Air Force, Navy, and Coast Guard relied exclusively on social science methods, which included ethnographic observations, recruit survey, focus groups, and interviews. A comprehensive literature review was conducted prior to the start of data collection.

Major Findings:

Social Science

- Military Services and other stakeholders lack a common definition of gender integration at recruit training. There is no formal Marine Corps definition of gender integration at recruit training; Marines commonly understood gender integration to be based on the organizational level where male and female recruits are co-located (e.g., company-level integration). Other Services and participants interviewed for their differing views understood integration as involving all training activities and/or integration at the platoon equivalent level.
- The major set of benefits identified from gender-integrated training included: recruits learning to work in an integrated environment, dispelling gender biases and stereotypes, diversifying perspectives, exposure to leaders of both genders, developing trust and shared bonds, and increased motivation and competition. Drill instructors in other Services saw enhanced professional and personal development from working in mixed-gender teams.
- All study respondents described cultural challenges as the most pernicious and persistent challenge to gender integration. For the Marine Corps, this manifested in limited female representation in training and education materials, sexist and derogatory language in the training environment, and inconsistent privacy practices at the MCRDs. Male Marine Corps recruits surveyed showed benevolent and hostile sexism that were much higher than their female peers and male recruit counterparts. Respondents also identified other challenges including romantic distractions among recruits, physiological gender differences, logistics, communication, and guidance, and facilities. Because of the highly supervised and controlled nature of recruit training, respondents at all levels in all Services did not perceive sexual harassment and assault as a major consequence of gender-integrated training.
- Drill instructors are critical role models for recruits and set the tone for equity and respect in training. Mixed-gender drill instructor teams, as seen in the other Services and endorsed by participants interviewed for their divergent views, provide recruits examples of gender-

integrated teams and demonstrate men and women as equals in their Service. The relatively small population of enlisted mid-career women may not be sufficient to meet Service demands for female drill instructors.

- Recruits desire training preparing them to work in gender-integrated units. Marine Corps recruits, regardless of training model experienced, reported wanting more integrated training (physical, tactical/field, and educational), and mixed-gender drill instructor teams. Recruits from the other Services supported gender-integrated training at the lowest unit level and preferred training from mixed-gender drill instructor teams.

Human and Physical Performance

- The most physically demanding time periods for Marine Corps recruits occurred during the first phase of training, which included the greatest energy expenditures, distance covered, and steps taken. While workloads tended to become reduced as training continued, the consistently elevated resting cortisol values, particularly in females, point to the cumulative nature of the training in addition to persistent psychological demands.
- There are clearly notable similarities across the currently studied gender-integrated models regarding patterns of change in workloads and cortisol responses across recruit training.
- Internal workload metrics (caloric expenditure per kg body weight) were fairly consistent between males and females, however there were differences in stress, activity, and sleep metrics.
- Regardless of model, the total sleep duration still fell notably below recommendations for optimizing health and recovery, particularly in highly active populations.
- Series Track female recruits experienced no decline in absolute and relative CMJ Concentric Peak Force performance from week 2 to week 11, while performance declined in Integrated Company female recruits. Training differences may potentially explain these results.

Injuries During Recruit Training: At MCRD Parris Island, the most frequent body part affected by medical record reviewed musculoskeletal injury during recruit training was the hip among female recruits and the knee among male recruits.

Administrative and Self-Reported Data: Female recruits who attrited had a baseline resilience score that was approximately 14 points lower than the baseline resilience score of female recruits who did not attrit, although this difference was not statistically significant. Female recruits who attrited reported a statistically significantly lower baseline quantity of strength training physical activity as compared to female recruits who did not attrit.

Conclusions, Courses of Action, and Recommendations:

The study team designed three alternate models which maximize the feasibility of implementation under current conditions:

- **Alternate model 1:** mixed-gender drill instructor teams in Integrated Company model
- **Alternate model 2:** Integrated Company plus model, which increases the number and types of gender-integrated training events at or below the platoon level within the Integrated Company model
- **Alternate model 3:** integrated platoon model, in which recruits fall out into integrated training platoons after morning basic daily routine

The study team also provided a set of recommendations (strategic vision, evaluation and working groups, curriculum and education, culture and social norms, recruit experience, female population, and physical and human performance) to support current and future gender integration efforts at Marine Corps recruit training.

Chapter 1: Introduction

This chapter reviews the purpose and context of the study, interdisciplinary approach and study team composition, guiding study objectives and research questions, provides an overview of each report chapter, and ends with acknowledgements.

A. Purpose of Study

The U.S. Marine Corps requested an independent, scientifically credible study to analyze current approaches to gender integration at recruit training, at the Marine Corps and other Services, to provide alternate models that integrate men and women to the greatest extent possible while continuing to train Marines to established standards. At the time the study was proposed, the Marine Corps employed two models of integrated recruit training at Marine Corps Recruit Depot (MCRD) Parris Island: (1) the older Series Track model where a female series (two to three platoons of female recruits) train alongside a male company (six to eight platoons of male recruits), and (2) the newer Integrated Company model where a company of recruits is comprised of one to two female platoons and four to five male platoons. During the study period, MCRD San Diego began training female recruits. The Army, Air Force, Navy, and Coast Guard conduct gender-integrated recruit training at the platoon equivalent level.¹ In addition to data collection from the other Services, the Marine Corps also requested the study team gather differing viewpoints to ensure all alternatives are considered.

This study supports a specific task for the Commanding General of Marine Corps Training and Education Command (TECOM) in the Marine Corps Force Integration Implementation Plan to “develop a study plan that encompasses the entry-level training (ELT) transformation process, to include but not limited to, the extent and effectiveness of gender-combined recruit training and possible options to increase gender-integrated training during boot camp.”² The goal of the study, as outlined by the Marine Corps, is to provide objective, data-driven recommendations for policy change on gender integration at recruit training. Specifically, the Marine Corps requested a study which addresses “the sociological effects of increased gender integration and consider training models which maintain the same level of discipline, physical fitness, attention to detail, and camaraderie.”³

In addition, the FY 2020 National Defense Authorization Act (NDAA) which was signed into law on December 20, 2019 prohibited gender-segregated training at the Marine Corps Recruit Depots (MCRDs). Specifically, the language states Marine Corps training at the MCRDs “may not be segregated based on gender.” MCRD Parris Island has until FY2025 to comply and MCRD San Diego has until FY2028 (NDAA, 2019).

During the study period, Marine Corps Commandant David H. Berger released the Talent Management 2030 plan outlining a fundamental redesign to the Marine Corps personnel system.

¹ The U.S. Space Force was outside the scope of this study.

² The Marine Corps request for proposal and performance work statement for this study described ELT but the project scope and places of performance were limited to recruit training.

³ Language comes from the study’s request for proposals and performance work statement.

Diversity, equity, and inclusion were featured prominently as a core tenet of Marine Corps future talent management approach.

The Marine Corps draws its collective strength and identity from all its Marines, so it is critical that we prioritize policies that maximize the individual strengths of every Marine, regardless of race, gender, sexual orientation, creed, or any other marker. To that end, we will commit to prioritizing diversity, equity, and inclusion as part of talent management – not to satisfy abstract notions of political correctness, but as a very real means to recruit, develop, and retain Marines of varied talents (USMC, 2021e, p. 5).⁴

Recruit training sets the stage for a Marine’s career—it is the process by which civilians are transformed into basically trained United States Marines. The training and indoctrination process, including implicit and explicit messaging about the Service’s views on gender, stays with recruits as they become the next generation of Marine Corps leaders. These early experiences may also influence retention which has financial and readiness implications for the Marine Corps as it looks to evolve and strengthen the force in the future.

B. Overview of Study Team Institutions and Interdisciplinary Approach

A team of academic experts from multiple universities and institutions came together to deliver an interdisciplinary, mixed-methods study on gender integration at Marine Corps recruit training. The University of Pittsburgh partnered with Insight Policy Research, University of South Carolina, and subject matter experts from University of Maryland and Fitchburg State University. Researchers are experts in physical performance, human performance, and sociology. The three major institutions, University of Pittsburgh, Insight Policy Research, and University of South Carolina are profiled below.

- **The University of Pittsburgh’s (Pitt) Neuromuscular Research Laboratory/Warrior Human Performance Research Center (NMRL)** was established in 1987 and is the applied research facility of the University of Pittsburgh’s Department of Sports Medicine and Nutrition. The NMRL is staffed by multidisciplinary research faculty and graduate students. The University of Pittsburgh has extensive experience conducting state-of-the-science sports medicine and military-focused research among female and male military personnel and athletes. The University of Pittsburgh is a state-related research university. It is a member of the Association of American Universities (AAU), which comprises 63 preeminent doctorate-granting research institutions in North America. The University of Pittsburgh ranks among the top universities in the world for research and research is a major source of external investment in the university. External expenditures for research were \$808 million in FY 2018, and Pitt was in the top five in National Institutes of Health funding. Pitt is committed to expanding human understanding, improving health, spurring innovation and entrepreneurship, and stimulating solutions to the greatest needs of

⁴ Boldface font used in original text.

modern society. University of Pittsburgh was the coordinating center for the study and conducted physical performance research with Marine Corps recruits.

- **Insight Policy Research (Insight)** is a certified 8(m) woman-owned small business with substantive and long-standing experience conducting research on high-profile military policy issues, including gender integration; women in the military; sexual assault in the military; veteran healthcare; military families; and wounded, ill, and injured Service members. Insight specializes in mixed-methods studies, including complex program design, quantitative and qualitative data collection, implementation, analysis, and report and presentation development. Insight provides over two decades of experience conducting high-quality, rigorous, nonpartisan research and analysis for the U.S. Department of Defense, the U.S. Department of Veterans Affairs, and other Federal clients. Insight led and conducted the social science component of this study, encompassing ethnographic observations, focus groups, a recruit survey, and in-depth interviews at Marine Corps, Army, Air Force, Navy, and Coast Guard recruit training sites (findings are presented in chapters 4–9 of this report).
- **The University of South Carolina (UofSC)** is a public research university in Columbia, SC. It is also the state's flagship university, a sea-grant university, and a member of the Southeast Conference for athletics. The university has an R1 research designation as a doctoral university with highest research activity. UofSC is within 2 hours drive of MCRD Parris Island and it has also recently entered into a research partnership with USSOCOM. The Department of Exercise Science in the Arnold School of Public Health at the UofSC is home to the top-ranked doctoral program in the United States. Additionally, UofSC is the top sport science university in the US and is in the top 10 globally. The Sport Science Laboratory is internationally recognized for its work with female athletes. University of South Carolina conducted human performance research with Marine Corps recruits.

The study team employed a variety of methods to study the current training environment and provide the Marine Corps with alternate models for increasing gender integration at recruit training and other recommendations towards that end. Primary data collection involved site visits at both MCRDs which involved extensive ethnographic observations, interviews with training cadre and drill instructors, and multiple forms of data collection to capture recruit perspectives (surveys and focus groups) and performance outcomes (surveys, physical performance testing, cortisol sampling, and physiological performance through wearable devices). Primary data collection at the Army, Air Force, Navy, and Coast Guard focused exclusively on social science methodologies, including ethnographic observations, interviews with training cadre and drill instructors, and gathering perspectives from recruits about gender integration and the training environment through a survey and focus groups. The study team also conducted interviews with Service leaders of all branches, those responsible for governing policy and strategy, and published experts who have alternate or differing viewpoints from current Marine Corps gender integration practices. Primary data collection was augmented with analyses of secondary data such as policy documents, academic literature, training materials, and Service-level administrative data.

To provide the Marine Corps with emerging and rapid results, the study team designed an iterative multistage mixed-method study. A mixed-methods design incorporating qualitative and quantitative interdisciplinary data which provided a comprehensive picture of the current status of recruit training and aided in developing objective, data-driven alternate models and recommendations for increasing gender integration. This study was a descriptive, observational study and no research interventions were administered as part of this protocol.

C. Study Objectives

This study addressed seven broad objectives—some outlined by the Marine Corps and others developed by the study team.

1. Examine models of recruit training at MCRD Parris Island and San Diego.
2. Examine gender integration training practices of the Army, Air Force, Navy, and Coast Guard to determine if and how their methods are useful to the Marine Corps.
3. Explore alternatives by synthesizing previous reports and studies on gender integration and recruit training.
4. Seek out differing viewpoints from Marine Corps current approaches to study all alternatives.
5. Identify alternate models that could increase gender integration at Marine Corps recruit training to the greatest extent possible while continuing to train Marines to established standards.
6. Identify broad recommendations for gender integration at Marine Corps recruit training.
7. Identify best practices and recommendations for measuring and evaluating success of gender integration at recruit training.

D. Research Questions

Multidisciplinary research questions guided the team's study design and data collection. Research questions included but were not limited to:

- How is gender integration motivated, defined, and operationalized for the Marine Corps and the other Services?
- What social, cultural, physical, and structural factors shape gender in the recruit training environment for the Marine Corps and the other Services, and how do these factors matter for gender integration?
- What are Service member experiences with the current recruit training approaches?
- What lessons learned and best practices from other Services can be applied to the Marine Corps?
- What individual and group metrics are used to determine success at recruit training?
- What cultural and behavioral factors influence the gender-integrated training environment?

- What are the current policies governing recruit training and how have those changed over time?
- How is recruit training currently structured and what activities are conducted?
- What are leadership perceptions of the goals and purpose of the recruit training environment?
- What are the facilitators and barriers to gender integration at recruit training?
- What are Service leaders' perceptions of gender integration at recruit training?
- How do recruits understand and perceive the culture of their Service branch during recruit training? Does this differ by gender?
- What alternatives exist to the current Marine Corps recruit training approaches?
- What aspects of gender-integrated training integrate members to the greatest extent possible while maintaining Marine Corps standards?

E. Outline of Report

The following chapters in this report present the study team's informing literature, methodology, and findings, culminating with the proposal of alternate models and recommendations for further gender integration at Marine Corps recruit training.

- **Chapter 2** provides the original literature review conducted by the study team in November 2020 which synthesizes reports, guiding policy documents, and academic literature.
- **Chapter 3** features relevant background context, provides detailed information on the methods of data collection and analytic approaches and outlines broad study limitations.
- **Chapter 4** presents in-depth information on the Marine Corps recruit training and transformation process, current models of gender-integrated training, Marine Corps definition of gender integration, benefits of gender integration, and challenges for current and further gender integration.
- **Chapter 5** summarizes alternative viewpoints from experts interviewed who are former Service members (including Marine Corps), academics, civilian researchers with Marine Corps expertise, and public intellectuals with demonstrated expertise on matters relating to gender integration and recruit training in a military environment.
- **Chapter 6** focuses on the Army, Air Force, Navy, and Coast Guard approach to gender integration at recruit training, featuring how each Service defines gender integration, their approach to gender-integrated recruit training, benefits and challenges of gender integration, and presents nine best practices for gender-integrated recruit training identified by the study team.
- **Chapter 7** provides the training cadre and drill instructor perspective and experience with gender integration and recruit training, perspectives from all Services are represented in this chapter. Benefits, challenges, and considerations for gender-integrated training from training cadre and drill instructors are described.

- **Chapter 8** dives into the Marine Corps recruit experience and perspective on gender integration presenting social science findings from survey data and focus groups which include gender attitudes of recruits, perceptions of current training experiences, benefits and challenges of gender integration, and desires and preferences for gender integration at recruit training.
- **Chapter 9** features Army, Air Force, Navy, and Coast Guard recruit experiences and perspectives on gender integration presenting social science findings from survey data and focus groups. Relevant comparisons to Marine Corps recruits are made throughout the chapter.
- **Chapter 10** provides information on physical and human performance including countermovement jump (CMJ) and Isometric Mid-Thigh Pull (IMTP) data as well as workload, sleep, and cortisol information.
- **Chapter 11** describes musculoskeletal injuries sustained by MCRD recruits during recruits training, as well injuries sustained prior to recruit training.
- **Chapter 12** features data from self-reported surveys as well as administrative data collected from both MCRD Parris Island and San Diego. The chapter also includes a description of associations between self-reported survey, administrative and injury data.
- **Chapter 13** presents the three alternate models for gender integration at Marine Corps recruit training, a set of evaluation and assessment best practices and pilot projects, and other recommendations to support current and future gender integration efforts at Marine Corps recruit training.
- **Appendices** provide detailed supporting material such as data collection protocols, survey data tables, a condensed list of findings supporting each alternate model and recommendation, and other relevant information.

F. Acknowledgements

The study team would like to thank the hundreds of participants in this study who volunteered their time and shared their thoughts with candor. This study would not have been possible without their generous contribution to the research, dedication to their institutions, their kindness, and their willingness to share their views and experiences. Even when sharing critical perspectives, study participants were clearly driven by their fidelity and respect for their institutions, seeking genuine improvement for the military and the Marine Corps.

The study team is grateful the Marine Corps facilitated open and transparent access to Marine Corps facilities, personnel, and recruit training events. The Marine Corps was committed to ensuring an unbiased study product by providing full access to observations, information, training materials, and personnel requested by the study team at MCRD Parris Island and San Diego. The Marine Corps also organized logistics and access to Army, Air Force, Navy, and Coast Guard recruit training sites and Service leaders for additional extensive data collection. The study team also thanks personnel from the other Services who were equally gracious, accommodating, and open in sharing their perspectives and providing full access to learn from their recruit training process.

Chapter 2: Literature Review

A. Description and Limitations

To determine the most appropriate course of action in establishing study design, the study team conducted a comprehensive literature review of reports, guiding policy documents, and academic literature published to date (as of November 2020). Any literature that may have been published after this date was not included in the primary review listed here.

The purpose of this literature review was to examine the following questions:

- What are the current policies governing recruit training, and how have those changed over time?
- How is recruit training currently structured, and what activities are conducted?
- What individual and group metrics are used to determine success?
- What are facilitators and barriers to gender integration at recruit training?
- What cultural and behavioral factors influence the gender-integrated training environment?
- What are alternatives to the two current Marine Corps (USMC) approaches to gender-integrated training?

Results informed the subsequent phases of the study, which included primary data collection from Service leadership, training cadre, and recruits from USMC and other Services.

To complete this review, the research team read and abstracted information from approximately 40 government-furnished documents created by government agencies, research institutions, Federal Advisory Committees, international researchers on gender-integration in foreign militaries, the U.S. Department of Defense (DoD), USMC, and other Service-guiding policymakers (see appendix B). The research team also conducted searches and reviews of relevant academic literature (see appendix C).

This literature review had several limitations and considerations:

- Although the research team conducted a thorough review of the highest priority literature within the time and resources allotted, this literature review should not be considered fully comprehensive; there is a depth of other information the study team could explore.
- Although the research team examined other U.S. Military Services, this literature review focused on USMC and should not be generalized to other Services.
- When new policies are passed and enacted, previous research that examined a different environment becomes less applicable; however, substantial research on the topic of gender integration has been conducted.
- The research team did not conduct a systematic review of all foreign militaries.

- Many of the findings presented were related to gender integration and integration of combat positions in general; this broad topic has been studied in greater depth and over a longer time compared with research related specifically to the recruit training environment.

B. USMC and Other Services’ Approaches to Recruit Training

This section presents the USMC and other Services’ approaches to ELT with a focus on recruit training. It describes the policies governing recruit training and how they have evolved. It also presents the structure and activities that make up USMC recruit training.

1. Current Policies Governing Recruit Training and Changes Over Time

Bottom Line Up Front

- Recruit training involves intense socialization and indoctrination processes with the purpose of transforming civilians into members of their respective Services.
- Other (non USMC) Military Services cite that gender-integrated recruit training fosters collaboration and prepares Service members to work together in integrated environments.
- USMC argues that gender-segregated training minimizes distractions and enables recruits to focus on training.

Initial or entry-level training is foundational to Service members’ readiness. This intense socialization and indoctrination process to military Service builds the social and cultural foundation of Service members (Gaddes et al., 2019). In general, leaders of the U.S. Military Services agree that “the quality of basic training has a direct effect on operational readiness,” and “the primary purpose of basic training is to transform recruits into group members of cohesive military units” (U.S. Congress, 1999a, p. 81). As illustrated in table 2.1, training materials from all five Services indicate the purpose of recruit training is to transform civilians into Soldiers, Sailors, Marines, Airmen, and Coast Guardsmen.

Table 2.1. Summary of Purpose of Recruit Training for Enlisted Service Members

Military Service	Purpose
Army	“Basic Combat Training (BCT) is a training course that transforms civilians into Soldiers. Over the course of ten weeks recruits learn about the Seven Core Army Values, how to work together as a team and what it takes to succeed as a Soldier in the U.S. Army. There are four distinct phases, each teaching you a very different set of skills” (U.S. Army, 2016).
Navy	“Recruit training, or ‘boot camp,’ will be approximately seven weeks long. The goal of this training is to transform you from a civilian into a Sailor with all of the skills necessary to perform in the fleet. ...The goal of military training is to instill and reinforce the Navy's Core Values of Honor, Courage, and Commitment with the basic skills of training in a team environment” (U.S. Navy, n.d.).

Marine Corps	“[Recruit training] is based on an intensive 13 week entry-level training program that transforms recruits into basic Marines through a thorough indoctrination to our history, customs and traditions and by imbuing them with the mental, moral and physical foundation necessary for successful service to Corps and Country” (U.S. Department of the Navy, 2019).
Air Force	“[Basic Military Training] is a challenging experience both mentally and physically but will ultimately transform you from humble recruit to confident Airman with the skills and confidence you need to excel as a member of the U.S. Air Force ” (U.S. Air Force, n.d.).
Coast Guard	“Recruit training or "Basic training" is an eight-week basic training program that is designed to prepare recruits for entry-level service...Its purpose is to prepare members for life in the Coast Guard... and developing recruits into basically trained, physically fit Coast Guardsmen ready to serve our Nation” (Gilreath, 2020).

DoD Guidance and Other Services Beliefs About Gender-Integrated Training

Despite decades of historical restrictions limiting their ability to serve, women have been integral to the success of the U.S. military. Early in American history, women served troops as nurses, cooks, laundresses, seamstresses, and water bearers. In the American revolution and Civil War, some women even disguised themselves as men to join the fight. The expansion of women’s roles in the military came through consistent wartime service as nurses, administrators, secretaries, and telephone operators.

Following World War II, President Harry Truman signed the Women’s Armed Services Integration Act in 1948, granting women permanent status in the regular and Reserve military forces. Restrictions were in place to limit the proportion of women serving until 1967, followed by the end of conscription and the birth of the All-Volunteer Force (AVF) in 1973. The AVF bolstered a greater need for women’s service. The 1970s and 1980s brought new opportunities, such as the opening of the Military Service Academies to women, and women rose into more leadership positions within the military. In 1993 restrictions were lifted to allow women to fly combat aircraft. However, the full realization of women’s ability to serve in combat would not become reality until many years later (Women in Military Service for American Memorial Foundation, n.d.).

In 1994, the Direct Ground Combat Definition and Assignment Rule was established to exclude “women from assignment to units and positions whose primary mission is to engage in direct combat on the ground” (DoD, 2013). Nearly two decades later, the Secretary of Defense and the Chairman of the Joint Chiefs of Staff modified the 1994 Rule to remove these gender-restrictive policies (DoD, 2013). With this modification, the Joint Chiefs of Staff proposed a path to integrate Servicewomen “without compromising our readiness, morale, or war-fighting capacity,” instructing the Services to open over 14,000 closed units and positions by January 1, 2016 (DoD, 2013, p. 1).

For full gender integration to be achieved, the Services must provide Servicewomen with the same training and educational opportunities as their male peers (Gaddes et al., 2018). With this in mind, the other Services began integrating female recruits into all aspects of training and educational environments, fostering “a collaborative culture and cohesive unit climate” (Gaddes et al., 2018, p. 23). It is important to note that each Service conceptualizes gender integration differently and has varying perspectives about what full and successful gender integration looks like. Table 2.2 provides the rationale for gender-integrated training for enlisted Service members

by Service branch. The purpose of basic training is to install values of discipline, self-respect, teamwork, pride, and self-confidence, all of which transcend any concept of “gender” (U.S. Congress, 1999a).

Table 2.2. Summary of Purpose of Gender Integrated Training for Service Members

Military Service	Rationale for Gender-Integrated Training (GIT)
Army	“[GIT] better prepares trainees for their future assignments in the integrated operational Army. It also prepares men and women to work together in a professional environment and reinforces to trainees that both men and women have gone through the same training. Having a gender-integrated instructor corps reinforces to trainees that Army leadership is integrated.”
Navy	“The Navy integrated training in 1994 ... The Navy’s rationale for GIT is that recruits need to be prepared to work in a gender-integrated environment when they go into the operational fleet. ... If recruits see instructors of different genders, it reinforces the message to recruits that the leadership structure of the Navy is also gender-integrated and that their future commanders may be members of the opposite gender.”
Air Force	“GIT in BMT [basic military training] has largely been driven by the facilities—in particular, the size and configuration of the sleeping bays. Since male and female trainees sleep in gender-segregated flights, this has determined the level of GIT in those same training flights. ... USAF leaders have raised concerns that the current model does not accurately represent to new trainees or to the public that diversity is a USAF priority, and that current levels of GIT do not reflect integrated working conditions in the operational USAF—especially now that all USAF positions are open to women.”
Coast Guard	“Given that USCG recruits move from basic training directly to an operational unit, the USCG believes that they need to prepare their recruits to work in a gender integrated environment—one that often includes confined quarters on a small boat.”

Source: Schaefer et al., 2018, pp. 18–28

USMC’s Belief About Gender-Integrated Training and Progress Toward Gender Integration to Date

Although all Military Services have some form of gender-integrated training, each is unique. Marine Corps recruits from a wide range of backgrounds arrive at the Marine Corps Recruit Depots in Parris Island and San Diego as impressionable civilians.⁵ USMC capitalizes on these recruits’ unifying desires to become Marines, transforming them into individuals with a common set of values and practices (U.S. Congress, 1999a). As illustrated in table 2.3, USMC leaders have long believed gender segregation is critical to building cohesive military units.

Table 2.3. Summary of Purpose of Gender-Segregated Training for Service Members

Military Service	Rationale for GST
Marine Corps	“USMC argues that gender-segregated training minimizes distractions and allows recruits to focus on their training. Second, the USMC argues that gender-segregated boot camp allows trainees to see strong role models and mentors of the same gender. There are so few women in the USMC that female recruits may not see female role models or mentors for much of their careers. Third, the USMC argues that the current system produces high-quality female Marines and that altering the current recruit training construct may jeopardize some of the “intangibles” of the transformation process that transforms civilians into Marines.”

⁵ To date, male recruits report to both MCRDs and female recruits report only to MCRD Parris Island.

USMC remains the only Service that has not yet implemented practices for full gender integration during its recruit training (Gaddes, 2019). However, USMC has made progress to integrate male and female Service members in the training environment. In 2012, USMC temporarily opened specific entry-level training schools previously closed to Servicewomen, including its Infantry Training Battalion and Infantry Officer Course (U.S. GAO [Government Accountability Office], 2015). The Secretary of Defense's decision to open all previously closed combat positions and units to Servicewomen also opened the Infantry Officer Course and the Infantry Training Battalion to Servicewomen who meet the occupational specialty classification standards. As of 2018, only four Servicewomen had participated in the first phase of the assessment and screening process for the Marine Corps Special Operations Command Individual Training Course. Although one Servicewoman did successfully complete the second phase of the assessment and screening process, she was not invited to attend the course (Kamarck, 2016; Snow, 2018).

The Marine Corps has yet to integrate at the platoon level but has been directed by Congress that training may not be segregated based on gender and that they must integrate training at Parris Island by 2025 and San Diego by 2028 (National Defense Authorization Act for Fiscal Year 2020, 2019). Regarding integration of recruit training at Marine Corps Recruit Depot Parris Island, the first gender-integrated company—composed of five male and one female platoons—graduated in March 2019. Notably, “The Marines performance statistics reflected no significant variations when compared to other training companies” (USMC, 2019c). In fall 2019, the second gender-integrated company began training, joining an additional seven integrated companies to graduate by April 2020 (USMC, 2020).

2. Marine Corps Recruit Training Objectives and Associated Activities

Bottom Line Up Front

- Marine Corps recruit training is an intensive four-phase transformative process delivered over 13 weeks.
- The objectives of Marine Corps recruit training are character development, discipline, military bearing, esprit de corps, entry-level training, and combat conditioning.
- Daily activities include a variety of physical conditioning exercises along with socialization and indoctrination training.
- The Crucible is the culminating rite of passage of recruit training. It is a 54-hour experience that blends the physical and social training experiences and serves as a final assessment of recruits before they officially become Marines.

Recruit training is a transformative process that includes indoctrination of Marine Corps history, customs, and traditions as well as the mental, moral, and physical foundations required of Marines. Recruit training is a 13-week intensive training program delivered over 70 training days and divided into four progressive phases (USMC, 2019a; 2019b; U.S. Department of the Navy, 2012). The focus of each phase follows:

- **First phase** includes core values, character development, discipline, physical fitness, martial arts, and marching/drill and introductions to basic first aid, the Uniform Code of Military Justice, leadership, customs, courtesy and traditions, and history of the Marine Corps.
- **Second phase** introduces initial leadership training, combat water survival, and marksmanship qualification.
- **Third phase** includes Basic Warrior Training, final physical fitness and academic tests, personnel inspections, and the Crucible.
- **Fourth phase** is to check understanding, stimulate critical thinking skills, and reinforce comprehension in the six functional areas of Marine Leader Development: fidelity, fighter, fitness, family, finances, and future. This is accomplished through small-group guided discussion and question-and-answer sessions with the drill instructor. Fourth phase concludes with formal graduation ceremony.

Guiding policy describes six objectives of Marine Corps recruit training (USMC, 2019a; 2019b):

- **Character development** involves understanding Marine Corps values and values-based decision making with a focus on teamwork and leadership.
- **Discipline** involves respect for authority, obedience to orders, and building traits that exemplify Marine obedience, fidelity, and zeal.
- **Military bearing** involves proper wearing of the uniform and personal hygiene and representing the Marine Corps at all times.

- **Esprit de corps** is the warrior ethos; it involves mental and physical toughness, devotion, pride, initiative, determination, and problem solving.
- **ELT** involves mastery and proficiency in basic skills.
- **Combat conditioning** involves achieving and maintaining physical fitness, endurance, and proper body composition and promoting the concept of fitness as a way of life.

The Marine Corps conducts entry-level training (ELT) in a progressive format with multiple training programs and locations before Marines are assigned to their first unit. The ELT pipeline begins with recruiting and recruit participation in the delayed entry program. Recruits then attend basic training at one of the two MCRD locations: Parris Island or San Diego. After graduation from recruit training, Marines in infantry occupations are assigned to the Infantry Training Battalion (ITB) for their Military Occupational Specialty (MOS) training at the School of Infantry (SOI East or SOI West). After training at SOI, Marines with an infantry MOS head to their first fleet assignment. Marines with a noninfantry MOS attend Marine Combat Training at the SOI East or SOI West after recruit training, followed by specialized training at their MOS school before they are assigned to their first unit in the fleet. All ELT that occurs after basic training at the MCRDs is gender integrated at the platoon level.

Activities

The daily activities recruits experience are designed to address the objectives outlined above. Some activities are focused on physical conditioning, and others are focused on socialization and indoctrination.

Physical combat conditioning occurs almost daily during recruit training and incorporates both physical training and nutrition programs to enable a recruit to achieve the physical fitness level required to succeed in combat (USMC, 2019a; 2019b). Each combat conditioning session follows the same sequence: 10 minutes of dynamic warmup and the Daily 16 (a set of physical training exercises); primary workout consisting of multiple events with sequencing adjusted by the drill instructor; and cool-down.

In the progress through recruit training, recruits experience physical conditioning weeks focused on the development of different skills and physical capabilities. **Swim Week** (week 4) focuses on water survival training conducted by Marine Combat Instructors of Water Survival. **Team Week** (week 5) is an opportunity to assess team-building in a minimally supervised environment and allow for medical/dental treatment and/or injury recovery without training time loss. **Grass Week** (week 6) is preparatory marksmanship training focused on teaching basic marksmanship fundamentals and safety. During **Fire Week** (week 7), recruits use live rounds during marksmanship training. **Basic Warrior Training** (week 8) provides recruits an introduction to individual field skills and an opportunity to improve self-confidence through day/night movement courses; day/night land navigation; exposure to improvised explosive devices; etc. Additional training includes the Marine Corps Martial Arts Program, rappelling and fast roping, obstacle course, confidence course, and conditioning marches (USMC, 2019a; 2019b).

Socialization and indoctrination training. Concurrent with the combat conditioning activities, recruits undergo an array of activities designed to transform recruits from civilians to Marines. Collectively, these activities, as described in the Commander’s intent, ensure—

Time-tested rigors of Marine Corps basic training will continue to teach entry level military knowledge and skills, with an emphasis on teamwork; while concurrently instilling spirit, discipline, physical and mental toughness, strength of character, selflessness, and the utmost respect for fellow Marines (USMC, 2019b, p. 2).

This indoctrination to Marine Corps culture begins with the Yellow Footprints Speech, when recruits first interact with their drill instructors and begin to learn what will be expected of them during recruit training. Recruits are educated on the standards of conduct; they receive briefings; and they participate in guided discussions on sexual assault response, suicide prevention, and hazing. Recruits also partake in discussions guided by core values and mentoring and small unit leadership programs. The discussions occur in an informal setting with the drill instructor and provide an opportunity to expose recruits to the fundamentals of leadership.

Academic training. The first, second, and third phases of recruit training include classroom-based academic activities. These include skills training on general military subjects, core values, Marine Corps Organization, History, Customs, and courtesies (USMC, 2019a). These academic trainings also provide additional classroom instruction to support tactical skills (e.g., rifle marksmanship classes, tactical combat casualty care) (USMC, 2020).

The Crucible. This culminating 54-hour experience blends the physical and social training experience and serves as a final assessment of recruits (USMC, 2019a; 2019b). It consists of a 15-kilometer conditioning march, 27 daytime events, and 2 nighttime events composed of a variety of military problem-solving exercises. As the final transformative process, designed as a rite of passage, the Crucible instills selflessness and teamwork. The combination of challenging activities also builds trust in self and in fellow Marines. This event is the ultimate assessment of all training, simultaneously testing teamwork; physical fitness; and the honor, moral and physical courage, and commitment of recruits. The Crucible is a rite of passage that improves trust in self, fellow Marines, and the Marine Corps. After successfully completing the Crucible, recruits are formally welcomed into the Corps as Marines in the Emblem Ceremony. If a recruit cannot complete the Crucible because of injury or illness, the Battalion Commander decides whether to retain or recycle the recruit, factoring in overall performance during the Crucible and total training missed.

3. Comparison With Other Services' Recruit Training

Bottom Line Up Front

- The representation of women among active-duty personnel in each Service varies from 8 percent (Marine Corps) to 22 percent (Air Force).
- Each Service's recruit training varies in length, activities, and approaches to gender integration.
- Although each Service focuses on transforming civilians into Service members, the combination of activities is uniquely designed to address the mission of each Service.

The Marine Corps differs from other Military Services in the length, activities, and locations of training (see table 2.4). The percentage of women making up the total enlisted active-duty force also varies. In the Marine Corps in 2019, 8 percent of active duty enlisted personnel were women. The percentage of active duty enlisted women in the Army in 2019 was 18 percent, in the Navy was 21 percent, in the Air Force was 22 percent, and the Coast Guard was 14 percent (Gaddes et al., 2019, p. 1).

Table 2.4. Comparing Recruit Training in the Military Services

Factor	Marine Corps	Army	Navy	Air Force	Coast Guard
Duration	13 weeks	10 weeks	Approximately 8 weeks	8.5 weeks	8 weeks
Approach to gender-integrated training	“Male and female recruits initially train separately, but same place and same time training increases over time.” ^a	“All training platoons fall out and intermix in the morning. All aspects of training are gender integrated.” ^a	“All aspects of training are gender-integrated. Gender-integrated training also takes place in the (sleeping) bays.” ^a	“Male and female recruits train in separate flights. Some training activities are gender-integrated, while some are gender segregated.” ^a	“All training activities are gender-integrated.” ^a
Training locations	Marine Corps Recruit Depot in Parris Island, South Carolina Marine Corps Recruit Depot in San Diego, California	Fort Benning, Georgia Fort Jackson, South Carolina Fort Leonard Wood, Missouri Fort Sill, Oklahoma	Recruit Training Command, Great Lakes, Illinois	Lackland Air Force Base, San Antonio, Texas	Training Center Cape May, New Jersey

Note: ^a Schaefer et al., 2018, p. 19

Other Sources: Military One Source, 2020a, 2020b, 2020c; Moore, 2020; U.S. Navy, 2020

The Army's approach to basic combat training is a 10-week training program divided into four progressive phases: yellow, red, white, and blue (U.S. Army, 2021a). The Yellow and Red Phase focuses on the fundamentals of soldiering, core Army values, Army traditions and ethics, and what it means to be a Soldier. This phase is designed to teach recruits to comport themselves as Soldiers and includes briefings on sexual harassment and sexual assault prevention, physical readiness training, confidence building, and formation marching. The White Phase focuses on self-discipline, teamwork, combat skills, night training, hand-to-hand combat and weapons training, basic rifle marksmanship, and physical fitness. In addition to marksmanship training, this phase includes physical fitness training and navigation exercises. The Blue Phase focuses on additional weapons training and rifle marksmanship, an overview of convoy operations, military operations in urban terrain, and field training exercises. The phase culminates in a multiple-day land navigation course to test survival, fitness, and Soldier skills. The final step is to pass all 212 tasks of the end-of-cycle test (U.S. Army, n.d.).

The Navy's approach to recruit training begins with a week of administrative processing (U.S. Navy, n.d.). This week is followed by training in the classroom or hands-on technical training environments; this phase focuses on teamwork, self-discipline, and attention to detail. The classes include first aid, uniforms and grooming, equal opportunity, sexual assault prevention and response, and naval history. The technical hands-on training consists of four phases: Marlinespike (basic seamanship), firefighting, water survival, and weapons training. Physical training is a focus throughout recruit training, including 1-hour daily workouts 6 days per week. To graduate from recruit training, recruits must pass the Navy Physical Fitness Assessment.

The Air Force's approach to basic military training occurs over 8 weeks (U.S. Air Force, n.d.). The training begins with orientation to Air Force life, Air Force history and heritage, character and leadership skills, personal conduct, laws of combat, and countering threats. It culminates with a range of field training exercises and combat scenarios. Activities and classes include fitness and nutrition briefings, human relations and cultural sensitivity, suicide awareness and prevention, weapons handling and maintenance, dress and appearance, resilience, cyber awareness, sexual assault prevention and reporting, warrior ethos, combat stress recovery, joint operations, and mental preparation for combat. The culminating event is the Basic Expeditionary Airman Skills Training zone orientation.

The Coast Guard's approach to recruit training begins with recruit arrival. The first week (forming week) is used for administrative tasks and to prepare recruits for the training that lies ahead (U.S. Coast Guard, 2020). After forming week, recruits are assigned to a Recruit Training Company and meet their Company Commanders. Recruits begin by learning the basics of physical fitness and required Coast Guard knowledge, such as military customs and courtesies and military drill. Recruits then begin learning firefighting and marksmanship and must take and pass a midterm exam. As Coast Guard recruits progress through training, they prepare for their future assignment and learn first aid and watch standing. Graduation marks the culmination of the recruit training program. Unlike other Services' that require follow-on training, 95 percent of Coast Guard recruits who complete recruit training are assigned to an operational unit in the fleet (Schaefer et al., 2018).

Entry-level training pipeline differences among the Military Services. Following graduation from recruit training, basically trained service members from each Service take different paths to their first assignment. The Coast Guard stands alone in that almost all newly pinned Coast Guardsmen head directly to the fleet for their first duty assignments following recruit training. Recruits graduating from Army, Navy, and Air Force basic training complete their military occupational specialty (MOS) training before their first assignment; MOS training for every Service branch is gender integrated. In comparison, the Marine Corps's entry-level training pipeline is unique in that every basically trained Marine attends the School of Infantry (SOI East or SOI West) for additional training. Marines in infantry occupations are assigned to the Infantry Training Battalion (ITB) at one of the SOIs for their MOS training. Marines with a noninfantry MOS attend Marine Combat Training at the SOI East or SOI West after recruit training, followed by specialized training at their MOS school before they are assigned to their first unit in the fleet.

C. Assessing Recruits' Success

Regardless of gender, recruits undergoing recruit training are regularly tested against an array of metrics to determine their individual performance. Group performance is also measured throughout recruit training. This section describes the physiological and psychosocial metrics of success for both individuals and groups. It also presents considerations surrounding injury rates during Marine Corps recruit training.

1. Assessments During USMC Recruit Training

Bottom Line Up Front

- Throughout USMC recruit training, several physical assessments are required, including the initial strength test, physical fitness test, the combat fitness test, and water survival and service rifle qualifications; recruits must also pass the Marine Corps martial arts program.
- Recruits must meet height and weight standards and pass the Battalion Commanders inspections.
- Academically, recruits must achieve mastery of basic training tasks.

Several assessments are required during USMC recruit training (USMC, 2019a; 2019b; Jensen et al., 2019, U.S. Department of the Navy, 2012). The Initial Strength Test is a pass/fail assessment administered before the first training day to ensure recruits can meet the physical demands of training (USMC, 2019a; 2019b; Jensen et al., 2019; USMC, 2013; U.S. Department of the Navy, 2012). Both the Physical Fitness Test and the Combat Fitness Test are administered at various times during recruit training (USMC, 2013; Jensen et al., 2019). All recruits with ground combat arms military occupational specialties (MOS), Program Enlisted For (i.e., an enlistment incentive option available to recruits in certain occupational specialties that help Marine Corps' meet its annual accession needs), and with Quota Serial Numbers must pass the Physical Fitness Test and Combat Fitness Test according to the MOS Classification Standard (USMC, 2015).

To successfully complete recruit training and transformation into Marines, recruits must qualify at the Water Survival Basic level; qualify with the service rifle; pass the Physical Fitness Test and Combat Fitness Test (inventory and final); meet height and weight or body composition standards; achieve mastery of 80 percent of assigned 1,000 level tasks from the ELT Training and Readiness Manual; pass the Marine Corps Martial Arts Program (tan belt); complete the Crucible; and pass the Battalion Commander’s inspection of uniform, discipline, bearing, and general knowledge (USMC, 2019a; 2019b; U.S. Department of the Navy, 2012).

2. Psychosocial Constructs Used to Determine Success

Bottom Line Up Front

- In addition to physical assessments, the success of recruit training is measured against the psychosocial objective of producing a Marine who has embraced the core values and is transformed by the Corp’s shared legacy.
- Academic research has identified metrics for defining and measuring cohesion, morale, discipline, and esprit de corps both individually and within a group, but a uniform set of metrics for these psychosocial factors is lacking.

When determining the readiness of Marine Corps recruits after completion of recruit training at Marine Corps Recruit Depots, the group of recruits is assessed on both psychosocial and physical standards. According to the U.S. Marine Corps Depot Order 1510.32A, the psychosocial objective of recruit training is to produce a basic Marine who has embraced the core values and is transformed by the Corps’ shared legacy (2019). A basic Marine represents the epitome of personal character, selflessness, and military virtue and has demonstrated mastery of character development, discipline, and esprit de corps—warrior ethos. Psychosocial factors considered in the success of a recruit include accomplishments in unit cohesion, morale, discipline, and ultimately esprit de corps.

These factors have been defined at various levels of specificity depending on the context of their study and which military Service or independent entity studied them. The psychosocial factors have been measured in different ways and operationalized into validated metrics academically. This study team drew from this work in preparing for the next phase of the study.

As of this review, all constructs discussed were drawn from studies conducted by entities independent from any U.S. military Service organizations. None of the Service documents provided to the study team included Service-specific protocols for measuring cohesion, morale, discipline, and esprit de corps.

Cohesion. Cohesion is vital for assessing unit readiness following recruit training because of its effect on performance; it is often cited as a primary outcome of basic training (Schaefer et al., 2018). Cohesion is determined at the group or unit level. Scholars define cohesion in many forms and use varying levels of specificity in how it is measured. The 2015 RAND study on the integration of women into the Marine Corps infantry defined cohesion as “the resultant of all the forces acting on the members to remain in the group. These forces depend on the attractiveness

or unattractiveness of either the prestige of a group, members in the group, or the activities in which the group engages” (Schaefer et al., 2015, p. 17).

Beyond this focus on group bonds, definitions of the concept have varied widely (Mudrack, 1989) as have measures (e.g., Carless & De Paola, 2000). In addition to bonding, treatments of cohesion view group bonds as sustaining members’ commitment to one another, and treatments of group cohesion in military contexts have viewed commitment as the essence of unit cohesion (Cotton, 1990; Hackett, 1979). The literature on cohesions has given rise to several typologies: The distinction between *task* and *social* cohesion has emerged as particularly important and enduring (Mullen & Copper, 1994; Zaccaro & Lowe, 1988). Task cohesion refers to a shared commitment among group members to achieve a goal, whereas social cohesion refers to emotional bonds among group members.

Depending on the context, cohesion has been measured in various ways. Some research has involved administering surveys to recruits and leaders to assess cohesion-related concepts such as the following:

- **Qualities of people:** Different personal interests, values, personalities; cliques; morale, attitude; gender issues; racial issues
- **Organization of unit:** Division by work department, platoon; size of unit
- **Leadership:** Leadership; communication; management, mismanagement; discipline; recognition, rewards
- **Working/training together:** Accomplishing missions, goals; teamwork; tradition, pride; operations tempo, long hours; work, task cohesion; personnel tempo; training; working hard
- **Trust/friendship/respect:** Standing up for, respecting, depending on one another; relationship outside work hours

Morale. Morale is often described as at the heart of unit cohesion. According to Harrell and Miller at the RAND National Defense Research Institute, morale is only relevant “for individuals who are members of a goal-oriented group” (Harrell & Miller, 1997, p. 69). Morale focuses on the degree to which group members are enthusiastic about and committed to carrying out the duties of that group and is a function of cohesion “both at the primary (small) work group level and the secondary (larger) unit level” (Harrell & Miller, 1997, p. 69).

Morale has been measured through surveys of self-report responses from recruits and leadership and indirectly through a series of attitude-related questions. Attributes measured that contribute to morale include leadership, workload, cohesion, job satisfaction, individual attitudes, quality of life, and material/training (Harrell & Miller, 1997).

Discipline. According to the U.S. Marine Corps Recruit Training Order, discipline refers to the “respect for authority, instantaneous obedience to order, and self-reliance to maintain or improve those traits that exemplify a Marine: obedience, fidelity, and zeal.” Discipline is essential to the success of all recruits during and after recruit training (USMC, 2019a; 2019b).

Esprit de corps. Success of a recruit culminates in whether they exhibit esprit de corps—the warrior ethos. Esprit de corps is the mental and physical toughness, devotion, pride, initiative, determination, and intense desire for problem solving and working with and for others toward excellence in achieving common goals (USMC, 2019a; 2019b).

While discipline and esprit de corps are considered when assessing the success of a recruit in recruit training, no uniform metrics were identified in the measurement of these two factors.

D. State of the Science

Much research has been conducted to date on the military gender-integration process and physiological factors associated with physical performance. This section presents findings from a review of academic literature on gender and organizational socialization, gender integration, cohesion, unit performance, and physiological factors associated with performance. Appendix C provides information on the search parameters for the academic literature cited in this chapter.

1. Gender and Organizational Socialization in the Marine Corps

Bottom Line Up Front

- USMC recruit training involves organizational socialization transforming recruits into Marines.
- A goal of recruit training is to orient recruits to military core values such as honor, obedience, loyalty, achievement, courage, and commitment; recruit training forms the basis for activities that make up the training course.
- Gender-segregated training may emphasize the concept of “benevolent sexism” by reinforcing the idea that female Marines need special treatment; gender stereotypes can unintentionally be perpetuated from the first day of recruit training.
- Gender-integrated training reduces gender stereotypes and improves men’s perceptions of women.
- Entry-level socialization is enhanced when it matches the working environment Marines will experience after recruit training.

Process of organizational socialization. Recruit training in USMC is a process of organizational socialization. The “mystical alchemy” (Krulak, 1984) of making Marines during USMC recruit training is not mystical; decades of social science research inform understanding of how organizational socialization indoctrinates and transforms newcomers to an organization. Outcomes of initial USMC socialization stem from a mix of recruit backgrounds; the formal training program and how it is structured; and the implicit and explicit messages from agents of socialization, such as the drill instructor (Van Maanen & Schein, 1979). As an ideal-type total institution, recruit training controls all aspects of daily life of recruits (Goffman, 1968). This total institution environment exists for the express purpose of (re)socialization primarily through divestiture of recruits’ civilian identity and investiture of a new identity of Marine (Van Maanen & Schein, 1979). Recruit training is focused on socialization and acculturation to foundational Marine history, culture, norms, and values.

Military values, standards, and gender integration. Military values have historically centered on the ideals of honor, obedience, loyalty, and achievement (Janowitz, 1960). Honor, courage, and commitment are the core values espoused by the Marine Corps (Marine Corps Order 1510.32F) to be explicitly inculcated through recruit training. Proponents of gender-integrated training have expressed concern that segregated training with separate and unequal standards for physical fitness and training socializes recruits to highlight gender differences, particularly in physical capability, and defines “female” as less or weaker than male (Arkin & Dobrofski, 1978; Schaefer et al., 2015). A pervasive cultural discourse about pullups suggests the perception of lower standards for women, a distinction first made salient in entry training. This topic is recalled frequently by Marines of various ages and ranks (Fosher et al., 2018; Brekke, 2018). Gender-specific physical training is believed to reduce scrutiny of women’s physical training to minimize men’s resentment and discrimination against female recruits (Stiehm, 1989; Snyder, 1999; 2003), and to de-emphasize gender-specific training standards (Schaefer et al., 2018). However, male and female recruits are acutely aware there are different physical fitness standards, and without intentional leadership communication strategies, they can reinforce narratives that women have lower standards. In educational settings, segregating by a characteristic (gender) only makes that characteristic more salient, leading to greater intergroup biases (Halpern et al., 2011). Similar dynamics may be operating in gender-segregated recruit training. Arguments in favor of segregated recruit training for the benefit of women recruits’ confidence and self-esteem veer close to “benevolent sexism” (Ivarsson et al., 2005) by reinforcing an impression Marine women need special protections from male colleagues. This view itself reinforces stereotypes of weakness and incompetence (Arkin & Dobrofski, 1978).

Benevolent sexism is defined as “a subjectively positive orientation of protection, idealization, and affection directed towards women that, like hostile sexism, serves to justify women’s subordinate status to men” (Glick et al., 2000, p. 763).

Influence of gender-integrated training on gender stereotypes and perceptions of women.

Gender-integrated training has been shown to alter perceptions and evaluations of women in military settings. Research from basic military training in Norway found training and living alongside women in initial-entry training affected men’s views of women’s competence and leadership, perhaps by exposing men to counter-stereotypical information about women. Women were randomly assigned to some squads but not others for 8 weeks of boot camp, when squads live together in the same room and train together (Dahl et al., 2018). Men with women assigned to their squad had a 24 percent higher likelihood of thinking mixed-gender teams performed equally well as same-gender teams.

The authors also noted men assigned to all-male squads increased their belief that same-gender teams outperform mixed-gender teams (Dahl et al., 2018). There were no differences between the beliefs of men in same- or mixed-gender squads on whether women would make better leaders at higher levels. Similarly designed research found exposure to women as squad mates eliminated gender discrimination in evaluations of a hypothetical squad leader. In one European study, men in male-only squads rated female squad leader candidates more poorly than male candidates with the exact same credentials, whereas men in integrated squads showed no difference in ratings of male or female candidates (Finseraas et al., 2016). Recent research by the

U.S. Army Research Institute found that a year after the integration of women in previously closed positions and occupations, male Soldiers showed shifts to more neutral and positive perceptions of women (U.S. GAO, 2015). These studies suggest meaningful, intense, and relevant exposure to mixed-gender entry training eliminated gender discrimination in evaluation of women as peers and near-peer leaders.

Gendered stereotypes associating male qualities with military leadership are pervasive across military training settings in the United States, including the U.S. Air Force Academy (Boyce & Herd, 2003), the U.S. Military Academy (Morgan, 2004), the U.S. Naval Academy (Looney et al., 2004), and the Texas A&M Corps of Cadets (Boldry et al., 2001). However, integrated training can reduce gender stereotypes and their pernicious effects on how military women are perceived. Boldry et al. (2001) found evidence of gendered stereotypes affecting performance evaluations. Stereotypical-male attributes were associated with higher performance evaluations, and women cadets received lower subjective performance evaluations even though there were no gender difference in actual performance based in objective measures. Compared with those in male-only outfits, men training in integrated outfits in the Corps of Cadets showed more positive perceptions of women's motivation and character without altering perceptions of male cadets (Boldry et al., 2001). Early experience with integrated training appears to socialize recruits into less discriminatory attitudes toward women and assessments of women.

Messages that women are devalued, harmful, distracting, or otherwise a problem as Marines are pervasive and received early in recruit training, sometimes explicitly and sometimes inadvertently from drill instructors (Archer, 2013; Fosher et al., 2018). Well-meaning women drill instructors introduce and disseminate gendered stereotypes when attempting to mentor female recruits by honestly sharing their experiences as women Marines, and how to navigate the obstacles they will face as women (Archer, 2013). Both men and women report being repeatedly told to ignore the opposite sex and to not engage with or be distracted by them during recruit training (Archer, 2013; Fosher et al., 2018; Lane & Fosher, 2020).

Gender-separate recruit training socializes men and women and can unintentionally foster fear and suspicion of the other rather than developing the cross-gender or even within-gender cohesion for women (Archer, 2013; Fosher et al., 2018). Men especially receive messages that capricious women Marines can end a man's career through claims about sexual impropriety (Archer, 2013; Fosher et al., 2018; Lane & Fosher, 2020). Women also internalize negative messages from other women Marines. Archer (2013) finds that women do not find camaraderie with other women because of competition with them.

Brownson (2014) concludes something different from a similar sample of women Marines: Women rejected underperforming women to uphold a common standard for all Marines. However, both observations are likely true: Heightened visibility of small numbers of women who are tokens in the organization leads to greater scrutiny of themselves and one another to ensure adherence to "standards" (Kanter, 1977). While male Marines find a brotherhood in the Corps, women do not report finding a comparable sisterhood (Archer, 2013). Male drill instructors employ tactics for motivating lagging male Marines through degrading gendered language, comparing men's performance to that of women and referring to them using derogatory terms for women and their genitalia (Archer, 2013; Fosher et al., 2018). Research

suggests that for both men and women, gender stereotypes are reinforced starting from the first day of training rather than reduced or actively worked against.

2. Enhancing Entry-Level Socialization by Promoting Cohesion

Bottom Line Up Front

- The events of recruit training, culminating with the Crucible, are designed to promote cohesion.
- Some evidence suggests gender integration can interfere with group cohesion, and more homogenous groups have higher levels of cohesion. However, group diversity has many benefits, and there is overwhelming evidence gender integration does not negatively influence cohesion or performance.
- High levels of cohesion, particularly task cohesion, in mixed-gender groups is associated with greater group performance. Cohesion also provides groups with the support needed to be successful when facing stressors or adversity.
- A range of strategies to promote cohesion for effective leadership, supportive environments, and integrated housing can address challenges associated with gender integration.

Attending to cohesion when considering consequences of gender-integrated training is particularly important, both because building cohesion is a central goal of military training and because cohesion predicts group performance. Guidance from the Joint Chiefs of Staff has indicated gender integration of training should happen in a way that preserves group cohesion (U.S. GAO, 2015). According to Krulak (1997), the major objective of the Crucible is to build a sense of cohesion that recognizes the value of teamwork. Neil et al. (2016) argue that the primary training unit in the USMC is the platoon precisely to facilitate the development of group cohesion and USMC views task cohesion as the natural result of individual competence that develops during training. Training does lead to positive consequences for cohesion, regardless of whether it is gender integrated (U.S. Congress, 1999b). Strong group cohesion has been found to have positive consequences, including higher courage (Peterson & Seligman, 2004), psychological well-being (Ahronson & Cameron, 2007), and especially group performance (Evans & Dion, 1991).

In short, more cohesive groups tend to perform better than less cohesive groups (Beal et al., 2003; Mullen & Copper, 1994). This factor appears especially true for task versus social cohesion (Mullen & Copper, 1994; Zaccaro et al., 1995), although there is substantial overlap between task and social processes in groups (Zaccaro & McCoy, 1998), so separating effects of task and social cohesion can be difficult. Research has also found the relationship between cohesion and performance to be bidirectional (e.g., Mathieu et al., 2015), with some evidence the relationship is stronger in the direction of high performance predicting high cohesion than cohesion predicting performance (MacCoun & Hix, 2010). Finally, there are indications cohesion should be viewed as a performance enabler rather than enhancer, with high cohesion providing the commitment necessary to deal with stressors and perform effectively (Griffith,

2007). Cohesion has been put forward as a crucial factor in combat motivation and a strong determinant of successful military unit performance (Wong et al., 2003).

Entry-level socialization is enhanced when it replicates occupation practice with fidelity, when recruits ‘train as they fight’ (Dooley, 1998). Early mixed-gender socialization and training establish the foundation for later occupational effectiveness. The opening of combat occupational specialties to women demands renewed consideration of what is lost by not engaging in early gender-integrated training and socialization. Gender-integrated training also implies consideration of gender-integrated leadership teams. Drill instructors play a key role in supporting or opposing such efforts. Past research finds Army drill sergeants with negative views of gender-integrated basic training produce Soldiers who perform more poorly and have lower morale (Mottern, 1997). Exposure to mixed-gender drill instructor teams may enhance cohesion and build role models of both genders, while also modelling positive cross-gender teamwork, gender integration, cohesion, and unit performance (Dooley, 1998).

Critics of gender-integrated training have often pointed to anticipated negative consequences of gender integration on group dynamics, and specifically group cohesion (Chapman, 2008; Burrelli, 2013). For example, Marine Corps instructors in focus groups believed mixed-gender training at or below the platoon level could diminish cohesion (*Dolfini-Reed et al.*, 2017). A study in the Canadian Navy found beliefs that gender-integrated units would lead to personal relationships with certain negative effects on cohesion (Bélanger & Davis, 2010). A set of surveys and focus groups of Special Forces personnel in the United States found strong opposition to opening specialties that had been closed to women, with strong concern that integrating women into specialties would erode cohesion (Szayna et al., 2016). Some (e.g., Chapman, 2008) have stated that arguments based on cohesion to resist gender-integrated training are similar to arguments previously used to justify other exclusions, such as maintaining racially segregated training. In general, rationales based on cohesion have historically been used to exclude, rather than include, persons viewed as outsiders (Australian Human Rights Commission, 2011).

Group homogeneity and cohesion. Some evidence indicates gender integration has the potential to interfere with group cohesion (Schaefer et al., 2015). For example, interpersonal relationships, which are an element of social cohesion, are more easily established between persons with similar experiences and demographic characteristics (Reagans, 2012). On average, more homogenous groups exhibit higher levels of group cohesion (Jehn et al., 1999; O’Reilly et al., 1989) and less relational conflict (Pelled et al., 1999) than less homogenous groups. However, although cohesion generally has a positive relationship with performance, there are negative consequences to the high cohesion that might result from forming highly homogenous groups. For example, excessive cohesion can lead to groupthink and polarized attitudes and subsequently to deficient judgments (Dion, 2004). Group diversity can have the benefits of facilitating realistic appraisals of situations and de-escalations of commitment to failing courses of action (Whyte & Auer-Rizzi, 2000). If there are potential negative effects on cohesion of greater group diversity, these consequences can be offset and managed as discussed below.

Group cohesion in the military context. Cohesion has been the subject of much research in studies of military organizations, beginning with Shils and Janowitz’s seminal 1948 piece,

Cohesion and disintegration in the Wehrmacht in World War II. Some (e.g., Siebold, 2011) have argued research on cohesion from groups in broader society should not be viewed as necessarily applicable to military settings. Groups in military settings are part of highly regulated and hierarchical organizations, with uniforms denoting rank, members who cannot easily leave, and potential lethal threats to group members. It is argued findings from wider research on cohesion might not apply to military groups (Siebold, 2007). As a result, the state of research on cohesion in military contexts is considered here.

The positive relationship between cohesion and performance noted in the literature at large has held true in military contexts. In mixed-gender military units, high cohesion has been found to predict performance (Employment of Women in the Armed Forces Steering Group, 2002). In gender-integrated Air Force units, for example, social cohesion significantly predicted unit teamwork (Hirschfeld et al., 2005). A review of studies of military units found task but not social cohesion was positively related to group performance (Oliver et al., 1999). Studies of gender-integration of military units have found a range of results on consequences of gender-integration on cohesion. For example, the Kassenbaum-Baker Committee in 1997 concluded gender-integrated training in Military Services had led to decreased unit cohesion, while the 1999 Blair Commission in contrast found no effects of gender composition of training on cohesion (Schaefer et al., 2018).

Some research has found adverse effects on cohesion of gender integration. Rosen and colleagues (1996), for example, found gender-integrated military units had lower cohesion than single-gender units. Most research, however, has not found these negative consequences. Scarpace & O'Neill (1992) found gender-integrated training improved women's performance and did not adversely affect men's performance in either readiness or cohesion. Other research and reviews of studies in military settings have relatively consistently found no negative effects of gender integration on cohesion (Goldstein, 2003; Hoiberg, 1991; Knarr et al., 2014; Pinch et al., 2004). The state of the research literature on gender integration and unit cohesion in military settings led MacCoun and Hix (2010) to conclude that any effects of gender integration on weakening cohesion, if they exist at all, appear to be weak and fleeting.

Relationships between integration and cohesion, and between cohesion and performance, are not always straightforward. The research literature identifies many nuances to these relationships. For example, research has identified the role of leadership as important in successful gender-integration of groups. In mixed-gender groups, cohesion is highest when both men and women feel they are respected and treated fairly by leaders (Chrobot-Mason & Aramovich, 2013), and the shared experience of stressful training activities increases unit cohesion for both women and men (Bartone et al., 2002). Similarly, women in male-dominated fields who feel they have been treated fairly and not been discriminated against perform better and feel more integrated in male-dominated groups (Richman et al., 2011). Research finding negative effects of cohesion on gender-integrated training has found it to be an issue only when conflict was already a problem in the units (Laurence et al., 1999).

Research has identified a range of consequences of gender discrimination in military units when they become gender integrated. Gender stereotypes apparent in broader society that favor men are also present in the USMC (Archer, 2013). When cohesion has been a problem in gender-

integrated units, it has typically been based on beliefs that men and women have been treated differently (Harrell & Miller, 1997; Burrelli, 2013). As an example of these processes, women Marines in one study performed worse on a marksmanship test after gender stereotypes were made salient to them (Archer, 2010). Hypermasculinity has been found to be associated with lower levels of cohesion in mixed-gender military units (Rosen et al., 2003). In analyses of other countries' experiences with gender-integrated training, negative effects of integration on cohesion occurred when there was evidence of enduring negative gender stereotyping from men (Cawkill et al., 2009).

The overwhelming result in military contexts, however, has been that gender integration of units has not eroded cohesion or performance (Gebicke, 1997; Simutis & Mottern, 1996; U.S. Army, 2015; Gebicke, 1993). Recruits have supported the gender integration of training (Herres, 1992). Research has found women who completed USMC training prior to the integration of combat training feel less accepted as members of the USMC than women who completed training after integration (Dooley, 1998). Research also shows gender-segregated training can perpetuate feelings of superiority among men (Halpern et al., 2011), and gender-integrated training reduces stereotypical perceptions about the motivations and character of women (Boldry et al., 2001).

Mitigation strategies to address challenges. Although academic studies generally do not find negative effects of gender integration on cohesion or performance, and anticipated problems from gender integration in these areas have not tended to materialize in military settings, there are steps found to be successful in mitigating any negative consequences that emerge:

- **Effective leadership.** Effective leadership is especially important for building cohesion in gender-integrated units (Siebold & Lindsay, 1999); promoting a command climate that reinforces the normality of mixed-gender cohesion should have positive results (Davis, 2007; Neil et al., 2016).
- **Supportive environments and team building.** Other steps likely to have positive consequences for cohesion in mixed-gender units include a supportive environment, cohesion-building activities, adding mixed-gender problem solving tasks to build cohesion, and role modeling appropriate behavior (Neil et al., 2016; Schaefer et al., 2018; Schaefer et al., 2015).
- **Integrated housing.** To the extent possible, research supports higher cohesion when housing facilities for women and men are integrated rather than segregated by gender (Harrell & Miller, 1997; Kassebaum Baker, 1997). However, it is important to note that additional safety protocols may be required to prevent incidents of sexual harassment and sexual assault in integrated housing (Schaefer et al., 2018).
- **Time.** Cohesion in gender-diverse groups improves over time (Harrison et al., 1998), and leaders of gender-diverse groups should allow time for cohesion to develop (Schaefer et al., 2015).

3. Physical and Physiological Factors Associated with Performance

Bottom Line Up Front

- Military personnel experience a variety of occupational demands that require both physical fitness and skill.
- Combat fitness requires strength, anaerobic power, muscular endurance, aerobic capacity, body composition, flexibility, coordination, balance, agility, and speed.
- Biomarkers can be used to detect physiological responses to training, and results using biomarker monitoring can boost performance outcomes.
- Men and women experience different types and rates of injury during Marine Corps recruit training.

Military personnel experience a variety of occupational demands that require both physical fitness and skill. Engaging in combat missions requires muscular strength and endurance, aerobic capacity, flexibility, and body composition as well as speed, agility, power, coordination, and balance (Nindl et al., 2015a). A broad assessment of an individual's physical performance capabilities is critical to determining combat readiness. Identification of physical fitness and performance metrics predictive of success in military occupational tasks are a valuable resource to guide training and conditioning in efforts to boost readiness and reduce the risk of musculoskeletal injury.

Components of physical fitness are often assessed by comprehensive tests as a part of military recruitment, selection processes, or periodic assessments of combat readiness (Nindl et al., 2015b; Pihlainen et al., 2018). These military occupational fitness tests are designed to incorporate task simulations similar to what would be required as part of a combat MOS (Richmond et al., 2008; Payne & Harvey, 2010; Nindl et al., 2015a). Of significant importance, the Marine Corps Combat Fitness Test taken by Marines every 6 months consists of a timed 880-yard sprint, lifting a 30-lb ammunition can overhead from shoulder height repeatedly for 2 minutes, and a 300-meter maneuver-under-fire event (Bartlett et al., 2015). Despite this test's ability to assess some aspects of muscular strength, muscular endurance, aerobic capacity, agility, balance, speed, and coordination (Nindl et al., 2015a), no one test battery has been employed that has consistently shown an ability to assess all necessary components of physical fitness. However, identifying the performance metrics most predictive of success may aid in determining best practices for physical fitness assessments and physical fitness requirements for recruit training.

Strength. The National Strength and Conditioning Association's second Blue Ribbon Panel of Military Physical Readiness determined muscular strength and power as the most critical fitness metrics required to successfully accomplish common military tasks (Nindl et al., 2015a; Nindl et al., 2015b) and excel in battlefield performance (Friedl et al., 2015). Predictors of success in Army Ranger school and performance on military tasks have been found to be closely tied to muscular strength (Barringer et al., 2019; Hydren et al., 2017). Critical tasks related to these physiological parameters include loaded marching, repetitive lifting, digging, and carrying.

Anaerobic power. Anaerobic power is another critical physiological element associated with military physical performance. For example, Army Ranger school completion and Special

Operation Forces task performance success have been consistently associated with the power of the lower body and anaerobic capacity (Barringer et al., 2019, Pihlainen et al., 2018). The vertical jump, in particular, is representative of the explosive power of the lower body, which has been found strongly relevant to battlefield tasks (Harman et al., 2008). Mala et al. (2015) found the strongest predictor of a high-intensity combat task with heavy load carriage was counter movement jump peak power. The idea of physical and physiological indicators predictive of success is not relegated to military populations. Studies in soccer athletes have found significant relationships between jump test performance (vertical jump, standing broad jump, and triple hops) and soccer-specific field tests (Lockie et al., 2016), with significant relationships between team average jump height (countermovement jump and standing jump) and team success in league standings (Arnason et al., 2004). Based on these findings, it is evident anaerobic power plays an important role in determining performance readiness and may be included as a predictor of success during battlefield task situations.

Muscular endurance. Muscular endurance as part of military testing is commonly measured by assessing how many repetitions an individual can perform for a given exercise (e.g., pushups, situps, pullups). Research has demonstrated performance on the 2-minute pushup and situp tests is moderately related to tests that more closely reflect battlefield activities, such as 30-meter rush times, 400-meter run times, and specific obstacle course times but not casualty rescue times (Harman et al., 2008). Those who were able to pass the Australian Special Forces Entry Test demonstrated better pushup performance (Hunt et al., 2013). Pushup and pullup performance has been moderately associated with performance on an obstacle course designed to simulate military tasks (Neves, 2017).

Aerobic capacity. Aerobic capacity (i.e., aerobic “endurance”) has long been considered an important component of physical performance, particularly for prolonged physical activities and in combat situations (Hauschild et al., 2016; Pihlainen et al., 2018). Harman et al. (2008) found aerobic capacity assessed by a 3.2-kilometer run to be the second most important variable after vertical jump for predicting battlefield-specific performance. This profile is similar to that required for success in elite power-endurance athletes (Walker et al., 2019a). Research has also shown associations between greater aerobic capacity and faster loaded march (Rayson et al., 2000; Williams & Rayson, 2006), casualty rescue task performance (Harman et al., 2008), improved military simulation tests (Pihlainen et al., 2018; Huang et al., 2018), and obstacle course completion (Jette et al., 1990). However, run times were weakly correlated to simulated military task performance in the Colombian army (Neves, 2017) and an occupational physical ability test in U.S. police officers (Marins et al., 2019).

Body composition. Each military Service specifies a body composition (e.g., height and weight, body mass index) required to maintain health and successfully serve military occupations. However, most military assessment is limited to a crude index of body mass rather than composition. Despite a previous report of low predictive values of body size or composition in Soldier performance (Harmon & Frykman, 1992), recent data suggest total body mass, muscle mass, and fat mass may be associated with military task performance (Pihlainen et al., 2018; Harman et al., 2008). Pihlainen et al. (2018) found completion of a military simulation task in male Soldiers was significantly correlated with body fat percentage and skeletal muscle mass rather than overall body mass. Similarly, lean body mass and body fat percentage were found to

be significantly correlated with load carriage performance. Specifically, higher body fat percentage was associated with slower load carriage, while higher lean body mass was associated with faster load carriage (Harman & Frykman, 1992). Harman et al. (2008) found heavier body mass was significantly associated with faster casualty rescue times and nonsignificantly associated with slower times on a timed 400-meter run, obstacle course, and 30-meter rushes.

Flexibility, coordination, and balance. While comprehensive fitness tests that include many aspects of physical fitness have been suggested to guide training in efforts to improve Soldier combat readiness (Heinrich et al., 2012), research on tests related to flexibility, coordination, and balance in military populations are lacking. Hunt and colleagues (2013) found no significant differences in flexibility between Soldiers who passed the Australian Special Forces entry test compared with those who failed. It appears more research on flexibility, coordination, and balance may be required to determine the role of these human performance metrics in predicting success in combat-related tasks and their role related to injury prevention.

Agility and speed. Agility is defined as the ability to rapidly and accurately change the direction of the whole body in space (Nindl et al., 2015b). Anecdotally, the importance of agility in military operations is thought to be critical for performance of high-intensity movements. The ability to perform tasks requiring power and agility in the face of enemy fire or during other stressful events has said to be essential to prevent the risk of injury, fatality, or mission failure (Joseph et al., 2018). However, there is little evidence linking agility with military performance, with preliminary data inconsistent at best. Hunt et al. (2013) found no differences in agility among Soldiers who passed the Australian Special Forces entry test compared with those who failed. On the contrary, Marins & colleagues (2019) found agility (assessed via the Illinois Agility Test) as one of the best predictors for occupational performance in federal police officers. Military occupational fitness tests often require a time limit to complete the test successfully. Therefore, speed may play a role in successful test completion. Although field test options have been provided for assessing speed components in military populations (including assessing 40-yard sprint times) (Nindl et al., 2015b), more research is warranted to assess the relationship between speed and battlefield task success. While data supporting a strong link between speed and agility and combat readiness are limited, previous research in athlete populations may lend support for speed and agility as an important indicator of military performance (Sekulic et al., 2019; Walker et al., 2019a).

Differences in performance metrics between men and women. When comparing performance metrics between sexes, women have inherently lower absolute strength, anaerobic power, and aerobic capacity compared with their male counterparts. The differences are in part the result of physiological differences leading to disparities in body composition, with men exhibiting lower body fat percentages and greater muscle mass on an absolute basis. Therefore, with regard to muscular strength, women typically demonstrate half the upper body strength and two-thirds the leg strength as men (McKardle et al., 2010). When expressed relative to body weight, these differences are somewhat reduced. When expressed relative to fat-free mass, they are reduced even more. However, absolute performance outcomes are not assessed using these caveats.

Women also have lower power capacity (McFadden et al., 2020), with significantly lower vertical jump heights than those of men (Helgerud et al., 2002; McFadden et al., 2020). This

difference is apparent even if accounting for muscle mass. In addition to lower body strength and power, aerobic capacity has been shown to be 15–30 percent lower in both trained and untrained women compared with men of similar age (Dada et al., 2017; Sharp et al., 2002). While this variation is attributable to cardiovascular system differences (i.e., heart size, blood volume, stroke volume differences), women do possess some unique adaptive advantages to reduce the discrepancy somewhat.

Despite differences in absolute physical performance capabilities, women are expected to meet the minimum physical requirements to successfully perform their military duties (Dada et al., 2017). In basic training, female Soldiers performed 53.1 percent fewer pushups, 15.9 percent fewer situps, and 19.1 percent slower 2-mile run times than men (Dada et al., 2017). The performance gap was reduced in operational units, with women performing 39.5 percent fewer pushups, 4.7 percent fewer situps, and 17.9 percent slower 2-mile run times. These details suggest that despite absolute performance differences between sexes, the performance outcomes can be improved with appropriate training. Women generally demonstrate similar adaptive capabilities to men in initial stages of training.

Differences in nutritional needs between men and women. Women in Infantry Training Battalion reported their experiences losing strength and muscle mass at USMC recruit training as a result of nutritional deficiencies accumulated during training. For example, women cited a need to rely heavily on dairy for strength and felt there were not enough protein options beyond eggs and chicken (Dolfini-Reed et al., 2017).

Importance of biomarkers and the environment. Biomarker monitoring has been shown to be useful for detecting physiological responses to training and providing insights into efforts to boost performance outcomes (Walker et al., 2019b, McFadden et al., 2020). Research in female collegiate athletes participating in a physically demanding training and competition season has shown a relationship among biomarkers, performance outcomes, and body composition (McFadden et al., 2020). Specifically, biomarkers related to stress and muscle breakdown, such as IL-6 and cortisol, were shown to negatively correlate with strength and fat free mass, whereas markers of anabolism, such as IGF-1, were positively correlated with strength.

Biomarkers have also been shown to relate to changes in military performance where 3 weeks of military field exercises resulted in deteriorations in physical performance and negative changes in body composition as well as hormonal and immunological markers (Ojanen et al., 2018). Men and women demonstrate uniquely different physiological responses, even when relative workload is similar (Walker et al., 2017). One study examining biomarker responses associated with a competitive soccer season found female athletes experienced greater training-induced alterations in hematological values, which may have implications for recovery strategies in these athletes. Energy deficiency may also have more notable health effects on women, with disruption of the hypothalamic-pituitary-gonadal axis

In conjunction with psychological measures, biomarkers have also been used to detect responses to environmental and social conditions. This is evidenced by the differential stress responses (reflected by cortisol secretion) and social-cognitive responses in women placed in either single sex or coed exercise settings (Arent et al., 2005). Individual characteristics related to social physique anxiety resulted in a lower threshold for the stress response activation in women, even

after controlling for exercise intensity (Martin Ginis et al., 2012). Taken together, these studies indicate biomarker changes in response to stress from training in conjunction with environmental conditions may have implications on performance outcomes.

Epidemiology of Injuries During Marine Corps Recruit Training

Little peer-reviewed literature describes the epidemiology of injuries during USMC recruit training, and previous studies have been conducted separately among female and male recruits. Musculoskeletal injuries were reported in 44.4 percent of women during USMC recruit training, with 5.7 percent of the female recruits sustaining a stress fracture (Shaffer et al., 1999). Risk factors for stress fractures in women during USMC recruit training included low aerobic fitness, fewer than 7 months of lower-extremity weight training (Rauh et al., 2006), and no menses during the past year (Shaffer et al., 2006).

A large percentage (39.6 percent) of men also sustained a musculoskeletal injury during USMC recruit training, and the most frequent diagnoses were ankle sprains (6.2 percent) and iliotibial band syndrome (5.3 percent). Injury rates measured weekly showed significant correlation with hours of vigorous physical training (Almeida et al., 1999). Another study in male USMC recruits revealed a large percentage (> 40 percent) of injuries sustained during training were sprains, strains, iliotibial band syndrome, or stress fractures. Poor performance on the Initial Strength Test was associated with occurrence of injuries (Jensen et al., 2019). Analysis of the risk of lower extremity stress fracture in men during USMC recruit training showed poor physical fitness and low levels of physical activity prior to entry into the program was associated with increased risk (Shaffer et al., 1999).

After adjustment for demographic characteristics, negative first-term outcomes (not completing first term and not being promoted to corporal) were associated with lower extremity injuries or stress fractures during training in female Marines (Trone et al., 2007). Among men, occurrence of stress fracture during training, older age (> 23 years), poor self-reported physical fitness at baseline, no history of competitive exercise, and lower extremity injury with incomplete recovery at baseline were associated with discharge from USMC basic training (Reis et al., 2007).

Other studies have investigated injuries in both women and men during USMC Officer Candidate School (OCS). The cumulative injury incidence during OCS was higher among women (80.0 percent) compared with men (59.5 percent; risk ratio = 1.3, $p = 0.026$). The most common injuries were blisters in men (0.68/100 trainees/1,000 training hours) and bone stress reactions in women (1.35/100 trainees/1,000 training hours) (Piantanida et al., 2000). A higher incidence of stress reactions has been described in female OCS candidates (11.5 percent) compared with male OCS candidates (7.9 percent) (Winfield et al., 1997). A comparison of musculoskeletal injuries in women and men during the USMC Ground Combat Element Integrated Task Force workup and assessment phases in gender-integrated units showed a greater proportion of women (40.5 percent) sustained an injury compared with men (18.8 percent, $p < 0.001$). The most frequent sublocation was the hip (24 percent) in women and foot/toes (26 percent) in men (Lovalekar M, et al., 2020).

A report by the Institute of Medicine (IOM) described higher stress fracture rates (more than twice) among female military trainees during basic training compared to male military trainees. The report also indicated some studies that controlled for aerobic fitness were not able to show a sex-difference in the incidence of injury between men and women when individuals of the same fitness level were compared (IOM, Committee on Body Composition Nutrition and Health of Military Women, 1998). As the absolute fitness levels required for safe performance of various operational specialties is not known, development of improved injury risk models to identify intrinsic and extrinsic injury risk factors is needed (Tepe et al., 2016).

E. Lessons Learned, Best Practices, and Alternative Approaches

As the Marine Corps considers options and alternative approaches to gender-integrated training, it can learn from the experiences of other Services and other countries. Although the United States military is like no other, and the Marine Corps has a mission set that differs from its sister Services, lessons learned and best practices from other entities that have worked toward gender-integrated training may be applicable.

1. Lessons Learned From Other U.S. Military Services

Bottom Line Up Front

- Although critics have raised concern about integrating minority groups, DoD has successfully integrated women, racial and ethnic minorities, and Service members who identify as gay or bisexual.
- Other services have found the effects of gender-integrated training to be either positive or neutral.
- Lessons learned for successful gender integration from other services include strong leadership showing support of integration; clear internal and external communication; demonstrations of respect, fairness, and equality; and positive organizational culture.

Decades of integration processes and incremental changes to DoD policy demonstrate how perceived fears and concerns over degradations to readiness, cohesion, and morale when integrating minority groups have not materialized (Schaefer et al., 2015). The Military Services ushered in the successful integration of women, racial and ethnic minorities, Service members who identify as gay or bisexual, and most recently Service members who are transgender (Dunlap et al., 2020; Kamarck, 2019). The military was often touted as a leader in diversity in the mid-to-late 20th century with the integration of racial and ethnic minorities and women. While great progress has been made, the Military Services are still fully realizing the integration of women, particularly in previously closed occupations (Kamarck, 2019; Vickers, 2020). As previously noted, USMC has not equally applied gender integration at both locations for recruit training. Little research evaluates the impact of gender-integrated recruit training on the training environment, recruits, or Service members in the force. The most recent study on gender integration and recruit training was conducted by RAND in 2018; it examined options for the Air Force to increase gender integration in basic military training. Research supports gender-integrated training, demonstrating it “improves female performance and does not adversely affect

male performance” as related to readiness and cohesion outcomes (Schaefer et al., 2018, p. 13). Noting the effect of gender-integrated training as largely neutral or positive, RAND researchers offered two mitigation strategies to ward off potential negative impacts of gender-integrated training: minimizing injuries and using role models.

- **Minimize injuries.** Injury reduction for women during recruit training “requires both physical and cultural solutions” and would improve the readiness for all recruits, regardless of gender (Schaefer et al., 2018, p. 11).
- **Use role models.** Instructors are powerful role models in the recruit training environment and can set the tone for gender-integrated environments demonstrating professional mixed-gender interactions and ensuring all recruits are treated with respect and fairness (Schaefer et al., 2018).

Another crucial consideration related to gender integration at recruit training is the prevention of sexual harassment and sexual assault. It is important to ensure recruit safety at all times during recruit training. Prevention of sexual harassment and sexual assault is multi-dimensional; it involves preventing these unwanted behaviors among recruits, whether same gender or mixed gender, and is influenced by the relationship between drill instructors and recruits. While all the Services, including USMC, provide sexual assault prevention and reporting training as part of the academic curriculum for recruits, additional structural measures and policy considerations can further prevent these issues in gender integrated environments. The Air Force and Coast Guard have specific policies restricting instructors from spending time in recruit sleeping areas after certain hours. Several Services, including the Navy, employ policies that recruits cannot be alone with instructors behind closed doors and ensure instructor offices have windows that provide a clear view into the office. The Air Force and the Army provide accessible phone lines for recruits to report sexual harassment and sexual assault incidents without the involvement of drill instructors or other leadership. Another method used for recruit safety is a ‘battle buddy’ policy, which is in place at MCRDs, where recruits stay with their same-gender buddy and do not go anywhere alone (Schaefer et al, 2018). Prevention of sexual harassment and sexual assault can be aided by leadership efforts to ensure these unwelcome behaviors are prevented (GAO, 2015).

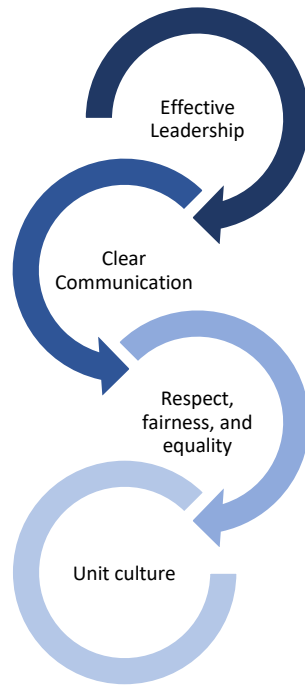
Recommendations and best practices from the Services result from recent research conducted on gender integration in occupations previously closed to women. These lessons learned and recommendations are broad and can be applied to the recruit training environment. Gender-integration research from the other Services coalesces around four interconnected themes:

- **Leadership, at all levels, is key to successful integration.** Leaders, from the highest ranks of military service to the smallest unit level groups, serve as facilitators for gender integration processes. Leaders who articulate and demonstrate their commitment to integration set the tone for all others, leading to greater integration success (Schaefer et al., 2015; Schaefer et al, 2018). Drill instructors are pivotal all-encompassing leaders, teachers, and role models for recruits (Schaefer et al., 2018). The commitment of both male and female drill instructors to gender-integrated training is necessary for the success of all recruits; instructor attitudes toward gender-integrated training have been shown to affect recruits’ readiness and cohesion (Schaefer et al., 2018).

- **Clear communication, both internal and external, strengthens and guides the integration process.** Communication is paramount to the facilitation and success of any integration process. The Army implemented gender-integrated recruit training in the 1970s and then returned to gender-separate recruit training in the early 1980s. When the Army initially established gender-integrated recruit training, it did so “without a clear statement of goals, policies, or procedures” (Chapman, 2008, p. 68), which ultimately harmed the Services’ integration efforts. Consistent messages communicated both internally and externally from the Services can provide clarity on the integration process and create a shared understanding about the intent of integration. Focus groups with Service members have also identified the need for strong communication to help dispel myths surrounding gender integration, particularly related to standards (Gaddes et al., 2017). Clear, direct, and unwavering communication from Service leadership is especially important for providing messaging to counter resistance and amplify how integration will benefit mission readiness (Schaefer et al., 2008).
- **Transparent demonstrations of respect, fairness, and equality are essential.** Perceptions that standards will be lowered to accommodate women have represented and continue to represent a major obstacle for gender integration in the Military Services writ large. Transparent gender-neutral standards that are clear to all can reduce fears and resistance that women’s inclusion weakens the military or certain occupational requirements. Studies from the Marine Corps, Army, and U.S. Special Operations Command found “positive unit cohesion was more likely when and if physical standards and professional standards of conduct were applied equally to men and women” (Kamarck, 2016, p. 30). Gender-neutral standards as applicable in the recruit training environment and clear communication of those standards set an equal foundation and can minimize the perception of difference (Schaefer et al., 2015).
- **Internal culture can propel or harm integration efforts.** Culture, particularly at the unit or smallest group level of interaction, can have a substantial influence on integration efforts. Cultural ideals and norms that promote, uphold, or allow hostility toward women are particularly harmful for success in gender integration. Mixed-gender units with greater levels of sexual harassment in the Army were found to be “less cohesive, less accepting of women, and less ready for combat” than units with lower levels of sexual harassment (Schaefer et al., 2015, p. 23). Units with cultural norms that promote equity, diversity, and inclusion are less likely to be negatively affected by integration; and integration may increase cohesion among these groups (Schaefer et al., 2015).

Figure 2.1 summarizes the connection among these four themes arising from research on gender integration in the Military Services.

Figure 2.1. Lessons Learned for Gender Integration From Other Services



2. Lessons Learned From Other Countries

Bottom Line Up Front

- The Marine Corps can apply lessons learned from the experiences of gender integration in Canada, Israel, Sweden, and New Zealand.
- These countries found success through strategic and phased integration plans, accountability and tracking success, promoting integration through policy, and thoughtfully considering physical standards.
- Like some U.S. services, these countries found the success of gender integration depends on strong leadership.

This section contains approaches and frameworks that foreign militaries used to achieve full gender integration. Though much of the literature is written regarding the integration of women in combat arms or special forces closed to women, many lessons can be applied to the model the Marine Corps develops to integrate recruit training. The study team examined case studies from Canada, Israel, Sweden, and New Zealand and identified several common themes examined below.

Role of strategic, phased integration plans. The Israeli Defense Forces pursued several strategies to integrate women into combat occupations. A phased integration process was used, in which integration occurs within a specific set of occupations or units before being gradually expanded to all units and occupations. They started with all-male and all-female units before gradually transitioning to integrated units. However, the Israeli Defense Forces did not clearly

lay out an integration plan, which ultimately hindered integration (Schaefer et al., 2015). Having a clear implementation plan is an important element of programs that are more successful with gender integration (Schaefer et al., 2018).

The New Zealand Defence Force also integrated women into combat occupations in phases. It integrated lateral transfers or internal recruits first, then sought new recruits for those occupations (Schaefer et al., 2015). Other foreign military leaders and researchers stated that phased integration often appears to support progress because it allows integration to occur gradually alongside training. It also facilitates frequent status checks and course corrections as needed (Schaefer et al., 2018).

Accountability and tracking success. Frequent status checks are essential to monitoring gender-integration initiatives. Canadian military commanders and those involved in gender-integration processes reported the value of developing a clear set of metrics that can be monitored to assess and track the progress of integration. Clear data monitoring and frequent assessments have helped the Canadian Forces “reaffirm commitment to integration and identify areas of strength and weakness during the integration process” (Schaefer et al., 2015, p. 61). Data monitoring and assessments have included tracking the number of female recruits, releases, and promotions across occupations over time and collecting data on any problems or complaints that emerge (Schaefer et al., 2015).

Using policy to promote integration. Both the Israeli Defense Forces and the New Zealand Defence Force relied heavily on training programs and policies to promote cultural changes in attitude and the acceptance of women in nontraditional roles. According to senior and military leaders, New Zealand has been able to achieve more success in integration since focusing on human resource management policies. The Israeli Defense Forces used quotas as part of integration and instituted several legal and policy changes to support them, including revised procedures for handling sexual harassment. They also have a Women’s Affairs division to address challenging issues such as sexual harassment, discrimination, and other obstacles women face (Schaefer et al., 2015).

The Swedish Armed Forces, like the Israeli Defense Forces, updated its sexual harassment policies to help implement integration. Every unit now has a special administrator in charge of handling sexual harassment cases and gender issues. Gender field advisers are assigned to individual units and advise commanders and personnel on gender-equity issues during routine operations and on international missions. Sweden has relied on gender advisers—and gender coaches—to promote equality and integration of women with training and education force-wide. Gender coaches often target senior leaders and key persons within the Swedish Armed Forces. Sweden has also relied on targeted recruiting and retention programs (not quotas) and assignment policies that support the advancement of women (Schaefer et al., 2015).

Thoughtful consideration of physical standards. Regarding physical training, the New Zealand Defence Force used gender-normed standards, rather than gender-neutral standards, for all occupations except special operations. These standards are designed to differ for men and women but are based on the performance distribution of each gender. For example, a timed run standard might be set at the 70th percentile of men and women, even if this time differs by

gender (Schaefer et al., 2015). Israeli Defense Forces relied on a combination of gender-neutral and gender-proportional physical standards. Based on an assessment of commanders and female Soldiers themselves, “Integrated training is most effective at improving the physical performance of women,” and unit cohesion is promoted by integrated accommodations (Schaefer et al., 2015, p. 64). It is important to consider that this successful approach relates to gender-normed physical standards that account for physiological gender differences, and not occupational standards.

Role of leadership. The influence of leadership on the success of gender-integration was emphasized in all the foreign case studies examined. Without visible involvement and commitment by senior leaders, “Progress on integration is difficult or impossible to achieve,” according to stakeholders and senior leaders involved in the integration process (Schaefer et al., 2018, p. 68). Canadian Forces documented the role leadership has played throughout integration of women in previously all-male units. From 1979 to 1985, the Servicewomen in Non-Traditional Environments and Roles (SWINTER) trials assessed the effects of women’s employment on the operational effectiveness of all-male units. The trial research concluded that the “adoption of a ‘business as usual’ approach” would not provide sufficient guidance in creating positive integration of women into previously all-male domains (Davis, 2007, p. 76). Effective integration would depend on leadership in addressing real and perceived issues such as: compromised selection and training standards, harassment of women, resistance to change, restrictions in range of tasks that supervisors assign women, differences in the physical strength and aggressiveness of women and men, women’s fearfulness, emotionality and pregnancy, sexual relationships between men and women who are working together, and rumors of women’s homosexuality. Although women were not assigned combat duties in the SWINTER trials, the trials did provide an opportunity for further policy development and a rethinking of the ways the Canadian Forces could or should be responsive to changes in social practice and attitudes during the 1980s (Davis, 2007).

In 1998, a report from the Canadian Army Lessons Learned Centre stated that cohesion of mixed-gender combat arms units was a leadership challenge. A search was needed for common ground or a point all team members could identify with. It was considered leadership’s responsibility to provide the framework and common ground to facilitate team building in a nonhomogenous environment. The cause of breakdown in unit cohesion, especially concerning gender, reportedly stemmed from inequitable leadership and discipline, favoritism or harassment of distinct groups, fraternization (especially within the chain of command), and isolation and segregation of distinct groups. The report identified that successful integration of women required all members of the Canadian Army to achieve one standard that met operational requirements and that everyone was treated equitably. Knowledgeable, proactive and effective leadership, particularly at the levels where integration was occurring, was acknowledged to be the fundamental element to ensure the initiative was successful (Cawkill et al., 2009).

The Canadian Ministry conducted an experiment in 2000 to closely examine the relationship between various aspects of group cohesion and operational performance and the presence of women in combat units. One all-male and five mixed-gender groups were subjected to a series of demanding tests and routines. The Ministry measured and observed differences in cohesion and military performance, but as the report concluded, “Leadership and teamwork ... were more important in explaining variation between sections than gender mix” (Pinch et al., 2004, p. 61).

An example that supports the reports' conclusion is Lieutenant-Commander Marta Mulkins' first day as captain of HMCS (Her Majesty's Canadian Ship) *Kingston* in July 2003. She is the first woman in the Canadian Navy to command a ship:

Of note, and clear testament to their own excellent leadership, was the instant and unquestioning support offered to me from the other two members of the Command Team, the Executive Officer and the Coxswain. Their influence on the ship's company was immeasurable; undoubtedly through their attitude and tone, they transmitted a positive anticipation and expectation. Had they shown anything less than the utmost support to me from the first day onward, it would certainly have made my first days in the new job more difficult. This positive atmosphere probably made the team more receptive when I explained my philosophies and expectations to set the tone for the ship. It was made clear that I expected the highest standards of professionalism, and in turn would strive to give them every opportunity to advance; I stressed my approach to issues would be "firm but fair" and that while we would work very hard, we would certainly play hard as well. In what was probably the only time I addressed the elephant in the room, I stated that I would do whatever I could to shield them from any extra attention that might be aimed at me. Beyond that, I believe I deliberately did not again acknowledge the scrutiny we were all under—hopefully relegating the obvious to "minor inconvenience" status. It is possible though that the Executive Officer and the Coxswain may have kept that factor in mind in their own direction to the team. (Davis, 2007, p. 41)

F. Conclusions and Implications

Gender integration of the military has been an ongoing process over America's history. It has gained traction in recent decades and has been the subject of public scrutiny as DoD and the Services continue to move toward full integration and increased representation of women across the Armed Forces. Central to the gender integration process is the subject of recruit training, which is steeped in tradition as a process that focuses on transforming civilians to Service members. Although policies guiding recruit training are prescriptive, each Service has its objectives to recruit training and therefore its own approach to gender-integrated training. Each Service also defines full gender integration in its own way. Given the varying concepts of full gender integration across the Services measuring success requires careful consideration of these unique perspectives and approaches.

Although men and women have physiological differences and experience the physical rigors of recruit training differently, there are mitigating solutions to ensure all recruits receive the necessary support throughout training. Research suggests that widely speaking, gender-integrated recruit training has positive or neutral effects on performance metrics such as cohesion and morale. The Marine Corps should consider lessons learned and best practices from other Services and countries when planning for next steps in gender-integrated training.

As USMC considers approaches to gender integration, it is important for leaders to consider the values and lessons regarding gender that recruits take away from gender-segregated recruit training and the gender beliefs that may be imprinted on them from the training experience. This includes both the explicit and implicit messages recruits receive about men and women during recruit training.

Recent public sexual harassment incidents such as “Marines United” and the #MeToo movement highlight the need for concerted early efforts to socialize Marines on gender issues to ensure respect for women in USMC. Separating men and women in recruit training may minimize some distractions or alleviate privacy concerns but at the expense of possibly exaggerating and highlighting gender stereotypes. Failure to socialize recruits in a culture of equitable gender professionalism can establish an early foothold for sexism. At a minimum, lack of explicit socialization away from harmful gender stereotypes conveys that gender attitudes are not a foundational concern that warrants training for the basic Marine, and any negative gender values imported from civilian society are not challenged, much less eliminated or replaced with appropriate professional values. In addition to carefully planning for psychosocial integration, USMC leadership should consider ways to ensure all recruits receive specific physical training and support that enhances their physiological performance.

COVID-19 Pandemic Impacts on Recruit Training

Each Service is taking a different approach to ensuring the safety of recruits during the ongoing pandemic. The Services are requiring incoming recruits to quarantine before starting recruit training which means the official introduction to the Service starts with this pre-recruit training experience (Phillips, 2020). As the study progresses, the study team will document implications of these safety protocols on gender integration.

The recruit training environment sets the stage for a Marine’s entire career. These early experiences may also influence retention which has financial implications for the Marine Corps and security implications for the nation. The indoctrination process, including implicit and explicit messaging about the Service’s views on gender, will stay with recruits as they become the next generation of Marine Corps leaders.

Next steps in the study. The findings from this literature review informed the next steps in the USMC study to examine alternatives to the current approach to gender-integrated training. The study team worked toward answering the research questions outlined above by collecting primary data from Service leaders, training cadre, and recruits. As the team developed data collection protocols, it drew on the decades of research conducted on this topic to ensure questionnaires were valid and reliable.

Chapter 3: Background, Methodology, and Study Limitations

Bottom Line Up Front

- The study team employed an interdisciplinary, mixed methods study to assess current Marine Corps recruit training models and other Services' approach to gender integration at recruit training with the goal of developing objective, data-driven alternate models and recommendations for gender integration at Marine Corps recruit training.
- Data collection at Marine Corps Recruit Depots involved multi-method original data collection using social science, physical performance, and human performance methodologies.
- Marine Corps recruits in three company configurations (Integrated Company, Series Track, and Male-Only) were studied at week 2, week 7/8, and week 11 in the training cycle. Original data collection from recruits for this study included a social science survey, focus groups, physical performance (CMJ and IMTP), wearable and cortisol, self-reported survey (physical activity, resilience, nicotine consumption, and injury data).
- Administrative data on Marine Corps recruits enrolled in the study were also captured which included CFT/PFT scores and information about recruit attrition and drop-offs.
- Data about medical record review musculoskeletal injuries were obtained from the Marine Corps Recruit Depots.
- Additional social science data collected on the Marine Corps involved extensive ethnographic observations at Parris Island and San Diego, as well as interviews with Service leaders, training cadre, and drill instructors.
- Experts on gender integration and recruit training in military environments were interviewed to gather alternative viewpoints on Marine Corps recruit training and gender integration. Participants selected had peer-reviewed or publicly available research or writing related to gender integration, the Marine Corps, and/or recruit training.
- Data collection for the Army, Air Force, Navy, and Coast Guard relied exclusively on social science methods. Original data collection included ethnographic observations, recruit social science survey, recruit focus groups, and interviews with Service leaders, training cadre, and drill instructors.
- Several study limitations are outlined which should be considered in understanding and interpreting the results and findings.

The study team employed an interdisciplinary, mixed methods study to assess current Marine Corps recruit training models and other Services' approach to gender integration at recruit training with the goal of developing objective, data-driven alternate models and recommendations for gender integration at Marine Corps recruit training. Consent was obtained from each participant where needed prior to data collection activities in accordance with the University of Pittsburgh's Institutional Review Board guidelines and requirements. This chapter

provides background, methodological, and data analysis approaches for social science, human performance, and physical performance data collection. Self-reported and administrative data collection on musculoskeletal injuries, Combat Fitness Test (CFT) and Physical Fitness Test (PFT), and attrition/drop-offs are also described. The chapter concludes with important study limitations to provide context to the results and findings.

A. Social Science Methodology and Data Analysis (Chapters 4-9)

To examine the sociological aspects and implications of gender integration, the study team designed a mixed-methods approach to primary data collection. This approach enabled the study team to capture multiple perspectives and develop a nuanced understanding of the recruit training⁶ environment to inform recommendations and alternate models for gender integration. The design offered an expansive view on gender integration in the Marine Corps and other Services⁷ by interacting with participants at all levels of the institutions in varied ways. The varied datasets helped the team triangulate findings to strengthen its ability to provide robust, data-driven alternate models and recommendations (see chapter 13).

1. Data Collection and Methodology

The study team's social science data collection methods included ethnographic observations, a survey, focus groups, and interviews. For each method, the study team developed data collection protocols to guide researcher interaction with environments and participants, collect consistent quantitative data from recruits, and establish representative question sets on primary areas for interviews with training cadre, instructors, Service leadership, experts with alternate viewpoints, and focus groups with recruits.

Prior to conducting surveys, focus groups, and interviews with study participants, the study team reviewed the consent process, following established study team protocols approved by the University of Pittsburgh Institutional Review Board, and answered all questions participants had regarding the study and their participation. Participation was voluntary. The study team sought and received approval to waive written documentation of informed consent to afford more protection to participants; however, prior to initiating data collection, the study team sought and, in the case of interviews, recorded participants' verbal consent.

The study team analyzed three Marine Corps recruit training configurations, varied by their levels of gender integration:⁸ Series Track, Integrated Company, and Male-Only. For each model, the team dedicated two weeklong visits, one near the beginning (week 2) and one near the end (week 11) of the 13 weeks training cycle, to examine the transformation process of a cohort of recruits. Recruits completed surveys and participated in focus groups at both time points. At each visit, the study team extensively observed Marine Corps recruit training to understand as

⁶ The study team is using "recruit" and "recruit training" to broadly reference the initial training of enlisted personnel across the Services, and "drill instructor" and "training cadre" to broadly reference those in charge of managing and delivering recruit training at the installation. Each Service has its own language and terms for basic training and these positions.

⁷ The U.S. Space Force was outside the scope of this study.

⁸ For this research, each configuration is considered a model to be studied.

many facets of the training process and environment as possible. For other Services, the study team spent one week at selected recruit training locations collecting survey and focus group data from recruits, interviewing training cadre and instructors, and completing extensive ethnographic observations of the training process, practices, and environment. The following section provides details about each method of data collection.

Recruit Training Environment: Ethnographic Observations

To best understand the recruit training environment, the study team conducted intensive ethnographic observations during weeklong site visits to the Marine Corps and other Services. Ethnographic observation is a form of qualitative data collection that enables the study team to accumulate nuanced knowledge of the recruit training environment, including recruit and instructor interactions, use of space and training facilities, group dynamics and cohesion, application of gender-integrated training, and implementation of each Service's basic training mission and goals. The study team worked with Service representatives at each training location to create a site visit schedule for observing training activities and events.

While on the ground for site visits, the study team observed as much recruit training as possible. A typical site visit day included between 10 and 14 hours of ethnographic observation in addition to other data collection activities. The study team observed physical training activities, combat or practical application training and skills, drill instructor time, meals, daily routines, academic classes, inspections, religious services, culminating events, recruit free time, and movement to and from events. Observations were conducted across the entire timeline of basic training for each Service, from arrival to graduation. For every observable activity, each study team member took notes, or "jottings", describing settings, interactions, imagery, language, and other characteristics of recruit training activities and events. Jottings were later expanded on in memos for further data analysis. The study team obtained relevant physical documents and electronic materials from each Service, including training schedules, recruit knowledge/guidebooks, curriculum documents, academic class PowerPoint slides, and reports or briefings related to gender integration.

Members of the social science study team conducted hundreds of hours of ethnographic observation of recruit training during weeklong site visits to Marine Corps and other Service training locations. In total, the study team conducted four site visits to Marine Corps Recruit Depot (MCRD) Parris Island and two site visits to MCRD San Diego between June and November 2021. Other Service site visits included the Army at Fort Jackson (September 2021), the Air Force at Lackland Air Force Base (October 2021), the Navy at Naval Station Great Lakes (October 2021), and the Coast Guard at Cape May (November 2021).

Recruit Perspective and Experience: Surveys and Focus Groups

The study team used two forms of data collection to capture the recruit experience with and perceptions on gender-integrated training: surveys and focus groups.

Recruit Social Science Survey

Quantitative data, obtained through a 19-question paper survey, captured sociodemographic information, history of family military service, reasons for joining the military, anticipated length of service, experiences during recruit training, preferences for gender-integrated recruit training, and gender attitudes and beliefs (see appendix D for survey instrument). The team adapted the survey questions assessing gender attitudes and beliefs from the Monitoring the Future survey, a public survey of adolescents and young adults in use since 1975 (National Institute on Drug Abuse, n.d.). The Department of Defense Office of People Analytics implemented similar questions measuring benevolent and hostile sexism beginning with the 2019 Guard and Reserve Survey and continuing in surveys of active-duty Service members (Breslin et al., 2020). All Marine Corps recruits who participated in the study were offered the opportunity to complete the survey during week 2 and week 11 of basic training. Recruits in the other Services selected for the focus groups were provided the opportunity to voluntarily complete the survey once, near the end of their basic training cycle. Table 3.1 presents the number of social science recruit surveys completed by Service, Marine Corps training model, and gender. Sample sizes for the other Services are smaller than the Marine Corps samples by design; the primary focus of the study is an in-depth examination of Marine Corps recruit training models.

Table 3.1. Number of Recruit Social Science Surveys by Service, Model, and Gender

	Marine Corps						Army	Air Force	Navy	Coast Guard
	Series Track		Integrated Company		Male-Only					
	Week 2	Week 11	Week 2	Week 11	Week 2	Week 11				
Male	96	76	106	78	200	176	21	20	20	20
Female	98	84	87	60	N/A	N/A	20	20	20	20

Note: The study team had an additional male Army recruit participant due to unintentional circumstances.

Recruit Focus Groups

Focus groups are guided discussions designed to capture recruits’ perspectives on and experiences with recruit training and gender integration at recruit training. Focus groups lasted 90 minutes and covered recruits’ interactions with instructors and leadership, training experiences, experiences with or perceptions of gender integration in recruit training, and recommendations for gender integration (see appendix E for focus group protocols). Each focus group consisted of one facilitator, approximately 10 recruits of the same gender (all males or all females), and a notetaker.

Marine Corps recruits were randomly selected from the physical performance study sample and asked to voluntarily participate in the focus groups. Focus groups with Marine Corps recruits occurred during week 2 and week 11 of basic training. At both time points for MCRD Parris Island, the team conducted two male recruit focus groups and two female recruit focus groups. For MCRD San Diego, two male recruit focus groups were conducted. Marine Corps recruits who participated in the week 2 focus groups were invited to participate in the week 11 focus groups; new participants were randomly selected from the study sample to replace recruits who attrited from the training cycle since week 2. Recruits from other Services were randomly

selected to participate in the focus groups near the end of their training cycle. At each Service, the team conducts two male and two female recruit focus groups. For both Marine Corps and other Service focus groups, recruits for each focus group were intentionally sampled from different training units (e.g., platoons, flights, divisions, companies) to provide the broadest perspective. Table 3.2 shows recruit focus groups completed by Service, Marine Corps training model, and gender.

Table 3.2. Recruit Focus Groups by Service, Model, and Gender

	Marine Corps						Army	Air Force	Navy	Coast Guard
	Series Track		Integrated Company		Male-Only					
	Week 2	Week 11	Week 2	Week 11	Week 2	Week 11				
Male	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓
Female	✓✓	✓✓	✓✓	✓✓	N/A	N/A	✓✓	✓✓	✓✓	✓✓

Note: Each checkmark represents one focus group (with up to 10 participants).

Training Cadre and Instructor Perspectives: Interviews

Semistructured interviews with training cadre and instructors at each recruit training location offered the chance to gather the perspectives of those who are managing and executing the mission of basic training for each Service. Training cadre includes officer and enlisted leadership of drill instructors, active duty and civilian staff in key support roles (e.g., chaplains, sexual assault prevention and response workforce) on the installation, and installation senior enlisted and officer leadership. Instructors are those directly involved in daily recruit training. The study team identified the mix of leadership roles most desirable for interviewing for each Service and worked with Service representatives to solicit volunteers for the interviews.⁹ The study team aimed to capture a consistent set of rank perspectives across Services and worked to ensure adequate representation from male and female interviewees. The study team retained physical documents and electronic materials from interviewees related to gender integration and recruit training provided or offered by training cadre and instructor interviewees.

Interview questions and themes include benefits and challenges of gender-integrated recruit training; impact of gender-integrated recruit training on drill instructors, training cadre, and recruits; gender integration in drill instructor and leadership teams; barriers to and opportunities with gender-integrated recruit training; sexual harassment and sexual assault issues in the recruit training environment; recommendations for gender integration; and recommendations for Marine Corps recruit training gender integration (see appendix F for training cadre and instructor interview protocols). Interviews lasted approximately 1 hour and were audiorecorded and conducted in person at each recruit training location. A few interviews were conducted with more than one training cadre member upon request of the interviewee. Interview participant

⁹ Service representatives from each installation were responsible for soliciting volunteer training cadre and instructors to participate in the study; approaches to solicitation varied. It should be noted that more than one training cadre member and/or instructor at Fort Jackson shared with the study team that they were pre-interviewed by their leadership about their gender integration perspectives prior to involvement with the study.

names were not recorded to protect the confidentiality of respondents. Table 3.3 shows the number of training cadre and instructor interviews completed by Service and gender. Fewer interviews were conducted with the other Services than with the Marine Corps by design; the primary focus of the study is an in-depth examination of the Marine Corps recruit training environment.

Table 3.3. Number of Training Cadre and Instructor Interviews by Service and Gender

	Marine Corps		Army	Air Force	Navy	Coast Guard
	Parris Island	San Diego				
Male	13	8	3	3	2	3
Female	14	7	2	2	3	2
Total	27	15	5	5	5	5

Note: A Navy interview accounted for in the male row also had one female participant.

Service Leadership Perspectives: Interviews

Semistructured interviews with Service leadership provided the opportunity to understand each Service’s perspectives on gender integration relative to basic training policies, practices, and metrics. In conjunction with Marine Corps and other Service representatives, the study team identified up to five positions per Service responsible for overseeing training doctrine and policies as potential interviewees. These individuals were given an opportunity to voluntarily participate in the study. The study team aimed to capture perspectives from senior enlisted members, officers, and civilian government employees across Services and worked to ensure adequate representation from male and female interviewees.

Interview questions and themes included major goals and objectives of recruit training, definition of gender integration for each Service, measurement of the success of gender integration in recruit training, socialization of values and expected norms in recruit training, challenges and benefits of gender integration, sexual harassment and sexual assault issues in the recruit training environment, and recommendations for Marine Corps recruit training gender integration (see appendix G for Service leadership interview protocols). Interviews lasted approximately 1 hour and were audiorecorded and conducted virtually or in person. A few interviews were conducted with more than one Service leader upon request of the interviewee. Interview participant names were not recorded to protect the confidentiality of respondents. Table 3.4 shows the number of Service leadership interviews completed by Service and gender.

Table 3.4. Number of Service Leadership Interviews by Service and Gender

	Marine Corps	Army	Air Force	Navy	Coast Guard
Male	4	4	3	2	2
Female	1	1	2	3	3
Total	5	5	5	5	5

The study team obtained relevant physical documents and electronic materials from Service leadership interviewees, including policy documents, survey instruments, other metrics or measurements, and reports related to gender integration and recruit training.

Participants with Differing Viewpoints: Interviews

Interviews with individuals possessing demonstrated expertise on gender integration and recruit training in a military environment with alternative viewpoints were used to consider a range of perspectives on gender integration and recruit training (see appendix H for alternate viewpoints interview protocol). These interviews captured the perspectives of those who both agree and disagree with the Marine Corps current approach to gender integration at recruit training. Participants included former Service members (including Marine Corps), academics, civilian researchers with Marine Corps expertise, and public intellectuals who have expertise on matters relating to gender integration and recruit training in a military environment. The primary selection criterion for identifying individuals as participants was publication of peer-reviewed, publicly available research related to gender integration in the military, the Marine Corps, and/or recruit training. The study team began with a list of approximately ten potential experts and identified an additional ten through recommendations from those who had been interviewed or further review of the literature. This generated a diverse and knowledgeable sample.

The study team originally proposed holding a series of convenings to seek different viewpoints on the study findings and recommendations the team identified after the process of data collection. Given delays in securing approvals for collecting data from multiple Services, the team altered the proposed approach to this task with the approval of Marine Corps Training and Education Command leadership. Instead of seeking the views of experts after data collection was complete, the team instead began data collection by interviewing participants on questions about gender integration in military organizations, including the Marine Corps, and in recruit training specifically to inform ongoing data collection and the development of alternate models and recommendations.

Interviews were approximately 1 hour in length and were conducted virtually. Interview participant names were not recorded to protect the confidentiality of respondents to the greatest extent possible. To provide additional protections to participants, interviews were not audio-recorded and were captured through summary notes. Names of participants were not recorded, nor were any identifying characteristics of our participants linked with their responses in the interview to offer the strongest possibly confidentiality protections to allow for maximum candor. A total of 20 semi-structured interviews were conducted between April and September 2021.¹⁰

Participants were diverse with respect to gender and military or Marine Corps experience. The study team interviewed: 13 women and 7 men; 10 civilians with no personal military service and 10 military veterans, 8 of whom served in the Marine Corps. At least 5 of those 8 participants had direct experience leading recruit training in the Marine Corps either at MCRD Parris Island

¹⁰ During and after data collection, the Marine Corps adjusted and made changes to gender integration at both MCRDs. Therefore, participant responses may not be able to speak to these ongoing changes in gender integration at Marine Corps recruit training.

or San Diego (and in some cases both). One individual from another Service had experience with officer entry-level training. Two additional veterans of other Services also had direct experience with initial officer training. Two of the 5 with MCRD recruit training experience were women. These categories are not mutually exclusive; this chapter does not present combinations of characteristics to protect the anonymity of participants. In addition to the decades of Marine Corps and other service experience of the 10 participants with military experience, civilian experts brought similar depth of expertise on questions about gender and the military, having studied the military and/or taught military leaders at various Professional Military Education institutions, or worked as civilian professionals for the Department of Defense. Two of these civilians were affiliated with a Professional Military Education institution, 7 were faculty at civilian institutions, and 1 was a think tank researcher. All had at least 10 years of research experience with military-relevant topics. In sum, our participants had extensive relevant expertise in the Marine Corps entry-level training environment and/or expertise related to gender integration or sexual assault in military settings including the Marine Corps, or expertise on Marine Corps culture, values, and practices. Several participants have been very influential in shaping past and current Marine Corps recruit training policies and practices.

2. Data Cleaning and Analysis

Following data collection, the study team cleaned the quantitative and qualitative data and prepared them for analysis. Mixed-methods data collection involves data that must be analyzed separately and then examined in the context of each component to create the best understanding of the recruit training environment and gender integration.

Quantitative Data: Recruit Social Science Surveys

Responses from the paper survey were inputted and compiled into an Excel file, with each survey participant identified by an assigned study number.¹¹ The study team performed quality assurance measures to ensure all data were inputted correctly and ready for analysis. For the Marine Corps, individuals who do not complete a survey at both time points (weeks 2 and 11) were dropped from the sample. Marine Corps recruits may not complete a survey at week 11 as a result of attrition from the training cycle or declining to volunteer a second time.

Members of the study team used Stata, a statistical analysis software, to analyze survey data. The study team produced descriptive statistics for Marine Corps and other Services data. For Marine Corps data, Pearson's chi squared test was used to assess whether the differences between training models or between male and female recruits were statistically significant. This nonparametric test enabled the team to assess how responses to questions on training experiences, preferences for gender-integrated recruit training, and opinions about the impact of gender integration differed among various groups. Differences in responses between male and female recruits were assessed by comparing responses between genders, after subsetting by timepoint and training model (e.g., we assessed difference in responses between male and female recruits in the series track at week 11). When studying the differences in responses between training models, the study team aimed to assess how training models may have impacted

¹¹ Marine Corps recruits are assigned the participant study number corresponding with their physical performance and human performance data. Recruits from other Services are assigned a random study number.

recruits' responses to survey questions. In addition, the team assessed the differences between the Integrated Company and Series Track models, with subsets separated by gender; Integrated Company male recruits and the San Diego male-only model; and finally, all Parris Island males (series and integrated) and the San Diego male-only model. Differences between training models were assessed for survey responses at weeks 2 and 11. The Stuart-Maxwell test of marginal homogeneity was used to assess whether the change in survey responses within groups over time was statistically significant. Differences in survey responses between timepoints were assessed by comparing survey responses at weeks 2 and 11, after subsetting by gender and training model (e.g., assessing the difference in male series track recruits' survey responses between weeks 2 and 11). For all tests of statistical significance, $p < 0.05$ is considered indicative of a statistically significant difference that is not likely to arise simply by chance or random fluctuation.

Qualitative Data: Ethnographic Observations, Focus Groups, and Interviews

Qualitative data analysis necessitates an iterative approach. First, the team cleaned and prepared the data for analysis. Second, the study team conducted an initial round of coding before secondary-level coding and further analysis. This study involves multiple forms of qualitative data, which were analyzed separately and in concert with one another.

Ethnographic Observations

After the completion of each site visit, the study team prepared ethnographic observation notes as memos. Upon returning home, the team members from the site visit worked collaboratively to write memos for each observation activity or event to describe and summarize their observations. Memos followed a standard series of prompts, as shown in Figure 3.1, and are written with enough detail to help those who were not present build a working knowledge of each event or activity. Memos varied in length from half a page to two pages. For each site visit, memos from the study team totaled around 50-70 pages.

Figure 3.1. Ethnographic Observation Memo Prompts

1. Describe the setting, the people (who is present and their gender), and the training purpose of the event or activity.
2. Describe interactions that occurred among and between people in the setting.
3. How was gender present in this activity or event? And how did its presence matter?
4. How was gender absent in this activity or event? And how did its absence matter?
5. What should someone who didn't observe this event know about what you saw?
6. Is there anything else you saw or thought about during this observation that wasn't addressed above?

Focus Groups

During each focus group, a member of the study team served as a notetaker, capturing the verbatim discussions between focus group participants and the facilitator. Focus groups were not audiorecorded. After the completion of a focus group, the notetaker was responsible for cleaning and redacting the focus group transcript to remove identifiable information mentioned or discussed by recruits (e.g., drill instructor's name, mother's name). Focus group participants were given numeric identifiers created by the study team and specific to the focus group data. This number is not linked to the survey study number.

Interviews

Once completed, audiorecorded interviews (training cadre, instructors, and Service leadership) were transcribed verbatim. Summary notes for interviews with participants possessing alternate views were cleaned for clarity and typos.

Data Analysis for Ethnographic Observations, Focus Groups, and Interviews

Driven by the research questions, literature review, protocol documents, and team discussions, the study team developed initial coding schemes used when coding focus group transcripts, and interview notes and transcripts. The initial coding scheme reflected major themes and broad patterns. Members of the study team coded notes and transcripts in NVivo, a qualitative analysis software. Coding gathered all the text and discussions related to a particular theme into a code, parsing the data into related pieces of information to be used for further analysis. Examples of initial codes included “Role of Instructors,” “Challenges for Male and Female Recruits,” “Benefits of Gender Integration,” and “Overarching Goals of Recruit Training.” Secondary coding, additional coding within each initial code, was conducted to further identify results and findings. Analysis incorporated coding as well as identifying patterns and themes across and within relevant categories such as gender, Service, participant category (Service leader, training cadre or instructor, recruit), and for Marine Corps recruits between week 2 and 11.

B. Human and Physical Performance (Chapter 10)

1. Human Performance: Workload, Sleep and Cortisol Response Data

Background

Marine Corps recruits experience a variety of stressors throughout recruit training to prepare for military service which may impact recruits’ readiness to perform and their physical capacity. Strenuous training and workload demands, in addition to social environment considerations, can increase psychological and physiological stress. Therefore, methods of assessing and profiling military readiness and recovery status are valuable when seeking to optimize recruit training. This becomes even more important when considering current and suggested models for gender integration requirements. Assessing impacts at a recruit and platoon level have the ability to provide objective insights that can be combined with structural and organizational requirements in order to optimize the overall training environment to produce United States Marines. Monitoring workload is an important tool for determining how a recruit is adapting to the imposed training demands. Heart rate (HR) monitoring has the capability to track the physiological response of the recruit, often termed internal load, and provide information regarding caloric expenditure. Although males tend to express a greater energy expenditure than females due to larger body mass, when expressed on a relative basis (per kg body mass) more accurate comparisons across sexes can be made. On the other hand, physical demands, often described as external load, can be tracked using global positioning satellite (GPS) and accelerometry systems that can determine distance covered as well as the speed traveled. In addition to assessing workloads, sleep is an important aspect for recovery. Adequate sleep may

act to buffer the negative effects of increased training demands, while inadequate sleep may lead to a worsened state of fatigue with significant negative effects on performance, perceived effort, and cognition as well as other biological functions (Halson, 2014). Wearable technologies, such as the wrist worn monitoring unit, the Polar Grit X, have the ability to unobtrusively monitor external workloads, energy expenditure, and sleep throughout recruit training.

Another important consideration when assessing military readiness is the combined psychological and physiological effects of the training stimulus and environment. Biological markers of stress and recovery can provide unique insight into a recruit's adaptation and readiness to perform (Lee et al., 2017). For example, resting cortisol can provide information pertaining to the stress response, with chronic elevations indicative of a maladaptation of the hypothalamic pituitary adrenal (HPA) -axis and an impaired ability to recover from training. Tracking resting cortisol values throughout recruit training gives an indication of how the recruit is responding to the overall training environment. Biomarker changes in response to stress from training in conjunction with social and environmental conditions may have implications on performance outcomes given the cumulative stress they represent. Furthermore, differential physiological responses resulting from the training model used for recruit training have the potential to provide important insights for developing best practices and allowing for the evaluation of optimizing organizational approaches to balance outcomes with sociological expectations and experiences. Our previous work has demonstrated physiological and stress response differences as a function of gender combination in a training environment, which has direct relevance for establishing recommendations to enhance outcomes for both male and female recruits (Arent, Tuzzolino, Smith, & Friedman. 2005).

Data Collection

Marine Corps recruits were monitored throughout recruit training to assess physical and physiological responses over time compared across gender integration models. Three models were evaluated which included the series track consisting of separate companies with female series training (two platoons of female recruits) alongside a male company (six platoons of male recruits), an integrated company which consists of a recruit company that has two female platoons and four male platoons, and a male-only company.

Testing and workload monitoring occurred over 72h periods during the beginning of week 2 (one day following human performance testing), the start of week 7 (MCRD PI)/8 (MCRD SD), and week 11 of recruit training. Starting with the Series Track (MCRD PI) in early June, 99 (51% female) recruits from were provided a wrist-worn wearable tracking device (Polar GritX) which was programmed with individual recruit information including age, height, weight, and sex. Recruits were instructed to wear the device covered with a sweatband for three consecutive days and nights until collected by the research team. Settings and displays on the wearable screen were locked throughout the duration of use. The device combines GPS, accelerometry and heart rate (via photoplethysmography) technologies in order to determine energy expenditure, distance covered, steps, sleep duration, and sleep continuity.

Energy expenditure is estimated from continuous HR data combined with movement/activity and surface area (a function of height and weight) calculations and expressed on a per kg body mass

basis. Total activity and distance covered are calculated using data derived from GPS monitoring and the internal accelerometer sensors. Sleep duration is assessed by 3D acceleration measurements and is determined as the time between falling asleep and waking up. Measurement of the times between successive heart beats and analysis of their variation is used for the classification of sleep into the different sleep stages.

A Polar sleep algorithm classifies 30-second epochs during this period into light sleep, deep sleep, REM sleep or interruptions. Therefore, the sleep continuity score evaluates continuous sleep based on the pattern of interruptions and sleep bouts during the night. The scale is based on a Likert scale of 1-5, where 1 reflects fragmented sleep and 5 very continuous sleep.

After distributing wearable devices at ~0400-0430, whole saliva was collected by passive drool method. Recruits were provided with a cryovial and salivary collection straw and were instructed to allow the saliva to pool in the mouth. Then, with head tilted forward, recruits were instructed to gently guide saliva through the straw into the vial until the vial was filled with 1.5 mL of saliva. Immediately after collection, samples were frozen at or below -20°C. Samples were shipped to Salimetrics, LLC (Carlsbad, CA, USA) for the analysis of salivary cortisol via enzyme linked immunoassay (ELISA). Samples were run in duplicate with a coefficient of variation of 3.6%.

These procedures were repeated for the Integrated company (MRCD PI) beginning in late June with 97 (49% female) recruits and again for the Male Only company (San Diego) beginning in early September with 85 recruits. Data collection weeks for the male-only company occurred at week 2 at ~0430-0500 and again at weeks 8 and 11 in order to match training schedules across models.

Statistical Analysis

Linear mixed models were used to test for Group-by-Time interactions as well as Group and Time main effects between the three different gender integration models at weeks 2, 7/8, and 11 in workload variables, sleep variables, and cortisol. Significant interactions were followed up with a simple effects analyses of Time with Group with comparisons back to week 2. Significant Group and Time main effects were also followed up with simple effects analyses of Group or Time, respectively. The same analyses were conducted on males and females separately. Further analyses were conducted to determine relationships between the workload variables and salivary cortisol. Change scores from baseline were calculated at week 11, and Pearson product moment correlations were conducted. All analyses were conducted using R (version 4.1.0) with the lme4 (version 1.1-27.1) and emmeans (version 1.6.201) packages.

Data Considerations

Wearable devices used accelerometry and photoplethysmography based technology along with algorithms to obtain sleep duration and sleep continuity. **This method may not be sensitive to differences in individual sleep patterns nor was subjective ratings of sleep collected.** In addition, although instructed to maintain their watch on their wrist for 72 hours during the data collection period, there was no control for recruits taking off their watch.

The use of exogenous hormones was not controlled for during the study collection period. Of particular importance, oral contraceptive use has been shown to relate to an increased stress response during intensive training periods. Therefore, females using oral contraceptives may have exacerbated the differences seen in cortisol responses between males and females.

2. Physical Performance Data: Counter Movement Jump and Isometric Mid-Thigh Pull

Background

The study team collected human physical performance data using the counter movement jump test (CMJ), and the Isometric Mid-thigh Pull test (IMTP). Previous studies have found these tests to be reliable predictors of multiple performance outcomes (McMahon, Jones, Dos'Santos, & Comfort. 2017; Nuzzo, McBride, Cormie, & McCaulley. 2008; Thomas, Comfort, Jones, & Dos'Santos. 2017; Wang et al., 2016). Other studies have shown that performance in these tests may be predictive of musculoskeletal injury (Merrigan, Stone, Thompson, Hornsby, & Hagen. 2020; Molloy. 2016; Suchomel, Nimphius, & Stone. 2016). The variables analyzed from the CMJ test were Concentric Peak Force, Relative Concentric Peak Force, Peak Power, and Relative Peak Power. The variables analyzed from the IMTP test were Peak Force, Relative Peak Force, RFD 100-200ms, and RFD 0-100ms.

Data Collection

Performance data were collected at week 2 and week 11 of United States Marine Corps recruit training in the Series Track and Integrated Company cohorts at Marine Corps Recruit Depot Parris Island, and from the Male-Only cohort at Marine Corps Recruit Depot San Diego. Recruits performed tests dressed in physical training uniform and athletic footwear. Prior to testing, recruits performed a 5- minute general dynamic warm-up consisting of squatting, hinging, lunging, and jumping movements.

The target sample size for human performance testing for this study was 200 recruits in each of the three cohorts tested - Series Track at MCRD PI, Integrated Company at MCRD PI, and Male-Only cohort at MCRD SD. Based on the previous experience of the study team with similar research studies, this sample size was assessed to be adequate to address the specific aims of the study. The study team discussed the feasibility of testing 200 recruits during a Sunday of week 2 (pre-test) and week 11 (post-test) of recruit training with stakeholders from the Marine Corps prior to starting the study. The day of the week (Sunday) and planned duration of testing (approximately 5 – 6 hours) was designed to minimize disruption to the recruit training schedule and maximize the number of recruits who would be tested (surveys, human performance testing).

Countermovement Jump

Recruits were instructed to jump “as high and as fast as possible” with hands akimbo for 3 maximal countermovement jump (CMJ) repetitions. Tests were performed on bilateral force platforms (FDLite Forcedeck dual force platforms; VALD Performance, Sydney, Australia)

sampling at a frequency of 1000Hz. Trials were separated by approximately 2 minutes rest to ensure adequate recovery. The repetition which elicited the highest jump height was recorded. Peak Power (W) was recorded as the maximal power output achieved during the concentric portion of the CMJ, that value was then normalized to body mass to attain Relative Peak Power (W/kg).

Isometric Mid-Thigh Pull

Isometric mid-thigh pulls (IMTP) were administered on a custom fabricated steel testing apparatus equipped with bilateral force platforms (FDLite Forcdeck dual force platforms; VALD Performance, Sydney, Australia) sampling at 1000Hz. Weightlifting straps were used to limit the effect of grip strength. The height of the apparatus was adjusted to allot for optimal knee (125-145 degrees) and hip (140 - 150 degrees) joint angles, as measured by a handheld goniometer. The height at which optimal joint angles were achieved was recorded for each recruit to be repeated at follow-up testing. Familiarization repetitions of 3 seconds in duration were administered at 50, 75, and 90% of perceived maximal effort. Testing consisted of two maximal repetitions of 5 seconds in duration separated by approximately 2 minutes rest. Recruits were instructed to "pull as hard and as fast as possible." A third trial was administered if >250N difference was observed between trials. Minimal pre-tensioning was permitted, and samples were visually inspected to detect any clear countermovement or deviation from acceptable force-time curve characteristics as described in the literature (Comfort et al., 2018).

Statistical Analysis

Descriptive statistics (mean, standard deviation) were calculated for all dependent variables.

Between cohort analysis

Two-way mixed measures analysis of variance (ANOVAs) were conducted to analyze the effect of time (within-subject variable: two levels – week 2, week 11) and the effect of cohort (between-subject variable) on each of the dependent variables. Assumptions of ANOVA, including normality of distribution of residuals, absence of outliers, absence of influential points, and homogeneity of variance were assessed. Separate analyses were conducted for female and male recruits. In the case of female recruits, the independent variable cohort had two levels: Series Track and Integrated Company. In the case of male recruits, the independent variable cohort had three levels: Series Track, Integrated Company, and Male-Only cohort.

Within cohort analysis

Changes in dependent variables from pre-test (week 2 of recruit training) to post-test (week 11 of recruit training) were analyzed using paired *t* tests and Wilcoxon signed ranks tests. Data were tested for normality using Shapiro-Wilk tests. In all cases, results from the paired *t* tests agreed with results from the Wilcoxon signed ranks tests. For the sake of convenience, results from the paired *t* tests are reported for this analysis.

Statistical significance was set *a priori* at $\alpha = 0.05$, two-sided. Data analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

C. Musculoskeletal Injuries (Chapter 11)

1. Medical Record Reviewed Musculoskeletal Injuries During Recruit Training

Data collection

Injury data was collected in person at MCRD Parris Island by a study team member. Medical data was reviewed for participants in the study and any information pertaining to musculoskeletal injuries sustained during training was collected and documented. Medical record reviewed injuries at MCRD Parris Island were derived from AHLTA and MCTIMS separately. Injury data were collected from MCRD San Diego through the transfer of secure files from Marine Corps personnel and were cleaned and analyzed by the study team to analyze injuries sustained by study participants during training. Data about medical record reviewed injuries at MCRD San Diego were derived from MHS Genesis.

Statistical Analysis

The injury attributes described in this report include injury incidence during recruit training, anatomic region and sub-region affected by injuries, event at the time of injuries, injury type, injury onset, and disposition following injury. Injuries were described separately for three cohorts – Series Track at MCRD PI, Integrated Company at MCRD PI, and Male-Only cohort MCRD SD. Injuries were also described separately for female and male recruits in the two cohorts at MCRD PI.

Injury frequency was calculated as the number of injuries/100 recruits during recruit training. Injury incidence was calculated as the number of injured recruits/ 100 recruits during recruit training.

Data analysis included calculation of absolute frequencies (counts) and relative frequencies (percentage) within each category. Fisher's exact tests were conducted to compare the proportion of injured recruits between groups. Data analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

Data Considerations

The MCTIMS database is only utilized at MCRD Parris Island. Therefore, there are no data for MCRD San Diego in this dataset. Further, ALTHA is more predominately used by ATs and medical professionals at Parris Island. MCTIMS is used as a secondary source of visit information and does not include all medical visits. In most cases, if the information was inputted into ALTHA, the practitioner did not create a separate entry in MCTIMS. MCTIMS data were available only from the Series Track cohort at MCRD Parris Island.

2. Self-Reported Musculoskeletal Injuries during Recruit Training and Prior to Recruit Training

Data Collection

Self-reported data about musculoskeletal injuries during recruit training were collected at week 2 (pretest: for injuries prior to recruit training) and week 11 (posttest: for injuries during recruit training) of recruit training at MCRD Parris Island (Series Track and Integrated Company) and MCRD San Diego (Male-Only Cohort) through the University of Pittsburgh licensed REDCap software (National Institutes of Health support through Clinical and Translational Sciences Institute (CTSI) at the University of Pittsburgh Grant Number UL1-TR-001857) administered on a tablet. A musculoskeletal injury was defined as an injury to the musculoskeletal system (bones, ligaments, muscles, tendons, etc.) that, resulted in alteration in tactical activities/training, or physical training or activities of daily living for a minimum of one day, regardless if medical attention was sought. Subjects within each cohort were asked to fill out the survey detailing musculoskeletal injuries sustained before recruit training (pretest: week 2) and then during their recruit training (posttest: week 11).

The questions in the REDCap survey administered (see Appendix I for survey) on the tablet followed a predetermined flowchart, so that many of the questions presented to the recruits depended on their response to the previous question. The anatomic locations listed in the survey included Lower Extremity, Upper Extremity, Spine, Torso, Head/Face, and Other. The anatomic sub-locations available under Lower Extremity were Hip, Knee, Ankle, Thigh, Lower Leg, and Foot and Toes. The anatomic sub-locations that could be chosen after selecting Upper Extremity as the location included Shoulder, Elbow, Wrist, Arm, Forearm, and Hand and Fingers. Spine injuries were classified as those affecting the Cervical, Thoracic, or Lumbopelvic spine. Sub-locations under Torso included Chest, and Abdomen. Questions allowed “Other” as a response followed by a free text box for recruits to write their own description of the injury.

Statistical Analysis

The injury attributes described include anatomic location and sub-location of injuries; cause of injuries; injury type; and for injuries during recruit training - activity at the time of injuries, injury incidence during recruit training, and whether or not medical care was sought for the self-reported injury. Data analysis included calculation of absolute frequencies (counts) and relative frequencies (percentage) within each category

D. Self-Reported and Administrative Data (Chapter 12)

1. Baseline Connor-Davidson Resilience Scale (CD-RISC) Data

Background

The Connor-Davidson Resilience Scale (CD-RISC) is a survey that measures psychological resilience (Ledford et al., 2020). Resilience is defined as the ability to maintain normal

functioning in the presence of high stress and/or trauma situations (Nindl et al., 2018). Specifically, psychological resilience refers to how an individual's mental processes and/or behaviors help protect against the negative effects of stress (Nindl et al., 2018). The CD-RISC generates a score from 0-100, with a higher score indicating greater resilience. In a study amongst U.S. Air Force recruits, Bezdjian et al. reported a mean score of 83.6 ± 11.0 , (Bezdjian, Schneider, Burchett, Baker, & Garb. 2017) whereas an average score of 75.7 ± 11.9 has been reported in undergraduate students (Hartley. 2011).

A greater level of resilience relates to a greater ability to cope with stressors and plays an important role in maintaining physiological performance (Leon-Guereno, Tapia-Serrano, & Sanchez-Miguel. 2020; Nindl et al., 2018). Military personnel encounter numerous cognitive, emotional, social, and physiological stressors and an inability to cope will likely impact performance and can be detrimental to the individual, team, or mission (Nindl et al., 2018). In fact, research in military populations using the CD-RISC has found that higher levels of resilience relate to greater success in stressful environments such as basic training (Ledford et al., 2020). In athletic populations, greater resilience has been found to relate to fewer injuries (Leon-Guereno et al., 2020). The CD-RISC may therefore be a valuable tool in identifying resilience in military populations and predicting success and injury rates.

Data Collection

Connor-Davidson Resilience Scale (CD-RISC) information was collected at week two of recruit training at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego (Male only cohort) through the University of Pittsburgh licensed REDCap software (National Institutes of Health support through Clinical and Translational Sciences Institute (CTSI) at the University of Pittsburgh Grant Number UL1-TR-001857) administered on a tablet (see Appendix J for survey).

Statistical Analysis

The scale is scored based on the total of all the item responses (25 total statements). Each item response is assigned a number from 0-4, creating a sum range from 0-100. Higher scores indicate a higher resilience. Baseline resilience scores were compared between cohorts. Separate analyses were conducted for female recruits (two cohorts – independent samples *t* tests) and for male recruits (three cohorts – one-way analyses of variance). Corresponding non-parametric tests (female recruits: Wilcoxon Rank Sum test, male recruits: Kruskal-Wallis test) were also conducted. In all cases, the results from the parametric and non-parametric tests agreed with each other. For the sake of convenience, the results from the parametric tests (independent samples *t* tests, one-way analyses of variance) are presented.

2. Baseline Physical Activity Data Prior to Recruit Training

Background

Baseline quantity of physical activity and attrition

According to the International Military Physiology Roundtable (2018), poor physical fitness is the single major contributor to military attrition. Previous research supports that military recruits who report lower levels of physical activity (e.g., sports, exercise, running/jogging) in the months preceding entry level training are at significantly greater risk of attrition than those who report higher levels of physical activity. This is consistent across various branches of the military and sexes, and supported by research prior to 2010 as well as more recent research studies.

Pollack et al. (2009) examined demographic, health-risk, and health-benefit characteristics as predictors of attrition in female U.S. Marine Corps recruits over a one-year period. While various demographic and health-risk characteristics were predictive of attrition at various timepoints, the only significant predictor across all timepoints was not exercising or participating in a sports activity on four or more days per week for at least 20 minutes before entering the Marine Corps. Similar results were seen in male and female trainees in U.S. Army basic combat training (BCT), with significantly greater attrition found in those with lower self-rated physical activity before BCT. (Swedler et al., 2011) For males, exercising/playing sports less than once weekly as well as running/jogging less than once per week were significant predictors of attrition. Interestingly, weight training frequency was not predictive of attrition.

Trone et al. (2013) reported that several different self-reported measures of physical activity prior to entry level training significantly impacted the likelihood of graduation versus late graduation/separation (“poor training outcome”) for enlisted recruits participating in basic training at Naval Recruit Training Command. Male recruits with self-ratings of *somewhat/much less active* were 1.33 times more likely to have late graduation/separation compared to those *much/somewhat more active*, with an even greater likelihood (2.83 times more likely) of late graduation/separation in female recruits when comparing the same groups. Further, male recruits who exercised or participated in sports once per week or less were 1.46 times more likely to graduate late/separate than those who exercise/participated in sports five or more times weekly. Female recruits who reported being less active than their same-age counterparts were 3.1 times more likely graduate late/separate than those who were more active. Based on these findings, the authors recommended that incoming recruits should be encouraged to participate in physical activity to decrease poor training outcomes.

Baseline quantity of physical activity and & CFT/PFT/IST Performance

There is very limited peer-reviewed research examining the relationship between physical activity prior to entry level training and performance of military fitness tests. Research has demonstrated that female recruits with higher physical fitness levels based on IST performance (pull-ups, crunches, and 1.5 mile run time) have lower attrition rates than those with lower physical fitness levels. (Peterson et al., 2014) Further, better IST performance appears to be associated with decreased attrition during recruit training, at 24-months, and 45-months as well as lower recruit training injury rates, and higher PFT and CFT scores. (Trost et al., 2014) It is reasonable that higher levels of physical activity prior to entry level training should be related to better IST performance, and subsequent CFT and PFT performance.

Data Collection

Self-reported data about quantity of physical activity performed regularly during the past three months was collected at week two of recruit training at MCRD Parris Island (Series Track and Integrated Company) and at MCRD San Diego (Male only cohort) through the University of Pittsburgh licensed REDCap software (National Institutes of Health support through Clinical and Translational Sciences Institute (CTSI) at the University of Pittsburgh Grant Number UL1-TR-001857) administered on a tablet (see Appendix I for survey).

The Compendium of Physical Activities (Ainsworth *et al.*, 2011), which was developed for use in epidemiological studies to standardize the Metabolic Equivalent (MET) intensities assigned in physical activity questionnaires, was used to estimate energy expenditure of self-reported average physical activity over the previous three months. Each activity in the compendium has a unique 5-digit code that identifies the major type of activity (e.g., Running) and a description of the specific activities (e.g., Running, 5mph). Self-reported physical activity was matched to the corresponding 5-digit code and the corresponding MET intensity was extracted. The MET intensity was multiplied by the frequency (average sessions per week) and by the time (average duration each session, in hours).

Statistical analysis

Baseline self-reported physical activity data quantified as metabolic equivalent tasks per week were compared between the cohorts. Separate analyses were conducted for female recruits (two cohorts – independent samples *t* tests) and for male recruits (three cohorts – one-way analyses of variance). Corresponding non-parametric tests (female recruits: Wilcoxon Rank Sum test, male recruits: Kruskal-Wallis test) were also conducted. In most cases the results from the parametric and non-parametric tests agreed with each other. For the sake of convenience, the results from the parametric tests (independent samples *t* tests, one-way analyses of variance) are presented. In case results did not agree between the parametric and non-parametric tests, the appropriate test was presented after testing for assumptions. Separate analyses were conducted for total, endurance, strength, and sports/other physical activity. Data analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

Data Considerations

Similar to all baseline data collected as a part of this study, based on availability of recruits for testing, the baseline self-reported physical activity data was collected at week 2 of recruit training. The question asked of recruits was “Check all of the following activities that you have **performed regularly during the past three months**”, but the survey was administered at week 2 of recruit training.

3. Baseline Nicotine/Tobacco Usage

Data Collection

Nicotine usage information was collected at week two of recruit training at MCRD Parris Island (Series Track and Integrated Company) and at MCRD San Diego (Male-Only cohort) through the University of Pittsburgh licensed REDCap software (National Institutes of Health support

through Clinical and Translational Sciences Institute (CTSI) at the University of Pittsburgh Grant Number UL1-TR-001857) administered on a tablet (see Appendix I for survey).

Statistical Analysis

The proportions of female recruits who reported ever using each kind of nicotine product were compared between the Series Track and Integrated Company cohorts at MCRD Parris Island using the Fisher's exact test. The proportions of male recruits who reported ever using each kind of nicotine product were compared between the Series Track and Integrated Company cohorts at MCRD Parris Island, and the Male-Only cohort at MCRD San Diego using the Freeman-Halton extension of the Fisher's exact test. Gender comparisons were conducted using the Fisher's exact test. Statistical analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

4. Self-Reported Height and Weight

Self-Reported height and weight was collected at week two of recruit training at MCRD PI (Series Track and Integrated Company) and at MCRD SD (Male-Only cohort) through the University of Pittsburgh licensed REDCap software (National Institutes of Health support through Clinical and Translational Sciences Institute (CTSI) at the University of Pittsburgh Grant Number UL1-TR-001857) administered on a tablet. Self-reported height and weight were converted to metric units and utilized to calculate body mass index (BMI) measured in Kg/m².

5. CFT/PFT

Data Collection

Data about performance on the Initial and Final Combat Fitness Test and Physical Fitness Test (CFT/PFT) during Marine Corps recruit training were obtained from MCRD SD and MCRD PI through the transfer of secure files.

Statistical Analysis

Changes in PFT and CFT scores from the Initial to the Final test were analyzed using paired *t* tests and Wilcoxon Signed Ranks tests. Data were tested for normality using Shapiro-Wilk tests. In the case of all dependent variables, results from the paired *t* tests and Wilcoxon signed ranks tests agreed with each other. For the sake of convenience, results from the paired *t* tests were reported.

Changes in the percentage of recruits who passed the PFT/CFT from the Initial to the Final test were analyzed using McNemar's tests.

Separate analyses were conducted for the recruits at MCRD Parris Island and at MCRD San Diego as the dates for the initial PFT and CFT tests were different in relation to the recruits' training cycle at the two locations. Analysis for the MCRD Parris Island data included data from both the Series Track and Integrated Company cohorts. The analysis for recruits at MCRD Parris Island was further stratified by gender. Statistical significance was set *a priori* at $\alpha = 0.05$, two-

sided. Data analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

Data Considerations

- Timing of the Initial and Final PFT and CFT tests were different between the two MCRD locations:
 - Parris Island: CFT T-27 & T-47; PFT T-35 & T-55
 - San Diego: CFT T-28 & T-40; PFT T-22 & T-30
- CFT/PFT total scores were calculated and used for analysis even if a recruit failed an individual event or overall test (total score < 150)
- When data for an event was missing, a total score and pass/fail was not calculated
- Recruits were all scored based on 17-20 age group regardless of actual age
- Recruits who failed the Initial PFT/CFT were assumed to have the test waived; it was assumed they were not dropped from the company for this reason and were able to take the final PFT/CFT
- When changes in scores between the Initial and Final administration of the CFT/PFT were analyzed, only those recruits who had complete data for both the Initial and Final CFT/PFT were included in the analysis

6. Attrition and Drop-off

Data Collection

Data about the attrition and drop status of recruits in the study from Marine Corps recruit training were obtained from MCRD SD and MCRD PI through the transfer of secure files.

Statistical Analysis

The proportions of female recruits who dropped-off from recruit training were compared between the Series Track and Integrated Company cohorts at MCRD Parris Island using the Fisher's exact test. The proportions of male recruits who dropped-off from recruit training were compared between the Series Track and Integrated Company cohorts at MCRD Parris Island, and the Male-Only cohort at MCRD San Diego using the Freeman-Halton extension of the Fisher's exact test. Statistical analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

The proportions of female recruits who attrited from recruit training were compared between the Series Track and Integrated Company cohorts at MCRD Parris Island using the Fisher's exact test. The proportions of male recruits who attrited from recruit training were compared between the Series Track and Integrated Company cohorts at MCRD Parris Island, and the Male-Only cohort at MCRD San Diego using the Freeman-Halton extension of the Fisher's exact test.

Statistical analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

Data Considerations

Recruits were classified as having dropped and/or attrited. The study team operationally defined attrition as when a recruit was dropped to the Recruit Separation Platoon (RSP) for separation/discharge from the Marine Corps. Otherwise, if a recruit was dropped to a proceeding company or to Medical in anticipation of continuing training with another company, the recruit was not considered as having attrited but rather only “dropped-off” from the company being analyzed in the study. Recruits placed in the Evaluation Holding Platoon (EHP) were also only considered “dropped-off” as the final placement of the recruit is not known to the study team. Recruits who were classified as attrited, were also considered dropped but not vice versa.

7. Associations between Injury, Self-Reported Data, and Administrative Data

This section describes the statistical tests for associations between self-reported data, administrative data, and injury data (from Chapters 11 and 12) and the results of these analyses can be found in Chapter 12.

The proportions of recruits who sustained at least one medical record reviewed musculoskeletal injury during recruit training were compared between those who dropped-off from recruit training and those who did not using the Fisher’s exact test. Separate analyses were conducted for recruits at MCRD PI and at MCRD SD as the sources of medical record reviewed musculoskeletal injury data differed between the two locations. The analyses were conducted separately for female and male recruits at MCRD PI. Statistical analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

The proportions of recruits who sustained at least one medical record reviewed musculoskeletal injury during recruit training were compared between those who attrited from recruit training and those who did not using the Fisher’s exact test. Separate analyses were conducted for recruits at MCRD PI and at MCRD SD as the sources of medical record reviewed musculoskeletal injury data differed between the two locations. The analyses were conducted separately for female and male recruits at MCRD PI.

Baseline resilience scores were compared between recruits who dropped-off and recruits who did not using independent samples t tests and Wilcoxon Rank Sum tests. In all cases, the results from the parametric and non-parametric tests agreed with each other. For the sake of convenience, the results from the parametric tests (independent samples t tests) are presented. Separate analyses were conducted for female and male recruits. Data analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

Baseline resilience scores were compared between recruits who attrited and recruits who did not using independent samples t tests and Wilcoxon Rank Sum tests. In most cases the results from the parametric and non-parametric tests agreed with each other. For the sake of convenience, the results from the parametric tests (independent samples t tests) are presented. In case results did

not agree between the parametric and non-parametric tests, the appropriate test was presented after testing for assumptions. Separate analyses were conducted for female and male recruits. Data analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

Baseline self-reported physical activity data quantified as metabolic equivalent tasks per week were compared between recruits who dropped-off and recruits who did not using independent samples *t* tests or Wilcoxon Rank Sum tests. In all cases, the results from the parametric and non-parametric tests agreed with each other. For the sake of convenience, the results from the parametric tests (independent samples *t* tests) are presented. Separate analyses were conducted for female and male recruits, and for total, endurance, strength and sports/other physical activity. Data analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

Baseline self-reported physical activity data quantified as metabolic equivalent tasks per week were compared between recruits who attrited and recruits who did not using independent samples *t* tests and Wilcoxon Rank Sum tests. In all cases, the results from the parametric and non-parametric tests agreed with each other. For the sake of convenience, the results from the parametric tests (independent samples *t* tests) are presented. Separate analyses were conducted for female and male recruits, and for total, endurance, strength and sports/other physical activity. Data analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

Associations between baseline total quantity of physical activity and performance on the initial PFT and initial CFT were analyzed using Pearson (parametric) and Spearman (non-parametric) correlation coefficients. In most cases, the Pearson and Spearman correlation agreed with each other. For convenience, results from the Pearson correlation are presented. If the Pearson and Spearman correlations did not agree with each other, the appropriate correlation coefficient was presented after checking assumptions.

Separate analyses were conducted for the recruits at MCRD Parris Island and at MCRD San Diego as the dates for the initial PFT and CFT tests were different in relation to the recruits' training cycle at the two locations. Analysis for the MCRD Parris Island data included data from both the Series Track and Integrated Company cohorts. The analysis for recruits at MCRD Parris Island was further stratified by gender. Statistical analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

Baseline BMI quantified as Kg/m^2 was compared between recruits with and without medical record reviewed musculoskeletal injury during recruit training, utilizing independent samples *t* tests. Separate analyses were conducted for MCRD PI and MCRD SD. At MDRC PI, separate analyses were conducted by gender and then cohort (Series Track and Integrated Company). Data analysis was conducted using IBM SPSS Statistics Version 28 (IBM Corp; Armonk, NY).

E. Study Limitations

The study team encountered several limitations related to the scope, conditions, and timing of the study that are important to acknowledge and consider when reviewing the findings.

- **Study did not address full Marine Corps Entry Level Training (ELT) pipeline; scope limited to recruit training at MCRDs.** The Marine Corps conducts ELT in a progressive format with multiple training programs and locations before Marines are assigned to their first unit. The ELT pipeline begins with recruiting and recruit participation in the delayed entry program. Recruits then attend basic training at one of the two MCRD locations. Marines in infantry occupations are assigned to the Infantry Training Battalion for their Military Occupational Specialty (MOS) training. Marines with a noninfantry MOS attend Marine Combat Training followed by specialized training at their MOS school before they are assigned to their first unit in the fleet. All ELT that occurs after basic training at the MCRDs is gender integrated at the platoon level. Due to scope limitations in the contract, the study team only studied recruits at the MCRDs. The study team was unable to study Marine Corps gender integration practices at the School of Infantry locations or MOS schools and was unable to study Marines' experiences at the next stage of ELT. Therefore, this study can provide information on the process and experience of becoming a basic Marine but cannot assess how a basic Marine functions in or experiences the rest of ELT training or their first assignment in the fleet. Future studies of gender integration policies and practices for the Marine Corps would benefit from a broader scope incorporating study and assessment throughout the full ELT pipeline.
- **Female recruits were not studied at MCRD San Diego.** During the period of performance, two separate platoons of female recruits trained at MCRD San Diego. The Marine Corps conducted a proof-of-concept test of the first integrated company at MCRD San Diego; recruits from Lima company began training there in February 2021. Lima company graduated from basic training prior to the completion of study approvals for data collection. Golf company conducted integrated training, with one platoon of female recruits, beginning in October 2021. The contract's period-of-performance limitations and financial constraints prevented the team from studying an integrated cohort of male and female recruits at MCRD San Diego. The study team conducted ethnographic observations of the integrated Golf company during the final site visit to MCRD San Diego in November 2021 as part of its data collection efforts. At the time of this site visit, recruits from the integrated Golf company were in the first phase of Marine Corps recruit training. The study team interviewed male and female drill instructors and training cadre who were directly involved with the two integrated companies run at MCRD San Diego in 2021 to capture their perspectives. Findings from this study do not reflect systematic data collection on, or a full set of observations of male and female recruits training in an integrated company at MCRD San Diego. Future studies of gender integration for the Marine Corps should incorporate studying integration experiences of male and female recruits at both training locations.
- **The study team did not have the opportunity to study the 5-and-1 Integrated Company model.** The study team was unable to study a cohort of recruits experiencing the 5-and-1 version of the Integrated Company model at either MCRD location. During the period of performance, MCRD Parris Island was only implementing the 4-and-2 Integrated Company model. At MCRD San Diego, timing and financial constraints limited the study team's ability to fully study the 5-and-1 Integrated Company model. The study team conducted ethnographic observations of the 5-and-1 Integrated Company

model during the final site visit to MCRD San Diego in November 2021 as part of its data collection efforts. The study team also spoke with training cadre members and drill instructors from MCRD Parris Island and San Diego with direct experience of the 5-and-1 Integrated Company model and asked for their perspectives and reflections on that model during interviews. The study team was only able to observe the 5-and-1 Integrated Company model for a few days during the beginning of the training. Without additional observations, including some at later stages of the training cycle, this study cannot provide substantive findings about gender integration in the 5-and-1 model. This limitation is particularly important because the Marine Corps intends to move forward with the 5-and-1 Integrated Company model to integrate MCRD San Diego, with more female recruits training at that location vice MCRD Parris Island.

- **The study team did not study a male-only company at MCRD Parris Island.** The study team only collected data on the cohort experience of men in the male-only company at MCRD San Diego; no male-only companies were studied at MCRD Parris Island. The study team elected to study Series Track and Integrated Company at MCRD Parris Island because, at the time the study began, those training models were only being conducted in Parris Island. A male-only company was selected for study at MCRD San Diego for two primary reasons: (1) to evaluate and capture data at MCRD San Diego (as required by the request for proposal from the Marine Corps), and (2) to study an all-male training environment. At the time the study began, no female recruits had trained or were training at MCRD San Diego. This report is unable to speak to the experiences of men in a male-only company at MCRD Parris Island. The study team conducted extensive ethnographic observations of male-only companies at Parris Island but did not capture recruit perspectives or experiences, physical performance, or human performance measurements for these male recruits. For example, we are unable to identify similarities or differences in the perspectives or performance outcomes of male recruits who trained in a male-only company where they saw women training but had no direct or co-located training with them, compared with men in a male-only company at San Diego where they had little to no opportunity to see other women training.
- **Findings from the male-only training model in the study cannot separate out the influence of a male-only training environment from MCRD-specific differences, including terrain, base layout, weather, and training schedule order and timing.** It is impossible for the study team to disentangle how the MCRD terrain, layout, weather, and training schedule differences affected the results of the physical and human performance measurements and outcomes between the Parris Island (Series Track and Integrated Company) and San Diego (Male-Only) study training models. One of the most pronounced geographic differences between the MCRDs is that recruits at San Diego spend time training at Camp Pendleton, which has hills and mountainous terrain for hikes, Basic Warrior Training, and the Crucible. Recruits at MCRD Parris Island have no opportunity to engage in training or hikes with hills. Similarly, training in South Carolina is routinely affected by temperature variations and humidity conditions that are rarely experienced in southern California. MCRD San Diego conducts some training in a different order and on different training days than MCRD Parris Island; relevant examples include the rappel tower, close-order drill initial and final evaluations, final

Combat Fitness Test, and more. Another consequential difference between the MCRDs is company proximity to the chow hall. MCRD Parris Island has multiple chow halls located near battalion barrack buildings; MCRD San Diego and Camp Pendleton have a central chow hall that all recruits use regardless of their battalion or company. Proximity and locations of chow halls can affect the daily movement patterns of recruits at each MCRD.

- **Each training model (Series Track, Integrated Company, and Male-Only) was only studied once.** The study team collected data on recruit experiences, perspectives, and performance outcomes for one cohort of each training model. Interviews with Service leaders, training cadre, and drill instructors and informal conversations that occurred while conducting ethnographic observation on site revealed many important factors that shape every training cycle for each company. Companies in both training locations execute the same program of instruction; however, the lived experience of recruits in each company is influenced by many internal and external factors. Internally, each company has a different drill instructor team who are with their recruits 24 hours a day, 7 days a week, for 13 weeks. This team plays a profound role in creating the recruit training experience. Every drill instructor has different strengths, weaknesses, personality quirks, service history, and demographic identities they bring to their execution of the role. Similarly, every drill instructor team has its own team dynamics that may affect recruits' experiences. Every battalion and every company has its own culture (sometimes summarized by training cadre and drill instructors as “-isms”), which often translates into what they emphasize in recruit training and with their drill instructor teams (such as physical fitness, close-order drill, or military bearing).

There are also various external factors that may affect the training cycle. For example, personnel at MCRD Parris Island discussed differences among recruits based on the time of year—recruits in the summer months generally come straight from high school and may have been star athletes and/or have known they wanted to join the Marine Corps for a long time, while recruits who join in the winter months may have tried college or the civilian workforce and pivoted for various reasons to join the Marine Corps, presenting different strengths and motivations for their service. All of these understood but uncontrollable differences overlap with controlled differences across cohorts, namely, the training model followed. Any differences between training model results observed in this study should be understood in context—as data on *one* Series Track, Integrated Company, or Male-Only cohort that may not generalize to every cohort following the same training model with a different company culture, drill instructor team, timing of training, and other factors. Future studies assessing and evaluating gender integration at Marine Corps recruit training should examine multiple cohorts of recruits following the same training models. For instance, the study could collect data from multiple Integrated Companies while varying known external and internal factors such as time of year, MCRD, battalions, companies, and drill instructor teams.

- **Marine Corps implementation of the Integrated Company model and gender integration evolved during the study's period of performance.** The Marine Corps was committed to ensuring an unbiased study product by providing full access to

observations, information, training materials, and personnel requested by the study team at MCRD Parris Island and San Diego. During the period of performance, Marine Corps leadership at multiple levels executed changes to the Marine Corps approach to gender integration at recruit training. The study team was not always informed by the Marine Corps about the evolution of policies or approaches in advance, if at all, which might have enabled changing the study approach to gather the most relevant, updated data. Information on changes related to gender integration and recruit training usually came from media articles or interviews with MCRD personnel and drill instructors on site visits during the active data collection period (June to December 2021). Ongoing changes include continued integration efforts of battalions and companies at the MCRDs and additional gender integration approaches at specific training events within the Integrated Company model. During the study period, MCRD Parris Island integrated 4th Battalion with the first integrated Papa company in summer 2021, and MCRD San Diego began training female recruits. Another relevant example includes both MCRDs beginning to integrate male and female recruits at the squad and fire-team level during major training events such as Basic Warrior Training, the bayonet assault course, and the Crucible. The study team was unable to capture data on recruit experiences of these additional gender integration practices in the Integrated Company model and did not observe these new practices due to the timing of these changes related to the site visit schedule. The study team, on a limited basis, captured MCRD San Diego training cadre and instructor perspectives related to these changes to the Integrated Company model at the end of data collection. This study is unable to assess or speak to evolving approaches to the Integrated Company model the Marine Corps appears to be adopting, including specific points during the training cycle where male and female recruits are directly working together shoulder to shoulder.

- **Due to recruit availability based on training schedules, pre-data collection was conducted at week 2 and post-data was conducted at week 11 of recruit training.**
- **COVID-19 pandemic restrictions affected recruit data collection and observations of recruit training and gender integration practices at other Services.** In response to the COVID-19 pandemic, many Services halted gender integration practices and other close-contact activities at recruit training to mitigate risk. The study team conducted site visits for the Air Force, Navy, Army, and Coast Guard from September to November 2021. Certain close-contact activities, such as combatives and chemical, biological, radiological, and nuclear training (e.g., gas chamber), were also paused to reduce the spread of COVID. Therefore, at some training locations the study team was unable to observe the full range of activities typically included in basic training. At the time of the scheduled site visits, the Navy and Air Force were not conducting gender-integrated recruit training; therefore, the study team observed gender-segregated training, with recruits segregated at the lowest unit level (divisions and flights). The study team was unable to capture or analyze recruit experiences of gender-integrated training from the Navy and Air Force or observe those Services' gender integration practices firsthand. The presentation of findings in this report addresses this context for those Services. Interviews with Navy and Air Force drill instructors and training cadre members who had direct

experience with gender integrated practices were prioritized to capture information about those Services' integration processes.

- **Delays in study approvals at the beginning of the study limited time to conduct analysis at the end of the study.** The study team worked within the time constraints of the period of performance. Because approval processes for data collection at the beginning of the study took more time than projected, the data collection schedule was compressed, with little flexibility once solidified. For example, the study team was unable to move or reschedule site visits to the Air Force and Navy to accommodate observation of gender-integrated training. In turn, time spent on data analysis and reporting toward the end of the study period was accelerated as a result of time constraints.
- **Post Crucible human performance testing.** Week 11 data collection was conducted after each cohort participated in the Crucible. The Crucible takes place over 54-hours and includes food and sleep deprivation and over 45 miles of marching, which taxes the nervous and muscular systems immensely, leading to a significant decrease in physical performance. Based on recruit availability and the training schedule at each site, recruits at MCRD Parris Island were tested approximately 24 hours post-crucible and recruits at MCRD San Diego were tested approximately 72 hours post-crucible resulting in different recovery times.
- **Findings from this study do not reflect the entirety of workload and sleep information for male and female recruits training at MCRD Parris Island and San Diego.** Although wearable data collection occurred during the three main phases of Marine Corps recruit training, the consecutive three-day collection periods are only a snapshot of what occurred during the full 13-week cycle.

Chapter 4: Marine Corps Recruit Training and Gender Integration

Bottom Line Up Front

- Marine Corps recruit training is a 13-week program transforming civilians into basically trained Marines through instilling physical fitness, military discipline, Marine Corps history, and core values. Marine Corps recruit training is part of an entry-level training pipeline that prepares Marines to enter the fleet.
- The Marine Corps transformation process is built on the camaraderie and cohesion of the platoon, which is led by a team of dedicated drill instructors and reinforced through around-the-clock discipline and training in and outside the squad bay. Recruits are afforded no privacy or individual identity during training as they work to earn their place as a Marine.
- The Marine Corps current approach to gender integration is the Integrated Company model. Recruits train in same-gender platoons led by same-gender drill instructor teams in an Integrated Company; recent changes include targeted training events where integration occurs below the platoon level.
- When asked to define gender integration, Marine Corps Service leaders, training cadre, and drill instructors define it by the level of integration (e.g., company) where men and women execute the same training (e.g., program of instruction) and are held to equally high standards.
- Articulated benefits of gender integration from the Marine Corps perspective include men and women seeing one another conducting the same training, recruits seeing men and women as leaders in the Marine Corps, increased competition and motivation during training, and diversity of thought.
- Driven by the Marine Corps's request to identify the sociological effects of increased gender integration, the study team detailed several structural, organizational, demographic, social, cultural, and historical challenges to current and future gender integration at the Marine Corps Recruit Depots (MCRDs).
- The Marine Corps possesses many institutional strengths and assets for gender integration at recruit training, primarily the commitment, dedication, and passion Marines hold for their institution and the mission of training Marines.

Each year, tens of thousands of young Americans enlist in the Marine Corps. They arrive at the yellow footprints, pass through the silver hatches, and, 13 weeks later, march off the parade deck as United States Marines. This chapter provides a comprehensive overview of the Marine Corps recruit training and transformation process, descriptions of current approaches to gender integration at recruit training, and an analysis of benefits, challenges, and strengths regarding gender integration. Information from this chapter is primarily drawn from ethnographic observations at the MCRDs; interviews with training cadre, drill instructors, and Service leaders; focus groups with recruits; and primary documents and materials (e.g., Service policies, training

curriculum, recruit knowledge handbooks).¹² For more information about the social science methodology used for data collection, see chapter 3.

Additional relevant information about the Marine Corps is presented in other chapters. A more extensive treatment of the drill instructor perspective and experience appears in chapter 7. Chapter 8 presents the perspectives and experiences of Marine Corps recruits as captured through focus groups and the social science survey. Marine Corps recruits' physical performance and human performance outcomes are detailed in chapters 10-12.

The study team conducted similar social science research at Army, Navy, Air Force, and Coast Guard recruit training locations to examine those Services' approach to gender integration and identify best practices to inform alternate models and recommendations for the Marine Corps. Parallel findings on gender integration from the other Services are presented in chapter 6. Army, Navy, Air Force, and Coast Guard recruit perspectives and experiences are featured in chapter 9, including relevant comparisons with Marine Corps recruits.

A. Marine Corps Recruit Training

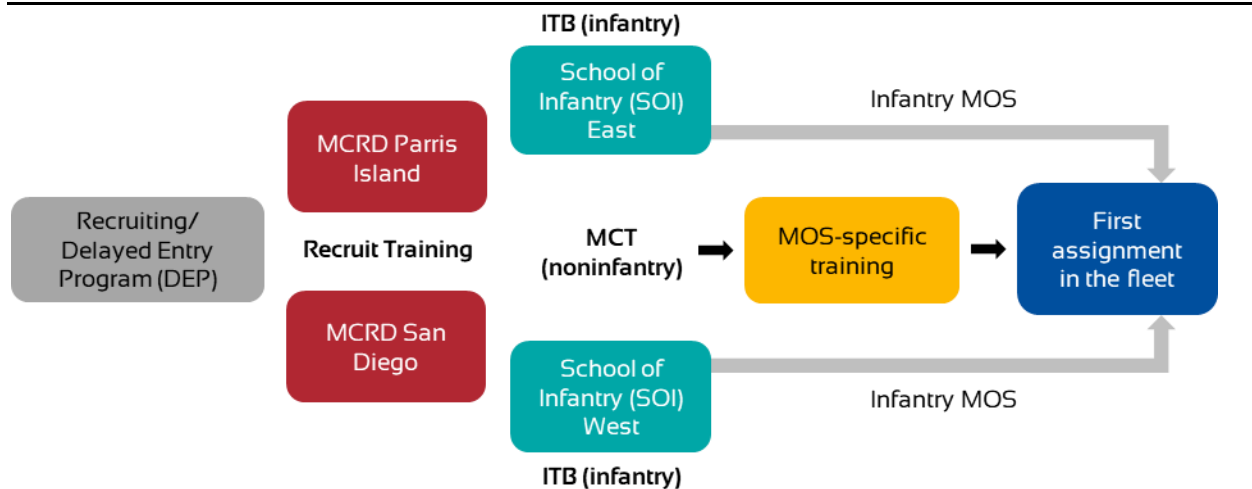
Recruit training is a transformative process that includes indoctrination of Marine Corps history, customs, and traditions and the mental, moral, and physical foundations required of Marines. The primary focus of recruit training is to produce a basically trained Marine who is committed to the Marine Corps's core values and is transformed through rigorous basic training in addition to being transformed by the Marine Corps's legacy (USMC, 2019b; U.S. Department of the Navy, 2012). Spirit, discipline, physical and mental toughness, strength of character, selflessness, and the "utmost respect for fellow Marines" are instilled in recruit training as entry-level military knowledge and skills are taught and teamwork emphasized (USMC, 2019a).

1. Marine Corps recruit training is part of an entry-level training pipeline

The Marine Corps conducts entry-level training (ELT) in a progressive format with multiple training programs and locations before Marines are assigned to their first unit. The ELT pipeline begins with recruiting and recruit participation in the delayed entry program. Recruits then attend basic training at one of the two MCRD locations: Parris Island or San Diego. After graduation from recruit training, Marines in infantry occupations are assigned to the Infantry Training Battalion (ITB) for their Military Occupational Specialty (MOS) training at the School of Infantry (SOI East or SOI West). After training at SOI, Marines with an infantry MOS head to their first fleet assignment. Marines with a noninfantry MOS attend Marine Combat Training at the SOI East or SOI West after recruit training, followed by specialized training at their MOS school before they are assigned to their first unit in the fleet (see figure 4.1). All ELT that occurs after basic training at the MCRDs is gender integrated at the platoon level.

¹² The study team uses limited identifiers to describe study participants; identifiers include gender, rank, Service affiliation, and category of participant (Service leader, training cadre, or instructor). Because the combination of these traits may identify some participants, the study team sometimes limits the use of identifiers to protect their confidentiality while maintaining as much context as possible about their position or perspective. Quotations from drill instructors do not identify senior drill instructors to further protect participants' confidentiality and guard against identifiability. Direct quotations featured in this chapter from ethnographic observations were captured verbatim in notes by study team members.

Figure 4.1. Marine Corps Entry-Level Training Pipeline



Note: ITB = Infantry Training Battalion; MCT = Marine Combat Training; MOS = Military Occupational Specialty

2. What is a basically trained Marine?

Guiding policy describes six objectives of Marine Corps recruit training that a basic Marine will display mastery in (USMC, 2019a, 2019b):

- **Character development** involves understanding Marine Corps values and values-based decision making with a focus on teamwork and leadership.
- **Discipline** involves respect for authority, obedience to orders, and building traits that exemplify Marine obedience, fidelity, and zeal.
- **Military bearing** involves proper wearing of the uniform and personal hygiene and representing the Marine Corps at all times.
- **Esprit de corps** is the warrior ethos; it involves mental and physical toughness, devotion, pride, initiative, determination, and problem solving.
- **ELT** involves mastery and proficiency in basic skills.
- **Combat conditioning** involves achieving and maintaining physical fitness, endurance, and proper body composition and promoting the concept of fitness as a way of life.

These training objectives are woven throughout seven requirements each recruit must meet to graduate from recruit training. Recruits must successfully perform the following (USMC, 2019a, 2019b):

1. **Water Survival Test**—Qualify at the Water Survival Basic level.
2. **Marksmanship**—Qualify with the service rifle.
3. **Physical Fitness Tests**—Pass the physical fitness test (PFT) and combat fitness test (CFT) and meet height and weight, or body composition, standards. If recruits have Service-designated Preferred Enlisted For (PEF) codes, then they must also meet the

physical fitness requirements specific to that PEF code, or they will be reassigned to a new MOS.

4. **ELT Training and Readiness Manual**—Accomplish mastery of 80 percent of assigned 1000 level tasks from the *ELT Training and Readiness Manual*.
5. **Marine Corps Martial Arts Program (MCMAP)**—Pass the MCMAP tan belt examination.
6. **The Crucible**—All recruits must complete the Crucible.¹³
7. **Battalion Commander’s Inspection**—The Battalion Commander will determine if recruits are qualified to graduate by evaluating their uniform wear and fit, military bearing, self-discipline, esprit de corps, and knowledge of general military subjects.

Recruits who fail to complete a graduation requirement with their original company may be recycled, reassigned, or transferred by the Battalion Commander. Consistent with standing policy, the battalion commander will make a recommendation to the Recruit Training Regiment Commander to separate a recruit if the recruit does not complete a graduation requirement and the battalion commander believes the recruit does not demonstrate the ability to serve in the future (USMC, 2019a, 2019b).

3. *Phases of Marine Corps recruit training*

Recruit training is a 13-week intensive training program that consists of receiving, processing, forming, training, and graduation. After the MCRDs receive recruits, they are processed in the Marine Corps’s systems, screened, and complete required administrative tasks. Forming begins once a platoon joins a training company and prepares for the first training day. Training is delivered over 70 days and is divided into four progressive phases (USMC, 2019a, 2019b; U.S. Department of the Navy, 2012). The focus of each phase follows:

- **First phase** includes core values, character development, discipline, physical fitness, martial arts, and marching/drill and introductions to basic first aid, the Uniform Code of Military Justice, leadership, customs, courtesy and traditions, and history of the Marine Corps.
- **Second phase** introduces small-unit leadership training, combat water survival, and marksmanship qualification.
- **Third phase** includes Basic Warrior Training (BWT), marksmanship training, final physical fitness and academic tests, personnel inspections, and the Crucible. The Crucible is the culminating 54-hour experience blending the physical and social training experience that serves as the defining moment of recruit training. It consists of numerous events/stations, two night events, and three core value discussions to test recruits mentally, physically, and morally. Designed as a rite of passage, the Crucible instills

¹³ If a recruit is unable to complete the Crucible as a result of illness or injury, the Battalion Commander will make the decision to retain or recycle the recruit based on their assessment of the recruit’s overall performance during the Crucible and the amount of total training missed.

selflessness and teamwork during challenging conditions. This event is the ultimate assessment of all training, simultaneously testing teamwork; physical fitness; and the honor, moral and physical courage, and commitment of recruits before they become Marines. After completing the Crucible, recruits are formally welcomed into the Marine Corps in the Emblem Ceremony, in which they are given their Eagle, Globe, and Anchor.

- **Fourth phase** stimulates and develops critical thinking skills, checks understanding, and reinforces comprehension in the six functional areas of Marine Leader Development: fidelity, fighter, fitness, family, finances, and future. This is accomplished through Socratic, small-group guided discussion and question-and-answer sessions with the drill instructor. Fourth phase concludes with a formal graduation ceremony.

B. Marine Corps Recruit Training Transformation Process: Transforming a Civilian Into a Basic Marine

Recruits undergo a rigorous transformation during recruit training whereby they arrive as civilians and leave as basically trained Marines. The transformation process is so stark that many parents remark at graduation that they can barely recognize their son or daughter. The Marine Corps transformation process is built on the platoon as the base unit for training. Recruits live and train with their platoon, and every moment of the training schedule is rigorously planned and executed by a dedicated team of drill instructors. Recruits are afforded no privacy or individual identity during training and are under the constant watchful eye of their drill instructors. Discipline and instantaneous obedience to orders are reinforced in and outside the squad bay; every moment is a training opportunity. Recruits must display physical fitness, mental fortitude, and emotional resilience as they work to earn their place as a Marine. These elements of the Marine Corps transformation process capture the intangibles—often referred to as the “secret sauce”—of how the Marine Corps makes a basic Marine.

1. Platoon is the central organizing unit of recruit training

The platoon is the nucleus of Marine Corps recruit training. Recruits are assigned to their platoon during their first moments of in-processing. Under the booming voice of a receiving drill instructor, skittish civilians (who are now recruits) are ordered step by step to write their platoon number on their paperwork and other items. This number prescribes the entirety of their world for the next 13 weeks. They will eat, sleep, train, live, learn, and work with their platoon. Recruits go everywhere and do everything with their platoon. At training events, recruits sit and are organized by platoon. Recruits meet their drill instructors at the end of forming days. Their drill instructors are a team of three to four Marines who will be with them day in and day out to test and challenge them, applying unrelenting pressure and constant demands to develop their fortitude so they become part of the Service that is “first to fight.”

2. Marine Corps squad bay is a cornerstone of the transformation process

The Marine Corps squad bay, colloquially known in the training environment as “the house,” is an essential training space and hallmark of Marine Corps recruit training. The squad bay is revered as a critical cornerstone of the transformation process from civilian to basic Marine. Its function as a living space for recruits during their training feels secondary to its conceptual

meaning and training utilization purposes. MCRD training cadre, drill instructors, and recruits all spoke to the importance of the squad bay in the process of making Marines:

What is the secret sauce the Marine Corps has? Honestly ... it's just what we do in the squad bay, honestly, that is ... I don't know why or how, but when I think of recruit training, I don't think of the rifle range. I don't even think of going to the field or hiking. My first thought is of experiencing everything in the squad bay.—**Marine Corps training cadre, officer, male, Parris Island**

The fundamentals of the squad bay experience—the fact that they are pressured 24/7—that's the secret sauce to everything we do here.—**Marine Corps training cadre, officer, male, San Diego**

Our Marines are trained, or made, in the squad bay.—**Marine Corps senior drill instructor, female, Parris Island**

The biggest point of when you become a platoon, the time you become a platoon, is the time in the squad bay. That's where you become a family.—**New Marine,¹⁴ male, Parris Island**

The best training happens in the squad bay. The place where I got stronger mainly happened in the squad bay.... When you're in the squad bay, you're getting messed up. But the more and more you're getting messed up in the squad bay, the more and more you see improvement in yourself.—**New Marine, female, Parris Island**

Physical description of Marine Corps squad bay

Male and female recruits in all Services must live separately per 10 U.S.C. § 8431 (see figure 4.2). Male and female recruits in the Marine Corps live in separate squad bays. In Integrated Companies, male and female recruits live in separate squad bays within the same barracks building.

Figure 4.2. U.S. Code Addressing Separate Housing for Male and Female Recruits

<p>10 U.S.C. § 8431 - U.S. Code - Unannotated Title 10. Armed Forces § 8431. Recruit basic training: separate housing for male and female recruits</p> <p>(a) Physically separate housing. --(1) The Secretary of the Navy shall provide for housing male recruits and female recruits separately and securely from each other during basic training.</p> <p>(2) To meet the requirements of paragraph (1), the sleeping areas and latrine areas provided for male recruits shall be physically separated from the sleeping areas and latrine areas provided for female recruits by permanent walls, and the areas for male recruits and the areas for female recruits shall have separate entrances.</p> <p>(3) The Secretary shall ensure that, when a recruit is in an area referred to in paragraph (2), the area is supervised by one or more persons who are authorized and trained to supervise the area.</p> <p>(b) Alternative separate housing. --If male recruits and female recruits cannot be housed as provided under subsection (a) by October 1, 2001, at a particular installation, the Secretary of the Navy shall require (on and after</p>

¹⁴ Focus group participants at week 11 have earned their Eagle, Globe, and Anchor and are officially Marines, so quotations from these participants identify them as “new Marines” rather than recruits.

that date) that male recruits in basic training at such installation be housed in barracks or other troop housing facilities that are only for males and that female recruits in basic training at such installation be housed in barracks or other troop housing facilities that are only for females.

(c) Construction planning. --In planning for the construction of housing to be used for housing recruits during basic training, the Secretary of the Navy shall ensure that the housing is to be constructed in a manner that facilitates the housing of male recruits and female recruits separately and securely from each other.

(d) Basic training defined. --In this section, the term “basic training” means the initial entry training programs of the Navy and Marine Corps that constitute the basic training of new recruits.

Note: Boldface font used in original text.

At MCRD San Diego, all squad bays have identical configurations. MCRD Parris Island has a few different styles of squad bays; differences include size of the squad bay, location of the head (bathroom), and size and style of the drill instructor hut. Regardless of the physical configuration, Marine Corps squad bays share common elements. The squad bay is an open living space with recruit racks on either side of the bay and a wide aisle between them. Recruit racks have one bed on the top and one on the bottom. At their rack, each recruit has a footlocker where they keep their personal and training belongings. Recruits are assigned racks in the squad bay based on their height, from shortest to tallest recruit, except for the platoon guide’s rack.¹⁵ When recruits are called to get “on line,” they stand in front of their rack facing the inside of the squad bay. Some squad bays have an actual line painted on the deck where the recruits are expected to stand, but most do not.

Every squad bay has a drill instructor (DI) hut—an office with a few desks and racks for drill instructors to sleep in during overnight duty in the squad bay. To maintain authoritative distance between recruits and drill instructors and provide drill instructors with privacy, recruits are instructed to look away sharply and announce “snap discipline” when they walk by the DI hut. There is an area near the DI hut where recruits can stand and bang three times to request to speak to one of their drill instructors for training, medical, or personal reasons.

The head, which encompasses the bathroom and shower facilities, is open in Marine Corps squad bays. Typically, there are no doors separating the head facilities from the squad bay; if there are doors, they remain open. Recruits are afforded no privacy in the head. Showers are open, urinals are open, toilets with stalls have the doors removed, and sinks are in an open area. Unlike other Services, drill instructors are allowed to move freely in and out of the head.

Squad bays generally have a supply closet (known as the “whiskey locker”), a closet for storing mops and brooms, weapons lockers, and pull-up bars. Squad bays have a TV or projection capabilities¹⁶ for teaching and instructional use. As the training cycle progresses, some drill instructors create a senior drill instructor (SDI) table where the SDI puts photographs, platoon awards, recruit artwork, and other memorabilia to motivate recruits and instill a sense of platoon pride. Squad bays have several posters on the wall, ranging from large to small, providing information related to health/welfare matters and basic military knowledge, such as rank

¹⁵ At MCRD San Diego, the guide’s rack is in the middle, toward the front of the squad bay. At MCRD Parris Island, the guide’s rack remains in line with other racks but is one of the first racks in the squad bay, toward the front. When in the squad bay, the guidon flag is staged at the guide’s rack.

¹⁶ In Parris Island, projection capabilities for some squad bays are created by hanging a white bedsheet from the ceiling.

structure and chain of command information. Some squad bays have whiteboards inside the open bay area that drill instructors use for various purposes.

Activities of daily living in the squad bay

During their 13 weeks at recruit training, recruits live in their squad bay. Activities of daily living occurring in the squad bay include sleeping, hygiene (showering and changing), morning and evening basic daily routine (BDR), free time, and evening devotionals.

- **Sleeping.** Recruits sleep in their racks in the squad bay except during Basic Warrior Training and the Crucible. Marine Corps recruits have a right to 8 hours of uninterrupted sleep, except for authorized conduct of interior guard/fire watch, during authorized Basic Warrior Training night events, and during the Crucible (USMC, 2012).
- **Hygiene.** The squad bays are used for hygiene and showering at least once per day. Recruits may be required to perform hygiene more than once per day, depending on the day's activities. During hygiene, females lock the squad bay hatch and place a sign on the door reading "hygiene in progress" to protect female recruits' privacy and ensure no male interruption during this time. Early in the training cycle, Marine Corps drill instructors are present in the shower with recruits, counting them down through cleaning steps as they maintain control and authority over the washing routine. The Marine Corps conduct of hygiene in the squad bay is distinct in that they are the only Service that allows free-range drill instructor presence in the head and does not prohibit recruit nudity in the squad bay. A Parris Island female recruit described her platoon's typical hygiene routine in the squad bay.

The thing with hygiene is that we don't get dressed in the head. You stand [in front of] your footlocker. You strip naked. You get a towel and stand there to take a shower. When you get out of a shower, you drop the towel and get dressed in your underwear and bra and stand in the middle of the squad bay [for the hygiene inspection].

- **Morning and evening BDR.** BDR is defined as "the hours between Reveille and the first scheduled training activity and between the last training activity and Taps" in preparation for "training, accountability of personnel and weapons, evening devotions, housekeeping chores, and hygiene/inspection" (USMC, 2019a, 2019b). In the morning, BDR involves getting dressed for the day, hygiene practices, and preparing or gathering gear and equipment needed for training. Evening BDR is preparing for Taps and ensuring readiness for the next day. For the Marine Corps, particularly in the first and second phases, BDR goes beyond getting prepared and ready for the day or next day; it is used as a training opportunity to instill discipline and instantaneous obedience to orders.
- **Free time.** Recruits have the right to 1 hour of free time daily except during processing, forming, Basic Warrior Training, and the Crucible. Free time is "to allow recruits to read and write letters, watch instructional media, and take care of other personal needs and hygiene deficiencies" (USMC, 2019a, 2019b). It is the one time of day when recruits do not receive training and the drill instructor does not conduct instruction, designed as a break from the near-constant pressures of recruit training. Recruits may take the initiative to use this time to study, practice drill movements, work out, or work on other aspects

related to training. Platoon guides or drill instructors sometimes provide suggestions about productive uses of free time based on ongoing training activities, such as cleaning weapons or preparing gear during weeks at the rifle range.

- **Evening devotional.** Recruits are provided 5 minutes at the end of each day for an evening devotional prior to Taps.

Marine Corps training uses of the squad bay

The Marine Corps uses the squad bay for a wide range of training activities throughout the training cycle. Some activities, such as morning and evening BDR, are intentional activities primarily designated for that space. Other activities, such as academic classes, can be shifted to the squad bay if needed or occur in other places. Of great importance to the Marine Corps approach are the training activities or moments that occur within the “white spaces” of the rigorous training schedule. An enlisted training cadre member from San Diego described these moments in the squad bay.

The real magic that happens, and it happens in such small amounts of time, you know, I mean in, in just a couple minutes in the squad bay. I am returning to the squad bay, make a head call, fill up their canteens, get them back on line, get accountability, and I might do a school circle with them and teach them, you know, how to conduct sucking chest wound first aid type class in the 3-minute block that I had before I need to step [to the next scheduled event].

Daily training activities in the squad bay include the following:

- **Morning and evening BDR.** Morning and evening BDR are used to instill discipline, reinforce instantaneous obedience to orders, and emphasize military bearing. In the first and second training phases, drill instructors meticulously count down every action a recruit makes, requiring a high degree of attention to detail and emphasizing both individual and platoon responsiveness. A male drill instructor from San Diego described the training purpose of the BDR process.

From the minute they get here, we break them down from civilian to recruit. ... You're breaking everything down to the very basic following commands from a drill instructor, instant obedience to orders. So we might be getting them dressed and undressed a hundred different times and it might take an hour ... they might think we're only messing with them ... but you're teaching them instant obedience to orders.

- **SDI time.** Drill instructors and platoons have SDI time scheduled every day in the training schedule. SDI time ranges from blocks of 30 minutes to several hours. SDI time is purposefully designed in the Marine Corps Recruit Training Orders to be at the discretion of the drill instructor team (USMC, 2019a, 2019b). SDI time could include instructional remediation, reinforcement of academic or practical application instruction, mentorship, preparation for upcoming training activities or events, assessment of platoon readiness, and more. Two training cadre members from San Diego described the importance and range of training that occurs within SDI time.

There [are] conversations that take place. There is discipline that takes place. There is teaching that takes place. There is just overall development that's going on in those blocks of time.—Enlisted Marine Corps training cadre, male

[The SDI] connect[s] on a more personal level, more than just “I’m standing in front of all you yelling at you,” but “I’m sitting, I’m talking about honor, and I’m using stories of my own personal experience or examples that you’re not necessarily learning in the history classes.”—Marine Corps training cadre, officer, male

- **Cleaning and squad bay maintenance.** Recruits must keep their “house” clean and are involved in cleaning activities in the squad bay, usually multiple times per day. Cleaning, while a routine activity, takes on training significance for the Marine Corps because it is used as another opportunity to instill discipline and reinforce instant obedience to orders. Platoons and drill instructor teams are formally (through inspections) and informally (through peer-to-peer conversations) judged on the cleanliness of their squad bay as a manifestation of their discipline.
- **Fire watch.** In every squad bay, the platoon must maintain a fire watch of at least three recruits from Taps to Reveille. Recruits cannot stand watch for more than 2 hours in a 24-hour period, and the fire watch team must rotate every 1 to 2 hours. Recruits on fire watch are responsible for maintaining the order, security, and safety of the platoon and the squad bay overnight. The drill instructor on duty is responsible for ensuring the fire watch is working appropriately and performing all duties correctly.
- **Hygiene inspections.** The Marine Corps performs daily hygiene inspections on recruits throughout the training cycle. Hygiene inspections involve the drill instructor or company officers inspecting each recruit’s body to identify and monitor health and hygiene concerns. During hygiene inspections, male recruits are dressed in their undershorts, and female recruits wear their sports bra and underpants. Hygiene inspections occur in the evening hours.
- **SDI one-on-one counseling with recruits.** Recruits can request to speak to their SDI at any time for any reason. During SDI or free time in the squad bay, recruits may request to speak to their SDI about personal matters or issues. SDIs can provide one-on-one counseling or conversations with recruits in the squad bay or the DI hut. A male training cadre member from San Diego described the importance of these counseling moments between an SDI and the recruits.

[The] one-on-one interactions as they’re doing their counseling with their recruits and, while this would sound blasphemous, but we’re treating him like a human being for 5–10 minutes and then really trying to connect with them and especially ones that are dealing with emotional challenges here because they’re young, it’s first time away from home, it’s not exactly going to be like Boy Scout camp or Girl Scout camp. It’s Marine recruit training.

Training activities that frequently occur in the squad bay include the following:

- **Incentive training (IT) and physical training (PT).** Depending on the day’s schedule, weather, and other factors, drill instructors may hold PT or IT sessions inside the squad bay. IT is a highly regulated physical exercise session used to correct minor infractions through the installation of discipline and motivation.
- **Practicing close-order drill (COD) movements.** Platoons can practice COD movements and positioning inside the squad bay. An SDI may choose to have the platoon work on COD movements during SDI time. Drill is most often practiced outdoors, but some movements can be practiced indoors within the squad bay.
- **Core Value Guided Discussions (CVGDs).** CVGDs provide an opportunity for drill instructors to reinforce and build recruits’ understanding of key concepts and topics covered in the curriculum. CVGDs, which happen regularly in every phase of Marine Corps recruit training, provide a chance for drill instructors and recruits to have a dialogue on important issues. CVGDs often involve a discussion of questions and scenarios designed to engage recruits’ critical thinking skills and enable the drill instructor to assess recruits’ learning and absorption of the material. Drill instructors often share their personal experiences related to the topic to make it more real for recruits and connect with them. There is a range of scheduled CVGDs, including ones on interior guard, sexual assault, social media, and Marine Corps core values. The relationship between the drill instructor and the recruit is a central component of CVGDs, as a female training cadre member from San Diego explained.

Part of that intimate training that we’re doing is in that squad bay with a platoon who’s together and they’re hearing it from the guy [SDI] they look up to the most, and he’s telling them a story about when he was a Corporal in the Marine Corps, and he’s relating to these kids and they have full trust and confidence in him. That’s part of the magic, too, is like, that’s the central figure of where we’re developing these core values.

- **Academic classes.** While most academic classes are taught in classroom facilities, sometimes classes are taught in the squad bays for scheduling or other reasons. For example, the study team observed a “Marriage and the First Term Marine” fourth phase class taught by a chief drill instructor in a female squad bay. In the open space of the squad bay, the instructor projected PowerPoint slides while recruits formed several rows using their campstools. The class proceeded as a normal class would.
- **Inspections.** Marine Corps recruits have several inspections during the training cycle, and most inspections take place in the squad bay. The squad bay itself is also part of the inspection process, reflecting on the platoon and the drill instructor team. Inspections evaluate recruit uniform wear and fit, military bearing, military knowledge, and weapon handling and care. The Battalion Commander inspection, the final inspection, is a Marine Corps graduation requirement.

Table 4.1 provides a summary of Marine Corps uses of the squad bay in Marine Corps Recruit Training.

Table 4.1. Summary of Marine Corps Uses of the Squad Bay

Activities of daily living	<ul style="list-style-type: none"> ▪ Sleeping ▪ Hygiene ▪ Morning and evening BDR ▪ Free time ▪ Evening devotional 	
Training	Daily	<ul style="list-style-type: none"> ▪ Morning and evening BDR ▪ SDI time ▪ Cleaning and squad bay maintenance ▪ Fire watch ▪ Hygiene inspections ▪ SDI one-on-one counseling
	Frequently	<ul style="list-style-type: none"> ▪ Incentive and physical training ▪ Practicing COD movements ▪ CVGDs ▪ Academic classes ▪ Inspections
Overnight monitoring	At least one drill instructor sleeps overnight in the squad bay with the platoon	

Note: BDR = basic daily routine; COD = close-order drill; CVGD = Core Value Guided Discussion; SDI = senior drill instructor

Squad bay utilization in the Marine Corps recruit training transformation process

The squad bay is a central space where tenets of the Marine Corps recruit training process intersect and are reinforced. It is more than a living or training space for the Marine Corps; it holds significant cultural meaning in the transformation process. Although sharing his disagreement with the general sentiment, one San Diego training cadre member remarked that the squad bay is considered an “almost divine or holy place” for the Marine Corps. The Marine Corps’s use of the squad bay reinforces fundamental elements of the Marine Corps basic training and transformation process, including an unrelenting training environment, around-the-clock presence of the drill instructor(s), stripping recruits of their individual identities in favor of a team mindset, and instant and willing obedience to orders marking acceptance of the complete control and authority of the drill instructor.

Army, Air Force, Navy, and Coast Guard conceptualization and utilization of the squad bay

Every Service has its variation of a “squad bay,” an open living and sleeping area used by recruits during recruit training. The Army and Coast Guard are the only Services that primarily use the inside of their squad bays for activities of daily living rather than as an active training space. Shared spaces in or near the barracks for the Army and Coast Guard are used as the training space, the Army uses outdoor drill pads, and the Coast Guard uses an indoor quarterdeck. The Navy and Air Force use their squad bays as active training spaces, with the Navy conducting training (including integrated training) in that space similar to the Marine Corps. No other Service attaches as much meaning or lore to their squad bay spaces as the Marine Corps. For other Services, these spaces are seen as *another* space where training happens rather than *one of the most pivotal* spaces where training and transformation occur. Other differences between the Marine Corps and other Services are policies and expectations regarding nudity and changing in the squad bay and overnight monitoring practices. All other Services prohibit recruits from changing in the open squad bay area; they restrict changing to the head or latrine. The Marine Corps is the only Service where drill instructors spend the night in the squad bay. Each Service’s use of its squad bay space and relevant policies and practices are detailed in appendix K.

3. Drill instructors: Continuous presence of the drill instructor team

Drill instructors are central to the recruit training process for the Marine Corps. In contrast with the other Services, which empower greater recruit leadership and responsibility through a recruit chain of command, the Marine Corps evolves platoon members in these roles (platoon guides and squad leaders) to reinforcing drill instructor directives. The Marine Corps drill instructor teams are the central figure of authority throughout the 13 weeks of training. The Marine Corps considers their recruit training to be an around-the-clock endeavor, demanding a high degree of mental resilience from recruits who are afforded no moments away from their drill instructors’ watchful eyes.

Marine Corps drill instructors maintain complete control of the squad bay at all times¹⁷ and are the ever-present authority of the space. Drill instructors often refer to the squad bay as their house when talking with their recruits, for example, saying, “I will not have the chief drill instructor walk in here to see *my* house a mess” to articulate the squad bay hasn’t been cleaned to their standards. Drill instructors use their control of the squad bay space, and everything that happens within it, to instill discipline, develop military bearing, and fortify instantaneous obedience to orders. All activities in the squad bay happen by the order of drill instructors. In the early portion of training, including forming days and the first and second phases, all movements are controlled by drill instructors’ step-by-step instruction. Recruits are given an order and must complete that order within the time allotted. For example, recruits are instructed to put on their left boot while the drill instructor counts down the number of seconds they have to complete the order. An enlisted male training cadre member at Parris Island described the Marine Corps’s unique level of control in the training environment:

¹⁷ Limited exceptions include when recruits are sick in quarters or, for example, at MCRD San Diego, when two recruits stand watch over the squad bay when recruits’ weapons are left in the house or when the squad bay hatch is not locked.

We do a lot in the squad bay. A lot of discipline happens in the squad bay. There's just so much that we do because we, our level of control and discipline is different than other Services, where they get put in their squad bays and they're left alone. There's not a lot of interaction there. ... For us, we ... control every—they never get left alone, so—and the drill instructors can help solve problems with individual recruits because they see them and know them so well.

The Marine Corps is proud that their recruit training experience is widely known as the most difficult and rigorous, and they believe the end state of a basically trained Marine is exceptional and different from the outcomes achieved by other Services' recruit training. A central tenet of Marine Corps recruit training is the systematic instillation of instant and willing obedience to orders through the drill instructors' actions and control. With BDR and other activities usually undertaken in the squad bay as the foundation, drill instructors use repetition and discipline to make recruits perform tasks in a synchronized and uniform manner. Recruits are expected to provide constant feedback and responses to every instruction they receive, and there is a sense of urgency demonstrated by loud, methodical counting down of the remaining seconds recruits have to complete every task put before them.

Marine Corps drill instructors take pride in their leadership and ability to impart values to the recruits they train while maintaining discipline, respect, and military bearing. They recognize that recruits follow their drill instructors' leads and will value what they see their instructors caring about, and they model the treatment and behaviors they intend to develop among the recruits they train. A male Marine Corps drill instructor from Parris Island describes,

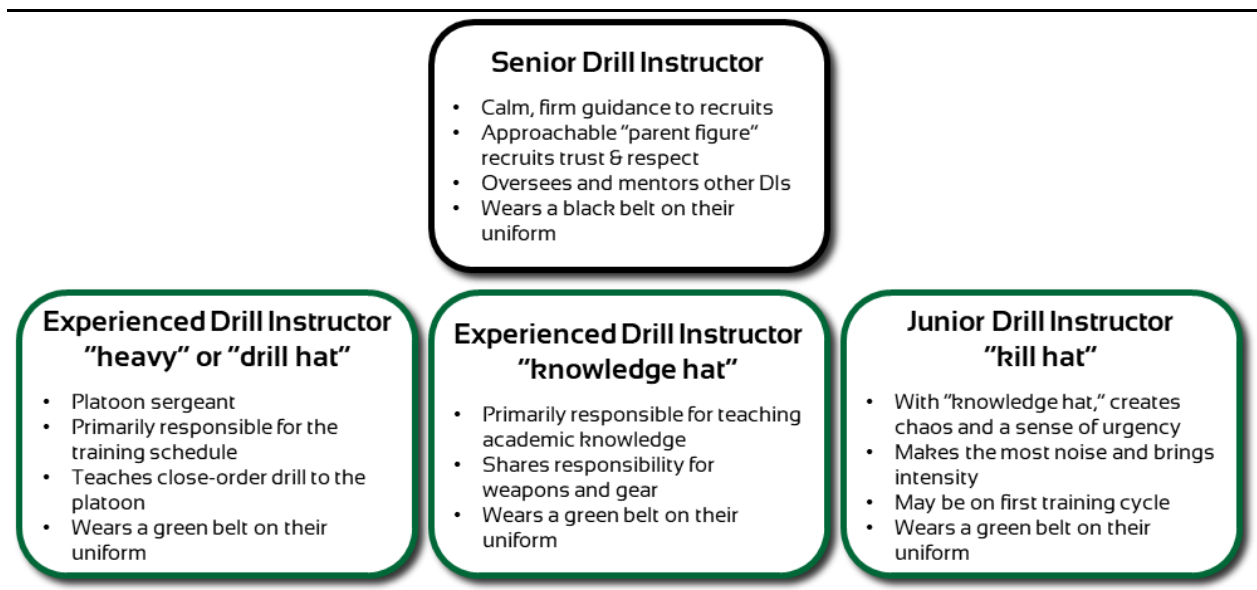
So there's a level of demand that exists, but you still allow a recruit to ask a question and you still answer their question and you make sure that their question is answered. I think people get mixed up in the "We don't care about a recruit and a recruit needs to learn." You're showing them that you don't care if you don't make sure that their question is answered. So I will make a recruit sit down and stand up three times. I will make a recruit ask me the right way, but [the] real demand is making sure that they ask the right way. I listen to their question. I answer their question, and I make sure that it's answered and they did the entire process the right way. The wrong way to demand is just to be like, "No, I don't care. If you don't know how to ask me a question, sit down."

Marine Corps drill instructors enact extreme measures in their self-presentation to project perfection within the role. For example, Marine Corps drill instructors never eat in front of recruits and limit their smiling or joking with other drill instructors as much as possible; many never break their face expression bearing in front of recruits. Drill instructors limit any displays of weakness when performing physical tasks or taxing training events, such as administering the gas chamber. Drill instructors are expected to be able to show and demonstrate every physical task—from pull-ups to rope climbs to the obstacle course—at a moment's notice.

Drill instructor teams and roles within teams

Marine Corps drill instructors generally work in teams of four.¹⁸ These teams are structured hierarchically, with “hats” numbered 1 through 4 based on experience and authority (see figure 4.3). From a training order and policy perspective, the Marine Corps only differentiates between the senior drill instructor and all other drill instructors on the team (USMC, 2019a, 2019b). However, in practice, Marine Corps drill instructor teams have developed and passed down very specific norms, expectations, and roles dividing responsibilities and personification for each member of the team. In describing her role, a female drill instructor nodded to the formal versus informal categorizations: *“Technically, I’m a 3rd hat, but we’re not really allowed to say that. So I’m a green belt drill instructor.”* Some drill instructor teams even follow informal “rules” about drill instructor body positions, limiting who can cross their arms or place their hands on their hips with elbows protruding outward based on their role in the drill instructor team.

Figure 4.3. Marine Corps Drill Instructor Team Positions, Roles, and Responsibilities



Note: DI = drill instructor

The senior drill instructor, colloquially known as “boss,” “senior,” or “SDI,” leads the platoon of recruits and provides mentorship to and oversight of the other drill instructors on the team. Senior drill instructors wear a black belt with their uniforms, providing a visual signal of their leadership and authority within the platoon. All other drill instructors wear green belts. Among recruits, the SDI’s role is to offer calm but firm guidance, direction, and mentorship. Drill instructor behaviors intend to encourage and teach recruits to trust and seek counsel from the SDI and to view the SDI as a “parental figure” for the platoon. When recruits speak in classrooms, their required introduction usually includes their platoon number and senior drill

¹⁸ Occasionally, a drill instructor team will take on a fifth drill instructor, usually one who is newly graduated from drill instructor school and available to begin a training cycle. Sometimes drill instructor teams only have three instructors because of personnel or staffing issues.

instructor's name. Marines who have gone through boot camp report that they remember their senior drill instructor's name for the rest of their lives.

The SDI's approachability and firm but not chaotic demeanor contrasts with the 2nd hat, an Experienced Drill Instructor (EDI). The 2nd hat is the platoon sergeant, colloquially known as the "heavy," "J," or "drill hat," and is primarily responsible for training and leading the platoon in close-order drill. The 2nd hat is also responsible for the training schedule and ensuring everything goes according to plan. The EDI is among those who will administer corrective training, known as IT, to recruits, including platoon guides and squad leaders. This contrasts with the SDI, who can IT an entire platoon at once. The SDI will sometimes end IT sessions administered by other drill instructors "early," further cementing their role as the approachable and understanding one in the platoon from the perspective of the recruits.

The 3rd hat, another EDI, is considered the "knowledge hat" or sometimes the "kill hat," and this position assumes primary responsibility for weapons, gear maintenance, and the platoon's mastery of academic knowledge. The 4th hat is the primary "kill hat" and referred to as "Nick" at Parris Island or "Bobby" at San Diego. They are the junior drill instructor on the team, usually on their first training cycle. The 4th hat takes on the job of creating unrelenting chaos and a sense of urgency at all times. The 3rd and 4th hats are the drill instructors who make the most noise and put the recruits under the most intense pressure, ensuring the platoon functions as a team by frequently administering IT and enforcing prompt verbal responses from the recruits.

A male drill instructor from San Diego succinctly summarized the role of each Marine Corps drill instructor.

So each drill instructor has a different role and responsibility. The senior drill instructor, he's like dad, he does all the talking to them [recruits]. And then the platoon sergeant, he teaches drill. The 3rd hat, he teaches prac[tical application], and then the 4th hat, the new drill instructor, he's the one that's primarily focused on discipline and learning from the other drill instructors, learning their role, so that way he's able to take over once he moves up.

Marine Corps drill instructors and training cadre shared reflections on the roles of each member of the drill instructor team:

Senior Drill Instructor/Senior/Boss

[As a senior drill instructor] just the love and the care ... and, I guess, essentially what I'm trying to get at is, talking to these recruits, I understand that they're human beings, too, and they have some shortfalls. They struggle with things. Something you have to—sometimes take the rank off and take the belt off and they understand that you're not defined by the uniform you wear or the cover you wear. Because you're human too, and you feel and understand some of the things that these kids talk about. You have to be there for them. You're the first echelon of care. So that's what's incredible about being a senior drill instructor because I think I have saved so many lives from going back to what they used to do, to

become this person that, when they see their parents again, they have no idea who their son or daughter is.—Marine Corps senior drill instructor, male, Parris Island

... the senior drill instructor is the one who does a lot of the core values discussions, which ... provides the recruits an opportunity to be open, decompress a little bit because the green belt drill instructors are not there.—Enlisted Marine Corps training cadre, male, Parris Island

... the senior drill instructor is the ... pressure release valve for one, the team, and two, the recruits. His role is very much of the release valve of, like, okay, hey—like the recruits come talk to him about all their personal problems. ... “I just got a letter from my mom and dad saying one of my family members is very sick” or “I just got a letter from my significant other back home that they’re leaving me” to “Drill instructor, this recruit came here with \$10,000 worth of debt.” To the drill instructor team being “I don’t understand and I’m trying to teach these recruits how to do this and they still don’t get it. I’ve been teaching this stuff for 30 minutes now, and none of them seem to get it.” So he’s [the senior drill instructor is] the pressure relief valve.—Marine Corps training cadre officer, male, San Diego

2nd Hat/Platoon Sergeant/Heavy/J/Drill Hat

... “heavy” is what we call it, just because the burden of the platoon is 100 percent on you, all their gear. The way that the squad bays look, the way that the recruits go about business during the day, all falls on that one individual. And we compare it to like a platoon sergeant in the fleet: you’re in charge of everything in their daily life before they wake up until they go to sleep, and it’s called—the experience shows such a role, but it’s not billeted any differently. The job is not written any different, but everything that the green belts are responsible for falls on your shoulders. ... But heavy is like—EDI is where you begin to really interact with recruits, all day on a daily basis, one on one, the entire platoon, but the performance of a platoon is heavily graded on the EDI. That was where not just, like, the philosophies came from but where I think the stress of the job actually hit me. I would wake up at, like, midnight, one o’clock in the morning thinking about, “I didn’t check to make sure everyone has a hat and glove [and] we’re going to need them tomorrow.”—Marine Corps drill instructor, male, Parris Island

3rd Hat/Knowledge Hat

... my role is I teach them knowledge. So I teach them the history of Marine Corps, like, anything to do about knowledge. It’s not my role to—like, yes, I’m a mentor and a guide, but I’m not over here talking with them [recruits] about any of that stuff. That’s my senior drill instructor’s role to do that. If there’s [a] concern to solve and they bring it up to me, I bring it up to my senior drill instructor, and she plays her role as a senior drill instructor. And there’s a lot of

stuff—there is points where if there’s knowledge that I’m going over, they have questions. Yes, I do go over that part with them. But I don’t necessarily put myself out there to.—**Marine Corps drill instructor, female, Parris Island**

My job [as the 3rd hat] is to reinforce everything that the recruits have been taught by their platoon sergeant, correct their deficiencies, and maintain discipline. Basically, to train recruits.—**Marine Corps drill instructor, female, San Diego**

4th Hat/Kill Hat/Nick or Bobby

So that first cycle was terrible, and now every Marine that comes into the company, I help them. I try to help them. I don’t care that you’re the “Nick.” You’re still a Marine, and most of them are sergeants. Even staff NCOs [noncommissioned officers], I’m going to mentor you so that you don’t have to go through what I went through because that was terrible. It was the worst cycle. It was the worst time of my life. I have never quit anything. I was going to quit. Didn’t care if my career was going to be over, I was like, “I’m done.” I would just stare at the ceiling in the night next to my wife and she looked at me, she’s like, “Are you okay?” “No, I don’t think I could do this. I think I’m done.” And then she talked me back into it and [told] me my “why,” and then I [would] get back to it.—**Marine Corps drill instructor, male, Parris Island**

Service leaders, training cadre, and drill instructors felt it was critical for recruits to have same-gender drill instructor role models throughout the arduous training process. The senior drill instructor was described as the most important role for gender alignment because they act as a stern yet fair parental figure. Recruits also felt this alignment of gender was important, reflecting that they learned to become a woman or a man through the same-gender mentoring of their drill instructors.

... growing up, I didn’t have female ... I didn’t have anyone. But my SDI is probably the best female role model I’ve ever had. She is extremely confident. She’s not cocky, but she knows that she’s the baddest B-word out there. She knows that, and she tells you she earned it, but she won’t let it get to her too much. But she is a confident, strong role model, and I think that’s really important.—**Marine Corps recruit, female, Parris Island**

Females [drill instructors] can do just as well, but I personally don’t think I could train how good of a man to be as I am now as male DIs can show me. ... I came here to be a better man and wouldn’t be able to get that from a female. I think females [recruits] would have the same response.—**New Marine, male, Parris Island**

4. 24/7 nature of Marine Corps recruit training and using “white space”

The Marine Corps differentiates its recruit training from the other Services through an “always training” mindset, 24 hours a day, 7 days a week. From the moment lights come on until they go

off in the evening, training takes up every moment of the day.¹⁹ Two new Marines from Parris Island emphasized this in the focus groups, stating, “*Training starts when the lights come on*” and “*I like the way the Marine Corps is. Lights is training.*” For instance, morning BDR is more than preparing for the day ahead; it is an intentional training opportunity where the Marine Corps maximizes the development of discipline and instant and willing obedience to orders. An enlisted female training cadre member from San Diego emphasized the around-the-clock nature of Marine Corps recruit training:

Our training is 24 hours a day. That’s in the squad bay. That’s one of our primary focuses ... instilling a sense of urgency in everything that they’re doing. That means moving fast when they’re making a head call and coming back out, and the mental resiliency that we’re building and the constant stress that we’re putting on them isn’t just the training schedule. It’s getting to every one of those events and so many of the movements, and the way that we build the team identity is the platoon in the squad bay.

The ceaseless nature of training is further characterized by the presence of the drill instructors at every moment. When recruits first meet their drill instructor team, the SDI delivers a scripted speech. In this speech, the SDI tells recruits what they can expect from their drill instructors, including that “my Drill Instructors and I will be with you every day, everywhere you go” (USMC, 2019a, 2019b). Marine Corps recruits experience the continual presence of drill instructors in the squad bay, in the chow hall, and at every training activity. A male training cadre member from San Diego stated:

These platoons and drill instructors are together 24 hours per day, 7 days per week, for 13 weeks. There is nowhere to hide. For 16 hours per day, they are under the watchful eye of a drill instructor or a drill instructor team. They can’t get away from the trainer who is trying to turn them into Marines.

Drill instructors are also present overnight in the squad bay. The Marine Corps is the only Service that requires drill instructors to sleep and stand duty overnight inside the squad bay during recruits’ sleeping hours.²⁰

In the Marine Corps around-the-clock training approach, every moment of the day is a training opportunity, whether formally scheduled or not. Drill instructors use this unscheduled “white space” in the training schedule to continuously train their recruits and better their platoons. Platoons within a company are competitive with one another at the recruit level and by drill instructor teams. This sense of competition fuels the desire to use every moment for training purposes. Typical white space training moments involve practicing COD movements, requiring recruits to recite military knowledge, reviewing combat or practical application skills, reinforcing military bearing, and discussing core values. Even in small moments, such as carrying trays in the chow hall, recruits are taught to hold their trays with a hand movement mimicking holding their rifle for drill to improve their performance. The white space training moments happen everywhere in the training environment.

¹⁹ A regular exception is Sunday mornings, which are reserved for religious services.

²⁰ 10 U.S.C. § 6932 mandates sex-based limitations for drill instructors and other personnel present in recruit living areas after the end of the training day.

Like I said, there are so many—there is so much, there is so much time, all those small pieces of time, they are just scattered across the 12 weeks you are here that I [a drill instructor] am going to pour in my development into you. I am going to do that, and it's not necessarily laid out in the training schedule. So it happens to and from everywhere. A lot of it, you know, like I said, happens in the squad bay. Everything from, you know, attention to detail, I mean, there is hours, I mean, after the training day is over from the end of chow, so we'll just say 1800 to 2100, right? It's a 3-hour block where it's just me and the platoon, every day.—Enlisted Marine Corps training cadre, male, San Diego

Our view of it is, there is no end to the training day, right? So the training day extends, and it's going to happen in the squad bay. And you'd be surprised ... how much is being taught in the squad bay. Something as simple as, "I don't know how to do a pull-up the right way" and they'll [drill instructors will] spend another hour in the squad bay working with individuals to perfect their technique.—Marine Corps Service leader

5. Stripping away recruits' individual identities

The Marine Corps training process is designed to strip recruits of their individual civilian identities and transform them into Marines. First, the physical environment of the squad bay affords recruits no privacy. Unlike other Services, there is no privacy in the head or showers. Every aspect of daily living is visible to other recruits and drill instructors. The platoon-based training approach is designed to remove individual thinking, instill a unit mindset, and inculcate an institutional identity to earn the title of Marine. A male recruit from Parris Island described the platoon emphasis in training.

Everything is so systematic in the squad bay. We have to undress, but we undress by piece of clothing as a platoon. And you take your blouse off then put it on your rack, and if one person doesn't do it, you all have to redo it. There are times when we're doing it over and over.

A female officer of the San Diego training cadre articulated how this shared platoon training process strips away recruits' focus on self and individuality.

[The squad bay is] the closest thing that you can get to have the entire platoon working as a team, other than drill. Because if one person messes up, then everyone kind of feels trickle-down effects. ... And I think it breaks kids out of their comfort zone. It can make kids move at a lot faster pace than what they're willing to move at. And there's discipline in it and an integrity aspect to it where you start to know the commands, you start to follow them on, you start to get smarter with it. ... [The squad bay] needs to be kept clean and you need to work as a team in there to make that happen in the fastest amount of time possible. And I think if you view it like that as a recruit, you get over the spotlighting or the feeling singled out aspects of your brain and you just start moving for other people. ... [The] thinking it eventually gets there, like I'd say right now, they're starting to realize that during week 2, but in the beginning, they were like, "I'm being singled out," and you're not. You're just not moving as fast as everybody else.

A male officer of the San Diego training cadre echoed that the exposure and lack of privacy extinguish individual-based thinking.

There is no time to be an individual. They [recruits] are completely exposed; there is no privacy. They are under the gun at all times. That pressure really drives the stripping away of individuality and makes them look to each other for support to try and make sure they are doing their part and not let the team down. That happens from lights on to lights off. Once the day starts, they are under the gun the whole time.

These external, physical efforts to dismantle a recruit's sense of individuality are reinforced by actions that influence a recruit's entire thought process. The most remarkable example of this is that recruits are forbidden from referring to themselves in the first person. The word "I" is replaced with "this recruit" in all instances until after recruits have completed the Crucible and received their Eagle, Globe, and Anchor to designate them as Marines. Recruits learn this the moment they step off the bus and onto the yellow footprints in the famous "yellow footprints speech" (USMC, 2019a, 2019b):

The Marine Corps' success depends on teamwork. Teamwork, therefore, is an essential part of your training here at [Parris Island/San Diego]. Starting now, you will train as a team. You will live, eat, sleep, and train as a team. The word "I" will no longer be a part of your vocabulary. Do you understand? (p. 2-5).

6. *Approach to building teamwork, trust, cohesion, and camaraderie through shared suffering and individual adherence to orders*

Most Marine Corps recruit training activities are individually executed in a group setting. Each recruit is expected to demonstrate achievements in building their character, discipline, tactical skills, and physical conditioning, and these shared developmental tasks provide the basis for team building and cohesion. The arduous, challenging nature of training experiences is an essential part of developing cohesion, trust, and camaraderie as a team. Bonds among recruits and between recruits and their drill instructor team are forged through moments of training and day-to-day life when recruits are exhausted, stressed, and being pushed beyond their limits. Even though these developmental milestones and graduation criteria must be achieved by each individual, the process of achieving them becomes team focused as recruits learn that the success or failure of one is the success or failure of the entire platoon.

There is so much, so much instruction and so much team building ... to teach the recruits in the platoon to put the health of the platoon first, to put the welfare of the platoon first, and I think that is—I mean, when we talk about the transformation, when we talk about why the Marine Corps is the way that it is, why Marines would give their lives for their fellow Marines, that's where it starts.—Marine Corps training cadre, officer, female, Parris Island

Recruits expressed that shared living conditions and upkeep tasks accelerated the bonding process, and that the camaraderie they shared with their fellow platoon members was built through small moments of connection in their shared sense of suffering.

The only time to bond is in the squad bay. I've made friends at night during free time and when we're in our beds and messed around and stuff. ... We shower and poop together, so we're like brothers. We live in the same house, so we're glued to each other.—**Marine Corps recruit, male, San Diego**

You form your connections. Half of the strength of connections is formed in squad bay through square away time and head calls. In the beginning, you don't get to talk to other people in the platoon. You can whisper in the head, [and] if you don't get that little bit, it would take two to three times as long to get to know people.—**New Marine, male, Parris Island**

I got really close with my sisters. ... Even if I'm getting messed up, I could look at my sister and know she is going through the same thing.—**New Marine, female, Parris Island**

7. Competition between platoons and competitive environment

Competition is a deliberate strategy to motivate recruits to continually improve their performance as they achieve each milestone toward becoming a Marine. A competitive element is built into every aspect of recruit training—from inspections to physical fitness to the acquisition of academic knowledge—serving as an omnipresent reminder that “good enough” never is. To be a Marine is to be the very best.

Competition is woven into the daily fabric of recruit training. Achievements are celebrated (or failures borne) at the platoon level. Nearly every competency required for graduation, including physical fitness, combat fitness, drill, rifle marksmanship, academic knowledge, and tactical combat casualty care, is formally demonstrated and scored. Individual recruit scores are added and summed to determine the winning platoon in the company. Table 4.2 presents the list of formal platoon competitions; winners are bestowed trophies that are proudly displayed in their squad bays. Scores for these platoon competitions are summed and averaged to determine the “honor platoon” of the company, which is first to be presented at graduation.

Table 4.2. Platoon Competitions in Marine Corps Recruit Training

Platoon Award
Highest PFT
Highest CFT
Initial Drill
Final Drill
Rifle Range (Table 1 and Table 2)

Academic Testing (1st, 2nd, and 3rd phase tests)
TCCC Evaluation
Honor Platoon: Total Highest Average Score

Note: CFT = combat fitness test; PFT = physical fitness test; TCCC = tactical combat casualty care

8. *Earning your place: Walking, talking, and looking like a Marine*

The transformation from civilian to Marine is marked by visible, often ceremonial, privileges earned throughout training to progressively look like a Marine. When recruits first receive and don their uniform in the forming phase, they look like civilians masquerading in military clothing. However, by the time recruits have completed their transformation into a new Marine at their graduation ceremony, their whole physical selves exude the confidence, discipline, and attention to detail instilled in them. Platoons earn the privilege of blousing their trousers (pants) after they complete their initial drill evaluation (USMC, 2019a, 2019b). Similarly, in the summer months, recruits earn the right to wear their sleeves tightly and neatly rolled—a signature Marine look. Visible uniform cues are a clear signal of recruits’ earned progression through the training cycle.

The senior drill instructor has the authority to order the platoon guidon (flag) to be furled at any time from the beginning of training until the start of the Crucible (USMC, 2019a, 2019b). Senior drill instructors will admonish the platoon by telling them, “I don’t even want people to know who we are,” signaling embarrassment at being identified if behavior, drill movements, or appearance is unkempt.

Completion of the Crucible marks a defining moment in the transformation process. Recruits have earned the privilege to be a Marine. The receipt of the Eagle, Globe, and Anchor at the end of the Crucible marks the personal end of the transformation, a moment where every recruit knows they’ve given their all and achieved something only “The Few, The Proud” are able to. They can now address their drill instructors by their rank rather than as sir or ma’am, look their drill instructors in the eye, and finally resume referring to themselves in the first person, saying “I” rather than “this recruit.”

Two weeks later at graduation, the transformed recruits emerge onto the parade deck as physically fit, neatly dressed, precisely drilled, smart Marines their loved ones barely recognize. The end of the transformation marks the beginning of their service to the nation as a Marine.

C. Marine Corps Approach to Gender Integration at Recruit Training

The Marine Corps approach to gender integration at recruit training has evolved. Beginning in 2019, the Marine Corps implemented an Integrated Company model in which same-gender platoons are integrated at the company level. This section provides information about the structural organization of the MCRDs, three training models currently implemented at the MCRDs with varying levels of gender integration, and an overview of the Marine Corps approach to gender integration.

1. Structural organization of MCRDs

The Recruit Training Regiment at each MCRD is organized into numbered battalions. MCRD Parris Island has four training battalions (1st, 2nd, 3rd, and 4th), and MCRD San Diego has three (1st, 2nd, and 3rd). Both MCRDs also have a Support Battalion that supports the training mission in a variety of ways. Each numbered battalion houses four lettered companies (except for 4th Battalion at MCRD Parris Island, which has three). For example, 1st Battalion has Alpha, Bravo, Charlie, and Delta Companies.

A company is typically made up of six platoons that complete the training cycle together. Companies can be integrated, male only, or all male but training with a company/series of female recruits. Within each company, platoons are organized into lead and follow series. A typical series has three platoons. One exception is 4th Battalion, in which November and Oscar Companies are split into two to three numbered series (i.e., Oscar 1, Oscar 2, and Oscar 3; November 2 and November 3) that train with male companies in the Series Track model. The series nomenclature “lead” and “follow” are merely designations and are not indicative of a series leading or following in any meaningful way. The battalion, company, and series levels have designated officer and enlisted leadership positions.

Platoons are made up of 60–90 recruits who share living quarters, known as squad bays, and are together 24 hours a day, 7 days a week, during the training cycle. Platoons are single gender, led by same-gender drill instructor teams (e.g., male platoons are led by an all-male drill instructor team). A typical drill instructor team consists of a senior drill instructor and three additional drill instructors. Drill instructors are enlisted personnel between the ranks of sergeant (E-5) and gunnery sergeant (E-7). This four-person drill instructor team is responsible for the training, health, safety, and welfare of their platoon for the entire 13-week training cycle. At least one drill instructor stands duty overnight in the squad bay with his or her platoon. For the Marine Corps, the platoon is the most important training unit and seen as a vital component in the transformation process from civilian to Marine. All aspects of Marine Corps recruit training are organized by platoons. Platoons are known by four-digit numbers, such as 1025 or 3056.

2. Marine Corps recruit training models

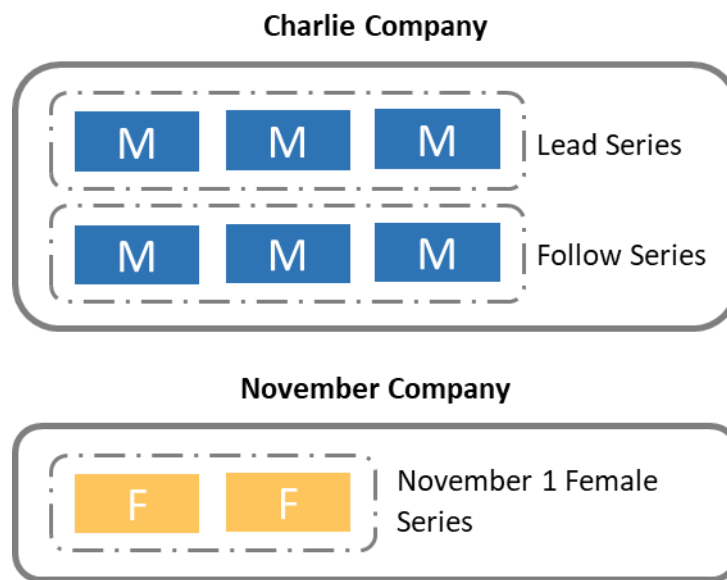
The Marine Corps is currently training male and female recruits under three different configurations: Series Track, Integrated Company, and Male-Only. Each structure utilizes the existing company, series, and platoon structure described above with different approaches to the structural positioning of male and female recruits. All models complete the same program of instruction, prescribed by the Marine Corps. For all models, platoon leadership (e.g., drill instructors) remains same gender, but officer and enlisted leadership at the series, company, and battalion levels can be mixed gender.

Series Track model

In the Series Track model, a male company (from 1st, 2nd, or 3rd Battalion) is paired with a female company/series from 4th Battalion. Figure 4.4 depicts the structure of a typical Series Track company. Charlie Company is an all-male company of six platoons organized into lead

and follow series. November Company is an all-female company in 4th Battalion broken into two series of two female platoons each (November 1 and 2). Charlie and November 1 complete the training cycle in parallel and come together for major training events such as the Initial Strength Test, MCMAP, swim qualification, rifle range, the Crucible, and graduation. If there are space constraints at particular training events or venues, the female series is paired with the male follow series. Because the two companies that make up the Series Track originate from different battalions, they live in different barracks on the installation. For this reason, Series Track male and female recruits eat separately and may do physical training activities, such as the obstacle course, separately. Series Track recruits also march to integrated training events from separate locations. The Series Track training model only exists at MCRD Parris Island and will be completely phased out by fiscal year (FY) 2024 and replaced by the Integrated Company model (USMC, 2022a).

Figure 4.4. Graphic Representation of the Marine Corps Series Track Model



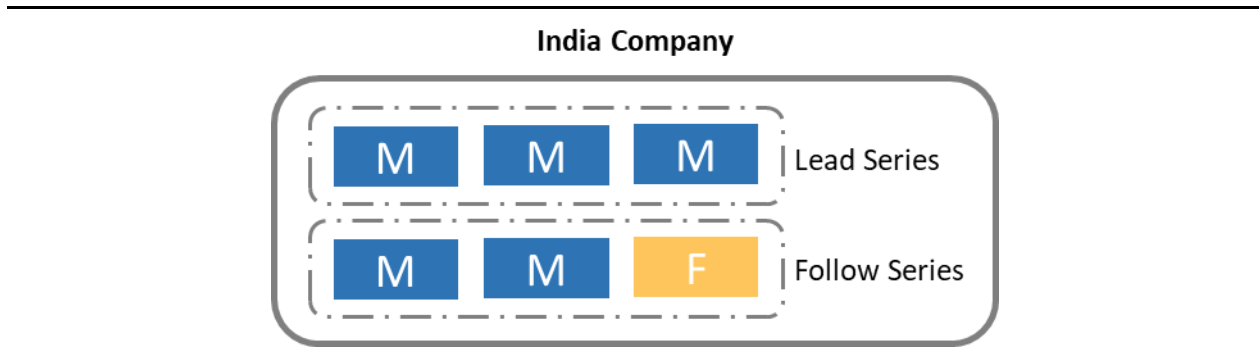
Note: M represents a male platoon; F represents a female platoon.

Integrated Company model

The Marine Corps executed the first Integrated Company model in January 2019 at MCRD Parris Island with India Company (USMC, 2020a). The initial structure of the Integrated Company model was five male platoons and one female platoon (5-and-1) in a company (see figure 4.5). Between January 2019 and June 2020, MCRD Parris Island ran nine iterations of the 5-and-1 Integrated Company model (USMC, 2020b). In November 2020, MCRD Parris Island adjusted the model to consist of four male platoons and two female platoons (4-and-2) within a company to incorporate gender integration into both series (see figure 4.6). MCRD Parris Island executed 10 4-and-2 iterations of the Integrated Company model in FY 2021. MCRD San Diego piloted its first 5-and-1 Integrated Company model beginning in February 2021 with Lima Company. The female platoon in Lima Company made history as the first women to graduate Marine Corps recruit training at MCRD San Diego (Harkins, 2021). MCRD San Diego is

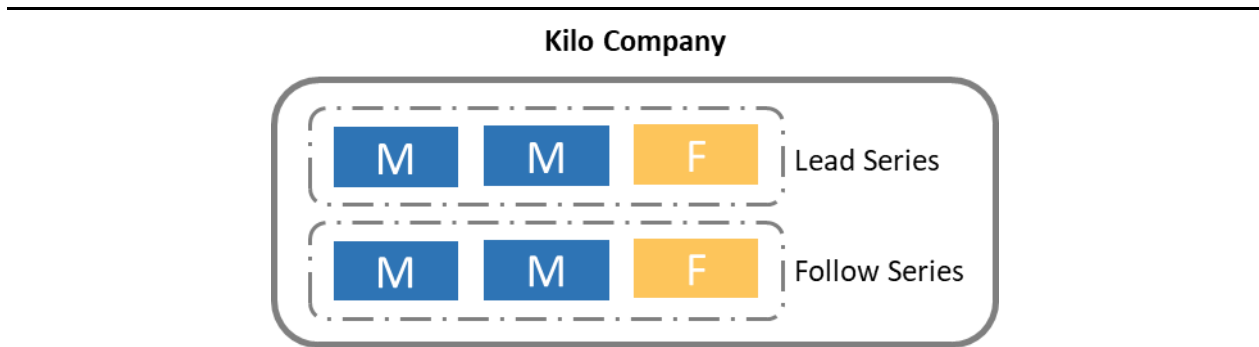
continuing to implement the 5-and-1 Integrated Company model; Golf Company began its first integrated training cycle in October 2021.

Figure 4.5. Graphic Representation of the Marine Corps 5-and-1 Integrated Company Model



Note: M represents a male platoon; F represents a female platoon.

Figure 4.6. Graphic Representation of the Marine Corps 4-and-2 Integrated Company Model



Note: M represents a male platoon; F represents a female platoon.

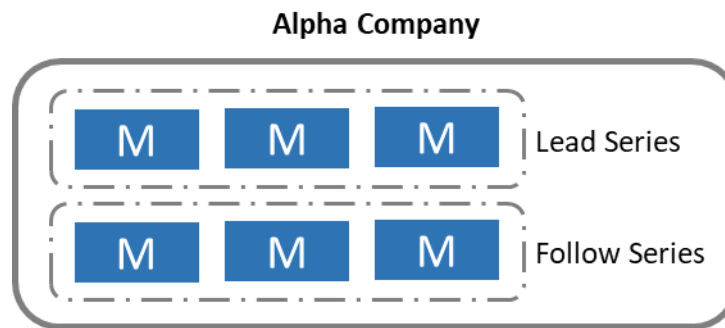
Integrated Companies, whether 5-and-1 or 4-and-2, are housed in the same barracks. For example, two female platoons live in squad bays on one floor, while the male platoons live in squad bays on two additional floors. Thus, integrated companies eat at the same time in the same chow hall and march to every training event or activity together. Training conducted above the platoon level can involve both male and female recruits. This is particularly true of the 4-and-2 model, in which each series has two male platoons and one female platoon. Some training events happen by series, so under the 5-and-1 model, there are times when the training is single gender for three of the male platoons in the series without a female platoon. Integrated Companies have more co-located training and line-of-sight opportunities regarding gender integration. The Marine Corps has described the Integrated Company model as “co-located, gender-separate, and conducts the scheduled Program of Instruction without deviation” (USMC, 2020a). While platoons are together at training events and academic classes and in the chow hall, they remain gender segregated. For instance, in an Integrated Company academic class, male and female recruits are present, but because they are seated by platoons, recruits are sitting next to others of

the same gender; there is no intermixing or opportunity for interaction.²¹ Recent changes (as of September 2021) to the Integrated Company model provide additional opportunities for male and female recruits to directly work together in training at field week events, circuit course and bases (physical training), and the Crucible (USMC, 2021d, 2022a); according to the Marine Corps, “further integration occurs at the platoon, squad, and fireteam levels for targeted training events and achieves specific integration goals” (USMC, 2022a, p. 3). At the time of this report, MCRD Parris Island is only running the 4-and-2 Integrated Company model, and MCRD San Diego is only running the 5-and-1 Integrated Company model.²²

Male-Only model

Male-Only companies continue to exist as a result of the small number of women enlisting in the Marine Corps each year. For example, in FY 2021, MCRD Parris Island ran 17 Male-Only companies, 16 Series Track companies, and 10 Integrated Companies. Thus, 40 percent of male recruits at MCRD Parris Island experienced their recruit training as Male-Only (USMC, 2020c). The Male-Only model follows the conventional company and series format, with six platoons in a company divided into lead and follow series (see figure 4.7). During busier training months, some male companies at MCRD San Diego expand to seven platoons. Male-Only companies are housed in the same barracks and conduct the training described above for the Integrated Company model except for the presence of female recruits. For the Male-Only model, the platoon is still the base unit of training; male recruits primarily interact and train directly only with male recruits in their platoon.

Figure 4.7. Graphic Representation of the Marine Corps Male-Only Model



Note: M represents a male platoon.

3. Marine Corps recruit training models and gender integration

Regardless of the model, recruits train shoulder-to-shoulder with their single-gender platoon for most of the training cycle. Exceptions for Series Track and Integrated Company models may include individual-based training events, such as the 2-mile run, or events that provide opportunities for recruits from different platoons to intermix while performing the training as a

²¹ The study team may have observed greater distancing of platoons than normal in classrooms because of COVID-19 mitigation strategies.

²² Scope and time restrictions limited the study team to studying and measuring outcomes only for recruits under the 4-and-2 Integrated Company model, as detailed in the limitations section of chapter 3.

result of varying completion times, such as the obstacle course. In these instances, recruits are executing individual training and are not working with one another. Recent changes to the Integrated Company model provide additional opportunities for male and female recruits to directly work together in training. This includes integrated teams for certain training activities, such as field week key events, circuit courses and bases (physical training), the bayonet assault course,²³ Basic Warrior Training, and the Crucible (USMC, 2021d, 2022a).²⁴ These changes to the Integrated Company model were made after the completion of data collection; therefore, the study team did not observe the shoulder-to-shoulder gender integration taking place during these training events.²⁵ For all models, there are some training events at which male and female recruits might work together not by design but by necessity, such as during swim remediation. Other limited opportunities for recruit interactions outside of their platoon are at medical appointments, during religious services,²⁶ and in team formation at the Crucible into teams (known as sticks) depending on platoon sizes in the company.

Narrative description of Body Sparring I with Integrated Company at MCRD Parris Island (June 2021)

After initial instruction and preparations, male and female recruits in an Integrated Company are staged around sand pits, ready to begin sparring. Male recruits from Integrated Company spar in one pit, while female recruits spar in the other pit, several yards away. Male platoons are staged around or near the male pit; female platoons are staged around or near the female pit. At each pit, the readying process is the same: multiple recruits place body gear on the recruit who is about to enter the ring. Recruits are organized by body weight; sparring is limited to same-gender recruits (by practice) within 10 pounds of one another (by law). Each pit has an event instructor who calls the next round of recruits into the ring. Two recruits step into the ring and begin sparring when the instructor blows the whistle. In the male pit, nine male drill instructors and three event instructors are in the ring with the two male recruits sparring. The drill instructors yell and egg on the recruits who are sparring; the environment is loud and intense. In the female pit, two female drill instructors and an event instructor are in the ring as two female recruits are sparring. Both the volume and quantity of instructors egging recruits on is substantially lower than in the male pit. Drill instructor teams primarily stayed near their platoons, which translated into many more male drill instructors around or engaged in the male pit than female drill instructors in the female pit. In one instance, a male drill instructor came into the female pit while female recruits were fighting but did not stay long.

This scene illustrates how recruits in Integrated Company may have a qualitatively different experience of the same training even with co-location. The drill instructors' allegiance to and responsibility for their platoon instead of the series or company inadvertently facilitates drastic experiential differences at some training events based on proportionality. Male recruits' sparring matches happen in the context of a loud, chaotic, and crowded pit. Female recruits spar in a notably less intense setting, despite being only a few yards away.

Mixed-gender interaction between recruits and instructors varies. Recruits are primarily instructed and corrected by their platoon's drill instructor team throughout the training cycle; thus, recruits are being instructed by same-gender instructors. Mixed-gender interactions with drill instructors (e.g., male drill instructors and female recruits, female drill instructors and male recruits) most often happen during co-located training events (Series Track or Integrated Company) as training corrections are needed. For instance, a female drill instructor may correct

²³ The bayonet assault course is currently only operational at MCRD San Diego.

²⁴ MCRD San Diego seems to have implemented these opportunities while MCRD Parris Island is piloting these integration opportunities with some Integrated Companies.

²⁵ For a more extensive discussion of this study limitation, see chapter 3.

²⁶ These encounters may have been affected by COVID-19 social distancing measures.

male recruits on their way to the head while at the confidence course, or a male drill instructor may correct female recruits on their form during a MCMAP lesson. Academic instructors, practical skills instructors (e.g., MCMAP, land navigation, rifle range), and support personnel (e.g., chaplains) are not assigned by gender, making mixed-gender instruction and interaction possible. Series, company, and battalion leadership (enlisted or officer) present other opportunities for mixed-gender leader and recruit interaction. Still, the most intentional and regular training and interaction occur between recruits and their same-gender platoon drill instructor team.

D. Definition of Gender Integration

The definition and conceptualization of gender integration shapes Marine Corps approaches to integration of male and female recruits at recruit training. The FY 2020 National Defense Authorization Act (NDAA) mandates training at the MCRDs “may not be segregated based on gender” (NDAA, 2019), a considerably vague requirement. In interviews with Marine Corps Service leaders, training cadre, and instructors, the study team asked, “How does the Marine Corps define gender integration in recruit training?”

A sizable number of respondents did not have a clear sense of how the Marine Corps defined gender integration at recruit training. For example, a senior Service leader requested support from one of his aides during his interview to find the Marine Corps definition. The Service leader reported he did not know what the statute definition is. His aide pointed him to the Marine Corps Force Integration Campaign Plan²⁷ but commented that there are continued ongoing discussions about the “level” of integration that should occur at training. The lack of clarity was also apparent among those in leadership positions at the MCRDs.

We don't know. They haven't defined it, so what we've been told is that headquarters Marine Corps, or big Marine Corps, wants to do the 5-and-1 model: five [male] platoons to one [female] platoon per company.—Enlisted Marine Corps training cadre, female, Parris Island

I can tell you what it looks like. I don't know if there's, like, an actual definition, but we integrate in a company so we've got female platoons and male platoons in the same company. And I think that's about all we can do, given the way we conduct recruit training.—Marine Corps training cadre, officer, male, Parris Island

I think they need to define what integration actually means to a military organization.—Marine Corps training cadre, officer, female, San Diego

Without a shared or widely known Service definition, respondents primarily defined gender integration by the structure of integration—how men and women are positioned within platoons and companies. Most Marine Corps respondents defined gender integration as integration at the company level, with men and women executing the same training at the same time.

²⁷ During the interview, it was referred to incorrectly as the “Marine Corps Female Integration Plan.”

... at the company level, again, within the stipulations with the law, whatever the true definition is that we would integrate men and women at the company level. Homogeneous platoons integrated in a male-female company, training as a company. So physical fitness, warrior skills, the Crucible, rifle range, all those things happen as a company. They go and train together.—Marine Corps Service leader, officer, male

Basically, it's integration within our standards and to the greatest extent possible. I mean, we're doing everything we can to ensure the proper assimilation of the sexes in training while at the same time trying to maintain that team aspect ... that early team-building aspect of single-sex platoons to afford the greatest level of training to be completed from the beginning of recruit training to the end. ... They are integrated as companies; the female platoons are integrated with the male platoons at the company level.—Marine Corps Service leader, male

I'm going to give my impression of the definition. The definition of gender integration is recruit training by all the training days and all the elements and everything else is the same. In gender integration, as we're trying to achieve it, is just like we were doing with different parts of the nation, different cohorts, different nationalities, different experiences and age even. ... When they're training, that they are training with males and females so they see that same disparity that some males are better in some things. Some females are better in some things. When they're out there doing all the elements of training, they get to see the [suffering] and discomfort and that control is the same, that males and females, Black, White, Asian, Indian—they're all lumped in the same thing. Because you have to suffer together, and no one is going to get by. And I think we're trying to do that in our integrated training while still preserving the intimate living conditions that then become a distracter for just transforming them from a civilian to a military member writ large.—Marine Corps Service leader, male

[Integrated training is] the way that we do it now. Everything we do, we train with the males. We do the same thing with males, like, say, one day, we have the confidence course, the females and males, same day, go and do the confidence course. ... We do the same training thing as males do.—Marine Corps drill instructor, female, Parris Island

Some respondents felt the Marine Corps has been integrating training since before 2019 because the Series Track model brought men and women together for major training events in a similar way, although less frequently, to the Integrated Company model.

I think it's just that the males and females are trained in the same way at the same time. And that is gender-integrated training, to which, in [early 2000s], when I showed up at Parris Island, I would consider that gender-integrated training technically back then because every female series was on track with a male company. So all the large training evolutions were done in conjunction with the males. So rifle range, Crucible, swim qual[ification]. So they were exposed to each other. They just weren't necessarily interacting, but it was the same training at the same time.—Marine Corps Service leader, female

*Well, honestly, I think being on track with a male company, we've always been doing integrated training, but it just wasn't called integrated training. So we've always been on—usually when you're on track with a male [company], and we do certain things together, before they called that integrated training. We'll run the PFT together. We'll hike together sometimes; we'd run the CFT together. We'd be at the pool, obviously, together. We're on the range with them. So we've always been integrated, but we just weren't calling it integration.—***Marine Corps drill instructor, female, Parris Island**

Marine Corps respondents defined integration as the level at which integration occurs, a definition that is absent of tangible meaning. Definitions of integration “at the company level” where recruits engage in the “same training at the same time” obfuscate articulations of what it means to be integrated: What does a recruit in an integrated environment experience? Is integration seeing one another? Standing next to one another? Interacting? Several respondents identified these disparities within the Marine Corps approach to integration, indicating the true meaning of integration remains unclear.

*I hear about the way the Army does it, and they're very integrated. Like, the only thing they don't do is sleep together in the barracks. ... In the morning, [they] fall in for morning PT, they all fall in formation together, males and females. And I think, to me, that is, like, the true meaning of recruit training integration, is if, like, I fall in to a platoon and there's a male and a female recruit, that's true integration, and my drill instructors are male and female. Like, then, now you're truly integrated. The only thing we're not doing is obviously we're not sleeping together at the end of the night. We go to our separate squad bays and obviously hygiene time, showering after PT, that's different. ... To me, that's true integration. The way we're doing that right now, we're, like, piecing it together, trying different things, see what works. So, to me, that would be true integration at recruit training.—***Enlisted Marine Corps training cadre, female, San Diego**

*... [The training I've experienced] was fully integrated. ... It was all together. ... So I have experienced what I think the military would define as fully integrated. And I think that here on recruit training, what's important to see is that it's achievable with adding the platoon in. I don't think that you need to have them sleeping in the same areas and sharing all of those experiences in order for it to be integrated. I think that there's infrastructure limitations here that don't allow that to happen.—***Marine Corps training cadre, officer, female, San Diego**


[Interviewer: Do you feel the Integrated Company is gender integration?] *No. No, not fully. ... It's not fully integrated because, I mean, you have one platoon—I mean, platoon of 60, right?—that are in an all-male company.—***Marine Corps training cadre, officer, female, San Diego**

It's [integration is] platoon separated by gender. The integration at the company level, I think is the definition that we've—again, because platoons live in squad bays together, they have to be segregated by gender. That's what the law says. So that's how we

integrate the training. I mean, it would be perhaps almost irresponsible, but it would certainly be time-consuming if you said, okay, well, every waking moment, they need to be integrated. So if there were no females living in the squad bay across, as soon as they got up, got dressed right away, they would rush together and they would do—it’s made it without. I would say it’s probably unreasonable to think that that would be effective or efficient, and I would challenge someone to say if that is absolutely necessary.—Marine Corps Service leader, officer, male

The differing opinions of these respondents show there is a spectrum of possible definitions for what it means to conduct “integrated” training. Participants with alternate viewpoints interviewed for this study (see findings presented in chapter 5) and previous studies on gender integration at recruit training (Dolfini-Reed et al., 2017; Schaefer et al., 2018) have posited there is a spectrum of integration where degrees of difference have meaningful implications for how recruits experience integrated training. Table 4.3 presents several degrees of integration, ranging from completely gender separate to direct, purposeful interaction between male and female recruits.

Table 4.3. Spectrum of Gender Integration for Recruit Training

Degree of Integration	Form of Integration	Description of Integration
Least integrated  Most integrated	Gender segregated or gender separate	Training events are conducted with same-gender recruits only; opposite-gender recruits are not physically present or within sight
	Line of sight	Male and female recruits in same-gender groupings conduct training within the line of sight of one another but are physically separated
	Co-location or “same place, same time”	Male and female recruits in same-gender groupings conduct the same training in the same location but do not interact with one another
	Shoulder to shoulder	Male and female recruits stand next to one another, interspersed, at the training event but do not interact with one another during conduct of event.
	Direct interaction	Male and female recruits interact with one another and work together in the training event

Using these degrees of integration as a guide, the Marine Corps Integrated Company model increased the amount of co-located or “same place, same time” training from the Series Track model. Recent changes to the Integrated Company model, where recruits are integrated for targeted training events at the squad and fireteam levels, increase shoulder-to-shoulder and direct interaction integration opportunities for recruits²⁸ (USMC, 2022a). Squad bay training activities (detailed earlier in this chapter) remain gender-segregated or gender-separate training events.²⁹

²⁸ These changes to the Integrated Company approach were implemented after data collection for this study; the study team did not directly witness these types of interactions.

²⁹ In passing, male or female recruits in Integrated Company may see squad bay training for the opposite-gender occurring because they are in the same barracks building.

E. Benefits of Gender Integration and Gender-Integrated Training

Marine Corps Service leaders, training cadre, and drill instructors were asked about the benefits of gender integration in recruit training for recruits, drill instructors, and the Marine Corps as a whole. Training cadre and personnel from MCRD Parris Island have more direct experience with gender-integrated recruit training and spoke at greater length and in more detail about the benefits of gender-integrated recruit training than those from MCRD San Diego.

In a February 2022 briefing to the Senate and House Armed Services Committee, the Marine Corps expressed the following purpose and benefits of gender integration in recruit training: “Gender integration contributes to cohesive units capable of diverse thought and intelligent action, thereby significantly increasing combat effectiveness” (USMC, 2022a, p. 2). Further integration goals outlined by the Marine Corps included “reducing biases; building cohesive units capable of diverse thought and intelligent action; perceiving each other as equals; sharing of ideas while accomplishing common goals; and overcoming common hardships” (USMC, 2022a, p. 3). These statements provide an institutional perspective on the benefits of gender integration that goes far beyond those articulated by most Marine Corps respondents interviewed for this study.

Discussion of gender integration benefits from Marine Corps respondents centered on awareness and exposure, which is likely emblematic of an integration approach where integration is company- or series-based co-location with the greatest amount of interaction happening within same-gender platoons.³⁰ The Marine Corps has substantially evolved its approach to gender integration at recruit training over the last several years, and for many interviewed, recruits’ ability to “see” one another completing the same training is a substantial difference from past approaches and was the most prevalent response to questions asked about gender integration benefits. Several broad themes about the benefits of gender integration from Marine Corps Service leaders, training cadre, and drill instructors are discussed below, listed in order of how frequently they were raised. This section concludes with a discussion about the merits of the 4-and-2 Integrated Company model over the 5-and-1 configuration, which was a topic raised by respondents.

1. Male and female recruits see each other doing the same training

One of the most frequently articulated benefits of gender integration by Marine Corps respondents was that male and female recruits see each other doing the same training. The Marine Corps has a long history of gender-segregated training, where women only trained with women in 4th Battalion (men trained in 1st, 2nd, and 3rd Battalions) at MCRD Parris Island. Until 2021, MCRD San Diego was a male-only training facility (Harkins, 2021). Respondents from Parris Island described broad benefits to the Marine Corps’s emergence from completely gender-segregated training.

³⁰ At the time the study was conducted, no gender integration occurred below the platoon level. Since data collection, the Marine Corps has begun targeted training events with gender integration at the squad and fireteam level in the Integrated Company model (USMC, 2021d, 2022a).

... keeping the women behind a wall is just far too antiquated. That's not the Marine Corps anymore. It's not the Marine Corps anymore.—Marine Corps training cadre, officer, female, Parris Island

... that's a huge benefit, whereas in the past, especially with 4th Battalion being kind of separated, kind of like their own ecosystem just because of how the battalion is structured, we [women] were almost like a mythical, like, the unicorn. What kind of training do they do? We do the same exact training as every other battalion. We execute the same exact schedule. Now with integration, it helps build that and show, no kidding, we are doing the same exact [training].—Marine Corps training cadre, officer, female, Parris Island

The fact that we're starting to separate from the mentality of females can't do what males do. ... Years ago, it was always females can't do what male Marines do. And right now we're showing them we're still doing the same training that you're going through, we're still doing everything that you're going through. There's nothing different.—Marine Corps drill instructor, female, Parris Island

Series Track and Integrated Company models provide male and female recruits opportunities to observe firsthand opposite-gender recruits following the same training and program of instruction, including equally rigorous physical demands.

... what we're doing here demonstrates and shows to everyone that there is no difference between how a female and a male Marine is made. It is the same.—Enlisted Marine Corps training cadre, male, Parris Island

... [gender integration] show[s] everyone, like, "Hey, males and females can do the same thing. You see us doing it every single day you see us doing a hike together. We're the same way. You see us running the same distance, you see us doing, like, shooting at the range every single day we're together." So it shows ... males and female Marines do the same thing to earn the title. [Later in the interview] Honestly, the only thing, I think, it really does is that male and female recruits understand that they do the same thing to earn the title and they get a little more interaction with each other instead of, like, going to MCT and be like, "I've never seen a female Marine before." Besides those two things, I don't think it does much else.—Marine Corps drill instructor, female, Parris Island

And making them understand that, okay look at me, I'm 5'7", 145 pounds soaking wet. ... I don't care what sex you are, I don't care what size you are—I mean, if you can do what a Marine is supposed to do, then that's what we're looking for. So I think it makes it clear to them that it takes all kinds to get the thing done. And just because someone might be smaller than you or female or a different race or whatever, that has nothing to do with it. It's like I said, a Marine is a Marine, as long as they can maintain the standards.—Marine Corps Service leader, male

They made a video of Papa Company because they were the first Integrated Company here [in 4th Battalion]. And it was great to see the male and the female new Marines

saying how impactful the experience was because they were—even though some of them were intimidated at the beginning, by the end of the cycle, they're like, that's my brother, that's my sister, and the male counterparts were like, "Oh my god. She's carrying the same weight I'm carrying; I better not, not fall out on this turning evolution and keep up with my sister" and vice versa. So actually for this particular iteration it made that group of recruits, now Marines, stronger and more cohesive.—**Enlisted Marine Corps training cadre, female, Parris Island**

A few respondents also discussed how gender-integrated recruit training can break down preconceived notions or gendered stereotypes recruits may bring with them into service.

... There's a lot of things that males or females may have come here with, a bad sense about the other sex, if that makes sense. They may have had a bad upbringing with males, they may have a bad upbringing with females coming here, [and] they learn how to be, like I said, professionals. They learned that there are good males, good females and stuff because they're forced to work together. ... I think it's important for a lot of these recruits and these females that get to see that. Then vice versa, males are like, "Man, she's doing it."—**Enlisted Marine Corps training cadre, male, Parris Island**

I think in all honesty, the benefit [of gender integration] is truly for the male recruits, which sounds weird. But it's just exposure to make sure that they understand ... not to disparage old veterans, but there's ... lots of thoughts that they might come into the Service with based off of talking to family members or what they've seen in movies. So just being able to be exposed to that sort of thing is always good, in my opinion. So I think the benefit is honestly for the male recruits more than anyone else.—**Marine Corps Service leader, officer**

2. Male and female recruits see leaders of both genders in the Marine Corps

The benefits of integration for recruits were also thought to expand with greater exposure to mixed-gender leadership, especially through the Integrated Company model. The prominence of male and female leaders, whether drill instructors in a company or officer and enlisted training cadre, sets the tone that both male and female Marines are leaders.

We're all flawed, but I think it is effective for recruits to see interactions between more senior male and females because it shows them that, hey, you can be the opposite sex and you can work together and it can be extremely professional and extremely effective. I think that is important for them to see because they're going to experience that. ... I think them seeing it here at recruit training and seeing it right from the get-go is important for them. That way they know, like, okay, this isn't just an all-male organization or where the males and females are segregated for all time.—**Marine Corps training cadre, officer, male, San Diego**

I think it's good that our male and female recruits see male and females in leadership positions unilaterally. There's no, well, you have to be—it has to be a female for this, it has to be a male. We don't have that, except for inside the squad bays for the supervisory

stuff. So that, to me, has been a tremendous benefit. It creates opportunities for them—for our drill instructors, our officers, and our senior staff and NCOs—once they leave here, too, which helps create a positive attitude about being here, which translates then into, I think, a better product overall.—Enlisted Marine Corps training cadre, male, Parris Island

Both male and female recruits get to have the opposite gender there as a leadership role and responsibility, for the first time getting yelled at by a male versus vice versa, and seeing them, seeing how the drill instructors interact male and female with each other ... I think it is a huge factor to show and inspire them as well, that they too can be in the leadership position. ... There's no restriction on your gender. So I think that's good to allow them to see early on. So I think it gives them something to shoot for and have understanding for it, and I feel like both—they all respond in the same manner. So the demand is no different. So the males don't treat or correct the females any different than what they do the males.—Enlisted Marine Corps training cadre, male, Parris Island

3. *Recruits are exposed to the opposite gender at recruit training so the concept is not foreign at later stages*

Another prominent benefit of gender integration from the perspective of Marine Corps respondents is recruits' exposure to peers of the opposite gender before experiencing increased levels of gender integration at SOI. Respondents emphasized that exposure at recruit training could make it less awkward or foreign to see and work with Marines of the opposite gender as they progress throughout ELT and eventually begin their work in the fleet. Men were more likely than women to emphasize this type of exposure as a benefit of the Marine Corps approach to gender integration.

A lot of these male Marines or even female Marines will sometimes never work with the opposite gender, and when that time comes, you don't really know how to deal or communicate with each other. So [starting] this at the foundation, just, it'll make it 10 times easier for them to build upon in the future.—Marine Corps drill instructor, female, Parris Island

I believe that with the integration, we give both males and females that exposure to the opposite-sex Marine because waiting until we get to MCT is, like, you don't see the females, and then you have the man's club or whatever. And you get a bunch of females, they come, they've never seen males, they haven't [seen] females in 3 months, and then you have a bunch of males that haven't seen females in 3 months. And then now, all of a sudden, they have these thoughts about how females train or the fact that females train differently than males, which is not true. So that also allowed them to see that the females were getting trained just as hard if not harder than what they were, and then for the females to see that the males were getting trained the same exact way.—Enlisted Marine Corps training cadre, female, Parris Island

... I think it's good that we are doing things that the way we are right now because it's getting them accustomed to being around the opposite sex earlier in training versus later,

*where they're not really used to it and it may be uncomfortable. So now I think it's good that they're seeing the opposite sex earlier because I know that, when I came in, there did seem to be more sexual assault cases and things like that that could have been prevented if they had been integrated earlier and got used to working together as a team in earlier stages. So I think we're doing that well.—***Marine Corps drill instructor, male, Parris Island**

*I just think it's just having the ability to work alongside their male counterparts. So it's norm when they go into the fleet, when they go to MCT, when they go to the MOS school; it's not foreign. That is the first time they're seeing a female Marine 'cause San Diego recruits, they don't see females until they possibly go to the fleet.—***Marine Corps drill instructor, female, Parris Island**

4. Integrated training increases competition and motivation for recruits and drill instructors

Training cadre and drill instructors felt that gender integration amplifies the competitive environment for male and female recruits and provides more motivation during training.

*... it's a kick in the butt to not be the person that can do something. So I think it helps motivate both men and women, whether that's a man that doesn't want to stop negotiating an obstacle because there's a woman watching or the woman that wants to prove that I can do it too. I think there's benefits both ways.—***Enlisted Marine Corps training cadre, male, Parris Island**

*I'm always very interested in the competitiveness that comes from just the integrated efforts. In the 6 months that I've been here ... it's like the number one thing that everybody wants to talk about. Even the recruits, when I talked with them. And when they're new Marines, they would really like it because there's a competitiveness. ... It wasn't like that when I came through recruit training.—***Enlisted Marine Corps training cadre, male, Parris Island**

The increased competition was also seen as a benefit for drill instructor teams, who push themselves harder to outmatch one another.

*And I'm telling you right now it is awesome to watch because you can tell the drill instructors feed off each other and they are very competitive, but not in a negative way. They're competitive in the way of, like, we need to do better as a team. Not as an individual or as a male platoon or as a female platoon, as a team.—***Enlisted Marine Corps training cadre, female, Parris Island**

And seeing this cycle [Integrated Company] full blast, seeing the last cycle full blast, I feel like it's been a unique experience. And you see the competitiveness between the females and the males as good. I think it creates good cohesion within the company or battalion even. ... And just it pumps me up. It motivates me just to see that I'm not only competing but trying to get better based off of, he's a male, she's a female. I'm a female,

and I'm going to work harder than he is. I'm a male, and I'm not going to let this female beat me. So it's mind-blowing just to see it on a day-to-day [basis].—Marine Corps drill instructor, male, Parris Island

5. Male and female drill instructors learn from one another with integrated training

Marine Corps training cadre and drill instructors spoke emphatically and in great detail about the benefits of drill instructors working more closely with one another. Male and female drill instructors, who were once separated into their own training spaces, were able to learn new approaches to the job or different techniques to produce better training outcomes.

... I think it's better for as far as women and men working together and seeing how each other does the business. ... We'll end up getting the good parts out of how the males do business and how females do business because there's a good part to both, and hopefully get rid of some of the bad habits or things that are not that valuable or maybe not the right way to do business. So I think there's value in integrating the staffs or having them work closer together. Rather than just being out at an event but we're still not really together.—Enlisted Marine Corps training cadre, male, Parris Island

A lot of the male drill instructors around here have already come out and told me ... "Hey, sir, I've gotten different perspectives. I appreciate their input and the way that I would not have thought that 4th Battalion females were doing the same thing." Some of them didn't even understand it was same process, same everything. You got to remember they are 25–26 years old. There's still a bit their—they've not expanded their awareness and understanding. So the male drill instructors benefited, the female drill instructors benefit, and there's something, again, that sometimes male and female bring—whether it's a delivery of style, the tone—changes how you receive something. And the reception, I think, is better at times for different ideas.—Marine Corps training cadre, officer, male, Parris Island

A male drill instructor from Parris Island shared new techniques and processes he learned from working with female drill instructors in an Integrated Company.

So every company has "isms,"³¹ and I think that the integration is nice because hats get an exposure to different types of isms. And what the females brought with them is, like, a level of cleaning and house procedures [in the squad bay] I have never experienced before in my life. The way that they have daily cleaning is way more intricate than anything we've ever done, and I definitely soaked up much as possible. The way that they have to project and plan, ... the way that they look ahead. I had never thought to look ahead that far. The way that they organize at 4th Battalion, one of the isms that they have is they micromanage every single day. Because there's, there's enough hat-to-recruit ratio that they're able to do that. Males, we just can't. There are six platoons. There's no way. And I think something that they [female drill instructors] brought that I saw is the level of organization with the training schedule. A lot of hats just, like, fire from the head because everything's always changing so much, but there is a healthy level of planning

³¹ "Ism" is a slang term for unique style.

that I think is in the middle of the two that I definitely took on and, just, I think it's good exposure for Marines.

Another benefit of integrated training for drill instructors was breaking up the cementation of battalion mindsets that resulted from drill instructors working with the same circle of people, as described by a female training cadre officer from Parris Island.

I think it is because when I first got here there was—you could identify who was from certain battalions just based on personality or their thought process or their views of the other battalions. With everything in the Marine Corps, there's always going to be that competition. We think we're the best because of x, y, and z, but every battalion was known for more of a specific personality. So now with all this integration, it starts to fuse everyone together, and then it's more of an actual one team, one fight, or a family. And just based on what I've heard specifically with these three companies, they're creating this ecosystem and this fusion between the three of them because they have so much overlap with their personnel, so I think that's creating something good for the future. Then not only that, but it exposes the other battalions, so 1st, 2nd, and 3rd Battalion are now being exposed to female drill instructors and female officers for the first time, and for 4th Battalion, it's being exposed to male drill instructors and male series commanders for the first time, and then even same with 1st sergeants and company commanders, and that was something that had never been done before these recent years of integration.

6. Improves diversity of thought and breaks “group think”

A few respondents touted how increased gender integration, offering more opportunities for male and female drill instructors and leaders to work together, will improve diversity of thought and bring more ideas to the table.

... you get more perspectives that we're all here to make Marines. And there's different ideas, different ways of doing things and life experiences, personalities. So I think having a more diverse team working together eliminates the one way, one mind perspective of thinking of doing things. So we don't become complacent or just [have] tunnel vision and just doing things one specific way.—Enlisted Marine Corps training cadre, male, Parris Island

... when you bring a bunch of different minds together, they always come up with better ideas. Just as a whole, they just become more efficient, in my opinion, 'cause you have different voices in there. ... I think it's a good change, even ... the chemistry of the teams and the company teams as a whole. ... I think it's good on a basic human level to put males and females together because it just balances each other out. ... So I think it's just good 'cause we've been separate for so long.—Marine Corps drill instructor, female, Parris Island

Gender integration can also improve sexist or unhealthy “group think” behaviors, as one female training cadre member from San Diego explained.

My last tour here I was [sitting in on a meeting led by a senior RTR leader] where he said, "Men, when left to their own devices, revert back to their animalistic instincts." He looked at me and he said, "Don't you agree, [name]?" I said, "Well, sir, I think what you just said is that men need me [as a woman] in the room to make sure that they're professionals. That they need to be, they need to have a woman on deck to make sure that the high level of professionalism always occurs. Men need to be babysat." He was like, "That's not what I said." I said, "It is. It actually is what you said, that men, when left to their own devices, revert back to their animal instincts, so they need me in the room to up their game." I said, "I think it's quite insulting." ... The other guys didn't say a word, and they were just, like, I would say one of them in the group probably was that animalistic guy and the other two were uberprofessional, and they don't need me in the room because they're going to be uberprofessional regardless of who else is with them.

7. Broad benefits of diversity and gender integration at recruit training

A few Marine Corps respondents articulated particularly broad views about the benefits of gender integration at recruit training, including maximizing talent management and diversity, casting the Marine Corps as a reflection of society, and building a superseding Marine identity.

I think that there's incredible value in [gender integration] not just for female Marines but for the Marine Corps. We talk about talent management. We talk about considering more assets that different people bring to the table. There is strength in that diversity. We can't all just carry a heavy pack and expect the Marine Corps to succeed. There's much more that all different types of Marines bring to the table, but making sure that we create those conditions for them to all have a voice at the table is what's important. If we just stick them [in] and then say, "All right, you better succeed," what we would be doing is expecting the female part. We will be putting the onus for successful gender integration on the female population, on 10 percent of the population. If it succeeds, it's because they did fine; if it doesn't succeed, it's because that 10 percent screwed up.—Marine Corps training cadre, officer, female, Parris Island

Well, I think for the most part the Services are trying to, in the right ways, emulate the general population, right? So the demographic of sex, race, creed—I mean, we're all trying our best to make sure that we are a reflection, a positive reflection of the society that we serve. So that's probably the biggest [benefit], but frankly, like I said, I go back to what I said in the very beginning of this conversation. We are not just preparing them for life in the Marine Corps, we're trying to prepare them for life. And it's just the nature of existence, right? I mean, there needs to be an integration and understanding and mutual respect, etc., that, again, not everyone's brought up with. So that's really the key.—Marine Corps Service leader, male

I think it is important [for men and women to work together at recruit training] because every Marine, regardless of race, sex, transgender, gay, or straight ... they need to see a uniform. Nothing else really matters. They just see a uniform, and they know that they can trust that individual. As a team, they will accomplish the mission together. If a recruit

is in uniform, they can look past the individual and just see the Marine. They should not see male or female. Just a Marine.—**Marine Corps training cadre, officer, male, San Diego**

8. Drill instructors and training cadre leaders overwhelmingly prefer the 4-and-2 Integrated Company model over the 5-and-1 model

To fulfill the FY 2020 NDAA mandate to train women at both MCRDs, the Marine Corps intends to move to the 5-and-1 Integrated Company model at both training locations (USMC, 2022a).³² However, at the time of the study, MCRD Parris Island was only running the 4-and-2 Integrated Company model, with MCRD San Diego running the 5-and-1 Integrated Company model. Many respondents at Parris Island had experience with both 5-and-1 and 4-and-2 models. Everyone the study team interviewed preferred the 4-and-2 version of an Integrated Company for the following reasons:

- Both lead and follow series are gender integrated. Companies do most training or events together; however, the series does every event or activity together. Female platoons don't feel like an "add-on" to a male company.
- Female recruits have two competition reference points: (1) male platoons in their company and (2) the other female platoon.
- Female drill instructors have another team of female drill instructors in the company that can provide support or augmentation if needed.

In their own words, Marine Corps drill instructors and training cadre described why they prefer the 4-and-2 Integrated Company model.

So we're saying we're integrated because what you're looking at is you're like, "We've got a female platoon inside of that company." That does not mean—there's a difference between co-location and integration. 5-and-1, you get co-located. 4-and-2, you get integrated because every series as they're training has the females and the males all trained together. There will be some things they do as a company, but the large majority is by series. So if you go 5-and-1, there's going to be one whole male series that isn't going to be around females for a large majority of the training schedule. One of the series will be. On the surface, you can say, "Hey, [name] company is integrated. I got a female, I got a platoon for one." That may pass the sniff check for people who don't understand recruit training or don't know all the way down into what that looks like, but that's not integrated. It's not. One series is integrated of a company, but the other one is not.—**Enlisted Marine Corps training cadre, male, Parris Island**

I know that we did a 5-and-1, so five males and one female [platoon]. I believe Parris Island is doing a 4-and-2. I think that would be a little bit more beneficial. ... I think 4-and-2 would be better, just so that way, it's more than just one [female platoon] and

³² Marine Corps training cadre and drill instructors were not thoroughly aware of these plans at the time the study was being conducted.

they're not singled out. I think 4-and-2 would be really awesome.—**Enlisted Marine Corps training cadre, female, San Diego**

I think it's important in these—some of these classes that we're teaching these kids [recruits], I really think the 4-and-2 allows both series to get that interaction. Because if you have one [female] platoon on a 5-and-1 model, there's a whole other series that isn't getting interaction and to learn how to be this professional example.—**Enlisted Marine Corps training cadre, male, Parris Island**

The 4-and-2 model works out really well. We have an even amount between males and females within the company. I mean, obviously, four platoons to two platoons, but it's not overbearing by five to one, so each series has a female platoon and we have full staff of female drill instructors.—**Enlisted Marine Corps training cadre, female, Parris Island**

[The 5-and-1 model] kind of hinders the growth of the females because from what I see is, if you have two female platoons in the company, they can compete within the males, but then also compete within the females, if that makes sense. So I think the four-two model is the best.—**Marine Corps drill instructor, female, Parris Island**

So yeah, but I think the 4-and-2 is better [for recruits] because you have, like, that other group of sisters that, like, you're competing against, but you're still a team with them.—**Marine Corps drill instructor, female, Parris Island**

So what we learned in the original model was the 5-and-1 model didn't provide enough [female drill instructor] depth to deal with a lot of the challenges we have here.—**Marine Corps training cadre, officer, male, Parris Island**

I would say right off the bat that just hearing about the 5-and-1 and then experiencing the 4-and-2, given we have enough manpower to equip 4-and-2 and there's a high enough population of female recruits, I would say 4-and-2 hands down. I think that serves many purposes and benefits on a lot of levels. ... I think it serves to have at least one other system there to feed off of for recruits, but then also drill instructors as well. It also serves to have each other's back.—**Enlisted Marine Corps training cadre, male, Parris Island**

The biggest issue with [5-and-1] is the female drill instructor population. So if each company only has four [female] drill instructors, they're never going to allow that drill instructor to move up to be the chief drill instructor. If one of the drill instructors goes down or two of them go down, that's going to put them on a two-hat team. It just significantly restricts, ... where the 4-and-2 model, it gives them a lot more flexibility. You have 8 [female] drill instructors or 10, depending on how many you have on the team, so 4 to 10 could be 6 to 10, actually, if they have three-hat teams.—**Marine Corps drill instructor, female, Parris Island**

F. Challenges for Further Gender-Integrated Recruit Training in the Marine Corps

The following challenges for the current training environment and future gender integration at the MCRDs were identified through hundreds of hours of observations of recruit training at the MCRDs; interviews with Service leaders, training cadre, and drill instructors; and focus groups with recruits at the beginning and end of their training cycle. Driven by the Marine Corps request for a study to “address the sociological effects to increased gender integration,”³³ the challenges described in this section focus on structural, organizational, demographic, social, cultural, and historical obstacles to gender integration. Previous studies commissioned by the Marine Corps were intended to capture and propose solutions for logistic and facility challenges (Dolfini-Reed et al., 2017; USMC, 2022a). Table 4.4 provides a high-level summary of the challenges to gender integration for Marine Corps recruit training. This list represents the most prevalent, prominent, or disruptive challenges to gender integration but is not exhaustive. The remainder of this section presents detailed findings organized by challenge category.

Table 4.4. Summary of Challenges for Current and Future Gender Integration at Marine Corps Recruit Training

Challenge Category	Specific Challenge
Organization/ structural	Primacy of platoon-based training renders most training same gender and requires integration below platoon level for greater integration between male and female recruits
	Tightly planned master training schedule leaves little room for integration formation for events or activities
Female population	The Marine Corps has the smallest percentage of female active-duty personnel; most male recruits will have an all-male training experience
	Higher demand for female drill instructors can lead to additional workload strain and burnout
	Female drill instructors described experiencing sexism from male peers in the training environment
	Female drill instructors provide gender-specific mentorship to female recruits, which is perceived as beneficial but can instill fear or an “us versus them” mentality in women entering the Marine Corps
Social organization	Competitive culture designed around platoons (which are organized by gender) may lead to gender-fueled competition
	Male and female recruits are told not to look at or talk with one another, even in Integrated Companies, reducing opportunities for meaningful interaction
Cultural	Use of sexually explicit and demeaning gender-based language in the training environment persists, primarily from male drill instructors and emulated by male recruits
	Lackluster representation of female Marines in Marine Corps history does not provide historical context about restrictions on their service and is relegated primarily to “firsts”
	Exemplary female Marines are absent from Core Value Guided Discussions

³³ This language was in the request for proposals and performance work statement for this research.

Challenge Category	Specific Challenge
	<p>Some course materials perpetuate outdated or harmful gendered stereotypes and imagery; imagery in shared spaces at MCRDs mostly features male Marines</p> <p>Training cadre who teach critical courses with sensitive subject matter related to gender, such as sexual assault response and prevention, are ill equipped to do so</p> <p>MCRDs have gendered and inconsistent privacy practices for male and female recruits</p>
Historical	MCRDs have vastly different histories with gender-integrated training, thus presenting unique challenges for each training environment

1. Organization and structure of recruit training challenges

Two organizational aspects of Marine Corps recruit training present challenges for greater integration of male and female recruits: (1) dominance of platoon-based training combined with same-gender platoons and (2) a tightly planned master training schedule.

Overlap of platoon and drill instructor teams with gender

In the current Marine Corps approach to training, platoons are defined as comprising recruits and drill instructor teams of the same gender, presenting two distinct challenges for gender integration:

- Strict platoon organization and clustering at every training event give the appearance of gender separation (but is actually platoon separation).
- Increasing gender integration beyond the Integrated Company model requires dismantling the 24/7 platoon mindset.

All training is organized and conducted by platoons; platoons comprise recruits of the same gender who are trained by same-gender drill instructor teams. A platoon (and its drill instructor team) executes every aspect of training together day and night. Platoons most often train with their series (a combination of three platoons) followed by their company (a combination of six platoons). Positioning and organization at every training event are by platoon. Recruits sit in the classroom by platoon, follow the confidence course in smaller groups with their platoon, and conduct company hikes grouped by platoon. This organization scheme in effect segregates recruits by gender (even when they are co-located), but such separation is the result of platoon organization, with gender as a byproduct.

If the Marine Corps intends to pursue further gender integration at recruit training—beyond the Integrated Company model—the biggest obstacle is changing the foundational approach that recruits train with their platoon at all times. For everyone involved in the training process, the continuous togetherness of a platoon is conceptualized as the driver of cohesion, camaraderie, and transformation: it’s the juggernaut of the Marine Corps training approach. With the recent addition of targeted training events integrated below the platoon level, the Marine Corps has begun incremental changes in this direction, but institutional mindsets, especially among drill instructors, may prove a difficult force of volition. For some drill instructors, disrupting or reforming any part of the drill instructor-platoon bond during the training cycle is unimaginable,

even for the purposes of one training event. A highly charged example of this is the Crucible. Conversations about gender integrating the Crucible raised strong emotions from drill instructors who evoked it as the culminating bonding moment after enduring months of shared hardship with their recruits. A male drill instructor from Parris Island described his opposition to integrating the Crucible, which was strongly informed by his own emotional experience of the Crucible as a recruit.

I actually think it's a disservice to integrate the Crucible any more than it already is [with male and female sticks] because here's what happens. You got recruits who go through all 10 weeks of pain, and I come in. ... My recruits are with me. That's personal to them, like that is one of the most personal things we do on Parris Island, if I'm being honest. When they tell us sad stories about how they got raped, when they tell us sad stories about when they got beaten up, it is not as personal as the Crucible because that is the moment they become something different. ... You sit down with them for the first time and you're like, "Hey" [and act like a mentor] and they're, like, blown away. And taking that away from males and females would be a disservice to the recruits. ... [At my Crucible,] I was with my heavy drill instructor, and he did something he wasn't supposed to do in front of us. He ate Swedish fish. He ate [an] MRE snack in front of us, and he sat down—first time I ever saw him sitting down—and then we sat down. He was like, "So what's up?" Changed my life forever! ... I'll never forget that moment. ... I'll never forget being handed my Eagle, Globe, and Anchor. ... The dude [drill instructor] who messed me up the most all cycle looked at me and said, "Never let anyone take this away from you or tell you that you didn't earn this." I will never forget that as long as I live. Why would you take away all of that? For what? For an integration. I'm sorry. You're over integrating ... all that; why would you take that away from somebody? You're taking away—that's what the Marine Corps makes their money on. Taking a picture of a Marine crying getting their Eagle, Globe, and Anchor. ... You want to take away the moment before that [at the Crucible] so that males and females can be integrated? That, to me, is a disconnection from the actual process.

The Crucible is the apex moment of recruit training where recruits are physically, mentally, and morally tested to demonstrate that they have what it takes to become a Marine. Its purpose, as laid out in Depot orders, is as a test and an evaluation yet also a “defining moment” of recruit training (USMC, 2013, 2022b) that leaves room for personal interpretation about approaches to execution. Is it a bonding moment capitalizing on cohesion built through the training cycle? Or is it a chance for individual recruits to prove their capabilities in a testing situation? A female drill instructor at San Diego, who led gender-integrated sticks during the Crucible, described her oscillation between both perspectives.

At first I was against [integration at the Crucible] because the Crucible is that culminating event. I feel like that's the biggest one, where your own drill instructors get to challenge you and push you to your limit—your physical, mental limits. So I was like, "I know my recruits; my recruits know me; so I should be with them" and then "I don't know these other recruits the same way I know mine." The male recruits, I didn't know them as well, so I didn't think it was going to work out, but honestly, once we started all the Crucible events, going to different stations and seeing them work together without

ever really working together on that level, I was really impressed with their teamwork. So I thought it was successful at the end. It really changed my mind. So I think, in the future, that'd be a good thing to have is not just at the bayonet assault course or at the very end at the Crucible, but if you start getting them to work together from the beginning. MCMAP and the O-course [obstacle course] and things like that. I think it'd be a good thing.

Gender integration in which male and female recruits have direct, meaningful interaction with one another necessitates a departure from the stringent platoon-only training approach, a course of action that may require institutional and interpersonal adjustments supported by leadership communication on how these changes align with integration goals.

Every minute is meticulously accounted for in the master training schedule

Out of all the Services, the Marine Corps has the most meticulously planned recruit training schedule. In the Marine Corps master training schedule, every 15–30 minutes of every training day are planned and accounted for. Training days at MCRD Parris Island begin at 0400 and end at 2000 with lights out; MCRD San Diego training days run from 0500 to 2100. Unlike many of the other Services, Sundays are also rigorous training days. The Marine Corps provides four hours for religious service time on Sunday morning, but training time occurs before and afterward, proceeding as any other normal training day. The Marine Corps around-the-clock training approach is embodied in their schedules. Drill instructors and company training cadre carry a printed copy of the daily schedule inside their cover (hat) for quick reference. Training doesn't always stick to the exact daily schedule, but training is always occurring. For example, a CVGD planned for 1800 might be moved to 1630 to create a better flow or efficiency for the evening hours.

When every minute of the training schedule is accounted for, changes or disruptions to that schedule, which are perceived to “eat into” training time, feel antagonistic. Because training is organized by gender-separate platoons that can seamlessly transition from the squad bay to a training event and back again, any gender integration occurring below the company/series level will require time to carry out. Whether organizing an Integrated Company into gender-diverse sticks at the Crucible or forming integrated training platoons on a day-to-day basis, additional time for formation would need to be built into the schedule. Even small amounts of time are perceived by Marine Corps drill instructors and training cadre to be disruptive and inefficient to the challenging mission they must execute. Time taken away from training is perceived as diminishing excellence. The strictly controlled schedule, which has been finely tuned around platoon organization, and the training cadre's and drill instructors' attachment to that schedule present a challenge for more robust gender integration.

2. Female population challenges

Among all the Services, the Marine Corps has the smallest percentage of female active-duty members, at 8.9 percent.³⁴ Comparatively, the Air Force has the highest percentage of women on active duty, at 21.1 percent, followed by the Navy (20.4 percent), Army (15.5 percent), and

³⁴ Women comprise 9.0 percent of enlisted active-duty members in the Marine Corps.

Coast Guard (15 percent) (Department of Defense, 2021; Thiesen, 2021). The Marine Corps increased its percentage of active-duty women from 7.7 percent in 2015 to 8.9 percent in 2021 and is seeking to recruit and retain a more representative force by following its diversity and inclusion plan and talent management 2030 strategic vision (USMC, 2021a, 2021e).

Gender integration efforts are made exponentially more difficult with such a small population of women for two reasons: (1) most men will continue to have an all-male training experience and (2) fewer women in the population creates a strain on the Service to produce an adequate number of female drill instructors each year.

Gender integration at both MCRDs requires the Marine Corps to increase its current female drill instructor population by 54 percent. Without this population increase, female drill instructors will face heavier training workloads with fewer opportunities to assume enlisted leadership positions within companies (USMC, 2022a). This kind of strain is likely to lead to burnout, with implications for retention of this critical, in-demand population. As the Marine Corps expanded the Integrated Company model at Parris Island, female drill instructors interviewed for this study reported less between-cycle time than their male peers—sometimes only a few days—which placed additional strain on their families and personal lives. Female drill instructors also described more movement between companies and battalions, which required them to adapt to new company cultures more frequently than male drill instructors.

The small population of women makes them a hypervisible minority in the Marine Corps. Female drill instructors described an ever-present pressure to perform and excel in their role. While this was a common theme among many of their peers in other Services, it was magnified in the Marine Corps because of the extreme gender proportions and masculine-oriented culture. Women's heightened visibility can invite greater scrutiny, leading female drill instructors often to feel they must outperform their male peers to earn the same respect.

Female drill instructors described sexism in the recruit training environment

Female drill instructors reported experiencing sexist treatment in the recruit training environment, another unique challenge experienced by this population. Some male drill instructors actively address any gender-based treatment they notice from male recruits, as one recalled, “...just because she's a woman, and just because you're a man, does not give you the right to blow her off or disrespect her.” However, female drill instructors reported their peers also engage in disparaging and sexist behavior. A male drill instructor at Parris Island described how his female colleague was treated by his male peers:

... she [my peer] was telling me [she will] be out at the parade deck, and she's a chief drill instructor. She's one of the highest billets that you can be. She's in [charge] of an entire series and people will literally come up to her and the other chief and only address him. They are like, “Hey, the recruits are doing this, this, this; you need to make this drill correction.” She'll be standing right there, and they will literally address him personally [and] completely ignore her.

A female drill instructor at San Diego recounted scenarios she felt were gender-based treatment from her male drill instructor peers. When she brought this to her (male) leadership, she described it being handled as a group meeting where everyone was told to “*quit being mean to each other,*” a sentiment she felt undercut the severity of the situation and failed to address the root of the problem.

The persistence of sexism and gender-based treatment harms all in the training environment³⁵—female drill instructors and leaders experiencing it, men who continue to engage in these behaviors, recruits who absorb all aspects of their training experience, and the Marine Corps more broadly.

Female drill instructors mentor female recruits on what it means to be “The Fewer, the Prouder”

Most female drill instructors felt it was part of their duty as a woman to prepare their female recruits for life in a male-dominated fleet. Female drill instructors described candid, explicit conversations during the training cycle about what it’s like to be a woman in the Marine Corps. Conversations covered a variety of hardships they might face, often conveyed through drill instructors’ personal experiences. These informal mentoring moments were intended not just to prepare female recruits for what awaits but also to remind them they were strong enough to face and overcome these challenges. Female drill instructors shared their advice and wisdom to develop resilient, confident Marines who would continue the legacy set before them.

So I tell them about my own experiences and the experiences of my mentors. ... [Once they are Marines,] I tell them very bluntly that they are going to be perceived in one of three ways; you’re either gonna be seen as a bitch, a slut, or a lesbian. So you’ll be seen as a bitch if you keep to yourself, you do your job, and you perform well. Or you’re going to be a slut if, like, you’re okay at your job, you’re not the fastest runner, but you’re a friendly person. ... Or you’re a lesbian because, like, if you join the Marine Corps and you don’t wear makeup or get your nails done like all the other girls, then you probably like girls. ... And I tell them that, no matter what, you’re going to fall into one of those—you’re going to be none of those, and you’re going to fall into one of those because you’re the minority. And I tell them the best one to be, obviously, is a bitch because you’re focused on yourself, as far as your career progression, and eventually the right people, the right leadership, hopefully one day will notice it and you’ll get your moment to shine. You’ll get that meritorious promotion, you’ll get to go on that board, you’ll get to go do that cool thing that you wanted to do. More than that, when you get to that position, remember to look out for those other “bitches,” to remember to look out for the ones that are being labeled as things that they’re not, to not feed into that culture which I’d say nowadays is a whole lot less. When I first got to the fleet, I definitely think it was that. I was all three in a matter of 2 days of being there.—Marine Corps drill instructor, female, Parris Island

I do talk to them about [being a woman in the Marine Corps. I tell them] ... you’re no lower than a male Marine. We all have the same name on our chest, so don’t ever think that you aren’t because we’re in an institution where it’s not that many of us and it’s

³⁵ For additional descriptions of sexism encountered by drill instructors, see also chapter 7.

more men; it's top-heavy when it comes to men. And sometimes you're going to come across some that feel like females should not be in the Marine Corps. And I don't know where that started, if it started in boot camp or when they first get to fleet. But some people feel like a female shouldn't be in the Marine Corps and there's certain things that females can't do. And I tell my girls all the time ... "Be that example. Don't ever give them a reason to think that you're anything less than the title that you earned." So I think it's more like just educating them about the real world when they do leave boot camp, when they do come in contact with their male counterparts, that it could be a positive or it can be negative.—Marine Corps drill instructor, female, Parris Island

Female recruits echoed an appreciation for these honest conversations from their female drill instructors.

One reason I prefer having a female DI ... SDI will have a time when we're in a school circle with us. She can talk about more personal things with us, being female recruits, and experience as a woman in general.—Marine Corps recruit, female, Parris Island

When a male DI was teaching us about what it was like in the fleet, he kind of sugarcoated it, but a female DI called him out and said that's not how it's like. Female DIs are constantly telling us to be safe. It almost makes you take a step back and look. It's obviously a problem because they are constantly telling us. Male DIs tell us we can do it, but at the same time, you need someone who gets it. I feel like the female DIs offer a real, true perspective as to what the fleet is like. I feel like that's what the female DIs do. I really appreciate that because they are not sugaring it. If something bad happens, you're stuck because you're not expecting it. Our DIs said, "When you leave, you can find me and ask me anything." We just had a heart-to-heart [with one of our DIs]. The worst thing she wants to hear is us being sexually assaulted, and that's why she gets so angry when she sees us talking to males. ... I feel like that's something you would not get from a male DI.—New Marine, female, Parris Island

They [our drill instructors] give us confidence talks too and would say, "You're a woman, and women get talked down on. Don't be afraid to stick your neck out and show your dominance with them."—New Marine, female, Parris Island

[Our female drill instructor talks about] pride in being a female Marine. We are so few, we are the few of a few.—New Marine, female, Parris Island

Most female drill instructors felt these moments were invaluable and necessary conversations, but some thought they perpetuated harmful stereotypes.

... I even remember being a recruit [and] being told, ... "You're either going to be a dyke or you're going to be a bitch. Pick which one you want to be and establish it." Okay, but we do that to ourselves. It's females telling females. It's like there is no point in time where a male Marine has ever come up and been like, "Which one are you? Pick one." We just got to stop doing that to ourselves. I hope we're getting better at that. I hope that's gone away.—Enlisted Marine Corps training cadre, female, San Diego

I'll start by saying that in my experience within the Marine Corps, and a lot of my female peers would probably disagree—they all have their own semblance of stories, right? I have never dealt with something where I have felt that I am unwelcome or that there's a stigma against me because I'm a female. I've been extremely grateful in my experience within the Marine Corps. I do know that those things exist out there, and I'm not ignorant to them. However, I also think that that's subjected to my mindset as well. ... I don't think that there's a stigma against me because I'm a female. And if anything, the weirdness [from males] has almost been in an overt caution 'cause they don't want to offend me. ... If something is said that offends me, I say it. And I also understand that it's a learning point for some people because they've never worked with a female before. I think sometimes that male Marines can almost feel like there's, for lack of a better term, [a] witch hunt against them if they're offensive towards females because that's how overwhelmingly the Marine Corps has come down and said, "You will deal with it and you will be respectful and we will change our ways." I think my mindset—I leverage towards a little bit more of leniency towards it. But I also speak up when something's said that I don't like, which is far and few between, and it's almost always a misunderstanding or they didn't realize that they were doing it.—Marine Corps training cadre, officer, female

While these honest discussions were characterized by most women as beneficial, they also have the potential to instill fear or concern in new female Marines about what they might experience as they continue their careers. This is most clearly illustrated regarding issues of sexual harassment and sexual assault. In the week 11 focus groups, female new Marines consistently expressed concern about experiencing sexual harassment and sexual assault in the fleet. Women reported receiving frequent and persistent messaging from drill instructors and others about the challenges they may face with unwanted sexual remarks or advances from male Marines (see chapter 8 for more details). Ensuring female recruits are cognizant of the dangers of sexual violence is important, but a careful balance between awareness and fear or inevitability needs to be struck.

Mentorship and woman-to-woman conversations between female drill instructors and their recruits have the potential to frame gender relations in the Marine Corps as antagonistic: men versus women. This “us versus them” mentality can hinder further gender integration efforts. Mentorship conversations between female drill instructors and female recruits can and should prepare recruits for life as a female Marine but should steer away from frightening female recruits, unwittingly limiting them to predetermined labels, or reifying false divisions between male and female Marines.

3. Social organization challenges

Organization challenges based on social aspects of the training environment present additional challenges for gender integration. These social aspects include a competitive culture designed for platoon-based competition and recruits being admonished by drill instructors for looking at or speaking with recruits of the opposite gender.

Competitions between platoons, organized by gender, can become gender superiority competitions

Competition and “being the best” are cultural elements built into the fabric of the Marine Corps. As a Service, the Marine Corps positions itself as exceptional, as do individual Marines (O’Connell, 2012). This cultural thread begins at recruit training, where recruits are socialized to become members of the Marine Corps. Competition is ubiquitous in the recruit training environment. It is built into formal evaluation processes, such as the competition for company honor platoon, and Depot traditions, like the color of the Eagle, Globe, and Anchor on the Parris Island parade deck symbolizing the battalion with the highest drill score for the quarter. Among drill instructors, competition is a currency in the quest to be the best and have the best platoon. Drill instructors judge one another informally on everything from the cleanliness of their squad bays to the presentation of their recruits to their own readiness and physical fitness. Platoon competition fuels an environment where drill instructors invest most heavily in training and correcting recruits from their platoon, even at series or companywide training events. As described in section B.7, formal (scored) competition is exclusive to the platoon; there are no series- or company-level competitions where platoons come together to work toward a shared goal.

While competition in the recruit training environment fuels positive aspects, such as motivation and drive, it can also escalate to the point of platoons and drill instructor teams pitting themselves against one another in an unhealthy way, even within the same company. Recruits described their observation of the high competition level, irrespective of gender.

[Moderator: What are the characteristics of a bad drill instructor?] *Competitiveness. We compete against the follow series. But sometimes the competition gets out of hand. But then it’s enjoyable to them [DIs] but not us. It’s not about us; it’s always about their [DIs’] reputation. If you don’t beat them, you’re this and that. It’s over the top ... makes our morale low.*—**New Marine, male, Integrated Company, Parris Island**

We want to fistfight other platoons all the time.—**New Marine, male, Integrated Company, Parris Island**

With platoons organized by gender and competition based around platoons, a level of healthy competition can intensify into unhealthy claims of gender superiority. Recruits and drill instructors relayed instances where they felt this occurred or anticipated it occurring.

[Moderator: What challenges, if any, would there be if male and female recruits had more interactions at recruit training?] *Power struggles. Everyone would want to be more powerful than each other. I think it would be less of a thing if you were in the same platoon, but if you’re in different platoons, then you’ll constantly fight. In the end, we’re all on the same team, but it could tip into being unhealthy. There’s a sense of, like, we’re going to be better Marines than you. Not just better in drill, but also better Marines.*—**Marine Corps recruit, male, San Diego**

So there's always competition. You always want to push your platoon ... but as drill instructors, we know we all have the same mission at the end of the day. ... We had that one platoon where their drill instructors took it a little bit too far, where it was taking away from the big mission of integrated training because the whole thing was to remove that gender bias, that females can't do this or, like, we're not doing the same training and all that starts here. They took it a little bit too far, where it was—there was this rivalry between [platoons in a company] and it was—they legitimately got to a point where it was like they just despised us, and that trickled down to the recruits. ... They would always talk trash about [platoon number], and it was like they were losing sight of the big picture. Like, we're trying to show the world that we can all work together and get the job done, and you're taking away from that because now these male recruits are going into the fleet, thinking that [platoon number] didn't perform as well, which, they knocked it out the park. You can't take that away from them. ... Those drill instructors were so adamant about winning and winning and winning, which, we all want to win, but we all know that we all can't win.—Marine Corps drill instructor, female, San Diego

One of the challenges that we ran into was the competitiveness of this place, right? Everybody wants to win everything. So that can go sideways pretty quick. ... This is a cultural problem, not widespread. ... It is immaturity, is what it is, but that competition became unhealthy. Where they were gunning for—well, we are not going to be as helpful with that platoon. ... And you can see it across the companies. That doesn't just happen where there is an Integrated Company; that can happen in any company if they deem somebody a threat, right? Instead of ... “I don't care if I win if that's going to come at a loss” to somebody else's complete failure. Like, I am not going to let anybody fail to that point so I can look good. That's backstabbing, right? I am not going to set somebody up for failure so I can look [good]; that's just bad business. ... If you think somebody needs assistance, then you go help them. ... If you are the worst person at teaching drill, but I taught you how to teach it better and then your platoon wins the drill competition, that's a win for me, right? Because I don't want the company to look bad. So, I try to breed—I'm trying to breed that. ... That's just good practice all around.—Enlisted Marine Corps training cadre, male, San Diego

Without careful attention and oversight, the lines of healthy competition can easily be crossed in competitions between platoons with recruits of the opposite gender. Competition can be used as a guise to distance or “other” female platoons and drill instructors in a way that runs counter to broader Service integration goals.

Male and female recruits are told not to look at or talk with one another, even in Integrated Companies

Marine Corps drill instructors assert control over the environment and instill discipline by prohibiting recruits from talking with one another. In all phases of training, recruits are prohibited from speaking with recruits outside their platoon, and in the early phases of training, recruits are restricted from talking with members of their own platoon unless authorized to do so.³⁶ Male and female recruits reported that they were told not to look at or talk with recruits of

³⁶ Exceptions are the 1 hour of free time daily and religious services on Sunday mornings.

the opposite gender, even in Integrated Companies. Recruits acknowledged that drill instructors told them they were not to talk with recruits in other platoons (regardless of gender) but received repeated messages that opposite-gender interactions were strictly forbidden, more so than same-gender cross-platoon interactions. Recruits perceived and reported that any transgressions, even looks or smiles in the direction of opposite-gender recruits, would trigger drill instructors to administer incentive training or threaten to drop them back in the cycle. These strict warnings left some recruits with the (incorrect) impression that any interaction with recruits of the opposite gender is “*against the law*”—more than one recruit described it in this way. Male recruits in Integrated Company stated, “*I remember someone in receiving week, they got caught talking to the girls and they almost got us kicked out*”; another shared, “*the DI [drill instructor] said if they talk to the girls, [they] will put them on the list to get them kicked out. For example, one of the females, I held the door open for them and they said thank you. I just stayed quiet, I don’t want to get kicked out of boot camp.*” Male and female recruits from the Integrated Company discussed this issue in the focus groups.³⁷

Marine Corps Recruits, Female, Integrated Company, Parris Island

Recruit A: *How much are we integrated? Not much. They threaten to drop us if we speak to the males in the same company. The guys are forbidden to speak at us.*

Recruit B: *We have to scream at them and tell them to go away. They make them go stand at the female formation, and when the guy comes, we have to scream and yell at him. If we speak to them, we get yelled at and IT’d. They told us almost immediately. I was passing guys during the 2-mile run, I was telling him, [imitating] “Hey, come on, come on.” ... The DIs said, “Shut up, run, don’t speak to them.”*

Recruit C: *I didn’t hear that. Day 1 it was at the chow hall when a bunch of males spoke to the females, and we heard screaming.*

Recruit D: *Since it was supposed to be integrated, I don’t understand.*

Recruit E: *Even though we’re integrated, if we could talk to them, we could get insight and check on them, see how they’re doing emotionally and mentally. [imitating] “Hey, how are you doing?”*

Recruit B: *I talked to some [Marines] before they really integrated in June last year. A couple went. When they saw each other, they couldn’t see or speak to each other. I knew it was gonna be a rule and thought it would be relaxed. I did an 11-hour drive with some guys. I say “hey” when I see them, and I get shut down.*

Marine Corps Recruits, Male, Integrated Company, Parris Island

³⁷ Recruit and new Marines letters (i.e., A, B, C) are randomly assigned for each group of quotations to show the flow of conversation as it happened in the focus group.

Moderator: What is your understanding of how often and in what context you will interact with recruits of the opposite gender during recruit training?

Recruit A: *They expect us to work together without talking to each other.*

Recruit B: *If you look at them, you get yelled at.*

Recruit C: *[Mimicking male DIs] “If I find you talking to a female recruit, I will do everything to drop you.”*

Recruit A: *I asked a female recruit for a fork; I got yelled at for it. It’s not really integrated. She didn’t talk to me, [she] just gave it [to me].*

Recruit C: *My history sucks, but I feel like Marine integration is how the U.S. interacted [with] Black people. They integrated, did not give them equal stuff. We have zero interaction.*

Recruit D: *They just threw them in.*

Recruit B: *Together but separate.*

Recruit E: *It’s military law: you cannot fraternize with these people. Any gender other than yourself.*

Recruit B: *It’s gender and, like, positions of power, but gender is a big part.*

Recruit A: *I just don’t get it, if they let us talk to females, it would make us much better once we went to the fleet. To cut it off and yell at us, it doesn’t make sense.*

Recruit C: *To be fair, we’re not supposed to talk at all amongst ourselves. It’s enforced even more strict with the opposite gender. Gender definitely plays a stronger role, but we’re also not really supposed to talk to each other.*

In the week 11 focus groups, recruits described some leeway in their interactions with peers of the opposite gender, especially when they transitioned to being Marines. However, interactions across the training cycle were described as limited, typically occurring at the outskirts of training—at church, in passing at the chow hall, waiting for training events to start, or using the head at the Crucible. While the study team was not present for every moment of the training cycle, the only time the study team observed sustained interaction between men and women in Integrated Company was while new Marines were waiting in line at Warrior’s Breakfast. Male and female recruits recounted their Crucible experiences with one another with glee, elated they had all made it as Marines. They appeared to be excited to interact with their fellow brother and sister Marines, perhaps for the first time for many. With recent changes to the Integrated Company model, such as some gender-integrated training events below the platoon level, it appears there would be regular training opportunities for male and female recruits to interact (USMC, 2021d, 2022a).

“Diversity of thought and intelligent action” has been touted as a major driver of Marine Corps efforts toward gender integration at recruit training (USMC, 2022a, pg. 2)—an aim that is impossible to accomplish when recruits in an integrated setting are instructed not to look at or speak with one another, with those instructions reinforced by drill instructor threats and actions. As articulated by recruits above, recruits are confused about what it means to be “integrated”

when they are strictly prohibited from interacting with one another. Recruits get the message, intentional or not, that there is something inherently different about interactions with the opposite gender, potentially something bad or wrong. While concerns about romantic distractions, fraternization, and sexual harassment in integrated training environments are valid, continuing to prohibit and discourage mixed-gender interactions runs counter to the Marine Corps's stated goals of integrated training and presents a challenge to meaningful integration.

4. Cultural challenges

Cultural challenges present some of the most persistent, insidious obstacles to gender integration because they internally erode the strength of the institution. As outlined in the 2021 Diversity, Equity, and Inclusion plan, the Marine Corps desires a force built on equity, inclusion, and respect for all Marines:

Simply having a diverse organization doesn't guarantee success, we must pair it with inclusion to get the most out of every Marine and Civilian Marine. Inclusion breeds boldness of thought and action; it allows each person to live up to their full potential and thrive. Members of organizations who are marginalized or forced to operate on the periphery do not improve unit outcomes. (USMC, 2021a, p. 6)

Recruit training lays the foundation for Marine Corps values, conduct, standards, and expectations; it sets the stage for a Marine's career. The persistence of cultural challenges that degrade or disparage women, treat them as "*an anomaly*" (as one respondent described it), and fail to address problematic inequities hinder the Service's recent and future progress with gender integration. The study team identified several cultural challenges, including language use, imagery, course content, and inconsistent privacy practices, described in detail below.

Use of sexually explicit and demeaning gender-based language in the training environment³⁸

The continued use of sexually explicit and demeaning gender-based language from drill instructors in the training process harms gender integration efforts at the MCRDs and undermines the institution of the Marine Corps. The future success of the Marine Corps, as Commandant of the Marine Corps General David H. Berger outlined, depends on reinforcing "a culture where the contribution of every Marine is respected and valued" because "Marines make the Marine Corps" (USMC, 2021e, p. 5). Such language is expressly prohibited in the standards of conduct section in both Depot orders (DepO) outlining the recruit training order (USMC, 2019a, 2019b). Sixteen standards of conduct must be followed by everyone involved in training; the fifth standard of conduct prohibits sexually explicit and demanding language based on gender:

³⁸After receipt and review of the draft report for this study, the Marine Corps sponsor (Training and Education Command) provided the following comments: "We have taken immediate and deliberate actions to address the issues highlighted within this section. We recognize that the use of the language described by the study team runs counter to current policies for training recruits and represents a systemic issue among Marine Corps drill instructors that we are working to correct, further enabling successful gender integration efforts."

[Personnel within this command:] Will not use profane, obscene, or unprofessional language, as it is offensive, detracts from the training environment, and reflects poorly on the Marine Corps. This includes all language which is sexually explicit or demeaning to any race, gender, ethnicity, heritage, sexual orientation, or religion. (USMC, 2019b, p. 1-7)³⁹

Nevertheless, this behavior persists in the training environment, presenting a challenge for current and continued gender integration. Specific instances shared with the study team most commonly involved male drill instructors using sexually explicit and gender-based language with male recruits that is degrading to women. Language shared with the study team by drill instructors and male recruits included words and phrases referring to women's bodies (including their genitals), sexual acts with women's bodies, slang words about sexual promiscuity, and words evoking stereotypes used to degrade or demean women. Some phrases implied tacit endorsement of violence and/or nonconsensual sexualized acts toward women. For full quotations from drill instructors and recruits supporting this section, including examples of language shared with the study team, see appendix L.

While most descriptions of sexually explicit and derogatory gender-based language reported to the study team occurred in male-to-male interactions (male drill instructors and male recruits), female drill instructors can also use language degrading to women. For instance, a female new Marine at Parris Island shared that her drill instructors told the platoon that if they talked to male recruits, *"they [drill instructors] are going to call you a slut."* The only other instance the study team heard about female drill instructors using demeaning language was from an enlisted member of the Parris Island training cadre, who shared a perceived double standard for drill instructor accountability: *"[A] male drill instructor calls a recruit a bad word—bitch—nobody bats an eye. Then a female does something similar and it's, 'Hey, you need to go to my office.'"*

While it is unclear how pervasive prohibited language use is among female drill instructors, descriptions from a male and a female drill instructor from MCRD San Diego and male recruits from both MCRDs⁴⁰ indicate derogatory language is a persistent issue in a male-centric training environment (i.e., male drill instructors with male recruits). Male drill instructors perceive sexually explicit and gender-based language as a useful training tool that can build rapport in the drill instructor-recruit relationship and motivate male recruits to perform better. Male new Marines similarly shared how this kind of *"personalized"* language motivated them and provided moments of levity in the stressful, unrelenting training environment. One male new Marine from MCRD Parris Island described how his drill instructor equated foul language use with preparation for combat: *"They tell us that if this [language] bothers you, what do you think the enemy is going to call you in combat? You shouldn't let little words get to you."*

A male senior drill instructor at MCRD San Diego shared that he uses sexual references with his platoons to *"loosen them up,"* noting, *"I sometimes say, like, sexual stuff 'cause we're all males, just to break the ice."* He felt this practice builds rapport between drill instructors and recruits,

³⁹ MCRD Parris Island's DepO 1513.6G presents this standard of conduct with bold font (the only standard of conduct in boldface).

⁴⁰ Extended direct quotations from drill instructors and recruits are featured in appendix L.

breaking for a moment the stern persona Marine Corps drill instructors embody in their role. He provided one specific example of a ditty—and alluded to others—he uses to teach close-order drill movements. The ditty he referenced trains specific body and eye positioning for recruits using a metaphor that purposefully objectifies and sexualizes women’s bodies. New Marines from several platoons at MCRD San Diego also shared that they were taught this specific ditty. The same male senior drill instructor described how sexually infused ditties “...*get [recruits] bought into the drill, [and] for them to get bought into you [as a drill instructor], because you can’t just be a fucking dick to them the whole time or they’ll quit; they’re going to say they’re going to hurt themselves. You have to make them feel comfortable around you.*” This male drill instructor described a general recognition from other personnel at MCRD San Diego of a need for new ditties once women began training there in early 2021.

So when [name] Company [with female recruits] was here, we had to, like, change our ditties, pretty much. And then same thing up north [at Camp Pendleton]; there was a ditty that they use at the weapons field training battalion ... it was about some sexual stuff. And they had to cut that ditty off, and they had to learn a way to get the females to learn it without saying it.

A female drill instructor at MCRD San Diego shared her experiences seeing and hearing sexually explicit and derogatory gender-based language used by male drill instructors. She described several different ditties in which close-order drill rifle movements are equated with reaching for or touching women’s genitals. She noted these ditties are formally codified in company documents.

So when I got to [name] Company ... there’s a binder, a drill binder, with the ditties that the drill instructors learn to teach the recruits. ... It’s all in writing. It’s in writing. I don’t know how that would be pleasing for anybody, but it’s in writing. ... I don’t know. This is supposed to motivate 18-, 19-, 20-year-olds? ... It’s old stuff that’s just been passed down.

She was surprised sexually explicit and derogatory language was being used so casually in the training environment and did not recall such language used in her all-female company when she was a recruit. For these reasons, she questioned narratives reinforcing the use of such language and phrasing as a motivational tool:

So male recruits have certain ditties that the male drill instructors teach them when they do certain movements, and they’re not the most politically correct ones. So that is already teaching male recruits that it’s okay to say things like that and the females don’t know that. Because even when I was a recruit, we were never taught derogatory things toward males when we were drilling, and we know how to drill the same [as] if not better than them. We still passed and/or won initial and final drill without having to say those things. So they don’t—my recruits don’t know that those recruits are learning ... all these things that motivate the male recruits to drill better, things like that. So I think maybe if they were drilling together, maybe in the same platoon, I know for sure the male drill instructors would have to conform to new style teaching to motivate those recruits in a different way that’s not going to offend the females and things like that. And nowadays, also—I’m hearing this a lot more from the drill instructors—there’s a lot more gay male

recruits going through recruit training. It's not going to motivate gay male recruits because it's not what they're interested in. So I just think we need to, like, get with the times on how we're teaching things like that.

The use of sexually explicit and derogatory gender-based language by male drill instructors was also described by male new Marines during the week 11 focus groups.⁴¹ The practice seemed to be more commonplace at MCRD San Diego than Parris Island, but male new Marines at both MCRDs reported their drill instructors using sexual references or inappropriate terms in the training environment. Male new Marines outlined the specific types of language used and the context they were used in and reflected on how they felt it motivated them and built a shared bond between them and their drill instructors. One male new Marine from San Diego commented, *"It's like they're [drill instructors are] throwing us a bone to make it funny. To lighten the mood. They'll never say that, but ..."* New Marines described a wide range of sexist language, derogatory ditties, and other explicit words used by their drill instructors during training. Recruits articulated how this type of sexually charged language built a shared bond between them and their male drill instructors.

Male new Marines described observed differences in language used when the environment was male-only compared with a mixed-gender presence (either drill instructors or recruits). These new Marines indicated their male drill instructors were very aware of when they could use this type of language in the training environment (around men) and refrained from using it around women. Conversations about language use in the focus groups arose organically when recruits and new Marines were asked to describe male drill instructors and commented how shared *"jokes"* made them feel bonded with their male drill instructors. In these discussions, male new Marines exhibited an active awareness that they would need to clean up their language if and when women were around, both in their immediate training environment and in their future service career. Several male new Marines from MCRD San Diego raised the issue as something they knew they would need to be vigilant about once they started training with women at their next assignment.

Male drill instructors and male recruits have developed a concrete understanding that it is wrong to use sexually explicit and derogatory gender-based language around women, yet strikingly absent in these discussions was any acknowledgment of its inappropriateness in the Marine Corps as a whole. Male drill instructors and recruits consciously describe how they must alter what they say when they are around women in the Marine Corps, yet there is no verbal recognition that this language goes against the standards of conduct, sexual harassment policies, or core values and tenets of the institution at large. In the sexual harassment class delivered during first phase, recruits learn about hostile environments, defined as "a work atmosphere which is offensive, intimidating, or abusive to an individual" that includes behaviors such as "using sexually explicit or sexually offensive language" (USMC, 2021c, p. 96).

Drill instructors are the apex role model for recruits. For 13 weeks, drill instructors are a walking, breathing, constant example of who a Marine is and what they should do. When drill instructors use sexually explicit and derogatory language disparaging any group or type of person, recruits learn that this language is acceptable in the Marine Corps. Some may come away

⁴¹ Recruits for every focus group were sampled from more than one platoon.

from recruit training thinking it is more than acceptable—that it is what good leaders do. Female drill instructors or recruits who hear or are aware of this happening learn that the institution they joined accepts and promotes language sexually objectifying their bodies and justifies it as a motivational tool for their fellow male Marines. This goes against the Commandant’s vision of how the Marine Corps should treat its Marines, as an institution whose “culture will remain compelling to all segments of society when people see that others like them who earned the title are treated with dignity, fairness, and respect” (USMC, 2021e, p. 5).

Inappropriate sexual and gender-focused comments are part of DoD’s identified “continuum of harm.” The continuum of harm conceptualizes how lesser offenses, such as sexually harassing language, contribute to an environment where greater offenses, such as rape and sexual assault, may occur unchecked (DoD, n.d.). The connection between sexual harassment and assault is supported by research showing service members who experienced sexual harassment and gender discrimination suffered higher rates of sexual assault (IRC, 2021; Marquis et al., 2017). The use of sexually explicit and derogatory language in the recruit training environment is detrimental to gender integration in the Marine Corps in the immediate training environment and beyond.

Current representation of female Marines in training and education materials at recruit training

Recruits spend a substantial amount of training time receiving academic instruction and participating in Core Value Guided Discussions. Reviewing materials for these types of instruction, however, reveals a noticeable absence and disparity of female representation, which runs counter to the Marine Corps stated strategic plan for diversity, equity, and inclusion (DE&I) released in May 2021. The Marine Corps Diversity, Equity, and Inclusion Strategic Plan states that “education and training are the primary mechanisms for instilling DE&I into our culture” and acknowledges the Marine Corps’s current shortcomings in this area (USMC, 2021a, p. 10):

Education and training which promotes a mindset of inclusion and an appreciation for diversity lacks consistency across the Marine Corps. Currently, the Marine Corps does not have a fully developed curricula teaching Marines about the importance of diversity and how to effectively leverage it to instill equity and inclusion. (USMC, 2021a, p. 10)

The Marine Corps’s focus on the structure of gender integration has missed broader conversations about social and cultural inclusion; current education and training materials present a substantial challenge to that end. The study team also notes that the training materials displayed may require updates and revisions to improve their quality.

History courses relegate women’s history primarily to “firsts,” do not provide enough historical context about women’s service restrictions, and describe notable female Marines differently than comparable male Marines

The Marine Corps cares about its history—it is a major cornerstone of the education recruits receive at recruit training. Recruits attend five Marine Corps history classes during their first phase of training and visit the MCRD museums in fourth phase:

- History I: 1775–1859 (60 minutes)

- History II: 1860–1917 (90 minutes)
- History III: 1917–1945 (90 minutes)
- History IV: 1946–1975 (90 minutes)
- History V: 1976–present (90 minutes)
- MCRD museum visit (120 minutes)

At the start of a History I class at MCRD Parris Island, the drill instructor (who is teaching this class because he is on quota⁴²) starts by asking the class of recruits, “*Who hated history in high school?*” Quiet grumbles arise from the new recruits in the auditorium, who are on training day 6. The instructor yells, “*Today, we’re studying my history*” as he points to the “USMC” name tape on the left side of his uniform.⁴³ He continues, “*Everything we do [as a Marine Corps] is instilled with tradition. We care about tradition. That’s what sets us apart from those other trash [military] Services, okay?*” To be a basic Marine is to know and appreciate the history and legacy of the institution. Recruits are tested on the material they learn in history and other classes and are often prompted by drill instructors to recite “knowledge,” a form of rote memorization, as they wait in line at the chow hall, get ready to enter the MCMAP pit, or are cleaning the squad bay. A drill instructor will call out to the platoon, “*What is the birth date of the Marine Corps?*” and recruits will yell back in unison, “*Sir/ma’am, the birth date of the Marine Corps is November 10, 1775, sir/ma’am!*” The attention, time, testing, and priority given to history in the training schedule signal its importance to the development of a basic Marine.

Marine Corps history is framed through combat operations and wartime engagements and highlights the individual heroic actions of Marines who were awarded the Medal of Honor, Navy Cross, or Silver Star. As a result of using this lens to present the material, heroic women in the Marine Corps are notably absent from the curriculum, as is contextual information about decades of historical service restrictions on their ability to engage in combat operations. Women faced a long history of restrictions on their military service until 2016, when all military occupations were opened to women.⁴⁴ Given this context, women naturally have a shorter and less robust history as Marines, particularly as it relates to combat operations and combat heroism formally recognized through awards, which are prioritized in current Marine Corps history curriculum materials used for recruit training.

The coverage of women’s service in the current Marine Corps history curriculum at recruit training is primarily relegated to “firsts” or milestone events and lacks acknowledgment of the ways women’s service restrictions have affected their ability to contribute to the institution. It also fails to recognize and profile how, despite extensive restrictions, women have served and broken through barriers, demonstrating their courage and commitment. As such, women’s pivotal and sustained contributions beyond combat operations are not acknowledged or codified

⁴² Quota is the period of time (typically 1 year out of a 3-year tour) where drill instructors serve the Recruit Training Regiment in a supporting role. This gives drill instructors a break from the rigorous training cycle. There are various postings throughout the regiment for quota drill instructors; teaching certain classes is part of that role.

⁴³ The drill instructor’s emphasis on “*my history*” references his identity as a Marine, not his gender.

⁴⁴ The Combat Exclusion Policy was lifted by then-Secretary of Defense Ash Carter, opening all military occupations and positions to women as of January 2016 (Pellerin, 2015).

in the history curriculum in any substantial way. The most profound coverage of women’s contributions to Marine Corps history in the education recruits receive is their work in Female Engagement Teams in Afghanistan. Table 4.5 outlines the coverage of women’s history in the Marine Corps history classes taught at recruit training.

Table 4.5. History of Women in the Marine Corps in Current Curriculum

History I: 1775–1859	No explicit discussion of women
History II: 1860–1917	No explicit discussion of women
History III: 1917–1945	<p>Women in the Marine Corps</p> <ul style="list-style-type: none"> • First female Marine: Opha Mae Johnson (1918) • Establishment of Marine Corps Women’s Reserve (1943) <ul style="list-style-type: none"> ○ Ruth Cheney, first female major in the Marine Corps ○ Support provided during World War II • Women’s Armed Services Integration (1948)
History IV: 1946–1975	No explicit discussion of women
History V: 1976–present	<p>First female general in the Marine Corps</p> <ul style="list-style-type: none"> • Margaret Brewer (1978) <p>Female Engagement Teams (FETs)</p> <ul style="list-style-type: none"> • Support of operations in Helmand Province, Afghanistan

Source: USMC, 2021c

Even when women are acknowledged in the history curriculum, their contributions are described differently than those of other key groups, such as African-American men. In History III, descriptions of the conditions of service for two diverse groups—women and African Americans—display stark differences in the characterization of their World War II contributions (see table 4.6). For example, when the curriculum teaches about African American men of the Montford Point Marines, it provides a detailed explanation about historical restrictions on their service and tangibly connects their service to Marine Corps core values of honor, courage, and commitment. Women’s service is presented without any discussion of the obstacles the first women had to overcome just to earn their place among Marines, including bravery, courage, pioneering spirit, and heroism. A major difference potentially influencing the descriptions of these two groups in the curriculum is that African-American men of the Montford Point Marines served in combat operations. Women’s service restrictions limited them to certain roles, all of which were noncombat.

Table 4.6. Selected Comparative Sentences From History III Lesson in Recruit Knowledge Book

History III: 1917–1945		
	Women in the Marine Corps	The Montford Point Marines
How they came to serve	“Women entered the ranks of the Marine Corps for the first time in 1918.”	“Although blacks had served our country since its inception, it wasn’t until 1941 and the establishment of the Fair Employment Practices Commission that service in our armed forces was truly opened up to them.”

	“With WW2 in full swing and manpower resources stretched to the limit, the Marine Corps Women’s Reserve was established in 1943.”	
Recruitment efforts	“In all, more than 23,000 women both enlisted and officer served in the Marine Corps during World War II.”	“Recruiting was difficult. The lack of volunteer recruits reflected the fact that the Marine Corps had excluded African-Americans since the American Revolution. Recruiters were trying to sign up recruits from a black community that had no tradition of service as Marines.”
How they were trained	“The first enlisted class of more than 700 women reported for training in March of 1943 at Hunter College in New York and the first commissioned officer class of women began training at Mount Holyoke College in South Hadley, Mass.”	“Regardless of why they took the courageous step to join the Marine Corps, they all had one thing in common ... they all went through Montford Point ... it was their beginning, it was their ‘Parris Island,’ and it was hard.”
Description of their contributions	“At the war’s end, General Alexander A. Vandegrift, 18th Commandant of the Marine Corps said that these women were ‘responsible for putting the 6th Marine Division in the field; for without the women filling jobs throughout the Marine Corps, there would not have been sufficient men available to form that Division.’”	“They demonstrated the same honor, courage, and commitment as their white counterparts during vicious and bloody fighting in places like Saipan and Okinawa. Their courage under fire and fidelity to their fellow Marines began to erode the cruel and false generational stereotypes within the Corps. In 1944, General Alexander Vandegrift, then Commandant who had observed the courage of black Marines in hand-to-hand combat on the island of Saipan said, ... ‘The experiment with Negro Marines is over. They are Marines ... Period!’ ”

Note: Boldface font used in original text.
Source: USMC, 2021c (pp. 136-138)

At the end of the History III section on “Women in the Marine Corps” the Women’s Armed Services Integration act is described as making “women a permanent part of the Regular Marine Corps” but fails to acknowledge and provide details about the continued restrictions on their service that would affect women in the Marine Corps for decades to come.

Similar disparities in description and context appear in the History V curriculum, which features biographies of the first female general and first African-American pilot and general. Toward the end of their biographies and service accomplishments, a descriptive sentence emphasizes their contributions to the Marine Corps. The descriptive sentence about Brigadier General Margaret Brewer is generic and could be said about anyone with 28 years of service, whereas Lieutenant General Frank Petersen is richly described, and his contributions to breaking racial barriers are specifically called out (see table 4.7). Lieutenant General Petersen served in combat in Korea and Vietnam. Because of historical restrictions on women’s service, Brigadier General Brewer did not serve in combat. However, their shared legacy as Service “firsts” can be equally

characterized as barrier-breaking, strengthening the legacy of the Marine Corps and inspiring future Marines regardless of service in combat.

Table 4.7. Selected Comparative Sentences From History V Lesson in Recruit Knowledge Book

History V: 1976–Present	
First female general in the Marine Corps	“Her 28 years of service demonstrates the honor, courage, and commitment that Marines make to their country and to the United States Marine Corps.”
First African-American pilot and general	“Petersen was more than an outstanding Marine and quality citizen; he broke racial barriers and strengthened the legacy of the Marine Corps while inspiring and leading the way for future Marines seeking to be the best in everything they do.”

Source: USMC, 2021c, p. 168

The most extensive treatment and discussion of women’s contributions to the Marine Corps in the history classes center around Female Engagement Teams (FETs). The study team observed a History V class at MCRD San Diego, where two videos of women serving on FETs in Afghanistan were featured and discussed. Given the Marine Corps focus on combat operations in the history curriculum, it seems more could be done to highlight women who served in FETs as well as women who served in support roles for combat operations but were thrust into combat situations as a result of irregular warfare tactics in Iraq and Afghanistan. Because this era of Marine Corps history is the most contemporary and “real” to today’s recruits, failure to highlight the adaptability, versatility, and value of female Marines is a missed opportunity to tie gender integration directly to the core values the Marine Corps takes pride in.

The dearth of women’s history in Marine Corps curriculum (partially a consequence of the curriculum’s focus on combat roles), lack of detail about the extensive restrictions placed on women’s service, and descriptive disparities between groups who experienced similar historical barriers to service fail to teach male and female recruits that their institution values the contributions of male and female Marines equally. Harkening to a phrase about the importance of representation—“You can’t be what you can’t see”—female recruits may wonder how they fit into the future of the institution. Further, recruits of both genders may assume, falsely, that women haven’t contributed much (or much to be celebrated) to the institutional legacy of the Marine Corps and therefore shouldn’t be expected to contribute to its future in any remarkable or noteworthy ways.

Representation and inclusion are important aspects of gender integration at recruit training. Presenting the contributions of women through a broader lens that goes beyond combat operations could highlight the myriad ways that Marines demonstrate honor, courage, and commitment and remove any messaging—intentional and overt or simply negligent—that women in the Marine Corps are afterthoughts rather than assets.

Core Values Guided Discussions (CVGDs) fail to feature exemplary female Marines

CVGDs, which happen regularly in every phase of Marine Corps recruit training, provide an opportunity for drill instructors and recruits to dialogue or have a small-group discussion about what they learned in the classroom. CVGDs often involve drill instructor prompts and scenarios designed to engage recruits’ critical thinking skills and enable the drill instructor to assess recruits’ learning and absorption of the material. Drill instructors can use CVGDs to reinforce and build recruits’ understanding of key concepts and topics covered in the broader training and education curriculum. Depending on the topic, drill instructors sometimes share personal experiences related to the topic to make it more real for recruits and connect with them. The range of scheduled CVGDs includes discussions on interior guard, sexual assault, social media, and Marine Corps core values.

Drill instructors are provided a Core Values Playbook, the comprehensive resource for every CVGD, which includes preparation guides and lesson plans. Drill instructors are instructed to use this guide as a “departure point for discussing the topics”; the design is meant to enable “any Marine to conduct a quality guided discussion without aid or other support” (USMC, n.d.a, p. 1). Of the 51 CVGDs outlined in the Core Values Playbook at MCRD Parris Island, 10 honor real Marines and Sailors for their heroic and courageous actions. Of the 33 CVGDs outlined in the Recruit Training Guided Discussions document used at MCRD San Diego, 8 honor real Marines and Sailors. Recruits learn about the scenarios or backgrounds of these Marines and Sailors and engage with discussion questions based on the topic. All 10 CVGDs featuring real Marines or Sailors are men; in total, 8 individual men are highlighted (see table 4.8).

Table 4.8. CVGDs Featuring Real Marines or Sailors

Core Values Guided Discussion Title	Marine(s) and Sailor Featured
Core Beliefs	Private First Class John Ahrens
Code of Conduct	U.S. Navy Commander James B. Stockdale (1965)
USMC Leadership	Captain William E. Barber and the Marines of Company F, 2nd Battalion, 7th Marines, 1st Marine Division (Chosin Reservoir)
Medal of Honor—Dan Daly	Private (1900) and Gunnery Sergeant (1915) Dan Daly
Rights and Obligations of Prisoners of War	U.S. Navy Lieutenant Dieter Dengler
Courage—GySgt Carlos Hathcock	Gunnery Sergeant Carlos Hathcock
Combat and Operational Stress Control*	Staff Sergeant Jeremiah Workman
Report Combat Related Reactions and Injuries	Staff Sergeant Jeremiah Workman
Combat Leadership	Sergeant Major Bradley A. Kasal
Warfighting/Chosin /Platoon Talk*	Captain William E. Barber and the Marines of Company F, 2nd Battalion, 7th Marines, 1st Marine Division (Chosin Reservoir)

Note: Slight variations exist between MCRD Parris Island and MCRD San Diego in titles, but instructor guidance and content are the same. For simplicity, MCRD Parris Island titles are presented in this table.

* = These Core Values Guided Discussions were not outlined in the MCRD San Diego document provided to the study team.

Source: USMC, n.d.a, n.d.b

The complete absence of real female Marines from the CVGDs is notable, given women have been serving in the Marine Corps for over 100 years (Huffty, 2018).⁴⁵ Their exclusion sends the message that women are still marginal members of the Marine Corps institution or have not made contributions worthy of discussion or emulation.

During the Crucible, recruits participate in three formal CVGDs: commitment, courage, and honor. Courage, the only Crucible CVGD that covers real Marines (as opposed to fictional scenarios), features the courage of African-American men who enlisted in the Marine Corps in the 1940s and trained in a segregated boot camp at Montford Point. The study team observed this CVGD during a visit to MCRD San Diego. Recruits gathered in a wooden hut and watched a contemporary video about the Montford Point Marines. Afterward, the drill instructor engaged recruits in a discussion about the mental, moral, and physical courage it took for African-American men to join and serve in the Marine Corps during that time, including in combat. It appeared that recruits readily connected with the material and verbalized how these men used courage to join and serve despite racial discrimination, segregation, and other barriers they faced. The drill instructor characterized the Marines as “*trailblazers*,” stating, “*They joined to be better and to make it better.*” One recruit piped up, describing the courage it took those Marines to “*fight for a country that doesn’t accept them.*”

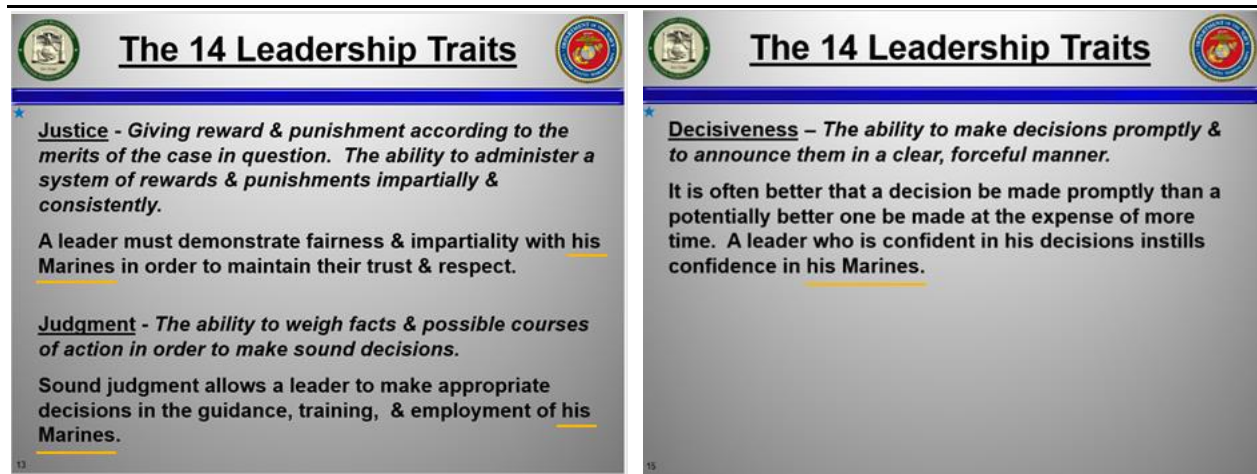
As showcased above, the Marine Corps has provided baseline educational curriculum and CVGDs addressing the historical context restricting minority groups, such as African Americans, from service and has used these lessons to demonstrate how these Marines represent core values. Yet Marine Corps CVGDs fail to communicate the same context and lessons about women. Unlike the history curriculum, where women have some presence, real female Marines are completely missing from CVGDs. With these omissions, the Marine Corps inadequately fulfills its mission to teach “the rich cultural history” of the Marine Corps and its core values (USMC, 2021a, p. 4).

Some course materials perpetuate outdated or harmful gendered stereotypes

In a “Marine Corps Leadership” class at MCRD San Diego, the study team observed several PowerPoint slides that used male pronouns in the descriptive examples of leadership principles (see figure 4.8). These PowerPoint slides were still in use when female recruits were training at MCRD San Diego. MCRD Parris Island’s class follows a slightly different format and structures sentences in a way that precludes the need to use gender pronouns.

⁴⁵ Opha Mae Johnson was the first woman to join the Marine Corps in 1918. However, because of restrictions on women’s service, women have not been able to serve in the Marine Corps continuously for 100 years.

Figure 4.8. Select PowerPoint Slides From MCRD San Diego “Marine Corps Leadership” Class



Note: Yellow underlines were added to the original slides for illustration purposes.
Source: MCRD San Diego “Marine Corps Leadership” PowerPoint slides

The instructor of the course (a male Marine teaching male recruits) primarily used male pronouns when speaking but would occasionally use gender-neutral terms such as “they” or “somebody.” The study team observed a more persistent issue with instructors’ use of gendered pronouns defaulting to men when they were speaking than with hardcopy prints teaching materials.

Outdated gendered perspectives and imagery in course materials that perpetuate men as the default Marine characterize a missed opportunity for the Marine Corps to provide relevant, inclusive instruction to recruits. One striking example of this is the “Marriage and First Term Marine” class taught during fourth phase. At MCRD Parris Island, the class opens with a scenario poem from the male perspective characterizing a heterosexual marriage relationship (see figure 4.9).⁴⁶ A poem like this could be rewritten in gender-neutral terms (e.g., partner or spouse) to provide all recruits the ability to imagine themselves in the “nice night in June” scenario. This poem also invokes negative gender stereotypes of women as wives, such as “nagging wife,” and draws closely to cliché phrases like “happy wife, happy life” with “Happy life. Happy man. Happy wife.”

⁴⁶ This opening slide was not in the PowerPoint for the “Marriage and First Term Marine” class at MCRD San Diego.

Figure 4.9. PowerPoint Slide From MCRD Parris Island “Marriage and the First Term Marine” Class



Note: This slide appeared only in the MCRD Parris Island PowerPoint materials.
Source: MCRD Parris Island “Marriage and the First Term Marine” PowerPoint slides

Marriage and the First Term Marine is meant to guide Marines to make thoughtful, informed decisions about marital commitments and impart the seriousness and responsibility that comes with a marital relationship. Overall, the course content for this course (at both MCRDs) is primarily written based on an assumption of a heterosexual marriage between a male Marine and a civilian wife. These outdated assumptions do not reflect the diverse landscape of present-day Marine Corps recruits and their families and especially fail to serve the particular needs of female Marines. For example, the lack of discussion or acknowledgment of the unique challenges for dual-military marriages overlooks the fact that nearly 60 percent of married active-duty women in the Marine Corps are in a dual-military marriage (Department of Defense, 2021). Outdated and gendered imagery also reinforces the course content, with all but one of the “couple” photographs featuring a man in uniform embracing a woman in civilian clothes (see figure 4.10). There are no images of women in uniform with male husbands (military or civilian) and no images of same-sex couples (male or female).

Figure 4.10. Couple Images on PowerPoint Slides for “Marriage and the First Term Marine” Class



Source: MCRD Parris Island and MCRD San Diego “Marriage and First Term Marine” PowerPoint slides

Similarly, imagery in the “Domestic Violence and Child Abuse” class depicts women as victims of abuse and contains no images of men as victims. Figure 4.11 shows two graphics used in class PowerPoint materials framing women as the victims of domestic abuse. Proportionally, women represent a greater share of domestic abuse victims, but images implying women are the only victims perpetuate stereotypes that constrict male and female recruits’ awareness of the broader issue.

Figure 4.11. Images on PowerPoint Slides for “Domestic Violence and Child Abuse” Class



Source: MCRD San Diego “Domestic Violence and Child Abuse” PowerPoint slides

Some Marine Corps classes, such as “Marine Corps Uniforms” and “Customs and Courtesies,” provide good examples of balanced gender and diverse imagery and should be used to inform imagery updates to other courses.

Imagery in shared spaces at MCRDs portrays men as default Marines

The recruit training environment is rife with imagery to provide stimulation, inspiration, and visual representation of model Marines. Outside the classroom, recruits are exposed to imagery in buildings and common spaces, such as the chow hall. Images in these spaces are focused heavily on Marine Corps combat operations and depictions of the warrior ethos in action. When images of Marines are distinct enough for gender identification, the images are primarily male. While recruits, training cadre, and drill instructors who are busy attending to mealtime may seem unaware of these images, such visual background material sends messages even if they are only subconsciously absorbed.

Although the Marine Corps continues to be a male-majority institution, some imagery in the training environment portrays all Marines as men and perpetuates outdated gendered stereotypes that are counterproductive to the development of Marines. The Marine Corps should consider how it builds a sense of belonging for all through visual representations featured in its training spaces, particularly as it seeks to increase gender integration at recruit training. Greater care should be taken to ensure that women are represented in images that adorn all training spaces. Further, these images should show female Marines in their full, contemporary breadth of roles. A best practice example of inclusive imagery observed by the study team is the “Recruit Training” exhibit at the MCRD Parris Island Museum, which features a wide range of diverse images, including women and racial and ethnic minorities.

Training cadre are ill equipped to teach critical courses on sensitive subject matters related to gender

Marine Corps drill instructors and company personnel wear many hats—they train, mentor, oversee, execute, facilitate, and teach. Recruits have packed training days, days that are led by even busier drill instructors and training cadre personnel. Classes at Marine Corps recruit training are mainly taught by a combination of drill instructors on quota and company leadership (primarily series commanders and 1st sergeants) who are provided various degrees of training and education on teaching methods. These Marine Corps personnel are expected to be able to pick up any class in the course curriculum and teach it proficiently. Given the wide range of course content, this capability is more attainable for some classes than others. Some classes involve sensitive subject matter, including “Sexual Assault Prevention and Response (SAPR),” “Sexual Harassment,” and “Equal Opportunity,” which require a greater degree of proficiency and expertise to teach and facilitate well, especially when eliciting discussion from recruits.

Recruits receive training and courses about SAPR at multiple points in the training process, with their first brief during receiving given by a full-time SAPR personnel. Other education and discussions during the training cycle about SAPR are facilitated by company leadership and drill instructors. Instructors who teach SAPR without expert knowledge can inadvertently send damaging messages about sexual assault, consent, and gender at an impressionable time, as was witnessed by the study team. This challenge is not specific to the Marine Corps—the study team also observed other Services struggling with proper delivery of this critical course content to their recruits.⁴⁷

In a SAPR class on training day 8, recruits from an Integrated Company at MCRD Parris Island sat in a lecture hall classroom. The class atmosphere was noticeably quiet compared with other classes, where drill instructors often yell and cause commotion near the back doors as recruits request permission to use the head. This environment set the tone for the gravity of the subject matter to be discussed. The class was taught by their male 1st sergeant, the most senior enlisted person in the company. He opened the class by emphasizing that sexual assault is one of the most underreported crimes in the military and everyone should report such crimes to their uniformed victim advocate. He encouraged recruits to “*look around the room*” because their job is to “*protect everyone.*” The instructor reviewed the definition of sexual assault, the definition of rape, the Marine Corps policy on sexual assault, and key differences between sexual assault and sexual harassment. Then the instructor had recruits read aloud a scenario which ended with a married male corporal groping his friend who is a single female corporal,

... when the movie ended, Cpl White [male] reached across Cpl Doe [female] to get the remote control, but instead started rubbing her breast. Cpl Doe tried to push his hand

⁴⁷ At a sexual harassment/assault response and prevention (SHARP) class at Fort Jackson, the study team observed a male drill sergeant teaching a mixed-gender class of recruits about SHARP issues, reporting procedures, and available resources and support. Throughout the course, the instructor often directed his body or turned toward the row of female recruits to deliver the information. In some instances, he specifically addressed the women (e.g., “*Ladies, when it comes to reporting ...*”) on course subject matter that pertained to every recruit in the classroom, regardless of gender.

away, but he continued, and then moved his hand down to her vaginal area. She was scared that he wouldn't stop but using all her strength she was able to finally push his hands off her body. Cpl White sexually assaulted Cpl Doe. (USMC, 2021b, p. 9)

The instructor then began an extended discussion about the scenario,⁴⁸ posing a question to recruits: *“What could Cpl Doe [the victim] do differently?”* Some recruits, all male, stood up and provided a variety of answers. The instructor continued seeking responses from recruits. A female recruit stood up and said, *“This recruit thinks Cpl Doe [the victim] is not to blame; it was Cpl White [perpetrator] who forced himself onto her.”* The instructor acknowledged this response and continued to poll recruits about what Cpl Doe could have done differently. Additional responses from recruits included being aware of Cpl White's [perpetrator's] marital status, not being alone in a room together, and enacting self-control. A male recruit offered, *“This recruit thinks they should have defined the relationship to each other,”* and the instructor responded, *“Absolutely.”* He continued to discuss the scenario, asking recruits, *“What were the contributing factors to the sexual assault?”* Male recruits responded by offering, *“Misunderstanding of the relationship,” “Cpl Doe [the victim] should not have invited him back to her barracks room,”* and *“alcohol.”*⁴⁹ The instructor ended the discussion about this scenario, restating, *“You have to tell them what you expect”* by setting clear boundaries between two people, even friends (as Cpl Doe and Cpl White were). The class continued covering risk factors for sexual assault, bystander interaction, Marine Corps resources, how to talk to a victim advocate, and two other scenarios (one involving male-on-male assault and another date rape drugs). Throughout the course, the instructor implored the recruits, *“Be the generation of Marines that tackle this issue.”*

Later that day, the study team observed two follow-on CVGDs from this SAPR class—one for a male platoon and one for a female platoon. In each case, the CVGDs were led by a drill instructor in their respective squad bays. In the male platoon, the senior drill instructor reviewed facts, definitions, reporting options, mandatory versus nonmandatory reporters, and victim advocates. He described a male recruit getting a bad conduct discharge from service after assaulting another male recruit in week 13 of training. He emphasized the career consequences of sexual assault, saying, *“You've seen cancel culture, right? You know it just takes one to report. There is zero tolerance,”* ending the discussion by asserting that if you assault someone, you put yourself in a bad position and *“it's either their career or yours.”* The female platoon's CVGD, also facilitated by the senior drill instructor, covered a review of the same basic information (e.g., reporting options, victim advocates) but flowed in a different direction. She told recruits, *“It's [sexual assault and harassment are] the reality of this world. I wish it wasn't, but thankfully we have resources. One-third of women will experience sexual assault or harassment. Look around the room. Sexual assault and harassment have no preference. The reporting rate is low. Why?”* Recruits talked about the reasons some may not report and began to veer into personal stories, which the drill instructor tried to redirect by emphasizing the resources available to them. A female recruit, hearkening back to the earlier discussion facilitated by the SAPR 1st sergeant instructor, said, *“This recruit, during the discussion today, heard one male platoon was accusing the victim. This recruit thinks it wasn't the female's fault and sees that*

⁴⁸ The official lesson plan for this course content begins with “instructor notes.” The third instructor note states, “Do not spend time debating the scenarios” (USMC, 2021b, p. 2).

⁴⁹ Alcohol use was not mentioned in the scenario.

there's a lack of belief in victims.” The senior drill instructor appeared flustered by the recruit’s statement, acknowledged it, and continued with the discussion. The female platoon’s CVGD ended with a discussion of scenarios and ways to engage the bystander “three Ds” (distract, direct, delegate).

The study team acknowledges that this specific scenario may not be representative of most SAPR classes in the training environment. However, one recruit who comes away from a SAPR class in their initial training thinking victims won’t be believed is damaging to the Service and that future Marine. Similarly, recruits who think a victim could or should have done something to prevent their assault perpetuate a culture that tolerates and justifies harm.

Ill-equipped personnel are a systemwide DoD issue recently identified by the DoD Independent Review Commission (IRC) on Sexual Assault in the Military. DoD is now establishing a dedicated primary prevention workforce (recommendation 2.2). The IRC stated, “Effective prevention of sexual harassment, sexual assault, and other forms of violence requires the time and dedication of full-time personnel with specific public health and behavioral social science expertise” because “double-hatted personnel lack both the capability and capacity to perform requirements essential” to prevention (IRC, 2021, p. 131).

Gendered and inconsistent approach to some privacy practices in the recruit training environment

The Marine Corps has developed inconsistent and gender-based privacy practices in the training environment that presume an extra layer of protection and privacy is necessary for female recruits without affording the same protections to male recruits. For example, recruits conduct daily hygiene sessions⁵⁰ where they are afforded at least 5 minutes to shower and brush their teeth. During hygiene sessions observed by the study team, recruits undressed and redressed on line at their rack before and after their shower. Recruits had very little time as they hustled from the rack to the shower and back again. Because of time constraints and changing in the squad bay, recruits are naked or have moments of nakedness during this time in the open squad bay area. Drill instructors or company leadership also perform an evening hygiene inspection to identify and monitor health and hygiene concerns for recruits. Drill instructors check for cleanliness and monitor/log blisters, sores, bruising, ticks, and other issues that may require medical attention. During hygiene inspections, male recruits are dressed in their undershorts, and female recruits wear their sports bra and underpants.

For female platoons at both Parris Island and San Diego, drill instructors lock the squad bay hatch doors and place a sign reading “hygiene in progress” on the outside to ensure no others can enter the squad bay during hygiene sessions and hygiene inspections. Conversely, male platoons do not take either protection measure—squad bay doors are closed but remain unlocked with no sign on the door. One of the noted new accommodations for training women at MCRD San Diego was the use of a “hygiene in progress” sign on squad bay doors (Hodge Seck, 2021). San Diego squad bays require female drill instructors to place multiple “hygiene in progress” signs—one on the front hatch and one on the door to the connecting head hallway between squad bays. For the hygiene period, practices have been employed to protect nude or changing female recruits from unintentional male intrusions in the squad bay; however, male recruits are not

⁵⁰ An additional hygiene session is required on PT days in the training cycle (USMC, 2019a, 2019b).

provided the same protection from unintentional female intrusions. Both MCRDs have mixed-gender leadership and have had such leadership (in varying degrees) for some time. While San Diego is new to training female recruits and regular female drill instructor presence, female battalion and company leadership have been in place for several years, yet male recruits have been thought not to need privacy or protection in the same way.

After the first platoon of women graduated from San Diego, military news outlets featured headlines about how the MCRD prepared itself; “frosted windows” were the biggest takeaway. Senior leaders from San Diego pointed to frosted squad bay windows as one of the only major changes the Depot needed to make to train its first class of women. Frosting the top portion of squad bay windows ensured that female platoons (who were housed on the first floor of their barracks building) could close their windows during hygiene time so no others could look in or see while they are changing or naked. The Recruit Training Regiment commanding officer was quoted as saying that he would like to get all squad bay windows frosted, potentially recognizing the privacy benefits for everyone (Hodge Seck, 2021). The addition of frosted windows for the female platoon also points to inconsistency in the Marine Corps approach to privacy. Male recruits at San Diego, who have trained there for several decades, have never been afforded the level of privacy given to female recruits in Lima Company. Male recruits live in squad bays that offer some potential that others outside of their platoonmates and drill instructors could see them naked in the process of changing. While it is unlikely others are looking or can blatantly see recruits in intimate situations, female recruits are presumed to need a level of privacy that should be afforded to every recruit.

A Marine Corps Service leader with leadership experience at MCRD San Diego described how training a transgender recruit at the Depot brought some of these traditional privacy practices into question.

So, for hygiene, his specific [male] recruit ... had top surgery but not bottom surgery. And so one of the changes was ... to maximize just their modesty and coverage during the changing process. So they would strip down, but they would have a towel around their waist, and then they would take their underwear off ... to the point where you could almost have a female on deck while they were preparing to go in for hygiene because they were never completely naked in the squad bay. They would go in, then hang their towel up, go into the shower and do what they needed to do, and then come out, grab their towel, and repeat it. And so there wasn't any, like, strip down, be completely naked, go into the shower. So it was a process that even if you had a male recruit that was somewhat shy about being naked in front of other people, that helped that recruit. It wasn't just for the transgender recruit. ... Another thing at San Diego, which shocked me when I showed up: When they're at medical, they take their shirts off. So they're just standing there in their trousers for shots and different things like that. I'm like, "Why? Why are they taking [off] their shirts? There was no need for them to take their shirts off." So they made that change wearing T-shirts at the pool for swim qual[ification], instead of taking off your T-shirt and doing swim qual. At Parris Island, they wear T-shirts. So it was a lot of the things that they already do at Parris Island because they have both males and females training together—implementing some of those little changes in San Diego to make it a little bit less of a difference.

These gender-based privacy practices around hygiene and changing may be relics of a historical Marine Corps when women were attached to but not fully serving in the Service. The continuance of this gendered-based approach, however, sends the message that women need extra protection from men and deprives men of being afforded the same legitimate privacy considerations.

5. Historical challenges: Divergent paths of the MCRDs

As the Marine Corps considers further gender integration at recruit training, the MCRDs bring very different historical orientations to gender. MCRD Parris Island has been training women for over 70 years, mostly separate from men. The Woman Recruit Training Battalion was first established in 1954; it transitioned to the Woman Recruit Training Command in 1976, and 4th Battalion, as it is known today, was established in 1986. Male and female recruits executed the same training schedule for the first time in 1997 (MCRD Parris Island, n.d.). MCRD Parris Island comes to gender-integrated training with a long history of gender-segregated training, and today's drill instructors are products of this type of training. MCRD San Diego has been training male recruits for nearly 100 years; it first began training female recruits in 2021 (Dyer, 2021).

For MCRD Parris Island, incremental changes to gender integration, even slight, represent a change to the institutional memory of how things have always been done. MCRD San Diego, on the other hand, brings a clean slate to gender integration. This dichotomy became apparent when the study team observed a MCMAP lesson for an Integrated Company at San Diego, where male and female recruits from different platoons practiced face-to-face mixed martial arts moves with one another in the pit. In a conversation with a company leader watching over the event, a member of the study team asked, "Is this typical?" pointing to the commingled line of male and female recruits. The response was something to the effect of "*What do you mean? We're integrated, so this is integrated training.*" Similar observations of MCMAP lessons at Parris Island had Integrated Companies strictly grouped by platoon, with recruits interacting only with their platoon (same gender by proxy), even though that training was integrated at the same level. Similarly, San Diego was the first to implement targeted training events with gender integration below the platoon level, where men and women integrated to form fireteams and sticks for the Crucible. This integration started with the pilot of the Integrated Lima Company in 2021. A male training cadre officer at San Diego described the situation.

[Leadership was invested in looking at] how early males and females could start working together. We're looking at best practices to break down barriers early. Nothing has been officially approved, but [there are] things we are looking at doing. ... There are events where we make sure we try to integrate, to make recruits know that they will be working with the opposite sex throughout their time here. These are not approved in the POI [program of instruction] yet, but as we try to get ahead of what we recognize is a push to try and integrate as early as possible, we are actively looking at places where we can do that safely.

After the interview, the respondent quoted above sent additional comments for the record that noted San Diego was first to pilot these targeted training events with Lima Company and

confirmed Parris Island has followed similar integration efforts with its Integrated Companies.⁵¹ Integration for these targeted training events, he wrote, are *“to achieve specific training objectives (diversity of thought, teamwork, and enhanced unit cohesion; with the additional benefit of dispelling any conscious or unconscious biases).”*

While San Diego has led the way with more substantial changes to the integration approach, the lack of institutional familiarity with training female recruits presents a different set of challenges. In the lead-up to the first platoon of female recruits arriving in 2021, one respondent described being caught in scrambles for female perspectives to aid the Depot working group, receiving text messages like, *“Hey, boss wants a girl in the room”* or *“Boss needs a woman to attend this meeting. Are you available?”* This left her frustrated, reflecting to a male colleague, *“Well, what am I invited to? Do I have talking points? Am I briefing something? What’s the point of me being in the room? Because if there’s a point, then I’ll go, but if I’m there because they need a girl, they can go find a girl. They can go find someone else.”* Female drill instructors reported problems with an inadequate number of female bathroom facilities at San Diego for recruits and drill instructors/training cadre and lack of receptacles for disposal of feminine hygiene products during field training. Another issue one respondent raised was adequate medical care, sharing concerns about a staff of medical doctors who have worked exclusively with male bodies for a long time. Supply and product issues, such as gear and equipment in smaller sizes, were also presented as a persistent concern.

As both Depots conduct integrated training and the Marine Corps seeks ways to further integrate recruit training, the historical context of each MCRD may present unique challenges for integration efforts that should be considered and addressed.

G. Marine Corps Strengths for Further Gender-Integrated Recruit Training

While the study team identified many challenges the Marine Corps faces related to current and future gender integration efforts at the MCRDs, the Service also possesses immeasurable strengths and assets that can help overcome these challenges—primarily the commitment, dedication, and passion Marines hold for their institution and the process of making Marines. While strengths of the Marine Corps recruit training process are described throughout the report, this section distills and describes strengths that should be leveraged and harnessed for further gender-integrated recruit training.

- **Marines are trained to execute at high levels, regardless of resources available.** Marines will tell you they do more with less. The history of the Marine Corps has borne this out, as have countless individual Marines and units scattered across the globe. The Service prides itself on its ability to accomplish its mission in any circumstance. As one training cadre officer from Parris Island said, *“Just put the Marines together in the same place, and they will figure it out, like Marines do everywhere.”* Tapping into the Marine Corps’s institutional volition by making gender integration a clearly communicated part

⁵¹ The study team also verified that Parris Island is conducting targeted training activities with gender integration below the platoon level in Integrated Companies.

of the “mission,” one that will better the institution in a myriad of ways, will mobilize support for execution in any set of conditions.

- **Marine Corps drill instructors are passionate and committed to the mission of making Marines.** The work ethic, dedication, and fortitude of a Marine Corps drill instructor are unparalleled. Marine Corps drill instructors put everything they have into the job of making Marines. They sacrifice a tremendous amount of time with their loved ones and children to do their job. They push their bodies and vocal cords to the brink. They are on their feet from early in the morning until late at night, orchestrating and controlling every aspect of an intense training schedule. The passion Marine Corps drill instructors bring to their role cannot be replaced, bought, or replicated and is one of the biggest assets the institution has in its continued gender integration efforts. Drill instructors care about the work they do and about doing it *right*; when given a mission, drill instructors want to succeed and make the best Marines out there.
- **Marines share tremendous pride in the identity of being a Marine.** Marines build and share a forever identity as Marines. They have incomparable pride in their institution and the Marine Corps legacy. Those who make Marines not only possess that pride but are fully invested in the process of building and molding the next generation of the Marine Corps. The deeply rooted, tightly held identity of being a Marine is a uniquely uniting force, connecting all Marines to one another even in the face of their differences. This strong shared identity can be used as an asset in the process of institutional change, particularly around matters of diversity, to bring Marines together as Marines.
- **The Marine Corps creates a highly controlled training environment.** The control governing the Marine Corps recruit training environment is above and beyond that found in the other Services. The Marine Corps is the only Service where drill instructors are present with their recruits at all hours of the day and night for the entirety of the training cycle. The Marine Corps also maintains a great deal of oversight for drill instructor teams, with multiple officer and enlisted leadership positions at the series, company, and battalion levels. Training cadre leadership (such as series commander or chief drill instructor) are active and highly involved in the training environment—they are routinely present at training events, even those that fall outside of their obligations. Highly controlled environments provide abundant opportunities to set a strict standard of equity and respect for everyone involved in training (recruits, drill instructors, and training cadre), along with immediate follow-through using corrections or accountability measures. Gender-based remarks, behaviors, and treatment degrade inclusion in the training environment; when attended to, these problems could be rooted out early and often, reinforcing they will not be tolerated by Marines. The Marine Corps is exceptionally good at demanding physical discipline through military bearing and close-order drill. Further gender integration, in which women and men would be provided more opportunities to work together, offers great potential for instituting a similar approach to morality and core values to immediately stop sexism or other undesirable behaviors by recruits, drill instructors, or training cadre.
- **The Marine Corps has the most intensive and extensive initial entry training process that produces a highly standardized transformation.** Compared with the other Services (see chapter 6), the Marine Corps has the longest recruit training process and ELT pipeline. The Marine Corps recruit training process maximizes the amount of

training time in any given day or week and uses time spent traveling to and from training activities as opportunities for additional training, such as practicing close-order drill movements or reciting academic knowledge. The duration and intensity of Marine Corps ELT signal its gravity and importance to the Service. The rigorous training process, in which every detail is meticulously planned, amplifies the opportunities for meaningful gender integration to occur under the guidance and leadership of Marine Corps drill instructors, training cadre, and senior leaders to prepare recruits for the fleet and their first assignments. The Marine Corps has high standards for entry, a physically demanding and intensive recruit training program, and a methodically designed process of transformation. What results is the standardized product of a basic Marine, one that generates confidence in the continued success in the ELT pipeline and mission accomplishment in the fleet. The Marine Corps's commitment to excellence in its training efforts, including the incorporation of recent changes to gender integration, supports future enhancements to gender-integrated training at the MCRDs.

- **The Marine Corps has a history of successfully executing changes at recruit training related to gender integration.** Marine Corps considerations of implementing more gender integration in recruit training are backed by a history of successful execution of major changes at the MCRDs. From a separate recruit training battalion where women were trained to a different program of instruction in the 1950s, to Integrated Companies at Parris Island, to male and female recruits working together at the Crucible at both MCRDs, the Marine Corps has demonstrated it can adapt and continue to produce highly trained basic Marines. The Marine Corps can further capitalize on the Service's culture of exceptionalism and excellence by making gender equity a source of pride and expectation for all Marines in future efforts.

Chapter 5: Alternative Viewpoints on Marine Corps Recruit Training

Bottom Line Up Front

- Participants interviewed had deep expertise in military training and/or gender integration and were selected in part based on having expressed views differing from Marine Corps current treatment of gender integration. Because Marine Corps approaches have undergone recent changes, participants were not always up to date on current practices.
- Participants all saw numerous benefits to increasing gender integration for male recruits, for female recruits, and for the strength and readiness of the Marine Corps.
- Overwhelmingly, those interviewed defined gender integration as integration at the platoon-level, although they generally did not believe that the Marine Corps holds the same view.
- Participants believed that successfully increasing gender integration will require as much attention to cultural issues as it will logistical issues.
- All saw mixed-gender drill instructor teams as crucial for the success of gender integration efforts in the Marine Corps.
- Participants recognized challenges associated with integrating squad bays but saw value in integrating some training activities in squad bays that fall short of male and female recruits sleeping in the same space.
- Concerns related to training standards and physical differences between women and men in further integrating training were shared, but participants also generally believed that these issues tend to be overblown and used as reasons to resist integration.
- Participants recognized that the relative numbers of women and men in the Marine Corps create challenges to integration that do not have easy solutions.
- Participants noted the need for top Marine Corps leadership to publicly embrace gender integration and for gender integration efforts to engage all stakeholders.

As part of the study, the Marine Corps requested the study team “seek out viewpoints which differ from the methods the Marine Corps currently uses at [recruit training] [to] ensure that all studied alternatives are considered.”⁵² Following this task, the study team used interviews to seek alternative viewpoints and consider a range of perspectives on gender integration and recruit training. These interviews capture the perspectives of those who both agree and disagree with the Marine Corps current approach to gender integration at recruit training.

Participants include a mix of former Service members (including Marine Corps), academics (with prior military/Marine Corps experience and/or expertise on military-related issues), civilian researchers with Marine Corps expertise, and public intellectuals who have expertise on matters relating to gender integration and recruit training in a military environment. The primary

⁵² Language from the request for proposals and performance work statement.

selection criterion for identifying individuals as participants was publication of peer-reviewed, publicly available research related to gender integration in the military, the Marine Corps, and/or recruit training. This generated a diverse and knowledgeable sample. A detailed methodology approach is covered in chapter 3, and the interview protocol instrument is in appendix H.

A total of 20 semi-structured interviews were conducted between April and September 2021.⁵³ Participants were diverse with respect to gender and military or Marine Corps experience. The study team interviewed: 13 women and 7 men; 10 civilians with no personal military service and 10 military veterans, 8 of whom served in the Marine Corps. At least 5 of those 8 participants had direct experience leading recruit training in the Marine Corps either at Marine Corps Recruit Depot (MCRD) Parris Island or San Diego (and in some cases both). One individual from another Service had experience with officer entry-level training. Two additional veterans of other Services also had direct experience with initial officer training. Two of the 5 with MCRD recruit training experience were women. These categories are not mutually exclusive; this chapter does not present combinations of characteristics to protect the anonymity of participants. In addition to the decades of Marine Corps and other service experience of the 10 participants with military experience, civilian experts brought similar depth of expertise on questions about gender and the military, having studied the military and/or taught military leaders at various Professional Military Education institutions, or worked as civilian professionals for the Department of Defense. Two of these civilians were affiliated with a Professional Military Education institution, 7 were faculty at civilian institutions, and 1 was a think tank researcher. All had at least 10 years of research experience with military-relevant topics. In sum, our participants had extensive relevant expertise in the Marine Corps entry-level training environment and/or expertise related to gender integration or sexual assault in military settings including the Marine Corps, or expertise on Marine Corps culture, values, and practices. Several participants have been very influential in shaping past and current Marine Corps recruit training policies and practices.

To provide additional protections to participants, interviews were not audio-recorded and were captured through summary notes. Therefore, quotations in this chapter are from notes taken and may not reflect direct quotes from participants, rather they are paraphrased by the note taker or interviewer. Full participant characteristics are not connected directly with quotations to further to protect participants' identity, although relevant information is offered to contextualize the nature of participants' expertise in some instances.

Information in this chapter is drawn from exclusively from these interviews (referred to as participants throughout this chapter) and covers the following primary topics or themes: definitions of gender integration, squad bays, drill instructors, standards, physical differences by gender, stakeholders, models of gender integration, culture, demographics, and concludes with a review of overall opportunities and challenges.

A. Definitions of Gender Integration

⁵³ During and after data collection, the Marine Corps adjusted and made changes to gender integration at both MCRDs. Therefore, participant responses may not be able to speak to these ongoing changes in gender integration at Marine Corps recruit training.

The study team began each interview with questions that narrow in on a definition of gender integration. Participants were asked how they defined gender integration and how they believe the Marine Corps defines it. The initial focus on attempting to establish a definition is an important first step before moving toward recommendations and discussions of the challenges and benefits of gender integration for several reasons, detailed below.

First, defining integration itself is important because the concept has been important in military settings in a variety of contexts (e.g., racial integration, integration by sexual orientation), as noted by one of the participants who has more than five decades of research on the issue:

[The] same issue came up when President Truman said equal treatment regardless of race. Some people interpreted that as racial integration, but [the] Army did not. There is precedent for lack of consensus on what [integration] means.

Second, integration in various forms has been of societal importance in the U.S. for some decades, and as such the meanings and uses of the concept have multiplied through time to the point that different people discussing integration could potentially mean different things. In fact, one of the participants familiar with the Marine Corps as a civilian researcher who led large projects for the Marine Corps felt that the Marine Corps itself almost certainly has multiple, competing formal definitions of gender integration to be found in different internal documents:

Would be surprised if the Marine Corps didn't have 4-5 competing formal definitions of gender integration floating around. Suggested [study] team should try to get ahold of them. [The respondent] would expect a Program of Actions and Milestones (POA&M) that provides benchmarks toward something called gender integration that's not defined to avoid having too narrow a definition put on it... They [Marine Corps] become beholden to those in some way but [it] keeps them from having to meet an externally imposed definition as long as [it's] keeping people happy with actions. That's an effective strategy to say 'look we're doing things, look at all the things' but Congress rarely comes back to ask to show the things done accomplish anything.

Third, the Congressional requirement from the FY2020 NDAA that the Marine Corps does not conduct gender segregated training provides no definition of what would reflect that goal being accomplished, therefore it is necessary to have at least some sense of a definition against which the study team can compare potential alternate models of integration. Finally, the study team sought to ensure there is shared understanding of what gender integration represents to avoid a situation in which a proposed model that is believed to represent fully gender integrated training is not seen the same way across different stakeholders.

The study team asked participants for their definitions of what would constitute compliance with the requirement that training not be segregated by gender (responses to this are treated as the participants' definition of gender integration) and their perspectives on what the Marine Corps would see as representing compliance (responses to this are treated as their perceptions of the Marine Corps definition of gender integration). Due in part to the factors just described, there was variability in responses from participants to these questions. Anticipating such variability and attempting to get a broad range of views is why the study team interviewed a number of

experts with different backgrounds and sources of expertise (on gender in organizations, on the Marine Corps, etc.). Although there was significant variability, the analysis did identify major themes and consistencies in responses summarized in sections below, organized around participants' own definitions of gender integration versus their perceptions of the Marine Corps definition.

1. Definitions of Gender Integration

There are areas of similarity and difference in responses by participants on how they defined gender integration. In the areas of consensus among the experts, three main themes emerged.

First, participants overwhelmingly defined gender integration as female and male recruits training together at all levels, to include within platoons. Well over half of the participants interviewed said that they would define training as gender integrated only if platoons were integrated. A common response from the participants was that gender integration occurs when recruits do everything alongside each other (some qualified this to say except sleeping in the same room). For example, the responses below exemplify the way the majority of participants themselves understood the meaning of gender integration at Marine Corps recruit training:

It ideally would involve fully integrating down to the platoon level with males and females integrated at the level of the platoon.

There is a big distinction to be made between "separated by gender" and "integrated to the platoon level." Having experienced fully integrated training and work environments my whole [military] career...I believe integration is within the same squad, within the same fire team.

The first definition was from a male Marine Corps veteran and the second a female Marine Corps veteran. One participant summarized the issue by suggesting full gender integration would mean that by the end of recruit training, individuals could have made friends of both genders, and also noted this simply wouldn't be possible under current Marine Corps models of gender integration.

Participants profess the belief that training that is not integrated all the way down to the platoon level is doing damage, and that the only times they have seen training meaningfully integrated has been when it's at the level of the platoon (or its equivalent in another Service). They emphasized the important distinction to be made between not separated by gender and actually being integrated at the platoon level (i.e. between no longer segregated and actually integrated). Several of the participants made the comment that recruits should train as they will fight, and that fighting happens in gender integrated platoons.

Additionally, some participants noted that many intangible values in the Marine Corps are taught at the platoon level, and that men and women should be together when those lessons take place if meaningful gender integration is to happen. As one participant, a male Marine Corps veteran, described,

What does desegregation actually mean? Desegregation means integration down to the platoon level, mixed gender. If we look at how we have to fight our wars, we fight our wars completely integrated. When I was in squadron, it was integrated, it couldn't be separated... You train like you fight—that saying should be a reality. If we start segregated at any level there is always going to be a perception that they are not good enough to be part of us from day one. Why should we accept them [women] even 10 years down the road? We have to talk about it at the platoon level... Recruit training offers two different things—(1) the skills, the actual physical, tactical things you have to do to be a Marine, including shooting your rifle, marching in formation, going through assault courses, the Crucible. Those skills they are doing in a desegregated manner. But at recruit training you also learn (2) the intangible values—honor, courage, and commitment. Those are being taught at the platoon level, that's where those lessons take place. That's where the drill instructors teach you how to embody being a Marine. If gender integration is having respect for every person, seeing every person as a Marine, we're missing the mark.

Second, participants largely defined gender integration in terms of minimizing or eliminating physical separations between female and male recruits. For example, participants proposed that if there are differences among recruits that matter for performance (e.g., height or upper-body strength), then recruits should be separated on those criteria instead of gender. Additionally, experts noted that being in the same space or alongside each other is not the same as interacting with each other, and gender integration in their view involves breaking down barriers in interaction. One participant, a male Marine Corps veteran, shared: “[The Marine Corps] idea is to co-locate cohorts of female recruits with cohorts of male recruits, but that by definition is not gender integration. Just having them attend classes together and so on is not integration at the most basic level.” Some did note that facility construction might be necessary—the building of squad bays and dining halls that allow for more gender integration, for example—but they saw integrating as requiring eliminating, to every extent possible, physical separation between female and male recruits.

Third, when defining gender integration, participants often noted that it involves both physical/logistical and cultural elements. Some identified the physical elements (e.g., male and female recruits in the same training units) as relatively easy, with the cultural challenge as much bigger. For example, one participant, a female Marine Corps veteran with training experience at Parris Island, described:

The first challenges would require some building. We'd have to have housing and lodging and chow halls available for a mixed gender environment. But the biggest challenges are cultural. The Marine Corps would have to be okay with female drill instructors with male recruits...but over time, the cultural change that would come about from a more integrated entry level training environment would have a significant impact. But there is so much resistance to this and the massive cultural change it would bring.

The participants noted that full gender integration would require the Marine Corps to get past norms that women must be kept separate from men or things will go wrong and beliefs that view female Marines as less than male Marines. This cultural issue was also framed more

generally as a need to more fully involve women in the Marine Corps. Put simply, participants, including the female civilian researcher quoted below, often identified gender integration as not only requiring that men and women not be separated in training, but also the breaking down of norms that view female recruits as different, and often less than, than male recruits:

What Marines might not think of are things like the words that are used by drill instructors. We know there are plenty of instances of drill instructors using derogatory terms during boot camp that are based on women's bodies or capabilities of women. In [the participant's] opinion, if we had true desegregation, the language, the terms, the ways drill instructors talk to recruits, would also need to change in order to remove gendered references that pit women against women and that specifically represent [them] as inferior. [The participant] doesn't think Marines would see that as necessary for gender integration. They will be more focused on the more literal physical divide but won't necessarily think about those cultural issues.⁵⁴

In addition to the above three consistent themes, it was common for participants to note that gender integrated training requires both male and female drill instructors to be leading gender integrated units. One participant, a female Marine Corps veteran with entry-level training experience at Parris Island, asked:

If you really want to change the culture, is it more important all women training women, or is it more important for men and women to see that their SDI [senior drill instructor] and DI [drill instructor] have great working relationships together and that they rely on each other and are a team?

Additionally, they generally discussed the importance of women being represented in leadership positions if training is said to be gender integrated. Additionally, although participants showed a high degree of consistency in how they defined gender integrated training, there were some differences. Perhaps most noteworthy was the extent to which the experts believed gender integration of training is possible with *any* physical separations between female and male recruits. Some believed it is, others did not.

⁵⁴ This quote captures study team findings, as reported in Chapter 4, with the specific language used detailed in Appendix L.

2. Perceptions of the Marine Corps Definition of Gender Integration

Participant views on how the Marine Corps defines gender integration did not generate the same consistency of themes as those from the experts' own definitions. For example, virtually all the participants defined gender integration as requiring integration at the platoon level, but there were no themes around which all agreed regarding perceptions of Marine Corps definitions of gender integration. This only reinforces the idea that the Marine Corps may lack a clear articulation of their definition of gender integration, because our experts didn't share a common understanding of the Marine Corps' definition. Nevertheless, three commonly raised themes did emerge.

First, there was some shared view among the participants that the Marine Corps is oriented toward following the letter but not the spirit of the gender integration FY2020 NDAA directive from Congress. For example, one female Marine Corps veteran participant noted,

I think that they define it as platoons or small units co-located, being able to see one another. But I think the Marine Corps' desire has been to keep same sex drill instructors with same sex trainees, and I do not think that's the gender integration that the NDAA wishes to see.

According to the participants, a model of same-gender platoons in integrated companies satisfies the requirement that training not be gender segregated, but in the minds of the participants, it's not consistent with the spirit of the directive to actually increase gender integration. Also, several participants pointed out the Marine Corps' approach of assigning same-gender drill instructors to recruits was inconsistent with the spirit of gender integration. Thus, in the views of the participants, co-locating platoons of female recruits with platoons of male recruits, and having the recruits largely trained by drill instructors of the same gender as themselves might allow the Marine Corps to claim training has been gender integrated, but it's not in their view true gender integration. At the same time, some experts did note that the current Marine Corps approach is a first step, that these early steps are often the most important ones, and that they would expect future actions to get the Marine Corps more in line with the spirit of gender integration. Additionally, some of the experts noted the importance of the integrity of the squad bay to what the Marine Corps does in training and recognized that as a challenge to full gender integration (see more findings on this in section B).

Second, participants commonly expressed the belief that the Marine Corps is attending relatively carefully to logistical issues in gender integration but not enough to cultural issues. One issue raised by the participants is that they don't feel the Marine Corps is giving enough attention to language used in training, terms used by drill instructors, the ways male and female recruits can be pitted against each other, and so on, as suggested by an earlier quote. Additionally, experts noted that the Marine Corps approach to diversity has essentially been that everyone is treated the same; everyone's a Marine. However, they see a consequence of this approach as not recognizing gender as something to value because of the benefits that diversity brings. As a result, they feel that the masculine ideal of the Marine is perpetuated, and it can lead to attitudes geared toward protecting women, benevolent sexism, and misguided beliefs that female Marines

should overwhelmingly have female mentors and leaders. One participant, a civilian researcher who led a major study related to women in combat, noted,

The segregation at the Marine Corps, at that time [with the Series Track], struck me as extreme. Especially because it was something they emphasized in a positive way. They segregated men and women and put women in an all-female chain of command. That was purposeful and the explanation provided at the time was to decrease distractions for everyone.

Several of the experts noted cultural issues in integration that require attention, including the perception that women repeatedly having to prove themselves and that there is thinly veiled hostility toward female Marines in some settings, which can have negative effects on the ability of teams to come together and fight. For example, one female Marine Corps veteran with recruit training experience at Parris Island commented,

The “othering” at boot camp turns into misogyny and assault later on in a woman’s career. A lot of the young female recruits that are signing up are not considered to be at the same caliber as other basically trained Marines. Every room a woman Marine walks into, she has to prove herself, and there is thinly veiled hostility in some quarters. This impacts the ability of teams to come together and fight.

The participants did not see these kinds of cultural issues as exclusive to the Marine Corps among the Military Services, but they did see them as necessary to address alongside the logistical challenges of gender integration.

Third, several of the participants stated that they don’t have a strong sense of how the Marine Corps defines gender integration. This was manifested in a few ways. Some simply had strong understandings of gender integration in other Services but less experience with the Marine Corps. Others have felt in the past as though they had a good sense of this, but they recognize views are changing in the Marine Corps, and they don’t feel confident that their experiences reflect the current thinking in the Marine Corps. Third, some felt that the Marine Corps has not had a consistent enough message on gender integration for them to be able to identify a Marine Corps perspective.

3. Summary: Definitions of Gender Integration

As stated, there was a great deal of variability in responses from participants. Across the interviews, however, two most major themes emerged in definitions of gender integration. The first was that the participants overwhelmingly saw attention to both logistical and cultural factors as necessary for gender integration but worry that the Marine Corps is not focusing enough on the latter. Second, most of the participants saw gender integration at the platoon level as necessary for training to be truly gender integrated, but they did not believe that the Marine Corps shares that perspective.

A shared definition of gender integration is important for many reasons. The concept of integration has been used in many different ways, Congressional directives have not been

explicit in what gender integration means, and a shared understanding is necessary to be able to determine whether any particular model in fact reflects gender integration. Thus, having an agreed upon definition of gender integration that's clear to all stakeholders would have considerable benefits. It would however involve risks as well. Maintaining a vague definition allows latitude that formal definitions do not. If the goal is progress, however, a formal, shared definition would be beneficial, a fact noted by several of the participants, and the discussion here is oriented toward pushing in the direction of a common definition. One female civilian researcher noted the importance of Marine Corps leadership identifying and sharing the definition of gender integration at the highest levels for efforts to be successful: *the process of defining and laying out what integration means must come from the Commandant himself. He can be informed by Training and Education Command but I think in how it's communicated--it needs to come from [the Commandant].*

B. Marine Corps Squad Bays

In a set of initial interviews, the study team did not directly ask about squad bays and the central role they play in training at MCRDs. Instead, questions focused on the goals of basic training, how basic training experience shapes initial experiences as a Marine, about the challenges and benefits of increasing gender integration at basic training, and thoughts about gender-integrated housing (but not squad bays specifically.) All of these topics had the potential to (and did) elicit conversations about squad bays. Then, after the first site visit to MCRD Parris Island, it became clear that there needed to be specific questions for participants about how they viewed the squad bays and their importance, given their central function in Marine Corps recruit training as a combined training and living space. Thus, some participants who were interviewed later in our timeline were asked specifically about squad bays, whereas some early interviewees were asked more abstractly about their views on integrating housing, but not squad bays specifically. However, more of our later interviewees were with participants who had relatively more familiarity with the Marine Corps and specifically with Marine Corps entry-level training (ELT).

The study team understands there are currently legal restrictions (10 U.S.C. § 8431) that require separate housing for male and female recruits. Thus, under current law, male and female recruits cannot sleep in the same squad bays, even if men and women may share housing facilities in ELT training after recruit training and in the fleet. Only one individual brought up "the law" regarding squad bays and sleeping/housing arrangements in basic training. This may mean not all respondents may have been aware of this legal restriction. Alternately, many participants discussed these issues with the study team in terms of ideal or desired practices without limiting their perspective by current constraints. That is, participants may not have mentioned the law constraining sleeping quarters for reasons other than lack of knowledge of it to include lack of agreement with the law.

Participants revealed a mix of perspectives about the role of squad bays in Marine Corps recruit training and fell along a spectrum in their views about integrating squad bays. At one extreme, a few participants expressed strong fears that integration of the bays as sleeping spaces would put female recruits at risk and/or that such an action had the potential to "break" Marine Corps training. Other participants expressed clear and strong support for the more abstract idea of increasing gender integration in housing, but it isn't clear whether they were envisioning the

group quarters of large, open squad bays or more individual, or private living quarters or latrine facilities. In between these extremes, most participants held nuanced views that reflected a tension between anticipated benefits that might accrue with increased integration of some of the training activities that happen within squad bays and the logistical challenges of trying to integrate the spaces given the need for segregation of sleeping and hygiene facilities. Several participants noted the specific challenge that arises in the Marine Corps because the squad bay defines the platoon, which is *the* central organizational training unit with 24/7 supervision during recruit training. In the following sections, views of each of these three sets of participants are detailed in turn.

1. Participants Strongly Favoring Gender Integrated Housing

Those most strongly in favor of integrating housing (in general terms, not necessarily specific to squad bays) relied on the logic of training as you fight, noting that men and women train, work, and fight together in close proximity in the fleet. Approximately a quarter of participants endorsed the view that barriers to gender integration in housing should be removed, with one of these participants having Marine Corps experience, one experience with another Service, and several civilians. These participants referenced the fact that all other training spaces are integrated (e.g., OCS, Service Academies, etc.), but these participants may not be fully informed about legal restrictions on integrating housing quarters in recruit training, for example a female civilian researcher who said,

They already do that in regular units. Don't know why [it] would be different at boot camp...If someone is going to sexually assault someone, it's really not about if [the] floor is all women or all men. It's about the person who's going to perpetrate that kind of violence.

Or another female civilian who had deployed as a researcher with Marine units,

They do it at college, so why can't the Marines do it? That's really overrated as a sensitivity point for people. What's going to happen? It's unlikely there will be wild sex, and unlikely there will be rape. I think it's a red herring.

These strong supporters of fully integrating housing felt early structural separation between men and women in basic training sets the wrong foundation for subsequent training and the fleet, both of which are fully integrated. Rather than treating gender integration as something that can wait to be built into training at later phases, these participants saw gender integration as a fundamental part of what should comprise making a basic Marine (a theme echoed by those who spoke more specifically about squad bays). As one female Marine Corps veteran noted:

There's just so much change that happens at boot camp...There's just a transformation and the Marines pride themselves on that. That's a cornerstone of Marine Corps culture. Marine culture I would argue is much more impactful than Army culture, Air Force... That's what we pride ourselves on... I don't think you can just say like 'Oh well, we'll deal with the integration later', because if you don't have that foundation of integration, it's really hard to tack it

on afterwards because there's just...you build your house, it's like going back to trying to fix something with the foundation after you've already started building the house.

2. Participants Strongly Concerned by Full Squad Bay Integration

Those most fearful of and most strongly concerned by full squad bay integration centered a concern about risks primarily to female recruits, but also to the Marine Corps as a whole. These participants still supported increasing gender integration at recruit training but expressed candid fears about the potential risks of gender integration around the squad bays. Three such participants out of twenty expressed concerns that putting women in close proximity to men in sleeping quarters would place those women at risk of harm, especially given what they saw as current Marine Corps culture. They feared the worst in terms of possible sexual assault or rape that could occur. For example, one male Marine Corps veteran participant with recruit training experience at MCRD Parris Island was very concerned about the safety of women:

Not for it based on what [respondent] knows about Marines. Need a larger cultural shift to make sure female recruits can go through training safely, that they would not face danger from their male counterparts. Would be critical to overall process, but based on current state of USMC, would be very worried about their ability to keep women recruits safe.

Another male Marine Corps veteran participant with extensive experience at both MCRD Parris Island and San Diego expressed similar concerns:

I am deathly afraid of having women in the same squad bay as male DIs. Deathly afraid. Aberdeen just frightens me. It's a matter of when, not if... I am deathly afraid of integrating at the platoon level for potential sexual abuse.

For this particular participant there was a further concern that women are often made into an out-group by men in the Marine Corps, and that mixing women in the squad bays would lead to the “othering” of women as a highly visible out-group who might then be blamed for holding up the platoon, taking too long to get dressed, etc. Continuing the participant’s thought from above:

The second reason is because of maturity level. You are creating the identity as a U.S. Marine, with that identity there needs to be an ‘other.’ Marines use the Army as an other. My concern is that in a platoon of males and females, even if the living space is divided, the males and male DIs would use the fact that it will likely take women longer to take head calls as an excuse. ‘Why do we have to wait for the women, why do we always have to wait for them?’ Even if facilities catch up when recruits are in the field, it takes men less time to make a head call. Women have to take their gear off, unsling their rifles, drop their trousers—it just takes longer. The maturity level of DIs would not handle that in a mature manner. There’s always going to be the potential of male and female recruits having sexual relationships. Army, Navy, Air Force have that all the time, you will never strip that out—you have to figure out how to manage it. I’m concerned that females will be discriminated against if they are within the [same] platoon [as men].

Concerns about the impact of integrated squad bays on the Marine Corps came down to whether the intimacy and candidness of moments like impromptu senior drill instructor (SDI) conversations would decline in a mixed-gender context, and whether possible cultural change implied by squad bay integration would be implemented poorly or too quickly, and in doing so would “break” something vital about the Corps’ recruit training. For example, another male Marine Corps veteran with extensive experience at both MCRD Parris Island and San Diego noted:

Core values training could be integrated to some degree but I’m not sure how candid and open recruits will be with other recruits not part of their platoon. The whole purpose is to get the SDI to say ‘let me tell you about when I got drunk...and this is not a good thing.’ Or ‘I’m a black Marine and this happened to me...’ They can be very candid discussions. I’m not sure if they are integrated if that candidness is going to occur... If the SDI, if they had a male SDI standing next to a female SDI or DI and they talked about topics and it showed a mutual respect, both of them standing there as equals. That can have a powerful effect on young men. And it can be positive for young women to be able to ask someone their SDI respects what it will be like for them out there. I think integrated would be good, but not sure about being integrated with the recruits.

3. *Participants Favoring Increased Integration that Falls Short of Sleeping in the Same Spaces*

The majority of participants held views favoring more gender integration in recruit training, including some of the current squad bay functions, but fell short of advocating for shared sleeping and hygiene spaces. These more nuanced takes sometimes reflected having more direct experience with or knowledge of the Marine Corps (i.e. were themselves former Marines) and/or the MCRDs (with the two notable exceptions who expressed strong fears above) who had greater understanding of the logistics of how the squad bays function. They also reflected individuals who spoke at greater length and detail about the mix of benefits and challenges of integrating the squad bay and who grappled with the tensions between them in their responses. Because the sample of participants was selected in part with the intent of identifying those with views different than Marine Corps perspectives, these participants still held supportive views of gender integration, with some supporting integration down to the lowest levels including platoon-level, even if that mean sleeping separately from the training platoon.

4. *Summary: Marine Corps Squad Bays and Gender Integration*

In conclusion, some participants favored full integration of squad bays, but given laws, that is moot in many respects. Others were strongly opposed, including some with extensive experience with recruit training. Most, a group that also included participants who had extensive experience with Marine Corps recruit training, favored greater integration that falls short of men and women sleeping in the same spaces or sharing latrines. They see lack of integration of training and other activities that happen in squad bays as a missed opportunity to create a more integrated environment. They favor men and women continuing to sleep in separate spaces but coming together as much as possible otherwise, including squad bay activities and training other than sleeping and hygiene.

C. Drill Instructors

Interview participants all discussed the crucial role that drill instructors play in the training of recruits. They overwhelmingly talked about the importance of training drill instructors for mixed-gender environments to, for example, be trained to not use language that represents women as inferior to men. They also discussed the importance of carefully selecting drill instructors who will lead integrated training environment. A particular issue that was probed during interviews and that also came up frequently without focus from the study team was the issue of whether recruits should have mixed-gender drill instructor teams. All participants expressed strong support for both male and female drill instructors training both male and female recruits, and in fact they saw such arrangements as crucial for the success of gender integration. Discussed below are particular challenges and opportunities that participants identified related to drill instructors, especially with reference to mixed-gender drill instructor teams.

Several participants discussed language used by drill instructors that might lead recruits to view female recruits as inferior to male recruits. Participants noted that drill instructors have often been strong advocates for gender integration and gender equity, but also that drill instructors do not tend to have social science educations, training in gendered language and its consequences, and not always a full understanding of what sexual harassment really is. Participants thus saw drill instructor training as crucial; that drill instructors be trained to not use gendered language, to identify biases, and to recognize the value of gender integration.

Participants also noted that a mixed-gender training environment won't feel normal to many drill instructors, that both male and female instructors will have biases, that male drill instructors might be afraid to work with female recruits out of fear of being accused of conduct in which they did not engage, and problems of drill instructors potentially becoming personally involved with recruits. Participants also saw solutions to these challenges that included mixed-gender drill instructor teams providing the opportunity to police the emergence of any potential inappropriate relationships, integrating awareness of the issues into drill instructor trainings and orientations, and just time itself overcoming some of the issues (e.g., a mixed-gender environment not feeling normal) as mixed-gender training environments become more familiar.

Most participants discussed the value of having mixed-gender drill instructor teams. Our participants felt that separating recruits by gender, as well as separating drill instructors by gender according to the recruits they work with, leads to different training experiences for recruits. In their view, mixed-gender drill instructor teams would have the benefits of both male and female recruits being able to look up to both men and women as leaders, recruits seeing capable women performing at a high level, recruits being in environments more similar to what they see in the fleet, and a role modeling of the notion of men and women fighting together. One male Marine Corps veteran participant said:

I'm totally supportive of mixed-gender DI teams because that's what they're going to see in the fleet. Male and female officer leadership. It's part of the acculturation process. You want the most realism for what will be reflected in their experience once they're in the Fleet Marine Force.

Another male Marine Corps veteran with recruit training experience at Parris Island said:

Mixed-gender drill instructor teams are absolutely necessary. That's where you start. You aren't going to have the numbers of female recruits to successfully manage integration. But you have enough women in the Marines to have female DIs. And that's what you need. You need the role models to become important.

Participants noted several additional benefits of mixed-gender drill instructor teams. They noted especially that female drill instructors will have positive consequences for male recruits in learning to respond to female authority and having role models who are women. Several participants noted that need for recruits to get used to the idea that they have to follow orders from both women and men, and that learning this is especially important for male recruits. Participants also saw benefits in mixed-gender drill instructor teams in recruits seeing men and women having positive working relationships with each other and in profound positive consequences resulting from seeing male and female drill instructors standing side by side and talking as equals. Participants believe there tends to be an underlying myth perpetuated in the Military Services that women can't lead men and vice versa, and that mixed-gender drill instructor teams would be an important step in overcoming this.

1. Summary: Drill Instructors and Gender Integration

Participants identified a number of potential considerations related to drill instructors as training becomes more gender integrated. These include language sometimes used by drill instructors that might intentionally or unintentionally degrade women, that drill instructors might have biases that can interfere with the benefits of integration, that male instructors might be afraid to work with female recruits, and that problems could arise from personal involvement between drill instructors and recruits. Participants saw ways to overcome these challenges in careful training and orientations for drill instructors that teach them consequences of gendered language and the benefits of gender integration. Participants also thought mixed-gender drill instructor teams would overcome some of these challenges, such as opposite gender instructors being in a position to identify the development of inappropriate relationships. Participants in fact saw several positive benefits of mixed-gender drill instructor teams. These included role modeling positive relationships between men and women, recruits learning to respond to leaders of both genders, recruits seeing women capable of performing at high levels, and more.

D. Standards

Training standards was a topic that emerged repeatedly in participant interviews. Although participants held a range of perspectives on consequences of mixed-gender training for standards, and perceptions about standards, they all saw it as an important issue. The participants saw no panaceas that would resolve issues around standards that would be introduced or exacerbated by gender integrated training, but they did identify a number of issues. A challenge that participants identified is in perceptions of differences in standards between female and male recruits. The participants expressed that some believe a consequence of gender-integrated training will be that standards slip and training will be degraded, and that gender integration will compromise the Marine Corps mission. Most participants saw this as more a communication and

perception problem than an actual problem, but some also saw slipping standards as a real concern. In views that it's a problem of perception, participants expressed both that it's a problem that comes out of public perceptions and that it can be a belief held in the Marine Corps as a basis for resisting gender-integrated training. In views that it's an actual problem that will result from gender-integrated training, participants noted that slipping standards would undo the good that gender integrated training will accomplish. Reflecting the view that it's a problem of perceptions, one female civilian researcher said:

People are worried that [gender integrated training] will lead to standards being lowered. That the group of recruits that included women will lead to different experiences in the units. Some pockets of civilian populations believe that, and it will then lead to a weaker service... You have to get rid of those initial perceptions so you can create a more gender-integrated training process.

Some participants also, however, had real concerns about effects of gender integration on standards. One, a female Marine Corps veteran with recruit training experience at Parris Island said:

Once standards slip, you are going to undo all of the good you are trying to accomplish. One of the things that makes integrated training meaningful is that female colleagues are doing the same thing as their male colleagues. We will break some of the female recruits coming in, but that is what the Marine Corps does.

In general, participants noted that there's always tension, both in the Marine Corps and in the public more broadly, about physical standards and how they differ for women and men. Some participants expressed worry about injuries to women becoming more likely as they attempt to keep up with men in training. Participants also expressed worry about male recruits being given flack if they go through training with female recruits on an assumption that their own training was somehow "easier."

Participants were relatively consistent in the belief that there is a need for continual critical assessment of what combat fitness standards are valid, linking standards to requirements. They also proposed a number of other potential solutions to challenges related to standards. These include a need to communicate that different types of strengths lead to differences in what people can do, a need to recruit women who are in strong physical shape, tailoring fitness programs in ways that allow women to excel, intentional training of women to develop particular muscles, the development of standards based on the human body in general rather than men's bodies, and longer, slower training periods for women relative to men.

The dominant view among participants was that where it really counts, standards between male and female recruits are essentially the same, and a mixed-gender training environment would show this in positive ways. As one male Marine Corps veteran said:

[The concern about standards] is a false equivalency. If women were less capable, then we would have seen that [in combat] in the last 20 years. The evidence isn't there.

Participants also expressed the belief that higher expectations on women that result from gender integrated training will lead to higher performance among women. They also uniformly saw gender integrated training as embodying the maxim that Marines should train as they fight: women and men fight alongside each other, they should train as they fight, and standards should reflect that. Additionally, participants expressed the view that more gender integrated training would minimize ways that female and male recruits are treated differently in training now; for example, one participant stated that women are treated hands off in training and not afforded the same discipline as men, a situation that more gender integration could help resolve in the participant's view.

E. Physical Differences by Gender

Participants noted a number of issues related to physical differences between women and men. These included differences in strength between women and men, different dietary needs, injury concerns, and perceptions that women and men training together will slow men down.

A consistent theme that emerged related to physical differences was that many participants believed that female recruits can complete all or almost all of the same activities as male recruits, but the process by which they get there might need to be different. Proposals included separating recruits by gender for initial physical training so that women are at full capacity entering training with men, separating female and male recruits for physical training only but then being fully integrated for all military training, drill instructors pairing relatively weaker female recruits with stronger female recruits, intentionally ordering activities in ways that allow women longer time to recover and lower likelihoods of injury, performing fitness tests separately so that recruits don't see male and female recruits being held to different performance standards, and planning physical training in ways that allow women to develop necessary strengths (e.g., performing pull-ups). One male Marine Corps veteran with extensive experience with recruit training at both MCRDs said:

Yes, let them pick up the pace, and add more weight to the pack... Women can do anything a man can do except instantaneous bursts of power, women can train up to it... The research and studies are there. Women can do anything a man can do, but she has to train up to it.

Participants also frequently expressed a belief that the training environment and requirements are tailored to men and men's bodies. Participants noted that standards tend to showcase men's strengths and that diets, equipment, and uniforms tend to be tailored to men's bodies. They believed that training requirements should be structured to highlight women's strengths (e.g., flexibility), that recent combat experiences should play a more central role in informing training (leading in their view, for example, to less emphasis on things like long hikes with heavy equipment), and that training requirements should be explained in terms of biological differences and control for body type. One female civilian researcher said:

The physical fitness tests favor men because they emphasize upper body strength. And women are hurt by the run by not running faster. Women should have shorter runs and longer time to show lung capacity. They need to showcase women's strengths. Lower

body strength. Do things that show women do them incredibly well. Without that, it's always going to be a comparison that women don't do as well, they're not as strong, they're not as fast. They need bona fide requirements.

In general, participants felt that despite biological differences, female and male recruits can be trained to perform the same activities. For example, participants noted that not just female recruits often need extra physical training at the beginning of recruit training, but male recruits as well. They also noted that although women and men can complete the same tasks, they sometimes need to do it in different ways and using different strengths. In general, the participants felt that women can be trained up to perform anything men can do, except tasks such as carrying heavy weight that require upper body strength, the utility of which participants thought needs questioning.

F. Stakeholders

Participants discussed several stakeholder groups who they believe are crucial to the success of gender integration, to include recruits, the general public, drill instructors, and Marine Corps leadership. Several participants noted how crucial it is that gender integration efforts be top down with strong support from senior leadership because there will be resistance from enlisted personnel, the officer ranks, and retired Marine Corps personnel. Others noted that it must be both top-down and bottom-up. One female civilian researcher said:

There is a larger cultural problem in which women are asked to exist with men. Cultural elements come through in recruiting and training. It comes through in language of anyone who has power over people coming into an institution...[It] requires a larger rethinking of what basic training is. They can't segregate by gender and then have people sit down for a talk on how they should not discriminate by gender. But just adding women and mixing might lead to perceptions of gender inclusion without attending to culture too.

In the case of senior Marine Corps leadership, participants stressed that senior leadership must be on board in thinking that further gender integration will not be harmful to the Marine Corps. In addition to leadership seeing integration as important, participants noted that top leadership needs to *say* how important it is, to stress it publicly, and to not privately say something different: they have to be convinced, and work to convince others, that the result of further gender integration will be a better Marine Corps. Otherwise, participants believe the efforts are unlikely to be successful. More than one participant gave the perspective that platoon cohesion being a potential barrier to successful gender integration is not a valid concern but that Marine leadership needs to believe that and stress it to others. They also believed that in promoting gender integration, leadership needs to work to identify people who will be problems early and remove them from training responsibilities.

In terms of public perceptions, participants noted that a sophisticated public information campaign will be necessary to sell what is happening as an elite process that will produce a better Marine Corps. Participants argued that successful integration will require Marine leaders to think about both their own views and public views, requiring a complex process of implementation.

Public perceptions include not just the general public but also the retired military community, many of whom participants noted believe that gender integration is a change imposed from the outside that will reduce effectiveness and readiness, that it will make the Marine Corps “softer.” Participants noted that changing these beliefs will take time, but it will happen, and it will require the attention of leadership. A male Marine Corps veteran said:

It's the history of the Marines, and by that I mean you have this weird dynamic. You have these leaders who grew up in a Corps that for good or bad applied policies that limited the inclusion of women in all spheres of the Marine Corps. And at the same time, new Marines are being made who grew up in a totally different environment. A more progressive environment when it comes to differences and issues of equity and inclusion. And then add a system that reinforces values and traditions that do away with those things. They don't have to change the system, but they have to leverage the system to harness gender to its benefit.

As discussed above, participants also noted the importance of drill instructors to the effort. They stressed that it was crucial that drill instructors be carefully chosen. One participant recommended an approach that solicits only volunteer drill instructors for what is described as an extraordinary effort. In general, participants felt that the Marine Corps needs to actively work to overcome beliefs in the fleet, among drill instructors and others, that women are coddled and held to lower standards than men. They saw gender equality as a value that must be inculcated at training and stressed throughout the fleet.

G. Models of Gender Integration

In our participants' discussions of gender integration, there was a tension that came through repeatedly, one driven by the gender differences in numbers of recruits and drill instructors. The participants don't want some recruits to have gender-integrated training experiences and others gender-segregated experiences, they want female recruits to be surrounded by sufficient numbers of other female recruits for support, they want all male recruits to train alongside female recruits, they don't want female recruits to be spread too thin, and they want all recruits to have both male and female drill instructors playing central roles in their training. Numbers of course do not allow all of these objectives to be realized, and participants recognized that tension.

One point where participants expressed a range of perspectives was essentially whether it's more important that all male recruits train alongside female recruits in meaningful ways or that all female recruits are training alongside sufficient numbers of other female recruits (as well as how many is sufficient). Multiple participants expressed the view that every male recruit should train closely with at least one female recruit. Some said this could be achieved by not keeping the same people together all the time during the training cycle, and others through having at least one female recruit in every platoon. There was a sense among these participants that having some companies or platoons integrated and others not, will have negative consequences. One male Marine Corps veteran participant said:

Neither scenario is ideal, but I would say they should get at least one female in each platoon. Get recruits at the initial intake of the process socialized into that dynamic.

Having some integrated and some not integrated isn't productive, and its bad optics. You don't want a culture where there's you went through an integrated platoon and you didn't.

Other participants felt that there should be some critical mass of female recruits in units that include any female recruits. Some said that the Marine Corps must avoid female recruits being spread too thin, that having just one or two women in training groups will lead to problems.

In interviews, the study team probed on whether participants thought 4-and-2 or 5-and-1 Integrated Company models would lead to better outcomes. Participants by and large did not have perspectives on which they thought was preferable, some because they did not feel they were well enough informed about particulars of the models, and others because they felt both approaches were problematic. In particular, some participants believed that for integration to be successful, it must happen at the platoon level. Some went as far as to say that if integration isn't at the platoon level, it's not integration, and anything short of it will do damage. A small number of participants did not see platoon integration as essential and rather saw value in an approach that takes incremental steps toward full gender integration.

Many participants sidestepped the question of which model might be better by noting steps that can be taken toward integration and can be part of any model. These included recommending mixed-gender time in professional and social environments, making chow halls and squad bays better equipped for mixed-gender environments, having recruits work together across genders in situations where they earn mutual respect, having opposite gender drill instructors do things such as leading recruits back from chapel, and integrating core values training to every extent possible. Some participants more directly proposed alternatives to the models. Some said the Marine Corps needs to target more female recruits to get past the issues (something the study team knows poses its own challenges), and some saw the discussion of the various models reflecting a bias that women and men are so different that there must be a certain number of women present before introducing them to male training groups. One female Marine Corps veteran said:

The way they are conceptualizing the models reveals a huge institutional bias that exists. The bias is that there has to be X amount of women in order to introduce women in at all...the way the models are being conceived is that there is something so intrinsically different about women Marines that there has to be a certain number of them to introduce any of them.

H. Marine Corps Culture

Participants understood that the Marine Corps has a strong and unique culture that differentiates it from other Services. Culture can mean many things and can capture many aspects of the Marine Corps experience, and participants thus touched on several elements of culture, these included: a culture of masculinity, physical strength, primacy of combat arms, and toughness as key to the identity and organization of the Marine Corps. Some participants noted that femininity and even women themselves can be at odds with the dominant culture of masculinity and physical prowess. One female Marine Corps veteran said:

But the enlisted recruit experience, the way the Marine Corps builds Marines, it's like the gender differences are "on steroids." It's way more intense at the enlisted level, especially in combat arms... There's always this comparison of toughness measured by masculine ideals. This starts intensely on Day 1 of enlisted recruit training.

Participants saw this as leading to women being treated as less than men and as "others" in the Marine Corps. Participants also saw little things that highlight elements of culture such as masculinity as being important and accumulating during training (such as in gender separation and associated messages). Additionally, because loyalty is another important element of Marine culture, participants noted that few speak up about issues related to negative treatment of women, sometimes because they don't believe leaders in fact want change. There was also a sense among participants that women tend to be seen as a threat to the culture because it's a culture of masculinity, with the result being biases against women at all levels.

Participants overwhelmingly noted how strong the Marine Corps culture is. They also noted that a consequence of there being a strong culture is that it can be changed if there is a will and accountability. The Marine Corps relies on culture to train, and the Marine Corps knows best how to inculcate a culture. One female civilian researcher said:

People notice claims that the USMC is first to fight and last on every progressive issue. Some see an opportunity to say first to fight and first to get this right.

In general, participants believed that segregating men and women at recruit training is an origin of views that devalue women in the Marine Corps, and also that it reinforces those views. One participant, a former Marine, said "*Women have to learn to be just the opposite of who are to fit the culture.*" The biggest challenge, according to several participants, will be inculcating a brand new culture to incoming recruits while at the same time attempting to manage (or ideally change) the mindsets of current Marines who have grown up as Marines in a culture that devalues women. To many of the participants, this will involve focusing on how integration will be helpful to the Marines and build a stronger Marine Corps. To successfully communicate gender equity as a core value of the Marine Corps, however, it must in fact be one. One male veteran from another Service with expertise in gender integration and leadership noted:

Because there's so much tradition, history, and there's so much culture... there's a lot of social and societal pressure perceived in that, pressures to hold the line on the culture regarding what it means to be a Marine. In a very misogynistical way, this is the threat. If women are completely integrated, that is some sort of a huge threat to the culture.

Thus, according to our participants, a change in Marine Corps culture is necessary to fully recognize the contributions of women and to value gender equality. As one female civilian researcher said:

It would make it easier to have one Marine Corps. It's a question of how important it is to have one Marine Corps. For a lot of history, women Marines were in a totally separate Marine Corps. So...how important is it to have one Marine Corps?

I. Demographics of the Marine Corps

Participants discussed a number of themes related to the demographics of recruits with respect to gender representation, and particularly concerns about logistics with the relatively low number of women in the Marine Corps. As discussed above, participants had different perspectives on whether female recruits should be spread out to maximize the number of male recruits who train alongside women versus making sure female recruits are surrounded by enough other female recruits to have proper support in place. There were also divergent views around the idea of having a critical mass of women in place before integrating training groups, with some feeling it is necessary in order to give women safer spaces for entry. One male civilian researcher said:

What they need to do is avoid the case of there only being one woman in a unit. The services have learned that you need more than one, and preferably have women in units in which women are in leadership positions. Even in all-male units, they should have female drill instructors and female NCO's [non-commissioned officers], but they don't want to spread female recruits too thin.

Other participants felt this perspective perpetuated a harmful stereotype that women need other women to be able to succeed. Participants with this view expressed that a belief that women need to be surrounded by other women sets up an unrealistic experience in that the female recruits will likely spend their Marine careers with relatively few women around them. Additionally, some participants discussed how the limited number of women overall in the Marine Corps puts a strain on women who serve as drill instructors, and how the drill instructor job fits with other MOS obligations and family life.

Although participants expressed different perspectives on how women should be represented in training, they all recognized that it's a complex issue without easy solutions. By and large, participants were not willing to work with an assumption that female representation in the Marine Corps must stay at about 10 percent.⁵⁵ They thought it was necessary for the Corps to recruit more women, to create better models of gender integrated training, and to ease the pressures on the female drill instructor pool. One female civilian participant said:

We need women. There's increased reliance on women. We can't afford to take off 50 percent of the population and say no. There are things that both men and women can contribute. The military is growing in terms of the skills needed, so let's not shut off any part of the population. We need them. Women might on average be less interested, but let's welcome them.

Participants noted that as long as the Marine Corps is about 90 percent men and 10 percent women, there will always be male-only spaces and always be pressures on women who are drill instructors. Participants also noted that women make up a higher percentage of the population eligible for the Marine Corps than do men and that increasing the number of women recruited would increase the quality of the force. Although participants felt that 10 percent women is too

⁵⁵ Currently, women comprise 8.9 percent of the active-duty personnel in the Marine Corps (Department of Defense, 2021).

low, most did not have a magic number. One did note from the research literature that getting to 15 percent women should have significant positive returns.

J. Overall Opportunities and Challenges

The challenges and opportunities that participants noted with respect to the themes above almost all cut across multiple of the themes. For example, a belief that male and female recruits carrying out physical fitness together will slow down runs for men has implications not only for training models but also for standards, physical differences between genders, and other themes. To capture overlaps of this type, the overall opportunities and challenges that participants saw as being associated with increased gender integration in general are presented below.

1. Opportunities for and Benefits of Gender Integration

Participants saw a number of opportunities and benefits to increased gender integration. These included for the Marine Corps as a whole, for women in the Marine Corps, and for men in the Marine Corps. For the Marine Corps in general, participants noted that future military needs will extend more and more beyond hand-to-hand combat and require cultural competencies and similar skills that women add. Along with the need for more competencies, they noted that recruiting is getting harder, and fewer men are eligible, and so the Marine Corps is going to increasingly need women. And they discussed several benefits of an integrated training environment. These include the value of integrating women at day one to increase force readiness, Marine recruits learning respect for others early in the process, training as they fight, building cohesion across genders from the start of training, and building a more capable and cohesive force. As one male civilian participant said, “*The battlefield is not a good place for a social experiment.*” A male veteran of another Service said:

You can't get away from the idea that you must train as you fight. Reality will force us into that. If we're forced to produce hard, event-based evidence, the preponderance of evidence would be on side of men and women fighting together.

Participants believed that more gender integration in training would normalize mixed-gender relations in the Marine Corps and increase performance for both women and men. In general, they felt that the force will be more effective when it is integrated better and where practices match the espoused gender equality values of the Marine Corps. They also felt that more gender integration would better reflect the gender-integrated society from which recruits come.

Benefits for women in the Marine Corps in particular that participants saw resulting from more gender integration of training included the value of women starting from day one in being treated equally, women being better prepared for later residing in units that are integrated, and reducing harmful stereotypes of women in the Marine Corps, particularly that there will be less fear and mistrust of female colleagues among men if they have gone through training with women. When training is gender-segregated, participants felt that women constantly have to prove themselves in that they are seen as not qualified because it is believed they went through softer training with lower standards. More gender-integrated training should help overcome these issues. Ultimately,

participants felt that more gender-integrated training would help in the retention of female Marines.

For men in the Marine Corps, participants believed that more gender-integrated training would instill messages that women can do the same thing, and if they can't, they don't get to complete recruit training. Men, like women, would have to learn to work in gender-integrated environments from the day they enter the Marine Corps, better preparing them for the fleet. One female Marine Corps veteran said:

My big take-away is that the lessons we learn are categorized, compartmentalized, built layer upon layer. The jokes that are made, the way even the uniform is presented and talked about, these things start on Day 1, the underlying culture begins on Day 1. Even the fact that we separate men from women speaks loud and clear, and goes above and beyond all else we might say or do.

In general, participants felt that the most major benefits to more gender-integration would be more for men than for women. They expressed that men who train alongside women have fewer prejudices toward women, know better how to work with women, and are less likely to later engage in sexual misconduct.

2. Challenges of Gender Integration

Participants identified several challenges related to training become more gender integrated. These included concerns about potential increased incidents of sexual misconduct during training. They expressed concerns about sexual misconduct both between recruits and between drill instructors and recruits. One participant noted that male drill instructions might not be used to attention from female recruits, but also that the presence of female drill instructors would help spot potential issues before they become problematic because the female drill instructors have seen female recruits when they are under stress. Participants also expressed concern that if any sexual infractions occur during gender integration, the existence of these infractions will become weaponized to justify re-segregation. In general, participants noted that more gender integration might present more opportunities for sexual misconduct, at least initially, just by virtue of men and women being put closer together in training.

Participants also discussed cultural challenges to increased gender integration. These included that changes need to go beyond just increasing the extent to which male and female recruits train alongside each other. Among the issues that participants feel need attention are the vetting and probing of incoming male recruits and drill instructors for biases along with changes to imagery, uniforms, gear, ditties, and so on. Participants saw it as especially important that there are more women in leadership positions, particularly as drill instructors. Participants also stressed the importance of convincing stakeholders that gender integration is an important task and actively working to overcome the perception that greater integration will dilute readiness and effectiveness and lead to a Marine Corps that is not as tough. Participants noted challenges in the need to get men in the Marine Corps past ideas of benevolent sexism, and of highlighting the history of women in the Marine Corps even though it's relatively limited. Overall, participants saw a major challenge facing the Marine Corps to instilling a will to produce more gender

integration, and to instill it among all groups to include current and former Marines. For gender integration to be successful, participants believe there must be a perception that the risk is worth the return, that engaging in the activity is vitally important.

Participants saw logistical challenges associated with increases gender integration. This chapter has noted several times the challenges associated with the numbers of women relative to men in the Marine Corps. Participants also identified issues with the drill instructor pipeline and challenges associated with having enough female drill instructors. Participants noted that drill instructor opportunities come at times, especially for women, that tend to be associated with high family demands. Many participants discussed the centrality of the squad bay for training, alongside legal requirements for keeping sleeping and hygiene separated. They did not see easy solutions to these issues, but they recognized that truly integrated training environments would involve male and female recruits completing at least some of the activities currently confined to the squad bay together. Similarly, participants did not see easy solutions to issues associated with women being tokenized in spaces dominated by men, but they thought that serious efforts at greater gender integration must attend to them carefully.

Chapter 6: Army, Air Force, Navy, and Coast Guard Recruit Training and Gender Integration

Bottom Line Up Front

- Army, Air Force, Navy, and Coast Guard respondents defined gender-integrated training as the integration of male and female recruits in all training activities but sleeping and showering.
- Each Service executes gender-integrated recruit training at the lowest unit level. Approaches vary based on Service size, number of training locations, proportion of male and female enlistments, and process for integration.
- The Army, Air Force, Navy, and Coast Guard have been training male and female recruits with mixed-gender drill instructor teams for decades.
- Service leaders, training cadre, and drill instructors describe many benefits to gender-integrated training for recruits and drill instructors. Primary themes include learning how to work in a gender-integrated environment, dispelling gender biases and stereotypes, diversity of thought, professional development, and exposure to leaders of both genders.
- Challenges of gender-integrated training identified include cultural change in a male-dominated institution, romantic feelings among recruits that can lead to distractions in training, considerations around sexual harassment and sexual assault, gender hygiene and self-care differences, policy guidance and communication, and facilities or infrastructure.
- The study team identified nine best practices for gender integration in recruit training from the other Services. These included mixed-gender drill instructor teams, timing and structure of unit-level integration, regular evaluation processes, training events designed around task cohesion, accountability standards, primary prevention-based education on sexual harassment and sexual assault, clear guidance for recruit conduct, and gender-neutral identifiers for drill instructors.

The Marine Corps requested a study providing objective, data-driven alternate models of gender integration and recommendations for policy change for recruit training. As part of this effort, the Marine Corps desired original data collection examining gender-integrated training practices and policies for the Army, Navy, Air Force, and Coast Guard.⁵⁶ The study team conducted social science research at select recruit training locations for each Service, examining their approach to gender-integrated recruit training and identifying best practices to inform the team's development of recommendations and proposed alternate models for gender integration at Marine Corps recruit training. Data collection methods for each Service included extensive ethnographic observations at recruit training sites, a recruit survey, focus groups with recruits, interviews with installation-level training cadre and drill instructors, and interviews with Service leaders responsible for training doctrine and policies. For additional information about methodology, see chapter 3.

⁵⁶ The U.S. Space Force is outside the scope of this study.

At each Service’s recruit training site, the study team sought to understand daily routine and practice, use of spaces and facilities, team building and cohesion, and how gender integration informs the training environment and experience. Information from this chapter is primarily drawn from ethnographic observations, interviews (with training cadre, drill instructors, and Service leaders), and primary documents/materials including Service policies, training curriculum, recruit knowledge handbooks, and more.⁵⁷ A more extensive treatment of the drill instructor perspective and experience appears in chapter 7. While some quotes from recruits are presented in this chapter, their perspectives and experiences are covered in greater detail in chapter 9.

This chapter presents an overview of the purposes of basic training for the other Services; an analysis of the definition of gender integration in recruit training; detailed descriptions of how the Army, Air Force, Navy, and Coast Guard execute gender-integrated recruit training; and reported benefits and challenges of gender-integrated training. The chapter concludes with best practices for gender integration at recruit training, identified by the study team.

A. Service-Specific Terms for Recruit Training

Each Service has its own language and terms for basic training, recruits, drill instructors, and the lowest unit level (see table 6.1). In this chapter, the study team uses “recruit” and “recruit training” to broadly reference the initial training of enlisted personnel across the Services, “drill instructor” and “training cadre” to broadly reference those in charge of managing and delivering recruit training at the installation, and “fleet” to describe Service members in operational forces or positions beyond their initial entry-level training. Service-specific language is used in sentences directly referencing one Service.

Table 6.1. Service-Specific Names for Basic Training, Recruits, Platoon, and Drill Instructors

Service	Basic Training Name	Recruit Equivalent Title	Drill Instructor Equivalent Title	Platoon Equivalent Term
Marine Corps	recruit training	recruit	drill instructor	platoon
Army	Basic Combat Training (BCT)	trainee	drill sergeant	platoon
Air Force	Basic Military Training (BMT)	trainee	military training instructor (MTI)	flight
Navy	boot camp or recruit training	recruit	recruit division commander (RDC)	division

⁵⁷ The study team uses limited identifiers to describe study participants; identifiers include gender, rank, Service affiliation, and category of participant (Service leader, training cadre, or instructor). Because the combination of these traits may identify some participants, the study team sometimes limits the use of identifiers to protect their confidentiality while maintaining as much context as possible about their position or perspective. Quotations from drill instructors do not identify senior drill instructors to further protect participants’ confidentiality and guard against identifiability. Direct quotations featured in this chapter from ethnographic observations were captured verbatim in notes by study team members.

Coast Guard	recruit training	recruit	company commander (CC)	company
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B. The Purpose of Basic Training

Each Service is tasked with turning civilians into basically trained members of their respective institutions, preparing them for future training and, ultimately, their service to the Nation. Recruits from each Service are trained for the unique mission set for their Service branch (DoD, n.d.b) and inculcated with Service-specific core values, culture, and social norms aligning to that mission:

- **The Army** is the oldest and largest U.S. Service branch, responsible for land dominance and ground forces. Army core values are loyalty, duty, respect, selfless service, honor, integrity, and personal courage.
- **The Navy** is a forward-deployed maritime service protecting America at sea. Navy core values are honor, courage, and commitment.
- **The Marine Corps** is an expeditionary force maintaining amphibious and ground units ready for contingency and combat operations. Marine Corps core values are honor, courage, and commitment.⁵⁸
- **The Air Force** provides ready, rapid air power. Air Force core values are integrity first, service before self, and excellence in all we do.⁵⁹
- **The Coast Guard** delivers law and maritime safety enforcement, marine and environmental protection, and military naval support.⁶⁰ Coast Guard core values are honor, respect, and devotion to duty.

The Services use similar language to describe the transformation process whereby civilians are imbued with Service values and equipped with the basic skills and knowledge needed for success in their careers. A Navy Service leader describes this shared approach to basic training:

So the Navy boot camp, Marine Corps, Air Force, Army, Coast Guard ... I mean, we all basically do the same thing in transforming civilians into Sailors for us, Marines, Soldiers, et cetera. ... I mean, we may be training for different missions, we wear different uniforms, but a lot of the concepts are the same. You're trying to transform those civilians into serving each branch of our Service.

All Services' basic training emphasizes similar aspects, including physical fitness, practical skills, intangible value internalization and adherence, discipline, and knowledge. The Services also use similar tools in the training process, such as classes, physical training sessions, skill

⁵⁸ The Marine Corps is a component of the Department of the Navy.

⁵⁹ The Space Force is a component of the Department of the Air Force conducting global space operations and space capabilities. Space Force core values are character, connection, commitment, and courage. The Space Force was outside the scope of this study.

⁶⁰ The Coast Guard is part of the Department of Homeland Security during peacetime and operates under the Department of the Navy during times of war.

obstacles, weapon ranges, ceremonies and rituals, and care of self and space. Instructors and other training cadre for all Services are essential to shaping, mentoring, and molding recruits in the basic training process.

While the Services share fundamental tenets and tools of the basic training process, differences emerge in what skills, values, and processes are most important to each Service. In observations of each Service's basic training, the tangible and cultural emphases of training reveal institutional beliefs and priorities about what turns a civilian into a basic Soldier, Sailor, Coast Guardsman, or Airman. A high-level summary of each Service's unique emphasis in basic training is provided below:

- **U.S. Army BCT:** Army BCT emphasizes trainee responsibility for self, peer, and process, as displayed in their morning routines, trainee leadership duties, and individual platoon responsibilities. Army BCT also stresses teamwork through its competition structure, internal team motivation and encouragement practices, and obstacle course guidelines.
- **U.S. Navy Recruit Training:** The Navy's recruit training emphasizes teamwork and collective responsibility through recruit leadership (including a chain of command structure) and its development of practical skills (including line handling, firefighting, first aid, and damage control). Navy recruit training also prioritizes the ability to navigate stressful and high-pressure situations through Warrior Toughness mindfulness training tools and promotes attention to detail and vigilance through inspection procedures, drill, and watch standing.
- **U.S. Coast Guard Recruit Training:** The Coast Guard emphasizes accountability for self and to others, as displayed in its night watch routine, recruit leadership responsibilities, and competition structure. The Coast Guard also stresses personal ownership of individual transformation and teamwork through the professional distance of the company commander relationship.
- **U.S. Air Force BMT:** Air Force BMT emphasizes professional comportment and appearance. The Air Force invests much time in developing attention to detail (through drill and uniform and residential living space care) and the intangibles of self-motivation and peer responsibility (through Sunday trainee-led time, "What Now, Airman?" classes, and flight commander sessions).

Following graduation from recruit training, basically trained service members from each Service take different paths to their first assignment. The Coast Guard stands alone in that almost all newly pinned Coast Guardsmen head directly to the fleet for their first duty assignments following recruit training. Recruits graduating from Army, Navy, and Air Force basic training complete their military occupational specialty (MOS) training before their first assignment; MOS training for every Service branch is gender integrated. In comparison, the Marine Corps's entry-level training pipeline is unique in that every basically trained Marine attends the School of Infantry (SOI East or SOI West) for additional training. Marines in infantry occupations are assigned to the Infantry Training Battalion (ITB) at one of the SOIs for their MOS training.

Marines with a noninfantry MOS attend Marine Combat Training at the SOI East or SOI West after recruit training, followed by specialized training at their MOS school before they are assigned to their first unit in the fleet.

C. Definition of Gender Integration in Recruit Training

How each Service defines and conceptualizes gender integration shapes their institutional approach to integrating male and female recruits for recruit training. In interviews with Service leadership, training cadre, and instructors, the study team asked, “How does your Service define gender integration in recruit training?”

It was not uncommon for respondents⁶¹ across Services and at all levels to say, “I don’t know,” express doubts about whether their Service had an official definition, or be reluctant to respond without referencing policy or guidance documents produced by their respective Service. Although all Services operationalize gender integration at recruit training in distinct ways, shared or consistent Service-specific definitions of gender integration might not be outlined, emphasized, or used in policies or plans. For some Services, such as the Army, Navy, and Coast Guard, gender integration at recruit training has become standard practice after decades of implementation. Many respondents in the Coast Guard attributed their lack of awareness of a Service definition to the long-running precedent of gender-integrated recruit training and gender integration of Coast Guard assignments more broadly.

Whether respondents admitted a lack of knowledge of a specific definition, collective narratives and shared understandings of gender integration at recruit training rose to the surface through responses to this interview question. Across all Services, there was a shared understanding that gender-integrated training is defined by integration in all training activities excluding sleeping and hygiene. Similarly, another collective theme was that gender integration practices should de-emphasize gender by prioritizing the Service identity as Soldier, Sailor, Coast Guardsman or Airman. Service-specific themes and points of emphasis in defining gender integration include same training and same standards, training as you fight, treating every recruit the same, and integration for all forms of diversity. Each shared and specific theme is detailed below.

Respondents overwhelmingly focused on defining gender integration as integration of male and female recruits. Only one Air Force respondent mentioned mixed-gender drill instructor teams in defining gender integration in the recruit training environment, despite widespread practice of this form of gender integration among all Services except the Marine Corps. It is possible this practice is so standardized for other Services it no longer comes to mind as an element in defining gender integration.

1. Integrated training is everything but sleeping and showering

Service leaders, instructors, and other members of the training cadre across all Services felt integrated training is defined by the integration of male and female recruits in all activities but sleeping and hygiene:

⁶¹ References to “respondents” in this chapter refers to Service leaders, training cadre, and instructor interview participants.

We define it as ... the ability to deliver training to both female and male Soldiers. It's one standard, and they're both trained to the same standard. They sleep in—they're housed in the same barracks, not together, but they do get to train together and eat together in the same dining facility. So, other than sleeping, they are training together.—Army Service leader, male

Go on a ship, males and females operate it together. It should look like that here. I guess that's as simple as I can put it, and the only thing they don't do is sleep and shower together.—Navy Service leader, male

The most segregated thing we do is keep them apart to sleep. They're line handling together. They're passing sea bags. They're ITing [incentive training] or marching. The most segregated thing we do is put the females in a separate squad bay. For us, it's, I mean, it's normal.—Enlisted Coast Guard training cadre, female

I think to define gender integration is to conduct all training events in a gender-integrated flight except for sleeping and hygiene. I think that's it.—Air Force Service leader, male

For the Air Force, Army, Coast Guard, and Navy, gender integration in training means every training activity happening together: male and female recruits directly and purposefully working together.

2. Recruits are first and foremost Soldiers, Airmen, Sailors, or Coast Guardsmen

Definitions of gender integration in recruit training also centered on recruits' institutional identity as a Soldier, Airman, Sailor, or Coast Guardsman, not as a male or female recruit. Imbuing recruits with a Service identity as their primary identity is implemented through training practices, policies, and approaches. This practice serves as a cornerstone for the Services' approach to gender integration in recruit training and is at the forefront of how they define gender integration:

We see everyone as green. It doesn't matter what gender, race, color, ethnicity—anything like that, doesn't matter. We see all of each other as green. So it really should not matter who you are from the outside. It depends on who you are on the inside and forming as a Soldier.—Army drill sergeant, female

Once they come out of here [recruit training], we call them a Sailor—not a male Sailor, not a female Sailor—and we just want them so that the fleet can use them wherever they feel that they need them. So, I think that we spent a lot of energy normalizing the gender gaps so that we don't have to pay attention to the gender gaps.—Enlisted Navy training cadre

I've never known any different. So, I have never, like, even when I was a company commander, everyone gets treated the same. You know what I mean? There's different

physical standards, which is understandable, but other than that, like, if your shoes are messed up, your shoes are messed up. If your hair is not correct, your hair is not correct. We just go by policy, and we enforce the standards. I think if any of us come into work and are looking for anything other than Coast Guardsmen ... and you're looking at anyone, any other way other than just a Coast Guard person, then you're doing something wrong.—Coast Guard Service leader, officer, female

Tell them straight on, "This is what's happening. We're going to be integrated, and males are going to be right next to you, females are going to be right next to you. It doesn't change anything. You look at this person as your teammate. This is your fellow Marine, Soldier, Airman." So I think that's it—I think it's you face it head on from day 1.—Air Force Service leader, officer, male

3. Service-specific definitions and purposes of gender integration

Although the Services share common definitions of integrated training, each Service articulated specific motivations for their approach to gender-integrated recruit training. In the Army, responses to questions about definitions of gender integration centered on implementing the same training and same standards for male and female trainees. A female Army Service leader stated:

Our conversations that we have about integration, especially within the combat roles, is there's absolutely no intent to make there [be] a difference in training or anything between men and women. ... We never changed the POI [Program of Instruction] to accommodate for the fact that we have women in combat. ... The standards don't change. Same thing with our Army Combat Fitness Test.

The Navy's definition and motivation for gender integration at recruit training is best summarized by the phrase "train as you fight," which was echoed by Service leaders, training cadre, and recruit division commanders alike. Respondents emphasized that the Navy is integrated; therefore, recruits must be equipped to work with Sailors of the opposite gender. Reinforcing gender integration in boot camp sets the tone for their Naval careers. One male enlisted Navy training cadre stated:

When they go to sea, that's exactly what they're going to see. It is important—at least, I feel it's important—that we reduce some of that stigma of working with the opposite gender and making it seem like, "Oh, I have a female chief"—or do you have a chief? Yeah, okay, it's a female, but that really has nothing to do with this. She's still your chief petty officer. It has to start here [at recruit training]. The less we integrate, the more that it becomes a burden on the fleet to have to balance out or train, normalize, and reconcile for however they decide to think.

Coast Guard respondents also emphasized the reality of Coast Guard service and the essential nature of gender integration in their day-to-day operations. Coast Guardsmen are often working in small crews on boats or in remote locations where every member of the team is critical for completing the mission. A male enlisted Coast Guard Service leader said, "I don't think we look

at it [gender integration] as a topic, so much, as a way of life. It's society practices. We're always together." Coast Guard training cadre and company commanders focused on equal treatment and equal training for male and female recruits as their definition of and approach to gender integration.

The Air Force's approach is motivated by broadening integration beyond gender. Air Force Service leaders designed their recent integration efforts to expose trainees to diversity in all forms. An Air Force Service leader described:

I think what we envision it being is to integrate holistically in any venue that we can during their training experience. When I say integrate holistically, to me ... it's really not just about the gender piece. It's about integrating people from any kind of diverse background, whether it's where you're from, whether it's your ethnic background. We need to increase exposure to different kinds of people in every avenue, every opportunity we can in basic training.

Air Force training cadre and instructors also defined gender integration as the creation of a professional work environment where male and female trainees can work together toward a common goal.

D. Execution of Gender Integration in Recruit Training by Service

Each Service executes gender-integrated training in a different way based on the Service's size, number of training locations, proportion of male and female enlistments, and approach to integration. To describe how each Service conducts gender integration in its respective recruit training programs, the study team combined knowledge gained through documentary review and official web pages with information gathered from ethnographic observations, interviews, and focus groups. Presented below are gender integration processes and relevant policies (for recruits and drill instructor teams) for the Army, Air Force, Navy, and Coast Guard.

1. U.S. Army Basic Combat Training

U.S. Army BCT is a 10-week training program divided into four progressive phases: yellow, red, white, and blue. BCT focuses on the fundamentals of soldiering, core Army values, Army traditions and ethics, and what it means to be a Soldier. The Army has four BCT locations: Fort Benning (Georgia), Fort Jackson (South Carolina), Fort Leonard Wood (Missouri), and Fort Sill (Oklahoma). Trainees are sent to their BCT location based on their MOS because they will often complete follow-on training at the same installation. For example, infantry and armor specialties complete BCT at Fort Benning where One Station Unit Training (OSUT) occurs; BCT and Infantry training are combined into a 22-week continuous period of instruction. Fort Jackson is the largest BCT location, training most Soldiers and nearly two-thirds of women enlisting in the Army. Fort Jackson graduates over 40,000 new Soldiers each year (U.S. Army, 2021a). All Army BCT locations implement the same basic training program. The study team, in conjunction with Marine Corps Training and Education Command, selected Fort Jackson for the study because of the greater proportion of women training at that location. The following section is limited to discussions of BCT at Fort Jackson.

Structural organization of BCT at Fort Jackson

Fort Jackson is organized into two brigades: the 165th Infantry Brigade (165th IN BDE) and the 193rd Infantry Brigade (193rd IN BDE). Each brigade has multiple battalions; every battalion has a historical lineage in the Army. The 165th IN BDE has six training battalions: 1st Battalion, 34th Infantry Regiment; 3rd Battalion, 34th Infantry Regiment; 2nd Battalion, 39th Infantry Regiment; 3rd Battalion, 39th Infantry Regiment; 4th Battalion, 39th Infantry Regiment; and 1st Battalion, 61st Infantry Regiment. The 193rd IN BDE has five training battalions: 1st Battalion, 13th Infantry Regiment; 2nd Battalion, 13th Infantry Regiment; 3rd Battalion, 13th Infantry Regiment; 2nd Battalion, 60th Infantry Regiment; and 3rd Battalion, 60th Infantry Regiment. The 193rd IN BDE also has a sixth battalion, 120th Adjutant General Battalion, which provides reception and support functions (U.S. Army, 2021b). Each battalion completes the training cycle together and is composed of five companies: (A, B, C, D, and E). Every company has up to four platoons (1, 2, 3, and 4); platoons range in size but typically have between 40 and 60 trainees. Trainees for each company sleep in four gender-segregated sleeping bays (three male bays and one female bay) and fall out into their platoons in the morning. Army training is primarily organized by the company; companies complete all training and routine activities, such as chow, together. All companies at Fort Jackson are gender-integrated and train female trainees.

Narrative description of a morning physical training (PT) session with one platoon at Fort Jackson (September 2021)

After morning fall-out, a platoon and two male drill sergeants march to a close-by PT field. The platoon arrives, drops their gear, forms in a designated pit area, and begins warm-up exercises led by a drill sergeant. Male and female trainees are interspersed in their formation. The drill sergeant who is not leading walks around and corrects/instructs trainees during the exercises. Once warm-up is complete, the trainees move to the set of eight pull-up bars, lining up in groups at each bar. Guided by the drill sergeant, trainees rotate through the following positions: waiting to get to the bar, being a front spotter, doing the pull-up exercises, and being a back spotter. The drill sergeant leads trainees through a series of progressive pull-up and leg tuck exercises; trainees complete 4–5 repetitions before rotating. Male and female trainees are intermixed and provide spotting and assistance for one another. Depending on the trainees' strength level, spotting may include light hands-on assistance in completing the exercise. Trainees have been instructed on appropriate hand placement. Male and female trainees provide spotting and assistance to one another equally, regardless of the gender of the trainee completing the exercise. Following the set of progressive pull-up exercises, the drill sergeant leads the group in additional strength and cardio exercises before stretching and cool-down. In total, the PT session lasts around 1 hour.

This scene illustrates how, once integrated, all trainees within a platoon (male and female) work together and interact with one another. Gender becomes inconsequential to the training process.

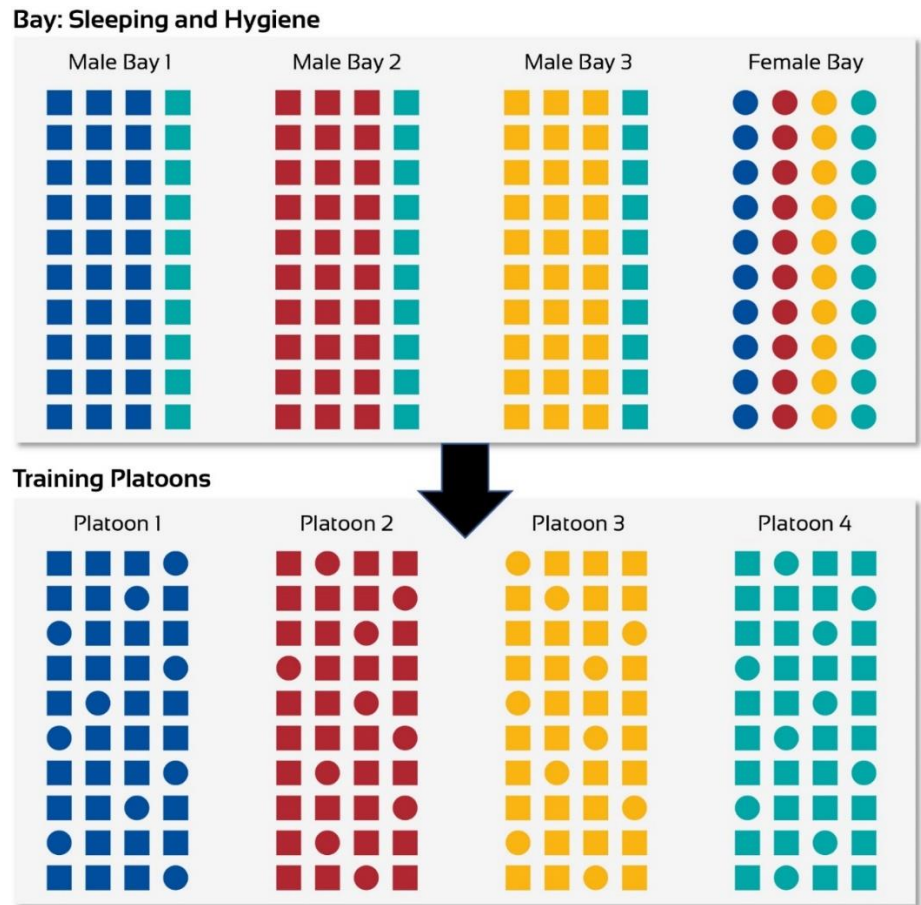
The brigade, battalion, and company levels have designated officer and enlisted leadership positions. Mixed-gender drill sergeant teams lead all platoons and are in charge of sleeping bays within a company. The Army strives to have female drill sergeant representation in every platoon, although it is sometimes not possible because of personnel constraints. However, at times, platoons can have more than one female drill sergeant. Drill sergeants are enlisted personnel between the ranks of Sergeant (E-5) and Sergeant First Class (E-7). Drill sergeants are responsible for all teaching and development aspects of BCT, including the instruction of all academic classes and marksmanship lessons. Drill sergeants are assigned responsibility for both a bay and a platoon. Typically, each bay has a senior drill sergeant and three additional drill

sergeants, and each platoon has the same mix of four drill sergeant positions. The level of trainee overlap (e.g., trainees assigned to both a bay and a platoon that a drill sergeant oversees) varies. Gender is inconsequential for the assignment of bay and platoon drill sergeant leadership. For example, female senior drill sergeants can be assigned to male bays, and male drill sergeants can be assigned to female platoons. Bays are locked and monitored at night by duty personnel at the battalion level. While drill sergeants are assigned to bays and platoons, the company identity translates into drill sergeants regularly and intentionally training trainees outside of their bay and platoon assignments.

Army BCT and gender integration

Aside from sleep and hygiene, the Army conducts all training in gender-integrated platoons; sleep, hygiene, free time, and bay maintenance or cleaning take place in gender-segregated sleeping bays. Even though bays are gender segregated, trainees are to conduct themselves in such a way that drill sergeants or other leaders of either gender may walk into the bay at any time. All attire changing and showering must occur in the latrine (bathroom). Latrines have entry and exit doors and individual shower and restroom stalls. In the morning, trainees are awakened by drill sergeants or an audio announcement. They are given instructions for the day (e.g., uniform, gear, necessary equipment) and a time to meet downstairs in platoon formation on the platoon drill pads. Once outside of the bays, trainees fall out into their platoons. Female trainees, all housed in the female bay, are assigned evenly across the four platoons. The male trainee experience varies—the majority are assigned to platoons with most other male trainees in their bay. The small segment of male trainees displaced by female trainees is assigned to other platoons with males not in their bay (see figure 6.1). During the training day, trainees complete all activities with their gender-integrated platoon. Once in integrated platoons, there is no differentiation between male and female trainees; they train together in all ways. Male and female trainees work together and directly interact with one another in all training activities and events. Trainees spend time during the day in the gender-segregated bays only for hygiene, study time, free time, and bay maintenance or cleaning.

Figure 6.1. Graphic Representation of Army BCT Gender Integration Model



Note: Individual male trainees are represented by squares; individual female trainees are represented by circles. Recruits are color-coded according to their platoon. Platoon size depicted in graphic may not be representative of typical platoon size.

Prior to COVID-19, gender-integrated training began with the first day of training. As part of quarantining and social distancing protocols, the Army introduced a new “yellow” phase that maintains gender-segregated training for the first 2 weeks. The 2-week yellow phase includes several days in reception and focuses heavily on administering academic classes, including Army history, core values classes, Sexual Harassment Assault Response Prevention (SHARP), personal finance, and more. In yellow phase, each bay conducts daytime training activities as a platoon (e.g., female bays constitute a female platoon, and each male bay becomes its own male platoon). Platoons may engage in co-located training outside, but close contact between male and female trainees is limited to prevent the spread of COVID-19. At the time of the study team’s visit (September 2021), companies could not proceed with gender-integrated training until COVID-19 spread was under control; some companies continued red-phase training activities while still being in a gender-segregated yellow-phase status beyond the 2-week mark. The Army plans to continue yellow phase beyond pandemic conditions, citing a reduction in sexual harassment and sexual assault rates among trainees.⁶²

⁶² Information comes from multiple Army Service leadership interviews.

Mixed-gender interaction between trainees and drill sergeants is the norm in Army BCT at Fort Jackson. Female drill sergeants train, lead, and develop male trainees, just as male drill sergeants do female trainees. Trainees have ample opportunities to be led by and interact with drill sergeants of both genders. Trainees also experience mixed-gender peer leadership within their platoons. Drill sergeants select platoon guides (PGs) and assistant platoon guides (APGs) throughout the training cycle to serve as platoon leaders. Both male and female trainees serve as PGs and APGs. The presence of mixed-gender drill sergeant teams and gender-integrated platoons provides trainees ample regular and intentional opportunities for many forms of mixed-gender interaction, team building, leadership, and development throughout all aspects of training.

2. U.S. Air Force Basic Military Training

U.S. Air Force BMT is a 7.5-week training program structured in a weekly progressive format from week 0 to week 8, with each training week beginning on Sunday. BMT provides trainees with mental and physical challenges meant to transform them from “humble recruit to confident Airman” who can “excel as a member of the U.S. Air Force” (U.S. Air Force, n.d.a). In response to COVID-19, the Air Force shortened BMT to 7.5 weeks from 8.5 weeks to mitigate risk to trainees, staff, and family members (U.S. Air Force, n.d.a).

BMT is located at Joint Base San Antonio-Lackland (Lackland AFB) in Texas. As the Air Force’s only recruit training site, Lackland AFB also trains Guardians enlisting in the U.S. Space Force. The Air Force graduates more than 35,000 new Airmen each year (U.S. Air Force, n.d.e).

Structural organization of BMT

Lackland AFB houses eight training squadrons and one support squadron, each with a historical lineage in the Air Force. The support squadron, 737th Training Support Squadron, provides academic instruction and field training to trainees and resource management support, personnel records management, and job classification and discharge actions (U.S. Air Force, n.d.b). Each of the eight training squadrons—320th Training Squadron, 321st Training Squadron, 322nd Training Squadron, 323rd Training Squadron, 324th Training Squadron, 326th Training Squadron, 331st Training Squadron, and 433rd Training Squadron—is housed within an Airman Training Complex (ATC). The training squadrons consist of up to 24 flights. Each flight contains approximately 48 trainees per training cycle (60 per flight prior to COVID-19). On the ground floor, the ATCs have a covered open space used for drill, athletic training, and flight time (such as the Flight Commander’s Team Building Exercises); the ground floor also houses squadron staff offices. The three floors above the ground floor house dormitories. Each floor has eight dormitories, and each flight is assigned one dormitory. Flights are paired into brother-brother and sister-brother flight pairings based on proximity within the ATC. All flights living in an ATC are on the same training week and graduate together.⁶³ Each dormitory has a MTI office separated by a door that opens into the entrance hallway. Near the ATCs are dining facilities and classrooms that can be shared between squadrons, depending on location. Each squadron has a designated drill pad next to the ATC.

⁶³ Historically, flights in the same training week lived in several ATCs and were part of different training squadrons. Several weeks before the study team’s site visit, BMT leadership shifted flights throughout the ATCs so that all flights within the same squadron had the same training schedule and graduation date.

The total number of flights in a squadron determines the number of female and male flights it has in a training cycle. Every fourth flight assigned to a squadron is a female flight. If a squadron has 24 flights, 6 flights are female and 18 are male. If a squadron has 16 flights, 4 are female and 12 male. Flights are divided evenly into four sections, and every four will have at least one female flight. Each flight is broken down into four elements, each element has an element leader, and each flight has a dormitory chief (dorm chief) and guidon bearer. These leadership positions are assigned to trainees by their MTIs.

The flight and squadron have designated officer and enlisted leadership positions. Squadron and flight commanders are officers between the ranks of Second Lieutenant (O-1) and Captain (O-3). Because of personnel constraints, not every flight has a flight commander; each flight commander oversees several flights. MTIs are enlisted personnel between the ranks of Staff Sergeant (E-5) and Master Sergeant (E-7). Two MTIs are assigned to each flight. MTI placements are not based on gender. A male MTI could be assigned to a female flight, and a female MTI could be assigned to a male flight. All-male and mixed-gender MTI teams are present at BMT. The Air Force is intentional about having mixed-gender instructor teams and communicated this as a priority. Throughout the training cycle, trainees are exposed to MTIs of the opposite gender and see them routinely throughout the training day, though they may not interact with MTIs who do not oversee their own or their brother or sister flight.

MTIs are not permitted to be in the dormitories before the trainees wake up at 0545 hours and must leave the dormitory by 2100, at lights out. Dormitories are locked and monitored at all times by squadron duty personnel through a camera security system, and trainees conduct entry control throughout the night in 2-hour rotations in teams of two. At least one MTI is present when trainees wake up and until lights out. MTIs work either the “morning shift” or “evening shift,” and their shifts overlap with their co-MTI during the day to ensure a seamless transition between instructors. Before the evening shift ends, the evening MTI prepares a summary of what occurred that evening for the morning MTI to ensure the other is aware of the flight’s progress and can adjust the morning schedule if necessary.

To ensure work-life balance, each MTI is authorized to work only 10 hours per day. The shifts are structured to maintain a days on/off schedule of 6/1 or 5/2. At times, because of vacations or absences, MTIs work a 3/2 schedule. The two-person MTI team works in tandem with another MTI team whose flight’s dormitory is adjacent to their flight’s dormitory. These MTIs coordinate activities and events together as the training schedule permits. MTIs support the MTIs of their brother or sister flight as needed and receive support from an Instructor Supervisor—a Technical Sergeant (E-6) or Master Sergeant (E-7) who provides mentorship and advice throughout the training cycle. MTIs are not with trainees on Sundays except for the first Sunday, during which they guide trainees through the schedule. Trainees are instructed to “self-motivate” on Sundays after they wake up. On Saturday, MTIs prepare a schedule and list of tasks for trainees to complete on Sunday. Assigned leaders in the flight, such as the dorm chief, are expected to lead the flight through the schedule, ensure they eat chow on time, and have the flight prepared for the next training day (Monday).

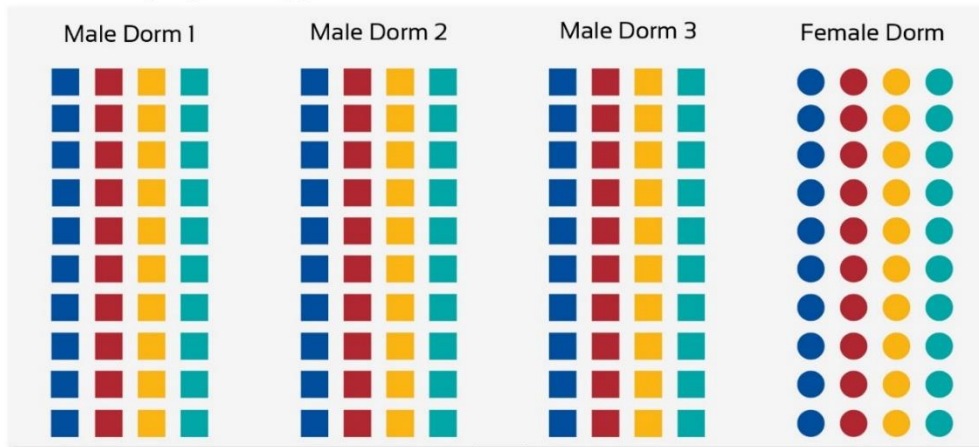
Air Force BMT and gender integration

In 2015, Air Force initiated gender-integrated training flights with integration of drill. In 2016–2017, the Air Force piloted an enhanced integration model for two cycles (U.S. Air Force, n.d.d). In this model, male and female trainees slept and conducted hygiene in gender-segregated dormitory flights and fell out in the morning into gender-integrated training flights. The Air Force continued piloting this integration model in 2019. These pilots revealed the need for enhanced trainee management technology. The Air Force addressed this gap and was prepared to reimplement an enhanced integration strategy in early 2020; however, COVID-19 risk mitigation procedures placed the effort on hold (U.S. Air Force, n.d.d).

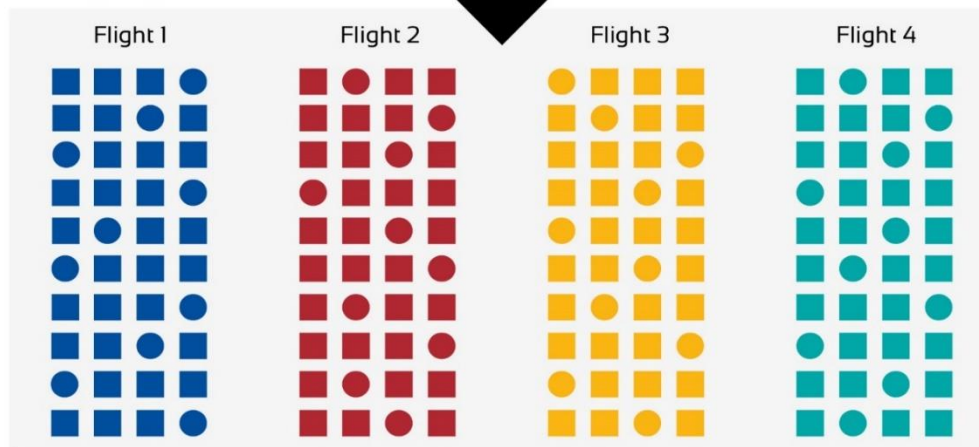
In November 2021, the Air Force resumed integration efforts on a limited scale while continuing to improve the trainee management technology. Two sibling dormitory flights (brother-sister or brother-brother) are recombined into two training flights for daytime training activities, which results in the brother-sister training flights being gender integrated. The Air Force continues to evaluate and evolve their integration model at BMT. In 2022, the Air Force plans to implement an enhanced integration model (see figure 6.2), in which each training flight will be made up of one element from each of the four different dormitory flights (U.S. Air Force, n.d.c). Air Force Service leaders emphasize the focus of their integration model is to enhance flight diversity overall rather than solely for gender integration purposes.

Figure 6.2. Graphic Representation of Air Force BMT Enhanced Integration Model

Dorm: Sleeping and Hygiene



Training Flights



Note: Individual male trainees are represented by squares; individual female trainees are represented by circles. Recruits are color-coded according to their training flight. Flight size depicted in graphic may not be representative of typical flight size. Source: U.S. Air Force, n.d.c

BMT and limited gender integration as observed by the study team

At the time of the site visit, most of the training trainees received occurred in gender-segregated environments.⁶⁴ The dormitory plays a critical role in forming and shaping trainees and is a place where trainees spent much of the training day. Outside the dormitory, male and female flights in the same section train together during morning PT but maintain flight formation. The 1.5-mile run is the only PT event where flight formation is not maintained; male and female trainees run alongside each other on the track. They also receive academic instruction together, in flight formation, if they are sister-brother flights. Though the overall ratio of female flights to male flights means not every male flight has a sister flight, there are moments throughout the training day, in addition to morning PT, where brother-brother flights are colocated with female trainees.

⁶⁴ The survey team visited the site in October 2021, when COVID-19 risk mitigation procedures were still in effect, which paused gender-integrated recruit training.

Male and female flights practice drill in the same area, attend religious services jointly, and eat chow together if their chow times align. Male and female trainees who are injured or have low body mass eat at the same table. Entry control monitors and various flight members with appointments or other duties that delay their movement with their flight may also sit next to or across from a trainee of the opposite gender as they fall in line with another flight for chow. Male and female trainees may be in closer proximity to one another in certain instances, though direct interactions are minimal or nonexistent.

Field training exercises and events conducted during Basic Expeditionary Airman Skills Training (BEAST) week, the culminating event in BMT that currently occurs during week 6, are gender integrated even during implementation of gender-segregated flights during the COVID-19 pandemic. The squadron trains for BEAST together and is led by training cadre assigned to BEAST. Trainees are divided into four zones. One-fourth of the female trainees are assigned to each zone. Within zones, when executing group activities, trainees work in smaller groups. Group formation can be selected by trainees or determined by the BEAST training cadre. When instructors choose, they aim to diversify the groups as much as possible, and trainees are expected to work together to accomplish the mission. When each field exercise is complete, trainees regroup into their gender-segregated flights and spend the remainder of the day studying for the upcoming academic examination and preparing for the next training day.

Narrative description of a field exercise known as “The Village” with a mixed-gender tactical group on Medina Training Annex (October 2021)

As a wounded wingman (represented by a mannequin) finds shelter in a village located in a combat zone, a team of 10–15 male and 4–7 female trainees work to create a plan to clear the village and find, treat, and rescue the downed wingman. The staged village consists of several small one-story structures and blown-out cars. Five to six villagers (BEAST instructors) are also present. Trainees must determine whether the villagers are friend or foe and, if foe, subdue them in accordance with the laws of war, which the villagers are intentionally challenging. Soon after the trainees engage with the villagers, the sounds of explosives and weapons firing fill the air. The trainees attempt to execute their plan following the guidance of their team-appointed leader. They break into smaller groups to advance through and clear sections of the village while avoiding any “deadly” traps set up by the villagers. Male and female trainees navigate the village alongside each other, shoulder to shoulder, communicating and strategizing in real time in response to unexpected changes to their plan and imposed time limits. They watch as some of their wingmen are “killed” during the mission and press on. BEAST instructors test trainees on their communication with each other and their collaboration in an unknown environment. After the exercise ends, male and female instructors debrief with the group on what went well, and trainees share what they learned from the exercise. The event lasts about 10–15 minutes. After the exercise, trainees return to their zone and regroup in their gender-segregated flights.

This scene illustrates one of the few moments in Air Force BMT, as currently executed, when male and female trainees interact and work with one another.

3. U.S. Navy Recruit Training

U.S. Navy recruit training is a 10-week training program designed to transform civilians into Sailors through a “Sailorization” process.⁶⁵ Recruit training develops recruits’ physical fitness and teaches basic skills such as seamanship, firefighting, shipboard damage control, and firearm use while instilling core values, encouraging teamwork, and developing discipline (U.S. Navy, n.d.). The Navy’s sole recruit training location is at the Recruit Training Command (RTC) Great Lakes in Illinois, which trains more than 40,000 recruits each year (DVIDS, 2021).

Structural organization of Navy RTC

Navy RTC has two departments: the Student Control Department (SCD) and the Military Training Department (MTD). The SCD is responsible for support aspects of recruit training, including arrival and in-processing, separations, and special programs for rehabilitation and recovery. The MTD is responsible for direct training aspects of Navy recruit training. Below the department level are two fleets (LANTFLT and PACFLT) that divide responsibility of the training groups and ships. A training group comprises an average of 8–12 divisions (which can flex from 4 to 14 divisions) that complete the training cycle together. During the initial processing days, called P-days, recruits live in the USS Pearl Harbor building, where they are known as a training group. The training group becomes a ship once they physically move into their actual ship (i.e., barracks), where they reside for the remainder of recruit training. Ships at RTC are named after U.S. Navy ships, such as USS Arleigh Burke and USS Hopper. Each ship contains multiple compartments (i.e., squad bays), several classrooms, and a galley (i.e., dining facility). There are typically six to eight training groups/ships active at a time. Division (i.e., platoon) size averages approximately 88 recruits. Although each training group/ship is completing the cycle together, every division has a unique training schedule throughout the week. For example, all divisions in a training group will complete a line handling practical application exercise during the same week, but the training may occur on different days. Recruits sleep in gender-segregated compartments, which are similar to Marine Corps squad bays. For nonintegrated divisions, the compartment houses the entire division. For integrated divisions, the division is split between two compartments based on gender. Each compartment houses two halves of two divisions, which combine in the morning to form two integrated divisions.

The department, fleet, and ship levels have designated officer and enlisted leadership positions. Mixed-gender RDC teams lead most divisions, but some divisions have female- or male-only RDC teams. Integrated divisions must have at least one female RDC as part of the instructor team. For example, during the site visit, 70 percent of divisions had mixed-gender RDC teams. Gender is not a determinant of where RDCs are assigned. RDCs must be at least a Petty Officer Second Class (E-5). The typical rank for RDCs is Petty Officer Second Class (E-5) to Chief Petty Officer (E-7). Some Senior Chief Petty Officers (E-8) or Master Chief Petty Officers (E-9)

⁶⁵ At the time of the study team’s site visit in October 2021, the Navy’s boot camp was 8 weeks in length. The Navy expanded its training to 10 weeks beginning in 2022 to incorporate a “Sailor for Life” module modeled after the Marine Corps fourth phase of training (Stancy Correll, 2022). The study team did not observe the Navy’s Sailor for Life training module.

will serve as an RDC for one to three cycles before moving to enlisted leadership positions at the ship or fleet level.

Three RDCs are responsible for each division, including a lead RDC (usually determined by rank); some divisions have a four-person RDC team. Some divisions also have multiple RDC students (known as “blue ropes”) assigned to their division as they complete their “C” school training to become an RDC. RDCs are responsible for the overall training and welfare of recruits in their division. Specialized training, such as firefighting, damage control, line handling, and Battle Stations-21 (Navy’s culminating exercise), is delivered by RDCs assigned to those positions (similar to the Marine Corps “quota” for drill instructors) or taught by specific instructors. Compartments are monitored overnight by two ship personnel, an officer of the deck (OOD) and a rover. This RDC watch team, which must be mixed gender (one male and one female), roves the ship’s compartments and quarterdeck every hour. Because of the smaller proportion of women in the ship, women typically serve overnight rover duty and hardly ever stand duty as the daytime OOD. In the compartment, the head has an open doorway, but a wall of sinks ensures no line of sight to the toilets or showers. Recruits are expected to be clothed in the compartment at all times. Changing below the PT gear level is only allowed to occur in the head because of the potential presence of opposite-gender RDCs. The head must be secured by recruits standing watch before an RDC enters.

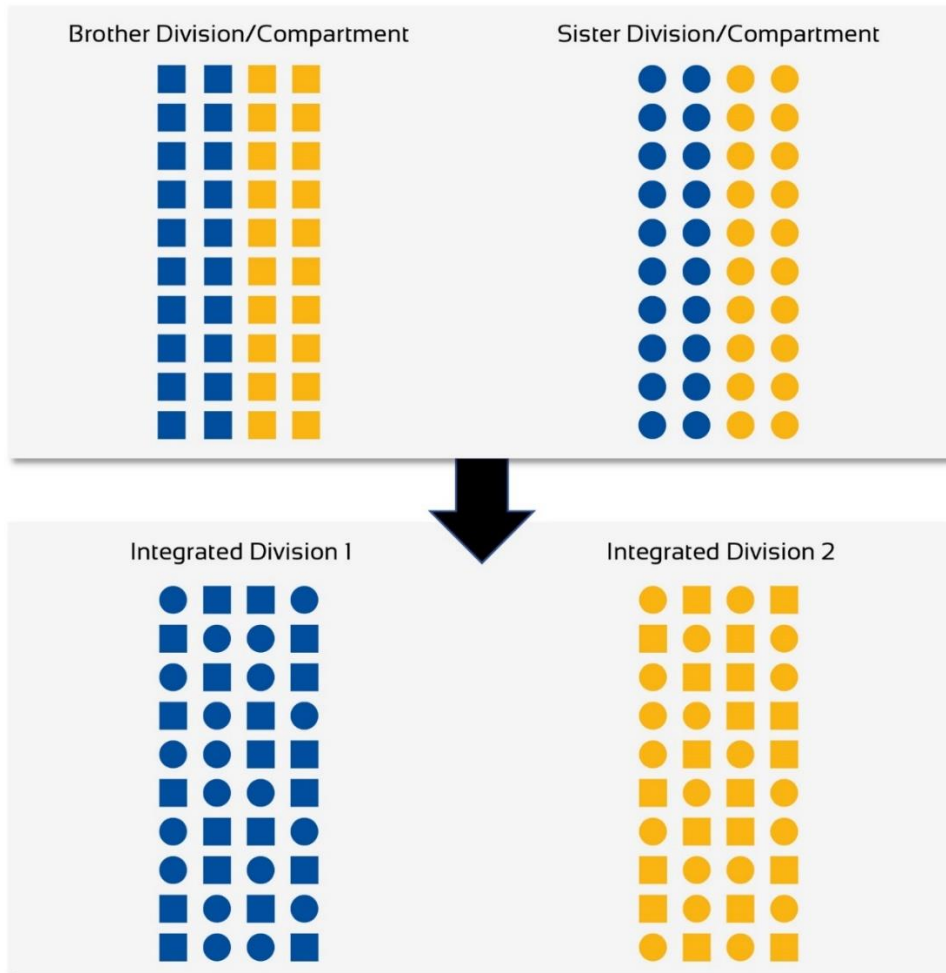
Navy recruit training and gender integration

During a portion of the COVID-19 pandemic, the Navy conducted gender-segregated basic training. All recruits trained with their division, which was limited to their same-gender compartment, for the entire training cycle. During the October 2021 site visit, the study team observed only gender-segregated recruit training at Navy RTC; therefore, no primary data collection was conducted on the Navy’s gender-integrated recruit training model. Interviews with Service leadership, training cadre, and instructors who had previous experience with the Navy’s approach to gender integration provided insights. The Navy resumed gender-integrated training in late November 2021.

The Navy’s gender integration occurs at the division level for some divisions within a training group/ship. For integrated divisions, half the recruits from a male compartment (known as “brother division”) and half the recruits from a female compartment (known as “sister division”) switch places to form two integrated divisions.⁶⁶ In integrated divisions, recruits sleep and conduct hygiene in their gender-segregated compartments and fall out as integrated divisions in the morning for training activities during the day (see figure 6.3). Brother and sister divisions live across the hall from one another, and integration occurs when recruits form up as their integrated division, which could occur in or outside of the compartment, depending on the training schedule. Integrated division training, including physical fitness, incentive training, drill, and inspections, regularly occurs within the compartment. Every recruit has an assigned place inside the compartment based on their rack number; their rack number is consistent even if they switch compartments for integration purposes.

⁶⁶ Brother and sister divisions continued during the pandemic (when training was gender segregated), but they were not integrated; they sometimes attended classes and ate chow together in division formation but did not switch compartments.

Figure 6.3. Graphic Representation of Navy Gender Integration Model at Recruit Training



Note: Individual male recruits are represented by squares; individual female recruits are represented by circles. Recruits are color-coded according to their integrated division. Division depicted in graphic is not representative of typical division size. Integrated division 1 would conduct compartment training in the brother division compartment, and integrated division 2 would conduct compartment training in the sister division compartment. Other divisions in the ship would be male-only.

The Navy implements an extensive recruit chain of command within divisions, which includes about 22 designated positions for 14 specific roles; leading division roles include the Recruit Chief Petty Officer and the Assistant Recruit Chief Petty Officer. For integrated divisions, the Navy *Recruit Training Manual* requires “the [recruit] division staff shall be evenly split between male and female to include any recruit assigned to fill in for another recruit. No exceptions are authorized” (U.S. Navy, 2021). Not all divisions in the ship are integrated. The number of integrated divisions is based on the number of female divisions in the ship. Brother-brother divisions (i.e., male divisions that are across the hall from one another) do not integrate and form new divisions during the day—their division is contained within one compartment.

Integrated divisions require the coordination and teamwork of at least six RDCs (at least three for each compartment) responsible for the two integrated divisions. An RDC of an integrated division is responsible for all recruits who conduct hygiene and sleep (overnight) in their assigned compartment and all the recruits (half of whom come from the opposite-gender

division) who train in the integrated division during the day. In comparison, an RDC of a nonintegrated division is entirely responsible for the division contained within one compartment. It is at the discretion of the RDC teams of integrated divisions to conduct as much integrated training as possible. Sometimes brother and sister divisions will complete training separately for logistical or scheduling purposes; however, RDCs are encouraged to conduct all training as integrated divisions.

Narrative description of RDC evening training time with a male division in their compartment (October 2021)

The study team observed training in compartments during the evening hours, after chow but before Taps, at the USS Arleigh Burke. The team entered a male compartment in the middle of an RDC-led PT session that was occurring in the compartment. Recruits were near their racks, facing the center of the compartment, where an RDC was leading them through a series of PT exercises. Recruits and RDCs were dressed in PT gear. The RDC was directing the exercises and doing them at the same time. Recruits and the RDC counted reps out loud after being instructed on the exercise. The intent of the training was physical exercise and strength building rather than a corrective or punitive measure. Exercises observed included mountain climbers, lunges, push-ups, and crunches. After several minutes of a male RDC leading the exercises, the division's female RDC (the senior RDC) swapped in to continue leading the exercises. Similar to her male counterpart, she directed recruits on the exercises and did them at the same time. After the RDCs completed the PT exercises, they led recruits through a series of stretches. Recruits were given 3 minutes to hydrate and use the head before an RDC began a mindfulness training session. The Navy implemented mindfulness training, including meditation and breathwork techniques, several years ago to increase mental and physical resilience capacity in recruits. Navy recruit training leaders have noted positive feedback from the fleet since implementing mindfulness training at boot camp. Following the 3-minute break, recruits returned to stand by their racks. A male RDC taught recruits how to do a progression muscle relaxation exercise as part of the Navy's Warrior Toughness program. Before starting the exercise, he told recruits, "Mental fitness is just as important as your physical fitness. You can be the strongest person physically, but your mental fitness will help you stay in the fight." Reading from a script, the RDC led recruits through the exercise of tensing and relaxing muscles throughout their body, starting from the head and working their way down. Recruits were encouraged to regulate and control their breathing during this exercise. The progressive muscle relaxation exercise lasted approximately 10 minutes, and the study team departed. Recruits from this division were scheduled to hygiene, and their RDCs noted they planned to practice drill prior to Taps.

This scene illustrates the Navy's employment of a mixed-gender RDC team and PT that regularly occurs in the compartment space.

4. U.S. Coast Guard Recruit Training

U.S Coast Guard recruit training is an 8-week program that instills in its recruits a solid foundation in the Coast Guard professional culture (U.S. Coast Guard, n.d.c) and prepares them with the necessary skills to protect, defend, save, and shield the United States and its people. The Coast Guard is the only military Service branch under the Department of Homeland Security. Recruits are trained and tested in military bearing, military skills, physical fitness, water survival and swimming, academics, vocation, self-discipline, and wellness and nutrition (U.S. Coast Guard, n.d.a). Recruit training staff prepare recruits, individually and collectively, for the Coast Guard's lifesaving, defense, and law enforcement missions. The U.S. Coast Guard's Training Center in Cape May, New Jersey, is the only site that provides basic training for enlisted personnel. Training Center Cape May receives and trains more than 4,000 Coast Guard recruits each year (U.S. Coast Guard, n.d.b).

Structural organization of Basic Training

The singular recruit training battalion at Training Center Cape May consists of up to eight companies, the smallest training unit. Each company typically consists of 70 to 120 recruits. Recruits are housed in one of three barracks throughout their training program. A fourth barracks, Sexton Hall, is reserved solely for in-processing and out-processing. Each barracks is named after an individual who epitomized Coast Guard values and went above and beyond the call of duty, such as Medal of Honor recipient Douglas Albert Munro.

Newly enlisted recruits arrive at the training center on Tuesdays, spend 3 days in-processing, and then pick up with their company commanders (CCs) on Fridays.⁶⁷ After completing the training program, almost all newly pinned Coast Guardsmen head directly to the fleet for their first duty assignments. This direct deployment to the fleet is unique to the Coast Guard; other Services require follow-on advanced training or training based on MOS before arriving to the fleet.

Each training barracks is a three-story building; the layouts of the barracks differ slightly yet contain similar components. Squad bays, segregated by gender, are on the second and third floors. A company occupies an entire floor, and each floor is made up of four squad bays, an open area in the center of the floor connecting each squad bay known as the quarterdeck, and CC offices. Toilet (head) configurations within the squad bays, while varied, share commonalities. Entrances to the head are blocked by plastic curtains. Each head has individual toilet stalls, space for a changing area (some have wall dividers), and an open shower bay. Recruits must change in the head. CCs limit their presence in the head, and no recruits or CCs of the opposite gender may be present inside the opposite gender's head. Two barracks at Cape May have "towers" at the back of the squad bays. These towers serve as supplemental sleeping quarters for 6–10 recruits. Recruits living in the tower have their own head and a separate stairwell for quick egress. However, to reach the quarterdeck and muster areas, recruits housed in the tower must pass through the connecting main squad bay. There are no locks on any squad bay doors, and the doors must remain open at all times, except during hygiene. Cameras monitored by base security are placed near the entrance of each squad bay, and one enlisted member provides overnight oversight for all the companies in the battalion.

One to two recruits serve as squad leaders in each bay, and one squad leader serves in each tower. Each company has approximately four to six yeomen, recruits who conduct administrative duties, and a guidon bearer. Other company jobs include mail and supply. Recruits either volunteer for these positions or are assigned to them by their CCs. Designated enlisted leadership, CCs, are between the ranks of Petty Officer Third Class (E-4) and Chief Petty Officer (E-7). Typical CC teams consist of four CCs per company.⁶⁸ CC teams are assigned to companies based on CC availability for the training cycle. Gender is not a factor in CC

⁶⁷ At the time the study was conducted if recruits arrive unvaccinated or not fully vaccinated against COVID-19, they are quarantined in squad bays with recruits of the same gender, their entry into training is delayed, and they must pick up with a subsequent company. At the start of the COVID-19 pandemic, the Coast Guard suspended training for several cycles. Afterward, it instituted a quarantine period (restriction of movement, or ROM) where recruits would remain in gender-segregated squad bays for 2 weeks and initiate their academic work. Once this period ended, they would join their full training company to complete 5.5 weeks of training.

⁶⁸ There are instances of CC teams of three and five as well, but four is considered a full CC team and the standard.

assignments; recruits can be trained by male or female CCs throughout their time in the training program.

At times, leadership will look at competency pairing when determining teams. It is atypical for teams to stay together for more than one cycle. CCs will usually get 1 week off after completing a cycle and will run several cycles before doing an “off-street” assignment, where they support RAMP (the Recruit Motivation Program) or the Regimental Hold Element (RHE) for injured recruits and those on administrative hold or fill certain academic billets. A section commander (E-7) oversees all the companies living in a barracks.⁶⁹ The section commander is also responsible for other activities, such as RAMP and RHE, if they are housed within their barracks. Above the section commander, recruits share the same officer and enlisted chain of command. Academic instruction is held in classrooms located near the barracks. These classrooms and the dining facility, also a short distance from the barracks, are shared among the companies. Academic classes are taught by civilians, officers, “off-street” CCs, or one of the recruits’ CCs.

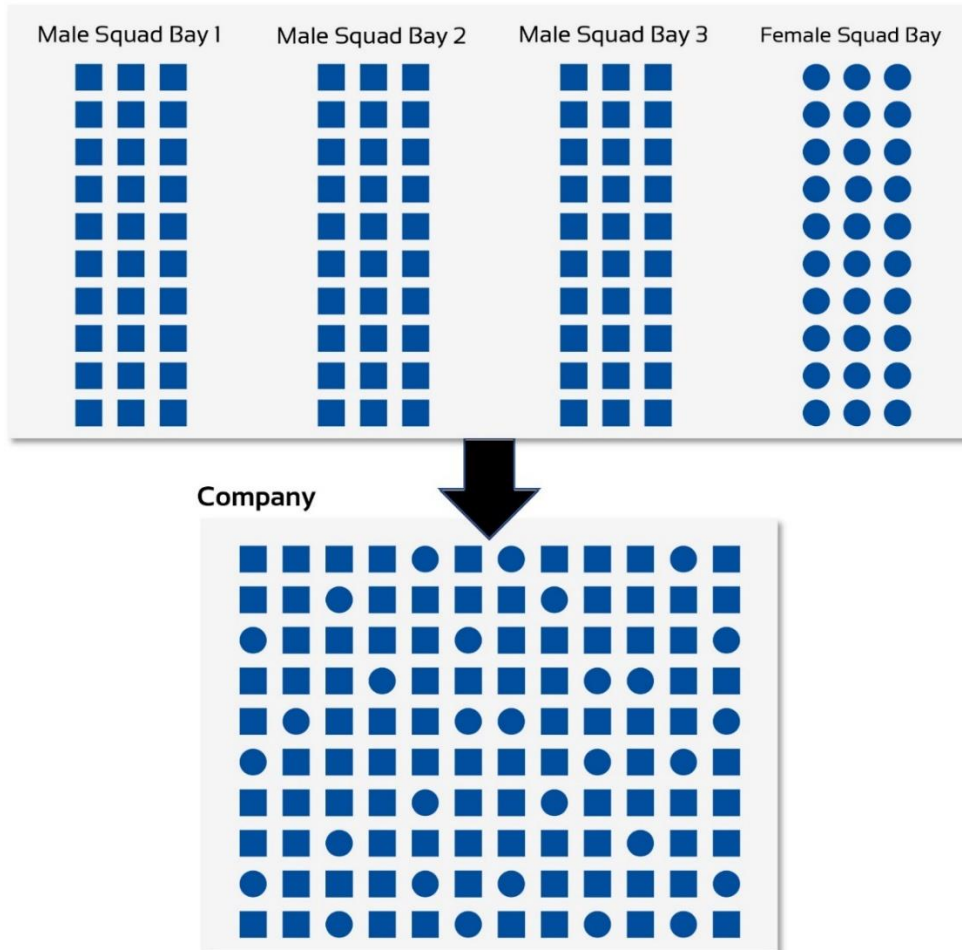
Coast Guard Basic Training and gender integration

From the moment they arrive at Training Center Cape May, male and female recruits train alongside and interact with one another. Training occurs at the company level, and companies are integrated by gender; male and female recruits do everything together as a cohesive group (see figure 6.4). They are intermixed during classroom instruction, chow, religious services, PT workouts, security watch, incentive training, and remedials, and they share leadership responsibilities. These responsibilities include overnight duty, where mixed-gender teams of recruits work together unsupervised. A rotating team of three recruits conducts security watch throughout the night. The recruit security watch team can and often does include both male and female recruits; each shift lasts 1 hour. One recruit serves as entry control at the main entrance of the barracks, while the other two recruits conduct rounds throughout the barracks building and wake the next recruits before the conclusion of their watch. The roving recruits are also responsible for waking any recruits who have early medical appointments. The security watch team may check the opposite-gender squad bays during their rounds and may wake recruits of the opposite gender. Two security watch partners must be together to wake any recruit. Recruits are not allowed to touch other recruits to wake them; they must knock on their racks, pull on their blankets, or use their flashlights.

⁶⁹ The number of companies living in a barracks at any point varies because companies are on different training weeks. At the time of the site visit in November 2021, two barracks contained two companies, and the other had one.

Figure 6.4. Graphic Representation of Coast Guard Gender Integration Model at Recruit Training

Squad Bay: Sleeping and Hygiene



Note: Individual male recruits are represented by squares; individual female recruits are represented by circles. Company depicted in graphic may not be representative of typical company size.

Gender segregation occurs for hygiene and sleeping. The only other times recruits are segregated are for COVID-19 quarantine (intentional segregation to accommodate sleeping regulations); for the Women’s Mentoring session in week 8 (intentional segregation), which is approximately a 2-hour-long discussion; and during barbershop runs (unintentional segregation).⁷⁰ The research team also observed one company conducting the seabag remedial in gender-segregated groups. This is not a standardized practice, but a way CCs can mitigate opportunities for inappropriate contact between male and female recruits during the remedial. Otherwise, the company operates as a cohesive unit, and no distinction is made by gender.

The number of female recruits who form with a company varies depending on how many enlist at any given time. The Coast Guard seeks to have no fewer than two females in a company because recruits are not permitted to sleep in a squad bay or tower by themselves. However,

⁷⁰ No women chose to have their hair cut at the barbershop, but they could.

there have been instances of single female recruits as a result of recycling and/or injury rates. In those rare instances, the female recruit hygienes and sleeps in another company's female squad bay. The ratio of female to male recruits in a company determines how recruits are positioned in squad bays. In barracks with no towers, female recruits occupy one of the four squad bays. If a barracks has towers and the female population is small enough, they are placed in a tower. Recruits housed in towers must request permission to cross the squad bay to access the quarterdeck and main muster, as mentioned earlier, and to enter the tower. They do this by approaching the main squad bay and hitting the door a few times to notify the recruits in the squad bay of their intent to enter. The recruits in the squad bay must secure the head and yell "Clear" before recruits may cross from the tower. Male and female recruits may approach the opposite gender's squad bay or tower if, for instance, squad bay leaders have a need to communicate with one another. The recruit requesting to speak to a recruit of the opposite gender waits by the open door for the other recruit so they can discuss tasks pertinent to training.

Squad bays are used as sleeping quarters and during the training day. Recruits gather in the squad bay for roll call after wake-up and before lights out, referred to as main muster. CCs conduct incentive training during this time. Though this form of training can occur in the squad bays, the Coast Guard uses the quarterdeck more for such training because of squad bay space constraints and integrated training purposes.

Narrative description of a company completing the confidence course (November 2021)

After receiving a safety briefing from the CCs, recruits begin the course. The first obstacle is clearing a bar. There are two levels of bars: a taller and a shorter bar. Recruits self-select the bar appropriate for their height. Most of the female recruits select the lower bar, as do several shorter male recruits. As these recruits clear the lower bar, a female CC stands nearby, providing feedback on their technique to ensure they complete the obstacle safely. Three male CCs do the same for the recruits who go over the higher bar. Both male and female recruits cheer fellow recruits struggling to get over the bars, and they continue to cheer and encourage one another as they clear each obstacle. The high wall obstacle consists of a shorter and a higher wall. As recruits attempt to scale the wall, other recruits are allowed to assist. Assistance largely comes from same-gender recruits; however, mixed-gender assistance is allowed and witnessed. After a female recruit seeks support from one of her shipmates, a male recruit kneels and gives her a boost using his leg as a step. Using the same technique, a female recruit gives a male recruit a boost up the high wall.

In this case, height determines which bars and walls recruits selected, not gender. This training sequence illustrates how gender is inconsequential to Coast Guard training as a result of integration at the company level (the smallest training unit). Recruits constantly interact and work together, regardless of gender.

E. Benefits of Gender Integration at Recruit Training

Service leaders, training cadre, and drill instructors identified many benefits of gender integration at recruit training. Gender integration can occur in two ways at recruit training: integration of male and female recruits or gender integration in drill instructor teams. Benefits of gender integration from the Army, Air Force, Navy, and Coast Guard recruit perspective are covered extensively in chapter 9.

1. Benefits of gender integration among recruits in recruit training

Several broad themes emerged as Service leaders, training cadre, and drill instructors shared their perspectives on the benefits of gender integration for recruits at recruit training. One observation was that gender-integrated recruit training mimics the gender-integrated service environment for which recruits are preparing themselves. Another was that opportunities for male and female recruits to work together help break down gender biases or stereotypes recruits bring with them and prevents the reification of divisions or separations in gender-segregated training environments. Finally, gender-integrated training in the Air Force, Army, Coast Guard, and Navy highlighted how diversity of thought strengthens the team, from the lowest unit level to the broadest Service institution.

Recruits learn how to work in a gender-integrated environment

From the perspective of the other Services, the most prevalent benefit of gender-integrated recruit training is that it prepares recruits for the fleet or operational forces; it is part of mission readiness. All branches and all occupations in the U.S. military are integrated;⁷¹ therefore, most recruits will work with members of the opposite gender at some point in their careers. Basic training prepares recruits to become members of their respective Service. From the perspective of the other Services, working with people from diverse backgrounds—including members of the opposite gender—is a fundamental aspect of military Service that should be reflected in the initial training environment. Being a basically trained Service member in the Army, Navy, Coast Guard, or Air Force includes the practical application of training with recruits of the opposite gender. Several illustrative quotes capture the perspectives of many Service leaders, training cadre, and instructors:

Having them start out at the ground floor, conducting everything as one team, it doesn't matter if you're male or female. You're there to work as a team; you're there to become a Soldier, and that's the focus and that's what's imprinted or implanted and reinforced throughout Basic Combat Training, because wherever they go in the Army, it's going to be gender integrated, and so that teaches them that. If we didn't do gender integration, I mean, they wouldn't have a full picture of the Army and how to operate within our Army.—Army Service leader, civilian, male

They wouldn't get a sense of the real Army. If you don't learn to work with the opposite sex, you could be very biased towards that one particular sex, and what would that benefit? The whole world is not divided into two. We work side by side with one another.—Army drill sergeant, female

I think what's great about the fact that we're integrated, I would say, is when males get out to the fleet, they're not surprised by a female being around because they're used to it here. They're okay with the fact that they have a shipmate that's not the same gender as them.—Coast Guard Service leader, officer, female

⁷¹ The Combat Exclusion Policy was lifted by then-Secretary of Defense Ash Carter, allowing all military occupations and positions to be open to women as of January 2016 (Pellerin, 2015).

So the sooner you get accustomed to that, you go through the training like that, because that's what the real world is going to be like. I think we're setting them up for success. Yeah, so I think that's the biggest benefit is, hey, we're trained, like, if I train ... like you're going to see in the field. So here's what the Air Force is all about. It's guys and gals working together.—Air Force Service leader, officer, male

Many felt it is not only important for recruits to learn how to work with members of the opposite gender, it is crucial that integration starts early. Recruits learn a variety of things in basic training, so gender-integrated training from the beginning sets the tone for the rest of their military service. One Air Force Service leader emphasized that gender-integrated basic training is about showing recruits “*what right looks like from the beginning.*” Similarly, an enlisted member of the Coast Guard training cadre noted, “*We set the standard from the beginning when they're here.*” Support for gender integration early in training is understood to normalize gender differences while de-emphasizing their importance in the training environment. A female Navy Service leader officer stated,

I think it just helps reinforce, hey, the Navy is a reflection of society, and you're expected to work with males, females, everyone in between. And it's not an issue, because if you do your job, if you follow orders and follow regulations, it should be a nonissue. And we want to make sure that people see that, that there's no special preference for one group or the other group. You are based on your actions.

The training environment is a learning environment. Service leaders, training cadre, and instructors felt recruits benefit from learning the boundaries of and skills to form professional relationships with members of the opposite gender in the training environment before getting to the fleet or operational forces:

[Integration] creates diversity of thought. It creates diversity of action. It increases learning, and it increases conversation and dialogue. That needs to happen at an earlier time in the recruit's career. Because in BMT, having these uncomfortable conversations, if you start out with realizing what's acceptable and what's not, and the reason why something is acceptable and what's not is because of the people in your formation that you begin with. That's where you're going to increase awareness, you're going to increase our core values, and you're going to increase the effectiveness of all of our graduates.—Air Force Service leader, enlisted, male

They need to know what's good to go and what's not good to go. We tried to really hone that in here. You don't touch people at all, period. We don't allow recruits to touch each other unless it's an emergency or they're providing medical aid or certain scenarios like that. Or if they're adjusting a uniform, they're supposed to ask permission first, like, “Hey, your collar is messed up. Can I fix your collar for you?” You want to [start] that here; that's supposed to carry over. Some of the other—I've had prior Service recruits that are like ... “I've never had to work with a female before.” From a male recruit, male recruit, “I've never had to work with a female before.” ... Letting them get that exposure here. ... They need to have those ground rules on how to interact with each other already

set in stone there, then for the rest of their career.—**Coast Guard training cadre, enlisted, male**

Lack of integration creates problematic divisions between genders

In discussing the benefits of gender integration, Service leaders, training cadre, and instructors emphasized the harmful divisions gender segregation practices could create. Respondents addressed how gender integration practices in recruit training prevent the creation of false differences or opposition between male and female recruits or Service members.

I think it's important because, I mean, society's gender integrated, right? Like, we don't go to the store and there's a male checkout line, a female checkout line. So why would joining a military service be any different? Because as soon as they graduate here, the way I see it, if you go through a gender-integrated or a nongender-integrated Service and you graduate boot camp, well, there's still real life after that. But if you've gone through 8 or 12 weeks with just somebody of the same gender, now you're almost in this place where it's foreign to you in a weird way. So for us, meshing them in, because they're going to units, they're going to be mixed gender right off the bat, and they're going to get put on ships where they're going to have to figure out how to work with males and females alike. Starting it from day 1 and setting that precedent is imperative in my opinion.—**Coast Guard training cadre, enlisted, male**

In the operational military, you're going to have males and females obviously working together. Why not start it at the basic training level? ... For me, it would create division, you know, you're [a] young lady. It's not necessarily that you're not good enough, but yet you can't train them with a male recruit and vice versa?—**Air Force military training instructor, female**

As a relevant reference for discussions of gender integration, a male Navy Service leader offered a recent, concrete example of how the Navy recognized that their practice of separating special warfare recruits in recruit training had unintended social and cultural consequences in the fleet:

[What] we previously called the 800 series divisions, those were people that were going to be Navy SEALs and Navy divers and things ... so, traditionally very male dominated. The leadership within the special warfare community was like, we no longer want them to be segregated from other recruits because ... once they leave boot camp and they go to Coronado to begin ... their training pipeline, like I said, a very male-dominated career field. They go throughout their careers, and it's like never really interacting with females and so, with some of the issues they've had in that community, it's like, hey, we need to have them being integrated with other Sailors. Not just females, but Sailors from other fields, so they don't have that mentality of superiority of, "Hey, we are SEALs in the special warfare community." So yeah, we are, it was starting at boot camp. It's building that division ... so now those Sailors are integrated throughout boot camp.

A female Coast Guard Service leader described how integration in recruit training builds a shared respect for male and female recruits that carries forward into the fleet, something she feels could not be accomplished with gender-segregated training:

A female can go to her unit knowing that every male that's there went through the same thing she had to go through. Nobody earned anything more than she did. Or for [a] male, that female first class that's above me as my supervisor deserves all the respect because she's been through this, that, and there. That she started from boot camp like I did. So, that basic understanding of "We came from the same place and you earned your keep. Nothing was handed to you." They learn that here because they look to their left and their right or in front of them and it's their female shipmate. If you look to the left and right of you and it's just your brother, okay, now you get to the fleet and you see a female. It's like she can't do what we did because we went through together. I don't know. Their boot camp was probably easier for them. It's just the biases or just the ignorance that they probably had it easier because you didn't see. They see what the females have to do because they're right next to them, sweating with them. If you're separated, how can you really know what they've done to get to where they are, if it's the same as yours? All you have is an idea. Here, there's no idea. It's right in front of your face. Either you like it or don't, but they're going to graduate with you and they earned it, and I think that's the best thing about bringing them together, is that respect and family orientedness. Mostly respect, though.

In summary, Service leaders, training cadre, and instructors felt that gender divisions may unintentionally reinforce or give meaning to the separations, which could create issues in future training environments and in the military's operational forces.

Integration dispels gender biases and stereotypes and builds trust among recruits

Recruits arrive at basic training from every part of the country and all walks of life. They bring with them vastly different experiences, shaped by their family backgrounds, local communities, religious beliefs, and cultural norms. One of the major benefits of gender integration described by the other Services is its ability to dismantle gender biases and stereotypes recruits may bring with them:

I think a lot of thinking and upbringing in certain regions around the country are still old school. We like to squash all of that here in the sense of, like, the old way of thinking of the, like, females are supposed to be at the house. They're the homemaker. The males are the ones out. That's still happening. We still get recruits that think like that because that's how they were brought up. Well, that's not going to fly in the Service. We want to squash that here. I think the benefit of that is it's going to set the males that may have that, those upbringing styles, it's going to squash that here before they get into the fleet and start saying things that aren't good to go or treating people differently because that's going to end their career. Here, they might have to hold something heavy, they'll be held accountable, but in the fleet, that's real-world consequences. We don't want people like that in our Service that are still thinking that way. We're a small Service and we just, we

can't put up with that. It's a cancer that spreads.—**Coast Guard company commander, male**

I think when men are put right next to women and expected to go through the same exact standards and evolutions, they get a much better understanding that there's not as much difference as they maybe have been conditioned to think, and I think that's what would be missing [if they were segregated] is that they would somehow think that they had it tougher.—**Navy Service leader, officer, male**

You get to see who has natural leadership qualities, who was born to lead. They are just good at it. You can't take that away from them ... the fact that they get, they realize that, you know what? He or she is better than me. I should probably take some notes from them. I should probably take their lead.—**Army drill sergeant, female**

Dispelling gender stereotypes or myths through gender integration, especially those related to women, builds trust among recruits. An Army Service leader stated—

Why not put them into the same environment from the beginning, so that it can dispel some of the attitudes that men or women may have on each other and get out there and say, "Hey, look, I'm just as good as you are as a Soldier. I can shoot, I can run, I can communicate, and I can do my job just as well as you can." ... If they learned that early in their career, that will make for a better Soldier down the line.

Integration brings diversity of thought

Another major benefit of gender integration described by the other Services is that integration brings diverse thought, strengthening the overall team and developing recruits' ability to engage with their training. A Coast Guard company commander described it as "*not limiting your knowledge pool*"; similarly, a Coast Guard Service leader stated, "*You need a lot of tools in the toolbox in order to get the job done.*" The other Services saw diversity as an important facet of strengthening the military overall, which begins in the basic training environment.

We need to embrace diversity of thought—not just diversity, but diversity of thought. It's very important, and these young men and women are not just our replacements, but they're going to be our upgrade. When I'm done, the people that I've trained would be my upgrade. It's to have that diversity of thought. They're the ones that are going to be the innovators, changing things, making the Air Force better, and if we lose that diversity of thought, we may be losing something that is going to be beneficial to our force. And so we cannot have less diversity or less gender integration, but more of it, more of it.—**Air Force military training instructor, male**

The more resources you have, the more minds, the more input you have to things, opens up your door for a lot of things. Yes, you have that common ground if you weren't integrated, you have that cohesion to a certain extent, okay, but you won't be able to develop or raise the bar, essentially, with multitude of minds or different types of minds.—**Army drill sergeant, male**

Providing opportunities for diversity of thought in the basic training environment is seen as enhancing and reinforcing lessons and core values already being taught. One male Air Force Service leader stated:

If you start [integration] early, if you started at BMT when you have core values, when you start to understand what integrity and dignity and respect [mean], and when you're being taught those lessons and sitting right next to you is a female Airman or a male Airman, you're able to actually understand what that means versus "Yeah, I'm talking about dignity and respect, but I'm sitting in a room full of men" or "Diversity and inclusion and integration, but I'm sitting in a room full of men."

2. Benefits of gender integration among drill instructor teams in recruit training

Gender integration of drill instructor teams benefits recruits and drill instructors alike. Members of the other Services agree that recruits gain more from recruit training when they are led by instructors of both genders. In particular, male recruits benefit from exposure to female leadership. Mixed-gender drill instructor teams show recruits, in real time, successful examples of gender-integrated teams and provide drill instructors the opportunity to learn from one another.

Male recruits benefit from exposure to female leaders in the drill instructor role

While Service leaders, training cadre, and instructors from the other Services described benefits to experiencing leadership by the opposite gender, there was specific emphasis on the importance of male recruits being trained and led by women. Some men who join the military have never been exposed to female authority figures or may come from cultural or religious backgrounds where women are not seen as leaders of men. Familiarizing male recruits with female leadership in the form of a drill instructor sets the tone for military service in an integrated environment and identifies recruits who show trouble adjusting to military culture:

We get recruits that, in the beginning, they're not used to female leadership. Once they see that they have an issue with it, and then we address it. You're joining an organization where your leader could be a male or female. They have to learn that in the beginning. That's why I feel like integration and boot camp, they see here and [know] to expect it when they leave and go to the fleet. I think it's really good that we start here because there's recruits that have issues with that.—Navy recruit division commander, male

If he [the recruit] struggles with taking orders and authority from females and he's not given that opportunity to either get weeded out here or build himself up and get over that, then he's going to have that struggle in the fleet, and now we just put somebody out into the fleet that needed that.—Enlisted Coast Guard training cadre, male

In general, there was agreement that recruits benefit from, as a female Navy RDC described, "being able to learn and respect and take orders and commands from someone of a different gender."

Mixed-gender drill instructor teams show recruits successful gender-integrated teamwork and provide recruits greater options for support

A benefit of mixed-gender drill instructor teams, according to members of the other Services, is that they provide recruits a real-life example of successful gender integration. Recruits see their drill instructor team working together in a professional manner while executing the mission. Another important message recruits receive from seeing mixed-gender drill instructor teams is the idea that a superior is a superior, regardless of their gender. A male enlisted Air Force Service leader reflected on his experience in basic training:

When I went through BMT in [the mid-1990s], my lead instructor was a female within a flight of all males. ... She instilled the fear of God in me, and I knew that, hey, that is what a staff sergeant looks like, not a staff sergeant female. I knew that an NCO [noncommissioned officer], my first exposure to an NCO in the Air Force, was a female staff sergeant, and she made me into the ... chief that I am today, for sure.

Many interviewees felt mixed-gender drill instructor teams give recruits the opportunity to seek counsel or support from more than one type of person as they progress through basic training. For certain issues or for certain reasons, recruits may feel more comfortable speaking to a drill instructor of their same or opposite gender; a mixed-gender drill instructor team provides recruits with more options for someone to turn to for guidance.

Drill instructors on mixed-gender teams learn from one another

Drill instructors also benefit from their experiences on mixed-gender drill instructor teams. Service leaders reflected on how male and female drill instructors learn from one another in their experiences working together. An Army Service leader shared how intentional instruction and drill sergeants sharing their experiences with male and female recruits help everyone learn:

Female drill sergeants can educate the male drill sergeants. The males can educate the female drill sergeants. We do have training in the Drill Sergeant Academy curriculum that prepares both male and female drill sergeant candidates how to deal with both male and female [recruits]. So, for example, they have a block of instruction where drill sergeants learn, okay, when they go out to the field, field training exercise 2 or 3 days, what are the challenges or things that both male and female Soldiers might bring up that they need to be aware of and have planned for, menstrual cycles and things like that? ... We teach that to them, but also having that female drill sergeant, they both help each other in addressing those things.

Integration and diversity help drill instructors learn and become better leaders, a Navy female Service leader said:

Having diverse skill sets of leadership capabilities is really important, not just to help lead a division, but also to grow as a leader yourself, having that diverse array of leadership and experiences to leverage when you're training a division. As far as leading

an integrated division, you're exposed to different types of recruits that you have to figure out how to lead that maybe you're not used to, not familiar with. It's, again, it's pretty comparable with just diversity in general, the more exposure you can get to different people with different experiences, different strengths, different weaknesses, the stronger you're going to be as a team, as a leader, as an RDC, as a recruit. It's a win any way you slice it, I feel like.

F. Challenges of Gender-Integrated Recruit Training

The Coast Guard, Navy, and Army all have decades of experience with gender-integrated recruit training at the lowest training unit level.⁷² It is important to note that these long-standing practices sometimes made it difficult for Service leaders, training cadre, and instructors to conceptualize specific challenges related to gender integration because integration is already woven into the fabric of basic training for their Service. For example, an enlisted Army Service leader stated, “*Gender integration in the Army has been there since '86. So it's been around a while. Most of the other Services are feeling the pain that we've had, that we dealt with almost 30 years ago.*” A female Navy Service leader shared a similar sentiment: “*I think that we've been doing it for so long that it seems normal, which is weird that other Services don't do it. That's how it seems. It seems like they're behind in some archaic times and we've already been through the struggles.*” For many Services, gender integration has become a fact of the training environment, which made it harder for those interviewed to isolate gender or gender-related challenges as problems that need to be overcome:

I don't think [of] the challenges per se because this is an expectation of the job. You go outside in the summertime and you're going to be faced with bugs. It's a known thing towards, like, they're not going to dissuade you from going outside, they're not going to change what you do, and you'll accommodate for them just as much as you can. And at the same time, there's small little issues. And when I say they're issues, they're not really issues. They're small learning lessons.—Coast Guard Service leader, enlisted, male

We don't design anything around any gender. I think that that's significant because it manifests into how we train, how we assign people. We do have some requirements for having female representation when the training of individual or female recruits, but we also have the exact same for males ... so that would be the only point where we pay attention to it is with the actual manning. ... I think that gender integration is just, it's like an afterthought, we make sure that, you almost have to think about it actively to realize that you're training different genders. You walk into a house and you really can't tell that it's a male division side or a female division side; it just looks like [a] recruit compartment.—Enlisted Navy training cadre, male

The long history of gender integration and the erasure of gender as an identity of consequence for training units is a testament to how large-scale changes that were once socially or structurally inconceivable became a standard practice over time. The difficulty some interviewees had in thinking of challenges related to gender integration is a notable finding. Of course, interviews involved robust discussions about the challenges of gender-integrated recruit training, with

⁷² The Air Force began gender-integrated recruit training in 2015.

explicit questions on the matter and probing and follow-up questions. Cultural issues about gender attitudes and biases and relationship dynamics between men and women were identified as the most persistent and prevalent challenges to gender integration at recruit training. Other common issues included physiological gender differences that matter for the training environment; logistics, communication, and guidance; and facilities.

1. Cultural change is a pervasive obstacle to gender integration

The intersection of culture, gender, and the military institution was the central theme of challenges to gender integration in the recruit training environment. This included broad military cultural issues and how gender biases infiltrate important relationships among recruits, between recruits and drill instructors, and among drill instructors. Service leaders pointed to long-standing historical roots of male-dominated military culture as substantial obstacles to the acceptance and support of gender integration and seeing women as equal to their male counterparts in recruit training:

Only 15 percent of the Army are women, right? I think when we start thinking about historically, how far ... we've come and the opportunities that have been open to us as women in the armed services. It's incredible for us as women, right? But I think there's still some deeply ingrained dissonance with the fact that women can also be equally as strong, equally as fast, equally as tough, equally as lethal. So, with the integration, I think, primarily, I mean, there are many barriers, I'm certain, but primarily, it's culture and acceptance.—Army Service leader, officer, female

As I talk to my brother and sister Services, ... many times when I talk to them, they are simply trapped in form. And it's because this is how we have always done it. And—and there's a lot of risk aversity when it comes to integration. But I would tell any of them to take that risk because, like Airmen, Soldiers, Sailors have done before, it is our job to stand up to those aversities. And I think we have to get up, get on it today. But I think we're trapped in form.—Air Force Service leader, enlisted, male

I think some barriers that they're scared of losing is traditional things that they're willing to not let go of. The "good old boy" type of mentality will go away. The more stringent things have to be when it comes to sexual assault or harassment. I feel like they will lose that security blanket of being okay if they did something wrong ... because back in the day, they could do things and its male dominated. It's like, this is the club, we're going to brush this under for you, don't do it again—a pat on the back or slap on the wrist type of thing. Now that's not like that. If you get called in for something that's really bad, you're going to get in trouble for it. There is repercussions to your actions now. So I think losing that security blanket or that comfortability of being able to say whatever you want, to do whatever you want in a room—it's going to be gone. If people are going to feel like everything's too sensitive or they can't be comfortable to say whatever they feel or whatever comes off their head, [that's] because it's not respectful.—Coast Guard Service leader, officer, female

Biases and gender-based attitudes of drill instructors were identified by Service leaders and drill instructors as considerable obstacles to gender integration at recruit training. Drill instructors who have negative attitudes or conscious or unconscious biases about women can degrade working relationships with their fellow peers and serve as poor role models for recruits.⁷³ An Army Service leader noted the need for caution in the drill sergeant selection process, stating, *“Those attitudes when the supervisor’s not around, some of those attitudes surface back up and they start treating individuals like they don’t belong there. That’s where you’re going to have problems.”* Multiple interviewed members of Army leadership referenced previous issues with female drill sergeants not being respected by male drill sergeants from infantry or combat MOS backgrounds, describing how female drill sergeants are sometimes treated as *“second-class citizens”* who feel that they *“have to work twice as hard to get half the credit”* among their male peers.

Unconscious biases or gender stereotypes from instructors can arise in sustained or brief moments in the training environment and influence recruits. At a SHARP class at Fort Jackson, the study team observed a male drill sergeant teaching a mixed-gender class of recruits about SHARP definitions/issues, reporting procedures, and available resources and support. Throughout the course, the instructor often directed his body or turned toward the row of female recruits to deliver the information. In some instances, he specifically addressed the women (e.g., *“Ladies, when it comes to reporting...”*) on course subject matter that pertained to every recruit in the classroom, regardless of gender. At a firing range in Fort Jackson where recruits were performing a qualification exercise, a male drill sergeant asked a female recruit to come over to his location by saying, *“Hey, female, come over here.”* The female recruit complied, rushing over to the area. Based on Army equal opportunity classes observed by the study team, trainees are told they are never to be referred to or refer to others using “female” as an identifier. These are two specific examples witnessed by the study team that are emblematic of how gender-based treatment, even in very brief moments, can occur and compound within the training environment.

Cultural gender issues were also identified as a challenge for gender integration. Primarily, the issues involved male recruits not being respectful of female leadership—both drill instructors and fellow recruit leaders in their training units:

We definitely had issues where maybe a female was appointed a section leader for a company and a male recruit refusing to take orders or listening to that person just based on the fact that it was a female giving the orders. So we’ve definitely had some of those issues that, that bubble up.—Coast Guard Service leader, officer, female

The acceptance of females into these roles by their male peers ... there are males who feel like if they’ve got a female in their platoon, that that’s the weak link. That female is going to bring them down. I think it’s just dictating acceptance of their male peers has really been the greatest challenge I think for integrations in the females. [Interviewer: Do trainees sense that?] In conversations I’ve had with the female drill sergeants, the trainees definitely sense that. They definitely do, and some, many times, vocalize the fact that they see that even within and among the drill sergeants, that the males don’t, they aren’t as accepting of their, even their female peers or female drill sergeants and

⁷³ For greater detail on these issues, see chapter 7 (drill instructor perspective) and chapter 9 (recruit perspective).

sometimes exacerbated through comments, whether jokingly or not. That, there's definitely, but the trainees definitely see that, yeah.—**Army Service leader, officer, female**

Gender-based perceptions, comments, or jokes among recruits of the opposite gender can derail the cohesion building process that is often a fundamental part of the recruit training process. Two members of the Air Force training cadre shared specific examples:

Challenges-wise, I've seen it come from classroom instruction, and especially like the SAPR [Sexual Assault Prevention and Response] class, where males do not act in a professional manner. And then that causes the females to not be receptive towards that flight, almost the rest of the flight cycle, because an 18-year-old male is being an immature young man. ... Once that happens, it was hard to kind of get them on the same page again.—**Enlisted Air Force training cadre, male**

Two complaints, actually, from members of the female flight that, for purposes or rationale unknown to me, the male flight started making comments about how the female flight was weaker, slower, all that stuff. We put an end to that because that's not professional.—**Air Force training cadre, officer, male**

Drill instructors also highlighted the need to be vigilant about behaviors of benevolent sexism⁷⁴ among recruits and correct these behaviors in integrated training units. A female Coast Guard company commander described, “I had a male recruit pull out a chair for a female recruit, which is, like, you want to do that for a male? [Then] you're not doing it for a female recruit.” A male Army drill sergeant shared a tactic he uses to deter male trainees taking heavy lifting tasks away from female trainees to help them and demonstrate their strength:

Whenever I see, whenever I call for duty gear to be downloaded, I would say, “Hey, let me get five individuals that are males, five individuals that are females” to keep it neutral. Because if I say five Soldiers ... where males typically come in and be the alpha of it and then they will [be like,] “It is heavy. It's too heavy for you.”

Cultural issues about gender are complex, nuanced, and interwoven into the social fabric of the military institution. Service leaders, training cadre, and drill instructors spoke to both broad, omnipresent cultural issues and gender-specific interactions among drill instructors and recruits as major challenges with gender-integrated training.

2. Romantic feelings among recruits can lead to distractions in the training environment

One of the most commonly raised concerns with gender integration is romantic-based distractions among recruits who are training together. It should be noted that most interviewees focused on heterosexual attraction (between male and female recruits), although this can be a

⁷⁴ Benevolent sexism is defined as “a subjectively positive orientation of protection, idealization, and affection directed towards women that, like hostile sexism, serves to justify women’s subordinate status to men” (Glick et al., 2000, p. 763).

problem with recruits who are attracted to the same gender, irrespective of gender integration practices. The young age of recruits, typically 18 to 24 years old, combined with being away from home, meeting new people, and experiencing a stressful environment may amplify development of romantic feelings for other recruits. While respondents from all Services described this as an issue, it was most often raised by Service leaders, training cadre, or instructors in the Army and Air Force. Common examples included recruits who talk to each other frequently, exhibit overly friendly behaviors when conversing, smile or “make eyes” at each other, and pass notes. Army trainees colloquially refer to these recruits as “battle boos.” There is a general acceptance that this kind of behavior will happen in an integrated training environment:

The only challenge that I've ever personally had with male and female flights is, again, humans being humans, especially as ... it's mostly primarily younger individuals harassing each other. Trainee X finds trainee Y in sister flight is so attractive, and they start passing notes back and forth from each other, which in those situations we try—we, as the instructors, try—to put a squash to it a lot of the times because it doesn't take much for them to go from, like, platonic professional to unprofessional really, really quickly. So we try and, like, kind of put—I would say, we try to put the fear of God in them a little bit about it.—Air Force military training instructor, female

I think one thing that we have to get through as they're coming through is kind of allowing or teaching them and training them that this is the environment that they will be in. And certain conduct is appropriate, certain things are not appropriate. So I think that's always difficult. They also, just to be frank, they're 17, most of them, 17- to 21-year-old kids. Not kids, but they're young and they are hormonal and everything. And so it's something we still deal with. And so that's always a concern of making sure—especially living, all living together and everything—is keeping the professional training environment and everything. So I think that is hard. That's difficult. I think that's probably one of the biggest issues is just making sure when they get briefed.... Sometimes the way they put it is “Boot camp is not the place to find love.” I will say, though, that's not unique to gender integration anymore.—Navy training cadre, officer

Common tactics for discouraging romantic behavior include drill instructor vigilance and intervention, methods for recruits to report witnessing romantic relationships, the use of cameras to monitor and control recruit environments, removal of recruits from flights or companies or platoons, and the practice of dropping recruits back in the training cycle. Coast Guard interviewees noted romantic issues as minor but attributed their highly controlled training environment and accountability systems (which swiftly and frequently call for recruits to be dropped back) as mechanisms that dissuade recruits from acting on any romantic feelings.

An Air Force MTI described a related challenge—allowing recruits to develop appropriate, platonic, professional relationships with opposite-gender members of their training unit:

We had to have that extra training to be able to say, hey, these young men and young women can actually have a professional relationship together. And for us, every time that we saw ... a male and a female talking, and we said it ourselves, they could literally be

sitting and discussing something as far as training goes. And one laughs and an instructor would always—we'd be like, "Are they flirting? Are they interested in each other? Should we go and stop that?" And then we'd yell and say, "Hey, stop talking to each other." And that took a lot for us to actually stand back and say, hey, you guys can actually have a professional relationship because we're a brother flight and a sister flight. And we have to understand that if we put them to go and sit together and take weapons apart, they're going to talk. And that was probably one of the hardest aspects because we weren't sure if they would develop romantic feelings for each other. So that was certainly one of the, the harder parts for me to get past—coming over here and seeing, like, actual basic trainees sitting together, laughing and enjoying a conversation with a male and a female.

Discussions about recruit distractions resulting from romantic feelings refer to consensual interactions that are inappropriate for the training environment but do not cross the line into sexual harassment or sexual assault. Harassment and assault issues as they relate to gender integration are discussed in more detail below.

3. Sexual harassment and sexual assault issues at recruit training

Sexual harassment and sexual assault are taken very seriously by all Services at all levels of training. The study team asked those interviewed to reflect on sexual harassment and assault in recruit-on-recruit, instructor-on-recruit, and instructor-on-instructor instances, including same-gender and opposite-gender involvement. Recruit-on-recruit and instructor-on-recruit sexual assault cases during recruit training do occur but were portrayed as rare. Most interviewees attributed the infrequency of these events to the highly controlled and strictly monitored environment, day and night, experienced by recruits and training personnel. The majority of sexual assault reports made by recruits involve incidents that took place before they joined the Service; through education and training classes, recruits may recognize for the first time that they were assaulted in the past.⁷⁵ They might also report previous incidences of harassment or assault during recruit training because they are able to seek free support services from the military.

Sexual harassment incidents at recruit training were described, by all Services, as a consistent issue with low rates of prevalence. A female Navy RDC reported, *"I can tell you from what I've seen [sexual harassment and sexual assault are] not as frequent, but it also does not, not happen. We've had cases happen. Whether it's same gender or the opposite gender, we've had that happen. It hasn't been egregious, at least from the ones I've heard about."* There is a general acknowledgment that sexual harassment issues will occur in recruit training, regardless of gender integration, but that gender integration may increase the number of incidents that occur. Many attribute sexual harassment issues to the young age of recruits, a need to learn right from wrong, and the employment of very strict definitions and clear boundaries of what constitutes sexual harassment in the Military Services and, specifically, at recruit training.

⁷⁵ The Department of Defense Independent Review Commission on Sexual Assault in the Military reported similar findings, noting that drill instructors and recruits need additional support to deal with prior incidents (U.S. Department of Defense Sexual Assault Prevention and Response Office, 2021).

The most common recruit-on-recruit sexual harassment issues described include derogatory comments, a recruit asking another recruit to date or connect on social media, inappropriate touching or brushing of body parts during movements (such as in the chow hall line or while at training events), recruits cuddling in racks overnight, and “locker room antics” (described as horseplay, slapping, and flashing). Training cadre and instructors generally agreed that these instances happen more often between recruits of the opposite gender, but a notable portion of the issues involve recruits of the same gender.

While some interviewees spoke about sexual harassment issues between instructors, there was less detail about “typical” incidents and little clarity about how prevalent instructor-on-instructor incidents are during recruit training. Some respondents spoke about instructor-on-recruit sexual harassment, which was characterized as rare, but when described, most instances involved male drill instructors and female recruits.

There is shared acknowledgment among Service leaders, training cadre, and instructors from the other Services that sexual harassment issues happen in the recruit training environment but are not seen as the most pressing or critical challenge related to gender integration. Each of the Services implement a curriculum to train and educate recruits about sexual harassment and sexual assault issues, how to report them, and how to seek support services for themselves or others in need. Teaching recruits right from wrong is a fundamental part of basic training and inculcation into expected social norms of the military institution:

There’s always going to be some form of sexual assault or sexual harassment, just like the same goes for suicide. There’s always going to be suicide, but we can do everything in our power to prevent and intervene. But as long as we are recruiting members from the American society, there’s always going to be those societal issues that bleed into the force.—Army Service leader, civilian, male

We need to look at how we can build our future Airmen with dignity and respect, and then give them the foundations of what right looks like, because inside of 4 years or less, they could be first line supervisors to more junior Airmen. So this is a critical time to lay those foundations. Don’t expect that to come for the first time at a later professional military education because by then it may be too late. We need to build that foundation in our Basic Military Training.—Air Force Service leader, officer, female

A distinct challenge related to sexual harassment and sexual assault was the resource and time investments required to conduct investigations on reports. Although only a few respondents brought up this challenge, they described how difficult it can be for recruit training personnel to conduct thorough investigations of each sexual harassment and sexual assault claim, work that is warranted but taxing on staff who are already stretched thin.

I don’t have enough time to deal with these problems that more than likely will arise once you gender integrate fully. All right, that’s simple comments to, maybe, well, I guess the far end of the spectrum is, like, physical and sexual assault, right? But anything in between there, as soon as one of those things pop off, that’s a high problem—not a problem, a high intensity, all the way up through several chains of command that we

have to tackle. Now, let's say one of those investigations takes up 2 to 3 hours a day of me and my staff's time, and we have three trainees. Because of the mix, that one reports sexual assault, one reports harassment, one reports something else. Guess what? My staff is tapped out. We no longer can train because, collectively, we now have three trainees that we now have to put in so much time and effort to run the due process on the investigation, all that stuff. Again, this is just my leadership view, but I think a lot of leaders are probably looking at this.—Air Force training cadre, officer

So everything goes all the way up the chain of command and extremely high percent of things turn into investigations, which is good. I mean, it protects everybody. It protects the victims, sometimes the accused, perpetrators. It protects the command. It's a good thing, but we don't have the manpower to necessarily support it. So we're constantly inundated with investigations and paperwork. It can be something as simple as a recruit looking up and down another recruit once, and that recruit feels intimidated by that or harassed by that, and then that can turn into an investigation. When you have limited staff, it can be very cumbersome trying to manage that workload because some of these investigations can be 50 pages, 70 pages, with lots of witnesses and lots of time spent. And so, I think, in summary, it is mainly manpower trying to keep up with that demand.—Coast Guard Service leader, officer

When considering gender integration as a general topic, sexual harassment and sexual assault issues are usually one of the first concerns raised. However, although Service leaders, training cadre, and instructors spoke about these issues at length, they did not exclusively categorize them as a problematic manifestation of gender integration. Rather, they saw them as an element of the recruit training environment, where many young adults are placed together in close quarters for the first time while learning how to behave in a professional working environment.

4. Gender differences that matter in the training environment

A set of challenges raised for gender integration at recruit training were gender differences that affect the training schedule or military uniformity procedures, including hygiene and basic self-care, physical fitness standards, and drill instructors learning to train recruits of both genders.

Hygiene and basic self-care

Men and women have different bodily hygiene practices that magnify in significance under tightly controlled and monitored schedules at basic training. Men require regular appointments for haircuts⁷⁶ and time for shaving facial hair. Women require time to secure their hair to conform to approved hair grooming styles. Women who are racial or ethnic minorities may have additional considerations for proper maintenance and wear of their hair within their Service's approved grooming standards. Women also typically need more time to use the latrine or head because of the time required for full removal of gear and trousers to use the bathroom; women must also maintain proper hygiene during their menstrual cycle.

⁷⁶ All Military Services require male recruits to shave their heads upon arrival at basic training. During basic training, male recruits visit the barbershop periodically at prescheduled times.

The manifestation of these time differences, especially with daily hygiene tasks, were presented as a minor challenge and consideration for gender integration logistics and scheduling. Military uniformity standards were also discussed as an issue for female recruits who need to carry feminine hygiene products. For example, if recruits' orders are to have only certain items in their pockets, accommodations must be made for feminine hygiene products. Female recruits also must have access to these products and the ability to properly dispose of them during their training.

Physical fitness and physical fitness standards⁷⁷

Training cadre and drill instructors from other Services described notable differences in the physical fitness levels of men and women at basic training. On average, male recruits were perceived as more successful with the challenging physical fitness requirements of recruit training. Respondents noted that female recruits, on average, experienced greater struggles than their male peers with aspects of training involving physical fitness. Most respondents also pointed out exceptions, including women who performed at or above their male peers and men who performed below their female peers. Some felt that today's recruits, who come from a less physically active generation, are more challenged by the physical component of training regardless of their gender; the COVID-19 pandemic was also seen as a factor contributing to recruits entering service with a perceived lower baseline of physical activity.

[Interviewer: What challenges do female trainees face that are different than male trainees?] *Fitness, first and foremost. Every female flight I've had, every female flight I've interacted with, probably has 20 percent not meet [the] fitness standards towards the end [of the cycle]. Fifteen to 20 percent, I would say. And then they take their final. And out of that percentage, I want to say, probably like 8 to 10 percent get recycled, but I've never seen a female flight not have trainees get recycled to another week group, where I have seen male flights do that.—Enlisted Air Force training cadre, male*

... you do see more females not able to pass [the physical fitness standards] than males. The other day, we ran our RDC assessment, which is just basically an assessment on, hey, you're halfway through boot camp. Where are you at, and how well are you going to do it on the actual PFA [physical fitness assessment]? So they add 1 minute and 30 seconds to their actual [standards] time. ... Had that been our official PFA, I would've had 29 females fail. That gives you the big difference of they're not there. ... My last division, all males, I didn't have a single failure.—Navy recruit division commander, male

I think when they first show up, the physical abilities of males and females is different. ... If you look at males for the PT test and females for the PT test, a lot of times the females get slumped by the push-ups, and the males ... are failing the sit-ups. ... Everything we do

⁷⁷ During the study period, the Army was implementing the Army Combat Fitness Test (ACFT) 3.0. The ACFT 3.0 maintained gender-neutral scoring with performance categories (used for promotions) evaluated separately by gender (e.g., women compared with women and men compared with men) (Brading, 2021; Center for Initial Military Training, 2021). In 2022, the Army announced the ACFT will incorporate an age and gender performance-normed scoring scale (U.S. Army, 2022).

in our training is tailored to the individual. So nothing is expected of someone outside of any average person's physical capabilities. So I don't see there being [any] other [differences] than, obviously, the obvious strength in male and female bodies.—Enlisted Coast Guard training cadre, female

... there's young folks that we have to show how to throw a ball, because they've never thrown a ball before. We do that in preparation so they know how to throw a hand grenade. Some can't even do one push-up or don't know how to run correctly—and this is for both, really, what I see is both male and the young folks military—but I really don't see a difference. I mean, I see both of them. They both come in and strive and work hard to do and to be part of a team, and I see the female trainees stepping up and doing the same thing as their counterparts.—Army Service leader, civilian, male

Differences in Service physical fitness test standards by gender are a factor for every Service member, not just those in the basic training environment. Questions about gender differences in physical fitness standards must be addressed by drill instructors, training cadre, and Service leaders. A male enlisted Air Force training cadre member explained,

We have two different standards for fitness, one for females and one for the males. And I don't see that going away anytime soon, right? Because it's there for a reason, but I think that can create some challenges if they're going to be on the same flight together with what the expectation is for them. Because now you're trying to—as an instructor, you're trying to set two different expectations for one group of people. So how do you communicate that expectation effectively without the males getting stuck in a potential mindset where they're superior because their fitness is better or the females feeling like they're left behind because the instructor's not communicating the intent effectively of what that gender integration is?

Similarly, a female enlisted Air Force training cadre perceived gender integration and physical fitness standard differences as “risky” from a leadership/commander perspective, citing concerns that women in integrated recruit training units would be blamed by their unit peers as being “weak.” A female Army drill sergeant tackled the potential issue of perceived discrepancies in physical fitness standards by emphasizing the individuality of the event,

... PT is an individual event, I tell them [the trainees] all the time. ... I tell them PT is an individual event. At the end of the day, if you fail, it's because you weren't, you did not push yourself when we did a run, when we did sprints, when we did these workouts. Because I run my platoon. I run the crap out of them. I really do. And if some of these males can't pass the runs that we implement, it's because they weren't successful, because they didn't push themselves.

Some respondents felt recruits were less concerned about physical fitness standard differences during basic training; rather, these differences become a topic of discussion in the fleet and operational forces. A female Air Force MTI described, “The enlisted force? Yes. The trainees? No. The trainees ... they've got those blinders on. The sole goal is to graduate. But in the actual Air Force? Yeah, I've always heard comments about that.”

Drill instructors learning to train recruits of both genders

Drill instructors executing gender-integrated training must learn how to train recruits of the opposite gender. Many experience a need to differentiate their approach to training male recruits versus female recruits. A male Air Force MTI described the learning curve he's still working through:

The way I have to train is, it's not very, very different, but it's different, and I can't quite put all of my—I can't quite figure out what it is exactly about what, how I need to be different, but I would say the communication is one, just as an instructor. ... You just have to know and understand and realize that women are different and the way they think, they're smarter. I've learned that right away. They pick up on things really fast. The way they interpret things is going to be different. ... The way you motivate women is going to be different than how you motivate the males.

Logistical concerns for drill instructors training recruits of the opposite gender also arise, such as being conscious of their presence during hygiene times and following regulations during training. A male Coast Guard company commander explained:

At recruit training, specifically, I would say trying to, as a male company commander, being able to hold the females or give the females the same experience that I'm able to give the males. What I mean by that is, like, for a male recruit, I can just roll right up into the head during shower time and make sure that they know that my presence is ever watching, whereas a female recruit, obviously, I would not be able to do that. However, I've been lucky enough to have a female on, I'd say, 95 percent of the teams that I've worked with, so we do have a female presence.

Drill instructors and training cadre must make sure they are treating recruits of both genders with the same disciplined approach. This was more often raised as an issue of male drill instructors potentially being “too soft” on female recruits. An enlisted member of the Navy's training cadre described how this could be detrimental to recruits' perceptions about their drill instructors:

So the understanding [is] that, as drill instructors, when we are in an environment where they're integrated, females do not need to be treated any differently than the males. They should be interacting with [them] the same as they interact with a male and they should not seem to have some type of different attitude or tone or being held accountable differently because that would cause problems within the training when they [recruits] can see that this is something different. They're favoring the females more.

5. Communication, clear guidance, and logistics support for gender integration practices

Gender-integrated training requires coordination, systematic processes, and communication among drill instructor teams to account for recruit movement during the day. One of the lessons learned from the Air Force's integration pilot in 2019 was a need to upgrade their trainee

management information technology systems. Trainees were tracked and accounted for by dorm (which served as a proxy for their flight). With integrated flights, changes need to be made to ensure instructors could execute the integrated training while maintaining accountability of all their trainees across a female and male dorm. The Air Force has made those changes will implement their enhanced integration models in 2022.

Drill instructors may require additional tracking systems or paperwork to maintain accountability of recruits in their training and sleeping units. An Air Force MTI who trained integrated flights prior to the COVID-19 pandemic described the necessary coordination and communication processes for integration:

Number one, you have to know who's in your flight. Number two, those instructors that are on those integrated flights also need to be really talking to one another. Then number three, making sure that, like, ... we have our EALs or Entry Authorization Lists that are broken down by flight. If I was on an integrated flight, I would make sure that I had both EALs with me, so if I have an appointment that I'm passing out to somebody that's not in my flight, I can at least highlight it, take a picture of it, send it to my teammate who's in charge of that flight. Then they're going to be able to track it.

A Navy RDC with experience training integrated divisions also highlighted communication and teamwork among the RDC team as an essential ingredient for integrated training: *"There's a lot more you have to be thinking about when it comes with logistics and planning out your day."*

Policy guidance is another area that can create challenges for drill instructors and training cadre conducting gender-integrated training, particularly if the guidance is unclear or leaves drill instructors to design their own processes or procedures. An enlisted Navy training cadre shared how policy flexibilities initially designed to benefit instructors led to uneven implementation of integration efforts:

We're given too much flexibility on when they integrated and we are looking to close all those gaps. That basically the second that they're ready to, that they've completed their morning routine, the expectation [is] that the division will integrate as soon as possible. What we would have seen in the past is that divisions that just were moving slow or they just didn't want to, they might go do a couple of evolutions by house and not integrate. We were trying to give them flexibility, but it turned out to be we were giving them an easy button. They exploited it and took advantage of it ... so, as we come back out of it [after COVID-19 protocols], we want to reduce the amount of time that it's optional and make it basically that you better have a really good reason why you did not leave as an integrated division.

6. Facilities and infrastructure

Facilities and infrastructure, such as barracks and training spaces, were identified as a challenge to gender integration at recruit training. Facilities that do not allow for male and female recruits to live close to one another and facilities that lack shared training spaces where gender-integrated training at the lowest unit level can occur were seen as problematic. Facility challenges were

most often mentioned as an obstacle without an easy solution, and one that requires advanced planning and a large amount of funding. While this challenge was part of the discourse with respondents from all Services, discussions related to social and cultural challenges were much more robust, dominating interviewee responses about the challenges of gender integration.

G. Best Practices for Gender Integration From the Army, Air Force, Navy, and Coast Guard

Through interviews, focus groups, and extensive ethnographic observations, the study team identified nine best practices for gender integration. These best practices range from macro structural processes, such as how integration happens, to small cultural procedures, such as gender-neutral salutations and responses to drill instructors.⁷⁸

1. Mixed-gender drill instructor teams

The Army, Air Force, Navy, and Coast Guard have trained male and female recruits with mixed-gender drill instructor teams for decades in preparation for their entry into an integrated Service; the study team has identified this as a best practice. Recruit training develops civilians into basically trained Service members expected to execute missions critical to national security. Today's recruits will work in a gender-integrated environment. They are expected to take orders from the men and women who occupy the ranks above them. Eventually, they will lead diverse Soldiers, Airmen, Sailors, and Coast Guardsmen. Training and leadership from male and female drill instructors in their first moments as a Service member sets the tone that men and women are equally respected and authoritative leaders in their Service.

The practice of training under mixed-gender teams benefits Service members in numerous ways. Mixed-gender drill instructor teams model successful gender integration for recruits. Drill instructors from the Army, Air Force, Navy, and Coast Guard described personal and professional benefits from working with members of the opposite gender in this arduous yet fulfilling role. Recruits who demonstrate gender-related biases can be more easily identified and corrected or removed from service when they reveal these biases through interactions with authority figures of both genders. And importantly, not only did recruits from the other Services report tremendous value in being trained by both men and women, Marine Corps recruits stated their desire for a similar training experience (see chapters 8 and 9 for more details).

2. Lowest unit level integration from first day of training

When conducting sustained integration during the training cycle at the lowest unit level (i.e., platoon equivalent), integrating from the first day of training is a best practice. If integrated training units are to conduct most of the training cycle together, integration at the start of training maximizes recruits' ability to build cohesion with their peers and sets the expectation that male and female recruits will work with one another.

⁷⁸ Best practices in this section are not listed in any meaningful order; the study team suggests all are equally important.

Prior to the COVID-19 pandemic, the Army, Air Force, Navy, and Coast Guard conducted gender-integrated training at the lowest unit level from the first day of training. During the pandemic, which began in 2020, several Services paused their gender-integrated training as a risk mitigation practice, reducing contact among recruits who were not housed together. All Services returned to gender-integrated training practices at the lowest unit level by the end of 2021. The Army is the only Service that plans to continue a period of gender-segregated training.

Description of Army BCT “Yellow Phase”

In 2020, the Army introduced a new “yellow” phase that maintains gender-segregated training for the first 2 weeks. The 2-week yellow phase includes several days in reception and focuses heavily on administering academic classes, including classes on Army history, core values, SHARP, and personal finance. In yellow phase, each bay conducts daytime training activities as a platoon (e.g., female bays constitute a female platoon, each male bay becomes its own male platoon). At the time of the site visit, recruits were trained by same-gender drill sergeant teams during yellow phase. The Army plans to continue the 2-week yellow phase, including gender-segregated training for recruits, during and beyond pandemic conditions.

The Army’s yellow phase provided an opportunity for the study team to assess, on a limited basis, the relative benefits and challenges of an initial period of gender-segregated training. In interviews, Army Service leaders spoke highly of yellow phase and felt it generated unexpected training benefits.

We found out—so we did yellow phase because of COVID, and it was a temporary thing. Then we realized that, as COVID started to die down, holy shit, we are gaining, there was probably 25 or 30 things that were positive results of yellow phase. And the primary example is sexual harassment and sexual assault. The sexual harassment after yellow phase—because they were separated and then they came back in after yellow phase—the reporting for sexual harassment went up 300 percent, but sexual assault went down 200 percent. It was absolutely amazing because they understand, and during yellow phase is when we teach [them] all of that stuff. Before yellow phase, we taught all those “how to be a Soldier,” “how to do the right thing”—all of that was done throughout the cycle, throughout basic training. But since yellow phase, we put it all in the beginning and then reiterate it throughout, but everything is taught in the beginning.—Army Service leader, civilian, male

So my experience with yellow phase and reintegrating after the first 2 weeks, I personally saw no issues with the integration. And also at CIMT, we go on staff-assisted visits to each of the Army Training Centers and to the AIT sites and see no issues with gender integration. And also, in yellow phase, we do—we train them that the Army is gender integrated from day 1 upfront.—Army Service leader, enlisted, male

... the idea of a yellow phase has slowed things down a little bit, so that they can get all of these classroom instructions out of the way, where they learn about values, they learn about Uniform Code of Military Justice, learn about customs and courtesies, all those type things. They learned those things at a slower pace now, I think, and it allows the Soldiers the opportunity to get indoctrinated, so to speak, into the Army atmosphere.

Once that is over and then they move into the red phase, then they're ready at that point, they're physically ready, they're mentally ready to move forward and start doing all of the other things that they need to do.—Army Service leader, civilian, male

While Army Service leaders spoke to the merits of yellow phase, Service members at the installation level (training cadre, drill instructors, and trainees) at Fort Jackson were unequivocally against it. They felt yellow phase disrupted and delayed platoon cohesion, essentialized gender differences, and contributed to boredom and apathy-related behavioral issues. Most Soldiers interviewed at Fort Jackson had training experiences prior to the pandemic and could describe the difference from firsthand knowledge. Selected representative quotes for each major issue appear below.⁷⁹

Disruptions and delays to platoon cohesion

I dislike it [yellow phase]. I get it for the COVID perspective, but it's a period where we can't get that platoon unity from the jump. ... We got 10 weeks. So if two of those 10 weeks I'm pulling you apart, now you're getting to know one another, but only for 2 weeks. And then I'm going to mush you back in with all these males that you've got to re-know. Oh, by the way, now you got to relearn male new drill sergeants. It's harder to get after making them part of the team from the get-go. I did get it for COVID ... but from an integration standpoint, it's been the worst part for us.—Enlisted Army training cadre, male

[Interviewer: Is there any benefit to maintaining gender segregation the first few weeks?]
I don't think so. Because then you realize who your team is off the bat, and they have more pride if you do it sooner. So the sooner you do it, the better—you know, your team—the better you work together in blue phase. So it's red, white, and blue.—Army drill sergeant, female

I feel like it would have been better if we just arrived there and we integrated right away. COVID made this hard. In quarantine [yellow phase], we were always with the females. So the first week of being integrated was rough. All the females knew each other, and when we integrated, it broke apart that camaraderie. There is still camaraderie, but COVID has changed things.—Army trainee, female

Yeah, I feel like there's really a key to success, honestly, because once again, you have an end result, and if you start together, typically you want to end together. So that's the way that I see it from outside looking in, and I'm pretty sure that in their mindset has been that they're young. "Hey, I know I'm going to get ready to move platoons here soon. Why

⁷⁹ During the site visit, the study team also had many informal conversations with training cadre and drill instructors while conducting ethnographic observations. No individual conversant liked yellow phase or thought it was beneficial to training. Service leader claims that yellow phase dramatically reduced sexual harassment and sexual assault incidents were not supported by those on the ground at Fort Jackson, including individuals who were current SHARP representatives and educators. Those familiar with SHARP conditions at Fort Jackson felt sexual harassment rates had increased since implementing yellow phase, particularly same-sex recruit-on-recruit incidents.

put a lot of effort or investment in time into this platoon, the cohesion and stuff like that?" That's what I see...—Army drill sergeant, male

Teamwork is slower to be enacted because they're all separated [in yellow phase]. Normally in basic training, by day 3 or 4 you're hitting an obstacle course and doing the rappel tower where you're working as teams. Now we're at day 10 or day 12.—Army training cadre, officer, male

I'll be the first to say that when we integrated it was awkward. It took a while to get used to. But after the first obstacle course and confidence course, there was more bonding. As training continued, we got to be closer battle buddies and friends. In red phase, though, it becomes teamwork. It's awkward at first, but you grow.—Army trainee, male

Essentialized gender differences

The only thing that I have noticed [with yellow phase] is trainees are very, very loyal, right? They will pick their favorite drill sergeant. If it's me, I have four drill sergeants in my platoon, myself and then three others, right, so I will always have a drill sergeant that belongs to me and working with me. If not, it's just me, all right? They are very loyal to those drill sergeants. So then my other two drill sergeants go working on the other bay during yellow phase. When [recruits] come in to get integrated with us, they're like, "I don't have to listen to you." That's the only issue I think that we've ever had with that. They're like, "Who are you? I don't have to listen to you," and I'm just like, "What the hell, where do you come off?" A drill sergeant is a drill sergeant at the end of the day. They are your first line NCO, so you will respect them. You may not have to like them, but you will respect the position that they hold and the rank that they wear on their chest, regardless of who they are. ... I know my two male drill sergeants one cycle had the male bay and then I had the female bay. Those males looked at me like I was crazy. Well, they've lost their damn minds. So that is the only issue that I think that I've seen is that they have, they pick their favorite drill sergeant the first 2 weeks and then once they get integrated, they're like, "Who are you?"—Army drill sergeant, female

It took about a week and a half of our training away. People were just talking trash, and some people would flip out over dumb crap. And it was always male-female. It was a big hindrance for a while before we actually started to know the people we were with.—Army trainee, male

... normally what I see, too, is sometimes—and this is normally from the males—the males have a hard time listening to females at times. So the sooner you can get them together and realize, well, they ain't going nowhere, whether you like it or not, the better that flow goes. ... In my opinion, the quicker it [integration] starts, the better. There's always going to be some of that. Especially if you're like me, when I joined the Army from a very traditional upbringing, you've got to get used to it. So the sooner you start, the better. I think there's often that [surprise] when they find out their female drill is the drill sergeant, that's a female, they're going to tell them what to do ... and it blows my

mind. It's 2021. I'm like, "Yeah, man, you got to listen to a female." So the sooner that can start, the better.—Enlisted Army training cadre, male

Contribution to boredom and apathy-related behavioral issues

I hate yellow phase. I really do. I understand why we do it, but I just hate it so much, because you're sitting there. You're not doing anything. We can train them on 100 different things, but you get bored sitting in a bay, listening to the same person every day. You get bored. You want to do stuff, and that is unfortunately—that timeframe, is when we get a lot of trainees that just, "I don't want to be here anymore." I tell them all the time, "Hey, this is just yellow phase. Just wait and just wait. Give me another week. When we start training, you're going to change your mind," and every single time, they change their mind. Because it sucks. It sucks sitting there for 2 weeks. Day in and day out, go into PT, coming back, and then you're sitting there in the bay listening to a PowerPoint slide. It sucks. I know I wouldn't want to do it. It sucks, so they're at each other's throats.—Army drill sergeant, female

For these substantive reasons, the study team believes Services implementing sustained gender integration at the lowest unit level (i.e., platoon equivalent) should integrate from the start.

3. Equal change experience for male and female recruits during formation of integrated training units

The Air Force's method of forming gender-integrated training units is a best practice because it establishes a consistent integration process for male and female trainees. An equal proportion of male and female trainees switch into gender-integrated training units from their same-gender sleeping units—creating a similar “change” experience for most trainees. In contrast, the Army implements the least desirable integration approach: Only a certain number of male trainees switch into a different gender-integrated training platoon from their assigned sleeping bay as women “displace” them, creating divergent integration implications for men and women. This type of integration process subtly signals women as “other,” a disruptive factor requiring incorporation into male training spaces for integration. It also creates different integration experiences for all women compared with most men: Female trainees train with one-quarter of the individuals they share their sleeping bay with, while most men have a substantial overlap between their bay and fellow platoon trainees. The Navy's approach strikes a middle ground that is nevertheless less desirable than the Air Force's process. Navy recruits form two integrated divisions from their same-gender sleeping compartments, but most divisions in the ship remain male-only (brother-brother divisions) and do not engage in “switching” practices. Therefore, male recruits paired with a sister division undergo a different training experience than others.⁸⁰ The Coast Guard's substantially smaller size is reflected in their integration process—multiple male squad bays and one female squad bay come together to form one integrated company.

⁸⁰ Navy training cadre and recruit division commanders emphasized that, while integrated divisions require increased communication and coordination, the integration process reaped greater benefits, far outweighing any challenges associated with forming integrated units. They framed it as brother-brother divisions missing out on better training experiences (because they are not integrated with women).

While this is a qualitatively different process than any other Service and creates a consistent integration experience for men and women, it is less feasible for the larger Services.

4. Continuous evaluation of recruit training goals, objectives, and basically trained Service member output through engagement with multiple stakeholders and evaluation methods

The Army, Air Force, Navy, and Coast Guard collect feedback from various stakeholders at different times to assess and evaluate their success in meeting recruit training goals and objectives (see table 6.2). Each Service has its own feedback loop intended to prompt reflection, evaluation, and course corrections if needed. These feedback mechanisms and evaluation processes can identify issues related to gender and gender-integrated training by providing regular data and information to commanders and senior leaders responsible for oversight of recruit training.⁸¹

Table 6.2. Army, Air Force, Navy, and Coast Guard Information on Feedback Mechanisms and Evaluation Processes Provided by Interview Respondents

Review Target	Army	Air Force	Navy	Coast Guard
Recruit training: recruits	Sensing sessions (end of cycle)	End-of-cycle feedback forms	Test critique (twice per cycle) Midcycle check-in Recruit roundtable (executive officer level) Exit survey	Level 1 survey CC debrief Enlisted leader informal sitdown
Recruit training: drill instructors	Drill sergeant syncing sessions End-of-cycle After Action Review Peer-to-peer evaluations	MTI working groups for Air Force instruction and operating procedures	Briefs from recruit feedback during cycle Biannual RDC quality of life survey	Weekly “hot washes” with CCs
In/of the fleet	IET survey Site visits to BCT training locations (every 18 months, G-3 level)	Field evaluation questionnaires (career field managers)		Level 3 surveys (recruits in the fleet and supervisors) Biannual Board of Advisors meeting
Major curriculum and/or training program review	Curriculum: every 2 years	Curriculum: annually	Program: every 5 years	Curriculum: every 3 years

Note: Information for this table was sourced from Service leader and training cadre/drill instructor interviews. The study team did not independently research or verify evaluation measures taken by each Service.

BCT = Basic Combat Training; CC = company commander; IET = Initial Entry Training; MTI = military training instructor; RDC = recruit division commander

⁸¹ The Army, Navy, and Coast Guard have been conducting gender-integrated recruit training for decades. Because it has been such a long-standing practice, these feedback processes may not be actively used to assess gender integration implications.

Recruits provide feedback throughout and at the end of the training cycle with surveys, sensing sessions, debriefs, and leadership discussions. This information can be used broadly by recruit training commands and senior leaders but also provides direct and immediate feedback for drill instructors and drill instructor teams. An enlisted Air Force training cadre member described how trainee feedback helped him improve as an instructor.

... the trainees get feedback forms for us. And I thought I've always felt like those have value. Sometimes you get the generic, like, an instructor did great, or no negative things to say. ... but other times you get, like, "Hey, on this day, at this time, I really felt like you could've explained this better to me." And I'm like, all right, cool. Now I can put that in my inventory for what I need to improve on as an instructor.

Drill instructors also provide input through surveys, postcycle After Action Reviews, peer evaluations, and weekly meetings or sync sessions. For example, the Navy conducts a quality-of-life survey of RDCs twice per year. A female Navy Service leader described how that provides leadership critical feedback to address issues within that population.

We do the quality-of-life survey—that's twice a year among the RDCs. That's looking at, basically, their outcomes. I wish I had a copy of it in front of me. I don't know the exact questions we ask on it, but the things that come out of it tell us, well, first of all, what is the RDC's quality of life like? And we ask them if they had any issues at home with themselves drinking, [engaging in] destructive habits [or] outbursts. That gives ourselves and RTC CO a barometer of where the RDCs are. For instance, last year during COVID, we got the survey back and it was like, "Whoa, these guys are at the red line. We need to dial it back and just find ways to mitigate a lot of the stresses these guys are going through."

Feedback from the fleet provides important information about what skills are needed in today's Army, Air Force, Navy, or Coast Guard and how the "product" of a basically trained Service member is performing in the fleet. The Army's Initial Entry Training (IET) survey, conducted annually, takes the pulse of what the operating force needs, as one Army Service leader described.

... we send out an IET survey to the operating force and basically ask them what they're looking for out of a Basic Combat Training graduate. We use that feedback as well. The number one thing they want is a disciplined and physically fit Soldier to arrive at their unit. I mean, we use it primarily when we're doing the POI review, but if something drastically changes from the IET survey or something stands out, then we'll use it and take that feedback, and [it] goes into the calculus of determining the BCT Course Map, and we can do rapid revisions to the POI.

The Coast Guard holds a biannual Board of Advisors meeting at Cape May to talk about how new recruits are performing in the fleet and identify gaps or problems that need to be addressed. A Coast Guard Service leader described the benefits of the meeting.

[The Board of Advisors meeting is] great for us because it puts all of our key partners in one room. So we have Coast Guard recruiting command there so they can talk about their recruiting issues, and then we can relay what we're seeing here at boot camp, and we have—FORCECOM is in charge of the board—and they're there, and then we have our personnel folks in the room, our policy folks in the room. So everyone in one spot. That it makes it a lot easier for us to be able to communicate our problems and issues, and then [they] can resolve those issues once they go back to headquarters.

Each Service also conducts regular curriculum reviews and programmatic reviews. These reviews happen on different timetables, ranging from annually to every 5 years, but provide regular periodic reviews and updates to the curriculum. The Air Force and Army also incorporate processes for minor revisions to the curriculum or priority topics, such as racial extremism, to be addressed between review cycles.

When properly and intentionally implemented, these evaluation approaches can provide the Services insight into what is working well and what needs to change. Concerns and fears about gender integration or increasing gender integration at recruit training are best monitored through measured data collection and feedback processes from all levels. Strengths and challenges of gender integration practices can be assessed in the recruit training environment but should also be evaluated and measured in follow-on training environments and the fleet.

5. Training events centered on task completion and meaningful interaction to build cohesion among recruits

Through focus groups and ethnographic observations, male and female recruits in the other Services emphasized how working together to achieve a goal helped build genuine trust and respect for one another. Each Service's basic training includes events with components aimed at strengthening recruit cohesion through task completion (see table 6.3).

Table 6.3. Air Force, Army, Coast Guard, and Navy Team-Oriented Events

Service	Training Event	Characteristics for Team Building
Air Force	Basic Expeditionary Airman Skills Training (BEAST)	<ul style="list-style-type: none"> In this culminating event, male and female trainees are split into four zones (three to four male flights and one female flight per zone) Small, single- and mixed-gender teams in each zone strategize and work together to complete events
	Student Training Time on Sundays	<ul style="list-style-type: none"> In the absence of military training instructors on Sundays, trainees lead themselves and practice with or help each other to improve their skills
Army	Fit to Win endurance obstacle course	<ul style="list-style-type: none"> Platoons run through the course together, ensuring they do not leave fellow trainees behind as they navigate through individual and group-based obstacles Trainees from each platoon build mixed-gender “superstar” teams and cheer each other on as they compete to see who can go through the course the fastest

Service	Training Event	Characteristics for Team Building
		<ul style="list-style-type: none"> Team members actively communicate to devise the best strategy and provide spotting support on obstacles requiring it
	Confidence course	<ul style="list-style-type: none"> Trainees move through the obstacles in mixed-gender teams and boost each other over an obstacle if needed
	The Forge	<ul style="list-style-type: none"> During some components of this culminating event, male and female trainees split into small mixed-gender teams to accomplish their missions
Coast Guard	Confidence course	<ul style="list-style-type: none"> Working side-by-side, male and female recruits cheer each other on as they overcome the same obstacles (some obstacles are modified to accommodate height differences) If needed, male and female recruits can boost each other over an obstacle
	Time objectives	<ul style="list-style-type: none"> Company commanders give their company a certain number of seconds to complete basic tasks Everyone must finish the task for it to be deemed a success Recruits quickly learn they must work together to complete the tasks in time
Navy	USS Marlinpike	<ul style="list-style-type: none"> Recruits perform line handling and watch standing procedures in mixed-gender teams under timed, high-pressure conditions
	Basic seamanship (line handling, damage control, firefighting)	<ul style="list-style-type: none"> Recruits must communicate and work with each other in mixed-gender teams to practice these practical application skills All skills require teamwork (i.e., they cannot be done alone)
	Battle Stations 21	<ul style="list-style-type: none"> Small mixed-gender teams complete four different training evolutions together during this culminating event Recruits can be penalized individually and/or as a team, so cooperation is paramount

While Marine Corps basic training focuses on individual skill development as a foundation for developing task-based team cohesion in follow-on entry level training, the other Services' basic training explicitly teaches recruits how to accomplish missions as mixed-gender teams. Recruits come from a diverse range of backgrounds and may not be naturally predisposed to prioritizing team achievements over individual ones, which is a substantial part of learning to be a Service member. The Air Force, Army, Coast Guard, and Navy believe practicing multiple events in which every recruit, male or female, is a contributing member to the team's success best instills group-oriented mindsets. Working in mixed-gender teams may also act as a filtration system to expose any negative attitudes or inappropriate behavior recruits might exhibit toward the other gender. Catching these issues during basic training enables drill instructors to address them before recruits join the operational forces, where it will become harder to correct their actions and mindsets and the behaviors will be more detrimental to the force. Completing task-based exercises in mixed-gender teams presents recruits with irrefutable evidence that both genders are equally able to accomplish goals, can be trusted team members, and provide valuable insights

into problem solving. Integrated classes can also improve cohesion and teamwork by introducing recruits to new ideas and opinions.

During focus groups, recruits from all Services consistently noted their respective group-oriented events as memorable turning points for coming together as a cohesive team:

I'll be the first to say that when we integrated it was awkward. It took a while to get used to. But after the first obstacle course and confidence course, there was more bonding. As training continued, we got to be closer battle buddies and friends.—Army trainee, male

It would help us because in our actual jobs, we will have to work with the other sex or gender or whatever. You can't just be working with all females or all males or so on. You have to interact, and we need to do that. Right now, we work in groups of females. But if we mix up, we work better. At BEAST, that's what we did. Our group had some girls and some guys, and we won with both girls and guys. All four of the flights worked together during BEAST ... and that's what we need, teamwork across genders.—Air Force trainee, female

It doesn't matter the background, we're all shipmates together. We're all going to sweat together and sink together. Whatever the task is, you will execute it together.—Coast Guard recruit, male

Recruits also noted they preferred to work in integrated teams while at basic training because they will be expected to work seamlessly with the other gender to accomplish missions when they are in the operational forces.⁸²

Definitely working with males more. In training for both sides, having the same compartments and stuff. Not integrating class is fine because we're taking notes, but hands-on stuff like marching and firefighting—in the fleet, it's not all females taking care of the fire. No, it's whoever is there, not specific gender assignments. Just realistically, it would be way better to have us training together. Going through hardships together before we even start going into operations. It just puts into our minds that it's against the rules to interact. Some people like breaking rules.—Navy recruit, female

[Recruit training] should be exactly how it will be in the fleet, because why would you do it differently? I wouldn't trust the females if they had separate training. I wouldn't know if they went through the same IT sessions and classes. I don't know if they met the same standard. Now? I trust them 110 percent. In the morning, we all line up together. They're fresh out of their racks, just like me. We're screaming beside each other. We trust each other. I know that if I went down right now, she could save my life in CPR.—Coast Guard recruit, male

⁸² For more in-depth information about recruits' perspectives on gender integration, see chapter 8 (Marine Corps) and chapter 9 (Army, Navy, Air Force, and Coast Guard).

6. *Clear communication and execution of accountability standards*

The Air Force and Coast Guard offer multiple best practices for enforcing clear accountability policies that reinforce equity and trust in the training environment. The Air Force employs a progressive discipline system when trainees violate or do not meet the standards set at basic training. For example, if a trainee fails to demonstrate the integrity required of an Airman or makes an inappropriate remark about another trainee, the first response is for the trainee to meet with their MTI for a counseling session, which is noted on a small, white form called the “341.” If the issue persists or a more serious violation is committed, the MTI gives the trainee a “derogatory comment,” or paperwork in their file with recommendations for next steps, such as completing remedial training or writing a paper to demonstrate they understand their mistake and will learn from it. Another strike results in an unsatisfactory core value rating for the week. A single unsatisfactory core value rating for the week disqualifies the trainee from being an honor graduate. Trainees who receive a second unsatisfactory core value rating for the week must meet with the instructor supervisor team or flight commander to discuss their future in the Service. Trainees receive core value ratings daily, and MTIs keep a regular record of their evaluations. MTIs and training cadre have discretion in this process and can skip steps if needed in response to the gravity of the offense.

The goal of this system is not to immediately weed out underperforming trainees but to provide trainees with every opportunity to learn and improve their behavior. Each trainee is an investment of time, money, and resources, so the Air Force exhausts all possible options before separation. The transparent and distinct steps provide a clear explanation of the consequences for infractions and an opportunity for objective, fair disciplinary procedures as MTIs carefully document evidence of infractions explaining why a trainee needs further attention. The mechanism of repeated disciplinary measures also enables the Air Force to ensure their trainees have fully internalized core values before sending them to follow-on training. Trainees may not realize their behavior is unacceptable in the Air Force or may have difficulty conforming to the standards, so they have multiple chances for rehabilitation under MTI mentorship. A male enlisted Air Force training cadre member explained the Air Force’s perspective on disciplining trainees and holding them accountable.

I think something that took me a while to learn was we say that the military has a zero-tolerance policy on this. I don’t think that means that we just get rid of people. I think it means that we’re addressing the problem when it comes up, giving a person opportunity to learn and grow from it, depending on the nature of the offense. And I think that’s what we’re trying to do here. Yes, it’s inappropriate, but they’re also an 18-year-old that had their mom doing their laundry for them last week before they got down here. I don’t expect them to have a lot of life skills coming into this situation. And again, the comments that I have seen trainees make were out of ignorance. I have yet to see a trainee make a comment out of genuine hatred or strong beliefs against someone where they weren’t willing to reconsider their view by the end of the conversation.

The Coast Guard offers an effective demonstration of how Services can hold their recruits accountable by clearly setting rules and standards when recruits arrive at basic training and following through swiftly should they choose to violate those rules and standards. While all

Services warn recruits that they will not hesitate to punish them individually or collectively for disregarding the rules, the Coast Guard truly holds their recruits accountable for any infractions through small punishments such as incentive training and serious punishments such as recycling (or dropping them back) during the training cycle. These responses send a strong message to not just transgressors but all recruits that they are expected to meet the standard and will face grave consequences if they do not. A female CC shared how the recruits quickly buy into the strict rules set for them.

And part of the whole “building it in from day 1”—“You’re not to do this; you’re not to do that; you will not do X, Y and Z.” [Recruits are] quick to rat each other out. They are. We set a standard the moment they do something. I tell my company, I said that “If you screw up or you see somebody screw up, you better tell me before I find out, because we will find out.” They’ll come rat each other out for something they deem inappropriate.

Coast Guard training cadre, CCs, and recruits reported total confidence in their accountability system—that these processes will eject recruits who have demonstrated an inability or unwillingness to adhere to the Service’s core values. The threat of recycling is omnipresent and often used by CCs to keep their recruits in line. During the site visit, the study team learned that approximately 40 to 50 percent of all recruits at Cape May are either rephased or reverted at basic training.

Perhaps as a result of how strictly the CCs monitor their recruits during the day, the CCs trust them to act responsibly during the later weeks of training, even when they are not actively being watched. Not only do recruits earn and treasure that trust, they understand the foundation of these rules is rooted in respect for their fellow Service members, as male Coast Guard recruits noted in a focus group discussion.

Recruit A: *We have a buddy system. You can’t go into anyone’s head for watch. Or at any time, really. Just simple rules and respect. I’m not going through someone else’s rucksack, like I wouldn’t want them to do that to me.*

Recruit B: *I think that comes from being integrated from the start. These are the rules when we got here, so it applies to watch, too. I wouldn’t go into the female head in week 1, so I wouldn’t go on watch in week 5. Just, like, get on the right foot from day 1 and then that will help you in the long run in the fleet.*

Recruit C: *We see each other as Coast Guardsmen. I’m alone with a female recruit during the company runs. At this past company run, there were four males and one female on the quarterdeck, cleaning. We were totally alone, with no CC. We’ve been doing that for the past 3 or 4 weeks.*

This environment is only possible because CCs and recruits trust their system of holding recruits accountable and turning them into disciplined, respectful Service members who can act responsibly toward members of the other gender.

If a recruit accuses another recruit or an instructor of inappropriate behavior, training cadre and leaders at Cape May can verify the recruit's claim using cameras set up at all facilities. Thus, recruits and drill instructors are protected from and held accountable for improper conduct.

7. Prevention-based education and discussions on sexual harassment, sexual assault, and equal opportunity

Education and information on sexual harassment, sexual assault, and equal opportunity are primarily taught through classes and supplemented with informal discussions in every Service's recruit training program. The Air Force Sexual Assault Prevention and Response (SAPR) class and "What Now, Airman?" and "Risky Business" guided discussions are exemplars of how Services should teach this critical and sensitive material, using a prevention-based curriculum that helps recruits meaningfully engage with the material and discuss real-life scenarios they may face in the near future under the guidance of trained personnel and subject matter experts.⁸³

Air Force SAPR classes are taught by professional civilian experts (including a retired Airman) familiar with the subject matter. The experts are proficient and fluent in the content, and their primary job is teaching SAPR, thereby reducing the likelihood that the course will be sidelined or shirked in favor of other responsibilities. They teach and tailor the standardized content to their audience and their specific Service. SAPR instructors in the Air Force are regularly evaluated to ensure trainees receive accurate information on how to prevent and respond to sexual harassment and assault and the instructors' teaching methods are effective.

Air Force SAPR instructors demonstrate that primary prevention⁸⁴ is not only about raising awareness on the prevalence of sexual harassment and assault in the Service but also about taking comprehensive action and educating Service members to stop sexual violence before it occurs. Air Force instructors teach mandated foundation material⁸⁵ while taking a holistic and respect-based approach to SAPR education. This includes framing discussions around how to have professional relationships, the importance of communication and consent, and direct challenges to harmful stereotypes about both genders. During the SAPR class, instructors encourage trainees to talk to each other about their opinions and experiences and provide common, real-world examples of actions and comments constituting sexual harassment. Although instructors still maintain full control of the class, they enable trainees to learn from each other and gain new perspectives. Importantly, instructors clearly identify behaviors that are acceptable and unacceptable in the Air Force, rather than only telling trainees what not to do or leaving misinformation uncorrected. In the Air Force SAPR class observed by the study team, the instructor strongly emphasized to the trainees that they are adults who represent the United

⁸³ Material from the Navy's second SAPR class in the training cycle ("Not on My Watch") has very similar content and structure to the Air Force's SAPR class. The study team did not observe this specific class, so this best practice is based on observations from the Air Force site visit.

⁸⁴ Primary prevention constitutes "improving physical environments in barracks and installations, teaching basic sexual education and developing healthy communication skills for sexual activities, and strengthening and enforcing policies that prohibit hazing, stalking, and harassment, and increasing knowledge about military culture and violence prevention" (IRC, 2021, p. 28).

⁸⁵ Including the definition of sexual assault, what behaviors can lower personal risk, the continuum of harm, and reporting options.

States Air Force, so they are “*held to a higher standard*” and must play an active role in shaping what and whom they want their Service to stand for, starting at basic training.

The Air Force and Navy designed safe, intentional classroom dialogues, facilitated by drill instructors, through which recruits can openly express opinions about sexual harassment, sexual assault, and equal opportunity. Every Air Force trainee participates in six “What Now, Airman?” guided discussions, which cover topics including integrity, abuse of power, loyalty, teamwork, being a wingman, and righteousness. While most of the lesson plans are not explicitly tied to SAPR-related topics, trainees can raise questions or invite such conversations during this time. “Risky Business,” on the other hand, is specifically designed to talk about potentially precarious situations trainees might encounter when they leave basic training, such as underage drinking and parties at follow-on training. The course also addresses healthy sexuality and how to develop positive relationships. The Navy’s bystander intervention and equal opportunity classes are structured in a small-group, guided discussion format with exercises intended to engage recruits in uninhibited conversations about gender stereotypes. These conversations, designed to help recruits express themselves and arrive at a grounded understanding of complex issues, include dialogue to develop recruits’ ability to recognize and prevent abuse, assault, and harassment. To engage in effective and meaningful conversations, Air Force MTIs and Navy RDCs guide informal discussions with small groups. For the Air Force, during each guided discussion, the MTI plays short video vignettes about a particular moral or ethical dilemma an Airman faced (often at follow-on training) and encourages trainees to talk to each other about how they would proceed in that situation. The DoD Independent Review Commission (IRC) on Sexual Assault in the Military recommended this approach, finding that small-group discussions and relatable content “tailored to Service members’ needs and developmental stage ... make the content more engaging for Service members” (IRC, 2021, p. 148).

While the Air Force SAPR class and facilitated discussions aim to ensure trainees are well informed about sexual harassment and assault definitions and reporting procedures, the overall goal is to teach trainees how to establish and maintain respectful, professional relationships, which will improve morale and mission readiness. The Air Force and Navy model how open, authentic conversations among recruits led by qualified instructors can encourage healthy thinking and help recruits learn what appropriate behavior looks like in their Services.

Services expect recruits to apply core values to help themselves and/or others in difficult or inappropriate situations, and respect undergirds all conversations in SAPR classes and facilitated discussions. Although only the Coast Guard officially identifies respect as a core value, all of the Services’ core values are tied into discussed scenarios to underscore how they should be used to guide every decision and action, echoing the DoD IRC statement that “treating your fellow Service member with dignity and respect should be integral to a Marine, Sailor, Airman, Guardian, or Soldier’s identity” (IRC, 2021, p. 189). Sexual harassment and sexual assault violate every core value and have no place in any Service. Ensuring recruits are educated in the most effective manner about how to prevent and respond to sexual harassment and sexual assault and develop healthy, respectful, and professional relationships is key to creating a safe environment for all service members.

8. Clear, memorable, gender-neutral guidance on recruit conduct policies

A best practice drawn from the Navy and Coast Guard is the imposition of clear, memorable, and gender-neutral standards of conduct for recruits. From the first day, Navy and Coast Guard recruits are taught there will be “no recruit-to-recruit contact.” This rule forbidding any touching is a part of the RTC Commanding Officer’s “Top Six” in the Navy, which are policies all recruits must abide by while at basic training: no sexual assault/harassment, no racism/discrimination/sexism, no fraternization, no recruit-to-recruit contact, no hazing, and no substance abuse (see figure 6.5). Recruits are required to internalize these rules; pithy phrases such as “no touching anyone” and “no recruit-to-recruit contact” are clear, simple, and gender-neutral policies for recruits to memorize. Enforcing gendered conduct rules makes recruits hypersensitive to gender and reifies false divides between men and women. Without drawing focus to gender, these clear, easy to memorize gender-neutral rules set expectations for how recruits should behave in a professional environment. No recruit is allowed to touch another recruit except when directed by drill instructors for specific training purposes. A female Navy training cadre officer explained how the conduct rules apply to both genders, no matter the level of integration.

Figure 6.5. RTC Commanding Officer’s Top Six

No Sexual Assault/Harassment

No Racism/Discrimination/Sexism

No Fraternization

No Recruit-to-Recruit Contact

No Hazing

No Substance Abuse

Successful Recruits Follow Really High Standards

Note: presented as originally formatted in Navy recruit trainee guide

So the no touching and everything, that’s across the board, so that’s not gender specific. So that’s why we still have—we have recruits getting in trouble now because [of] recruit-to-recruit contact. They are not supposed to touch any recruit, regardless of gender. And I do think that’s important that it’s not gender specific, right? We expect to have more [incidents] with the gender integration and also comments too ... but guidance that you don’t touch each other is consistent whether we have integrated divisions or not.

9. Gender-neutral identifiers for drill instructors

The Army, Navy, and Coast Guard effectively de-emphasize gender in an integrated environment by using nongendered identifiers to refer and respond to their drill instructors and enlisted training cadre. Instead of saying “ma’am” or “sir,” recruits in these Services refer to their drill instructors using their ranks or roles followed by their last names. Gendered identifiers prime recruits to think about or visually search for a drill instructor’s gender first, before their rank or role. Because recruits are directed to treat and obey all drill instructors equally, consciously highlighting gender as a distinction requiring different reporting and response procedures is counterintuitive. Gendered identifiers have the potential to remind recruits of negative stereotypes they hold, undermining their responsiveness and willingness to comply with orders given by a drill instructor of that gender.

Gender-neutral identifiers are an unambiguous, impartial way to circumvent these issues. Employing gender-neutral identifiers eliminates the possibility of misgendering drill instructors, which can unintentionally offend or cause discord. By teaching recruits to use gender-neutral identifiers for their drill instructors, Services underscore the importance of respecting authoritative figures regardless of gender. A few male Coast Guard recruits discussed the nonexistent role gender plays when referring to their CCs and how that prepares them for the fleet.

Recruit A: *When we are sent out to look for or hand something to a CC, they don't say look for a guy or girl; they say go look for this officer/enlisted leader.*

Recruit B: *That gets me sometimes. I expect the person to look one way based on their name.*

Moderator: That teaches you to not assume their gender?

Recruit C: *Yes, to not assume.*

Recruit A: *For example, there is a male and female CC whose name is Vasquez. They would specify which Vasquez they're referring to by other factors/descriptors rather than gender.*

Moderator: Is this taught?

Recruit D: *They cut gender out.*

Recruit E: *You learn not to assume.*

Recruit B: *When you get to the fleet, its BMT2 (rank) and their name.*

Moderator: They are teaching you how to reference each other later on?

Recruit B: *Yes.*

H. Conclusion

Collectively, the Army, Air Force, Navy, and Coast Guard have several decades of experience with gender-integrated recruit training and mixed-gender drill instructor teams. Each Service executes gender-integrated training differently. The study team identified best practices ranging from broad structural formations of integrated training units to microcultural facets of training. In discussions about gender integration, the Marine Corps is quick to point out differences between their basically trained “product” (Service members) and other Services’ “product” as a reason why it is challenging for them to take the same or similar approaches, particularly with regard to integration occurring at or below the platoon level. Every Service has its own mission, needs, and core values and has designed its recruit training processes accordingly. This study was not intended or designed to speak to or assess the “product” or performance of basically trained Service members in the fleet. The purpose of data collection from the other Services was to collect detailed information about how they execute gender-integrated training to inform alternate models and recommendations for the Marine Corps. Numerous leaders and training

cadre members from the other Services implored the Marine Corps to utilize their knowledge, successes, mistakes, and lessons learned as a resource as they continue to seek ways to improve or expand their gender integration approach.

Chapter 7: Training Cadre and Drill Instructor Perspectives and Experiences

Bottom Line Up Front

- The responsibilities of drill instructors are similar across the Services and include teaching, mentoring, motivating, instilling discipline, and keeping recruits safe in a physically and mentally demanding environment.
- The most pressing and pervasive issue facing most of the Services is a shortage of women to serve as drill instructors. This scarcity amplifies other challenges related to gender integration, such as work-family conflict, disruptions to duty from injury or pregnancy, and ensuring recruits are trained by mixed-gender drill instructor teams.
- Women encounter unique challenges, such as sexism from male recruits and personnel, that make the role of drill instructor even more difficult. The continued existence of these issues imposes additional pressure on women to outperform their male peers to prove themselves.
- Gender-integrated training introduces several considerations related to drill instructors, such as the need for increased communication and coordination, vigilance to shut down inappropriate or negative behaviors, knowledge of gender-specific standards or hygiene requirements, and egalitarian training to maximize each recruit's potential.

Across the Army, Navy, Air Force, Marine Corps, and Coast Guard, training cadre and drill instructors are responsible for executing their Services' recruit training programs.⁸⁶ Drill instructors, training cadre, and others in the training environment are recruits' first extended exposure to personnel and leaders in their Service (outside of recruiters). They are the front line, demonstrating what it means to be an excellent Soldier, Sailor, Airman, Marine, or Coast Guardsman. Together, training cadre and drill instructors are the linchpin of the successful execution of gender integration at recruit training.

Information in this chapter is drawn from several forms of original data collection, primarily Service leadership interviews, training cadre and drill instructor interviews, and ethnographic observations.⁸⁷ A detailed methodology approach is covered in chapter 3, and interview protocol instruments are included in appendix F. Recruit perspectives on and experiences with their drill instructors are featured in chapters 8 and 9.

⁸⁶ For this chapter, the study team uses "drill instructor" and "training cadre" to broadly reference those in charge of managing and delivering recruit training at the installation. Each Service has its own language and terms for basic training and these positions. Service-specific language (see table 7.1) is used in sentences directly referencing one Service.

⁸⁷ The study team uses limited identifiers to describe study participants; identifiers include gender, rank, Service affiliation, and category of participant (Service leader, training cadre, or instructor). Because the combination of these traits may identify some participants, the study team sometimes limits the use of identifiers to protect their confidentiality while maintaining as much context as possible about their position or perspective. Quotations from drill instructors do not identify senior drill instructors to further protect participants' confidentiality and guard against identifiability.

This chapter covers the following topics and themes: an overview of the roles of training cadre and drill instructors in the recruit training process, challenges unique to female drill instructors, and the effects of gender integration at recruit training on drill instructor approaches and practices. The chapter ends with important considerations for gender integration from the training cadre and drill instructor perspectives.

A. Roles of training cadre and drill instructors in the recruit training process

Training cadre and drill instructors execute their Services’ recruit training programs. Training cadre (officer and enlisted) oversee and manage drill instructor teams, contribute to administrative and leadership training tasks, and interact with recruits. Drill instructors are the day-to-day leaders, mentors, and teachers for recruits and are responsible for recruits during training. Each Service has a different title or name for its drill instructors (see table 7.1).

Table 7.1. Service-Specific Titles for Drill Instructor

Service	Drill Instructor Equivalent Title
Marine Corps	drill instructor
Army	drill sergeant
Air Force	military training instructor (MTI)
Navy	recruit division commander (RDC)
Coast Guard	company commander (CC)

Drill instructors for all Services assume a variety of roles during the training cycle, including teaching and developing practical skills and knowledge, mentoring recruits and modeling appropriate behavior and attitudes, motivating recruits for success during and after recruit training, applying and instilling discipline, ensuring the safety and welfare of recruits, and mentoring and teaching junior drill instructors.

1. Teach and develop practical skills and knowledge

A major component of the drill instructor role is teaching recruits the practical skills and knowledge they need to become a basically trained Marine, Airman, Sailor, Soldier, or Coast Guardsman. Much of the teaching and training is of a military nature: physical fitness, combat skills, tactical training, weapons handling and marksmanship, military bearing, uniform standards, use and storage of military gear and equipment, military customs and courtesies, basic survival skills, and more. Recruits are also taught academic and developmental subjects at recruit training, such as Service-specific history classes, core values, Service policies, Uniformed Code of Military Justice laws, and personal standards and conduct expected of every Service member.

Recruits come from a wide range of backgrounds and varied experiences, so training cadre and drill instructors also equip recruits with fundamental skills of living, which can be applied both within and outside the military environment. These life skills can cover such areas as personal hygiene procedures or how to keep shared living and sleeping areas clean and orderly. Drill

instructors described how some recruits arrive at recruit training with little knowledge about how to care for themselves and their bodies.

There are things that, when you bring a young man or woman into that team environment, you're going to teach them because it's a disciplined environment. This is how you will shave; this is how you will shower. This is how [you] will get dressed; this is how I will look for hygiene. This is how I will inspect your body to make sure you're healthy for the next day, and I'll put you to bed. Same thing for young women. Personal hygiene, feminine hygiene—this is how you're going to do it from now on. I think that's part of that magic, that's just a small piece of all of the intangible things that go into—this is how you wear your uniform, this is how you make your rack. This is how you [put together] your uniform. I'm going to teach you basic things, how to put things together that are the building blocks.—Marine Corps Service leader, officer, male

... the Air Force core values, the esprit de corps, the team, the integrity, the camaraderie, that's all ... teach you how to shave, we teach them how to march, we teach them how to dress, teach them how to walk, talk, and look like an Airman. And that's all the MTIs [military training instructors], really. Yeah, and I say 99 percent of it is hands-on, face-to-face ... that MTI teaches you everything you need to know.—Air Force Service leader, officer, male

I'll teach them, hey, you guys need to specifically be trained on how to shoot and why you're not shooting the best, how you can shoot better, you know, during our range times, which is white phase.—Army drill sergeant, female

... some of these kids, when they come here, they don't know basic hygiene. And it's like we're not only training to be Marines, we're training them to be women. So we had to teach them, "Hey, that's not how you do that. Let me give you this sanitary pad. This is how you utilize that." Because some of them, they don't [know]. It's just the way the life worked out for them, unfortunately. So we found ourselves not only making a basically trained Marine, but we also find ourselves teaching them just life skills.—Enlisted Marine Corps training cadre, female, Parris Island

If a recruit doesn't know how to shave their face, I will take them into the head and I will show them—not yelling, not screaming. Sometimes I'll even take my cover off, like [a] teaching environment. You guys have noticed whenever we go into the teaching environment, we take the cover off, so it's no longer, like, mean, scary man. Now, I'm a person.—Coast Guard company commander, male

The Services take different approaches to assigning responsibility for teaching various skills and content at recruit training. For example, Army drill sergeants are responsible for teaching all academic courses and practical skills, such as marksmanship, to recruits in their platoons. Other Services have specialized assignments for certain kinds of instructors. Many of the academic and history classes at Marine Corps recruit training are taught by drill instructors who are on an extended break from an active training cycle known as quota, and the Marine Corps has primary

marksmanship instructors whose sole, full-time job is to teach recruits shooting proficiency at the range.

2. Mentor recruits and serve as role models

Drill instructors view the mentorship and role modeling part of their job as separate from teaching. Whereas teaching is focused on the development of skills, knowledge, and routines, mentorship contextualizes those lessons and guides recruits on how to fully embody their new role as a Service member and navigate the stresses of life in the military. Demonstrating leadership through their behavior, actions, personal appearance, and conduct, drill instructors in each Service instill Service values and act as a primary role model for recruits to emulate as they embark on their career.

... mentorship is one of my favorite things to do, because I get to—outside of training, our lessons, and all that, outside of that is a part of the transformation that I like to see. That’s why these jobs are so rewarding, because of the mentorship that we are able to provide. And we will impact someone in some kind of way, a positive impact, in some kind of way, and I’ve done my job. And they’re going to go on to impact someone. It becomes exponential.—Air Force military training instructor, male

But as we transition into phases—because the drill instructors transition with the recruits—and get less yelling and more instructing and teaching, mentoring, coaching, having them have those role models ...—Enlisted Marine Corps training cadre, female, San Diego

[Interviewer: What opportunities do you have to provide mentorship and counseling with your trainees?] *I mean, it’s on a daily basis, truthfully. That’s true. For me, I try and be, like, the hard-ass for the first, like, 2 to 3 weeks. Once I kind of, like, get into the rhythm of what’s expected, I try and backpedal, like take off the hat more and put on that soft cap a little bit and actually, like, mentor them. “Hey.” Find out a little bit about them, figure out what’s going to make them the best performance. ... We have evening briefings, and those are excellent opportunities to, like, for me, I would always try and maybe talk about where the flight [is] that day, what they think that they could do better, how they feel like they can perform better, and go from there.—Air Force military training instructor, female*

The emphasis on mentorship from drill instructors can vary during the training cycle. For instance, early in the cycle, drill instructors of all Services are stricter and more demanding so they can break recruits down and resocialize them in their new environment. Later in the cycle, drill instructors provide more mentorship and have conversations with recruits to prepare them for life in the fleet. In the final weeks of training, the Navy and Marine Corps have training phases intentionally designed to prioritize mentorship. In this portion of recruit training, the drill instructor and recruit relationship slowly shifts to mimic what new Sailors and Marines will experience with junior enlisted leaders in the fleet. Certain positions within the drill instructor team may carry greater mentorship expectations. In the Marine Corps, senior drill instructors take on the primary mentorship role for recruits as the leader who is the most personally

accessible for open, honest conversations. Senior drill instructors maintain strict expectations and demeanor but also create space for recruits to call on them when needed.

3. Motivate recruits for success during and after recruit training

Recruits enlist in the military with a willingness to serve their country, knowing they will be challenged physically, mentally, and emotionally at recruit training. Each Service requires its recruits to meet specific minimum standards of fitness, knowledge, and acculturation to military life within the short amount of time available in the training cycle as a demonstration of their readiness for the fleet. Drill instructors and training cadre motivate and inspire recruits to push their personal limits, put the success of the team ahead of their own achievement, and exceed standards, even when they are tired and do not feel up to the task at hand. Training cadre expect that these motivational techniques will stay with recruits as they join their respective Services as full-fledged members.

So the role [of a drill sergeant], a little bit, changes. Initially, it's very much what the—I'll use the term "the disciplinarian," the person that's going to ensure they see it. But then, as it goes along, you more become a mentor/example of, "Hey, follow me. I'm going to be there with you. I'm going to be there with you. I'm going to get you through this, but you guys got to do it as a team. I'm only 1; there's 60 of you. So now I'm going to help you through this."—**Enlisted Army training cadre, male**

... [recruits] come tell me that they feel so disappointed in themselves, and they don't even say, "I made a fool of myself." They don't say stuff like that. They'll just say, like, "I didn't do a good job" or "I disappointed you," whatever, and I tell them the truth: "This place, if you're here and you're expecting to make it through motivation and inspiration for me, yeah, sure, you'll make it, but after this place, nobody is going to do what the drill instructors did for you. Nobody is going to hold you accountable in the same way." So I tell them straight up that it's on them. I can give them all the tools, I can lead them in the right direction. But if they don't find what it is within them that makes them want to be here and continue to be better, they're going to be mediocre at best. So I ask them why they joined. I ask them what they care about. And then I tell them why I joined. I tell them why I do what I do, and I tell them what things they do well. So I'll tell them, "It's a good thing that you can recognize that you have things that you need to improve on. The fact that you're not okay with just sitting on it by yourself, and coming to talk to me and asking me, 'What can this recruit do better?' says a lot about your character, says a lot about the person that you want to be."—**Marine Corps senior drill instructor, female, Parris Island**

4. Apply, instill, and develop discipline

Military life, regardless of whether a Service member is at home or deployed, serving during wartime or in a peaceful setting, demands a level of selflessness and discipline that few other career paths or lifestyles require. Without the disciplined commitment of every individual, the force would lack strength, cohesiveness, and the ability to accomplish the mission in stressful or chaotic environments. This degree of personal regulation and discipline must be taught and

practiced to ensure it becomes habitual and self-driven by the end of the training cycle, rather than forced upon the recruits. Drill instructors use the most basic activities to instill in recruits uniform and specific ways of performing tasks; individuality is replaced by a team mentality.

... you got to think about just as much as your recruit comes into recruit training as a civilian ... they may not know how to groom themselves, they may not know how to live in a group setting or cooperate with others in a team, in a teamwork construct working towards a common mission or something like that, right? These may be fairly foreign things to them, but they're a core essence of what the military does. So in recruit training, we're teaching them how to stop being individuals and how to start seeing themselves as a team, and their contribution as the team has been the highest thing.—

Marine Corps training cadre, officer, male, Parris Island

Whether [you're] female or male, you're going to scream, you're going to say something back to me if I say something to you, because at the end of the day, I'm a drill instructor. This is my job, and your job is to respond, and it shows respect. So whenever they get to the fleet, they know they're going to respect everybody across the board.—

Marine Corps drill instructor, female, San Diego

There is a thing when we talk about discipline and we're teaching self-discipline: Self-discipline to lead to unit discipline. And an individual that comes into the Marine Corps, that comes across that threshold ... [it] is a big culture shock. Everything done is designed for a purpose. The amount of time that we have is very small to make that transformational process, to begin the elements of breaking an individual down from his identity or her identity towards a commonality inside the team with self-discipline.—

Marine Corps Service leader, officer, male

Drill instructors across the Services also apply discipline through physical training, often known as “incentive training”, such as push-ups, burpees, abdominal crunches, or other strenuous exercises with (unloaded) rifles. These physical training sessions challenge recruits’ strength and endurance while giving them time to reflect on the behavior that earned them a discipline session—usually a failure of attention to detail or substandard task performance.

Discipline expectations in recruit training vary across the Services; each Service administers or emphasizes discipline in different ways. The Marine Corps has the most universal expectation of discipline in every facet of training at all times, whereas the Air Force demands a substantial amount of discipline from their trainees in uniform appearance and preparation. The Coast Guard demands discipline in interactions with company commanders and physical training activities. Training cadre and drill instructors for every Service instill and model the importance of discipline and demonstrate how crucial and universal discipline is for everyone, from the least experienced Service member through the most seasoned leader.

5. Ensure the safety and welfare of recruits and the training environment

The recruit training environment is fast paced, physically demanding, and highly stressful by design. Fundamental assurances of safety and welfare for recruits during recruit training are

paramount. Training doctrine and policies for each Service dictate such safety and welfare provisions as three nutritious meals a day (and the time to consume them) and sleeping quarters that are free from threat or undue disruption. The responsibility for ensuring the safety and welfare of recruits rests on the drill instructors and training cadre. Drill instructors check recruits' trays of food in the dining hall and instruct recruits who may not be consuming enough food to return to the line for more. Strict safety procedures on the rifle range—such as when to load, ready the rifle for firing, and fire—are taught, practiced, and applied under close observation and scrutiny. Drill instructors and training cadre must weave safety and welfare into each activity and training environment, even if recruits are left unsupervised, such as during overnight fire watch duties. Training cadre and drill instructors are also subject to regulations governing their conduct in the presence of recruits to ensure the safety and welfare of everyone in the training environment.

[In] DI [drill instructor] school ... [we have] 57 training days. We're taking that raw material, no matter where it starts, and spitting out [on the] back end an individual who's more or less prepared to spend the night, be completely 100 percent responsible for 90—let's call it what it is, kids—17-, 18-, 19-year-olds who are ... undisciplined civilians and make sure that they don't die, make sure that everything that happens needs to happen with them. It's an enormous amount of responsibility.—Marine Corps training cadre, officer, male, Parris Island

I'm a senior drill instructor, so I pretty much look out for the welfare of not only the recruits, but the drill instructor[s] as well. Pretty much everything ... what's going on with the platoon. I'm like the first one in charge, pretty much, but more in charge of the welfare of the recruits and my drill instructors.—Marine Corps senior drill instructor, female, Parris Island

6. Mentor and teach junior drill instructors

Training cadre and drill instructors work in teams with established hierarchies and duties fulfilled by each member to accomplish the mission of training recruits. The role of drill instructor is demanding and offers little downtime, so support and mentorship within the drill instructor team are crucial to maintaining readiness. Because every drill instructor is serving on a special duty—being a drill instructor is not a primary job in the military—there is a learning curve to the process. Senior drill instructors or more experienced training cadre mentor, teach, and further train new drill instructors. Some drill instructors serve a second tour or assume positions of higher leadership in recruit training units after successful completion of their initial tours or training cycles. For instance, Sailors learning to be RDCs go through 4 weeks of classroom instruction and then 8 weeks of practical application training, shadowing an RDC team as they train a division of recruits. A female RDC instructor described this experience and her simultaneous roles as a teacher and mentor to RDCs and as an active RDC training recruits.

So as far as the instructors go, so, we'll teach the curriculum for the [RDC] students, and then they go on push⁸⁸ with us. So they do their 4 weeks of curriculum, like, classroom. And then the 8 weeks of, "Hey, you're going to go on push, observe what it is to be an

⁸⁸ "Push" is Navy slang for an active training cycle. RDCs on "push" are training recruits in the training cycle.

RDC for 8 weeks” live. So we’ll—for us instructors, it’s a two-role thing on push. It’s not just being an RDC. It’s an RDC [and] instructor. So it’s a lot more responsibility ... a lot more managing, ’cause now you’re managing RDCs and ... the recruits and also the partners that you have, red ropes [experienced RDCs]. It’s a lot of managing.

[Interviewer: That sounds like a lot of work.] *It’s a lot, but I enjoy it.*—**Navy recruit division commander, female**

The Marine Corps employs experienced drill instructors for second tours where they serve as enlisted training cadre, such as a chief drill instructor for the series, company 1st sergeant, or battalion sergeant major.

I was offered the job [to come back to recruit training] and I was like, yeah. I jumped in on the first opportunity. When I first left the Depot, I had no inclination or any thought of coming back as a 1st sergeant or a second-tour drill instructor ... but I did say that if I was ever to come back, it was gonna be as a sergeant major, just to take care of the drill instructors, because it’s a hard job. And sometimes people focus a little too much on the recruits, because they’re the future of the Marine Corps. And they forget, oh yeah, the drill instructors are the ones putting [in] the hard work. So that was my idea of returning back to the Island as a sergeant major. So when I was selected to sergeant major, I called one of my mentors, and he was like, “You wanna come back?” And I was like, “If I’m offered the job, I’ll take it.”—**Enlisted Marine Corps training cadre, female, Parris Island**

B. Challenges unique to the female drill instructor population

Service leaders, training cadre, and drill instructors were asked about similarities and differences of challenges faced by male and female drill instructors. Although all agreed the drill instructor role is demanding and difficult, unique challenges for women dominated the conversation. Few mentioned challenges unique to male drill instructors. Several respondents from Marine Corps Recruit Depot (MCRD) Parris Island described how male drill instructors tended to have more alcohol-related incidents, including showing up to work smelling like alcohol or drunk-driving incidents while off duty, and behavioral issues such as domestic violence incidents.⁸⁹

Respondents from some Services, such as the Navy and Coast Guard, saw work and family strain as equally challenging for male and female drill instructors, while respondents from other Services, such as the Marine Corps, noted these challenges as more pervasive and persistent for women. The lack of unique challenges for men in the drill instructor billet may be ascribed to a variety of factors, including an abundant population of men in the Services, history of the military being a male-dominated institution, and societal norms or gender roles that normalize men’s full dedication to work and lower expectations for domestic and childcare responsibilities. Across all Services, the most common challenges reported for female drill instructors centered on personnel shortages, work and family conflict, male-dominated culture fueling sexism in the training environment, and the pressure to excel above and beyond male peers.

⁸⁹ Respondents who mentioned this noted it was a rare occurrence.

1. Personnel issues plague the female drill instructor population

With the exception of the Coast Guard, all of the Services noted they are “*are always hurting for females*” in the drill instructor role, in the words of an enlisted male Navy training cadre member. Female representation in leadership is important to all Services, and adequately staffing their female drill instructor populations is a challenge. The paucity of women in the Services as a whole and of women who possess the physical and occupational readiness to be a drill instructor in particular has significant personal and professional repercussions for female drill instructors. Service leaders interviewed from the Marine Corps, Air Force, Navy, and Army⁹⁰ reported an urgent and critical need for more female drill instructors. Each Service falls short of desired staffing levels of female drill instructors at its recruit training locations. While all value exposing as many recruits as possible to female leadership and authority in this crucial stage, they lack the personnel to fully manifest that value.

*So we [the Marine Corps] recruited last year a little over 13 percent, but we’re hovering right around [women as] 9 percent [of the] total force. The market—if you were to go do the study in the market, it would tell you anywhere around 8 percent is probably what the eligible population will be for females. ... And again, remember, 13,000 in the Service. I whittled that down to about 3,000 that are eligible [to be a drill instructor]. Of that 3,000 that are eligible, it turns out, when you take out all of the things—health, physical fitness, orders, deployment—it [gets] down to about 650 who I would say screened and they meet all the requirements to go be drill instructors. Now of that 650, how many really want to go [be a drill instructor]?—***Marine Corps Service leader, officer, male**

*... female recruit training has been underresourced compared to the male recruit training its entire existence. Even up to this day. There’s a hidden ghost platoon’s worth of drill instructors in every single male company that they are structured for, which they get resourced for, which doesn’t exist in the female construct. ... They have more males to meet their mission per capita, and it’s hidden in the ways that we manage our structure and everything, and it’s something that we’ve been messaging for a long time to try and explain, but ... it’s a hard message to tell and to get across. A lot of the plans [for the future] only exacerbate that existing problem, and especially when they’re deliberately underresourcing—then it really exacerbates it.—***Marine Corps training cadre, officer, male, Parris Island**

Well, [having enough female MTIs] is a struggle now, and I would say COVID has probably made it a little bit harder, but after the scandal and the Woodward report,⁹¹ we had maintained at least 25 percent of the MTI is female. So that guaranteed—because we

⁹⁰ Army Service leaders expressed a need for more female drill sergeants across the Service. Locally, drill sergeants in Fort Jackson felt they no longer faced this issue at their Basic Combat Training location.

⁹¹ General Edward Rice, Commander of Air Education and Training Command, commissioned a commander-directed investigation in 2012 led by Major General Margaret Woodward to investigate substantiated reports of sexual misconduct by MTIs at Basic Military Training (BMT) ranging from unprofessional relationships to sexual assault of trainees. The final report included 22 findings and provided 46 recommendations. One of the recommendations was to have more female MTIs at BMT (Air Education & Training Command, 2012; Harvey, 2012).

group flights into brother and sister flight, so in that group of four MTIs, there will always be a minimum of one female, so every single flight got exposed to a female MTI. Really, to sustain that, you had to get a little bit closer, about 30 percent of your MTI [population] is female—to make do for other jobs, leave, TDY [temporary duty travel], etc., that has waned since COVID. And it's not as robust as it needs to be right now, but we continue to focus on making sure we sustain that number above 25 percent for that reason.—Air Force Service leader, officer, female

So there's not enough female drill sergeants or female candidates right now that could be drill sergeants that meet the requirements. There's basically—there's no bench for female drill sergeants right now and we, CIMT [Center for Initial Military Training], are working with the TRADOC [Training & Doctrine Command] and the Drill Sergeant Academy to fix this problem, and it's also working with FORSCOM [U.S. Army Forces Command] to get more female drill sergeants. We absolutely need more. There's not enough of them.—Army Service leader, civilian, male

One of the big complaints that I got while was there [at Recruit Training Command], the sheer numbers, and it's always a challenge in the Navy at the schoolhouses. So for technical training, for recruit division commanders, we want females, because we want for the female recruits to see that we have female leaders in the Navy. With the number of females that we bring into the Navy per year, it's about 20 percent, and so there's a direct correlation with the number. Percentage of female RDCs that we have on staff is based on the percentage that we bring into the Navy. So it's about 20 percent of the recruit division commanders are female. Routinely, we are not fully manned for all the females that we're supposed to have.—Navy Service leader, officer, male

To have enough female drill instructors, eligible female Service members may be “voluntold”⁹² to serve as a drill instructor. Rather than accepting the assignment to become a drill instructor, some women, if they have the option, may choose to leave the Service.

Our females in the Marine Corps are already extremely limited, right? Almost all of our females that work here [at MCRD Parris Island] are volunteers. So, nominally, if we're going to have to get more DIs, they're going to have to be nonvolunteers, which is going to be, on the female side, exceptionally challenging. So there's a force requirement that's going to be tapped into. So to make more, you have to have more. We're doing this [gender integration] so rapidly we don't have time, and as we already identified, we're not trying to grow the female end strength. So we're just squeezing more blood from this turnip, and that's the nonsustainable part. [Later in the interview, the respondent elaborated more:] The less [women] that will volunteer [for drill instructor duty] or [those who] quit in order to avoid coming here [to MCRDs], which will mean that we'll have less females again in the fleet to draw from. And this is the unsustainability of it, because third-, fourth-, and fifth-order effects destroy the females in the Marine Corps, and it's a self-reinforcing negative feedback loop is what we create, and it won't fully materialize until about 3–4 years after they get to the steady state they want here [at the MCRDs for the Congressional mandate]. At that point, it will be just destroying what

⁹² Slang for having no choice or say in the matter.

we've tried to create here, and because we haven't increased the capacity of females—actually grown the numerical number of [them in the] force—it'll just eat itself alive from the inside, and no female will ever want to stay in the Marine Corps past the first tour, and it will hurt recruiting.—Marine Corps training cadre, officer, male, Parris Island

Some people volunteer, some people get voluntold, as I'm sure you've heard. And I think it's—I think it can be hard to find maybe the target audience that we're trying to achieve with all those prerequisites [to be an MTI] met. And we have a female instructor here right now who has three children, and she's a single parent. I feel like her leadership failed her, putting her in a job where she could be working 6 days a week, trying to have the responsibility of a parent at home as well.—Enlisted Air Force training cadre, male

... because if somebody tells a Marine in the fleet, female Marine in the fleet, you can't go to Marine security guard duty to work on an embassy because we need you to go to the drill field [as a drill instructor], because they're not giving them the opportunity to do that because we need females in the drill field, they're gonna say, "I'm getting out."—Enlisted Marine Corps training cadre, female, Parris Island

The Marine Corps noted retention issues for male and female Marines with special duty assignments (such as drill instructors) in a recent brief to Congress (USMC, 2022a).

A limited eligible population of female Marines exist in the grades of E-4 to E-6 for first tour special duty assignments (SDA), which includes duty on the drill field. Increasing the number of female DIs competes with requirements and opportunities for experienced female Marines in Recruiting, Combat Instructor, Marine Security Guard, and Fleet Marine Force (FMF) billets. With regard to retention, Marines involuntarily assigned to SDAs historically exit the Service at a higher rate. (p. 5)

Another potential consequence of Service members being voluntold to fulfill a drill instructor role is a compromise in drill instructor quality resulting from a lack of drive to excel and produce the best possible recruits.

You probably hear that a lot, no matter what [recruits] they're going to graduate, they're going to get, like, the best training because we have certain standards that they can't graduate without meeting, but at the same time, they're going to miss that little extra something that the drill instructors [who] want to be here give them—because of the extra 10 percent that maybe they'll stay a little later. Maybe you don't mentor them a little bit more at the end, but that's the part that they'll be missing if we pull in more that are, like, voluntold to come here. Because as Marines, we're always going to give, like, our best, but at the same time, when our bodies and our minds are attached to a certain level, that extra 10 percent, we're just not going to give if we just were told to be here and we just wanted the money. We'll just go home. So actually that is that 10 percent that was missing, but at the end of the day, they're still going to be basically trained Marines.—Marine Corps drill instructor, female, Parris Island

We have drill sergeants that are pulled in to go to Drill Sergeant Academy and serve as drill sergeants who never wanted to go there. We were told, “This is the role you’re going to do; here are your orders; make it happen.” I think we struggle with that, too, because we don’t want drill sergeants who don’t want to be there, who don’t want to teach, who don’t want to train. And we have those individuals. And that can really pull down the morale and effectiveness of the unit.—Army Service leader, officer, female

I don’t know if you’ve seen ’em or not, but there’s very unmotivated, unmotivated people here. And it’s just for different reasons or whatever the case is. But as far as [RDC] students, like, we try to keep them motivated while they’re in curriculum. You can’t save everybody, unfortunately. So we try to do what we can. But you can definitely tell the difference. So our main goal is to, hey, get them to change that mentality. By the time they grad[uate], when they go on push and they get their recruits, they have a positive impact and they’re not bashing the Navy. ’Cause if you, if you’re that RDC that bashes the Navy with your recruits, your recruits are going to hate the Navy, and they’re gonna wanna leave. They’re gonna get in trouble. They’re going to be problems. ... We say it a lot—direct reflection, right? Like, the recruits are [a] direct reflection of you and your training. If you have a bunch of problems, a bunch of issues, you’re doing something wrong. Like, yeah, I get it. Recruits will be rebels; they’ll break rules. But if it’s 80 percent of your division getting in trouble, it’s self-reflection. You need to look in the mirror and see what you’re doing wrong.—Navy recruit division commander, female

Conversely, some initially unenthusiastic drill instructors find success in the role. One female Air Force Service leader officer stated, *“I think sometimes [those who don’t volunteer], they turn out to be the best MTIs. They get there and actually find themselves in their element, and they do extremely well.”* The Navy RDC quoted above shared how even voluntold RDCs can turn out to be motivated with leadership and support.

I actually just had a student that was voluntold to be here. But because she had a really good instructor her first 4 weeks, when she came to me for push, she had heard nothing but good things about me. She was motivated still. And then by the end of it, she’s like, “Thank you.” And she told the chiefs thank you. Because we changed her mentality. Because she was already coming with the, you know, “I don’t want to be here. I can’t believe ...” upset in here. But we changed it because of how positive we were about it. But not every RDC is like that, because not every RDC encounters motivated RDCs.

Family formation and child-rearing are also potential deterrents for female drill instructors. Service members are typically considered for the drill instructor job after they have earned at least the rank of E-5. This rank means they have met time-in-service and time-in-grade requirements and skill certifications, milestones most candidates need 5 or more years of service to achieve. Consequently, potential drill instructors tend to be in their mid-20s, which are prime family formation years. The long hours, laborious work, and degree of physical readiness necessary to perform as a drill instructor may be perceived as incompatible or less desirable for women who have or want children.

*When we come down here and you're here for 36 months, you're essentially asking our female drill instructors, if they have kids—not if they're married, but if they have kids—to put on hold a large majority of what is probably the more developmental and formative years. Because most of them, if you look at our target group of drill instructors, male and female, sergeants to staff sergeants with a few gunnery sergeants thrown in there every now and then, that puts them roughly around 23 to 28 years old, which is when the large majority are having children or at least beginning their families and that type of stuff.... Also, let's say you come down here and you want to start a family, but there's that weight of, like, well, if I get pregnant, I can probably work up to a certain point, but then I'm going to not be able to work and then I've got to go through this period [off duty and recovery]. ... So that ties into getting people to volunteer to come down here. It's not that they don't want to be a drill instructor, because a large majority of them, at least in the Marine setup, ... want to, but a lot of the sticking points that I get back from them is like, "So I got a 2-year-old daughter. I want to be there for my daughter, and I just don't think that I'm going to be able to do that. So I would rather go be a recruiter. I would rather go teach at the academy or my MOS [Military Occupational Specialty] school or whatever the case may be."—***Enlisted Marine Corps training cadre, male, Parris Island**

*[Starting a family] is a distracter from a lot of people wanting to [be an MTI]. Because if you look at the age demographic of which we're recruiting, you're looking at staff and tech sergeants, which are E-5 and E-6; they're in their mid- to late 20s, early 30s, and it is 100 percent a distracter for people wanting to go and do it.—***Air Force Service leader, enlisted, male**

*So they pick the top 10 percent of your branch MOS [to be drill sergeants], and then you get selected. Because it is considered as a broadening assignment, so every NCO at some point is either going to be an AIT [advanced individual training] instructor, AIT platoon sergeant, a drill instructor, or a recruiter. Because that is a broadening assignment—you have to leave your branch and your MOS and your job and do this for 2 years and then go back. So some people do volunteer. I definitely did not, but it's not a job that I dislike. I actually thoroughly enjoy training trainees. Well, I hadn't had Soldiers in a very long time. So coming here, having Soldiers, I enjoy training them. [Interviewer: When you got selected, were you looking forward to it?] I was devastated. [Interviewer: Tell me more about why.] ... because of the long hours. My husband's at Fort Bragg. So it was—I knew that that was going to be difficult, him being there, and he couldn't have come with me with his job, because he's in special operations and that's solely at Fort Bragg. So I knew that we were going to be separated for this timeframe, and plus my daughter, having long hours, because I went from ... basically my own schedule. Whenever I was done with work, I was done with work, to go home whenever I wanted to. Coming here to having a very strict timeline and schedule and limited time with my child. So other than that, that was the only reason why I was, like, very hesitant in being a drill sergeant, but I knew that—I knew it was something that I had to do just get it over with, do it and then go back to whatever it is that you were doing before. So that was my mindset.—***Army drill sergeant, female**

Pregnancies and injuries result in more frequent absences and gaps for female drill instructor teams in the Marine Corps

Personnel concerns are further exacerbated by pregnancy and injuries, which occur more frequently for women, especially for a job that demands a high level of physical readiness. An already stretched female drill instructor population is strained further when individuals are pulled off duty for pregnancy or injuries. Many Marine Corps respondents at MCRD Parris Island described dire staffing situations for female drill instructor teams as a regular occurrence, including teams starting a cycle with only three hats (compared to the usual four) or having to substitute female drill instructors from another company or those on quota.⁹³ Other Services with mixed-gender drill instructor teams maintain a small pool of female drill instructors, but they have the flexibility to replace drill instructors without consideration of gender.

*So you're talking 9 months of pregnancy. Maybe they're working for the first month or two of that before they find out they're pregnant, and they're like, "Oh crap, I'm pregnant." When it's all said and done, you got a good year and a half without working, and, I mean, that's like a productivity thing here. This isn't like a desk job, where it's like "Oh well, no problem. You just ... work from home or you do whatever you need to take off some maternity leave, but you can still get stuff done." No. You're not pushing recruits, you're not pushing recruits. ... They're just taken out of their company and they don't work. Yeah, so we're just missing that Marine for that duration.—**Marine Corps training cadre, officer, male, Parris Island***

*If the drill instructors aren't ready to move up, or maybe the drill instructor got pregnant, or whatever the case may be [with] those drill instructors, I might pull a senior [drill instructor] from here and I might pull ... two from here to go fill that job that needs to be filled here. Whereas over here [in 4th Battalion], they're all in the same training days, and you're not going to cherry-pick from here to fill here because they're all there anyway, or if I'm not doing it within my own company, it would be, like, across the other two companies. Oscar Company or November Company would say, "I need a chief," and I would have to say, "I can't help you" or "I can give you this person." So now [with Integrated Companies], instead of them getting their 2 weeks off, or time off from here, they're going to leave from whatever training day they're on to go pick up with them on their [day] when they pick up.—**Enlisted Marine Corps training cadre, female, Parris Island***

The persistent stigma attached to pregnancy in the military adds more scrutiny to female drill instructors, as a female enlisted Marine Corps training cadre member from San Diego noted.

I mean, not just a drill instructor thing, but just a woman thing, as that's one of the stigmas we're still trying to work on too is like, oh, well, if a female gets pregnant, and she's been gone for so long. It's like, why am I getting punished for having a family but [men] have a family? Just because you're not the one carrying the baby, like, you usually get to have a family. ... So it's not really a drill instructors thing. I just—I think a military

⁹³ One Parris Island respondent described a time in which they were so short staffed on female drill instructors that a company had to augment the team with a male drill instructor.

stigma in general or even in the workforce, just in general, like, working mom, you're a terrible mom. If you don't work, you're lazy because you just stay at home, which is not the case.

Female Marine Corps drill instructors also tend to suffer more injuries than their male counterparts, which can place strain on the remaining female drill instructors on the team. A male enlisted Marine Corps training cadre member from Parris Island discussed these difficulties.

There is a higher likelihood for lower extremity injuries for our female [drill instructor] population, and that's just the way that the body is set up. Femoral neck injuries, stress fractures—some of that stuff just from the constantly being on your feet. I mean, the males get it too, but we have such a higher density of them that it's easily offset, because if I have a drill instructor in this platoon who gets hurt, and I've got four drill instructors in this platoon, I can take one and put them over there. If I've already got a small group to choose from, and we average somewhere around 20 percent noneffective in our female population in terms of legal, family, medical, whatever, I've now got a smaller group [to backfill from].

Staffing shortages lead to higher cycle op-tempos for female drill instructors in the Marine Corps

Female drill instructors have the same work requirements as their male counterparts, but their smaller population size can lead to disproportionately heavier workloads and increased burnout. The inflexibility of single-gender drill instructor teams combined with personnel shortages necessitate female drill instructors shortening their between-cycle breaks to ensure sufficient coverage for every female platoon. In Integrated Company and Series Track models at Parris Island, female drill instructors have less time off between cycles because fewer of them are available to receive new female recruits as they are shipped in. Female drill instructors on quota, a break from the arduous training cycle, may be called back more quickly if female drill instructor teams are short-staffed. Without sufficient time to rest and prepare between cycles, the drill instructor job takes an even greater toll on physical, mental, and emotional health. An enlisted female Marine Corps training cadre member from Parris Island stated, “*Most of our female drill instructors lose custody of their children, their marriages fall apart, [and] their bodies end up in casts.*”

2. Work-family conflict may be more pronounced for female drill instructors

Marine Corps and Navy training cadre reported that conflict between work and family domains was a major challenge, particularly for female drill instructors. Male drill instructors with families also sacrifice family time to their demanding schedules, but male Marines were perceived as less likely to be the sole or primary caregiver for children or other family members.

It's hard. It's definitely a struggle of trying to find that balance of being a good Marine, but then being a mom and a wife, which the males don't seem to have that problem. Like [they'll] still be at work all the time, which is great 'cause you have a supportive wife, but men at home are not as understanding and supportive [of their female drill instructor

wives] because that structure of the gender roles always comes into play, especially in my house. So that's always a struggle. I've also been married three times, so that should give you a hint of how difficult it is to stay here. And then they wonder like, well, why do you guys [women] always get out? Why do you ...? Because I'm tired of getting divorced. I'm tired of someone else raising my kids. I'm tired of not going to open houses for my kids' school and do[ing] traditional mom stuff, but I love what I do. So it's just always trying to ... yeah. But hence why I'm on marriage number three.—**Marine Corps training cadre, female, San Diego**

We have more single parents that are females, and I think that might be not unique to the Navy, but they still come here and they figure out how to make it work. Most of the males that have children, or most of them here, are not single. So therefore they're enjoying that advantage. My daughter needed to be picked up today from school. I'm just taking her back and, like, my wife is picking her up. And it's not anything that I'm concerned about; it allows me to stay here. ... That flexibility, no single parent has that, and it seems like majority of the single parents are females. And I think that that's the thing, and then they start to get a little bit bent.—**Enlisted Navy training cadre, male**

... a lot of drill instructors will send their kids to live with the grandparents or other relatives, other family members, when they're in a cycle, or if they are married and we've had the spouse doesn't want to stay at home alone by themselves all the time. So they'll go back with the kid and live with their family or whatever, just because it sucks being a spouse of a working drill instructor.—**Enlisted Marine Corps training cadre, male, Parris Island**

Air Force and Coast Guard respondents felt that, while drill instructors and training cadre who are single parents endured the greatest hardship, male and female drill instructors faced the same challenges of balancing family and work. A more flexible schedule and gender-neutral staffing options help minimize these conflicts, but regardless of gender, Service members recognized the special challenges the drill instructor tour of duty presents.

I feel like it's the same [for men and women]. I don't have any children, but I've obviously worked with people that do have kids, and at the end of the day, if my buddy needs to switch schedules with me so that way he can go to his kid's soccer games, and hell yeah, I'm going to jump on that for him. It's just about communicating.—**Air Force military training instructor, female**

But the Coast Guard as a whole that I've seen, my time in has—is very accommodating to families. But it is tough. And I could see it being tough. If I did have a child having this role, I probably would not have applied. But even if I was a male, and I had a younger child, I don't think I would have applied either.—**Coast Guard company commander, female**

Actually, we have quite a few parents that are CCs. [Interviewer: Are they dual-military or single parents? Or are they married to civilians, do you know?] So both. We definitely have quite a few married member-to-member CCs with kids, and then we do have a

couple of single parents with kids. Luckily, we do have a CDC, a child development center, here on base. So most of them have their children enrolled in the CDC here if they're young enough or, you know, we just—they work their schedule so that they can be on shift, if you will, while their kid is attending school and then be off shift at night.—
Coast Guard Service leader, officer, female

3. Female drill instructors feel they need to prove themselves

Male and female drill instructors described an omnipresent pressure for female drill instructors to prove themselves and their worthiness to fulfill this arduous role. The scarcity of female drill instructors at recruit training makes them feel responsible for representing their group, so they work twice as hard to dispel any assumptions that they cannot do the same work male drill instructors do. This feeling is known as the minority spotlight effect, defined as a phenomenon in which “individuals who are the sole representative of a social group (e.g., Black students on mostly White college campuses) often feel chronically conspicuous and responsible for representing their group” (Crosby, King, & Savitsky, 2014, p. 1).

For the females—maybe from my perspective, but from all the other females I speak to, whether it's the drill instructors, the leadership, the recruits—you do feel that you have to work so much harder just to feel that you're at the same levels as the males. It shouldn't be the case.—
Marine Corps training cadre, officer, female, Parris Island

[Women are] just outnumbered in a lot of ways, and they have to work twice as hard. I can see and understand that for sure. ... To show that they belong. To show that they belong. “I'm the female instructor, but I'm more of an instructor than just a female instructor.” I don't want someone to say, “Oh, she's good for a female instructor.” No, she's a good instructor because she's a good instructor. I can see how that might be something for a female instructor to feel or think sometimes. It's just a male-dominated military, and sometimes women may feel like they have to work twice as hard, which is unfortunate, but sometimes women feel that way.—
Air Force military training instructor, male

I think that there are different struggles in those areas for being a company commander as male versus female, but I think the ultimate is the self-imposed pressure to be perfect. I think ... across the board, the biggest struggle I find [is] that our female company commanders give themselves is—no one else is telling them, “Here's the male company commander standard, but yours is up here.” No. They just—we're all top performers here, and they want to, as a whole, I would say, they're like, “All right, I got to be the best of the best.”—
Coast Guard company commander, male

There's only one other female chief in this team, and sometimes you almost feel like I better be at work, because one, I'm a female and two, I'm one of two. ... I don't want my females to feel that same way, not today. I hate to say, I feel like that's just the, maybe, the image of society too. As females, we pretty much got to prove who we are to get some positions or to be who the males think we should be, and honestly, that's just my opinion,

but sometimes that's how it feels in certain areas that you work in.—**Navy recruit division commander, female**

Female drill instructors are hard on each other because we know that, at the end of the day, the man looks at us and they're like, "Oh, she's weak. I can, I can break that." ... And I teach my recruits the reason why my drill instructors are on your face 24/7 is not only for you to ensure you react the right way in combat but it's because not only do you get placed in situations where you have to have a quick decision making to save lives, but also because, essentially, you're going to have to battle your own brother [in the Marine Corps].—**Marine Corps drill instructor, female, San Diego**

4. Female drill instructors experience sexism in the training environment

Female drill instructors across all Services reported verbal and nonverbal sexism from male recruits and their male peers. Such behavior is, by regulation, not tolerated by any of the Services, yet it remains prevalent in the recruit training environment. For example, a few male drill instructors and training cadre noted that even when female drill instructors outperform male drill instructors, they are shown less respect because they are women. One male Marine Corps drill instructor from Parris Island observed both subtle and more conspicuous sexist attitudes from his male colleagues toward female drill instructors.

One thing you hear is—and this is one of my pet peeves—"the females." That's third deck lead. That is [platoon number] and [platoon number]. That's not "the females." What are you trying to say? I see that stuff. So there's the subtle stuff where they'll just be like "the females." They're not "the females"; they are hats in our company. That is third deck. It's weird that you call the males "second deck lead" or "platoon" whatever, but you say "the females," "the lead series females." They—they get, like, petty with it. I hate all that, all that stuff. I correct Marines on the spot ... [another hat] would be like, "Ain't no way we're going to lose to females." No. Ain't no way we're going to lose to [platoon number]. No, we are not going to lose to this EDI [experienced drill instructor] or this senior drill instructor. I'm not going to lose to them. I don't care that they are female. I just want to beat them; I just don't want them to beat me. And I remember, like, specifically talking to him like, "Dude, you sound kind of sexist," and he was like, "I kind of am." And he just said it, like, belligerently in front of me. I was like, boss, I understand wanting to beat everybody, but don't do that stuff in front of the other hats, you're just poisoning them. They're going to come up in a fully integrated company. You're done. Don't put that poison in their head. "I'm not going to lose to females." That's going to create—it's just like hazing a hat can create violent tendencies. Treating someone less than a human makes them treat someone else less than a human.

A female member of the training cadre at MCRD San Diego described her experiences as a woman in a predominantly male training environment.

... [when we first started integrating] it was a very frustrating environment. We—as the only female often in the room, being talked about as if I am like this weird anomaly that they don't know how to deal with it. It is a, I would say overall—and I guess it's not just

MCRD San Diego—overall, the Marine Corps is a very masculine culture. It is a very testosterone-fueled environment, which can be healthy at times because it's competitive. ... I will tell you, like, how I was treated when I first got here. I would laugh because I was treated, like, with kid gloves when I first got here. It was very interesting when my peers or even my higher-up would talk to me. It's like, "Hey, sorry. I have this recommendation." It was like, "Do you say 'I'm sorry' to your [male boss], or do you just, like, 'Hey, man, this is what's wrong; we need to fix this'?" I had to have conversations about that because I was like, dude, you don't need to apologize. You don't apologize when you talk to somebody else. I'm not going to break down and cry, right? ... The other part of it, I hate to say this, but sometimes we accept, sometimes we accept. ... So there's more men, right? If they perform at a great level or even at an inferior level, it's not as visible. With the females, it's super visible. There's a lot of scrutiny. Sometimes people, sometimes allowances are made because we're a minority where they shouldn't be and vice versa.

Female drill instructors also encountered subtle forms of sexism from male recruits. Good military order and discipline require that recruits recognize and respect the authority of all drill instructors, regardless of gender. The strict training environment does not permit male recruits to overtly disrespect female drill instructors, but the recruits can use body language and attitudes to clearly demonstrate hostile feelings.

What I had discussed earlier was that most males aren't used [to], because I'll always put a female in charge at one point or another. There will be a female in charge of you, and that was the biggest—I think that is the biggest challenge is that some males just do not reciprocate to females at all and they will be disrespectful, they won't listen, and then—yeah, that's, I think that that is the biggest challenge.—Army drill sergeant, female

Just with the female leadership with a female RDC. They just have—some recruits just have trouble with having female leadership. It's usually the recruits from outside the country. We have more—that issue comes up with people from Africa. So sometimes it happens with them that they're not used to having a female leadership, just telling them what to do, and they have issues with that.—Navy recruit division commander, male

C. How gender integration in recruit training affects drill instructors

On the ground at basic training, drill instructors are responsible for implementing gender-integrated practices. While the integration focuses on recruits, drill instructors train recruits of both genders and must adjust their behaviors as needed to ensure they are setting a positive example for recruits and providing an egalitarian and professional training environment for all. Drill instructors from all Services described how gender integration practices affect their approach to the role, implementation of training, and considerations for success.

1. Drill instructors must actively address and dismantle sexist language

When recruits and drill instructors begin interacting more regularly and purposefully in mixed-gender settings, any gender-based remarks can undermine the training environment by damaging trust and respect. Drill instructors must address and correct sexist language they hear from recruits, notice in their peers, and use themselves.

None of the Services tolerates discrimination on the basis of gender. Drill instructors have a responsibility to actively dismantle any bias or discriminatory attitudes they observe in recruits in the training process.

I am a firm believer on handling things at the lowest level. ... If it's a comment, or if it's just like, "Oh, we don't want you on our team because you're a female" type of stuff, it's like, "Oh, no, no, no." I might purposely team that recruit up with a female forever for the rest of recruit training. They have to work together.—Coast Guard company commander, male

I know for a fact that if any one of those males, male trainees were to try and, in any way, shape, or form, approach me in a negative or derogatory way, those male drill sergeants will get in their faces and tell them, "You need to check yourself." And they will literally say the same exact thing because they know, they know. They know, at some point in their military careers, they will have a female in charge of them and they just need to—they need to adhere to the rules or they just need to get out.—Army drill sergeant, female

When drill instructors recognize and challenge offensive language and attitudes, they set a positive example for male and female recruits for how their Services hold accountable those who communicate discriminatory intentions, knowingly or not.

Drill instructors must also be vigilant with their own peers and condemn sexist language or sentiments they hear among drill instructors. A female enlisted Marine Corps training cadre from Parris Island recalled hearing male recruits use demeaning language toward a female recruit they heard from their drill instructor.

... So I went up there, and I was like, "Why are we crying? You should be happy you're here." And they were like, "Nothing's wrong, ma'am." I was like, "No, no, something's clearly wrong because you're crying. What's going on?" So a couple of the male recruits from one of the platoons were calling them "wookiees." If you're a Star Wars fan, you know Chewie, all hairy. So they were calling her "wookiee" in a very derogatory manner, and I was obviously a little upset about it, but I wanted to maintain my professionalism in front of the recruits. So I was trying to cheer them up. ... It got better. But I went outside. And I say, "Hey, who's the senior drill instructor for his platoon," and I say the number because I kind of console those recruits in there too. And it was a sergeant, and I was a gunnery sergeant, so I outranked him by two ranks. And he came up to me in a very confrontational manner. And I say, "Hey, man, are you teaching your recruits to call female recruits wookiees?" "So what if I'm doing it?" And I'm like, "Really?" I say, "You're shaping the future of the Marine Corps, and you're bringing that crap down here that should not be down here." And he got a little confrontational and I went off. I literally put him in his place.

2. Drill instructors need to be aware of and shut down inappropriate recruit relationships

Several Marine Corps drill instructors and training cadre voiced their apprehension that further gender integration would encourage inappropriate male-female relationships among recruits. While romantic feelings in the current training environment between recruits of the same gender in the same platoon were a consideration noted by drill instructors, there was a fear that heterosexual romantic distractions would more substantially derail training. As recruits see the opposite gender more in integrated settings, they would have more opportunities to interact and engage in behaviors such as flirting and passing notes to each other.

Drill instructors and training cadre from the Army, Air Force, Navy, and Coast Guard felt some romantic distraction among recruits is inevitable (regardless of the level of gender integration) but stressed the need for drill instructors to remain vigilant and take immediate action. A male enlisted Army training cadre noted how recruits help drill sergeant teams by reporting any romantic behavior they witness between other recruits.

Two things are going to happen. One, the cadre catch on, but two, the trainees will tell on themselves too, because [of] the trainees that, that get it, and they come here knowing what they're here for. They get frustrated, and they're like, "Hey, we ain't supposed to do it. We don't want to get in trouble. We've had enough trouble in the first 2 weeks. Man, we don't want no more trouble." And then they see it happening. So they'll just, like, slide a note under the drill sergeant's door at night: "Hey, Jimmy and Johnny are doing this," you know.

Many Services have rules forbidding recruits of the opposite gender from talking or looking at each other, and some respondents felt that recruits benefit from understanding why these rules are in place. A female Navy recruit division commander explained her reasoning.

"You're not here to pick anybody up." That's how I pitch it to them. I explain to them why I'm saying, "Don't look, don't talk." But what the majority [of RDCs] probably do is just, "Hey, don't talk, don't look," but never give them a reason. I feel like that's also hurting them 'cause they don't know why. So when they go to A School and they're allowed to talk to them, it's like, "Wait, why did I just go through 8 weeks of getting yelled at, but here it's fine?" So we kind of, like, confuse 'em. I feel like that turns 'em into rebels. 'Cause it's like, "What? I went through that for no reason." And now they, like—we call it "wild out"—right now, they wild out. 'Cause they know they have all the freedom in the world. So I feel like if you set that line and you actually explain why you're doing what you're doing or saying what you're saying, they understand it and respect it more.

3. Drill instructors must train all recruits equally, regardless of gender

With the exception of physical fitness requirements, male and female recruits are held to the same standards and are expected to perform at the same level of excellence in all Services. Drill instructors must be consistent in how they train recruits, regardless of gender. If drill instructors

show special treatment toward one gender, they send a message to recruits that differences between the genders cannot be overcome without accommodations. A female Air Force military training instructor described how she treated her male and female trainees equally.

I'll give females 30 push-ups to do for doing something, a correction or a tool, and I'll give the male trainees the same exact ones. I never give a male trainee the same or more than I would just because they're a male flight. But, to be honest, if we treat them the same way and I train them the same way and they develop the same set of skills, you know, I think it's really on the instructor not to be biased.

Treating recruits equally and holding them to the same standards, however, does not mean the same training method works equally well with both genders. Some drill instructors noted distinctions between male and female recruits that require different management and motivational approaches.

The last two flight cycles, I've had female trainees. Both of those were spent way more on being a team and team building and resolving hurt feelings. The male flights actually got the conversations more so of what makes a good trainee, what's going to make you more successful in the Air Force, and that's just because, again, the male flights are more used to being able to, like, headbutt and then buddy-buddy. For female flights, it's a consistent kind of snappiness to them, and they're always like, well, kind of talking behind each other's back versus just confronting the issue.—Air Force military training instructor, female

... however, in my experience, the females have been the better recruits. Most of the time, they're a little bit more mature. When you tell them to go do something, they go do it, whereas the male recruits are the ones that are playing around, joking around in the squad bays. Typically more often, so they might need that more oversight.—Coast Guard company commander, male

... females and males, when they come to recruit training, we treat them the same. They go through the same training, everything is the same. But males, when they come to recruit training, they know they're coming to recruit training. They're like, "I wanna become a Marine. That's the end state." Cool. [Male recruits are like,] "If you need me to go through that wall, I'll go through a wall, even though there's a door right there." Female[s], yeah, they know they wanna become a Marine, but they question everything. "Hey, I need you to go through that wall." "But there's a door right there. Why can't I open it?" So you have to be more of a psychological type of approach with them when you're training them. ... You have to be very, like, this is how we do it and this is why. And when we do stuff like that, we—so for example, the males they just kind of like, just shove everything in the pack. And that's something that I don't like with our male counterparts here and I've been retraining them. It's like, you're here to teach them how to be a Marine, right? So part of being a Marine is knowing how to pack a pack, how to ensure that you mitigate injuries, stuff like that. So when you look at our packs, they look very neat. And it's not because of appearance. I mean, it looks good, obviously, but it's

because we [have to] teach the recruits how to pack their gear properly because they're smaller.—Enlisted Marine Corps training cadre, female, Parris Island

4. Drill instructors must learn and understand female grooming standards and specific gender hygiene needs

As part of maintaining military bearing and uniformity, male and female recruits must present themselves in a neat and professional manner, according to gender-specific grooming standards. For schedule planning, drill instructors must have a thorough understanding of differences in these standards and how they might affect timing. A male enlisted Marine Corps training cadre member from Parris Island described the different timing considerations for male and female recruits.

In the morning, when a male gets up, they have ample time in the morning to be able to get ready—but really, for a male, shave, brush your teeth, go to the bathroom, that can be done in 5 minutes. For a female to get up, to be able to make sure that their hair is good, put the hairspray and do all of those other things that we require of them as they want to look and be in accordance with our regulations on grooming standards? Five minutes is not enough time. So if you're writing a schedule the exact same way, it doesn't work that way.

Male drill instructors and training cadre from all Services noted they tended to learn about female grooming and hygiene regulations from experiences on the job rather than formal lessons at drill instructor school. Male and female drill instructors can help each other understand what the standards are and how to enforce them without causing misunderstandings. A male enlisted Army training cadre member recalled his personal experience with such peer communication.

... sometimes there'd be things with females that I'd be afraid to address, and I'll give you an example of one: getting a new sports bra. Initially, in my mind, I would've never walked up to a female and said, "Hey, I think you need a new sports bra," because, in my mind, I didn't want her thinking that I'm thinking about her bra. My [drill sergeant] partner was like, "Listen, it's for the health of their back. You know, when they run." She's like, "You can tell in a heartbeat; this is what you look for." A period—for example, when I initially became a drill sergeant, I wouldn't have asked a female in a million years, "Are you having your period?" She was like, "Dude, we have our period every month. It's something you got to be comfortable with. If they need a tampon, you need to get them one." Without [drill sergeant name] being with me to get me through that for the first one or two times, I would've just let that problem keep going and I would've been afraid to address it, because I would've thought, like, it could have been perceived the wrong way.

5. Gender-integrated training requires additional time and communication among drill instructors

Teamwork and constant communication among drill instructors are critical for successful gender integration of recruit training. In the Army, Navy, and Air Force, gender integration involves

moving recruits from their sleeping quarters to their integrated unit formation each morning and back to their sleeping quarters at night. A male Navy recruit division commander shared how this movement affected communications.

With integrated, it's like being on push with six RDCs. You have to be in constant communication with brother division, because if we have to hygiene, then the houses do that, the all-female house and the all-male house, they have to do hygiene and you have to coordinate that. If you want to do drill but brother doesn't want to, you have to integrate for that. It's those challenges right there with communicating with the other RDCs.

Even for integration at the series level for 4-and-2 Integrated Companies, drill instructors in the Marine Corps recognize the importance of communication, as shared by a male drill instructor at Parris Island.

I think some of those friction points were common. It's like the communication between the males and the females on how, for instance, if we were to move from point A to point B, we move as a series, and we would have to make it all—like if we were going to come out of the house at the same time. It was like one of those things where, like, “Oh, we got to do this, we got to do that,” which is understandable because females have to fix their hair and stuff like that. ... Those are things—like, doing everything as a series was, like, a difficult tension between them because they were the only female platoon with the two male platoons in that one series. So being able to communicate within that series, which is, like, a common problem, to be able to move efficiently from or accomplishing together as a series all the time.—Marine Corps drill instructor, male, Parris Island

Lost time during the white spaces in the schedule as a result of gender integration was a concern for drill instructors and training cadre from all Services except the Coast Guard, because integrated training units are already physically co-located at Cape May. Some drill instructors worried integrating male and female units would take valuable time away from recruit training. However, others asserted they had learned how to maximize training time during integrated cycles and reduce inefficiencies. Despite logistical concerns about timing and additional communication, many believed gender integration to be worthwhile. A female Air Force Service leader officer shared, “*My thought would simply be that the inefficiencies are worth it. I would be surprised if there are that many inefficiencies that would be a deterrent to really thinking twice about doing this [gender integration at recruit training].*”

Drill instructors also encounter challenges with direct supervision of opposite-gender recruits in the heads or during hygiene. In the Army, Air Force, Navy, and Coast Guard, a female drill instructor cannot enter an occupied male head and vice versa. While this means an individual drill instructor is unable to supervise an integrated unit at all times, these Services do not expect the head to be a place requiring active supervision; they trust recruits to conduct themselves properly.

6. Mixed-gender drill instructor teams encourage greater teamwork and build trust among drill instructors

All Services except the Marine Corps employ mixed-gender drill instructor teams to train recruits; Marine Corps female and male drill instructors work together in the Integrated Company model. Drill instructors and training cadre working with opposite-gender peers noted the benefits of learning best practices and new methods from each other, engaging in healthy competition to push themselves to do better, and building mutual trust.

For her [my other drill sergeant] to give me that other perspective of, “Hey, you’ve tried this three times and you’re getting the same outcome from this dude”—or dudette, doesn’t matter—“Have you ever thought about you switching your approach?” I’m like, “Well, you think that might work?” and she’s like, “They shut you down already. You’re a big guy, you’re full of tattoos, you’re aggressive. Sometimes you got to be a little bit more of a coach or head coach than a defensive coordinator.” That’s what she used to always tell me, and without—I mean, I credit [drill sergeant name] to a lot of my success, because she set me up for success and vice versa. I was able to help her, too, because males would try her. ... Not that she needed me to stand next to her as a tough guy, but for them to know like, “Hey, this is my partner. You ain’t going to mess with her.” I couldn’t even imagine doing it any different, because I had that to fall back on, just like she had it to fall back on.—Enlisted Army training cadre, male

I think it’s so much fun being around male drill instructors because you feed off each other. So just like the recruits feed off of being around each other and just knowing that competition, the females and the male drill instructors are always like, in cahoots too. You’re yelling to someone, you can be [yelling] at somebody too. You are ITing next to me, I’m going to IT too, and now we’re going to see who can do the better IT session. So it’s just, I love training against the males, just, or next to the males, because we get that exposure to them, and then I can just look at a chief and be like, “Look at that kid. What’s he doing? That was yours,” and he be like, “Wait, look at her,” and so it’s like, it makes it fun across the board for the drill instructors.—Enlisted Marine Corps training cadre, female, Parris Island

When we did combined training, I think one of the most valuable parts about it was the continuity of the companies together, which allow the drill instructors to build relationships. And then the most important part of that was that the recruits got to see it. Like, if they would see me talk to a male drill instructor, and the male drill instructor would respect, like, all of my drill instructors, or they would see, you know, a female drill instructor correct a male recruit and be like, “I don’t need her to go tell on me to my senior drill instructor to be yelled at.” There is, like, an equivalency and a mutual respect. There was a recruit on range, just stupid or didn’t know what he was doing, who made a disparaging comment about one of my drill instructors. But man, did every single male drill instructor in that platoon have something to say about it to him. And not even just yelling at him but like, “Hey, like, that is inappropriate. That is not only my friend, my peer, my fellow drill instructor, someone’s been in the Marine Corps for that long, like, they are a human being, like, worthy of, like, your respect.” And that spoke volumes for the entire series.—Marine Corps training cadre, officer, female, Parris Island

Male and female drill instructors may learn or think differently; bringing diverse ideas and perspectives together was seen to strengthen their training approaches. Just as drill instructors aim to instill in recruits respect for and trust in their peers, they build camaraderie founded on mutual trust and respect by working closely together to train recruits. Given that female and male drill instructors each have sex-based limitations in some training spaces, they need to be able to trust that their colleagues will hold recruits accountable and train them properly in their stead.

7. Marine Corps drill instructors must learn different company cultures

Historically, all female Marine Corps recruits were trained in the female-only 4th Battalion at MCRD Parris Island. In the current Integrated Company model at Parris Island, companies are formed by moving female drill instructors from 4th Battalion to 2nd or 3rd Battalion.⁹⁴ Based on staffing needs, female drill instructors may move from company to company. Male and female drill instructors reported struggles adapting to new company cultures.

As you know, there's three or four companies that had to come together as one company, Papa Company. ... Okay, last cycle was rough. It was. There was a lot of differences simply because it was more so, "Back at Hotel, we used to do this." "Back in Echo Company, we used to do this." Now we're here, Papa Company, 4th Battalion; this is how we do this. But as training progressed through last cycle, we brought a lot of stuff to our superiors that needed to change. It's not going to be the Echo way, it's not going to be the Papa way. How about we all combine what we learned through our experiences here as drill instructors and make Papa Company "big Papa"? The company it is today. And that was a battle. Everybody was in their own ways. It caused a lot of frictions, a lot of arguments, a lot of, damn it, almost fistfights just because companies had their ways.—Marine Corps drill instructor, male, Parris Island

It was definitely an adjustment at first, because I left as a drill instructor, the top knowledge, and then I came ... to [company], not knowing what to expect. And a lot of it was "On 4th Battalion we used to do this." "Well, this ain't 4th Battalion, this is 2nd Battalion." And there was a lot of, like, pushback at the beginning of like, "You're in 2nd Battalion now. Do things the 2nd Battalion way," but eventually, it went into more of, like, "Okay, that works, so let's do the 4th Battalion way." So there's a few things that they took from us and a lot of things that we have to learn, because at the end of the day, they were right: It is 2nd Battalion, it is [name] Company.—Marine Corps drill instructor, female, Parris Island

Drill instructors shared that they were ultimately able to find common ground and agree on the best approaches for training their recruits. They noted company culture clashes are inevitable, so having the right leadership to help meld the companies together is critical. As a male enlisted Marine Corps training cadre member stated, "... it takes a strong company-level leadership to be able to hold that together while it works through its initial vibration, so to speak."

⁹⁴ At the time of this report, 1st Battalion had not yet integrated at MCRD Parris Island.

D. Important considerations for gender integration at recruit training from the perspective of drill instructors and training cadre

Findings and analysis from the drill instructor and training cadre perspectives present important considerations for current and future gender integration efforts at Marine Corps recruit training:

- **The drill instructor role demands significant physical, mental, and emotional energy.** Drill instructors are asked to be the first, and best, role model for a Marine, Sailor, Airman, Soldier, or Coast Guardsman. They are required to fulfill many roles at once, including a teacher who develops recruits' knowledge and practical skills, a mentor who motivates recruits to be successful, an authority figure who instills discipline and military bearing, and an extension of the institution, inculcating a broader Service-specific identity through the spirit of self-sacrifice. The drill instructor role is consuming and demands a great deal from everyone who volunteers for or is slated into the role.
- **Personnel issues plague the female drill instructor population and are a persistent and pervasive challenge to gender integration efforts.** Service leaders in the Marine Corps, Air Force, Navy, and Army reported an urgent and critical need for more female drill instructors at their recruit training locations (the Coast Guard was an exception). The problem is greatly exacerbated in the Marine Corps, where only 8.9 percent of the active-duty population are women (Department of Defense, 2021). Women are a necessary and highly desirable population to fill the drill instructor role, particularly as the Services aim to expose recruits to leaders of both genders during their critical first training experience. A lack of women volunteering to serve as drill instructors may lead the Services to rely on assigning women to these roles, raising retention concerns, especially with the overlap between drill instructor duty and prime years of family formation and child-rearing.
- **Female drill instructors face additional challenges in and outside the role compared with their male peers, and some of these challenges are preventable.** Women encounter several unique challenges, such as absences related to pregnancy and giving birth and sexism from male recruits and personnel, that make the difficult role of drill instructor even more so. Sexism, gender-based treatment, and discrimination are not condoned in any Service, yet the continued existence of these issues drives women to feel additional pressure to outperform their male peers so they can prove themselves. Male drill instructors and leaders who actively correct and shut down discriminatory behavior were noted as making a positive impact on the training environment. Outside of work, women serving as drill instructors may experience greater expectations at home than men do, leading to greater work-family conflict. With attention and intention, some of these unique challenges women face in the training environment can be prevented.
- **The success of gender integration efforts depends on drill instructors' intentional approach to the process.** Drill instructors' training experiences in integrated environments emphasize the need for a willingness to learn and a commitment to equity and respect to achieve the greatest success. Drill instructors and training cadre must be vigilant to shut down prohibited, distracting, or negative behaviors among recruits (and peers) and understand gender-specific needs or regulations relevant in the training environment. Male and female drill instructors from the Army, Navy, Air Force, and Coast Guard found support and strength in mixed-gender drill instructor teams, noting

how they improved their execution of gender-integrated training and sharpened their own professional development.

Chapter 8: Marine Corps Recruit Experiences With and Perspectives on Gender Integration

Bottom Line Up Front

- Marine Corps recruits join because they want to be challenged and recognize the Marine Corps as the most physically and mentally demanding service.
- Male recruits and new Marines show the highest levels of benevolent and hostile sexism, much higher than their female peers. Male and female new Marines held more gender-egalitarian views, expecting husbands and fathers to contribute at home. New Marines of both genders also showed high agreement with equal opportunity and treatment measures.
- Recruits report differences in how male and female drill instructors approach the role and their relative strengths as drill instructors; new Marines, regardless of gender or training model, would like to be trained by mixed-gender drill instructor teams.
- Female recruits encounter more physical and strength-related challenges in recruit training, recruits perceive differential treatment by gender from drill instructors, and female recruits report challenges with accessing clean and adequate heads and proper hygienic products.
- Recruits perceive rates of sexual harassment and sexual assault to be low in the training environment, but female new Marines worry about becoming victims in the fleet while male recruits fear unknowingly causing these incidents. New Marines wanted more comprehensive and proactive training on these issues.
- Recruits and new Marines shared many benefits of gender-integrated training, including better preparation for the fleet, drawing from different perspectives and strengths, and additional motivation and competition.
- Challenges to gender integration described by recruits and new Marines include an increase in romantic distractions, disrupting the platoon bond built through round-the-clock time spent together, and concerns about sexual harassment and assault.
- Marine Corps recruits want physical, tactical, and educational training to prepare them for a gender-integrated fleet. Across training models and time points, recruits want more training with members of the opposite gender; however, most did not support integration at the platoon level. New Marines identified many training events and activities where they would like more gender-integrated training, including combat and tactical training such as Basic Warrior Training and the Crucible.

Each year, tens of thousands of civilians step on the yellow footprints and enter through the silver hatches to become a United States Marine. Recruits are the future leaders of the force. Their perspectives and experiences in recruit training are vitally important to any policy decision related to gender-integrated recruit training. The Integrated Company model is so new to the Marine Corps that, at the time of this study, no current drill instructors had been trained under this model. In 2021, recruits were the sole voice at the MCRDs that could speak to the lived experience of the Marine Corps's current approach to gender integration.

Recruit experiences and perspectives informing this chapter come from two forms of original data collection: a social science survey and focus groups. Marine Corps recruits were studied across three models: Series Track (MCRD Parris Island), Integrated Company (MCRD Parris Island), and Male-Only (MCRD San Diego). All Marine Corps recruits who participated in the study were offered the opportunity to complete the social science survey during weeks 2 and 11 of basic training. Marine Corps recruits and new Marines⁹⁵ were randomly selected from the larger physical performance study sample and asked to voluntarily participate in focus groups at weeks 2 and 11. Marine Corps recruits who participated in the week 2 focus groups were invited to participate in the week 11 focus groups; new participants were randomly selected from the study sample to replace recruits who attrited from their original training cycle after week 2. Further details about methodological design, sampling, and analysis for each form of data collection are presented in chapter 3. The social science recruit survey and focus group protocol instruments are included in appendices D and E, respectively.

This chapter focuses exclusively on the Marine Corps recruit perspective and experience; analysis of survey and focus group data makes comparisons across training model, time point (week 2 versus week 11), and gender. Similar data were collected from recruits in the Army, Air Force, Navy, and Coast Guard;⁹⁶ information from recruits in the other Services and a cross-Service comparison with Marine Corps recruits are presented in chapter 9.

This chapter covers the following topics and themes: sociodemographic information on recruits in the sample; why recruits joined the Marine Corps; gender attitudes of recruits; recruit experiences in the Series Track, Integrated Company, and Male-Only models; perspectives on drill instructors; challenges for recruits by gender; sexual harassment and sexual assault at recruit training; benefits of gender-integrated recruit training and increasing gender-integrated training in the future; challenges for gender integration at recruit training; and desires and preferences for gender integration. The chapter ends with important considerations for gender integration from the Marine Corps recruit perspective.

A. Recruits in the Social Science Survey Sample

The Series Track recruit sample from MCRD Parris Island consisted of 159 recruits, including 75 males (47.2 percent) and 84 females (52.8 percent); the Integrated Company recruit sample from MCRD Parris Island consisted of 138 recruits, including 78 males (56.6 percent) and 60 females (43.5 percent); and the recruit sample from MCRD San Diego consisted of 175 individuals, all of whom were male.⁹⁷ For a breakdown of *N* size for each survey question by

⁹⁵ Focus group participants at week 11 have earned their Eagle, Globe, and Anchor and were officially Marines, so quotations and data from these participants identify them as “new Marines” rather than recruits.

⁹⁶ Recruits in the other Services could voluntarily complete the social science survey and participate in the focus groups once, near the end of their basic training cycle.

⁹⁷ The final sample used for analysis consists of recruits who completed surveys at both time points (week 2 and week 11).

training model, gender, and time point, see data tables in Appendix M.⁹⁸ Almost all Marine Corps recruits were aged 17 to 23 (95.1 percent), were never married (98.1 percent), and reported either a high school diploma (or equivalent) or some college as their highest level of education attained (93.9 percent). Over a third of recruits were of Hispanic/Latino/Spanish ethnicity (37.4 percent), including 42.4 percent of female recruits. The percentage of males at MCRD San Diego who reported Hispanic/Latino/Spanish ethnicity was higher (43.1 percent) than at MCRD Parris Island (26.1 percent). The majority (69.3 percent) of recruits reported their race as White. The second most reported race was African American or Black, at 13.6 percent. The majority (75.4 percent) of recruits reported having relatives⁹⁹ who served in the military; however, only 29.9 percent reported having an immediate family member¹⁰⁰ who served. Top reasons recruits joined the military included personal growth, development, and security; testing themselves mentally or physically; and challenging or interesting work. Most recruits (66.4 percent) indicated they anticipated serving 2 to 8 years in the military, and only a small minority (8.4 percent) anticipated serving more than 20 years. Appendix N includes visual profiles containing detailed sociodemographic information on Marine Corps recruits by training model.

B. Why Recruits Joined the Marine Corps

Recruits in the study described a variety of reasons why they decided to join the Marine Corps. In the week 2 focus groups, recruits were asked, “What’s the top reason you decided to join the Marine Corps over other Services?” Most prominently, Marine Corps recruits (male and female) wanted to be challenged and recognized the Marine Corps as the most physically and mentally demanding Service.

The spirit of it [Marine Corps] ... it’s very difficult ... that’s kind of the idea. The Air Force gets their cellphones [at basic training]; here, you get rid of everything. You only come with a folder.—Marine Corps recruit, male, Parris Island

Higher standards mentally and physically, and lots of mind games. It tests your mental state because you constantly get frustrated about doing things over and over. But it instills discipline.—Marine Corps recruit, female, Parris Island

Both male and female recruits felt that being a Marine garners a special kind of respect and recognition from others—something they wanted to be a part of.

The respect. I worked at a breakfast restaurant with a lot of veterans. You could just tell when someone was a Marine. People would pay for their food. How people view Marines ... it’s something special. I want to be held high for my accomplishments.—Marine Corps recruit, male, Parris Island

⁹⁸ Exact *N*s for the data shown in figures for this chapter may vary slightly from the overall sample size due to missing responses. Percentages for figures in this chapter were calculated based on the number of nonmissing responses to each question.

⁹⁹ Response options included “mother,” “father,” “sibling,” “cousin,” “aunt or uncle,” “grandparent,” and “other family member.”

¹⁰⁰ Immediate family member was defined as a parent or sibling.

Every Marine has a strut, looks like the shit. I want everyone to see where I came from. I want to be an inspiration for my siblings and all those around me.—**Marine Corps recruit, female, Parris Island**

Male recruits were more likely to identify wanting to be part of the legacy of Marine Corps Service, and many referenced joining the “brotherhood” of the Marines.

I'd say the Marine Corps has a legacy of fulfillment in life. You come out of the Corps and end up feeling good about doing whatever you're going to do and having less regrets compared to others.—**Marine Corps recruit, male, Parris Island**

...a lot of people don't want to join the Marines because they know it's hard. In a sense, you feel like you have a better opportunity to become something in the Marines versus the Army. In my honest opinion, no one will remember you once you die, so you might as well be remembered as heroic instead of ordinary.—**Marine Corps recruit, male, San Diego Brotherhood. One hundred percent.**—**Marine Corps recruit, male, San Diego**

Women, on the other hand, more often described respect through the lens of earning the title “Marine.”

Having to earn the cammies and the boot ties. There's a lot of stuff we have already been through. We have to earn this uniform. It means I'm not soft.—**Marine Corps recruit, female, Parris Island**

...I joined because it was hard, and I'm pretty sure that more than half of us in here are competitive. And there is a certain reaction—you want to be a Marine compared to others, respect, because you know it is hard. You get respect with the title. It feeds into my ego: [vocally emphasizing] “Oh yeah, it's tough.”—**Marine Corps recruit, female, Parris Island**

External circumstances also motivated recruits to join the Marine Corps, including family and financial instability (mostly reported by female recruits) and dissatisfaction with available options such as college or civilian jobs (mostly reported by male recruits). Family service and benefits (including stable income and education and healthcare benefits) were also major motivating factors identified by recruits.

Recruits shared reactions from friends and family about joining the Marine Corps, which included support, surprise, pride, and concerns for safety related to war and combat operations. Some female recruits shared that friends and family had concerns for them as women joining the Marine Corps, noting the Service's male-dominated culture and perceived high rates of sexual assault. No male recruits reported their friends or family were concerned for them in this way.

My mom was worried about the alpha male personality. She was worried about sexual assault. “You're going into a branch that is, like, 6 percent female, and they're notorious for spitting out these alpha males.”—**Marine Corps recruit, female, Parris Island**

My husband didn't want me to do it because he said he knows how a lot of the male Marines are with females. Like, they say, "Be a bitch. Don't be a slut. Don't let them trample over you." Because there's so few of you, they can trample over you, so just be demanding, I guess.—Marine Corps recruit, female, Parris Island

I had a similar thing. My brother-in-law is a Marine. He said, "Go Air Force," and I was like, "Why?" He said they have better stuff, but he said there's a lot of ... like, rape [in the Marine Corps]. That was his big one. He was really wary about that.—Marine Corps recruit, female, Parris Island

C. Gender Attitudes of Recruits

The recruit social science survey concluded with a series of 12 questions to capture gender-related attitudes. These questions were asked last to prevent any potential reactivity among recruits from influencing responses to other questions. Survey questions were drawn from items commonly used to study gender-related attitudes in the broader population. Eight of the 12 items have been asked annually in the Monitoring the Future survey, a large, nationally representative survey of high school seniors administered since 1973 (Johnston et al., 2002).¹⁰¹ These data have been used to understand trends in attitudes, behaviors, plans, and expectations of high school seniors, including military propensity. The items enabled the study team to compare the attitudes of recruits with a nationally representative sample of young people (see chapter 9 for civilian comparisons).

Four questions from the Ambivalent Sexism Inventory (ASI) were also included (Glick & Fiske, 1996). Ambivalent sexism includes two dimensions of sexism beliefs: benevolent sexism and hostile sexism.¹⁰² Hostile sexism reflects hostility toward women, especially those who violate traditional gender norms, while benevolent sexism captures seemingly positive views of women that nevertheless connote inferiority to men based on fragility, helplessness, or lack of competence (Glick & Fiske, 1996). The recruit social science survey included two questions capturing benevolent sexist attitudes and two questions capturing hostile sexist attitudes. DoD began including questions from the ASI in personnel surveys with the 2019 Workplace and Gender Relations Survey of Reserve Component Members (Breslin et al., 2020). The study team included measures of both benevolent and hostile sexism attitudes because past literature on gender integration in military settings has raised concerns about men feeling the need to protect women and the potential disruption such feelings would create for unit cohesion and effectiveness.

All questions ask respondents about their agreement with a series of statements in a five-category Likert scale of "agree," "mostly agree," "neither," "mostly disagree," and "disagree." Table 8.1 presents survey items organized by gender attitude topic.¹⁰³

¹⁰¹ For analysis, the team used 2016–2020 data, accessed in 2022.

¹⁰² For a more extensive discussion of ambivalent sexism, see the literature review in chapter 2.

¹⁰³ Survey items are sometimes rephrased in the following text for parsimony.

Table 8.1. Recruit Survey Gender Attitude Questions by Topic

Item Number	Survey Item
Gender role attitudes	
1	It is usually better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family.
2	If a wife works, her husband should take a greater part in housework and childcare.
3	Most fathers should spend more time with their children than they do now.
4	Most mothers should spend more time with their children than they do now.
Equality of opportunity and treatment	
5	Parents should encourage just as much independence in their daughters as their sons.
6	Men and women should be paid the same money if they do the same work.
7	Women should be considered as seriously as men for jobs as executives or politicians.
8	A woman should have the same job opportunities as a man.
Sexist attitudes: Benevolent sexism	
9	Women should be cherished and protected by men.
10	In a disaster, women should be rescued before men.
Sexist attitudes: Hostile sexism	
11	Many women get a kick out of teasing men by seeming sexually available and then refusing male advances.
12	When women lose to men in a fair competition, they typically complain about being discriminated against.

Note: Item 1 is worded such that more agreement indicates less egalitarian views, whereas for items 2–8, more agreement indicates more egalitarian views about women. For items 9–12, more agreement indicated more sexist attitudes.

1. Statistical analysis for gender attitude questions

The following descriptive analyses of these data compare the average percentage of respondents' agreement (agree or mostly agree) with each statement across several groups. Testing for statistical significance of difference relies on various statistical tests, depending on the data and nature of the differences being tested. Average percentage agreement is presented separately by gender, by time point observed (at week 2 or week 11), and by training model (Series Track, Integrated Company, and Male-Only).¹⁰⁴

Comparisons between male and female new Marines use only week 11 data and combine all data across training models; all cases with nonmissing data at week 11 are included. The study team used Fisher's exact test to assess the statistical significance of the difference between male and female attitudes.

To evaluate how attitudes change over time, the study team employed an exact McNemar's test to evaluate whether and how attitudes change over time and if patterns of change vary by

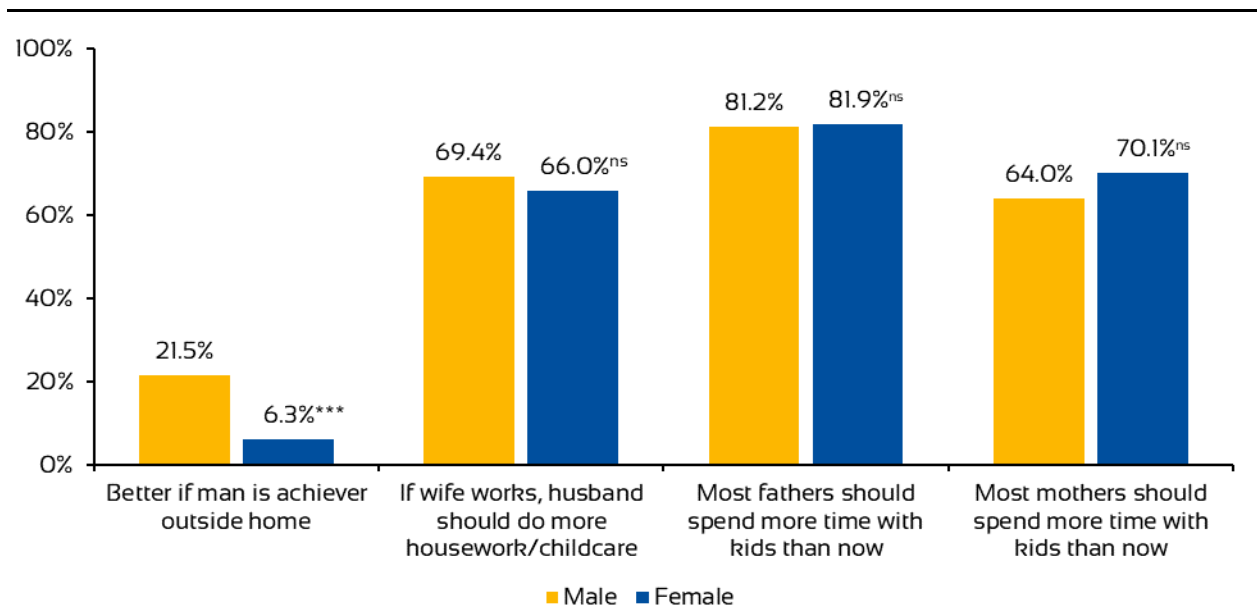
¹⁰⁴ Tables M.19.1-M.19.3 in appendix M report the values underlying the figures in this section that illustrate key findings, namely, the percentage agreement and sample size for each of the subgroups defined by gender, training model, and time point.

training model or recruit gender. The analysis includes all cases with nonmissing data at both week 2 and week 11. There may be slight differences in samples across tables and figures comparing male and female new Marines and those comparing change over time as a result of different patterns of missing data in week 2 and week 11. For all tests of statistical significance, $p < 0.05$ is considered indicative of a statistically significant difference that is not likely to arise simply by chance or random fluctuation. All p values and summary data are reported in table M.19.4 in appendix M.

2. Differences between male and female new Marines in gender role attitudes

Measuring gender-related attitudes of recruits and new Marines offers the opportunity to understand the values recruits bring into training, how their attitudes change over time, and what attitudes they take to the next stage in training. The 12 survey items and 5 comparison groups defined by training model and recruit gender offer a variety of potential comparisons. Appendix M presents the full set of descriptive results from men and women by training model in a compact format, accompanied by the sample size for each group. The most salient findings from these data follow, noting comparisons that represent statistically significant differences. The analysis leads with differences in gender attitudes between male and female new Marines. These are Marines who will soon complete recruit training and move to the next stage of entry-level training (ELT), where they will experience gender-integrated training and work environments. Figure 8.1 presents the average percentage of respondents who agree or mostly agree with four statements that capture aspects of traditional gender roles.

Figure 8.1. Percentage of New Marines at Week 11 Who Agree or Mostly Agree with Gender Role Attitude Statements by Gender



Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; ns = not significant ($p \geq 0.05$)

In general, male new Marines expressed an interesting and somewhat inconsistent mix of gender role attitudes. Although 21.5 percent believed it is better for a man to work outside the home

while a woman takes care of the home and family (traditional gender division of labor), 69.4 percent held husbands and fathers to high standards, agreeing they should help more at home if the wife worked outside the home, and 81.2 percent agreed that fathers should spend more time with their kids. The latter two attitudes are typically taken to reflect support for a less gendered division of labor between man as breadwinner outside the home and woman as caretaker of the home and family. But male new Marines held both mothers and fathers to high expectations for spending more time with their children, with 64.0 percent in agreement that mothers should spend more time with their kids.

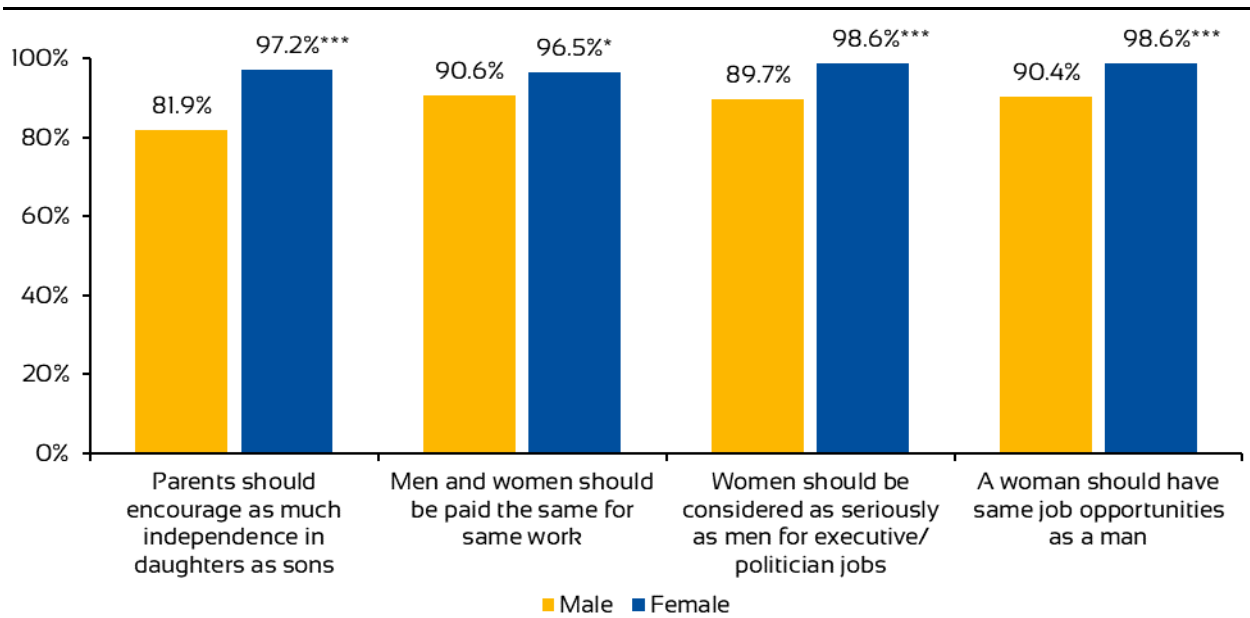
Female new Marines also held husbands, fathers, and mothers to high expectations for sharing in home and family care and spending more time with children. Approximately two-thirds (66.0 percent) of female new Marines felt husbands should help more at home if the wife works, 81.9 percent agreed fathers should spend more time with their kids, and 70.1 percent agreed mothers should spend more time with their kids. In this regard, new Marines of both genders hold high expectations for men as husbands and fathers and women as wives and mothers in their family lives. These levels of agreement were not statistically different from the levels expressed by male new Marines (husbands should help more: $p = 0.518$; fathers should spend more time with kids: $p = 0.898$; mothers should spend more time with kids: $p = 0.206$).

However, male new Marines were more than 3.5 times as likely to agree with a traditional gender division of labor, as were female new Marines (21.5 percent versus 6.3 percent), and this difference was statistically significant ($p = 0.000$). Because a woman serving in the Marine Corps is a clear and visible example that violates traditional gender roles (i.e., she is not staying home taking care of house and children and is working in a traditionally male occupation), male new Marines who believe in traditional gender roles may find themselves (knowingly or unknowingly) harboring negative evaluations of such women, which could lead to both implicit and overt bias toward female peers or superiors. These biases might also affect their expectations of the roles women should hold within the Marine Corps. In general, people expect role congruence from other people and evaluate them negatively when they violate their expectations for their roles (i.e., people who hold traditional gender role views will evaluate women who engage in behaviors inconsistent with traditional gender roles negatively) (Eagly & Diekmann, 2005; Lee & Huang, 2018; Ritter & Yoder, 2004).

3. Differences between male and female new Marines' attitudes about equality of treatment/opportunity

Figure 8.2 presents the average percentage of respondents who agree or mostly agree with four statements that reflect attitudes about equal opportunity and treatment between men and women.

Figure 8.2. Percentage of New Marines at Week 11 Who Agree or Mostly Agree with Equality of Treatment/Opportunity Statements by Gender



Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; ns = not significant ($p \geq 0.05$)

Male and female new Marines both expressed high levels of support for gender equality in opportunity and treatment. Agreement was over 80 percent for all items and at or over 90 percent for three of the four items. The majority of male new Marines endorsed the view that parents should encourage daughters to be as independent as sons (81.9 percent) and agreed with equal pay for equal work (90.6 percent), equal consideration for leadership jobs like executive or politician (89.7 percent), and equal job opportunities in general for men and women (90.4 percent). Among female new Marines, 96.5 percent agreed with equal pay for equal work, 98.6 percent agreed that women should be considered equally for leadership positions such as executive or politician, and 98.6 percent agreed that women should have the same job opportunities as men.

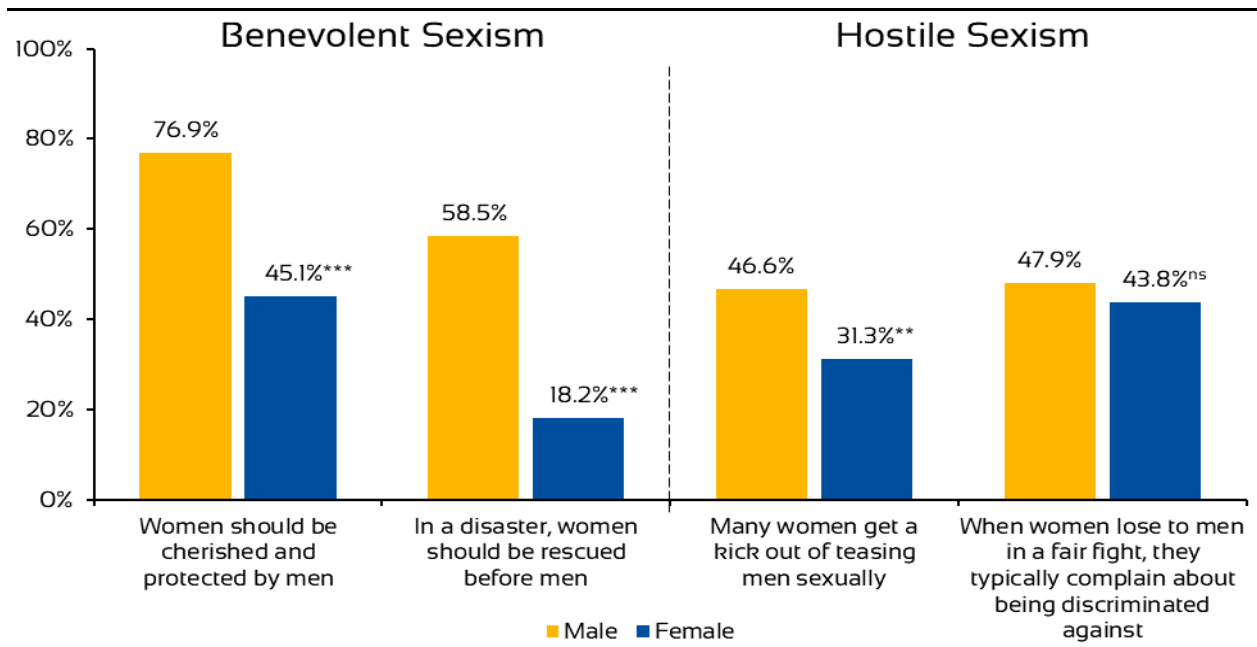
Although male new Marines showed high levels of agreement with equal opportunity and treatment by gender (approximately 82–91 percent), their level of agreement was still approximately 6–15 percentage points lower than their female peers, representing a statistically significant difference for each of the four items. The largest difference related to encouraging as much independence among daughters as among sons: 81.9 percent of male and 97.2 percent of female new Marines supported this statement, with the difference being statistically significant ($p = 0.000$). However, male new Marines were statistically significantly less likely than female new Marines to agree men and women should be paid the same for doing equal work (90.6 percent versus 96.5 percent; $p = 0.035$), women should be considered as seriously as men for executive or politician jobs (89.7 percent versus 98.6 percent; $p = 0.000$), and women should have the same job opportunities as men (90.4 percent versus 98.6 percent; $p = 0.001$). The pervasive support for gender equality among male new Marines is encouraging and may allay

widespread concern about overt hostility to gender-equal opportunities to serve in the Marine Corps and its leadership and equal treatment of male and female recruits.

4. Differences between male and female new Marines' attitudes about benevolent and hostile sexism

Figure 8.3 presents the average percentage of respondents who agree or mostly agree with four statements that reflect attitudes of benevolent and hostile sexism. Items capturing sexism attitudes elicited some of the most striking results from the gender attitude survey. Male new Marines reported high levels of agreement with both benevolent and hostile sexism measures. More than 50 percent of male new Marines endorsed benevolent sexism attitudes, while just under 50 percent endorsed hostile sexism attitudes. Most male new Marines (76.9 percent) agreed that women should be cherished and protected by men, and 58.5 percent agreed women should be rescued before men. Nearly half (46.6 percent) agreed women get a kick out teasing men sexually, and 47.9 percent agreed that women claim discrimination when they lose in a fair fight.

Figure 8.3. Percentage of New Marines at Week 11 Who Agree or Mostly Agree with Benevolent and Hostile Sexism Statements by Gender



Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; ns = not significant ($p \geq 0.05$)

Female new Marines held statistically significant lower levels of agreement than male new Marines with all but the view that women claim discrimination when they lose to men in a fair fight; 43.8 percent of female and 47.9 percent of male new Marines agreed with this statement reflecting hostile sexism ($p = 0.421$). Although endorsement of the other hostile sexism item and the two benevolent sexism items was lower for female new Marines than for males, support for these statements among females was nontrivial. Nearly half (45.1 percent) of female new Marines agreed women should be cherished and protected (versus 76.9 percent of males; $p =$

0.000), 18.2 percent agreed women should be rescued before men (versus 58.5 percent of males; $p = 0.000$), and 31.3 percent agreed women get a kick out of sexually teasing men (versus 46.6 percent of males; $p = 0.002$).

Statistically significant differences between male and female new Marines on sexism attitudes (with differences of approximately 15, 32, and 44 percentage points) were among the largest group differences found in the data on gender attitudes. These gender differences suggest that benevolent and hostile sexist attitudes among male Marine recruits have the potential to create challenges with increased gender integration in recruit training. They also suggest that benevolent sexism may currently be contributing to gender integration problems at follow-on training, given the disparity in views male and female new Marines bring into these fully integrated training environments.

Hostile sexist attitudes are more overtly problematic because they indicate possible antagonism and opposition to women, particularly women who violate expected gender roles by serving in the military, for example. Endorsement of the view that women enjoy sexually teasing men, a harmful stereotype, is an aspect of hostile sexism sometimes brought up when considering gender integration in military settings, out of concern that women might wield their sexuality as a source of power or would become a source of distraction to men. It also may contribute to the fear among male new Marines and recruits that women could falsely accuse men of sexual assault or wrongdoing—a fear that may interfere with building cohesive teams.

Benevolent sexism is perhaps even more insidious, however, because it may appear harmless—and even chivalrous or complimentary—on the surface. In contrast, benevolent sexism is harmful in perpetuating and idealizing subordinate qualities in women, such as the need to be protected or special nurturing and caretaking skills. Especially in the male-dominated, masculine culture of the Marine Corps, where toughness and strength are privileged aspects of competence, the implication that women must be protected rather than be protectors and defenders is damaging and undermines women being taken seriously as military professionals. Exposure to benevolent sexism, more than exposure to hostile sexism, has been shown to impede women's cognitive performance by generating feelings of incompetence (Dardenne et al., 2007). These dynamics are likely amplified in an environment where both cognitive and physical performance are under constant stress and scrutiny, such as in Marine Corps recruit training.

5. Comparisons over time and by training model among Marine recruits

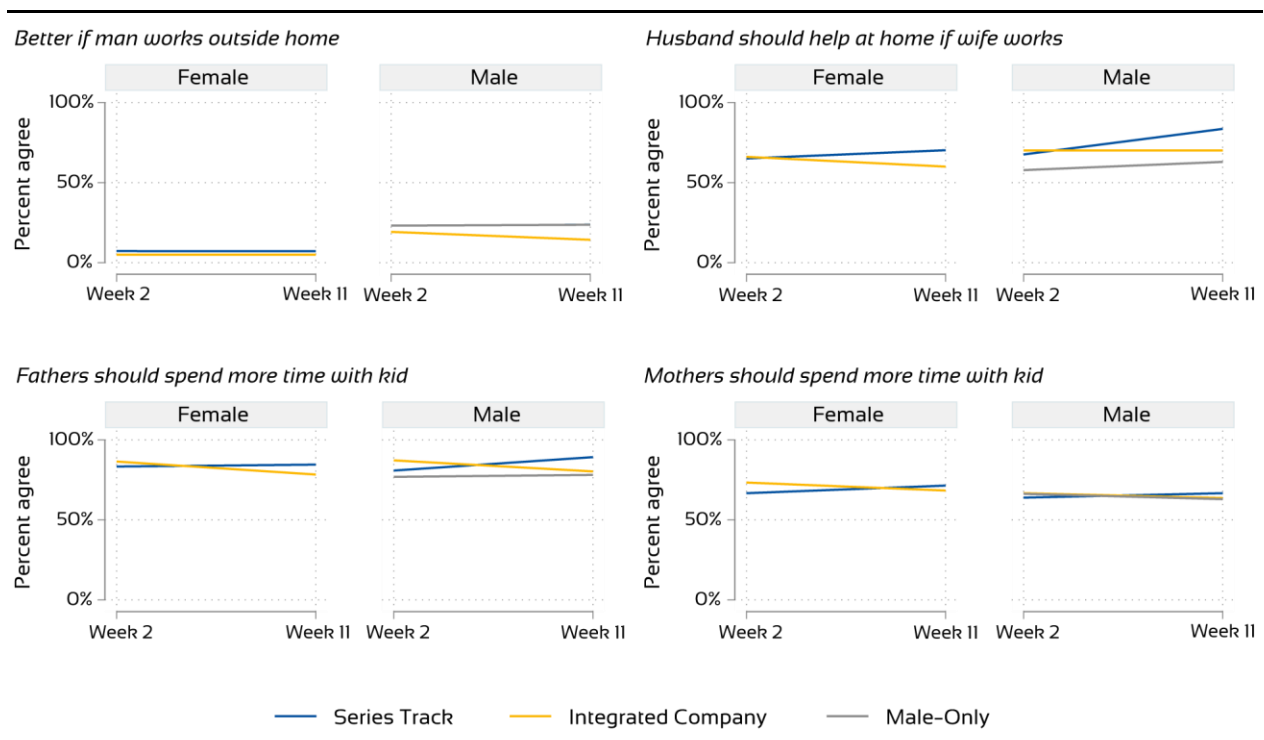
The social science surveys given at weeks 2 and 11 were designed to capture the attitudes new Marines bring to their next training environment and how these attitudes reflect changes that take place during the recruit training experience. Recruit gender and training model experienced may shape attitudes and attitude change over the course of recruit training. Succinctly reporting the results of comparing 2 genders, 3 training models, and 2 time points on 12 different gender-related survey items is challenging. Figures 8.4 through 8.6 illustrate group-specific average attitudes in week 2 and week 11, with groups defined by gender and training model. The analysis focuses only on statistically significant changes over time; statistical significance was assessed using an exact McNemar's test. The team performed tests for significant change for four types of parameters: pooling all recruits; separately for males and females (two groups), pooling across

training models; separately by training model (three groups), pooling males and females; and separately for each of the five groups defined by gender and training model. Table M.19.4 in appendix M provides detailed information on testing for statistical significance. The results indicate some statistically significant net change in attitudes over time, but changes were typically limited to one or two groups and for only limited items.

Gender role attitudes

Three of the four items capturing attitudes about traditional gender roles showed no statistically significant change over time (see figure 8.4). Pooling across training models, male recruits showed an increase from 62.8 to 69.4 percent agreement that husbands should help more at home if the wife works ($p = 0.035$). Recruits in the Series Track model (pooling male and female recruits) also showed statistically significant increase in agreement over time, rising from 66.5 to 76.8 percent ($p = 0.026$). Both broader group changes seem to be driven by the relatively large change among Series Track male recruits.

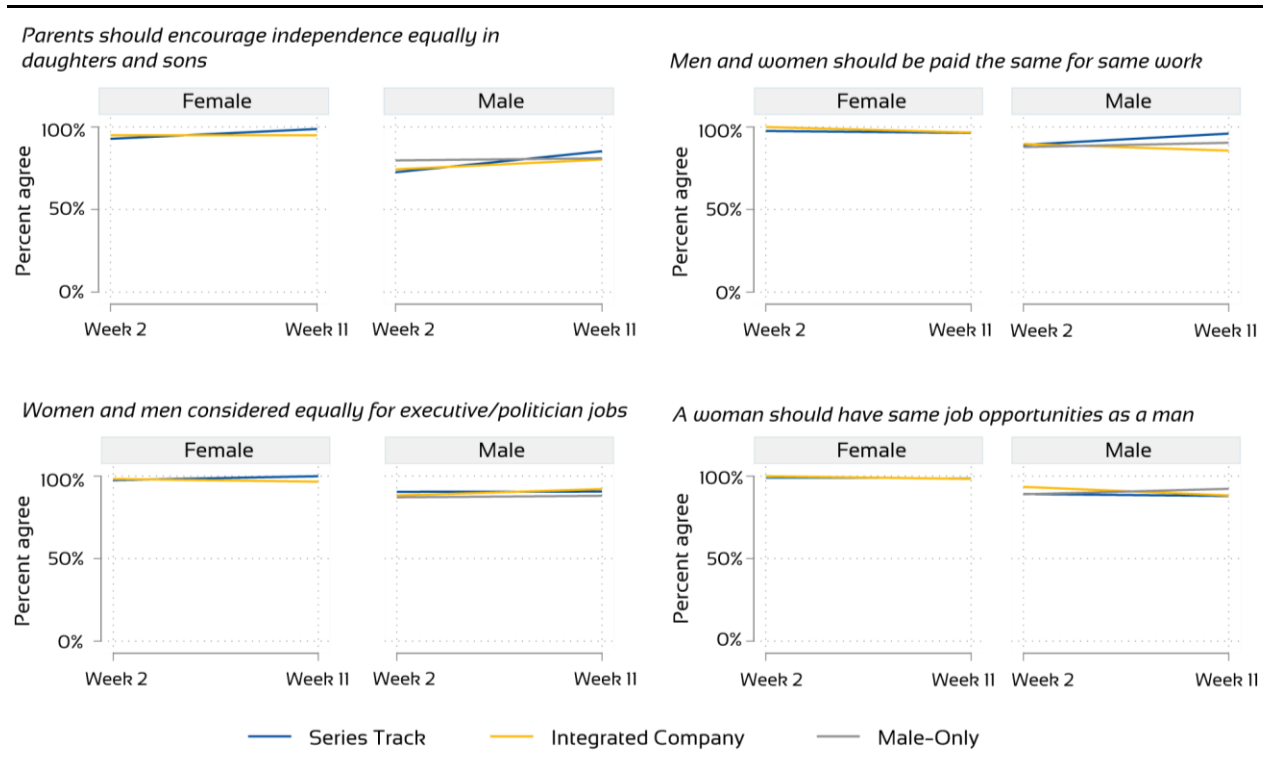
Figure 8.4. Change Over Time in Gender Role Attitudes by Gender and Training Model



Equal opportunity and treatment

Similarly, three of the four items capturing attitudes about equal opportunity and treatment of men and women showed no significant change over time for any groups defined by gender and training model (see figure 8.5). Only recruits in the Series Track showed a significant increase in agreement that parents should encourage independence in daughters as much as sons, from 83.3 to 92.3 percent ($p = 0.007$) when pooling male and female recruits together.

Figure 8.5. Change Over Time in Equal Opportunity/Treatment Attitudes by Gender and Training Model



Benevolent and hostile sexism

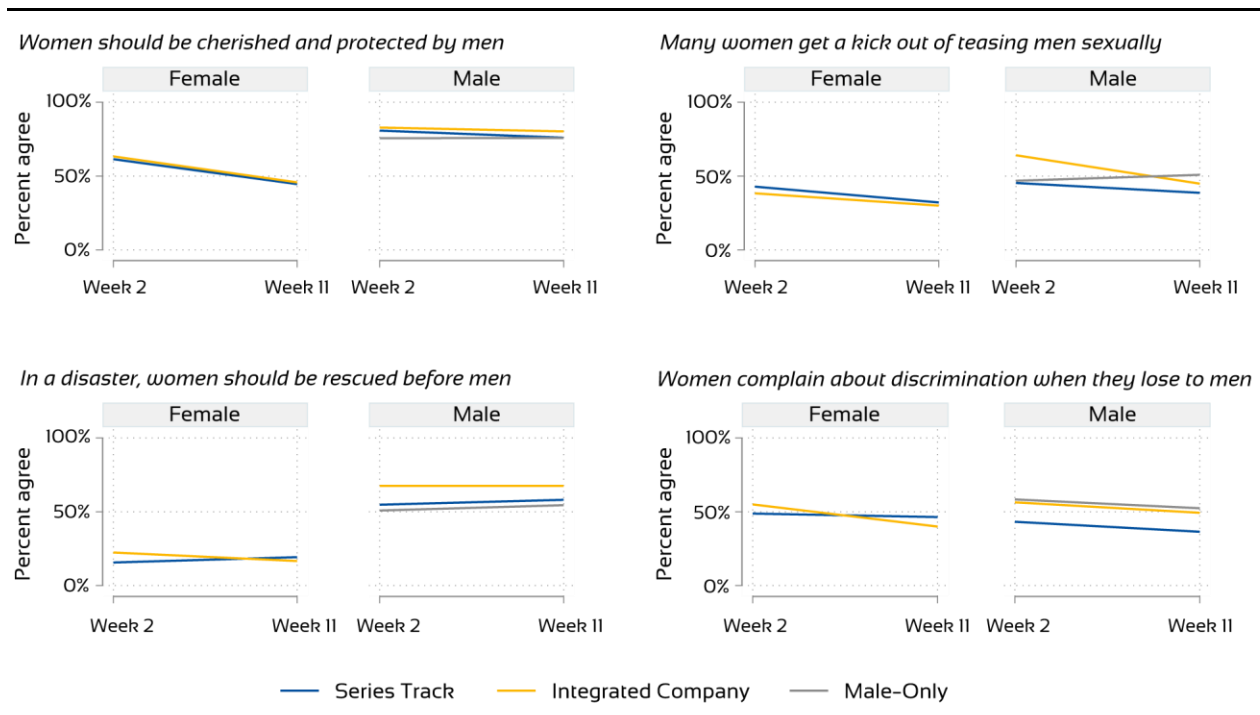
The most meaningful changes in attitude occurred in the items measuring sexism, with three of the four attitudes showing significant change over time among all recruits and by gender and training model (see figure 8.6). Among all recruits, agreement that women should be cherished and protected by men declined significantly, from 73.3 to 67.4 percent ($p = 0.010$). This overall decline was apparent among all female recruits (pooling across training model), who dropped from 61.7 to 44.7 percent endorsement ($p = 0.000$). Similarly, when pooling male and female recruits, those in Series Track showed significantly decreased support, dropping from 70.3 to 59.5 percent ($p = 0.012$). Recruits from Integrated Company also decreased agreement, from 73.9 to 65.7 percent, although this difference fell just outside the standard for statistical significance ($p = 0.052$). These declines were partially driven sharp declines among female recruits in both the Series Track and Integrated Company training models. Female recruits showed the most consistent change in endorsement of the view that women should be cherished and protected over the course of their training.

Both items measuring hostile sexism changed significantly between week 2 and week 11 for recruits as a whole. Agreement that women get a kick out of teasing men sexually declined significantly among all recruits, from 47.7 to 41.9 percent ($p = 0.018$). Pooling across training models, female recruits showed significantly reduced agreement over time with this item, declining from 41.0 to 31.3 percent ($p = 0.024$). Pooling male and female recruits, Series Track

and Integrated Company recruits reduced agreement, from 44.0 to 35.2 percent ($p = 0.029$) and from 52.9 to 38.4 percent ($p = 0.002$), respectively. The decline among male recruits in the integrated platoon is noteworthy.

Among all recruits, agreement that women claim discrimination when they lose in a fair fight declined significantly, from 53.6 to 46.8 percent ($p = 0.004$). Pooling across both training models, male recruits showed significantly reduced agreement over time with this item, declining from 54.6 to 48.2 percent ($p = 0.027$). Pooling male and female recruits, Integrated Company recruits significantly reduced agreement, from 56.3 to 45.2 percent ($p = 0.017$).

Figure 8.6. Change Over Time in Benevolent and Hostile Sexism Attitudes by Gender and Training Model



The patterns of change over time on gender attitude measures are not consistent across all measures or for all groups. However, the one consistent pattern of change observed was the lack of change in gender attitudes among recruits from the Male-Only training model at MCRD San Diego. These recruits showed only marginal (not statistically significant) change in gender-related attitudes over the course of their training. The maximum change over time across all 12 items was a 6.0 percentage point increase in agreement that husbands should help more at home if the wife works. They also reduced agreement by 5.5 percentage points that women claim discrimination when they lose in a fair fight. Neither of these differences reached statistical significance. Most other changes fell within a ± 0.6 to ± 3.0 percentage point range and were inconsistent in the direction of the change. The study team cannot definitively explain the limited attitudinal change among these recruits but speculates that a completely gender-segregated training environment does not require male recruits to think about gender at all, and therefore they do not change their thinking about gender-related issues. With little to no exposure to

women during their training, their environment and experience do little to alter these recruits' perspectives about gender.

Recruits in the Series Track training model had limited training time with members of the opposite gender. However, they were not entirely segregated, as with MCRD San Diego. Series Track male recruits showed some attitudinal change over time. These two groups both experienced predominantly male training, albeit at different locations, but showed slightly different levels of attitudinal change. These differences could be ascribed to systemic distinctions between Parris Island and San Diego, the influence of particular drill instructor teams, company culture, chance, or other unknown factors. Given close, round-the-clock interaction and training, it is possible that drill instructor personalities and perspectives could shape attitude change among recruits and make gender more salient when training in a location co-located with female recruits.

Although differences in attitude were not clear, consistent, or large for recruits in the Series Track and Integrated Company models, Integrated Company recruits appear to have experienced declines in sexist attitudes, especially in hostile sexist attitudes. The survey data are simply not detailed enough to conclude that the Integrated Company model was the cause of these declines. However, it is notable that recruits who experienced gender-integrated training exhibited some of the largest changes in hostile sexism of all groups, suggesting that increasing gender integration at recruit training could be beneficial in that area.

6. Conclusions and implications of gender attitude measures and Marine Corps recruits

Summarized below are the major conclusions drawn from the survey data on recruits' gender-related attitudes and implications of these results for increasing gender integration at Marine Corps recruit training.

Benevolent and hostile sexism attitudes

The most striking differences between male and female new Marines are found in benevolent and hostile sexism attitudes, which are higher among males than among females. Hostile sexist views decline somewhat over the course of training among male and female Marine recruits, while only female new Marines experience a meaningful decrease in benevolent sexism views. But even the somewhat reduced levels of sexist attitudes near the end of training among males are much higher than among their female peers.

Concerns that increased integration of men and women might lead to chivalrous behavior or protective treatment by men are potentially valid, given the attitudes expressed by surveyed recruits. Three-quarters of male new Marines agreed that women should be cherished and protected by men, while less than half of female new Marines felt the same. Concerns that increased gender integration may negatively affect social cohesion are also potentially valid, given that nearly half of male new Marines and almost a third of female new Marines agreed that women get a kick out of teasing men sexually. Nevertheless, high levels of endorsement of sexist attitudes should not be a reason to limit women's opportunities or prevent gender integration. These attitudes are not consistent with the values espoused by Marine Corps leadership of

respecting and valuing diversity, which includes gender diversity. Cohesion should be built around task cohesion rather than social cohesion, which can only happen through mixed-gender groups working together to complete tasks. High levels of sexism in any group should be addressed and remedied, not used as a reason to limit integration.

Gender role attitudes

Survey items reflecting expected contributions of husbands and fathers to the family ostensibly reflect more gender egalitarianism and less espousal of traditional gender roles. Strong agreement that husbands should help with housework and childcare when their wife works outside the home and fathers should spend more time with their kids represents less adherence to belief in a traditional gendered division of labor. Yet the relatively high levels of sexism—especially benevolent sexism—held by the same recruits who hold high expectations of husbands and fathers suggests other factors may be influencing these attitudes. The study team speculates that perhaps the strong culture of duty, honor, and obligation in the Marine Corps translates to high expectations of men in all aspects of their lives, including family life. The culture of exceptionalism and excellence in the Marine Corps may drive high expectations of men as partners and fathers, even when such men otherwise hold views supportive of traditional gendered divisions of labor. Female new Marines also held husbands and fathers to high standards. It may be possible to capitalize on the culture of exceptionalism and excellence in the Marine Corps by making gender equality a source of pride and expectation for all Marines.

Equal opportunity and treatment attitudes

The high levels of agreement with various aspects of equal opportunity and treatment among both male and female new Marines are encouraging for increased gender integration in recruit training. High levels of endorsement of these views can be built upon by implementing a policy of increased gender integration. Such implementation would match reality with rhetoric and provide clear, observable evidence that women experience equal opportunities and equal treatment at Marine Corps recruit training from the beginning. Exposing recruits to the daily, active practice of equality of opportunity and treatment from day 1 may also lead to a convergence of male and female Marine attitudes about gender equality.

D. Recruit and New Marine Perceptions of Gender Suitability for Military Roles

The survey asked recruits to select whether men, women, or equally men and women were best suited to serve in the following military roles: drill instructors, infantry and combat roles, leaders at the highest levels of their Service, special forces, intelligence roles, administrative roles, healthcare roles, and engineering roles. Across training cohorts, strong majorities of male and female recruits and new Marines agreed that men and women were equally suited to serve as drill instructors, in leadership positions, intelligence roles, administrative roles, healthcare roles, and engineering roles. At week 11, 89.0 percent of new Marines in Integrated Company, 89.3 percent of new Marines in Series Track, and 86.5 percent of new Marines in the Male-Only model believed men and women were equally suited to serve as drill instructors. Of all the roles in which new Marines believed men and women were equally suited to serve, these were some of the highest percentages. The percentage of recruits who felt men and women were equally

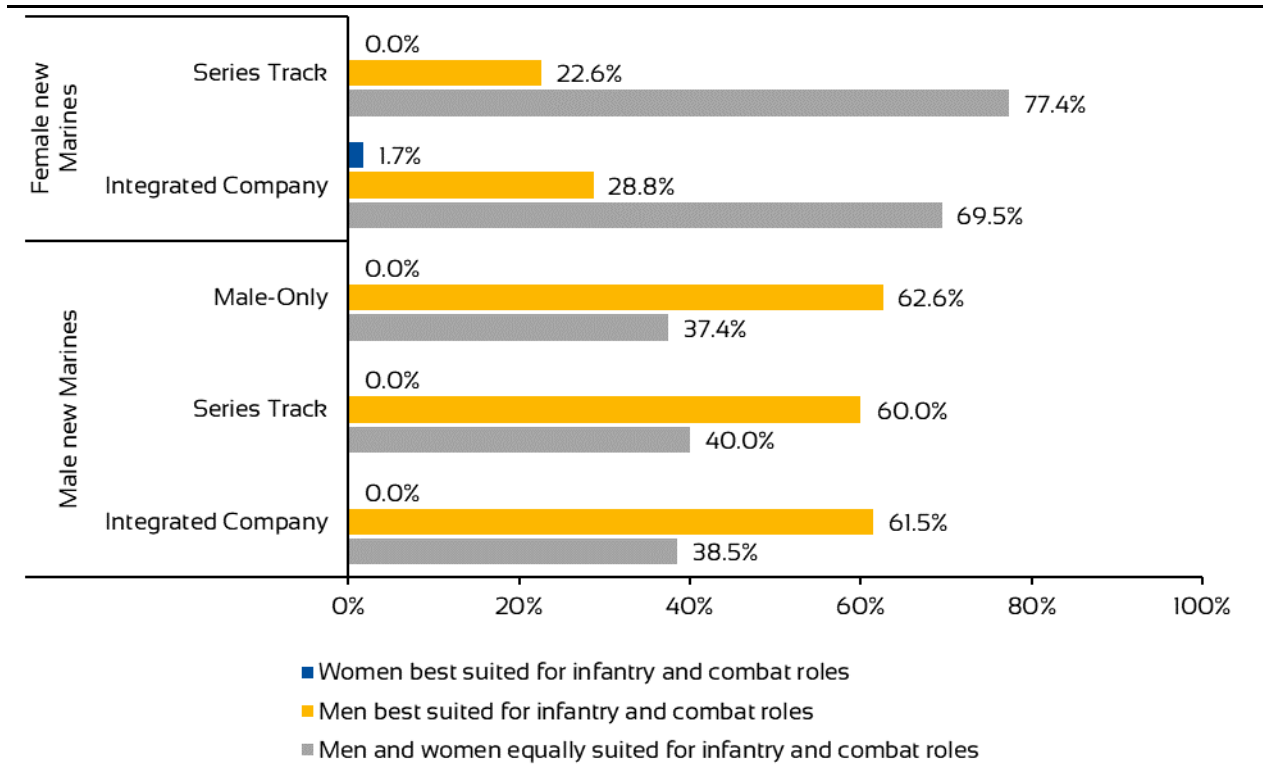
suiting to be drill instructors increased over time; there were statistically significant changes from week 2 for men ($p = 0.004$) and women ($p = 0.004$) in Integrated Company and men in the Male-Only model ($p < 0.001$).

Attitudes diverged concerning gender suitability for infantry and combat roles and special forces (see figures 8.7 and 8.8). A greater percentage of male new Marines felt men would be better at historically male military occupations, whereas female new Marines tended to possess more egalitarian perspectives on these roles. At week 11, a significant association was observed between the new Marine's gender and the perceived gender of who was best to serve in infantry and combat roles within Series Track and Integrated Company.¹⁰⁵ Nearly two-thirds of men in all training models believed men were better suited for infantry and combat roles, followed by men who believed men and women were equally suited for this role. No male new Marines felt women were best suited to serve in infantry and combat roles. Approximately three-quarters of women in both training models felt men and women were equally suited to serve in infantry and combat, with the remainder believing men were better suited. Similar to their male counterparts, very few women believed women were better suited for infantry and combat roles (only 1.7 percent in Integrated Company). A similar pattern emerged in recruit and new Marine opinions on which gender was best suited for special forces roles, with a significant association between the new Marine's gender and the perceived gender best suited for special forces within both Integrated Company and Series Track.¹⁰⁶

¹⁰⁵ Integrated Company, $p = 0.001$; Series Track, $p < 0.001$

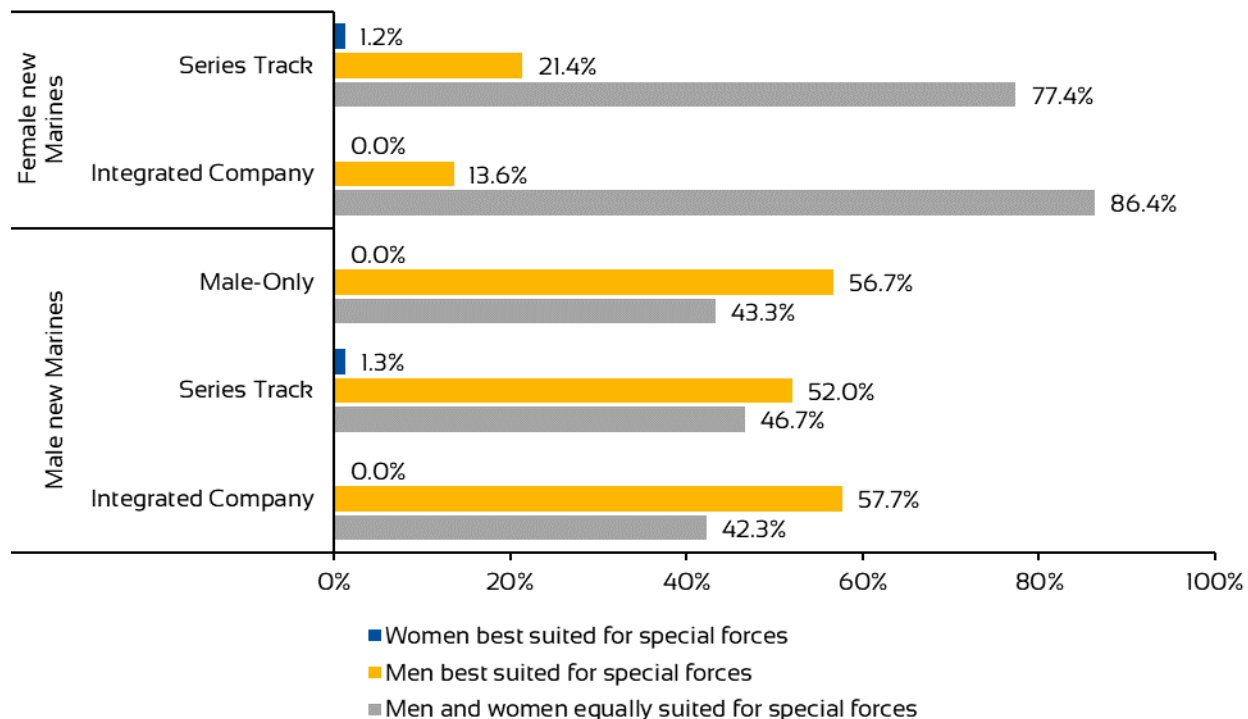
¹⁰⁶ Integrated Company, $p < 0.001$; Series Track, $p < 0.001$

Figure 8.7. Percentage of New Marines at Week 11 Who Believe Men, Women, or Equally Men and Women Are Best Suited for Infantry and Combat Roles



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

Figure 8.8. Percentage of New Marines at Week 11 Who Believe Men, Women, or Equally Men and Women Are Best Suited for Special Forces



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

E. Recruit Experiences in Series Track, Integrated Company, and Male-Only Models

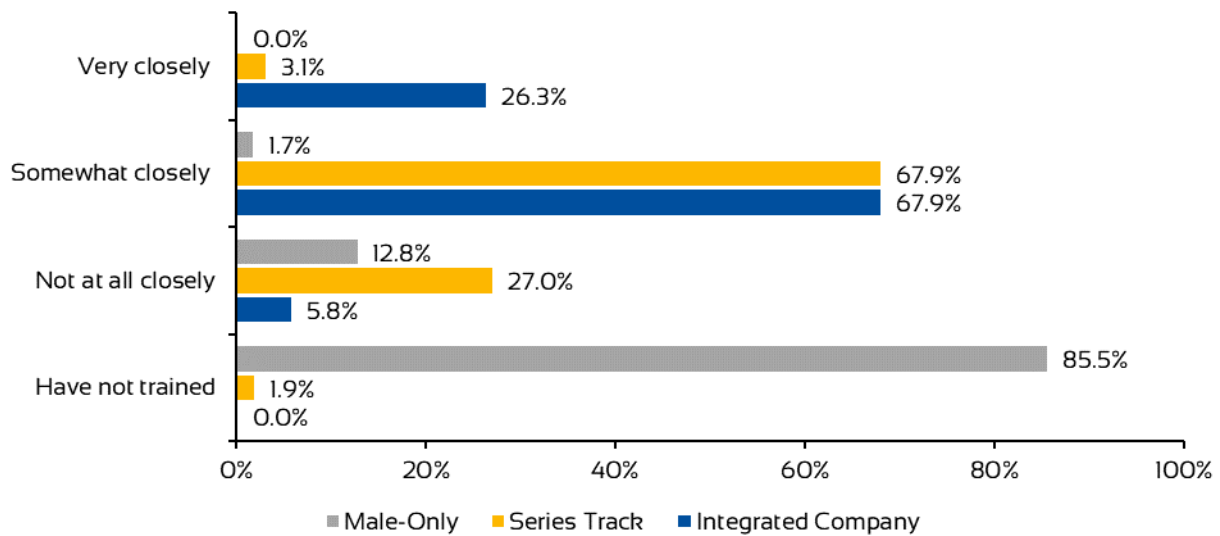
Survey and focus group data provide insights into recruits’ experiences in the Series Track, Integrated Company, and Male-Only models. Recruits reported how closely they felt they trained with recruits of the opposite gender and responded to a variety of statements intended to gauge platoon cohesion and dynamics.

1. Recruit perceptions of how closely they trained with recruits of the opposite gender

The social science survey asked recruits to rate how closely they trained with recruits of the opposite gender during recruit training; response options included “very closely,” “somewhat closely,” “not at all closely,” and “I have not trained with recruits of the opposite gender.” Unsurprisingly, over 98 percent of new Marines at MCRD San Diego in the Male-Only model reported not having trained with female recruits or not training at all closely with female recruits. New Marines in Integrated Company reported training the most closely with recruits of the opposite gender. In both Series Track and Integrated Company, 67.9 percent of new Marines said they trained “somewhat closely” with recruits of the opposite gender. However, 26.3 percent of new Marines in Integrated Company responded that they trained “very closely” with recruits of the opposite gender, compared with only 3.1 percent in Series Track. New Marines in Series Track more often reported training “not at all closely” with recruits of the opposite gender (27.0

percent) than new Marines in Integrated Company (only 5.8 percent) (see figure 8.9). These responses suggest that recruit experiences with gender integration in Series Track and Integrated Company were perceived as only marginally different because the majority of new Marines from both models felt they trained “somewhat closely” with recruits of the opposite gender.

Figure 8.9. How Closely Recruits Reported Training With Members of the Opposite Gender in Week 11, by Training Model¹⁰⁷



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

New Marines in Series Track reported their interactions with recruits of the opposite gender were limited. A female new Marine said, “*The interactions I had with males was slim to none.*” One male new Marine characterized what it felt like to only come together for major training events: “*[Our experience with female recruits in the sister company,] it’s like your parents got divorced. Your mom took your sister, your dad took you, and you only saw them at Christmas and Thanksgiving.*” Other male new Marines also described their experiences with the Series Track model.

[Name] company is our sister company. Lead series had very limited interaction, less than follow series. The majority of follow series was with [female] company. Lead series, follow series, and [female] company each did their own thing. The only time we were together was during the last night event on the second day [of the Crucible]. On the range we had some interaction with [female] company ... We were not encouraged to talk with them.—**New Marine, male, Series Track, Parris Island**

¹⁰⁷ Prevalence of responses was similar for male and female new Marines. However, Integrated Company males trended slightly toward reporting less integration compared with females. All Integrated Company new Marines who answered “not at all closely” were male; 33.9 percent of Integrated Company females answered “very closely,” while only 20.5 percent of males answered “very closely.”

When we did see them, it was at beginning of training and end of training. There is no way to build relationship with company you don't see. To ask if you feel a brotherhood and sisterhood to them. Do we feel a bond with another Marine out there? Yes, because we've all gone through same training. Are we more likely to help a [female] company than someone out there in the fleet? We didn't really train with them.—New Marine, male, Series Track, Parris Island

Female new Marines in Integrated Company described feeling much closer to the male new Marines they trained with throughout the 13 weeks than those in Series Track. One female new Marine stated, “*Finishing the Crucible together [with the males] made me feel like we all are a real family.*” Another recruit reflected a similar sentiment: “*We are all a family. Even though we don't know each other's past or background, we've been alongside each [other] for the last 3 months and would die for each other.*” Female new Marines were more emphatic about their closeness to their male peers in Integrated Company than male new Marines.

Some new Marines at MCRD San Diego had known that they would be training with only male recruits, but others had assumed they would be training with female recruits because of recent headlines about women training in San Diego for the first time in 2021 (Harkins, 2021).

2. Recruit perceptions of platoon cohesion

Recruits were asked to rate their agreement with a series of statements about their platoon cohesion and dynamics:

- The members of my platoon are cooperative with each other.
- The members of my platoon know that they can depend on each other.
- When I face a difficult task, other recruits in my platoon help out.
- Recruits in my platoon really respect one another.

Across training models, agreement prevalence was highest for the statement “When I face a difficult task, other recruits in my platoon help out,” with the majority of new Marines agreeing or mostly agreeing at week 11. Agreement prevalence was lowest for “Recruits in my platoon really respect one another” at both time points, with half of respondents or fewer indicating agreement.

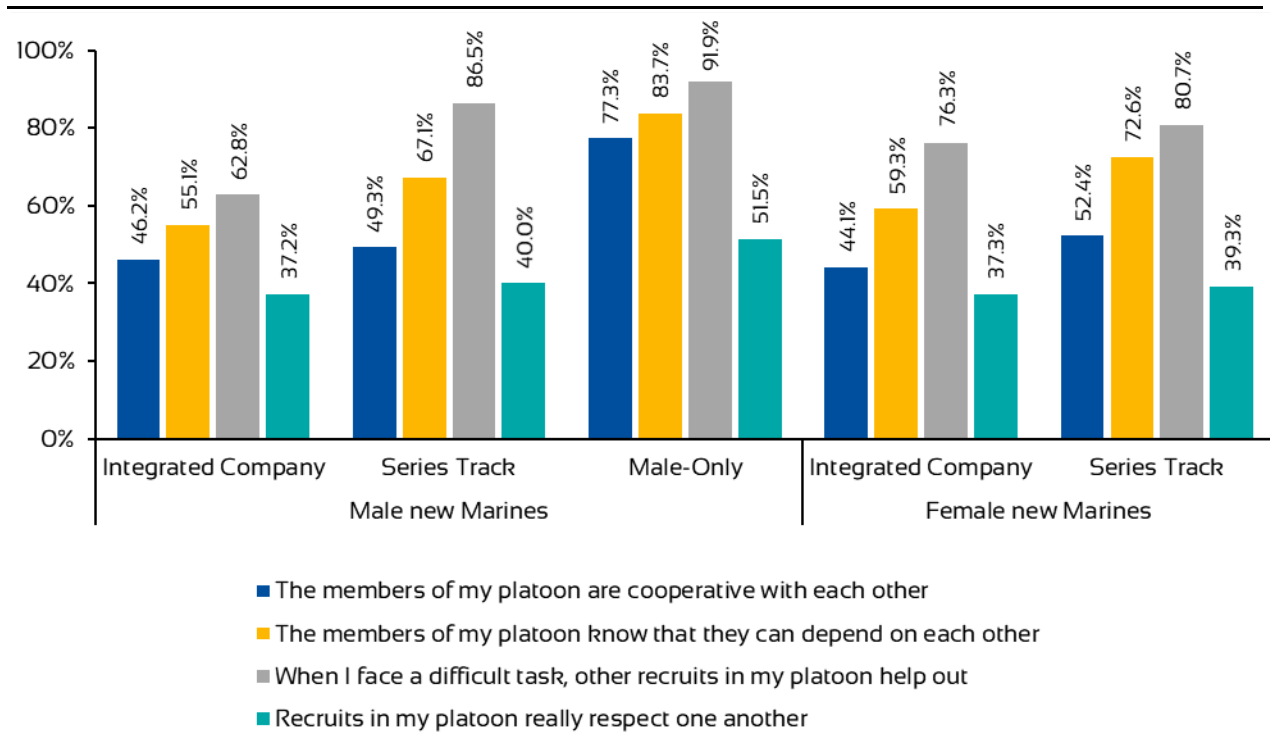
Significant variability in levels of agreement was observed when comparing male new Marines across training models. Male new Marines surveyed at week 11 demonstrated a significant association between training model and agreement that members of their platoon are cooperative with each other,¹⁰⁸ members of their platoon know they can depend on one another,¹⁰⁹ members

¹⁰⁸ Integrated Company males v. Male-Only model, $p < 0.001$; all Parris Island males v. Male-Only Model, $p < 0.001$

¹⁰⁹ Integrated Company males v. Male-Only model, $p < 0.001$; all Parris Island males v. Male-Only Model, $p < 0.001$

of their platoon help out when one is faced with a difficult task,¹¹⁰ and recruits in their platoon really respect one another.¹¹¹ For female new Marines, no significant association existed between training model and level of agreement for any statement, except “The members of my platoon are cooperative with each other” ($p = 0.046$) (see figure 8.10).

Figure 8.10. Percentage of New Marines at Week 11 Who Agree or Mostly Agree With Platoon Cohesion Statements, by Gender and Training Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

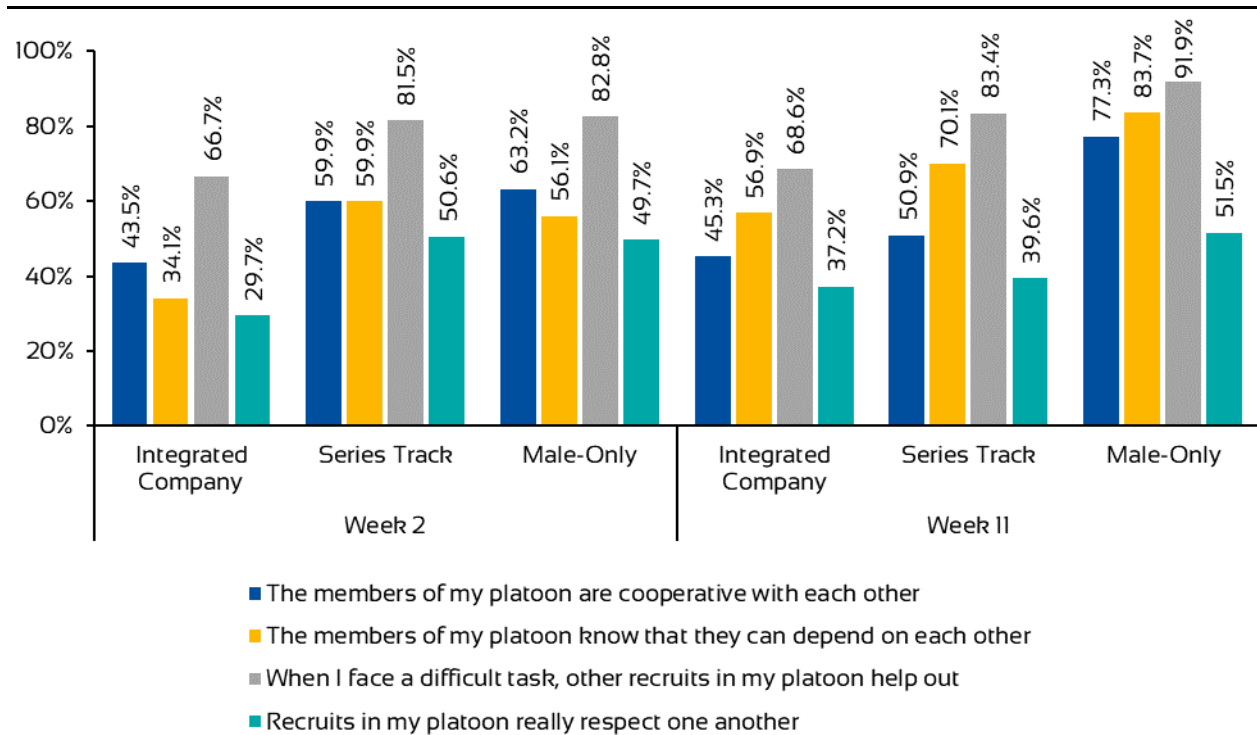
In Series Track and Integrated Company, recruits’ agreement with statements about platoon cohesion generally did not change dramatically over time, though statistically significant changes occurred for some statements. The Male-Only model saw statistically significant changes in agreement (agree or mostly agree) from week 2 to week 11 with statements about platoon cooperation ($p = 0.001$), dependability ($p < 0.001$), and reliability ($p = 0.03$). While recruits’ perceptions of their drill instructors became substantially more favorable over time (see figure 8.11), it appears that their feelings about their fellow platoonmates remained stable from week 2 to week 11, particularly in Series Track and Integrated Company. This is a surprising finding because the Marine Corps has the longest recruit training process and recruits spend 24 hours a day, 7 days a week, with the members of their platoon. What is most concerning about this set of findings is the low level of recruit agreement that members of their platoon “really respect one

¹¹⁰ Integrated Company males v. Male-Only model, $p < 0.001$; all Parris Island males v. Male-Only Model, $p < 0.001$

¹¹¹ Integrated Company males v. Male-Only model, $p < 0.001$; all Parris Island males v. Male-Only Model, $p = 0.001$

another,” given the prominent role of respect in forming truly cohesive groups. The highest level of agreement about recruits respecting one another was just over 50 percent among new Marines in the Male-Only model at week 11 (see figure 8.11).

Figure 8.11. Percentage of New Marines at Week 11 Who Agree or Mostly Agree With Platoon Cohesion Statements, by Training Week and Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

F. Perspectives on Drill Instructors

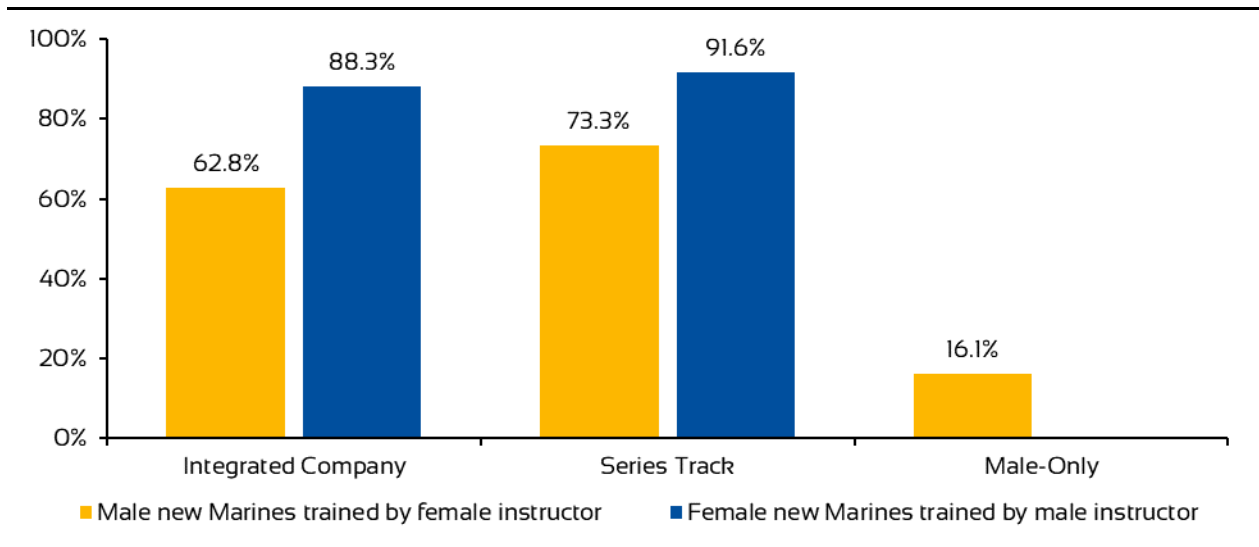
Marine Corps recruits are with their drill instructor team every hour of the day and night throughout the 13-week training cycle; drill instructors are central to recruits’ training experience. Marine Corps recruits are trained by same-gender drill instructor teams, regardless of model (e.g., female recruits are trained by an all-female drill instructor team, male recruits are trained by an all-male drill instructor team). Recruits may be instructed or trained by drill instructors, company leadership (officer and enlisted), or training cadre personnel of both genders. For example, a female MCMAP instructor may teach MCMAP to a Male-Only company, or a male series commander may teach a core values class to a Series Track female platoon.

The survey asked recruits if they were trained by an instructor¹¹² of the opposite gender during recruit training. In both training models at MCRD Parris Island, more women reported being

¹¹² The survey question purposefully asked about the broader category of “instructors”; it did not specify “drill instructor.”

trained by an instructor of the opposite gender than men. The vast majority of female new Marines reported being trained by a male instructor at some point during training. A smaller majority of male new Marines at MCRD Parris Island reported they were trained by a female instructor. In the Male-Only model at MCRD San Diego, only 16.1 percent of new Marines reported having been trained by a female instructor (see figure 8.12).

Figure 8.12. Percentage of New Marines at Week 11 Reporting They Were Trained by an Instructor of the Opposite Gender, by Training Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

Recruits were also asked to rate their level of agreement¹¹³ with a series of statements about their drill instructors:

- My instructors at recruit training treat recruits fairly.
- My instructors at recruit training treat me with respect.
- I can rely on my instructors for help if I face a difficult problem during recruit training.

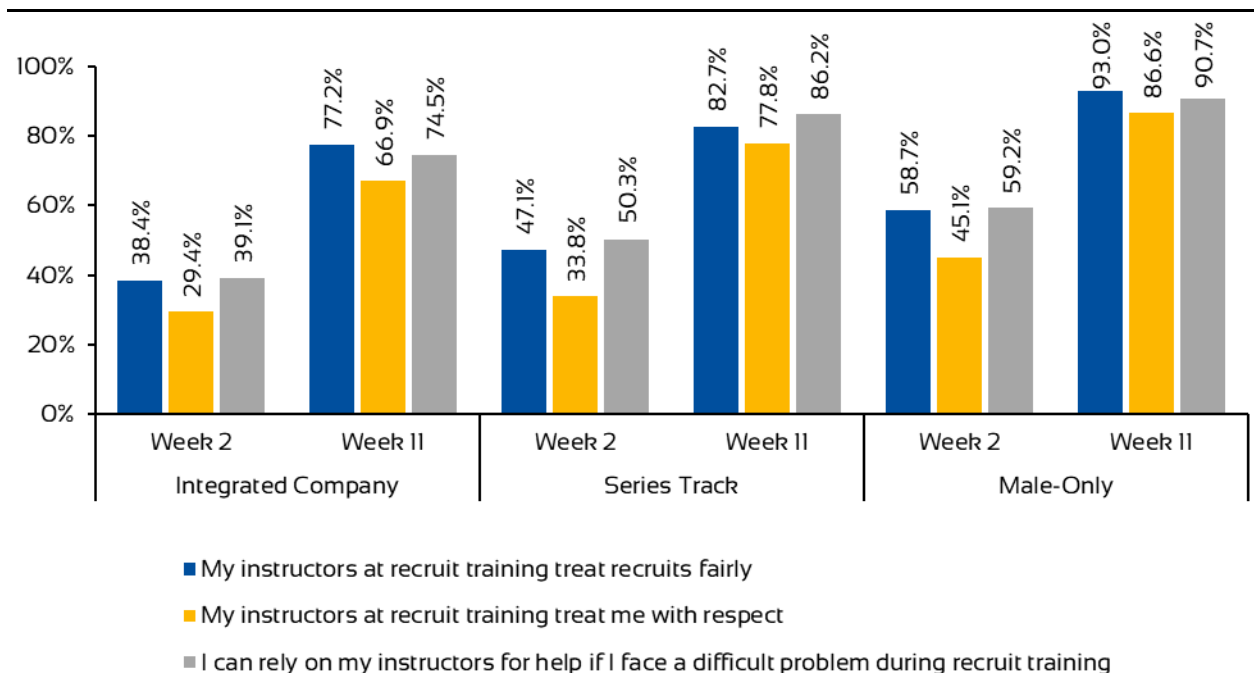
From week 2 to week 11, recruits' agreement (agree or mostly agree) with these statements increased over time in all training models for both genders. Changes in the level of agreement over time about drill instructors' fair treatment, respect, and reliability were found to be statistically significant for both genders across all training models.¹¹⁴ By week 11, the majority of both genders across training models agreed or mostly agreed with these statements (see figure 8.13). Week 11 data were collected after the completion of the Crucible and the Eagle, Globe, and Anchor ceremony, as recruits entered the fourth phase of training. The fourth phase of

¹¹³ Response options were "disagree," "mostly disagree," "neither," "mostly agree," and "agree."

¹¹⁴ Statistical significance for all three statements about drill instructors: Integrated Company males, $p < 0.001$; Integrated Company females, $p < 0.001$; Series Track males, $p < 0.001$; Series Track females, $p < 0.001$; Male-Only, $p < 0.001$.

training is the first time drill instructors speak with and to recruits in a more approachable way, dialing back their drill instructor bravado as they relate to recruits as fellow Marines within the rank structure. These data demonstrate the evolution of the relationship among drill instructors and recruits from week 2 to week 11.

Figure 8.13. Percentage of Recruits and New Marines Who Agree or Mostly Agree Their Instructors Treated Them Fairly, With Respect, and Were Helpful, by Training Week and Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

While prevalence of agreement was generally high at week 11 across all training models, some differences arose related to training models and gender (see figure 8.14). Men showed a significant association at week 11 between training model and agreement that instructors treat them fairly,¹¹⁵ treat them respectfully,¹¹⁶ and can be relied upon in the face of a difficult problem.¹¹⁷ A higher percentage of new Marines in the Male-Only model (93.0 percent) agreed or mostly agreed that instructors treat them fairly, compared with 78.2 percent of men in Integrated Company. More new Marines in the Male-Only model (86.6 percent) agreed or mostly agreed that instructors treat them with respect, compared with 70.1 percent of men in Integrated Company. A higher percentage of new Marines in the Male-Only model (90.7 percent) agreed or mostly agreed that instructors treat them fairly, compared with 73.1 percent of

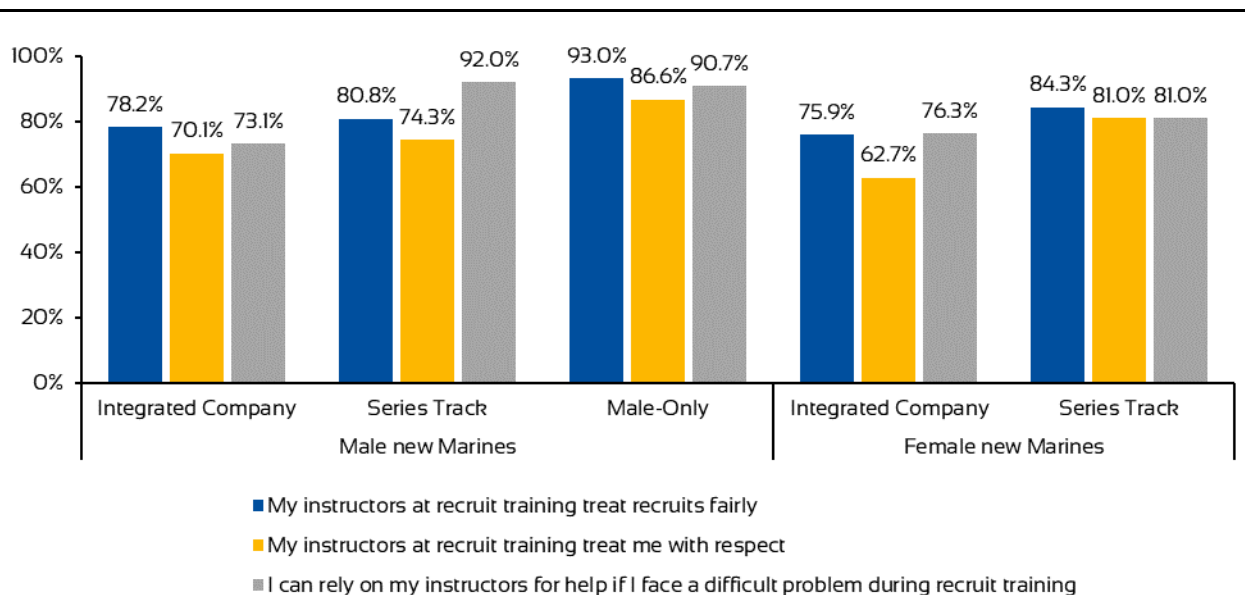
¹¹⁵ Integrated Company males v. Male-Only model, $p = 0.001$; all Parris Island males v. Male-Only Model, $p = 0.002$

¹¹⁶ Integrated Company males v. Male-Only model, $p = 0.005$; all Parris Island males v. Male-Only Model, $p = 0.005$

¹¹⁷ Integrated Company males v. Male-Only model, $p = 0.001$; all Parris Island males v. Male-Only Model, $p = 0.061$

men in Integrated Company. Women showed a significant association at week 11 between training model and agreement that instructors treat them respectfully ($p = 0.021$); 81.0 percent of female new Marines in Series Track agreed or mostly agreed, compared with only 62.7 percent of women in Integrated Company.

Figure 8.14. Percentage of New Marines at Week 11 Who Agree or Mostly Agree Their Instructors Treated Them Fairly, With Respect, and Were Helpful, by Gender and Training Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

In the focus groups, recruits and new Marines shared more detailed and nuanced information about their perceptions of and experiences with drill instructors.¹¹⁸ Male and female recruits observed differences in how men and women embody the drill instructor role and described differences in how male and female recruits are treated at recruit training by drill instructors of the same or opposite gender.

1. Recruits perceived differences in how men and women personified their role as a drill instructor

Male and female recruits in all training models and at both time points shared a strong consensus about how male and female drill instructors fulfilled their role. Broadly, female drill instructors were perceived as “scary,” targeted, and detail-oriented, while male drill instructors were perceived as physically demanding, loud, and more knowledgeable about combat skills.

¹¹⁸ Focus group data were aggregated across training model and time point (e.g., weeks 2 and 11); similarities and differences between male and female recruits/new Marines were analyzed.

Female drill instructors were perceived as “scary” and more interpersonally intense than male drill instructors

Male and female recruits reported female drill instructors were “scary” and yelled more often than male drill instructors. One female new Marine described female drill instructors as “*feisty, scarier than male DIs*”; another shared, “*They make you grit your teeth.*” A male recruit in Series Track observed, “*Because they [female drill instructors] don’t have the physical stature, they up the ante a bit more and mix it up and come up with different ways.*” Female drill instructors were largely regarded as focusing more on attention to detail and repetition as their main method for building discipline.

Female drill instructors were also perceived to make more personally directed and sometimes negative comments toward recruits than male drill instructors did. Male and female recruits in all training models at both time points made this general observation.

The way the drill instructors are. I’ve dealt with male and female, and the biggest change is the female drill instructors are more verbally insulting than physically insulting. The male DIs are more physical than verbal. And neither one are really intimidating to me. To me, they’re just nuisances. You just got to deal with it.—**Marine Corps recruit, male, Parris Island**

When they [male recruits] are getting instructed, it’s like, “OK, I’m teaching you.” When the females instruct us, it’s like, “Why can’t you do this? You’re dumb.”—**Marine Corps recruit, female, Parris Island**

This recruit has seen a lot of cruel female DIs ... They’re vicious in the way they’re not supposed to be. A DI is meant to simulate what it’s like to be in the battlefield.—**Marine Corps recruit, male, Parris Island**

The female DIs are more harsh in general. I don’t think I would make it through boot camp if I was in a female platoon.—**Marine Corps recruit, male, Parris Island**

New Marines, Male, Integrated Company, Parris Island¹¹⁹

New Marine A: *Females are more personal. Males will make comments, but they’re not as personal.*

New Marine B: *If a female DI is correcting someone, it’s like they’re trying to insult their character.*

New Marine A: *Talking to you as a person and not as a recruit. Male DIs will say you suck as a recruit ... females will say ...*

¹¹⁹ Recruit and new Marines letters (i.e., A, B, C) are randomly assigned for each group of quotations to show the flow of conversation as it happened in the focus group.

New Marine B: *“Are you dumb? Do you have one brain cell?” They’ll make comments about your parents, say that you’re fat and ugly.*

New Marine C: *They embarrass female recruits. When we were there, they’d embarrass them in front of male recruits.*

Male and female recruits and new Marines attributed many of these characteristics to female drill instructors feeling they needed to prove themselves as tough and worthy of being in an institution with so few women.

*[Female drill instructors,] they’re a lot more stricter because they have more to prove. The Marines have the fewest number of women. When we shave, the female Marines are a lot stricter. Even if there are some hairs, all the male Marines just brush it off and don’t say anything. But for a female Marine, if she sees more hair than what’s allowed, then she’ll get up in your face. There’s a saying—and I’m not saying it’s true—but they say San Diego makes coddled Marines and Parris Island makes the real Marines.—***Marine Corps recruit, male, San Diego**

*Comparing it to males, it seems like they’re [female DIs] overcompensating toughness. [Imitating] “We’re tough so we can’t take showers; you can’t change your pad [with sarcasm], that’s weak.” They do more to seem tough instead of just being tough.—***Marine Corps recruit, female, Parris Island**

*[Female drill instructors] try to put their foot down more because they think male recruits won’t take them seriously. They get psychotic at times and take it personal.—***Marine Corps recruit, male, Parris Island**

Marine Corps Recruits, Male, Parris Island

Recruit A: *The females have something to prove, so they have to show this in front of other DIs.*

Recruit B: *When female DIs interact with males, they always say they know more and can beat them, and they focus on the gender side of things very heavily, like they’re insecure.*

Male drill instructors were perceived by recruits as more physical in their training methods and louder than female drill instructors

Male and female recruits felt male drill instructors were more likely to use physical training methods, such as difficult incentive training (IT) sessions, as their primary tool for building discipline. A female new Marine said, *“The male DIs are physical—physical punishment, with IT and exercise. The females, they will break you down mentally.”* Another female new Marine also perceived that male drill instructors implemented IT sessions more often: *“Males [recruits] get IT’d a lot more than we do for random reasons. Male DIs are harder on them.”* Highlighting differences between male and female drill instructors, a female new Marine commented, *“The males [drill instructors] are the brute and the brawn; females are the brains.”*

Recruits also observed that male drill instructors were louder in their vocal delivery, and their remarks were less personally targeted than those of female drill instructors. Common descriptors for male drill instructors among recruits of both genders were “loud,” “confident,” “patient,” and “strict.” Several recruits commented that male drill instructors broke their bearing for an occasional joke or smile more often than female drill instructors.

Male drill instructors were seen as more knowledgeable about combat and tactical skills and proficiencies. Female recruits perceived male drill instructors as better teachers because they stayed focused on the training task rather than getting bogged down by details or seeking the appearance of perfection.

It would be nice to be prepared and not focus [on] the details. Female DIs care about details. Male DIs focus on the task at hand.—New Marine, female, Integrated Company, Parris Island

I think male DIs care about if you understand, while women will just call you stupid. Male DIs just correct you calmly. I can only learn if you tell me calmly. Don't fucking call me stupid. I'm not gonna learn anything [if] you just yell at me. I understand you're going to just be yelled at in combat, dude, just chill.—Marine Corps recruit, female, Parris Island

New Marines, Female, Integrated Company, Parris Island

Moderator: How often are you interacting with drill instructors, other instructors, staff, or leaders of the opposite sex?

New Marine A: *All the time. We had the male DI who would be in our squad bay teaching us combat ... I think that instilled that confidence to interact with a male DI. He would teach us in ways that our female wouldn't. He was really hands-on.*

New Marine B: *Our female DI that would teach knowledge, [but] she was not hands-on with us.*

New Marine C: *The male DIs are really like, “You didn't understand it, so let me explain it to you in another way.”*

New Marine A: *Male DIs are really patient.*

New Marine C: *They want us to learn.*

2. Recruits perceived differences in how male and female drill instructors treat recruits of the same or opposite gender

In the focus group discussions, recruits identified several ways they felt male and female recruits were treated differently by same-gender and opposite-gender drill instructors. It should be noted that not all recruits reported perceptions of differential treatment, but specific themes were raised by multiple recruits and new Marines.

Perceived differential treatment of female recruits from female drill instructors

As described above, female drill instructors were perceived to make individualized or harshly worded comments to all recruits, but male and female recruits felt that female recruits bore the brunt of this treatment more often. One explanation for this perceived difference is that female drill instructors primarily train female recruits and therefore have more interaction opportunities. A general sentiment also exists in the training environment that women, as drill instructors or recruits, were more mental or emotional than men and required more psychological training techniques, such as personally targeted comments.

Some female recruits reported their female drill instructors made inappropriate comments about their dietary habits or their weight. No male recruits shared this experience or concern.

Another theme raised by female recruits was that female drill instructors would call them out on any perceived attention-seeking behaviors with male drill instructors. A female new Marine shared that her drill instructors told the platoon that if they talked to male recruits, “*they [drill instructors] are going to call you a slut.*” Another female new Marine described a particular instance she witnessed that bothered her.

Females [drill instructors] use males to degrade us as well. If a male DI tells you to do something, you do it. If a female DI says do something, and a male DI says something else, [female DIs] will say [imitates] “You that thirsty?” It’s [a] way to break you down. One girl was told by a male to do something, she did it, and the female DI was like, [imitates] “You that thirsty? You want him that bad?” and the female DI made her run after him. ... I’m all for female empowerment, but I don’t like female DIs.

Acknowledging how female drill instructors use comments akin to slut-shaming, a female new Marine came to understand this as a protective mechanism to prepare female recruits for the Marine Corps.

Our female instructors seemed tough, but as time went on, the more and more I see why female DIs do what they do ... In spite of the things they’d say to me, I understand why. They just don’t want us to be caught up with the males. They don’t want our accomplishments to fall down because we fell in love after we leave here. Now I understand, now I know why they say slick stuff about the males ... They [the male DIs] are funny and very helpful, but I’m not as quick to put down female DIs as in phase 1 because things are starting to make sense for me.

Female recruits and new Marines appreciated that female drill instructors could help them with gender-specific challenges they might face during recruit training, such as their menstrual cycles and learning female hair and grooming standards. A female new Marine described why she appreciated being able to have a female drill instructor: “*Men are awkward. You can’t just be like, ‘I need to use the head.’ You can’t just tell them, ‘I’m gonna bleed through my shorts.’*” Women also appreciated mentorship from drill instructors who know what it is like to be a woman in the Marine Corps.¹²⁰

¹²⁰ For a more extensive discussion of this from both the drill instructor and recruit perspective, see chapter 4.

They give us confidence talks, too, and would say, “You’re a woman, and women get talked down on. Don’t be afraid to stick your neck out and show your dominance with them.”—New Marine, female, Parris Island

One reason I prefer having a female DI is how she’s saying. SDI will have a time when we’re in a school circle with us. She can talk about more personal things with us, being female recruits and experience as a woman in general.—New Marine, female, Parris Island

Perceived differential treatment of male and female recruits from male drill instructors

Male and female recruits observed that male drill instructors sometimes behaved more gently and supportively toward female recruits than male recruits. This observation may reflect societal stereotypes that women are weaker and more emotional than men. Female new Marines in Series Track described being caught in a double bind¹²¹ with some male instructors—being invisible, or not acknowledged, and then being hypervisible as they experienced differential treatment compared with their male peers.

New Marines, Female, Series Track, Parris Island, Focus Group 1

Moderator: How often were you with male DIs?

New Marine A: *At the range, that was the most we talked to male leaders.*

New Marine B: *Especially at Crucible, male DIs were screaming at us. I noticed male DIs tell male recruits to open [the] door for us and get out of the way for us.*

New Marine C: *The male instructors wouldn’t acknowledge [name] company, and I felt disrespected.*

New Marine B: *The males would be talking, and they wouldn’t get yelled at, but when we started talking, they [DIs] told us, “Shut up.”*

New Marine D: *They said, “We’re at recruit training. You don’t have time to fix your hair and nails.”*

New Marine E: *One of the female DIs flipped out because a male DI said males have it harder at the Crucible.*

New Marines, Female, Series Track, Parris Island, Focus Group 2

New Marine A: *I don’t know if you all remember this—we were in the class taking the last test we took. The male that was giving out the tests, the female that was doing the slides. He did not acknowledge [our female company]; it was as if we were not sitting there. He was being so nice to the males whenever a male would get up to see*

¹²¹ The “double bind” phrase contrasting hypervisibility and invisibility is a reference from the article “Women Are the Most Visible Servicemembers, and the Most Invisible Veterans” (Goldstein, 2018).

if you missed a question. But when a female got up, it was, “OK, hurry up, don’t take your time.” It happened twice. He was rushing us to get up.

New Marine B: *He said good morning [to the male] company.*

New Marine C: *He only acknowledged the males.*

New Marine A: *And he left, he dismissed [male] company. He didn’t acknowledge us.*

New Marine C: *There was a chance he thought we were [an] integrated [company]?*

New Marine D: *I don’t think so. He knows.*

New Marine A: *Another male DI, not a senior [drill instructor], had to come in and dismiss us.*

New Marine D: *Good morning, [male] and [female] company. At the range, I saw a lot of males. They were joking around with the males, and to the females, they would say, “Shut up.”*

The study team also observed at least one instance, different from the time described above by recruits, when the Series Track male company was the only company acknowledged by the instructor in a class with a female company present.

Another example of differential treatment recruits described was the use of sexually explicit and demeaning gender-based jokes by male drill instructors with male recruits as a form of bonding and motivation. Male new Marines in the Male-Only company shared, “[Male] drill instructors could fit more in our shoes. They can make jokes we relate to, make it fun” and “After 4 weeks, we started to get into more conversational, we had more conversations with them [our drill instructors]. That was just like ... it’s just the boys. We love talking to him. He answers our questions. There’s also a lot of jokes, not necessarily sexual, but dumb jokes that only men would like.” For a more extensive discussion on the sexually explicit and demeaning gender-based jokes male recruits described being used by male drill instructors, see chapter 4.

G. Challenges for Recruits by Gender

All recruits encounter a variety of challenges at recruit training; most challenges are experienced similarly by men and women. However, male and female recruits reported some specific gender-related challenges. Some challenges were physiological, while others were cultural or social.¹²² Challenges and concerns about sexual harassment and sexual assault by gender are detailed in section H. Many of the gender-related challenges were identified by or about female recruits. However, a few male recruits and drill instructors identified anger issues as a troublesome problem for men in the training environment, sometimes leading to physical altercations between recruits in the same platoon.

¹²² Focus group data were aggregated across training model and time point (e.g., weeks 2 and 11); similarities and differences between male and female recruits were analyzed.

1. Female recruits encountered more physical and strength-related challenges at recruit training

Out of all the Services, Marine Corps recruit training is the most physically demanding. Recruits regularly engage in physical fitness activities and are also trained in many physically demanding skill development tasks such as obstacle courses, basic warrior training (BWT), marksmanship training, and swim qualifications. Male and female recruits agreed that women, on average, encountered more physical and strength-based challenges in recruit training than men. Male recruits also felt that female recruits were mentally weaker and more likely to break down during training, citing crying and other displays of emotion as confirmation of their perception. On the contrary, female recruits felt they were mentally tougher than their fellow male recruits and saw mental fortitude as one of their greatest assets in the training environment. This discrepancy highlights how male and female recruits make assumptions or draw conclusions about the other gender, which can be exacerbated by societal stereotypes and presumed gender-related differences.

2. Drill instructors were perceived as treating male and female recruits differently

Male and female recruits reported perceived differences in treatment by drill instructors in the recruit training environment. These findings are presented in greater detail in section F.2.

3. Female recruits perceived differences in leadership style by gender and anticipated leadership clashes

Recruit leadership opportunities are an important part of the training experience. All recruits noted that they valued respectful and effective communication as displayed through strong leadership skills. Female recruits perceived differences in the way their male and female peers approached leadership and anticipated clashes between leadership styles with further integration. Female recruits felt male recruits were more stern, aggressive, blunt, and quick to anger in their leadership styles. Some female recruits noted that female platoons struggled with “cattiness” and attitudes but felt their cohesive bonds solidified more quickly and were stronger than for male platoons. Female recruits expressed some frustration with feeling they were expected to embody male leadership styles. Several female new Marines from Integrated Company described these differences from their perspective.

[A challenge with more integration would be ...] clashes of leadership. Male and female leadership are two different things. I've worked in many groups where I'm the only female, and it clashes. [It's] a very big problem if the leadership clash. Especially if males don't respect females.—New Marine, female, Parris Island

I do wanna say ... about leadership, our leadership billets ... we're told to look at male platoons and how they talk to each other. One male from [platoon number] and how he leads ... they love him ... Females don't take that criticism ... they don't take that [kind of] leadership. They [DIs] think that's what we need to do. They don't know we quietly go through lines and quietly make those corrections, quietly and respectfully. They [male recruits] say, “Shut up!” We wouldn't take that. We've had experiences where we go to

squad leaders and say, “I know we need to rush ... but don’t touch me.”—New Marine, female, Parris Island

It takes a lot more for the males to gain brotherhood than it does for females ... even though females are super catty and emotional ... but once the DIs go away, that circle is tight. Once stress comes in, not as much ... With guys, there’s the leader, and if you don’t listen, you have attitude.—New Marine, female, Parris Island

4. Female recruits reported challenges with having enough opportunities to use the head, access to clean and adequate heads, and a lack of proper hygiene products

Recruits have a right to make head calls (e.g., use the restroom) as necessary (USMC, 2012). Recruits must always get permission from their drill instructors to use the head. Female recruits reported not having enough opportunities, or enough time per opportunity, to use the head. When female recruits were permitted to make a head call, unsanitary conditions presented additional obstacles. One female recruit shared, “*It [the head] was full of gnats ... in the sinks, mosquitos, gnats, no soap, no paper towels, nothing.*” Female recruits have access to hygiene products in recruit training, but many felt their access was limited. Platoons are expected to carry their own toilet paper to and from training events, but many women reported problems with having access to toilet paper.¹²³ For example, a female recruit in week 2 reported that women in her platoon frequently used Kleenex tissues to wipe themselves when outside of the squad bay. Inadequate access to toilet paper presents an extra challenge for women, given it is a hygienic necessity to prevent infections in women’s bodies more than it is for men.

In the week 2 focus groups, female recruits reported being scared to ask their drill instructors to make a head call and noted several instances of recruits peeing themselves because of delayed approvals from their drill instructors.

Marine Corps Recruits, Female, Series Track, Parris Island, Focus Group 1

Recruit A: *The DIs humiliated two girls who peed themselves.*

Recruit B: *We had an issue in the first week in our platoon with girls urinating themselves because they were genuinely scared to ask to go to the bathroom because our SDI is like, “Ask.” And first you have to ask permission to speak, then use the bathroom, so it’s like you request to speak, and they’ll be like, “I don’t care.” And girls will stand there holding themselves, requesting, and we ... one time a girl was standing in a puddle of her pee in her socks during hygiene inspection and the DI just walked by and didn’t say anything to her and she had to clean it up with her towel.*

Recruit C: *It got on her rackmate’s stuff too.*

Recruit B: *It’s, like, a big double standard because since it’s summer, they tell us to drink 12–14 canteens a day, but drinking 2 makes you go to the bathroom a lot. We have to go to the bathroom so many times, but we don’t get the opportunity.*

¹²³ Recruit bathrooms at MCRDs (e.g., outside of the squad bay) are not stocked or supplied with toilet paper.

Recruit A: *We get called selfish for going to the bathroom.*

Recruit D: *They can't decline you a head call, but they can delay it, and that's basically saying no.*

Marine Corps Recruits, Female, Series Track, Parris Island, Focus Group 2

Recruit A: *We've had three girls pee themselves.*

Recruit B: *They're too afraid to go to the bathroom.*

Recruit C: *It's the lack of confidence.*

Recruit C: *I got told there's no such thing as emergency head call.*

Recruit D: *They want us to drink 12–14 canteens of water.*

Recruit A: *They don't give us time. The chain of command got mad at them for not letting us drink water, but when we have free time and open the canteens, they get mad at us and tell us to put them away because we didn't get told to open it.*

Recruit D: *I'm scared of drinking because I'll have to go to the bathroom, and I don't want to pee myself.*

In a week 11 focus group, female new Marines raised unsanitary conditions and hygiene products as critical issues for women at recruit training,

New Marines, Female, Integrated Company, Parris Island

Moderator: What is one way the Marine Corps could improve recruit training for women?

New Marine A: *[That's] a tricky question. Half the bathrooms don't have toilet paper. I expected them to clean more. We're out in the middle by the sinks still buckling our pants.*

New Marine B: *Basic hygiene stuff, necessities we need.*

New Marine C: *Within our platoon, our senior DI is really good about us keeping clean within our own squad bay, but out in field, it is obvious porta potties haven't been cleaned for over 2 weeks. You have to use those heads, and it's so unsanitary.*

New Marine D: *As females, we have to be extra careful; we can get infections. [Drill instructors] need to realize we need extra time to clean.*

New Marine E: *During hikes, I stopped at the toilets. Four out of six [were] filled to the top with pee.*

No male recruits reported acute or chronic issues with head calls, unsanitary conditions of the bathrooms, or access to hygiene products such as toilet paper.

H. Sexual Harassment and Sexual Assault at Recruit Training

Concerns about sexual harassment and sexual assault are always raised in discussions about gender integration in the military. U.S. Secretary of Defense Lloyd Austin has described sexual harassment and assault as a “scourge” in the military, demanding change and strong leadership on these issues (U.S. Secretary of Defense, 2021). Recruits and new Marines were asked in the focus groups about sexual harassment and sexual assault in the recruit training environment, and in the survey about their perspective on the relationship of these issues to increasing gender-integrated training. In the focus groups, recruits and new Marines also discussed and raised these issues on their own, unprompted, as they shared their experiences in the current recruit training environment and their assessment of considerations for increased gender-integrated training.¹²⁴

1. An intense training schedule and controlled environment left little room for recruits to engage in consensual or nonconsensual sexual behavior

Recruits in all training models and at both time points agreed that sexual behavior and acts, whether consensual or nonconsensual, have no place in the recruit training environment. In a demonstration of the effectiveness of curriculum on sexual harassment and sexual assault, recruits expressed clear understanding that these behaviors carry judicial repercussions and would have negative consequences for their military career. Recruits perceived the prevalence of consensual sexual acts, sexual harassment, and sexual assault to be low to none at recruit training.¹²⁵ As one male new Marine stated, “*There’s no chance to even think about it.*” The most common sexual harassment behaviors described by Marine Corps drill instructors and training cadre were “horseplay” and “locker room” behaviors between male recruits and cuddling overnight among female recruits in the squad bay; overall, these behaviors were described as rare occurrences. Recruits attributed the low rate of incidence to a busy training schedule, regular accountability measures (such as counting off within the platoon), drill instructor oversight, and fire watch at night. Several recruits observed that those who were more likely to engage in these behaviors at recruit training were “*weeded out*” in the first few weeks. Several recruits stated they trusted drill instructors who witnessed or heard of these behaviors to shut them down.

2. Female new Marines actively worried, and were warned by female drill instructors, about sexual harassment and sexual assault in the fleet

In the week 11 focus groups, female new Marines expressed consistent concern about experiencing sexual harassment and sexual assault in the fleet. Women reported receiving

¹²⁴ Focus group data were aggregated across training model and time point (e.g., weeks 2 and 11); similarities and differences between male and female recruits were analyzed.

¹²⁵ Interviews with Service leaders, training cadre, and drill instructors from all Services also perceived recruit incidents of sexual harassment, and most especially sexual assault, to be low when compared with other military environments (see chapter 6). However, training cadre and drill instructors find that recruits need support at recruit training for traumas that occurred prior to recruits’ arrival for training. Learning about the definitions of sexual harassment and sexual assault in training can be triggering, and for some recruits, it is the first time they recognize they have been violated. The Department of Defense Independent Review Commission on Sexual Assault in the Military reported similar findings, noting that drill instructors and recruits need additional support to deal with prior incidents (U.S. Department of Defense Sexual Assault Prevention and Response Office, 2021).

frequent and persistent messaging from drill instructors and others about the challenges they may face with unwanted sexual remarks or advances from male Marines. Two female new Marines in Series Track shared a specific instance that occurred during recruit training after training at the range.

New Marine A: *I don't think there is any [sexual harassment or sexual assault problems here]. I've heard some stories about range. Coach[es] who are Marines in Table 1 and Table 2, lance corporals. They might say things that you feel uncomfortable with. Senior [DI] told our platoon before going to Table 1, "If there is any coach that says something to you, touches you, or makes you feel comfortable, those things happen because they are young Marines, they are the same age." And then she would say, "You have to let me know as soon as possible because things happen there." In my experience, everything was good.*

New Marine B: *Nothing happened to us, as far as I know. Senior [DI] had us stand on line and paused for a second, asking us, "Did any male DI say or do anything weird?" This was after the range. Everyone said no. We were confused: what is she talking about? She was checking in to make sure everyone was good.*

Sexual assault is a traumatic and adverse experience for any person; female new Marines actively worried about themselves or other women they know becoming victims in the future.

The consistent talks we've had with our DIs—it makes me dislike males even more. I'm not worried about me, but I'm worried about my sisters. Although I feel prepared, a part of me feels like I have to look out for them. I'm going to be on their ass because I don't want them to get ... become a statistic or make a mistake being in the heat of the moment.—New Marine, female, Series Track, Parris Island

Our SDI talked about how there will be males who will try to talk [to] you, a lot. They are going to talk to you like you are ... you always have to be, don't fall for anything because they are not all good. They all try to get something that you probably ... just don't fall for it. Always be on top of everything. Be serious.—New Marine, female, Series Track, Parris Island

New Marines, Female, Integrated Company, Parris Island

New Marine A: *Even a male DI went up to our deck and talked with us about that. We had a personal conversation about sexual assault. He put out there that there will be males trying to get at you because you're pretty or a new Marine and are naive. I feel like having more interaction with male DIs would be good...*

New Marine B: *The male DIs are almost protective of us. They give us the knowledge they've seen; they want us to go out to the fleet and be safe.*

New Marine C: *In my experience, it hasn't quite been like that. That's where the female DIs' experience comes in. When a male DI was teaching us about what it was like in the fleet, he kind of sugarcoated it, but a female DI called him out and said*

that's not how it's like. Female DIs are constantly telling us to be safe. It almost makes you take a step back and look. It's obviously a problem because they are constantly telling us. Male DIs tell us we can do it, but at the same time, you need someone who gets it. I feel like the female DIs offer a real, true perspective as to what the fleet is like. I feel like that's what the female DIs do. I really appreciate that because they are not sugaring it. If something bad happens, you're stuck because you're not expecting it. Our DIs said, "When you leave, you can find me and ask me anything." We just had a heart-to-heart [with one of our DIs]. The worst thing she wants to hear is us being sexually assaulted, and that's why she gets so angry when she sees us talking to males... I feel like that's something you would not get from a male DI.

3. Male recruits feared unknowingly causing sexual harassment or sexual assault incidents in their careers and perceived women thought all men are bad or predators

Male recruits in the week 2 focus groups expressed concern that they would unknowingly perpetrate sexual harassment, hindering their military career.

Sexual harassment is all about perspective. If I say a joke to my friend and we are in understanding that it's a joke, but somebody else hears it and they consider it offensive, then it's [a] sexual offense. If one female recruit felt uncomfortable while she had to take off her clothes, that could be a SHARP [sexual harassment or sexual assault incident].—

Marine Corps recruit, male, Series Track, Parris Island

Guys get really close. We get nothing else—not like that—but we get really loose and open with each other because that's all we have. And going out into the fleet, I don't know how they would perceive us. It's rated R 24/7. You can't say that stuff in front of a female. It could be sexist, racist, job-altering—there could be a charge. That's why not having females to train with could be detrimental because you could say something and boom, get a charge. You don't know what to expect. I only met one female Marine, and it was really different. It was a culture shock. I had to learn quickly what to say and what not to say.—

Marine Corps recruit, male, Male-Only, San Diego

Marine Corps Recruits, Male, Male-Only, San Diego

Marine A: *We could have that one obnoxious female recruit who says, "Oh, you sexually harassed me."*

Marine B: *We have to be so careful nowadays. If we do one little thing, we could easily get hit with any of that stuff.*

The heavy emphasis on male perpetration and female victims¹²⁶ creates and reinforces a narrative that men are bad.

¹²⁶ It should be noted that sexual harassment and sexual assault training curriculum delivered at Marine Corps recruit training includes diverse perpetrator and victim scenarios, including male-on-male incidents. However, social discussions of these issues among recruits largely centered around male perpetration with female victims.

We are told the same [as the men], throughout their career as a male Marine. There is this idea that they are all bad, that they will do something horrible to a woman. Not all men are bad, not all male Marines are bad. They are told that they are.—**New Marine, female, Series Track, Parris Island**

4. Drill instructors used sexually explicit and demeaning gender-based language in the training environment

Drill instructors' use of inappropriate sexual and gender-based language was discussed by new Marines in the week 11 focus groups. Male drill instructors were cited as using degrading gendered and sexual language, most often with or around male recruits. Male recruits felt this motivated them, casting the jokes as a moment of levity during the challenges of recruit training, and understood them to be a bonding activity shared by men.¹²⁷

Jokes that guys say are different than what girls say. For alignment of your eyes [to turn your eyes and not your head in close-order drill], they use “titty vision.” When you have a girlfriend but you want to check out another hot woman’s titties, you use your “titty vision” so your girlfriend doesn’t notice.—**New Marine, male, Male-Only, San Diego**

A lot of times, drill instructors will ask if something they say offends you. Like they ask if they are offended by cursing, and we say, “No, sir,” and they say, “All right, you guys are bitches!”—**New Marine, male, Male-Only, San Diego**

Inappropriate jokes and behaviors can also occur in mixed-gender interactions. A female new Marine in Series Track described a particular incident: “*Someone [a female recruit] was eating [a] banana and made eye contact with DI and he made them ... it was something really horrible. The DI was telling the other recruits, ‘You are not seeing anything.’ ‘Aye, sir.’*”

Female recruits also shared how inappropriate sexually explicit and gender-based language was used to condone perceived negative behaviors. A female new Marine at Parris Island shared that her drill instructors told the platoon if they talked to male recruits, “*they [drill instructors] are going to call you a slut.*” Another female new Marine mentioned that someone in her platoon who got caught talking with men was called a “*slut,*” although it was unclear whether fellow recruits or drill instructors used the term.

This kind of language reflects low-grade, yet problematic, behavior on the DoD’s continuum of harm—a spectrum of interpersonal interactions reflecting the interconnected nature of behaviors that increase the risk for sexual assault (U.S. Department of Defense Sexual Assault Prevention and Response Office, n.d.). When instructors use degrading language, they prime the environment and their recruits to be more permissive of the continuum of harm behaviors.

¹²⁷ For a more extensive discussion on the sexually explicit and demeaning gender-based jokes male recruits described male drill instructors using, see chapter 4.

5. Male and female recruits held divergent perspectives about the effect of increased gender integration on rates of sexual harassment and assault in the fleet

In the focus groups, male and female recruits expressed their thoughts regarding the relationship between gender-integrated training and sexual harassment and assault rates, but these opinions were in opposition by gender. Although female recruits are more likely to experience sexual assault or sexual harassment as Service members, compared with their male counterparts,¹²⁸ they argued that increased gender integration at recruit training would *decrease* incidences of sexual harassment and assault in follow-on training and the fleet. They further proposed that increased interaction between men and women would show recruits how to work with one another.

Male recruits felt that increased gender integration would *increase* sexual harassment and sexual assault incidences in the training environment, specifically. Men felt that sexual tension might detract from the learning environment of training and create more propensity for instances of harassment and assault.

The social science survey asked recruits to rate whether “sexual harassment and sexual assault among recruits” and “fraternization among recruits” would be more likely to occur, less likely to occur, or no different if the Marine Corps increased gender integration at recruit training. Except for female new Marines in Integrated Company, one-half to three-quarters of new Marines across training models anticipated increased fraternization and sexual harassment/sexual assault incidents from increased gender integration (see figure 8.15).

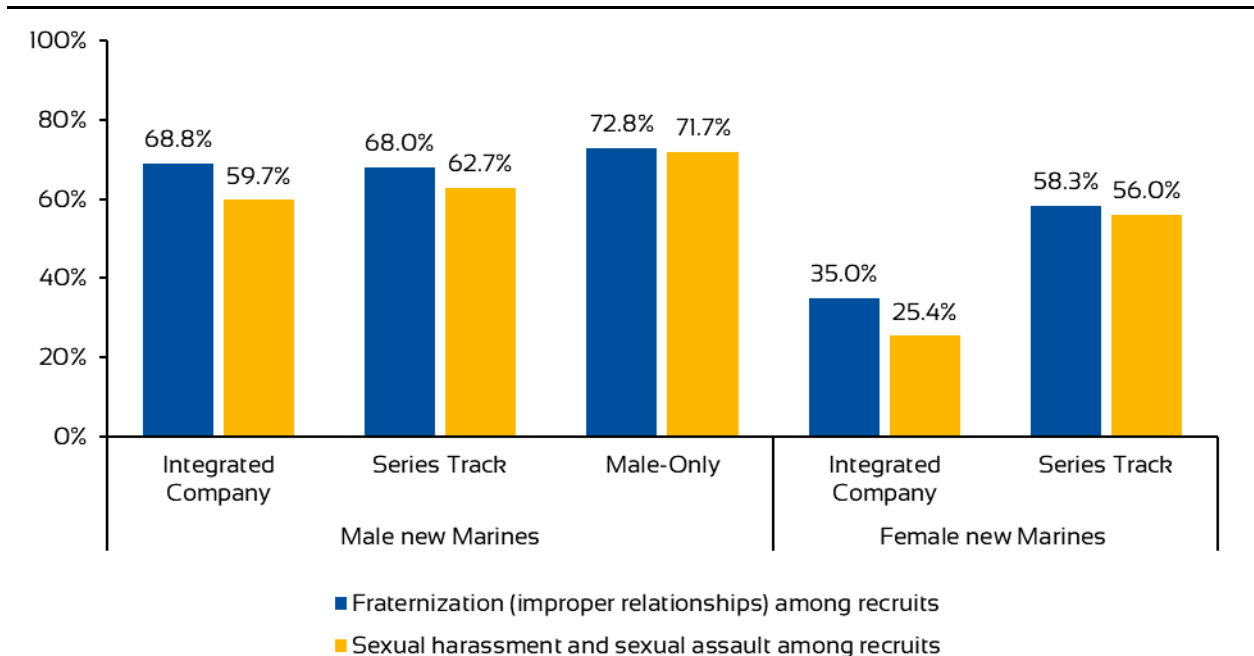
The majority of male new Marines across all training models felt fraternization would be more likely to occur with more gender-integrated training. About half of the women in Integrated Company (51.7 percent) believed there would be no difference to fraternization among recruits if integration increased, with 35.0 percent believing it would become more likely. Comparatively, 68.8 percent of Integrated Company men felt fraternization would be more likely to increase with additional gender integration. Men and women’s divergent views on fraternization prevalence in Integrated Company at week 11 were statistically significant ($p < 0.001$).

Within Integrated Company at week 11, gender was significantly associated with views on likelihood of sexual harassment and sexual assault occurring if integration were increased ($p < 0.001$). More than half of men (59.7 percent) believed sexual harassment and sexual assault would be more likely if integration were increased, but only 25.4 percent of females believed the same (52.5 percent of females believed there would be no change). Among female new Marines, training model was significantly associated with views on likelihood of sexual harassment and sexual assault, assuming increased integration. Over twice as many women (proportionally) in Series Track believed it would be more likely, compared with women in Integrated Company. This discrepancy suggests women who had more exposure to integration during recruit training were more likely to believe that increased integration would not lead to higher rates of sexual harassment and sexual assault or fraternization, compared with women who had less exposure to gender integration. Another significant association was observed comparing males at MCRD Parris Island (Series Track and Integrated Company combined) and the Male-Only training models ($p = 0.033$): 71.7 percent of new Marines in the Male-Only model believed sexual assault

¹²⁸ (U.S. Department of Defense Sexual Assault Prevention and Response Office, 2021).

and sexual harassment would be more likely to occur with increased integration, compared with 61.2 percent of male new Marines at Parris Island.

Figure 8.15. Percentage of New Marines at Week 11 Who Believe Fraternization and Sexual Harassment/Sexual Assault Among Recruits Would Be More Likely to Occur With Increased Gender Integration, by Gender and Training Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

6. Male and female recruits wanted more in-depth and proactive training on healthy, professional working relationships with members of the opposite gender

Based on focus group discussions, recruits and new Marines were clearly aware of the punitive repercussions of sexual harassment and assault and resources available should they become a victim. Much of the training and education on these issues focuses on what not to do. Men and women expressed a strong desire for proactive and primary prevention-based training to educate them on how to have healthy, professional work relationships with members of the opposite gender. New Marines articulated that they would like more comprehensive training and development in this area, especially if the Marine Corps were to increase gender integration at recruit training.

New Marines, Female, Integrated Company, Parris Island

Moderator: Based on your experience at recruit training, what is something the Marine Corps should keep in mind as they look to increase how much male and female recruits train together at recruit training?

New Marine A: *Gender integration is working well, but if they're going to increase it more than the way it is, they need to deal with these issues [sexual harassment and sexual assault].*

New Marine B: *They need to talk to males more. It's mostly a male problem. Having more sexual assault talks [would be beneficial] ... It's still going to happen no matter what they do. I've been pretty happy with gender integration, especially with male DIs.*

New Marine C: *More reliable resources for these situations. The Marine Corps talks about the advocates so much, and they have a plan, but the resources don't follow through. They need to live up to their word. They are the Marine Corps; they live by their word. Why not look out for their Marines? If you want to protect female Marines, they need more resources.*

New Marine D: *The same way that we are talked to about the fleet and looking out for ourselves, they need to give the males that same talk, ... [talk about showing] some mutual respect. For us, it's been pounded on our head; they just need to do the same thing to the males. I'm not going to say that it's going to work 100 percent, but ... there's only so much protection we [as females] could do*

New Marines, Male, Series Track, Parris Island

Moderator: Based on your experience at recruit training, what is something the Marine Corps should keep in mind as they look to increase how much male and female recruits train together at recruit training?

New Marine A: *Positive versus negative reinforcement. Here's what you can do to make this meaningful; here's what you can do to interact in a normal way. We get SAPR—don't do this—and then we are not supposed to look [at] or interact with them.*

New Marine B: *It's all negative.*

New Marine A: *There's not a healthy interaction class with Marines.*

New Marine B: *It doesn't exist; it's all negative. Interactions with females are all negative, according to the DIs.*

The desire for more comprehensive and applicable training on the prevention of sexual harassment and sexual assault aligns with recommendations made in 2021 by the DoD Independent Review Commission (IRC) on Sexual Assault in the Military. The Secretary of Defense has charged DoD to implement all recommendations made by the IRC, which include the following:

- **Recommendation 2.1c: The Services and National Guard Bureau should equip all leaders to develop and deliver informed prevention messages in formal and informal settings.** The IRC found that junior enlisted members wanted “to have authentic, small group discussions to explore key questions about consent, respectful workplace behavior, personal boundaries, and related prevention themes in scenario-based activities” and that

commanders need to create an environment where it's easy to identify "what right looks and sounds like" (IRC, 2021, p. 129).

- **Recommendation 2.4: Modernize prevention education and skill-building to reflect today's generation of Service members.** The IRC emphasized tailored content, delivery, and dosage of prevention knowledge for specific audiences, stating, "Prevention messaging, practices, and programs must be tailored for the setting, prior traumas, current level knowledge, and be culturally competent for diverse populations" (IRC, 2021, pp. 145-146). Continuing, they noted, "Some Service members enter the military with very limited sexual education or understanding of consent and healthy relationships"; thus, a prevention knowledge base should not be assumed (IRC, 2021, p. 146).

I. Benefits of Gender-Integrated Recruit Training and Increasing Gender-Integrated Training in the Future

Recruits and new Marines were asked to share their perspectives on benefits of the gender-integrated training they experienced and benefits for future recruits if the Marine Corps were to increase gender-integrated training. Across training models, recruits experienced varying degrees of integration, with the least integrated being the Male-Only cohort and the most integrated being the Integrated Company cohort. This section addresses recruits' statements about the benefits of gender-integrated recruit training with additional opportunities for men and women to work together in training and reflects a mix of actual and anticipated benefits of gender-integrated training.¹²⁹

1. Recruits felt gender-integrated training better prepares them for the fleet

The most pervasive benefit of gender-integrated recruit training described by Marine Corps recruits was better preparation for the fleet. Both male and female recruits felt that gender-integrated recruit training would better prepare them for their work as Marines. One female new Marine stated, "[The benefit is] learning practical application. In Afghanistan, you have males and females working together." Across all training models, recruits felt that gender-integrated training pays off down the line, especially in combat operations.

Everything we're going to use in combat, we have to train with the males. We could get deployed after [our] MOS [military occupational specialty] training, and we won't get training until we ... if we start [integrating] in boot camp, it'll make the fleet much easier.—New Marine, female, Integrated Company, Parris Island

There are also different methods of carrying people, depending on terrain and body weight. That's why there are different ways of carrying casualties away from the battlefield. It's important to get used to it. You don't have time to get a stronger male if your friend is dying in the middle of the street in Iraq.—New Marine, male, Male-Only, San Diego

¹²⁹ Focus group data were aggregated across training model and analyzed at both time points (e.g., weeks 2 and 11). Similarities and differences between male and female recruits were analyzed.

Everyone's a Marine, you're not a male or female Marine. If we were to talk about that in training ... if you're only with men and your NCO is a woman in the fleet, there's no difference. If we're taught now there's no difference, it would make more sense in the field.—Marine Corps recruit, male, Integrated Company, Parris Island

Male Recruits, Series Track, Parris Island

Recruit A: *I feel like, as a dude, knowing what you know about women, would you trust her to have your back when you're in combat? I feel like, if you do work with women, and they do integrate on that series side and learn to work with women, you'd have more trust.*

Recruit B: *Better to make mistakes in training than in the real world.*

Recruit A: *Sweat more in training, bleed less in combat.*

Recruits of both genders emphasized that working with recruits of different heights would better prepare them for combat. For male recruits, it was important to know how to work on a team with recruits who were shorter than they were (i.e., women, on average); for women, it was working with recruits who were taller than they were (i.e., men, on average). Marine Corps recruit training focuses heavily on physical training and conditioning, including obstacle and confidence courses. This finding may explain why recruits emphasized that this very specific aspect of working with the opposite gender would better prepare them.

Some recruits, mostly in Integrated Company, discussed benefits of having more time and training with drill instructors of the opposite gender. One female new Marine elaborated, *“The biggest plus is, because we had more hands-on time with male DIs, I feel we are way more equipped for the next phase in MCT [Marine Combat Training]. Not all the females are supply and combat, and the male DIs were able to provide us with that knowledge and training.”*

Recruits and new Marines were asked to rate their level of agreement¹³⁰ with the following statements, imagining that the Marine Corps increased opportunities for men and women to train together at recruit training: “Recruits will be better prepared for their first assignment” and “I would feel more confident in my ability as a Marine.” Overall, most women felt increased gender integration would better prepare them for their next assignment and in their careers as a Marine, while men felt less strongly about both statements (see figure 8.16).

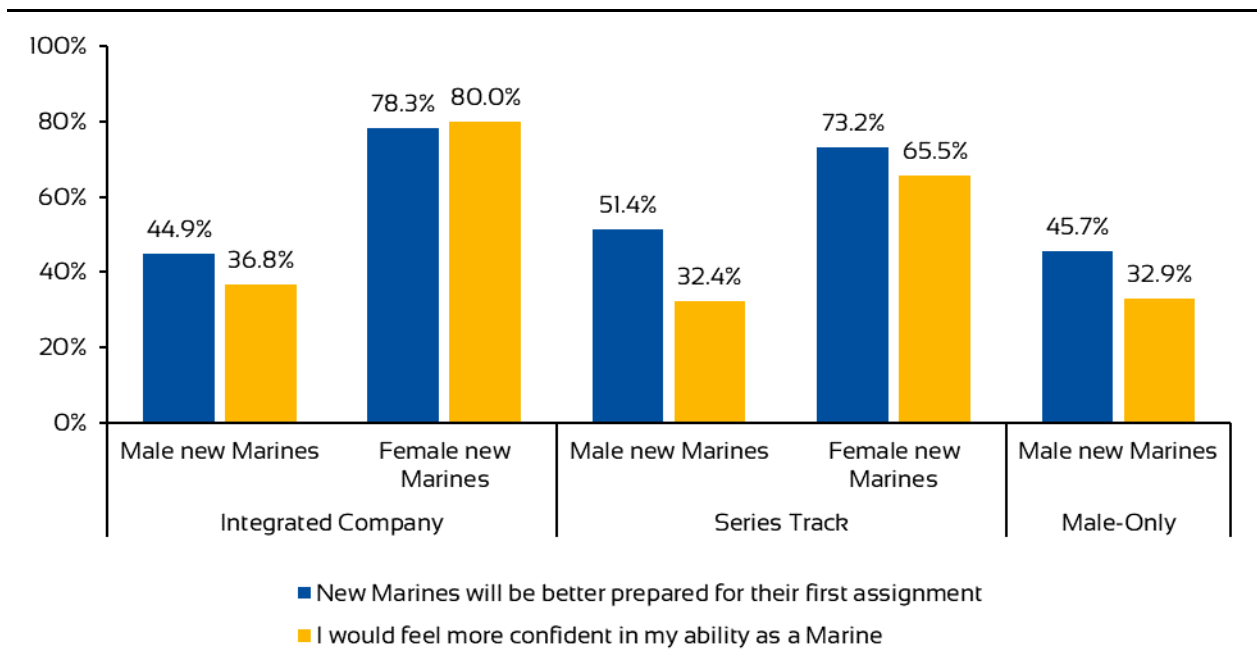
Gender was significantly associated with more confidence in one's ability as a Marine with increased integration within both training models at MCRD Parris Island.¹³¹ A majority (80.0 percent in Integrated Company and 65.5 percent in Series Track) of female new Marines agreed or mostly agreed that increased integration would increase their confidence in their ability as a Marine, compared with only 36.8 percent of men in Integrated Company and 32.4 percent in Series Track.

¹³⁰ Response options were “disagree,” “mostly disagree,” “neither,” “mostly agree,” and “agree.”

¹³¹ Integrated Company, $p < 0.001$; Series Track, $p < 0.001$

Gender was also significantly associated with better preparedness for first assignments with increased integration¹³² within both training models at MCRD Parris Island. Women in both training models felt strongly that they would be better prepared for their first assignment with more gender integration, while male agreement was dramatically lower (with about half across training models agreeing or mostly agreeing). Across training models, men who did not agree or mostly agree largely responded “neither” rather than “disagree” or “mostly disagree” for both confidence in ability and preparedness for first assignment.

Figure 8.16. Percentage of New Marines at Week 11 Who Agree or Mostly Agree They Will Be Better Prepared for Their First Assignment and Will Feel More Confident in Their Ability as a Marine With Increased Gender Integration at Recruit Training, by Gender and Training Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

According to the survey data, male new Marines did not feel as strongly as female new Marines that increased opportunities to work with members of the opposite gender would make them a better Marine. However, in the focus groups, when asked about the benefits of increased gender integration, men expressed that gender-integrated training would better prepare them for the fleet, and nearly all men desired more opportunities to work with women in recruit training (see section K).

¹³² $p = 0.05$ for Integrated Company; $p = 0.016$ for Series Track

2. Recruits felt gender-integrated training draws out different perspectives and strengths from each gender

Recruits felt one of the most powerful aspects of gender integration in recruit training is the ability to draw on the different perspectives and strengths of each gender. Recruits described yearning for different perspectives in recruit training and having an appreciation for the strengths they see in opposite-gender recruits.

[Integrated training would teach] us how to use each other in a fire team and how to work well together. “He’s strong; she’s fast; she has good leadership.” It teaches us our strengths and weaknesses.—New Marine, male, Male-Only, San Diego

The guys have the push, the power, but not the technique. It’s flipped for females; together, it works well.—Marine Corps recruit, female, Integrated Company, Parris Island

Females are very resourceful. If two males and two females were working on a goal, it would be different—it would be a different outcome. Quicker, smart [describing females]. A different product.—Marine Corps recruit, male, Integrated Company, Parris Island

The Integrated Company selected for the study appeared to have stronger working relationships among the male and female drill instructors than was observed by the study team for other Integrated Companies, which provided more opportunities for male and female recruits to interact with opposite-gender drill instructors and recruits. Female new Marines described how this benefited all recruits in the company and demonstrated the strengths of male and female recruits working together.

New Marine A: *Sometimes males are in our house, our squad bays, for knowledge and anything else other than sleeping and doing in-house work. We are tighter with all of them... Today we marched together [on the parade deck/during drill].*

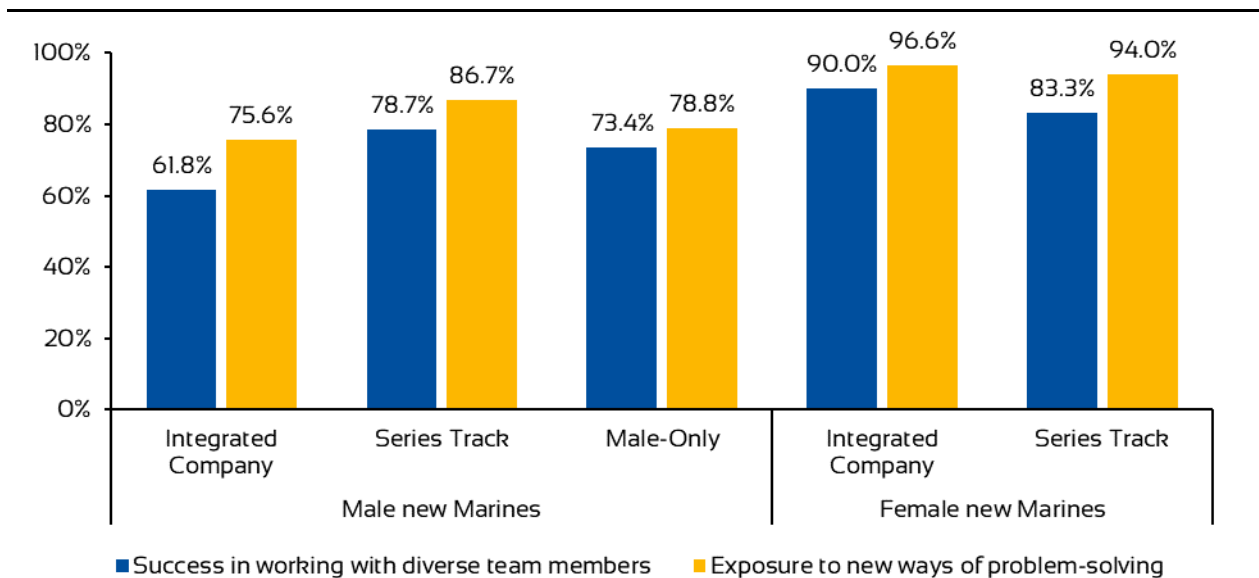
New Marine B: *It was cool because it showed us our strengths together. We were all working together, and it came out working pretty well. We all just enjoyed it.*

New Marine C: *When we’re with the males, we find this level of togetherness, and it just works. We get done what we need to get done.*

The social science survey asked recruits to rate whether “success working with diverse team members” and “exposure to new ways of problem-solving” would be more likely to occur, less likely to occur, or no different if the Marine Corps increased gender integration at recruit training. Across training models, most male and female new Marines felt that increased gender integration would lead to success working in diverse teams and increase exposure to new ways of problem-solving (see figure 8.17); there was no relationship between training model and views on these positive outcomes for either men or women at week 11.

Although majorities of both genders in Integrated Company foresaw greater opportunity for benefits from increased integration, more women believed this statement at week 11 than men. A significant association was found between gender and views on working with diverse team members within Integrated Company ($p = 0.001$). A majority of males (61.8 percent) and most females (90.0 percent) in Integrated Company believed success in working with diverse team members would be more likely with increased integration. Regarding exposure to new ways of problem-solving, a significant association was found between gender and those who believed it would increase with further integration within Integrated Company ($p = 0.003$). Approximately three-quarters of males (75.6 percent) and almost all females (96.6 percent) in Integrated Company believed they would likely be more exposed to new ways of problem-solving with increased integration. The Marine Corps has touted “diverse thought and intelligent action” as a major impetus for their gender integration efforts, and new Marines agreed these processes would continue to increase with more gender-integrated training (USMC, 2022a).

Figure 8.17. Percentage of New Marines at Week 11 Who Believe Success Working in Diverse Teams and Exposure to New Ways of Problem Solving Would Be More Likely to Occur With Increased Gender Integration at Recruit Training, by Gender and Training Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

3. Recruits felt integrated training provides additional motivation and competition

Male and female recruits described how gender-integrated training pushed and motivated them to be better, faster, and stronger. Competition between genders adds a spark to the fire of self-motivation and perseverance necessary at recruit training. Several recruits shared how their experiences with gender-integrated training motivated them.

I would pass these guys and they would wanna go past me. [Imitating] “A female is passing me. I can’t have that!” Male DIs will say, [imitating] “Don’t let her pass you!”

[Another recruit in the focus group chimes in, imitating a male DI: “Hey girl, pass him!”]—**Marine Corps recruit, female, Integrated Company, Parris Island**

Back in my RSS [recruiting substation], it was mostly males, and they would not quit whatsoever. They dragged me into not quitting because of how much more heavy exercises we did, since they were all males. They would say, “You are the only female here, so push, push, push!”—**New Marine, female, Series Track, Parris Island**

Recruits felt that increasing gender-integrated training or, for some, experiencing gender-integrated training would motivate them. Recruits felt integration would be motivational in both directions—female recruits would be motivated by males, and male recruits would be motivated by females.

I also feel like, when there are eyes on me, female eyes on me, I’ll push myself to do better. And to learn new things about myself. Breaking past a new limit. There’s nothing that can go wrong with it for me, it’s realistic. Sometimes I feel like I don’t even have to try. But if there were females, you could show that you could provide protection and assert yourself, and carry a rifle, and shoot someone, and carry a pack.—**New Marine, male, Male-Only, San Diego**

Our motivation levels would get higher. We would look forward to seeing the males.—**New Marine, female, Series Track, Parris Island**

Being able to have male and females interact at verbal levels would do fucking wonders for mental health and motivation.—**Marine Corps recruit, male, Integrated Company, Parris Island**

New Marines, Male, Male-Only, San Diego

New Marine A: *I think it would push us sometimes because we sometimes get complacent. In the PFT, if you’re the last person in your platoon, you can slack off. But if a girl fires off like seven pull-ups ... you just got smoked by a female platoon. It motivates you to be better.*

New Marine B: *It could go on both ends. They [female platoon] can see us and be like, “We can be better than them.”*

4. Gender-integrated training was seen as an opportunity to build important bonds between men and women as they are becoming Marines

Recruits felt that gender-integrated training leads to the development of stronger bonds between men and women, which will carry forward in their next training program and their careers as Marines. A male new Marine in Series Track stated, “[Gender integration] would improve teamwork when we get to SOI [School of Infantry] or MCT. There would be more cohesion between different Marines.” Similarly, a male recruit in Series Track explained, “You build a better bond with them [when you train with women]. At the end of the day, before we work with them, we have to trust them. We’re training to work.”

Female new Marines in Integrated Company felt extremely bonded to their fellow male Marines and male drill instructors as a result of the gender-integrated training they experienced. Responding to the moderator's question asking, "What was your favorite memory from your time at recruit training so far?" they shared the following:

New Marine A: *Finishing the Crucible together [with the males] made me feel like we all are a real family.*

New Marine B: *[Name] company feels like a close cycle. We see the DIs all the time. They switch and pick on us all the time. You learn from every one of them. The integration allowed us to find ways to build teamwork with the males.*

New Marine C: *That's something we wouldn't have if we were not integrated. One of the other male DIs saw us struggling and left his squad bay for about 30 minutes to help us.*

New Marine B: *You could also see the camaraderie amongst all the DIs. You would see 5–6 DIs come together and talk, teach, and mentor. They have done that the entire cycle. Having the integration allowed us to learn a lot more.*

5. For male recruits, gender-integrated training dispelled myths about female recruits having "easier" training

Several male recruits reflected on how integrated training put an end to their preconceived notions that female recruits might have it easier or do less in training. This sentiment was most consistently expressed by male recruits in the Integrated Company model.

PT. [To the focus group:] This morning, was there anything a female couldn't do to the same level? No. They do the same thing. They run the same road.—Marine Corps recruit, male, Series Track, Parris Island

I have a lot more respect [for the females]. Going through the whole process ... and knowing we all did the same thing ... you have more respect for it now. This shit sucked, and they got through it too.—New Marine, male, Integrated Company, Parris Island

We have more respect for them now. The females had forgotten their daypacks upstairs. We grabbed their daypacks, and theirs weighed 20–30 more pounds than ours did. And they're carrying them around with them daily. They're working harder than us on the daily.—New Marine, male, Integrated Company, Parris Island

I thought they [female recruits] had it easier, but now I see how it is.—New Marine, male, Integrated Company, Parris Island

6. Female recruits felt gender-integrated training would reduce sexual harassment and sexual assault in the fleet

As discussed in section H, female recruits expressed hope that gender-integrated training would lead to a reduction in sexual harassment and sexual assault in the Marine Corps.

I'm talking about sexual harassment and sexual assault that's going on in the Marine Corps. When the males are together, they don't learn how to act around female Marines and females in general. With integration, they learn how to treat a woman and get to understand that this is work and that's all it is. This could be beneficial going into the fleet.—**New Marine, female, Integrated Company, Parris Island**

That goes both ways with males. ... The integration within the fleet will help with the statistics that the Marine Corps is trying to fight. ... My senior DI said, "I don't want you to be a statistic." I feel like having us around males and learning how to work with them in a work environment—to say, "I see you as a coworker, nothing more or less"—would better set us up for MCT and the fleet.—**New Marine, female, Integrated Company, Parris Island**

J. Challenges of Gender Integration at Recruit Training

Equally as important as asking recruits and new Marines to reflect on benefits of gender integration at recruit training is collecting their perspectives on challenges. Overall, recruits and new Marines identified broader challenges for gender integration but spoke more voluminously and in greater detail about the benefits of gender integration. Facilities and housing constraints were top of mind for Marine Corps recruits and new Marines thinking about opportunities for further gender integration. The 24 hours a day, 7 days a week, fluid training environment in and outside of the squad bay left many puzzled about how further integration would happen without integrated housing; in some ways, this constrained recruits' thoughts about potential possibilities for further gender-integrated training. Recruits spoke to the challenges of gender-integrated training for recruits with additional opportunities for men and women to work together in training. Their comments reflected a mix of actual and anticipated challenges.¹³³

1. Integrated training was perceived to increase romantic distractions among recruits

Recruits were concerned that increased gender integration at recruit training would lead to distractions in the form of romantic feelings between male and female recruits. Recruits were also concerned about the maturity level of some recruits' behavior around members of the opposite gender.

There's the fraternization dating aspect. We did have females in our cycle, females were writing letters to guys and passing them in the chow hall. It not only hurt the males and females in the chow hall, but it hurt girls in our platoon.—**New Marine, female, Integrated Company, Parris Island**

¹³³ Focus group data were aggregated across training model and analyzed at both time points (e.g., weeks 2 and 11). Similarities and differences between male and female recruits were analyzed.

Dangers come from physical integration. Nonconsensual interactions are a problem; consensual relations are also very big problem. Boot camp is boring. Everyone is young, dumb, and bored.—**Marine Corps recruit, male, Integrated Company, Parris Island**

At church, they scoutin' ... Obviously it's not gonna be every male, but there's gonna be males. ... There's a lot of males I've seen that ... it's a joke to them, they joke around, they're playful.—**Marine Corps recruit, female, Integrated Company, Parris Island**

New Marines, Female, Series Track, Parris Island

New Marine A: *Inappropriate interactions, it's just the way it would be.*

New Marine B: *Girls and guys can't handle themselves. You have people coming straight out of high school, the first time away from home, and they are like, "It's love." No, honey, ... no.*

New Marine A: *It's not like that doesn't happen in all-female and all-male platoons. It happens, but it's less common.*

Male and female recruits identified romantic distractions as a challenge to gender integration, but male recruits most heavily emphasized it in the week 2 focus groups, while female recruits raised it more often in the week 11 focus groups.

Recruits and new Marines were asked to rate their level of agreement¹³⁴ with the following statements, imagining the Marine Corps increased opportunities for men and women to train together at recruit training: "Recruits will maintain the same discipline and focus while training" and "Recruits will maintain appropriate interactions during non-training time (e.g., meals, rest/recreation time)." Among female new Marines at week 11, training model was significantly associated with agreement that appropriate interactions could be maintained during non-training time.¹³⁵ In Integrated Company, 71.7 percent of women agreed or mostly agreed that appropriate interactions during non-training time could be maintained with increased integration, compared with only 51.2 percent of women in Series Track. A statistically significant relationship was also observed between training model and views on maintaining appropriate discipline and focus among female new Marines.¹³⁶ Three-quarters of women in Integrated Company (75.0 percent) agreed or mostly agreed that discipline and focus while training could be maintained with increased integration, compared with 54.2 percent of women in Series Track (see figure 8.18). This finding suggests that women who had more exposure to integration during recruit training were more likely to trust appropriate interactions could be maintained, compared with women without as much exposure to integration.

About half of men in Integrated Company disagreed or mostly disagreed that discipline and focus would be maintained with increased gender-integrated training; 46.3 percent disagreed that discipline and focus while training could be maintained, and 50.0 percent disagreed that

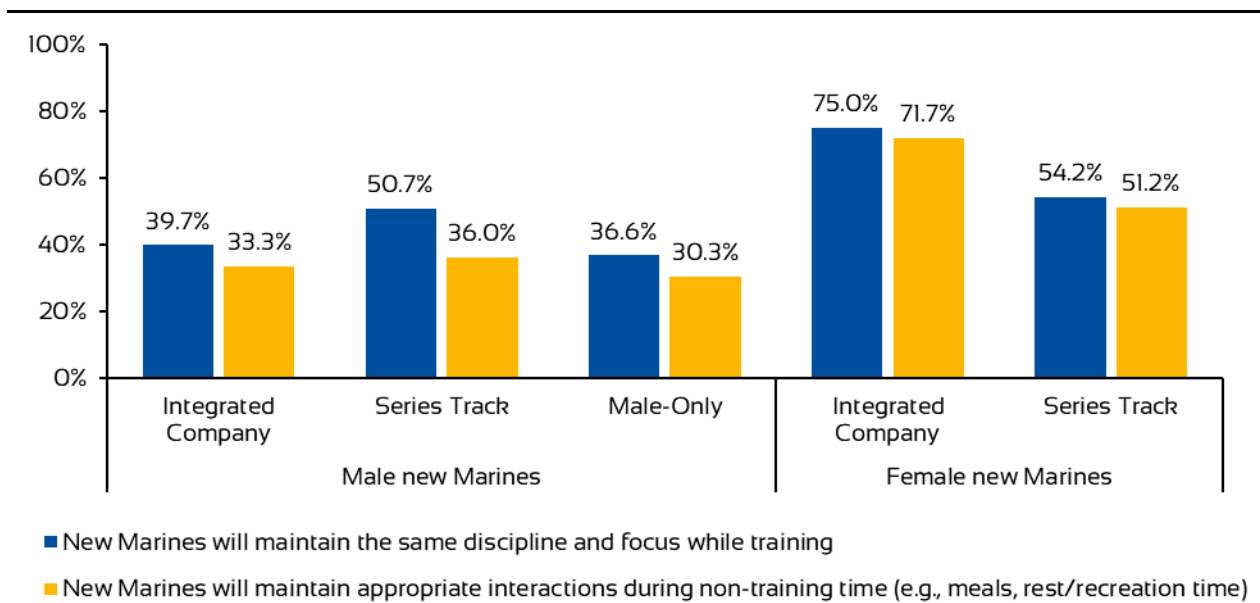
¹³⁴ Response options were "disagree," "mostly disagree," "neither," "mostly agree," and "agree."

¹³⁵ $p = 0.012$

¹³⁶ $p = 0.012$

appropriate interactions during non-training time could be maintained with increased integration. Similar percentages of new Marines in the Male-Only model disagreed with these statements. About half of Series Track males (50.7 percent) believed that discipline and focus could be maintained while increasing gender integration at recruit training. Aside from this, agreement (agree or mostly agree) was under 40 percent for both statements for male new Marines across training models. It is also worth noting that, in the Male-Only model, there was a significant change over time in agreement that both discipline and focus during training and appropriate interactions during non-training time could be maintained if integration were increased. At week 2, 50.3 percent agreed or mostly agreed that discipline and focus could be maintained while training, and 40.0 percent agreed appropriate interactions during non-training time could be maintained; by week 11, agreement prevalence dropped to 36.6 percent and 30.3 percent, respectively.

Figure 8.18. Percentage of New Marines at Week 11 Who Agree or Mostly Agree Recruits Will Maintain the Same Discipline and Focus and Appropriate Interactions During Non-Training Time With Increased Gender Integration at Recruit Training, by Gender and Training Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

2. Integrated training might disrupt the bond of a platoon that sleeps, eats, and trains together

Some recruits worried that gender-integrated recruit training at the platoon level would disrupt the bonds built between recruits who spend every moment of the training cycle together. In particular, recruits emphasized that bonds were built during the in-between moments and free time; they were concerned that integrated platoons wouldn't have those rare opportunities to get closer to one another.

Chemistry is a big part of how the platoon functions, what makes a good platoon. When we were doing quick time, I knew who in my platoon I clicked with and who I connected with when moments came. I could pick out people to use; every platoon has that. Your brains work very well together; you look for those people to do a specific task. Chemistry is very important.—Marine Corps recruit, male, Integrated Company, Parris Island

That bond would be missing when you can't sleep in the same room or hygiene together. But if you traded that out for more integration ... most of the time we don't get to talk. We have class and drill where we can't talk. We don't have free time until the night to do that. I think if we had more free time or free time integrated in the squad bay, then we can bond. We need time to bond, rather than just be pushed together.—Marine Corps recruit, male, Male-Only, San Diego

I got really close with my sisters. Falling out into the grass [in an integrated training platoon], I don't think I would have become as close. Our squad bay is our house. ... Even if I'm getting messed up, I could look at my sister and know she is going through the same thing.—New Marine, female, Integrated Company, Parris Island

Male recruits raised concerns about effects of integration on platoon bonding more at the end of the training cycle during the week 11 focus groups. Some recruits also felt gender integration could disrupt the platoon's relationship with their drill instructor team if they had different sets of drill instructor teams for their daytime training activities and nighttime routines.

3. Integrated training raised concerns about sexual harassment and sexual assault

While sexual harassment and assault are discussed in greater detail in section H, recruits did raise these issues as challenges for gender-integrated training. Male and female recruits expressed concerns that sexual harassment and sexual assault would increase with more gender-integrated training. Recruits felt there needed to be better support through policies, training, and education. Male and female recruits worried about the ability of male recruits to act professionally in a training environment with increased gender integration.

When I was in college, I had a friend who was sexually assaulted. She reported it, and the school let her down. That's a concern for me here. If you're going to force us to sleep and work together, there has to be policies in place. They say you have your SAPRs and they said they will remove you or the other person, but it's you [the female victim] that will be removed, and I don't think that's a good thing. ... That's concerning. In order to integrate the way they want to, they need to confront that.—New Marine, female, Integrated Company, Parris Island

We're not in high school anymore. We're all 18 ... We're all men. It's to the point where you can't be little boys focusing on women all the time. We have to know when to be mature. There's always going to be those guys who are not mature. That's the one thing I'm worried about. The minute there's one sexual harassment case, it will get blown up like crazy in today's world. Us guys are then put in that position of having to say we're

not like that. Most guys sexually harass all the time. Us guys here now know not to do that.—**Marine Corps recruit, male, Male-Only, San Diego**

I think, like, the main thing is awareness. Like, you're always gonna have one or two people, male or female, who try to take advantage if we try to integrate. And awareness all around, like, if you see something that looks a little weird, say something before something bad happens. It would just be, like, more eyes are needed.—**Marine Corps recruit, female, Series Track, Parris Island**

The majority of people here are just getting out of high school ... hormones are through the roof. It could be dangerous at some points [if we integrated more]. Sexual misconduct. They don't know how to interact with females, don't understand when someone is uncomfortable.—**Marine Corps recruit, male, Integrated Company, Parris Island**

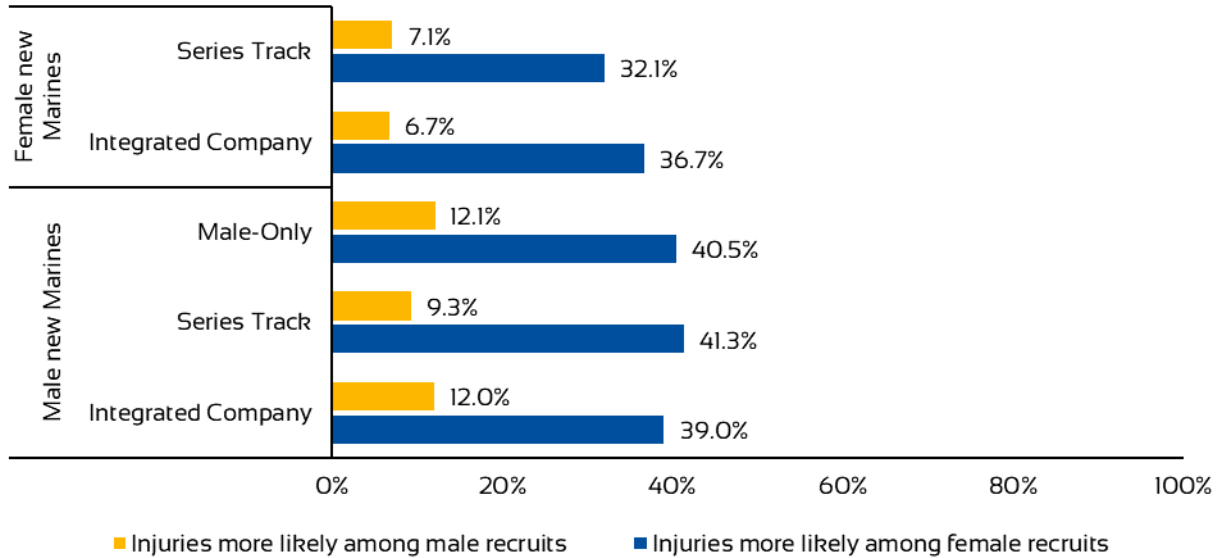
4. Other challenges and concerns related to gender integration included injuries and dropouts

Other challenges raised by recruits in the focus groups included concern that the ability of female recruits to complete training would not be taken seriously, specifically regarding physical aspects of training. Injuries for female recruits were also raised as a fear, especially with training events such as combatives, which involve (protected) physical hitting and punching. Male and female recruits emphasized the importance of considering physiological differences between men and women, such as bone structure and density, in the training environment and felt these differences could present challenges for female recruits if training were more gender integrated. Women wanted drill instructors and training cadre to be equipped with more knowledge about these physiological differences in such situations.

The social science survey asked recruits and new Marines to rate whether male and female injuries would be more likely to occur, less likely to occur, or no different if the Marine Corps increased gender integration at recruit training. Generally, new Marines reported more concerns about increased injuries for female recruits if training were further integrated (see figure 8.19). Regardless of training model or gender, most new Marines believed that further integration would make no difference in the levels of male injuries (percentages ranged from 70.7 percent to 78.7 percent).¹³⁷

¹³⁷ See appendix L for full survey responses, including “no difference” category.

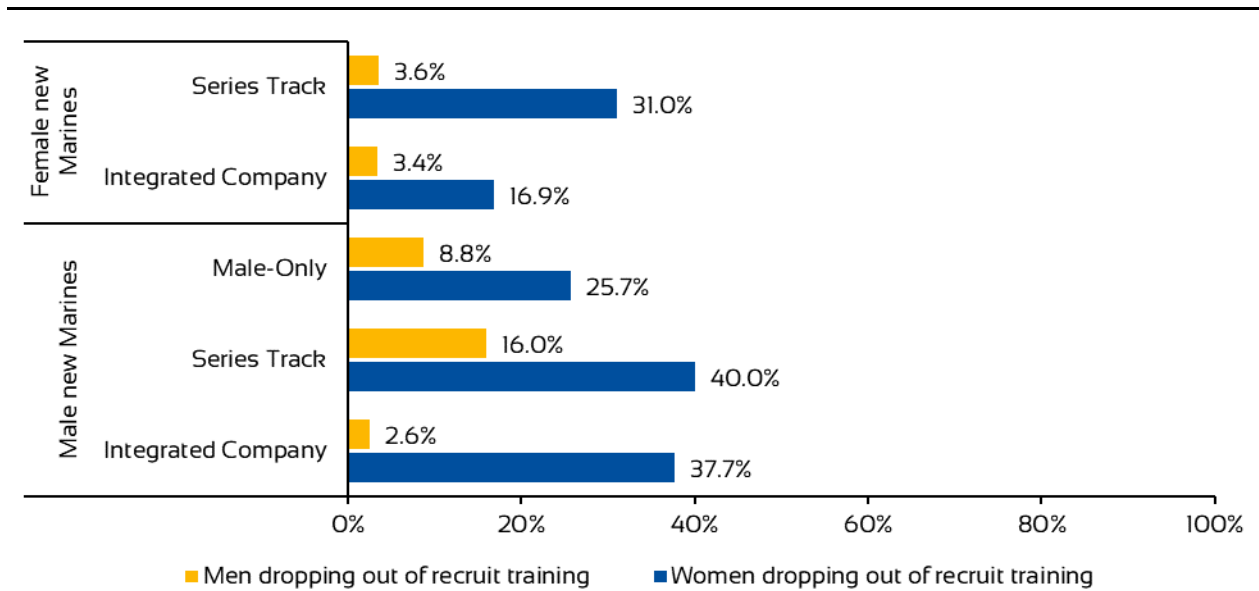
Figure 8.19. Percentage of New Marines at Week 11 Who Believe Male or Female Injuries Would Be More Likely to Occur With Increased Gender Integration at Recruit Training, by Gender and Training Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

Recruits and new Marines were also asked to rate whether men and women dropping out of training would be more likely to occur, less likely to occur, or no different if the Marine Corps increased gender integration at recruit training. Clear differences emerged in how new Marines viewed the likelihood of men or women dropping out of training if integration increased, depending on both training model and gender (see figure 8.20). For example, within Integrated Company, there was a statistically significant association between gender and perceived likelihood of women dropping out of training ($p = 0.026$), though the relationship between gender and the perceived likelihood of men dropping out of training was not significant. However, among new Marines in Series Track, the relationship between gender and the perceived likelihood of men dropping out of training was statistically significant ($p = 0.025$), while the relationship between gender and perceived likelihood of women dropping out was not. Across training models, higher percentages of new Marines of both genders believed that increased dropout rates among female recruits would occur if further integration were to be implemented, compared with increased dropout rates among male recruits.

Figure 8.20. Percentage of New Marines at Week 11 Who Believe Men or Women Have an Increased Likelihood of Dropping Out of Training With Increased Gender Integration at Recruit Training, by Gender and Training Model



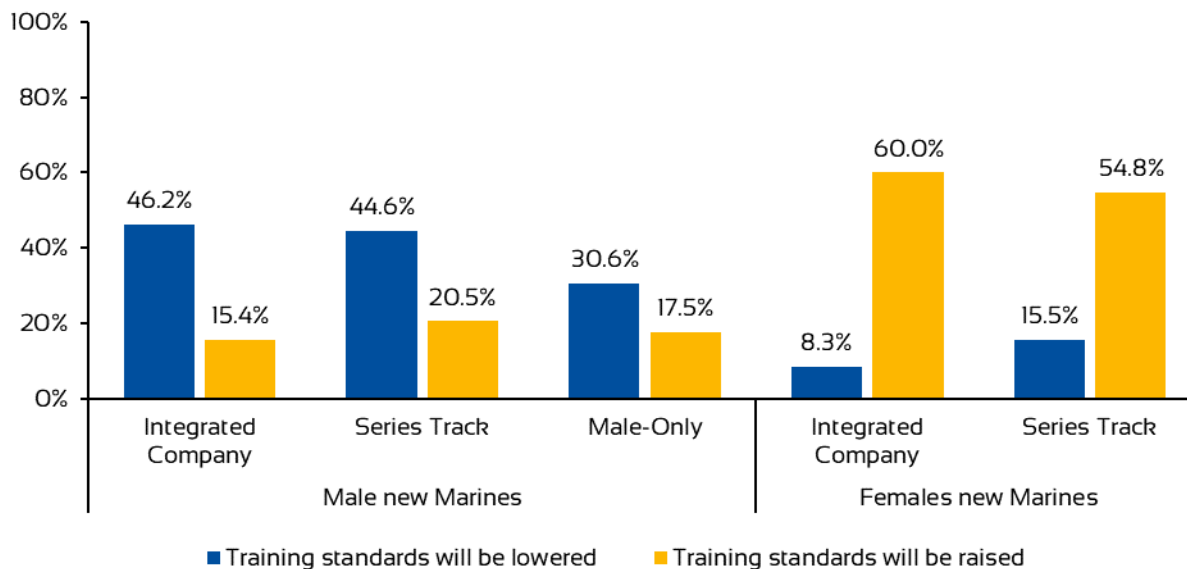
Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

Recruits and new Marines were asked to rate their level of agreement¹³⁸ on whether training standards would be lowered or raised with increased opportunities for men and women to train together at recruit training. In both training models, gender was significantly associated with views on shifting training standards as a result of more integration (see figure 8.21).¹³⁹ In both Integrated Company and Series Track at week 11, women were much more likely than men to agree or mostly agree that training standards would be raised if gender integration increased. Most men disagreed or mostly disagreed that training standards would be raised with increased gender integration (55.1 percent of Integrated Company males and 47.9 percent of Series Track males). Compared with their female peers, higher proportions of male new Marines agreed or mostly agreed that training standards would be lowered if men and women had more opportunities to train together.

¹³⁸ Response options were “disagree,” “mostly disagree,” “neither,” “mostly agree,” and “agree.”

¹³⁹ For the response “Training standards will be lowered”: Integrated Company, $p < 0.001$; Series Track, $p < 0.001$. For the response “Training standards will be raised”: Integrated Company, $p < 0.001$; Series Track, $p < 0.001$.

Figure 8.21. Percentage of New Marines at Week 11 Who Agree or Mostly Agree That Training Standards Will Be Raised or Training Standards Will Be Lowered With Increased Gender Integration at Recruit Training, by Gender and Training Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

The topic of standards, particularly PFT (physical fitness test) and CFT (combat fitness test) standards, arose during focus group discussions. Recruits felt further gender integration would spotlight differences between the standards, creating tension between men and women. Recruits also discussed the possibility of moving toward a gender-neutral standard, but no clear consensus arose on the relative advantages or disadvantages of that approach.

K. Desires and Preferences for Gender Integration

The focus groups and social science survey asked recruits and new Marines to reflect extensively on their desires and preferences for gender integration in recruit training. Marine Corps recruits and new Marines, regardless of training model, wanted more gender-integrated training than they experienced. The following section details type of integration, level of integration, integration of specific training events, timing of integration in the training cycle, and gender composition of drill instructor teams preferred by recruits and new Marines.¹⁴⁰

1. Recruits did not want integrated sleeping quarters at recruit training

The study team asked questions about integrated housing (male and female recruits sleeping in the same squad bay), even though it is currently prohibited by law,¹⁴¹ to better understand recruit perspectives on the scale and degree of integration desired. Male and female recruits in all

¹⁴⁰ Focus group data were analyzed and compared across training models, time point (e.g., weeks 2 and 11), and gender.

¹⁴¹ Per 10 U.S.C. § 8431, male and female recruits in all Services must live separately at recruit training.

models at both time points in the training cycle strongly opposed integrated housing. Recruits felt integrated housing would lead to increased sexual assault and harassment, present challenging privacy issues, and require major changes to squad bay facilities, such as head configurations.

2. Recruits had mixed opinions about platoon versus series or company integration

In general, recruits in all models at both time points felt it was important for men and women to train together. Only one female recruit suggested she would prefer to train with women only. A few male recruits expressed greater hesitancy about gender integration, wondering what purpose it serves for the greater Marine Corps mission, and cautioned that any integration efforts should be taken slowly. On the other hand, several female recruits were emphatic about the need for the Marine Corps to do more gender-integrated training at the MCRDs, hoping it would eventually help female Marines get more respect from their male peers. While there was general agreement about the benefits of more integration (regardless of level), recruits have mixed views on what level was best and what made the most sense for Marine Corps training.

Some recruits favored platoon-level integration

Recruits desiring platoon-level integration felt that all training, aside from sleeping and hygiene, should be integrated. Other recruits expressed interest in platoon-level integration but found it difficult to sort through the variety of challenges it might bring, especially logistic and time challenges affecting the training schedule. Recruits were also concerned that platoon-level integration of daytime training activities would break the bond developed from 24 hours a day, 7 days a week, contact. In the focus groups, no notable differences by training model emerged in favor of platoon-level integration. Thoughts of recruits who favored platoon-level integration are shared below.

I mean, just integrate the platoons. It would be the same training overall; you're doing it together. Same squad bay and training environment. Because if you go out there and PT with them, you won't feel comfortable, and if you don't feel comfortable ... we're trained to kill, but if you don't have faith in a woman having your back, and you can't help them ... say they do something wrong, you have to help them get better. They'll be there right next to you. So why not train with each other? They might be buddy rushing the enemy with you.—New Marine, male, San Diego

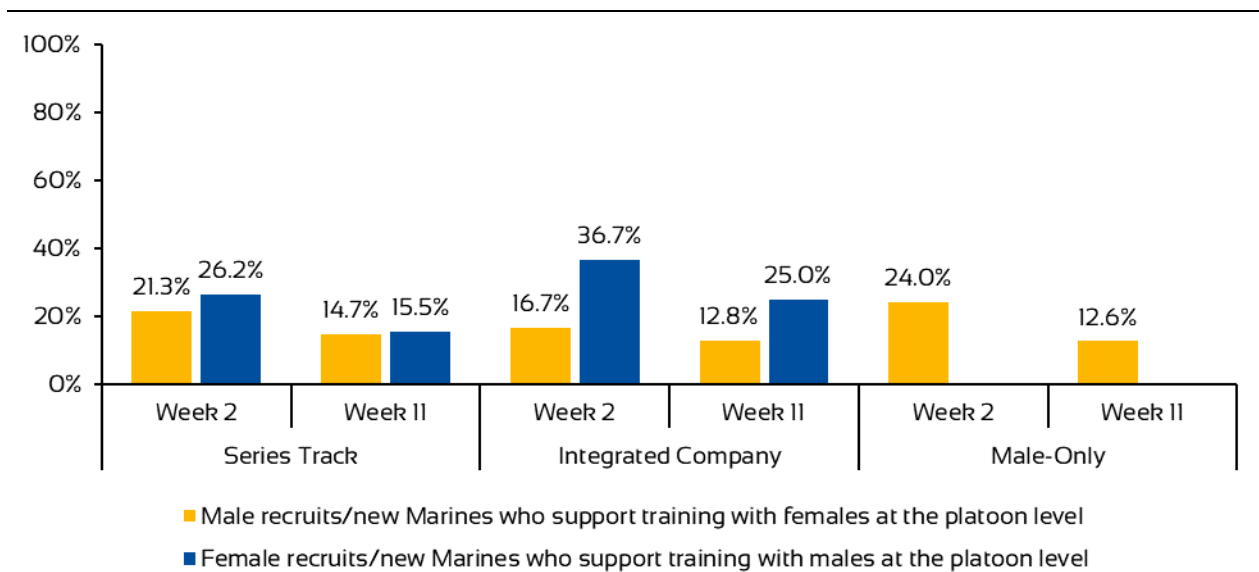
...when we go to our actual job, we're going to be with everyone, so I think we should be able to be responsible adults and train together and not be childish or whatever. I don't think they trust us as much as they should. Like, I seriously doubt that people will be doing weird stuff together that much because there's DIs everywhere, so you don't really have time to talk to them in weird ways.—Marine Corps recruit, female, Parris Island

Any of the training stuff can be integrated. We have learned that everything is a competition, even in the fleet when you want a promotion. Integrating all of this now, that starts showing you how to prepare for competition.—New Marine, male, San Diego

It starts in the squad bay. It's a brother and sister thing. If I need to get up and do high knees next to my brother... that sort of training would bring us closer ... if you're by my side for whatever training. ... You're not trained to carry those big ol' dudes, but you better be able to.—**New Marine, female, Parris Island**

The survey also asked recruits and new Marines about their desire for gender-integrated training at each level. Support for training with opposite-gender recruits at the platoon level was low across training models and gender and decreased over the course of the training cycle. The change in support was statistically significant only for the Male-Only model ($p = 0.001$) and women in Series Track ($p = 0.029$). At week 11 in the training cycle, a higher proportion of female new Marines in Integrated Company were supportive of training with male recruits at the platoon level compared with their male counterparts; however, the association between gender and support for training at the platoon level was only of borderline statistical significance ($p = 0.066$) (see figure 8.22).

Figure 8.22. Percentage of Recruits and New Marines Who Support Training With the Opposite Gender at the Platoon Level, by Training Week and Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

Some recruits favored series or company-level integration

Recruits often conflated series and company-level integration because they were not acutely aware of the differences between the 4-and-2 and 5-and-1 Integrated Company models. Recruits who were training in Series Track often described the Integrated Company model when describing their preferred level of integration. In the focus groups, no notable differences by training model emerged regarding recruits favoring series and company-level integration:

The ideal recruit training will end up being series integration. Put the males and females together at training events. Like our PT is just us. You look at them and you're thinking

that fucking sucks, that bonding moment, because you went through suffering together. Now you go to MCT with two platoons' worth of girls, and we don't have that bond [because we were Series Track]. BWT and Crucible separately, we don't have the bond. We didn't go through it together; we don't have those stories.—New Marine, male, Parris Island

I think the best way is by company or series, just not platoon, because we can't be that close because it just wouldn't work. The unity wouldn't be there. But if we integrated as a company and could work with the females, that would help a lot because, again, in the field when we get deployed, we'll be working with women so we should know how to work with them, and if we can't learn it here, then basically we have to wing it, and that's not fair.—Marine Corps recruit, male, Parris Island

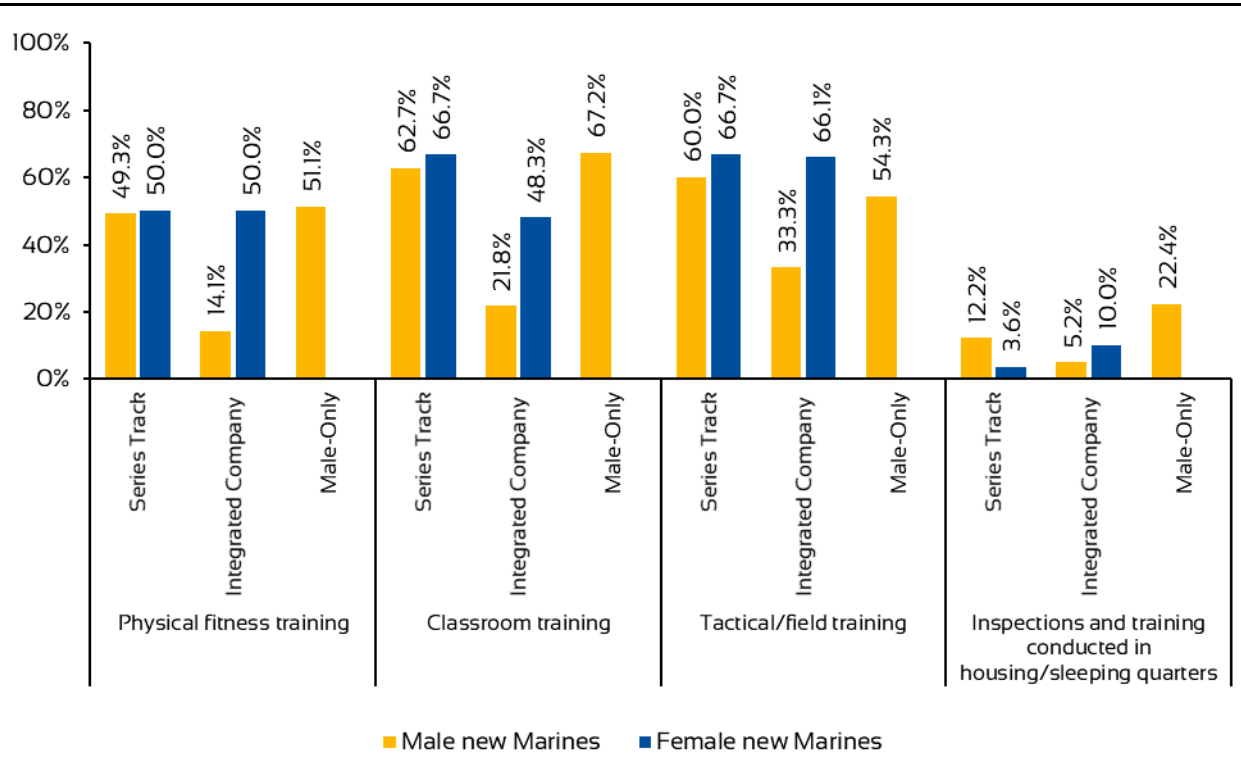
I don't think the platoon would work because you are supposed to be together all the time. I think series makes more sense.—New Marine, female, Parris Island

If you keep training how it is, I think the best way to do it would be to add a female [platoon] follow and leave [series], and then integrate every once in a while. That would be perfect. It would also mitigate the sexual communication barriers over different genders.—New Marine, male, San Diego

3. Recruits identified many training events and activities they would like to be gender integrated or more gender integrated

Recruits were asked to rate their preferred integration level (more integration, less integration, or satisfied with current integration) for four categories of training activities: physical fitness, classroom training, tactical/field training, and inspections and training conducted in housing/sleeping quarters. Figure 8.23 shows the percentage of new Marines at week 11 who favored more integration by training model and gender. Except for male new Marines in Integrated Company, more of whom were satisfied with current integration levels, approximately half to two-thirds of new Marines in each training model favored more integration in physical fitness training, classroom training, and tactical/field training. Fewer new Marines across training models favored more integration in inspections and training conducted in squad bays.

Figure 8.23. Percentage of New Marines at Week 11 Who Prefer More Integration in Select Training Activities, by Gender and Training Model



Note: Statistical significance is referred to in the chapter text and is not represented visually in this figure as a result of multiple analytic comparisons. For complete results of statistical significance testing, see appendix M.

Fewer Integrated Company male new Marines favored more integration in the aspects of physical fitness training, tactical/field training, and classroom training compared with women in Integrated Company and men in other training models. Among male new Marines at week 11, there was a significant association between training model and preference for integration in the aspects of physical fitness training,¹⁴² classroom training,¹⁴³ and tactical/field training.¹⁴⁴ Integrated Company showed a significant association between gender and preference for integration in physical fitness training ($p < 0.001$), classroom training ($p = 0.003$), and tactical/field training ($p < 0.001$). In these three types of training activities, more women in Integrated Company wanted more integrated training than men.

There was no association between gender and integration preferences in the four aspects of training for new Marines in Series Track. However, classroom training evinced a significant association between training model and integration preference for female new Marines ($p = 0.027$). In Series Track, 66.7 percent of female new Marines preferred more integration in classroom training, compared with 48.3 percent of female new Marines in Integrated Company. This discrepancy could come from women in Series Track having fewer opportunities for

¹⁴² Integrated Company males v. Male-Only, $p < 0.001$; Integrated Company males v. Series Track males, $p < 0.001$

¹⁴³ Integrated Company males v. Male-Only, $p < 0.001$; Integrated Company males v. Series Track males, $p < 0.001$

¹⁴⁴ Integrated Company males v. Male-Only, $p = 0.004$; Integrated Company males v. Series Track males, $p = 0.003$

classroom integration during their training, whereas women in Integrated Company took every class with male platoons in their series or company.

Importantly, when new Marines did not favor more integration, they usually reported being satisfied with current levels of integration. In the case of men in Integrated Company, while a smaller proportion favored more integration across all training aspects, most were satisfied with current levels of integration at week 11: 71.8 percent for physical fitness training, 75.6 percent for classroom training, 55.1 percent for tactical/field training, and 81.8 percent for inspections and training conducted in the squad bays. New Marines rarely favored less integration in any of the four training categories. Overall, inspections and training conducted in squad bays were the most common training aspect for which new Marines favored less integration (14.6 percent of Integrated Company, 14.6 percent of Series Track, 16.1 percent of Male-Only). Notably, no women in Integrated Company favored less integration in physical fitness, classroom, and tactical/field training.

Recruit discussions in the focus groups provided additional information on recruit preferences for integrated training events

Discussions about preferences for integration in the focus groups provided additional details to elaborate on survey data. Recruits from all training models at both time points wanted to see more gender integration at training events. The greatest expressed support for gender-integrated training was for combat and tactical training events in phase 3, including land navigation, BWT, and the Crucible. It is worth noting that even those in Integrated Company, who were the most integrated, wanted more integration at these and other training events. All recruits, regardless of gender, desired the ability to work with members of the opposite gender in integrated teams because they felt it would mirror real-world operational scenarios, where men and women work together. Recruits also felt integrated teams would be more effective and each gender would bring different strengths to the team.¹⁴⁵ Unique reasons for desiring more gender-integrated training events emerged. Female recruits and new Marines wanted increased gender integration of training activities to gain more respect from their male peers, while male recruits and new Marines felt integration could provide a chance for them to help their female peers when they are struggling with training, especially with physical aspects.¹⁴⁶

Marine Corps Recruits, Male, Series Track, Parris Island, Week 2

Recruit A: *Once we get out of there, they will have gone through the same final test as we did, so I'm confident she can drag me out. But the trust would be more solidified if we saw the progress rather than [heard], "Yeah, she made it through the same test."*

Recruit B: *Like, if she drags you through the sand on the Crucible, you'd trust her to drag you through the sand if you were hurt.*

¹⁴⁵ For additional details, see section I, in which recruits describe benefits of gender-integrated training or further gender integration at recruit training.

¹⁴⁶ See a more extended discussion about benevolent sexism in section C.

New Marines, Female, Integrated Company, Parris Island, Week 11

Moderator: How often would you like to interact and train with male recruits during your time in recruit training?

New Marine A: *Integrated sticks?*

New Marine B: *Yeah ... it would be better to interact more in sticks because there are things that females could do that men can't do and vice versa.*

New Marine A: *Learning practical application. In Afghanistan, you have males and females working together.*

New Marine B: *We understand that here in recruit training, the DIs don't want males and females to fraternize with each other, but on the one hand, they need to have in mind that they need males and females to work with each other. It would also be good combatwise, since there are males and females working well with each other. It would be beneficial when we move on to our first duty station.*

New Marines, Male, Male-Only, San Diego, Week 11

New Marine A: *We watched [Integrated] Company walk back from religious services, and the females were all about as tall as our shortest guys. And the guys in that company were super tall compared to them. I was like, "I wonder how they'll be able to do certain obstacles in the Crucible?"*

New Marine B: *That's good in a combat scenario. You're going to take every single measure to help any anyone in a combat situation. I feel like it's a good type of exposure, and it broadens your expectations to future scenarios.*

Recruits and new Marines also expressed a desire for more integration at physical fitness training events. For example, one male recruit from San Diego noted women “*have techniques for pull-ups so that they could get themselves above the bar. That would be beneficial to guys who can get better technique than their own.*” Other areas recruits expressed a desire for more integration included classroom training, the confidence course, obstacle courses, hikes, and the rifle range. Recruits’ opinions about integrated MCMAP training were mixed—some felt they would like to have an integrated MCMAP, while others felt it should remain more separate. Similarly, some recruits and new Marines (both male and female) wanted to see close-order drill integrated, while others had concerns about women always being the “little end” of the formation because of their height, and cohesion concerns with drill because they wouldn’t be together as a platoon 24 hours a day, 7 days a week.

Both male and female recruits and new Marines agreed that they would not want combative training such as pugil sticks or body sparring to be integrated, pointing to differences in the physiological makeup of men and women, even those of the same weight, that might cause issues.

Finally, some recruits suggested more comprehensive skills-based training around the prevention of sexual harassment and sexual assault if the Marine Corps were to increase gender integration at recruit training (see additional information on this in section H).

4. Recruits had mixed opinions about the timing of gender integration in the training cycle

Some recruits felt it would be best for gender integration to occur from the start of the training cycle, while others felt a progressive approach would be better. The study team did not explicitly ask about the timing of integration in the cycle; instead, this conversation arose naturally from focus group discussions. Recruits and new Marines who wanted a progressive approach to integration in the training cycle felt recruits would have more discipline and behave with more maturity around members of the opposite gender after the first or second phase of training.

5. Recruits wanted to be trained by mixed-gender drill instructor teams

An overwhelming majority of recruits favored training with drill instructors of both genders and having mixed-gender drill instructor teams. Recruits and new Marines felt being trained by both men and women would result in profound benefits, citing different strengths they perceived men and women bring to the drill instructor role. Men felt female drill instructors paid more attention to detail, were more disciplined, and created a more mentally challenging environment for recruits. They also felt they would be better prepared for the fleet if they were trained by women and could understand their perspectives of their experiences in the Marine Corps. Women felt male drill instructors were better at teaching and staying focused on the training task (as opposed to being mired in discipline and attention to detail) and were less degrading in their training approach.¹⁴⁷

We're focused on drill, cleaning; the guys are focused on knowledge. So if you put that together, we'd be more well rounded. If we had a male [drill instructor], we'd know more knowledge, they'd be more organized with the female [perspective].—Marine Corps recruit, female, Parris Island

It would even it out because female DIs mess with your head more. They're known for that, but the males are blunt: "Do this." But the women play mental games, and you need that balance because we're all mentally exhausted, but the males have it easier than us and everybody knows it. They [female drill instructors] play mind games. If you even it out by having a few males...—Marine Corps recruit, female, Parris Island

...until a long time I had not had a female boss. Having a female boss changed my perspective on how things should be run. It will break a lot of modes for males. "It has to be a man to command me." No one cares about man or woman in the military; it's about rank. At some point ... for some task and events in recruit training to have females ... I felt great about being led by a female ... carry down to SDI and all DIs will help with understanding of instruction.—New Marine, male, Parris Island

¹⁴⁷ For more detailed information about recruits' perceptions of drill instructors, see section F.

I get more on top of my game if the female DIs are around. ... They're just on it a bit more.—New Marine, male, Parris Island

It'd be a nice balance [to have both] because our [female] drill instructors are focused on breaking us down, and the males are definitely more better about not making you feel like you're disgusting in yourself. If you put them together, you're gonna get ... kind of even it out.—Marine Corps recruit, female, Parris Island

Having more female drill instructors is important, and we need to implement it. Because they can't instill into our recruits' heads, into their minds, what the fleet will be like. There will be females you have to work with. Having a female DI to tell stories and to get used to having more than a bunch of men ... also, women have a different way of teaching, and it is important to get that.—New Marine, male, San Diego

It would be really beneficial to have three female DIs and one male DI. ... Hygiene is a problem, but there's ways around that. We work differently. It's beneficial to have that type of feeling in the platoon, experience ... it would help us ... exposure for the fleet ... help us be well rounded.—New Marine, female, Parris Island

The most prevalent concern expressed about mixed-gender drill instructor teams related to hygiene time—not wanting opposite-gender drill instructors to be present during hygiene time, which currently occurs in the squad bay with open head spaces and changing on line.

Lack of support for training from opposite-gender drill instructors was minimal and typically bound in persistent gendered stereotypes. Some men raised concerns about women's competency with combat knowledge, their harshness as drill instructors, and the perception that they were more insulting or demeaning in their training approaches. Several male new Marines in Integrated Company also felt that part of the drill instructor's role was to teach them how to be men and felt only men could do so. A small group of female recruits in Series Track at week 2 suggested they did not want training from male drill instructors, describing them as “stupid” and less knowledgeable about how to be a good Marine than women. These dissenting opinions demonstrate the damaging nature of unchecked gender stereotypes in the training environment and should not negate the finding that most recruits and new Marines greatly desired direct training from male and female drill instructors.

L. Important Considerations for Gender Integration From the Marine Corps Recruit Perspective

Findings and analysis from the Marine Corps recruit perspective present several important considerations for current and future gender integration efforts for recruit training:

- **Marine Corps recruits want physical, tactical, and educational training at recruit training to prepare them for a gender-integrated fleet.** Marine Corps recruits understand that they are entering a fully gender-integrated fleet and feel their training should prepare them to do so. Men know that, as Marines, they will be working with, led by, and leading women; similarly, women know that they will be working with, led by,

and leading men. Recruits anticipate serving in combat operations alongside members of the opposite gender and want training that prepares them to do so. The Marine Corps argues that gender-integrated training comes later in the entry-level training pipeline, at the School of Infantry and MOS training. Recruits want it at recruit training—they want that progression to start earlier and more substantively at the MCRDs. Male recruits want to trust that their female counterparts can pull them to safety through the sand at the Crucible; female recruits want to demonstrate and prove to their male counterparts that they, too, have what it takes to become a Marine. The steps the Marine Corps has taken to conduct further gender-integrated training are working to dispel previous myths that women “have it easier” or follow a separate program of instruction (as shared by male recruits in focus groups for this study). Nevertheless, recruits see and desire additional opportunities for gender integration in the training cycle so they can feel better prepared for the fleet. Recruits also want more educational support for integration, such as classes that provide a blueprint for how to have healthy, professional working relationships with members of the opposite gender. Recruits expressed interest in being trained by both male and female drill instructors in mixed-gender teams, having observed the complementary strengths of drill instructors of each gender.

- **Marine Corps recruits, regardless of training model, want more gender-integrated training than they experienced.** Across training models and time points, recruits want more training with members of the opposite gender at recruit training. Survey data showed that, except for male new Marines in Integrated Company (most of whom were satisfied with current integration levels), approximately half to two-thirds of new Marines in each training model favored more integration in the aspects of physical fitness training, classroom training, and tactical/field training. One-third of men and two-thirds of women in Integrated Company at week 11 wanted more integration in tactical/field training. Focus group discussions provided the opportunity to gather more in-depth information on recruit desires for integration. Male and female new Marines expressed the greatest desire for gender-integrated training in phase 3 events, including land navigation, BWT, and the Crucible. It is worth noting that even those in Integrated Company, who are the most gender integrated, described wanting more integration at these and other training events in the focus groups.
- **Male and female Marine Corps recruits, at times, possess divergent perspectives, attitudes, and beliefs that are consequential to gender integration.** The survey and focus group data collected from recruits reveal social and cultural cleavages between male and female recruits that could significantly affect gender integration efforts. Male recruits and new Marines showed the highest levels of benevolent and hostile sexism—much higher than their female peers—which is an undercurrent that, if not addressed, will continue to affect gender integration and gender relations in the Marine Corps writ large. Female recruits reported more physical and strength-based challenges with recruit training, which perpetuates (primarily) male recruits’ concerns about further gender integration leading to lowered training standards and higher injury and dropout rates for women. On the issue of sexual harassment and sexual assault, female recruits and new Marines feared they would become victims, while their male peers feared unknowingly perpetrating these grave offenses and facing career-ending consequences. Recruits bring years of societal stereotypes and gendered socialization with them as they enter recruit training. While the training environment cannot completely erase or reprogram gendered

beliefs and experiences, opportunities exist for course correction with intentional training, thoughtfully designed education programs, and leadership from drill instructors and training cadre. These efforts would not only support gender integration at recruit training but could also improve gender relations in the Marine Corps overall.

Chapter 9: Army, Air Force, Navy, and Coast Guard Recruit Experiences With and Perspectives on Gender Integration

Bottom Line Up Front

- Recruits joined the Army, Air Force, Navy, or Coast Guard because they could choose their military occupational specialty, build transferable skills for the civilian labor force, and serve under less challenging conditions (than the Marine Corps).
- Male Marine Corps recruits show the highest levels of sexist attitudes when compared with male recruits from the other Services. Female Marine Corps recruits appear to hold relatively similar gender attitudes as their peers in other Services.
- Although recruits experienced varied levels of gender integration (because of COVID-19 mitigation procedures), they overwhelmingly support gender-integrated training at the lowest unit level (i.e., platoon equivalent).
- Recruits report differences in how male and female drill instructors approach the role and their relative strengths as drill instructors; all prefer training by mixed-gender drill instructor teams. Some recruits describe differential treatment from male drill instructors, including being “softer” on female recruits and perpetuating gendered stereotypes.
- Rates of sexual harassment and sexual assault are perceived to be low in the training environment, but Navy female recruits worry about becoming victims in the fleet. Army and Navy recruits describe specific instances of sexual harassment among recruits, some of which were perceived to not be handled properly by drill instructors.
- Recruits described many benefits of gender-integrated training, including better preparation for an integrated fleet, diversity of thought, development of shared bonds and trust, and additional motivation and competition.
- Challenges to gender integration described by recruits include sexism from male peers (Army and Navy), differential treatment from drill instructors, physical strength and standards-related difficulties for women, and romantic distractions among recruits (Army).
- Army, Air Force, Navy, and Coast Guard recruits provide the following recommendations to the Marine Corps: increase gender integration at recruit training; design specific activities to integrate; implement mixed-gender drill instructor teams; ensure equality of treatment for all recruits; and provide comprehensive, prevention-based education about sexual assault and professional relationships.

Every day, young Americans enlist in the Army, Air Force, Navy, or Coast Guard to serve their country. At recruit training, they embark on a journey designed to transition them from a civilian to a Soldier, Airman, Sailor, or Coast Guardsman. Recruits in every Service are the future military leaders of our country and everyday defenders of our nation’s freedom. Those who are eligible and choose to join the military are a self-selected group. Selection and sorting continue as they decide which Service branch they want to join, weighing a variety of factors including service mission, installation location, military occupational specialty (MOS) opportunities,

culture, family history of service, and a vision for their future life as a Service member. Recruit perspectives and experiences in recruit training are vitally important to any policy decision related to gender-integrated recruit training, and the experiences of recruits from the other Services can aid Marine Corps efforts in future gender integration.

Recruit experiences and perspectives informing this chapter are drawn from two forms of original data collection: a survey and focus groups. Further details about methodological design, sampling, and analysis for each form of data collection are presented in chapter 3. Army, Air Force, Navy, and Coast Guard recruits were invited to participate in the study one time near the end of their training cycle.¹⁴⁸ Recruits who participated in the focus groups were invited first to voluntarily complete the survey. The survey and focus group protocol appear in appendices D and E, respectively. This chapter focuses primarily on Army, Air Force, Navy, and Coast Guard recruits’ perspectives and experiences; it also draws comparisons with Marine Corps recruits (primarily Integrated Company). Marine Corps recruits’ perspectives and experiences are presented in full in chapter 8.

Each Service has its own language and terms for basic training, recruits, drill instructors, and the lowest unit level (see table 9.1). In this chapter, the study team uses “recruit” and “recruit training” to broadly reference the initial training of enlisted personnel across the Services, “drill instructor” and “training cadre” for those in charge of managing and delivering recruit training at the installation, and “fleet” to describe Service members in operational forces or positions beyond initial entry-level training. Service-specific language is used in sentences or focus group quotations directly referencing one Service. The generic term “recruit” is used in figures and study findings for consistency.¹⁴⁹

Table 9.1. Service-Specific Names for Basic Training, Recruits, Instructors, and Platoons

Service	Basic Training Name	Recruit Equivalent Title	Drill Instructor Equivalent Title	Platoon Equivalent Term
Marine Corps	recruit training	recruit	drill instructor	platoon
Army	Basic Combat Training (BCT)	trainee	drill sergeant	platoon
Air Force	Basic Military Training (BMT)	trainee	military training instructor (MTI)	flight
Navy	boot camp or recruit training	recruit	recruit division commander (RDC)	division
Coast Guard	recruit training	recruit	company commander (CC)	company

This chapter covers the following topics and themes: sociodemographic information on recruits in the sample; why recruits joined their respective Service; gender attitudes of recruits;

¹⁴⁸ Recruits participated in the study during the following training weeks: Army recruits, week 10 out of 10; Air Force recruits, week 7 out of 7; Navy recruits, week 6 or 7 out of 8; Coast Guard recruits, week 4, 5, 7, or 8 out of 8.

¹⁴⁹ In chapter 8, week 11 data from Marine Corps participants refer to them as “new Marines” to acknowledge their Marine status in fourth phase, earned through the completion of graduation requirements and award of their Eagle, Goble, and Anchor. However, this chapter refers to these participants as “recruits” to maintain consistency with data presentation from the other Services.

perceptions of suitability for military roles; recruit experiences with and preferences for gender integration; perspectives on instructors; sexual harassment and sexual assault at recruit training; benefits of gender integration; challenges of gender integration; and recruit recommendations for Marine Corps gender integration at recruit training. The chapter ends with important considerations for gender integration from the perspectives of Army, Air Force, Navy, and Coast Guard recruits.

A. Recruits in the Army, Air Force, Navy, and Coast Guard Samples

The social science survey administered to Army, Navy, Air Force, and Coast Guard recruits captured their demographic information, training experiences, and attitudes and beliefs about gender. Recruits selected for the focus groups were provided the opportunity to voluntarily complete the survey once, near the end of their basic training cycle. Sample sizes for the other Services are smaller ($N = 40\text{--}41$ for each Service) than the Marine Corps samples by design; the primary focus of this study was an in-depth examination of Marine Corps recruit training models. Survey data from the other Services were intended to be used descriptively to provide greater context and exploratory insights into the non-Marine recruit perspective. For these reasons, most survey data in this chapter were not analyzed using tests for statistical significance and figures do not note statistical significance.¹⁵⁰ For a breakdown of N size for each survey question by Service, training model, gender, and time point, see data tables in appendix O.¹⁵¹

1. Army sample: Fort Jackson

The Army recruit sample from Fort Jackson consisted of 41 recruits, including 21 males (51.2 percent) and 20 females (48.8 percent). Overwhelmingly, recruits were aged 17–19 (92.5 percent), had never married (97.6 percent), and reported a high school diploma or equivalent as their highest education level achieved (87.8 percent). Approximately one-quarter of recruits (24.4 percent) reported their ethnicity as Spanish/Hispanic/Latino. More males identified their race as White (71.4 percent) than females did (55.0 percent).¹⁵² The vast majority of recruits reported having relatives who currently served or had served in the military (90.2 percent), while slightly over half (56.1 percent) reported immediate family in the military.¹⁵³ The most prevalent reasons for joining the military were financial for both genders: for men, it was pay (including military retirement); for women, it was money for college, college repayment, and other education benefits. Personal development, growth, and maturity and desire to travel and see new places were also among the top five reasons. Approximately half of recruits said they planned to serve between 2 and 8 years, and only 10 percent anticipated serving more than 20 years. Appendix P presents a visual profile of detailed sociodemographic information on Army recruits.

¹⁵⁰ An exception is made for data presented in section C on gender attitudes.

¹⁵¹ Exact N s for the data shown in figures for this chapter may vary slightly from the overall sample size because of missing responses. Percentages for figures in this chapter were calculated based on the number of nonmissing responses to each question.

¹⁵² Recruits were instructed to select all races that apply.

¹⁵³ Immediate family is defined as parents or siblings.

2. Air Force sample: Lackland Air Force Base

The Air Force recruit sample consisted of 40 recruits, 20 of whom (50.0 percent) were male, and 20 of whom (50.0 percent) were female. The majority of recruits were aged 17–23 (80.0 percent), had never married (90.0 percent), and reported a high school diploma or equivalent as their highest education level achieved (57.5 percent). Approximately one-quarter of recruits (27.5 percent) reported their ethnicity as Spanish/Hispanic/Latino. The most frequently self-reported race among recruits was White, at 57.5 percent, while 40.0 percent reported Black.¹⁵⁴ Most recruits (87.5 percent) reported having relatives who currently serve or had served in the military, and 80.0 percent of recruits had an immediate family member who served.¹⁵⁵ Personal development, growth, and maturity and money for college, college repayment, and other education benefits were the most common reasons for joining the military. Anticipated lengths of service ranged widely; 35.9 percent of recruits anticipated serving 2–8 years, while 43.5 percent anticipated serving 17 or more years. Appendix P presents a visual profile of detailed sociodemographic information on Air Force recruits.

3. Navy sample: Naval Station Great Lakes

The Navy recruit sample consisted of 40 recruits, including 20 males (50.0 percent) and 20 females (50.0 percent). The majority of recruits (82.5 percent) were aged 17–23, had never married (87.5 percent), and reported a high school diploma or equivalent as their highest education level achieved (60.0 percent). Approximately one-quarter of recruits (23.1 percent) reported their ethnicity as Spanish/Hispanic/Latino. Most recruits identified their race as White (70.0 percent).¹⁵⁶ The vast majority of recruits reported having relatives who currently serve or had served in the military (87.5 percent), while 37.5 percent had immediate family in the military.¹⁵⁷ The most prevalent reason for joining the military was personal development, growth, and maturity. Desire to travel and see new places and test yourself mentally and physically were also among the top five reasons. Anticipated lengths of service ranged widely: 46.1 percent of recruits anticipated serving 2–8 years, while 33.4 percent anticipated serving 17 or more years. Appendix P presents a visual profile of detailed sociodemographic information on Navy recruits.

4. Coast Guard sample: Cape May

The Coast Guard sample consisted of 40 individuals: 20 males (50.0 percent) and 20 females (50.0 percent). The majority of recruits (77.5 percent) were aged 17–23 and had never married (85.0 percent). Recruits had varying levels of education: 40.0 percent of individuals reported a high school diploma or equivalent as their highest level of education. A bachelor's degree was the highest level attained by 27.5 percent of recruits. Approximately one-quarter of recruits (22.5 percent) reported their ethnicity as Spanish/Hispanic/Latino. White was the most frequently

¹⁵⁴ Recruits were instructed to select all races that apply.

¹⁵⁵ Immediate family is defined as parents or siblings.

¹⁵⁶ Recruits were instructed to select all races that apply.

¹⁵⁷ Immediate family is defined as parents or siblings.

reported race (82.5 percent).¹⁵⁸ The vast majority of recruits (90.0 percent) reported having relatives who currently serve or had served in the military, while 50.0 percent reported an immediate family member who served.¹⁵⁹ Recruits most frequently cited personal development, growth, and maturity; desire to travel and see new places; and desire to serve your country as their reasons for joining. Anticipated service lengths ranged widely but trended slightly toward longer service; 57.5 percent of recruits anticipated serving 17 or more years. Appendix P presents a visual profile of detailed sociodemographic information on Coast Guard recruits.

B. Why Recruits Joined the Army, Air Force, Navy, or Coast Guard

Recruits were asked, “What’s the top reason you decided to join [Service] over other Services?” Across the Army, Air Force, Navy, and Coast Guard, recruits echoed three major themes: building transferable skills for the civilian labor force, the ability to choose their MOS, and service conditions that seemed less challenging than other branches. These motivators for service contrast with how Marine Corps recruits describe their impetus to serve, which was unparalleled challenge, earning the respect of the title, and being part of a legacy (see section B in chapter 8). Several recruits from the Army, Air Force, Navy, and Coast Guard actively felt that the Marine Corps could not offer them what they most sought in their military service experience because of the mission, structure, and/or culture of the institution.

Recruits from the other Services described a desire to pursue jobs and build skills through their military service that would translate to the civilian labor force.

I heard that careers in the Air Force translate better in the civilian world.—Air Force trainee, male

The Navy is more medical, which is what I wanted to go into instead of the Marine Corps. And just the career options in the Navy are ... the Marine Corps has career options too, but more in the infantry, which is not applicable in the real world. The Navy has more technical options.—Navy recruit, female

Even though I respect the Marine Corps a lot, I don’t think I could do it. I’m in public affairs, and I think that would be a good job to transition to in civilian life. I couldn’t see myself in the Navy on a boat either, or in the Coast Guard in the middle of the ocean. The Army was a good choice for me.—Army trainee, male

Recruits, especially in the Army, felt the ability to pick their job or guarantee their MOS was important to them.

I wanted to pick my job. Every time someone I knew said they were “most likely” going to get a job, they didn’t. And I wanted to pick my job.—Army trainee, female

I talked to a Marine recruiter for months. ... They couldn’t guarantee me any job.—Army trainee, male

¹⁵⁸ Recruits were instructed to select all races that apply.

¹⁵⁹ Immediate family is defined as parents or siblings.

In stark contrast to Marine Corps recruits who joined to be challenged, recruits from the other Services joined their respective branches because they explicitly did not want the most challenging service experience. This theme was raised most often by Air Force trainees.

My dad did 23 years in the Air Force, and I want to follow him. And it's easier. I have friends in different branches, and I heard it's [the Air Force is] easier.—Air Force trainee, male

It's kind of that middle ground between the Air Force and Marines. In the Air Force, you can't pick your job, but with the Army, there's more variety.—Army trainee, male

I know that out of the Air Force, Army, and Marines, the Air Force is a better way to go because you're a female. It's easier on you. The physical standards aren't as high as the Marines. They treat you the same as men, but we don't have the same muscle intensity.—Air Force trainee, female

I think the Air Force cares about getting the job done. We have AC [air conditioning] in our tents so we can wake up feeling refreshed and well rested.—Air Force trainee, male

Similarly, several Coast Guard recruits noted they joined the Coast Guard because they did not want to deploy or be stationed overseas.

You don't get deployed to other countries. That was a big one for me. I wanted to stay on the mainland.—Coast Guard recruit, male

With me, I am a Coast Guard family. My grandfather retired as a master chief in 1977. So it was this or none of the Services with my family. I didn't want to be deployed overseas. Usually, they stay within the continental U.S., so I knew I could travel within the U.S. Any little instances where the billets are abroad, like the cutters that go to Japan or something, it's 6 months at most.—Coast Guard recruit, female

Male Coast Guard recruits explicitly expressed their desire to join the Coast Guard because it is oriented toward a different service mission of saving lives.

One thing we were told during ROM [restriction of movement]—the chief told us that every branch is taught how to fight and kill. In the Coast Guard, we are first taught how to save lives. It's more on the humanitarian side.—Coast Guard recruit, male

I'm very passionate about this country and I see Americans suffering all the time. I want to be a part of those people who go as part of hurricane rescue teams and make this country a better place.—Coast Guard recruit, male

A few Army recruits also described wanting to join the Army because they perceived the Service as “helping” in war, in contrast with their perception of the mission of the Marine Corps.¹⁶⁰

Trainee A: *The Marine Corps is more focused on ... I believe their purpose is to kick in the door during a war, and we come in and we win. That’s how I view it. They’re focused on finding the bad guys, whereas we help everyone.*

Trainee B: *We would go in a war zone to minimize casualties, but the Marines would go in to kill enemies.*

Trainee A: *Yeah, not to say they don’t help, but they’re more built for war.*

Navy recruits were more likely to emphasize travel as a reason for joining the Navy, and several male Navy recruits mentioned the Navy’s less restrictive policies about hand tattoos as an influential factor. Recruits from all Services were also motivated to join by a history of family service, and several mentioned access to education benefits as a top reason they joined their Service branch.

1. Some recruits considered treatment of women and sexual assault prevalence in their decision to join a particular branch

Recruits, primarily women, from all Service branches explicitly expressed their considerations and perceptions of how women are treated as a factor they used in deciding what Service branch to join. Prevalence of sexual assault and perceived handling of cases and reporting were also described as measures recruits used in their selection processes. These considerations were raised organically in the discussion, unprompted by focus group moderators. It is worth noting that no Marine Corps recruits, male or female, mentioned including a Service’s treatment of women or sexual assault incidents in their decision-making process.

One thing brought up to me that locked my attention was the amount of females in a branch, and they mentioned that the Air Force had the top majority of females, and then it went to the Navy, then the Army and Marines. That was something that I started thinking about because I had thought about the Army before, but I hadn’t thought about being in a male-heavy branch, so that caught my eye.—Navy recruit, female

The Navy’s treatment of women is significantly better when you look at studies between the Air Force and the Navy. I saw the Navy’s treatment of women was better.—Navy recruit, female

If we went to war, we’d be the same as one of them. One of the men.—Navy recruit, female

I did my research. The Air Force has the lowest sexual assault rates than the other Services ... and there is more women in the Air Force compared to the other branches.—Air Force trainee, female

¹⁶⁰ Recruit or trainee letters (i.e., A, B, C) are randomly assigned for each group of quotations to show the flow of conversation as it happened in the focus group.

Army Trainees, Female

Trainee A: *I feel like it's different ... the Marines. It's the Marines. All males are more cocky and sexist than they would be here. It's really different.*

Trainee B: *It's not avoidable. They are mean to women. I know people in the Marines.*

Coast Guard Recruits, Female

Recruit A: *... my mom read articles of why the Coast Guard is good for females, more female friendly is a way to put it.*

Recruit B: *I have a lot of family in other branches. I have people in the Army, some almost joined the Marine Corps. I have two cousins in the Coast Guard and my husband and friends are in the Coast Guard. I was told that the Coast Guard is more family friendly.*

Air Force Trainees, Male

Trainee A: *The Air Force handles sexual assault and harassment better than the other branches.*

Moderator: Why is that important to you?

Trainee A: *My little sisters have had issues with that in the past. If I'm working in a branch of the government and they're not handling it well, then it's not worth it.*

Trainee B: *I was gonna say something similar as well. Originally, I was planning on joining the Navy, but one of my friends is in the Navy and she got sexually assaulted. They didn't really handle it well, so it threw me off and sent me here.*

Several female Navy recruits described concerns raised by friends and family about them joining the military following the 2020 murder of Army Specialist Vanessa Guillén (Diaz et al., 2021).

Recruit A: *A lot of people told me that I chose the wrong branch. A lot of bad things happen to women in the Navy. I had two coworkers, and one filed a restricted report and the other one did an unrestricted report [for sexual assault]. Both were overseas. Both of them were coworkers from a previous job. I'm 18, I just started working. People in my home said I made a bad choice and that I should switch to the Army. I don't know why I'm here, to be honest with you, but I got a lot of warnings I shouldn't come here.*

Recruit B: *I got warnings about [joining] the Army too. Because of Vanessa [Guillén].*

Recruit C: *Did you say Vanessa? Yeah, I got that too.*

Recruit B: *When I said I was thinking about the Army, my mom said no because of Vanessa.*

Recruit D: *After I heard that story, I was about to not join the military at all. [Others nod in agreement.]*

Recruit C: *Yeah, that story was very nerve-wracking when I thought about joining.*

In an interview, a male training cadre officer at MCRD San Diego expressed how perceptions of women in the Marine Corps harm the Service’s ability to recruit women, as exemplified by his daughter.

... it prevents us from getting the best and brightest. Because if I asked my daughter today, would she be interested in joining the Marine Corps, her perception is that the Marine Corps is specifically biased towards women. Therefore, there is not a just opportunity for [her, and] because there is not a just opportunity for [her, she doesn't] have any personal interest in pursuing it.

Civilian perceptions of Service branch culture and treatment of women can amplify or detract from recruiting efforts, particularly for women who are considering or want to join the military.

C. Gender Attitudes of Recruits

Chapter 8 (section C) examines gender attitudes among Marine Corps recruits. This section draws comparisons among recruits of all Services included in the study (Marine Corps, Army, Navy, Air Force, and Coast Guard) and a nationally representative cohort of recruit-age peers. The social science survey completed by recruits concluded with a series of 12 questions designed to capture gender-related attitudes.¹⁶¹ Survey questions were drawn from items commonly used to study gender-related attitudes in the broader population. Eight of the 12 survey items have been asked annually since 1973 in a large, nationally representative survey of high school seniors in the Monitoring the Future study (Johnston et al., 2002). These data have been used to understand trends in attitudes, behaviors, plans, and expectations of high school seniors, including military propensity. Gender-related attitudes assessed in the survey instrument fall into three areas: gender roles, equal opportunity or treatment, and sexism (for more background, see section C in chapter 8). All questions ask respondents about their agreement with a series of statements in a five-category Likert scale of “agree,” “mostly agree,” “neither,” “mostly disagree,” and “disagree.” Table 9.2 presents survey items organized by gender attitude topic.¹⁶²

Table 9.2. Recruit Survey Gender Attitude Questions by Topic

Item Number	Survey Item
Gender role attitudes	
1	It is usually better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family.
2	If a wife works, her husband should take a greater part in housework and childcare.
3	Most fathers should spend more time with their children than they do now.
4	Most mothers should spend more time with their children than they do now.

¹⁶¹ These questions were asked last to prevent any potential reactivity among recruits from influencing responses to other questions.

¹⁶² Survey items are sometimes rephrased in the following text and figures for parsimony.

Item Number	Survey Item
Equality of opportunity and treatment	
5	Parents should encourage just as much independence in their daughters as their sons.
6	Men and women should be paid the same money if they do the same work.
7	Women should be considered as seriously as men for jobs as executives or politicians.
8	A woman should have the same job opportunities as a man.
Sexist attitudes: Benevolent sexism	
9	Women should be cherished and protected by men.
10	In a disaster, women should be rescued before men.
Sexist attitudes: Hostile sexism	
11	Many women get a kick out of teasing men by seeming sexually available and then refusing male advances.
12	When women lose to men in a fair competition, they typically complain about being discriminated against.

Note: Item 1 is worded such that more agreement indicates less egalitarian views, whereas for items 2–8, more agreement indicates more egalitarian views about women. For items 9–12, more agreement indicated more sexist attitudes.

Results in this section are reported as percentage of recruits who agree (“agree” or “mostly agree”) with a given statement and are presented separately for male and female recruits. Fisher’s exact tests were used to test for overall difference across the Services, and logistic regression was used to test for Service-specific differences from the Marine Corps. In both cases, statistical significance is delineated by $p < 0.05$. Sample sizes were much smaller among other Service recruits (20–21 male and 20 female recruits from each of the other Services) than Marine Corps recruits (144 female and 328 male recruits)¹⁶³. Sample sizes were much larger among the civilian comparison group (4,300–4,400 male and female civilian high school seniors) as a result of pooling the five most recent cohorts (from the 2016–2021 data). Statistical significance tests were not applied to the civilian comparison sample, which is included only for general context. Figures 9.1 and 9.2 present a compact graphical summary of the average attitudes on all 12 survey items for all Service and civilian samples for male and female recruits, respectively. Tables O.19.2 and O.19.3 in appendix O provide the data underlying these figures, with table O.19.2 providing the average percentage in agreement, and table O.19.3 providing the sample size for each survey item and group.

¹⁶³ Marine Corps recruit data used for this analysis was from week 11 only.

Figure 9.1. Gender-Related Attitudes of Male Recruits and Civilians (Percentage Who Agree or Mostly Agree With Each Statement)

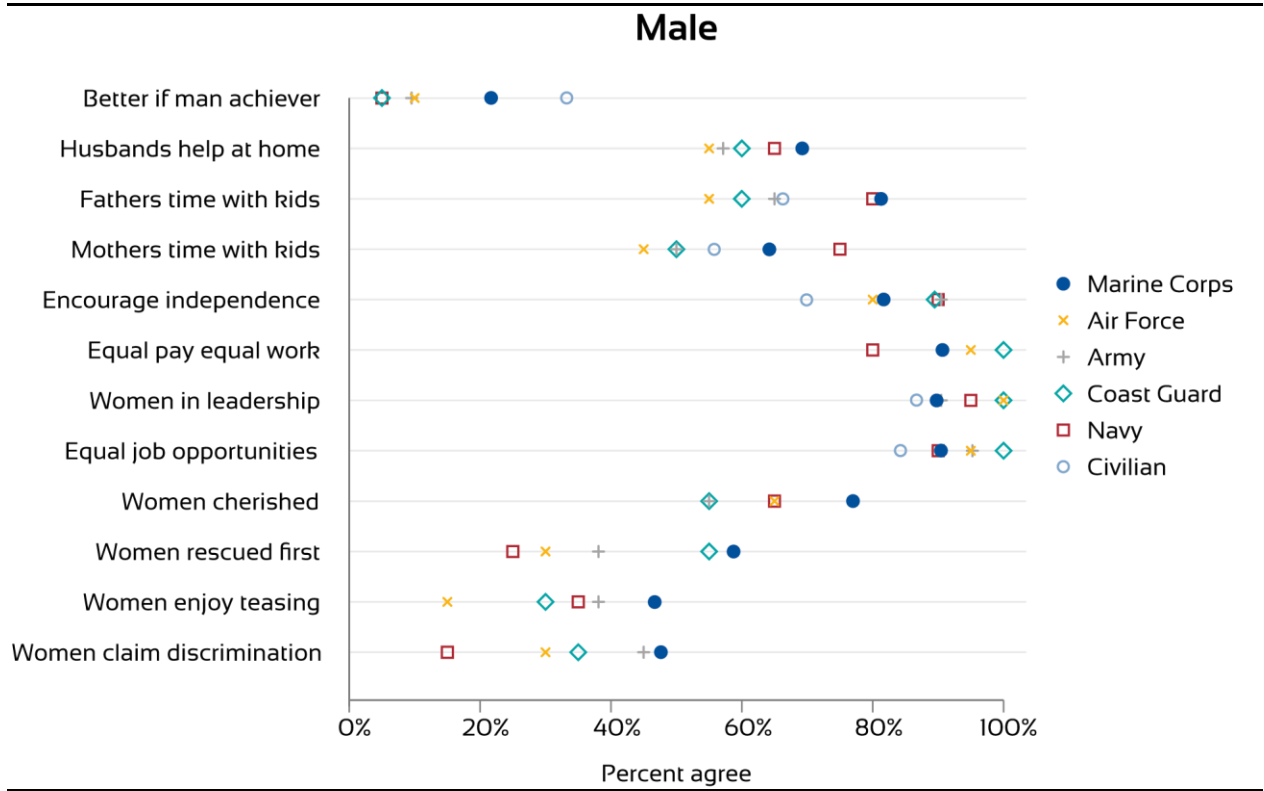
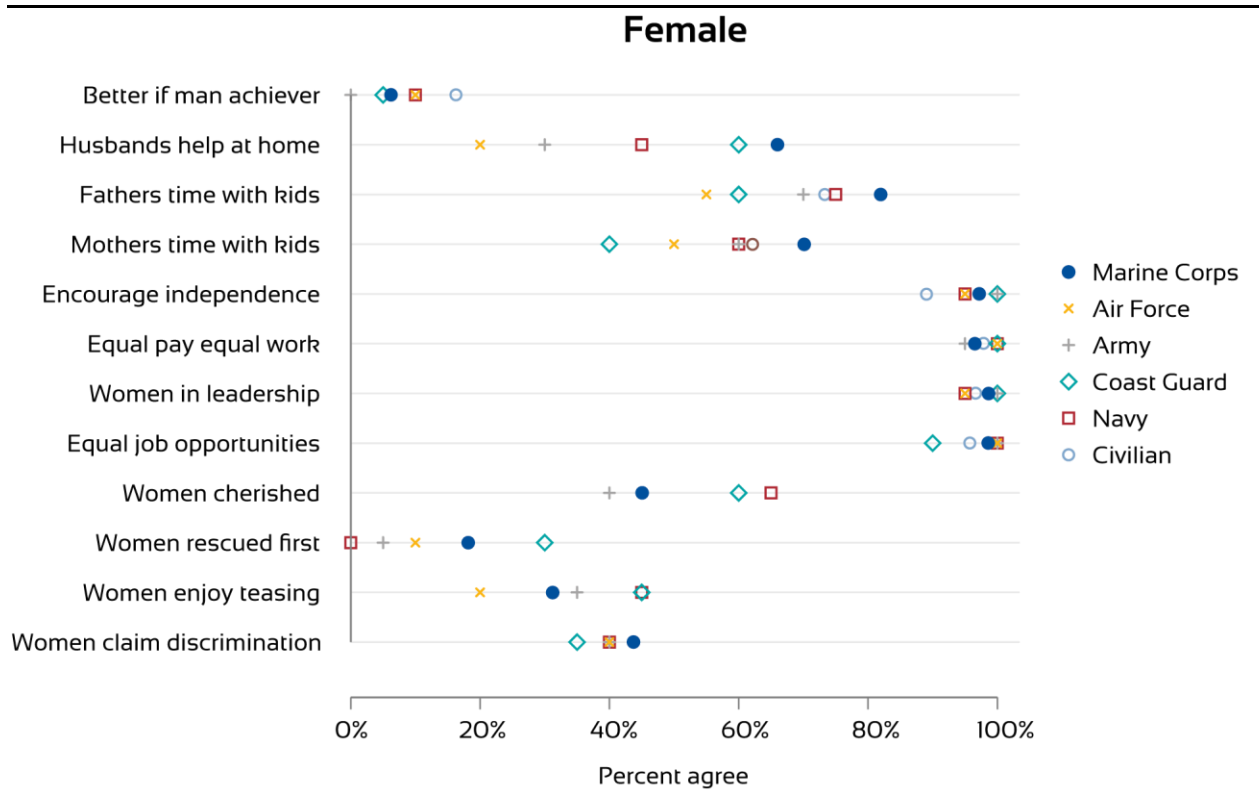


Figure 9.2. Gender-Related Attitudes of Female Recruits and Civilians (Percentage Who Agree or Mostly Agree With Each Statement)



1. Gender role attitudes

In general, male Marine Corps recruits communicated an interesting mix of gender role attitudes. They expressed the highest levels of support across all Services' recruits for a traditional gender division of roles (21.7 percent), although the differences across the Services fell just short of statistical significance. Male Marine Corps recruits also held husbands and fathers to high standards, showing the highest agreement that husbands should help at home if the wife worked outside the home (although the difference from other Service recruits was not statistically significant), and that fathers should spend more time with their kids. For the statement that fathers should spend more time with their kids, some statistically significant differences emerged when male Marine Corps recruits (81.3 percent agreed) were compared with Coast Guard male recruits (55.0 percent agreed) and Air Force male recruits (60.0 percent agreed).

Female Marine Corps recruits expressed the highest agreement that husbands should help at home if the wife works (66.0 percent agreed), statistically higher than female Air Force recruits (20.0 percent) and female Army recruits (30.0 percent). Like their male counterparts, female Marine Corps recruits held fathers to high expectations for spending more time with their children, with 81.9 percent in agreement, statistically higher than their female Air Force (55.0 percent) and Coast Guard (60.0 percent) peers.

Male and female Marine Corps recruits showed less agreement with traditional gender roles than their civilian peers about to graduate high school and higher agreement that husbands and fathers should do more to help at home and spend time with their kids.

2. Gender equality of treatment and opportunity

Very high levels of agreement were found among Marine Corps and other Service recruits on items about equal opportunity and treatment of women. There were no statistically significant differences among recruits across all Services; levels of agreement with these items ranged from 80.0 to 100.0 percent across male and female recruits. Civilian high school seniors showed similarly high levels of agreement, albeit mostly at lower levels than recruits.

3. Benevolent sexism and hostile sexism

Overall, items capturing sexist attitudes elicited some of the largest differences between male Marine Corps recruits and their counterparts in the other Services. Statistically significant differences (detailed below) were noted between male Marine Corps recruits and other Service recruits on all four items. More than three-quarters of male Marine recruits (77.0 percent) agreed women should be cherished and protected, compared with 55.0 percent of male Army and Coast Guard recruits. Most male Marine Corps recruits (58.8 percent) agreed that women should be rescued before men in a disaster, compared with 30.0 percent of male Air Force recruits and 25.0 percent of male Coast Guard recruits. Nearly half of male Marine Corps recruits (46.7 percent) agreed that women get a kick out of teasing men sexually, compared with 15.0 percent of male Air Force recruits. Close to half of male Marine Corps recruits (47.6 percent) agreed that women complain about discrimination when they lose to men, compared with only 15.0 percent of male Navy recruits.

Female Marine Corps recruits held views close to the overall average of female recruits, except they were most likely to agree that women complain about discrimination when they lose to men. They did not differ significantly from any specific group, although statistical tests indicate overall differences between Services on the item assessing whether women should be rescued first, likely driven by the difference between female Coast Guard and Navy recruits.

4. Conclusions and implications about gender attitudes from Army, Navy, Air Force, and Coast recruits as compared with Marine Corps recruits

Differences between gender attitudes of Marine Corps recruits and those of recruits from the Army, Navy, Air Force, and Coast Guard are statistically significant. In particular, the evidence that male Marine Corps recruits show the highest levels of sexist attitudes, both benevolent and hostile, is the most consistent difference between Marine Corps recruits and other Service recruits. Male Marine Corps recruits are leaving recruit training with higher levels of sexist attitudes than peers in other Services and are bringing these views into integrated training and working environments. Female Marine Corps recruits appear to hold gender-related attitudes consistent with their peers in other Services, with the exception of holding husbands and fathers to high expectations to help with family, which is significantly higher than female peers in other Services.

Although a more comprehensive analysis of benevolent and hostile sexism is outside the scope of the current study, the DoD Office of People Analytics (OPA) has begun including measures of these qualities in their Workplace and Gender Relations surveys of active-duty and National Guard/Reserve populations. The recent OPA 2019 Workplace and Gender Relations Report (Breslin et al., 2020) summarizes data on sexist attitudes among Reserve component populations, and the active-duty report will be released in the future. Results from individual items not included in OPA's report may be of interest to Marine Corps leadership for comparison with data presented in this study to better understand the prevalence of these attitudes in the broader Marine Corps population and across peer Services.

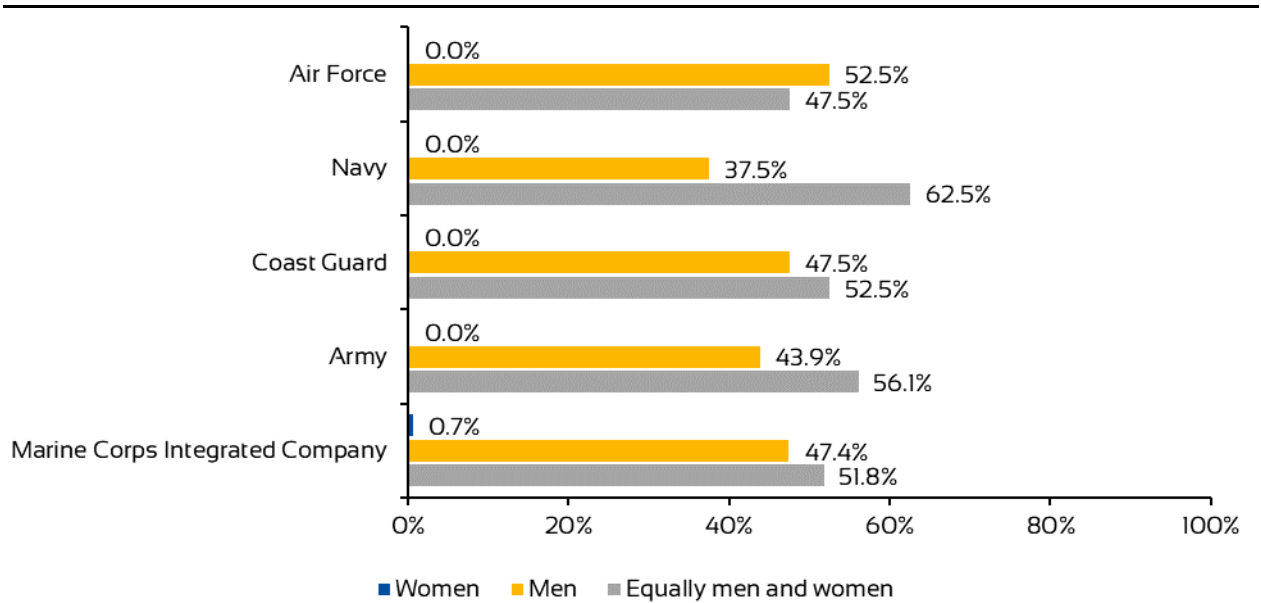
D. Recruit Perceptions of Gender Suitability for Military Roles

The survey asked recruits to select whether men, women, or equally men and women were best suited to serve in the following military roles: drill instructors (or equivalent), infantry or combat, leaders at the highest levels of their Service, special forces, intelligence, administration, healthcare, and engineering. With the exception of infantry and special forces roles (discussed in greater detail below), large majorities of recruits across all Services believed that men and women were equally suited for all roles, with the percentage of those agreeing (agree or mostly agree) usually exceeding 80 percent.

For infantry or combat roles, recruits from all branches were relatively split on whether they felt men were best suited for those roles or equally men and women (see figure 9.3). Almost no recruits felt that women were better suited for combat or infantry roles. A majority of Navy recruits (62.5 percent) felt men and women were equally suited for infantry or combat roles. As a Service, the Navy has fewer traditional infantry and combat roles (with the exception of Navy SEALs).

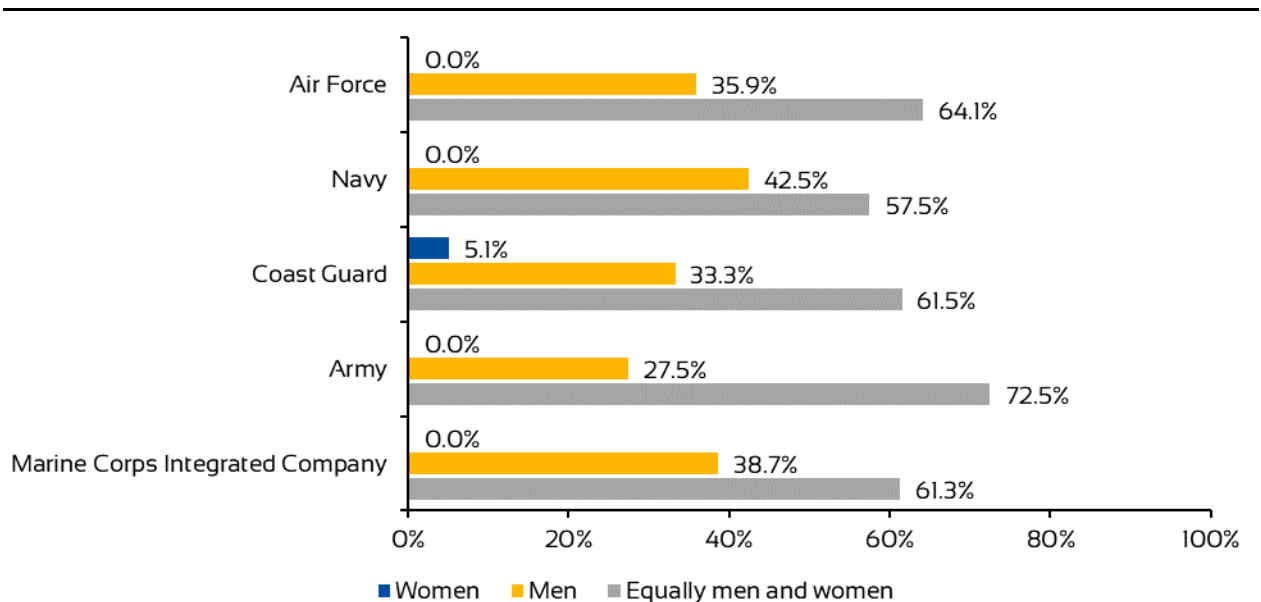
For special forces roles, most recruits in all Services believed men and women were equally suited (see figure 9.4). The highest percentage of recruits who felt men and women were equally suited for special forces roles was in the Army (72.5 percent), with the lowest in the Navy (57.5 percent). Again, very few to no recruits felt women were better suited for special forces roles.

Figure 9.3. Percentage of Recruits Who Believe Men, Women, or Equally Men and Women Are Best Suited for Infantry and Combat Roles, by Service



Note: At the time of data collection, Army and Coast Guard recruits experienced gender-integrated training and Navy and Air Force recruits experienced gender-segregated training.

Figure 9.4. Percentage of Recruits Who Believe Men, Women, or Equally Men and Women Are Best Suited for Special Forces Roles, by Service



Note: At the time of data collection, Army and Coast Guard recruits experienced gender-integrated training and Navy and Air Force recruits experienced gender-segregated training.

E. Recruit Experiences With and Preferences for Gender Integration

Survey and focus group data provide insights into recruits' experiences with and preferences for gender integration across the Army, Air Force, Navy, and Coast Guard. At the time of data collection, the Air Force and Navy were segregating recruits by gender during training as a risk mitigation practice for COVID-19, according to the following plans:

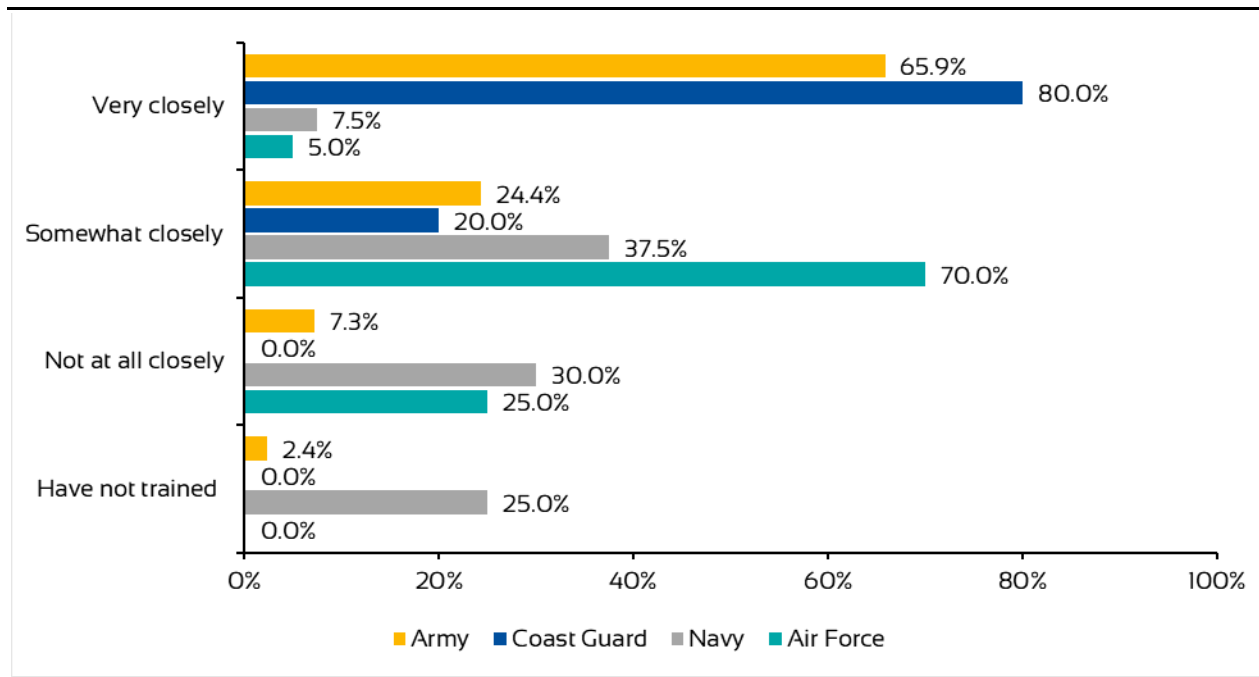
- The Navy conducted gender-segregated basic training, with recruits training with their same-gender division/compartment for the entire training cycle
- The Air Force conducted gender-segregated training, with trainees in segregated flights, except for the Basic Expeditionary Airman Skills Training (BEAST) culminating exercise during week 6, for which recruits integrated

During the pandemic, the Army implemented a new “yellow” phase in which recruits train in gender-segregated platoons for the first 2 weeks of BCT. Recruits integrate at the platoon level after yellow phase. The Army has continued to move forward with conducting gender-segregated training during yellow phase for 2 weeks, with gender integration at the platoon level for the remainder of training. The Coast Guard did not change or alter their gender integration practices at any time during the pandemic, aside from instituting a ROM quarantine period prior to training.

Recruits reported various levels of closeness in working with recruits of the opposite gender during training, and answers varied substantially among branches (see figure 9.5). Participants were asked to rate how closely they worked with the opposite gender: “very closely,” “somewhat closely,” “not at all closely,” or “have not trained.” Unsurprisingly, in Services where recruits experienced gender-integrated training (Coast Guard and Army), the majority of recruits reported working “very closely” with recruits of the opposite gender. In Services where recruits did not experience integration (Navy and Air Force), the majority of recruits reported either training “somewhat closely” or “not at all closely” with recruits of the opposite gender.

Although not shown in the figure, the majority of Marine Corps recruits in Integrated Company (67.9 percent) reported having worked “somewhat closely” with members of the opposite gender, and 26.3 percent said they had worked “very closely” with the opposite gender during training (see figure 8.9 in chapter 8 for additional details on Marine Corps training model perceptions of training closeness). While approximately one-quarter of Marine Corps recruits reporting they worked “very closely” with the opposite gender is not negligible, it is also far below the proportion of recruits in Services who experienced integration at the lowest unit level (Army and Coast Guard), suggesting current integration in the Marine Corps is not equivalent to the training experiences of those who are integrated at the platoon equivalent level.

Figure 9.5. How Closely Recruits Reported Training With Members of the Opposite Gender, by Service



Note: At the time of data collection, Army and Coast Guard recruits experienced gender-integrated training and Navy and Air Force recruits experienced gender-segregated training.

Recruits further elaborated about their integrated and nonintegrated experiences in the focus groups.

1. Nonintegrated recruit experiences: Navy and Air Force

Navy and Air Force recruits experienced all or the majority of their training in gender-segregated units. However, their day-to-day experiences differed based on Service approaches. The only time male and female recruits in the Navy interacted with one another was on quarterdeck watch; otherwise, recruits were separated and told not to look at or talk with one another for any reason.

Navy Recruits, Female, Focus Group 1

Recruit A: *We're supposed to be sisters and brothers, but we can't even speak a word to them.*

Recruit B: *They can't even look at us.*

Recruit A: *Without being threatened to be sent back.*

Navy Recruits, Female, Focus Group 2

Recruit A: *When we go places, we go right after each other. We're not together in a group setting.*

Recruit B: *The only thing we're together in is the gas chamber.*

Recruit C: *Even in classes, it's not integrated. We're just co-located.*

Recruit D: *We don't know how to interact with the other gender.*

Recruit E: *They're not teaching females how to work with men in the real world. We haven't gotten to work with them in the real world. If they taught us how to work with them and say, "This is how you work with them," then that would be helpful. It would be more helpful than here, where you're together but not together.*

Recruit B: *They teach us to fear each other, but they should teach us how to work together instead. They just tell us, "Don't look at or talk with them."*

Navy Recruits, Male

Moderator: How often and in what context do you interact with recruits of the opposite gender?

Recruit A: *None.*

Recruit B: *Never.*

Recruit C: *We're not allowed to have casual conversations, even when we go to medical. If you talk to a female in the first week of training ... I talked to a female because she was about to graduate, and they yelled at me like it was fraternization, even though I wasn't flirting or anything.*

Navy recruits felt the separation reinforced unhealthy competition between men and women and stoked the fires of gender stereotypes.

We aren't allowed to interact with them; they are just a presence. They're competition. We have class with them where we can't interact with them at all.—Navy recruit, male

If men already have ideas of men versus women and think that men are better, then this makes things even worse. Male RDCs don't do anything—we hear them say to brother division, "Even sister division can do it." Yeah, we can stand at attention because we're not stupid. If we had integration and they could rely on us more, then we could have more respect from the RDCs and the male recruits. They would need us.—Navy recruit, female

We had class yesterday about gender stuff. I think it would have been useful to have a female division there. It got gross in there. The instructor asked us, "What are stereotypical things for males and females? Derogatory names for transgender people? For males? For females?" It got weird and not great. And I think if a female division had been there, it would've been a different atmosphere because we could have heard a different side of the story. What does a female think is stereotypical?—Navy recruit, male

Air Force trainees also experienced gender-segregated training but were allowed to interact and talk with opposite-gender trainees in specific contexts, such as during class breaks and at BEAST. Trainees in flight leadership positions also were able to interact with opposite-gender recruits.

It was nice to work with the guys. We never get to talk with them. For the majority of the time, you can't talk with them unless you're in class. In BEAST, we could have coed teams. One of our trainees from our flight didn't have partners who were the same gender as her, and she did the DFP [defense fighting position] with a guy, which was in an open environment.—Air Force trainee, female

We are in the dorms all the time. We only leave to go to chow, class, an appointment, or drill. Out of those four things, we only get to talk to them in class. You can't even talk to your wingman.—Air Force trainee, female

Air Force Trainees, Male, Focus Group 1

Trainee A: *The interaction level is really low. The only time we have the freedom to talk—and that's only because we have pretty decent teachers—is in the classroom. On Sundays, it's just two people going to the dorm and saying, "What time are y'all falling out? We're falling out at this time." That's it.*

Trainee B: *BEAST was really a change, because when we were in DFPs, we had sister flight come over and it was our first time interacting with them. I could figure out how they're doing, how the MTIs are in their dorm. It was a cool experience. I wish we had more of that throughout Basic.*

Air Force Trainees, Male, Focus Group 2

Trainee A: *BEAST was definitely the most relaxed time to talk with other people like our cousin flights and other dorm chiefs. We talked with sister flight and interacted on a level as if we were on active duty, as if we were actually there to serve. We were interacting on a human level, not just, "We're falling out in 5 minutes; are you as well?"*

Moderator: Did you complete tasks together with them or alongside them?

Trainee B: *Completed tasks. That's when we felt most like a squadron.*

Trainee C: *DFPs are teams, and we get scenarios like people entering the base. Sometimes we're paired up with a female and vice versa. Sometimes you get a male and you have to complete the Village.*

Air Force Trainees, Female

Moderator: How often and in what context do you interact with recruits of the opposite gender?

Trainee A: *Just in the classroom.*

Moderator: Are you sitting on separate sides of the room?

Trainee B: *Yeah. During break time, we get 10 or 15 minutes, so we could talk with them then.*

Trainee A: *It depends on the MTI. We got yelled at so bad one time because we were not supposed to interact.*

Trainee A: *One MTI, she never had a problem with us talking. But the male MTIs came in and they didn't even want us to switch sides or talk with them at all.*

Air Force and Navy recruits were frustrated with the lack of gender integration at recruit training they experienced and wished that they were able to work with members of the opposite gender throughout training. In some cases, Air Force and Navy recruits experienced integration similar to Marine Corps Series Track and Integrated Company models (e.g., being co-located in the classroom), but recruits did not consider this gender-integrated training.

2. Integrated recruit experiences: Army and Coast Guard

Recruits in the Army and Coast Guard experienced gender-integrated training at the time of data collection. Army trainees were integrated at the platoon level for 8 of 10 weeks of their training. Army trainees characterized platoon integration after yellow phase as bumpy, but things quickly smoothed out within a few days to a week, especially after collective training events brought them together to accomplish a task.

[Integration] took about a week and a half of our training away. People were just talking trash, and some people would flip out over dumb crap. And it was always male-female. It was a big hindrance for a while before we actually started to know the people we were with.—Army trainee, male

The first 2 weeks when we weren't integrated, some of the platoons weren't taught certain things, so everyone was at a different level. First platoon, we learned things, but 2nd, 3rd and 4th didn't, so it was almost like we were falling behind on time.—Army trainee, female

I'll be the first to say that when we integrated, it was awkward. It took a while to get used to. But after the first obstacle course and confidence course, there was more bonding. As training continued, we got to be closer battle buddies and friends. In red phase, though, it becomes teamwork. It's awkward at first, but you grow.—Army trainee, male

I would say it took about a week to feel comfortable after integrating.—Army trainee, male

I feel like it would have been better if we just arrived there and we integrated right away. COVID made this hard. In quarantine, we were always with the females. So the first week of being integrated was rough. All the females knew each other, and when we integrated, it broke apart that camaraderie. There is still camaraderie, but COVID has changed things.—Army trainee, female

Female Army trainees described how drill sergeants for integrated platoons tried to break up male-male and female-female groups or pairings for training exercises throughout the training cycle.

Trainee A: *The boys will automatically go with each other and leave the girls. They leave us with each other.*

Trainee B: *Yes.*

Trainee C: *Our drill sergeants make the teams, and you have to have at least two females.*

Trainee D: *They [drill sergeants] don't do anything to us; we know that we can do it by ourselves. They split everyone into platoons.*

Trainee E: *In 2nd platoon, the guys, the first thing was the confidence course and Fit to Win. We were scared we would be left out, but they made sure that the guys were like, "We need to grab the girls." The trainees said that. Our platoon had to move in the group so we've never felt left out.*

Trainee F: *It depends. The last time when we were doing stations, we formed our group; most guys went together. The drill sergeant came and she made us integrate. She said that there can't be a whole female group.*

Male and female trainees described gender biases and sexism among trainees (see section H for more detail). Army trainees also described different integration experiences based on the quality of their working relationships with members of their platoon; some experienced positive opposite-gender interactions while others did not.

Coast Guard recruits experienced integrated training from day 1, and both genders agreed that training was equal and created a deeply shared bond.

It doesn't matter the background, we're all shipmates together. We're all going to sweat together and sink together. Whatever the task is, you will execute it together.—Coast Guard recruit, male

For me, I don't feel like we're the minority because of how they treat us. They treat us exactly the same.—Coast Guard recruit, female

I think the boys ... I like having them here because there are so many of them, so they focus on them more. The boys are really respectful—most of them—and really nice. They help us and we help them. They don't discriminate against us.—Coast Guard recruit, female

Coast Guard Recruits, Female

Recruit A: *I have yet to hear an example of when we were treated differently here. [Name] is correct, but not here where we aren't treated differently from the boys. We're treated the same.*

Recruit B: *We do IT [incentive training] sessions together.*

Recruit C: *Same time objectives.*

Recruit D: *Same gym coordinator.*

Coast Guard Recruits, Male

Recruit A: *... the females all stood in the middle, and they were the only ones sweating, even though they hit the time objective [and we were the ones that messed up], and we had to watch. Then, when given the option to continue the beating with us, they chose to keep getting beat.¹⁶⁴*

Recruit B: *That taught us sacrifice.*

Recruit C: *They're willing to do that for us. So okay, we have to be willing to do that for them. We have to help each other out so we don't get beat.*

Recruit D: *There's a mental aspect to the Coast Guard boot camp, so you are not just the one getting beat but you have teammates who will suffer for you. That was eye-opening to me. I thought, "I want to suffer for them now. It doesn't feel right to just watch them get beat."*

Recruit A: *There was an immense feeling of disappointment among the males because they [female recruits] had to suffer because of us. In early weeks, we probably wouldn't have felt it as strongly. Maybe because we had to suffer together, we felt it so strongly.*

Coast Guard recruits reported some issues related to integration, such as unfocused recruits, new additions to the company, and male recruits who were fearful to interact with women after their sexual assault prevention training. Generally, recruits felt these were minor issues during the training cycle. Male and female Coast Guard recruits overwhelmingly described sharing a family bond with one another.

¹⁶⁴ "Beat" is slang for physical training used in a disciplinary manner, similar to Marine Corps IT.

I think we have small cliques working together amongst themselves and against other people. It's just a big joke to them. They're joking even though they're doing a lot of extra sweat. We have a lot of sour apples to go through and pick out.—Coast Guard recruit, female

You asked about if we bond with the females. Yes, we do, but it's difficult to bond if you get a new female in week 6 or 7 because the whole pack is already formed. We know each other by then. And there are restrictions about how to interact with females. At that point, it's very difficult to try to tell the new females, like, "Hey, we're here for you." It becomes complicated.—Coast Guard recruit, female

When we first got here, we went over assault and reporting. The males did not speak to us at all because they were scared of us. They did not know how we would react to them.—Coast Guard recruit, female

3. Recruit perceptions of platoon, flight, division, or company cohesion

Recruits were asked to rate their agreement¹⁶⁵ with a series of statements about their platoon (or equivalent training unit) cohesion and dynamics:

- The members of my [platoon/company/division/flight] are cooperative with each other.
- The members of my [platoon/company/division/flight] know that they can depend on each other.
- When I face a difficult task, other recruits in my [platoon/company/division/flight] help out.
- Recruits in my [platoon/company/division/flight] really respect one another.

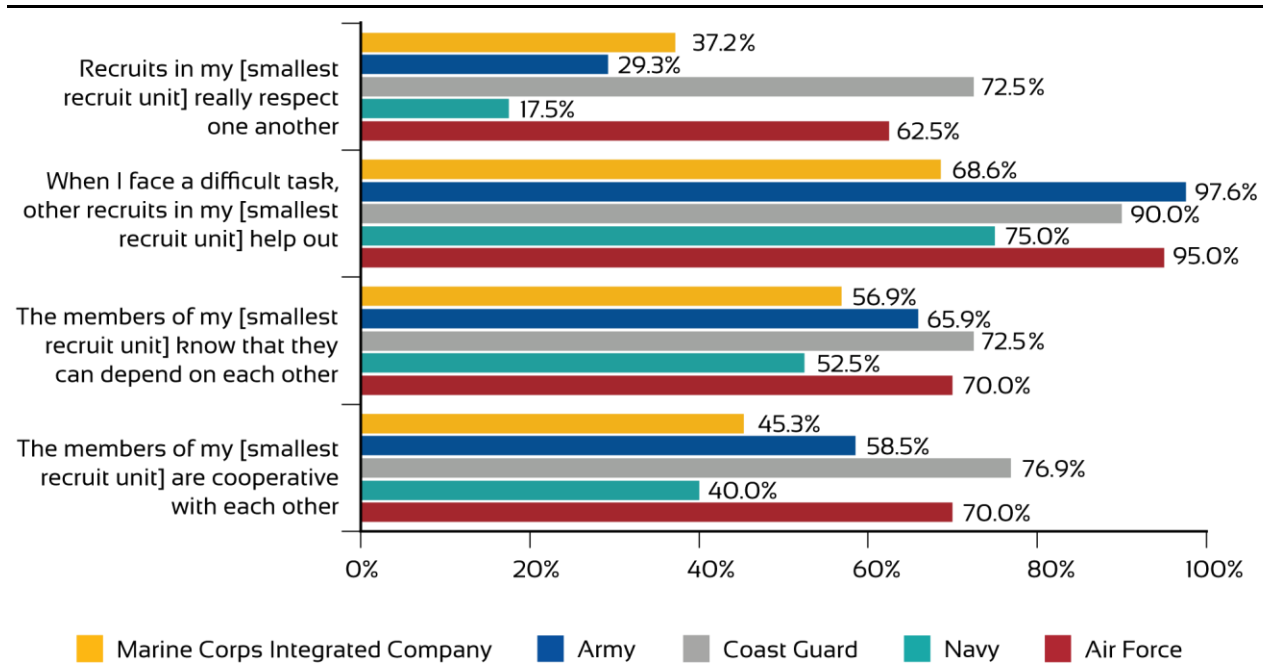
Across all Services, agreement prevalence (agree or mostly agree) was highest for the statement "When I face a difficult task, other recruits in my platoon help out." Majorities (albeit smaller majorities) of recruits across all Services also agreed or mostly agreed that recruits in their platoon or platoon equivalent know they can depend on one another (see figure 9.6).

There was more variability in agreement on the statements about recruits respecting one another and being cooperative with one another. Agreement (agree or mostly agree) that recruits really respect one another ranged widely, from 17.5 percent among Navy recruits to 72.5 percent among Coast Guard recruits; 37.2 percent of Marine Corps Integrated Company recruits agreed or mostly agreed. Agreement that recruits are cooperative with one another also varied considerably, from 40.0 percent among Navy recruits to 76.9 percent of Coast Guard recruits; 45.3 percent of Marine Corps Integrated Company recruits agreed or mostly agreed. Variations in agreement with platoon or platoon equivalent cohesion measures did not align with gender integration experiences, indicating that integration cannot explain better or worse outcomes with regard to how recruits feel about their fellow platoonmates. For instance, Coast Guard and Air Force recruits showed some of the highest levels of agreement with these

¹⁶⁵ Response options were "disagree," "mostly disagree," "neither," "mostly agree," and "agree."

statements yet experienced vastly different levels of gender integration in their training. The most striking difference between Coast Guard and Air Force and all other Services was on the measure about recruits really respecting one another. The study team observed Coast Guard and Air Force leaders and instructors conducting explicit conversations and training on respect, pointing to the importance of training and socialization about respect regardless of gender integration levels.

Figure 9.6. Percentage of Recruits Who Agree or Mostly Agree With Platoon or Platoon Equivalent Cohesion Statements, by Service



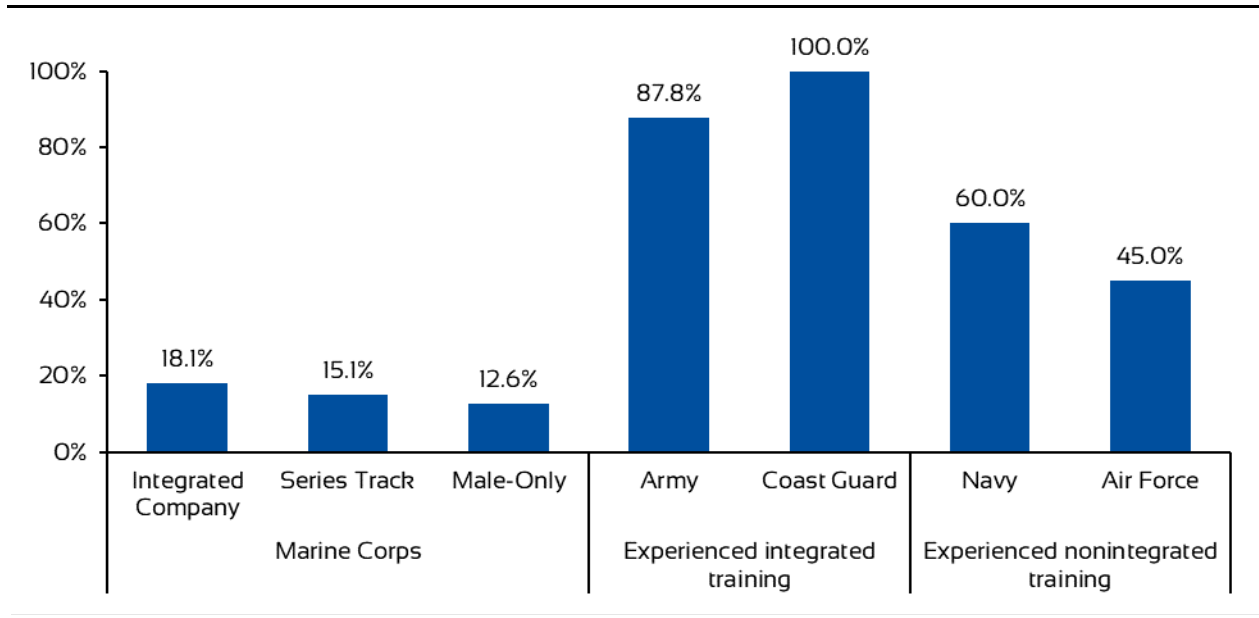
Note: At the time of data collection, Army and Coast Guard recruits experienced gender-integrated training and Navy and Air Force recruits experienced gender-segregated training.

4. Recruit preference for training at the lowest unit level

The survey asked recruits about their desire for gender-integrated training at each level. Support for training with opposite-gender recruits at the lowest unit level¹⁶⁶ (i.e., platoon equivalent) varied among Services. An overwhelming majority (87.8 percent to 100.0 percent) of recruits in Services with gender-integrated recruit training (Army and Coast Guard) believed that gender integration should be implemented at the lowest unit level (see figure 9.7). Navy and Air Force recruits, who did not experience gender-integrated training, showed less support for integrated training at the lowest unit level (60.0 percent and 45.0 percent, respectively) but showed much higher support than any Marine Corps training model. Support for gender-integrated training at the platoon level was low among Marine Corps recruits in every model, with support never reaching above 20 percent. These data suggest that most recruits who experience gender-integrated training prefer integration at the lowest unit level.

¹⁶⁶ Lowest unit level is platoon for Army, company for Coast Guard, division for Navy, and flight for Air Force.

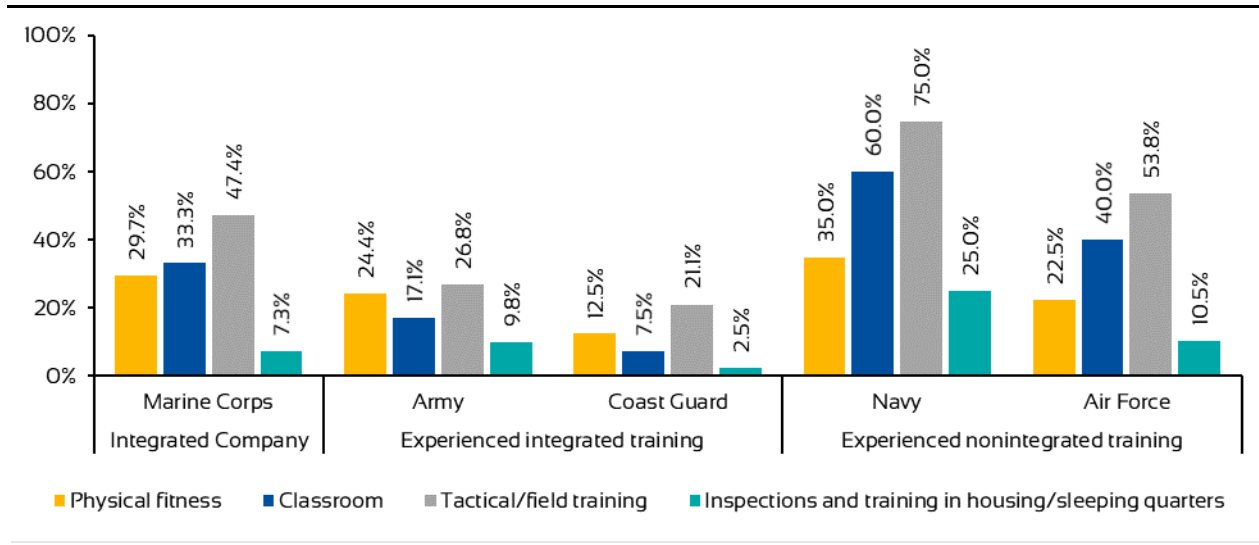
Figure 9.7. Percentage of Recruits Who Support Training With the Opposite Gender at the Lowest Unit Level, by Service



5. Recruit preference for more integration at specific types of training events

Recruits were asked to rate their preferred integration level (more integration, less integration, or satisfied with current integration) for four categories of training activities: physical fitness, classroom, tactical/field training, and inspections and training conducted in housing/sleeping quarters. Recruits in the Navy and Air Force who did not experience gender-integrated training generally favored more integration in their training activities, compared with recruits in the Army and Coast Guard who experienced gender-integrated training (see figure 9.8). Classroom and tactical/field training garnered the most support for increased gender integration among Navy and Air Force recruits; support for these training activities was greater than support among Marine Corps recruits in Integrated Company. The vast majority of Army and Coast Guard recruits who did not prefer more integration indicated they were satisfied with current integration levels in all training activities; the same was true for Navy and Air Force recruits. Across all Services, recruits rarely favored less integration for any training activity.

Figure 9.8. Percentage of Recruits Who Prefer More Integration in Select Training Activities, by Service



Examining recruit preferences for integration of training activities by gender reveals notable differences by gender and Service (see figure 9.9 for male recruit preferences and figure 9.10 for female recruit preferences). For the most part, male recruits from the Army, Coast Guard, Navy, and Air Force expressed a desire for more integration in training activities than their fellow female recruits; exceptions included physical fitness training for male Navy recruits and tactical/field training for male Army recruits. The opposite pattern emerged from the Marine Corps Integrated Company recruits: a much greater proportion of female recruits wanted more gender-integrated training in these training categories than their male counterparts. Male recruits from the Marine Corps Integrated Company favored more integration for training activities at proportions akin to Army and Coast Guard recruits, who experienced integrated training at the lowest unit level. Female recruits from the Marine Corps Integrated Company, on the other hand, favored more integration, akin to the Navy and Air Force, who did not experience gender-integrated training. These striking differences may indicate that male recruits in the Marine Corps have divergent perspectives on gender integration from their male counterparts in all other Services, regardless of gender-integrated training levels.

Figure 9.9. Percentage of Male Recruits Who Prefer More Integration in Select Training Activities at the End of the Training Cycle, by Service

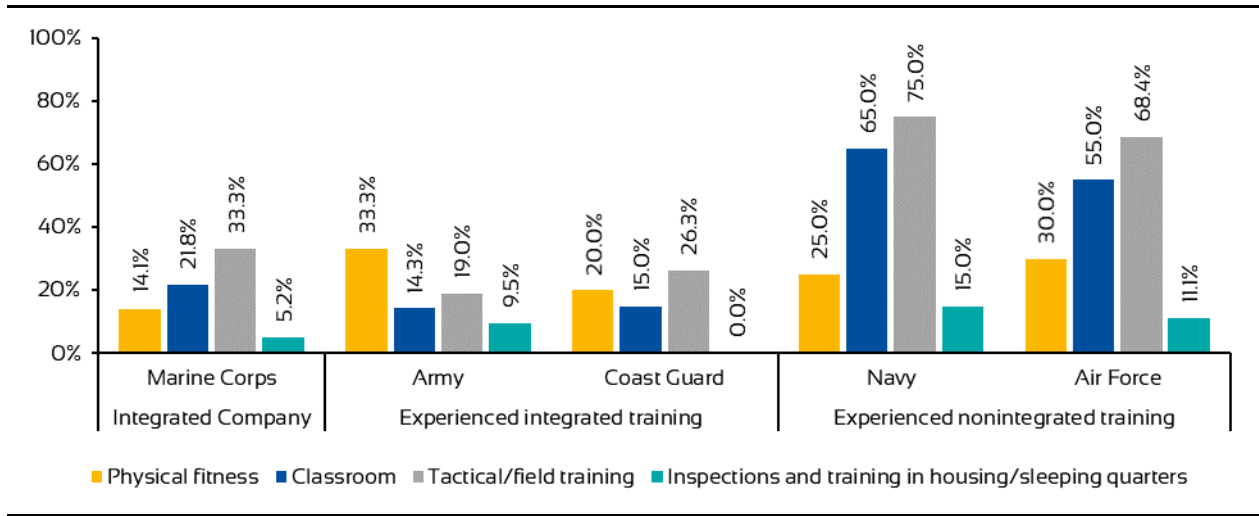
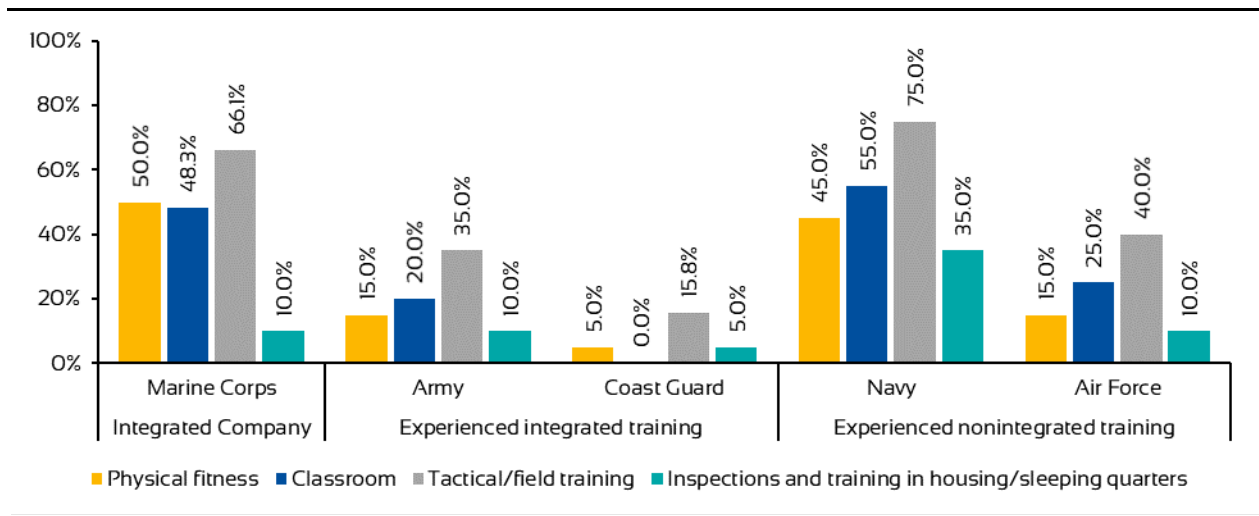


Figure 9.10. Percentage of Female Recruits Who Prefer More Integration in Select Training Activities at the End of the Training Cycle, by Service



F. Perspectives on Instructors

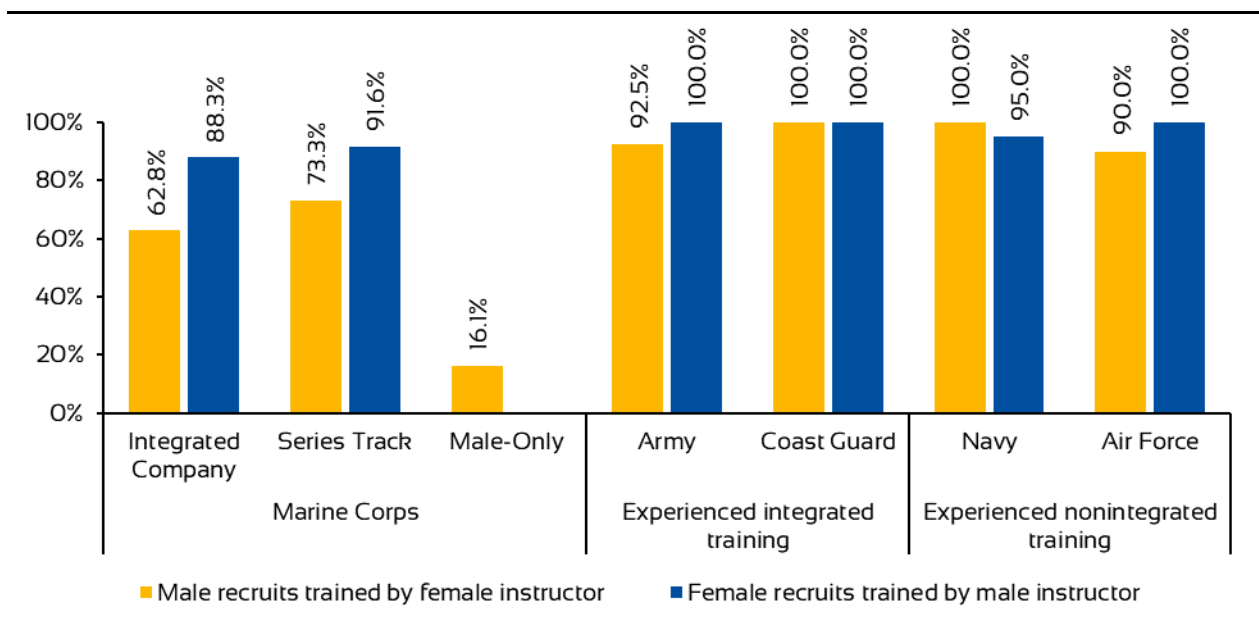
In all Services, instructors shape and mold the training experience for recruits. In the Army, Air Force, Navy, and Coast Guard, mixed-gender drill instructor teams are responsible for training recruits, contrasting with the Marine Corps, where recruits are trained exclusively by same-gender drill instructor teams. The social science survey asked recruits if they had an instructor of the opposite gender during their time at recruit training.¹⁶⁷ The overwhelming majority of

¹⁶⁷ The survey question purposefully asked about the broader category of “instructors”; it did not specify drill sergeant, military training instructor, company commander, recruit division commander, or drill instructor.

recruits in other Services (90.0 percent or greater for Army, Coast Guard, Navy, and Air Force) reported training under an instructor of the opposite gender (see figure 9.11).

The majority of Marine Corps recruits in Series Track and Integrated Company had experienced training by an instructor of the opposite gender, though the percentage of men trained by a female instructor for every training model was lower compared with the other Services. These data suggest that the vast majority of male recruits in other Services are exposed to female instructors, while a sizeable proportion of males in the Marine Corps are not. Of the recruits in the Male-Only track at MCRD San Diego, only 16.1 percent reported training under a female instructor.

Figure 9.11. Percentage of Recruits Who Reported They Were Trained by an Instructor of the Opposite Gender, by Service



Recruits were also asked to rate their level of agreement¹⁶⁸ with a series of statements about their instructors:

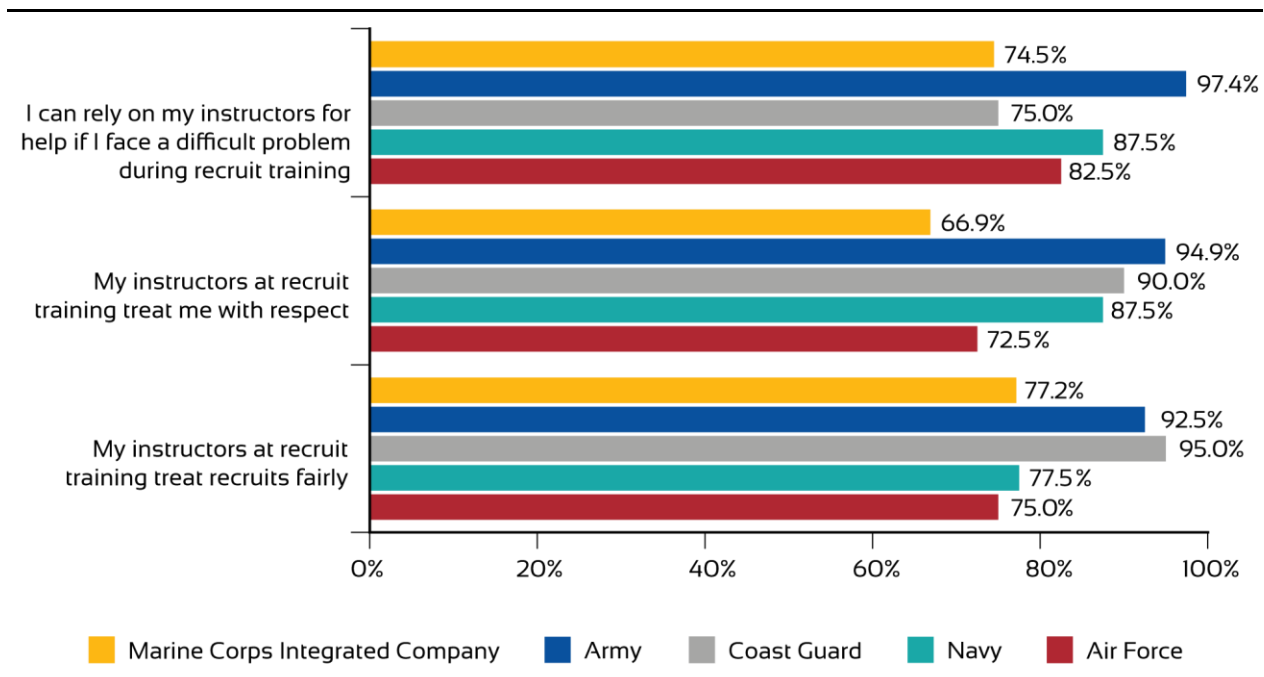
- My instructors at recruit training treat recruits fairly.
- My instructors at recruit training treat me with respect.
- I can rely on my instructors for help if I face a difficult problem during recruit training.

The majority of recruits in all Services agreed or mostly agreed that instructors treat them fairly, treat them with respect, and help when they face a difficult problem (see figure 9.12). The size of the majority, however, varied somewhat across Services. For example, 97.4 percent of Army recruits agreed or mostly agreed they could rely on their instructors if they faced a difficult

¹⁶⁸ Response options were “disagree,” “mostly disagree,” “neither,” “mostly agree,” and “agree.”

problem during recruit training, compared with 82.5 percent of Air Force recruits and 74.5 percent of Marine Corps Integrated Company recruits. The lowest percentage of agreement across these measures was for Marine Corps Integrated Company recruits: 66.9 percent agreed that their instructors treat them with respect. In general, Marine Corps Integrated Company recruits had lower levels of agreement that their instructors treat them fairly and with respect compared with the other Services; across all three measures, Army recruits had the highest or second highest levels of agreement. Recruit integration experiences in the other Services did not seem to play a clear role in recruits' views of their instructors.

Figure 9.12. Percentage of Recruits Who Agree/Mostly Agree Their Instructors Treated Them Fairly, With Respect, and Were Helpful, by Service



In the focus groups, recruits shared more detailed and nuanced perceptions on experiences with drill instructors.¹⁶⁹ Across all Services and for both genders, recruits shared similar perspectives on the role of drill instructors in developing basically trained Service members. Male and female recruits described some differences in how male and female drill instructors embodied their roles and reported disparities in their interactions with recruits of different genders.

1. Instructors instilled values such as discipline, motivation, responsibility, and accountability to prepare recruits for military service

Male and female recruits from various Services felt their instructors, above and beyond any other duty, were responsible for instilling values throughout training. While values differ slightly among Services, recruits generally highlighted discipline, motivation, responsibility, and

¹⁶⁹ Focus group data were aggregated for analysis; similarities and differences were analyzed between male and female recruits, by Service branch, and between levels of gender integration, where applicable.

accountability as critical elements in their development and ascribed the teaching and reinforcement of these values to drill instructors.

Teaching us discipline and professionalism because we are ambassadors of the Air Force, and we represent the Air Force. If they teach us those, at least we know how to act. ... They need to be stricter on being professional.—Air Force trainee, female

We've heard it since day 1. Discipline. We all come from different places. They are trying to turn us into one person, to have a similar mindset when we're out of here. Trying to develop that the entire time.—Army trainee, female

Attention to detail. A lot of what they [RDCs] get on us about is if they ask us to do something, you can't assume past that. You have to do it to a T. Having a high standard of execution of a task is making sure you're moving something 1 inch to the left or making sure it's angled this way.—Navy recruit, male

The big thing [our company commander (CC)] is teaching us is how the little things get to the bigger things.—Coast Guard recruit, male

Someone who shows you you can do more than you think you can. ... I didn't think I could do the stuff that we did here. I loved having [that encouragement].—Air Force trainee, female

Now that we're almost graduating, they have a set standard. As our senior drill sergeant, she always has a standard. She was more compassionate, but also the most disciplining. Whenever the bay was dirty, she would say, "This isn't clean. In 20 minutes, this will be hell." If you're doing PT wrong, they make you do it again because you're not doing it right.—Army trainee, male

Teach us more accountability and how to take control of what we're doing.—Navy recruit, female

2. Recruits valued instructors as leaders and role models who care and invest in their development

Recruits described looking up to their instructors as role models and exemplary Service members in their respective Services—individuals they could emulate. Perceptions of good leadership were amplified when recruits felt their instructors cared about them and their development throughout recruit training. Drill instructors who were not invested or were overly strict without explanation or purpose were described by recruits as having a detrimental effect on the training environment.

I feel like their role [RDC] is to see where everyone lacks and needs help with, and tear us apart and build us back up. You suck at running, so they'll help you run. Or you suck at being a leader, so they'll put you in leadership roles. I think that's the most important thing, to be able to look at one person and see how to help them.—Navy recruit, female

It's usually the drill sergeants that are tough on you. ... They'll be cool, but won't take shit. There's a time and place for everything. They can joke, but if you go overboard, they'll set you straight.—Army trainee, male

I feel like a good MTI can adapt to the trainees' needs. Some trainees need to have a stricter person in charge of them. Others need another approach. A good MTI can sense that.—Army trainee, female

... I would say that a good RDC knows very well how to walk the line and give you professionalism in the right moments and can also be a human every now and then. It's really important to achieve person-to-person interaction, but it doesn't necessarily have to be RDC-to-recruit interaction 24/7. Let's be honest, that's not how it is in the fleet. Once you get out of this strictly controlled environment, you won't have this. Attention to detail is still important, but for morale here at boot camp, it's really important to have some of that human character.—Navy recruit, male

... one of our CCs talked to me specifically because everyone was doing something stupid, and I'm one of the squad leaders, and they said, "Why aren't you helping out?" I said, "I think I'm a weak leader." And then we were talking about weakness. They asked me, "Is it better to be feared or is it better to be a respected leader?" I was like, "That's interesting," and started thinking about how that related to boot camp.—Coast Guard recruit, male

I like when they're stern and honest but also treat you like a human. There are some of them who will, like, ... walk into our compartment and say, "Recruit, get the fuck out," and just yell. I'm still a person. I'll be doing a job for my RDC, and he'll just yell at me. Our own RDCs don't talk to us like that. Our RDCs will just tell us, "We're being real with you, and this is what you have to step up on."—Navy recruit, female

Recruits emphasized the powerful impressions made by engaging with the human side of their drill instructors. This is a stark contrast to the leadership and role modeling approach taken by the Marine Corps, where drill instructors project unrelenting perfection at all times and rarely break from their drill instructor persona. Also in contrast to the Marine Corps approach, Army trainees specifically appreciated drill sergeants who demonstrated personal investments or self-sacrifices in the training process, interpreting this behavior as a sign of remarkable leadership.

There's one drill sergeant here that I really like. Anytime we screw something up, he'll do the exercises with us while he's smoking¹⁷⁰ us. It feels better, just because when you're watching them stand there, it looks like they're doing this to us for fun. But when I see that, it's like they care.—Army trainee, male

There's a drill sergeant who's not in our platoon, but he takes into consideration how we feel. All trainees are issued a boot pair which sucks. All other drill sergeants wear their

¹⁷⁰ "Smoking" is slang for physical training used in a disciplinary manner, similar to Marine Corps incentive training.

own boots, but he wears the kind we wear. So it's like he has respect, not only for us, but for the equipment, and it's just like ... it's more trust.—Army trainee, male

Our drill sergeant is a perfect example. He would definitely put us in our place, but he would immediately tell us after what we did wrong and how to do better.—Army trainee, male

During the last ACFT [Army Combat Fitness Test], a lot of people weren't having a good time with the 2-mile run. But the drill sergeant was running with them, and the trainees had a good pass rate because the drill sergeant didn't sit by the side.—Army trainee, male

The study team also witnessed this approach by Army drill sergeants. During the night infiltration course exercise in the Forge, a few trainees were the last to finish the long crawl through the sand to the end point. The exercise was over, and floodlights beamed across the area once pitch-black with gunshots flying overhead. The lights signaled to trainees that they were dead last to complete the exercise, but several drill sergeants approached to encourage them as they crawled toward the end. A drill sergeant began crawling in the sand next to a trainee, saying, “*Show your courage, face your fears, let's go!*” and “*You're almost there. Hurry up. You can do it.*” This type of leadership may explain the substantial number of Army trainees who agreed with the statements on fairness, respect, and help from drill instructors (see figure 9.12).

3. Recruits perceived differences in how men and women embodied their role as a drill instructor

Similar to Marine Corps recruits, recruits from the other Services described differences in how male and female drill instructors fulfilled their role; many of these reported differences align with how Marine Corps recruits perceived male and female drill instructors. Male and female drill instructors were seen as having a mix of opposing traits: female drill instructors were scary but also more compassionate, while male drill instructors displayed intensity but also possessed more understanding. During the focus groups, recruits were asked, “What are three words you would use to describe [male/female] drill instructors?”

Female drill instructors were perceived as “scary,” more demanding, and more compassionate or empathetic

Recruits from the other Services shared the same pervasive perspective as Marine Corps recruits: female drill instructors were “scary” and terrifying. Recruits from every Service and of both genders felt this way.

Females [MTIs] are scarier. [Another trainee verbally agrees.] They have a different approach to training and the business environment. They yield better results in some cases.—Air Force trainee, female

I think female RDCs put up a “top dog, I'm the scary one” act, the bad guy act. I think in my experience, sometimes they put up too much, to the point where we get disconnected.

Our male RDCs are on us, but then they tell us stories, too. With female RDCs, though, it's just the wall.—Navy recruit, female

Army Trainees, Male

Trainee A: *If anything, [female drill sergeants are] more disciplinary. As much as the male drill sergeant get mad, they're not as strict as the female drill sergeant. When it comes to talking, she's like ... she has supersonic hearing, and screams, "Why are you talking?"*

Trainee B: *She smokes the ever-loving dogshit out of us. She's a fun drill sergeant, to say the least.*

Navy Recruits, Female

Moderator: What are three words you would use to describe female RDCs?

Recruit A: *Scary.*

Recruit B: *Very scary.*

Recruit C: *Tiny terror. Always small.*

Recruit D: *There's a female chief and she's ... I started shaking when I saw her.*

Recruit E: *Out of the training ships, the most terrifying person is always female. No matter the rank.*

Coast Guard Recruits, Male

Recruit A: *I was so afraid every time I heard this female CC from [name] company. [Others laugh and nod.]*

Recruit B: *She was fierce.*

Recruit A: *I was shaking. My instincts were telling me to just run. They [looking at others in the focus group] already know. [Others laugh.] She might be like 5'4" or 5'5". It doesn't matter.*

Female Air Force recruits commented on how female drill instructors have to “*prove themselves*” to “*show that they are alpha*” because the military and the training environment are male dominated; this perspective was also shared by male and female Marine Corps recruits (see section F in chapter 8).

Recruits from the other Services also felt female drill instructors, despite being scary, were more compassionate and empathetic.

For 1st platoon, our senior drill sergeant ... I liked her the most in the beginning. We were getting yelled at, but we could talk to her. She taught us all we need to know about the yellow phase tests. With the male drill sergeants, we were scared of them.—Army trainee, male

... you can talk to them [female RDCs] more. ... They can understand us more. It's easier to go to female RDCs because we deal with the same things.—Navy recruit, female

Our [female RDC] is more understanding. She understands when there is a vagueness to instructions or they're not clear, and no one in the recruit chain of command knows what's going on. She'll give me an honest answer rather than degrade me if I ask a question.—Navy recruit, male

In [name] company, the female CC—after I left the company for a failed PT test, she came down [to my squad bay] on two occasions and asked me if I was working out to make sure I pass. ... It makes me want to do better, knowing that the CCs believe in me.—Coast Guard recruit, male

Marine Corps recruits reported female drill instructors making more personally directed comments at recruits, especially female recruits; most recruits from the other Services did not describe this behavior from their female drill instructors.

Male drill instructors are perceived as intimidating, loud, funny, and reasonable or understanding

Recruits reported a wider range of adjectives for male drill instructors, but many centered on their embodiment of the role as “intimidating” and “loud.”

He [our male RDC] doesn't joke with us. Or play around with the RDCs that much. If we're being loud or if we're being ... he's the first one to flip out or be loud if we're being loud. He's said to us, "If I could beat you right now, I would." We'd do way more if we had him all the time. He's not one of the RDCs who plays favorites. We're all the same. No friendship with him—he's your RDC.—Navy recruit, female

Very intimidating, especially at our old squadron. But that is very important because some of our supervisors will be very intimidating.—Air Force trainee, male

[Male RTIs are] dominant, more aggressive.—Air Force trainee, female

The biggest thing is that they [male drill sergeants] bring a lot of energy to the table. They bring both negative and positive energy. Good cop, bad cop.—Army trainee, female

[Males CCs are] intense. Crazy.—Coast Guard recruit, female

Male drill instructors were also described as funny. One female recruit said, “I do feel like they're [male RDCs are] funny, but when it's time to be serious, they are on it.” Male drill

instructors were also described as being more understanding and reasonable, primarily by female recruits.

Our male MTIs are more professional, but they also know how to make us more comfortable with them in the most professional way. We're more comfortable with them. I think we get along better with the male than the female MTI. [Others nod.]—Air Force trainee, female

... [One of our male RDCs] he actually helps people who want to do better. Some of these people are not doing anything. They push those people so hard—and they have asthma—but they were motivated and put effort into helping the division. And then other RDCs help these individuals pass their run, and they don't do shit for us.—Navy recruit, female

Coast Guard Recruits, Female

Recruit A: *Our lead CC [male] is very reasonable—the most reasonable person I've met.*

Recruit B: *He will sit down with you and talk with you.*

Recruit C: *He is also good about the punishment fitting the crime.*

Similarly, Marine Corps recruits described male drill instructors as being more loud and intense in their training methods; however, they also felt that male drill instructors were more physical in their training methods and more knowledgeable about combat skills (recruits of the other Services did not share these perceptions).

4. Recruits did not have strong opinions about whether they prefer same- or opposite-gender drill instructors

Having experienced training from both male and female drill instructors, recruits from the other Services did not have strong opinions about whether they preferred same-gender or opposite-gender drill instructors. While some recruits expressed a preference, most recruits said they had no preference about instructor gender. Other recruits expressed preferences based on personality and their connection with certain drill instructors that were not based on gender.

I would go to my senior drill sergeant who is a female first because she is inspiring and I look up to her. Then I would go up to a male. I respect all of them, but I look up to the female. It's half and half.—Army trainee, female

I prefer a mixture to get both sides. You can tell the difference between how males and females are thinking. They work good together, so I think both would be good to have, rather than just male or female.—Navy recruit, male

We can't really say one is different from the other. They all have attention to detail. They're all trained in the same way. We all learn from the same way. They all have us do the same activities.—**Coast Guard recruit, female**

I have all-male RDCs, but I think it would be nice to have integrated RDC teams so you could get how both operate in the division. [Some nod.]—**Navy recruit, male**

I think there should be no preference, but we should all have both. With a male MTI, we get certain perspectives, and with female MTIs, we get a whole new one that we don't get as men.—**Air Force trainee, male**

Army Trainees, Male

Moderator: Do you prefer male or female drill sergeants?

Several trainees: [Shaking heads.] *No preference.*

Trainee A: *Some days I would rather have males, others female. Some days I don't want to do push-ups, some days I want to get smoked. It's not because they're female, but just the kind of person that they are.*

One notable exception is that female recruits felt more comfortable going to female drill instructors about issues related to their menstrual cycles. For some, this preference was driven by feeling more comfortable talking with another woman about these issues, while for others it was informed by interactions with male drill instructors who did not know how to handle it or acted uncomfortable.

... I was in distress because I had my period on and off, and I didn't notice I was bleeding all day. So my pants had a big stain in the back. I was running late to formation, so I put on my sweats and I just stood there. And everyone else was wearing PT gear too, but I had to put on sweats. And I knew I would be yelled at for that. We were told that if you had a personal matter that you don't want anyone to hear but need to tell the CC, then you need to raise your hand and say, "I have a personal matter." But then he said, "No, you don't. I don't care." So then I had to go up and change and then run back down with the stain on my pants. Some of the guys noticed and were like, "Are you okay? Oh, that's why you were wearing your sweats." Thank goodness it was during the night, so not as many people noticed. So if the CC had been a female, then maybe she would have noticed. But I even signaled to him, pointing down to my pants, but he didn't care.—

Coast Guard recruit, female

With the male RDCs, I think it's easier to deal with them than the female petty officer because the male petty officers—because we're females, whenever we have some stuff like we're on our period or we need to go to medical for feminine issues, they get uncomfortable. It's easier to get away with stuff or make them uncomfortable because of whatever female issues we have. For our senior chief and petty officer, we're their first female division. Our female petty officer doesn't care. She knows what it is.—**Navy recruit, female**

Army Trainees, Female

Trainee A: *One of the trainees got pads in the packages and the male drill sergeant was making fun of it. The female drill sergeant was sticking up for the trainee.*

Trainee B: *If we needed pads, they came and gave us them. Male drill sergeants say if you need some, I'll give it to you.*

Trainee A: *Not ours!*

Coast Guard Recruits, Female

Moderator: Do you think having female CCs would be helpful in specific instances?

Recruit A: *I do. We have to figure things out. We have 10-minute water breaks, but we're on the third floor, so if your tampon isn't going in ... if you have a feminine issue ... I'm not going to go out there and say, "It's not working out."*
[Some laugh.]

Recruit B: *A lot of heads don't have a compartment for [used] feminine tissues [or hygiene products]. So I have to awkwardly carry out that stuff to the trash can in the squad bay. And then I have to explain why I'm late to the CC in front of the whole company.*

Recruit C: *Just for him to say, "I don't care. You still have to meet the time objective [be down here at a certain time]."*

Recruit D: *That's one of the things. It would be a little more helpful in that aspect to have a female CC.*

Since Marine Corps recruits are trained by same-gender drill instructor teams, female Marine Corps recruits did not report these types of issues or problematic interactions with male drill instructors. These stories emphasize the need for male drill instructors to know how to properly handle and discuss menstruation-related issues when training in a gender-integrated environment.¹⁷¹

5. Recruits perceived differences in how male and female drill instructors treat recruits of the same or opposite gender

Most recruits felt drill instructors in their Service treated male and female recruits the same way, a practice that engendered trust in a gender-integrated training environment. However, some recruits identified ways they felt female recruits were treated differently by male and female drill instructors.

¹⁷¹ For a more extensive discussion of these issues from the perspective of drill instructors, see chapter 7.

Male drill instructors were described as being “softer” and female drill instructors as harder on female recruits than on their male peers

Recruits, primarily women, perceived that male drill instructors were sometimes less demanding of them than their male peers. This issue was most reported by Air Force trainees. Female recruits perceived this to be because male drill instructors were uncomfortable with emotional displays, such as crying, and fearful that allegations might be made against them by female recruits. Female recruits were acutely aware of this differential treatment, sometimes using it to their advantage in the training environment.

Air Force Trainees, Female, Focus Group 1

Trainee A: *If we cry, I feel like male MTIs don't react the same as females. ... It would be different.*

Trainee B: *I agree. The crying was almost used to our advantage. The male MTIs would be like, “Oh, I'm sorry. I went too hard.” The females [MTIs] would be like, “I've gone through it. Get over it.”*

Air Force Trainees, Female, Focus Group 2

Trainee A: *[Male MTIs would act differently] towards girls, yeah.*

Trainee B: *I was gonna say at chow. The guys always get screamed at while we don't.*

Air Force Trainees, Male

Trainee A: *I feel that our sister flight was treated different because of the different problem[s] they faced. They faced different challenges than us. ... We figured out how to be a team faster.*

Trainee B: *I think they had only male MTIs. I think male MTIs were easier on them. Now they have a female and male MTI.*

Trainee C: *The old MTIs were more tolerable with the female flight.*

[Moderator: Do you see the male MTIs being not as strict?] *Yeah, they're more lenient. One of our old MTIs told us, “I screamed at my first girl flight and they started crying.” They said it was like a big shocker. I thought, “Oh, he's gonna go softer on this flight because of those girls.” They're fun, though.—Air Force trainee, female*

Guys [male recruits] have it harder because males and females scream at them. But males [MTIs] don't really know how to approach female flights. Like our last MTIs, one

of them was like, “I told one girl no one liked her, jokingly. And one of the girls started crying.” He was like, “Whoa, they’re sensitive.”—Air Force trainee, female

[Male MTIs are] very respectful. Sometimes, I think they do way less because they’re scared to lose their jobs. They are scared to do anything sometimes.—Air Force trainee, female

The only time I really see females getting treated differently from males is PT days. The MTIs will scream our heads off and say we’re not going fast enough. But they’ll turn around and say, “Female trainees, pass that guy! You’re better than him! You can do it!” They hammer us but encourage them in PT. It’s kind of funny, so I don’t really mind it. I’m like, “Why didn’t you tell me to go faster?”—Air Force trainee, male

They’re [male RDCs are] more sensitive around us because we’re females, so they won’t say to us what they would say to males because we might take it in a different way.—Navy recruit, female

Some recruits describing this issue did not specify the gender of drill instructors but felt some were more lenient with female trainees.

... drill sergeants have been more understanding to females. Not all of them, but the majority. If a female went up to a drill sergeant and asked a question, they would be nicer than if [a] male did it. If males ask a question, they would get, “Suck it up, deal with it”—smoke them. Happened to us sometimes; most of the time we didn’t get that response.—Army trainee, female

... in our platoon, if it’s a stupid question, [the drill sergeants] let us know, male or female. When we get smoked separately, the females get smoked less hard than the males. I noticed that.—Army trainee, female

Male divisions get yelled at more than female divisions, and when I got on base, I could hear that. The males got yelled at more than females, and whenever we have training near each other, the males are yelled at more harshly than females. It’s weird. Why is that? I don’t think it’s right.—Navy recruit, female

Coast Guard recruits reported differences in how male company commanders corrected deviations from the female hair and grooming standards; some avoided corrections, while others were perceived as being not knowledgeable enough to provide useful corrections.

As women with all-male CCs, we get away with things because of it. The female CC—like the other night, she yelled at us because our hair wasn’t perfect. Our hair doesn’t always stay down. ... Like after an IT session after being smoked all day, we’re running around the entire day. And being a yeoman, I was doing my job and directing my shipmates where to go. When you do that, you walk into the shark tank, where all of the CCs sit at these tables. When I walked in, immediately three female CCs came to me and started

screaming at me about my flyaways. But that was my hair from when I was being beat all day.—Coast Guard recruit, female

Other female Coast Guard recruits did not like when male company commanders called them on their hair standards because they felt men did not properly understand what “right” looks like.

Coast Guard Recruits, Female

Recruit A: *I saw a male CC stop a female during chow and say, “You don’t have enough gel in your hair.” Like [she] said, males will expect you to have a glob of gel in your hair.*

Recruit B: *It’s upsetting to be told by males what to do with your hair.*

Recruits sometimes felt that female drill instructors were harsher on female recruits, a theme that was also shared by male and female Marine Corps recruits (see section F in chapter 8).

They prepare us more than males because they know how it is in the fleet for women. They’re more strict on us because the males aren’t. They’re trying to get us to see the reality, so that’s why they’re more scary. The males will let us get away with it, but females don’t. In the fleet, it’s different, so if males let us get away with it now, then that’s not good.—Navy recruit, female

A lot [of] females say that other female drill sergeants treat females more harshly than the males.—Army trainee, male

Some male drill instructors perpetuated and reinforced gendered stereotypes about women

Male and female recruits described instances where male drill instructors used or played up gendered stereotypes about women; recruits felt this behavior was counterintuitive to values in the training environment. For many female recruits, male drill instructor’s insinuations that they were not as strong or weak made them angry, and recruits questioned their instructor’s integrity.

I heard in passing from other RDCs on the street¹⁷² and our own that even though we might have a brother division, we crack jokes about other divisions. The RDCs will say to us, “Oh, I thought this was a male division” if we’re not doing as well. When we’re doing exercises, we say, “Never relax and never surrender; that’s for sister div[ision].” ... I think that’s perpetuating bad things, in my eyes.—Navy recruit, male

If men already have ideas of men versus women and think that men are better, then [these statements by male RDCs] make things even worse. Male RDCs don’t do anything [about it]—we hear them say to brother division, “Even sister division can do it.” Yeah, we can stand at attention because we’re not stupid. If we had integration and they could rely on

¹⁷² “On the street” is slang for RDCs who are not responsible for one’s own division.

us more, then we could have more respect from the RDCs and the male recruits. They would need us.—Navy recruit, female

Air Force Trainees, Female

Trainee A: *Our male MTI told us that we have to work twice as hard. ... That rubbed us the wrong way. Other MTIs didn't do that. We are a really good flight; let us show it to you. Don't preach to us what society [says our] roles [are] and whatnot. He specifically has been talking about that and brought it up multiple times, and we were like, "Why?"*

Trainee B: *That's something that bothers me. If it was from a female [MTI], it would be different. We all are in male-dominated MOSs. Mine is 96 percent male. When it comes from a male—it's because of males like that we have to work twice as hard.*

Trainee C: *It's like, "We already know!" We were raised by single mothers, and some [recruits] have children.*

Trainee D: *It seems like we have to prove ourselves to him.*

Trainee A: *It's his first female flight. ... Encouraging boys and girls are two different things. At the same time, you can feel out the room and know what to say.*

Trainee C: *Some of us girls met with him and told him that there are certain ways you treat females [compared with males], and he came back and said, "You're right."*

Navy Recruits, Female

Recruit A: *During PT one time, there was a—I don't know the rank because he was a Marine. He said to the male RDC, like, "Don't do it like this. ... Females can't do some things." That got me upset because why would you say that? Half of us can do just as much or more than the males in that division. It doesn't matter about your division, just your motivation.*

Recruit B: *The chief select here is very prideful. I have a strong urge that he doesn't like women. [Others agree.] I feel like he hates women.*

Recruit C: *Also one petty officer said, "Shut up, bitch" to a recruit. Our RDC was like, "What the hell?" He never came back to our compartment. He doesn't even talk to males like that. He was yelling at our RPOC [recruit chief petty officer].*

Recruit D: *It was our dressing-down time, and she was dressing down, but he yelled at her for not being in the "right uniform."*

The minute we can't carry our weight, they'll say it's because we're women. But not for men. I was warned about two different things: Don't get pregnant at the wrong time, and be prepared for sexual assault. If you get pregnant at the wrong time, then they'll say we joined for the pregnancy benefits. So I was told multiple times that if I get pregnant at the wrong time, that'll be the end of my career and I will not advance as well as others.—
Navy recruit, female

*... we'll be marching and sitting next to a male division, and the petty officers will insult them and say we're doing better than them because we're female, specifically. They'll point out gender just to make them seem like they're worse.—***Navy recruit, female**

*... during the first PT test, there was a male behind me. I could hear a male MTI say, "Are you gonna let a female beat you?" I fully sprinted at the end and left him behind. When we were doing the cooldown, he said, "How did you let a female beat you? Why did that happen?" It worked me up so I could sprint to the end. But it was not okay that he expected a male to win just because he was a male.—***Air Force trainee, female**

G. Sexual Harassment and Sexual Assault at Recruit Training

Sexual harassment and sexual assault remain critical and pervasive personnel issues in the military and are of great concern in the recruit training environment. U.S. Secretary of Defense Lloyd Austin has described sexual harassment and assault as a “scourge” in the military, demanding change and strong leadership on these issues (U.S. Secretary of Defense, 2021). Recruits were asked in the focus groups about sexual harassment and sexual assault in the recruit training environment, and in the survey about their perspective on the relationship of these issues to increasing gender-integrated training.¹⁷³ In the focus groups, recruits also discussed and raised these issues on their own, unprompted, as they shared their experiences in the current recruit training environment.

1. Recruits in all Services received sexual harassment and sexual assault prevention training and understood these behaviors are not tolerated in the military

While programming may differ, recruits of all Services receive sexual harassment and assault prevention and response training. Recruits in all Services communicated that sexual harassment and assault are serious topics that carry severe judicial consequences for perpetrators and have deleterious impacts on survivors. While quality, amount of time dedicated, and recruit receptivity to sexual assault prevention and response training varied, recruits appeared to collectively agree that sexual harassment and sexual assault have no place in the military. Most felt these issues are taken extremely seriously in the training environment.

I think the Coast Guard does [a] good job at mitigating [sexual harassment and sexual assault at recruit training]. We are not allowed to touch anyone. By us not being able to touch someone at all, if a female recruit says a male touched her, he touched her and

¹⁷³ Focus group data were aggregated for analysis; similarities and differences were analyzed between male and female recruits, by Service branch, and between varying levels of gender integration where applicable.

broke the rule. The Coast Guard does a good job at establishing that rule. Touching is touching.—**Coast Guard recruit, male**

Our RDCs take that very seriously. With SAPR [Sexual Assault Prevention and Response] class, they made us take notes and asked us questions. They'll say, "Let me take a look at your notes" or "Give me a lecture on SAPR." They take it very seriously, so there are no problems here. I honestly think that I feel safer here than in the outside world because there are no males whistling at me or getting to know me.—**Navy recruit, female**

There's a SHARP [Sexual Harassment/Assault Response and Prevention] rep with every company. Everywhere we go, there's someone we can report to.—**Army trainee, male**

... to know that they have a zero-tolerance policy. I think that helps a lot in the sense of keeping people accountable and saying you are dismissed.—**Air Force trainee, female**

We have a SAPR training, and I feel like our senior chief takes that very seriously. He's always pushing us, like, "What did you learn?"—**Navy recruit, female**

He [our RDC] had a conversation with us because one girl came forward with allegations about a male recruit harassing her. He said, "You have to report because they'll get away with it." I was then thinking, how many people are not reporting when it's actually happening?—**Navy recruit, female**

In the military, the culture needs to be changed overall. Military men need to behave and honestly protect their sister-at-arms. Military men should not be harming military women.—**Coast Guard recruit, female**

2. Male and female recruits of all Services perceived a relatively low prevalence of sexual harassment and sexual assault at recruit training

Similar to Marine Corps recruits, recruits from the other Services perceived the prevalence of consensual sexual acts, sexual harassment, and sexual assault to be low to none at recruit training.¹⁷⁴ Recruits attributed the low incidence rate to a busy training schedule, drill instructor oversight, and reporting and accountability measures. As one female Navy recruit said, *"They do well to make sure there are no opportunities for that. I think also, for how rigorous our schedules are and what we have to do, there's no time of day to think about those options and opportunities to mess up in that way."* Some recruits trusted that other recruits or their drill instructors would report these incidents when they happened.

¹⁷⁴ Interviews with Service leaders, training cadre, and drill instructors from all Services also perceived recruit incidents of sexual harassment, and most especially sexual assault, to be low when compared with other military environments (see chapter 6). However, training cadre and drill instructors find that recruits need support at recruit training for traumas that occurred prior to recruits' arrival for training. Learning about the definitions of sexual harassment and sexual assault in training can be triggering, and for some recruits, it is the first time they recognize they have been violated. The Department of Defense Independent Review Commission on Sexual Assault in the Military reported similar findings, noting that drill instructors and recruits need additional support to deal with prior incidents (U.S. Department of Defense Sexual Assault Prevention and Response Office, 2021).

3. Navy female recruits actively worried about being sexually harassed or assaulted during their time in the military

Female recruits in the Navy shared intense and pervasive concerns about sexual harassment and sexual assault in the military, similar to Marine Corps female recruits. In many instances, they relayed messages they received from drill instructors and other leaders about sexual harassment and assault.

Yeah, we had all had sexual assault class. They told us if you haven't been sexually assaulted, there's a good chance it'll happen. One in five women in the military will be sexually assaulted. After that class, she told us a personal story and said it's going to happen so the best thing to do is be mentally prepared. We were talking women to women.—Navy recruit, female

My female chief warned me that sexual assault rates are extremely high. "Most of your female shipmates—probably 8 out of 10 will have that experience in their first ship." That's what she told us. Also, the stats that we're getting are not accurate because there are a lot of cases that are not reported. Most of her friends were sexually assaulted, which is concerning. But also, she's preparing us for that.—Navy recruit, female

Our RDCs said this [recruit training] was going to be the safest place. A lot of women are raped and killed, but they don't talk about it at all. It's not in the news. Our friend, he went missing in the Army. They found his body in the water, but it was never on the news or anything, and he's in the military. It really sucks to be a woman in the military, but also in general, because we're not protected. Or taken seriously if something happens. They're just like, "Oh, it's her fault she was sexually assaulted. She shouldn't have acted that way."—Navy recruit, female

The men always get away with it. The sexual assault and fraternization in the Navy are serious. These chiefs and higher rankings look at women and say, "Oh, she came in as an E-3, fresh out of boot camp. Let me take advantage of her. If you want to excel, you have to do this for me." You are in the place where you find yourself having to fuck your way to the top. It happens a lot. More often than you think. You just think that it's every little situation—they take advantage of young women or fresh women who are new to this and don't know what to expect. Then the women, they're thinking, "Oh, it must be like this for all women."—Navy recruit, female

Going back to the question of is sexual assault and harassment common here, we all know that shit happens in the fleet all the time. I know that there was this girl who got ASMOed [administratively separated] and she said she was assaulted by another female—that's something I feel like people don't talk about. Assault by the same sex. We watched a video on sexual assault, and that was done by another female. That freaked me out. I was like "What? Backtrack." People don't talk about females doing that to other females in the fleet. I was thinking that females could get raped or sexually assaulted by

guys, but I wasn't thinking that you could get assaulted by women as well.—**Navy recruit, female**

Female recruits from the Army, Coast Guard, and Air Force did not describe these same warnings or feelings of inevitability that they will be violated during their military careers, and no male recruits from any Service described worry about being sexually harassed or assaulted in the military. Some male recruits from the other Services described awkwardness or initial concerns that they would unknowingly cause an incident after receiving sexual harassment and sexual assault prevention training. Recruits primarily felt this way immediately after receiving training but did not report prolonged or enduring concern.

4. Army and Navy recruits described specific instances of sexual harassment in the recruit training environment, some of which were perceived to be not properly addressed by drill instructors or other leaders

Recruits from the Navy and Army shared several specific instances of sexual harassment at recruit training. Recruits from these two Services had different integration experiences, one fully integrated and one completely gender segregated, yet both described specific cases they knew of or had experienced. These reports illustrate that gender integration is not solely responsible for mitigating these issues—the social and cultural environment is of primary importance. Air Force and Coast Guard recruits, also with opposing integration experiences, did not describe or experience sexual harassment as pervasive issues at recruit training. Intentional training, education, and socialization on respect combined with robust accountability measures and drill instructor oversight—whether in gender-integrated or nonintegrated environments—are best practices for creating a safe, healthy environment that does not tolerate insidious, degrading behaviors.

Most incidents described below involved male perpetrators with female victims; however, some incidents described involved male-on-male recruit activities. These issues and the perceived lack of action on the part of drill instructors and leadership remain detrimental to gender equality and safety in the training environment.

In our division, one male was trying to talk to a female a lot, and she was like, “I don't know you and I'm not interested.” He kept on going—there were multiple cases where he found a way to talk to her. She reported it to senior chief, but she said, “I don't want to get ASMOed.” He went down there and chewed him out. He didn't get ASMOed, but that's what the RDCs are here for.—**Navy recruit, female**

I know a recruit who got too relaxed in the shower, and he got ASMOed for it. They take the CO's Top Six¹⁷⁵ real seriously.—**Navy recruit, male**

¹⁷⁵ Navy recruits are taught the RTC Commanding Officer's “Top 6”: no sexual harassment/assault, no racism/discrimination/sexism, no fraternization, no recruit-to-recruit contact, no hazing, and no substance abuse. The study team highlighted these guidelines as an example of a best practice for gender integration. See chapter 6 for more details.

A female did report something that happened to them. And that guy got switched around to a different battalion.—Army trainee, male

We had a trainee that was into guys, but it got to the point where it just crossed a line. And we would tell him, but he would just try harder. And a trainee reported him.—Army trainee, male

I wouldn't speak for 3rd [platoon], but I've talked to females that say some males do harass other females.—Army trainee, male

There was one case where a recruit was seen making inappropriate gestures, maybe winking or something. I don't think anything was ever made from it because no one could ever prove anything. That's the only case on paper I could think of.—Navy recruit, male

There was one guy who was in a different division than us. Me and her and another shipmate were walking out to take the trash out. He made some hand gestures and touched my friend. He basically did stuff that ... would fall under the category of sexual harassment. When we said this to the RDCs, they did as much as they could, I guess. But when he [the recruit] gets in trouble, he makes a mockery of it. He'll turn his head to us at chow and say, "I didn't get in trouble." He feels entitled to joke about it. I think it's fucked up, because if you get to the fleet—like, if you can do that now, how can I trust you then? How do I know you won't sexually assault us? My friend got into serious trouble because she played rock paper scissors with some guys. She got threatened to get kicked out. That just goes to show that if you do something so little as rock paper scissors, you'll get kicked out, but not if you do something like him that could fuck someone up in the long term. Getting sexually harassed plays with you mentally a lot.—Navy recruit, female

Army Trainees, Female

Moderator: Is sexual assault or harassment a problem here [at recruit training]?

Trainee A: *There was a male in our platoon that had five SHARP cases against him, but it's not a big problem.*

Trainee B: *They are very strict about this stuff. It's not physical issues, but it's the things the males say.*

Trainee C: *They make really gross comments, and we say to stop, but they don't care.*

Trainee D: *There was an instance when a male put himself on top of a female. He got put in another platoon, but it was right next to us. He denied doing it, and all the guys were on his side. She went up to the SHARP rep to open the case again, and nothing was done. She brought up multiple times how uncomfortable she felt. She left basic training because she felt so uncomfortable, rather than just move the male to a different company.*

Trainee C: *We were talking about the males disrespecting the females, and the drill sergeant told us that she hates that, and that it's going to be like that everywhere you go. When you see something like that happen, it's like it's not being taken seriously.*

Navy Recruits, Female

Moderator: Do the RDCs do a good job of stepping in when they need to?

[All say no.]

Recruit A: *Females get pushed more, like, "Don't look at this and don't talk to them." But guys can do whatever and get away with it.*

Recruit B: *Some RDC in ROM said he will not let a male look at a female. Some RDCs just don't care though.*

Recruit C: *Even in the galley, I was walking and I didn't notice that the RPOC and the yeoman from a male division were looking at me and pointing at me and nodding their heads. Someone in our division had to tell me.*

Recruit D: *The females always get more punishment than the males when we're talking about sexual assault. Even if the male started it first. There was a girl from another division—she didn't do anything, but a guy just gave her a piece of paper. She was sent back 3 weeks and he got sent back 1 or 2 weeks.*

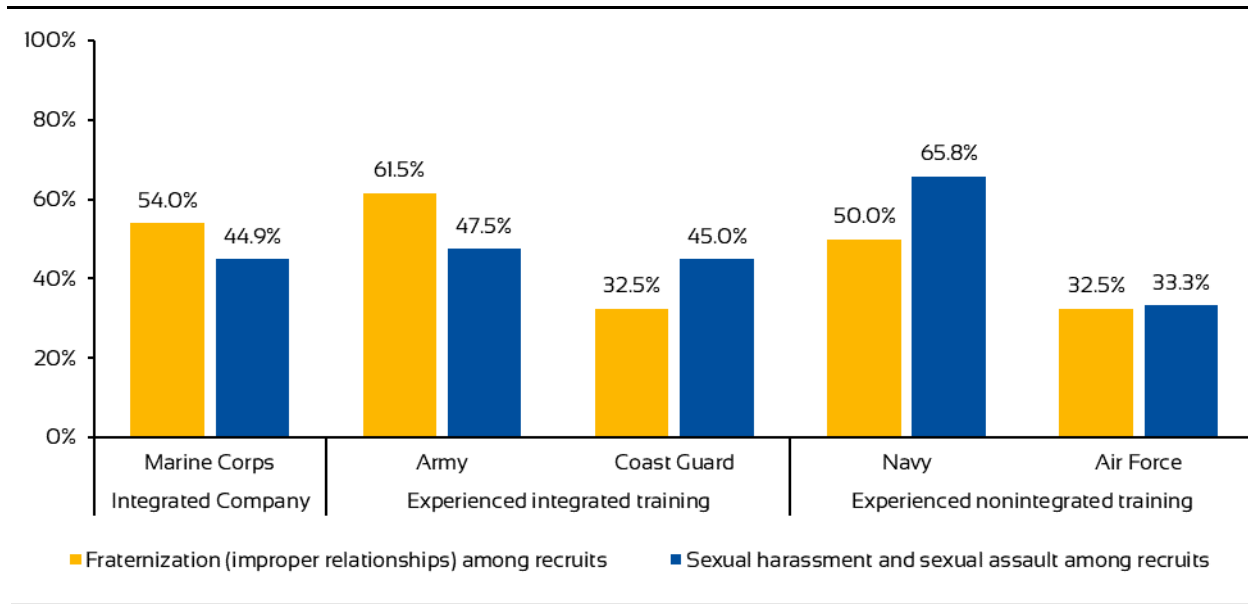
Specific sexual harassment incidents of this magnitude were not raised or shared with the study team by Marine Corps recruits (see section H in chapter 8). The most common sexual harassment behaviors described by Marine Corps drill instructors and training cadre were “horseplay” and “locker room” behaviors between male recruits and cuddling overnight among female recruits in the squad bay; overall, these behaviors were described as rare occurrences.

5. Recruit perspective about the effect of increased gender integration on prevalence rates of sexual harassment and assault at recruit training

The social science survey asked recruits to rate whether “sexual harassment and sexual assault among recruits” and “fraternization among recruits” would be more likely to occur, less likely to occur, or no different if their Service increased gender integration at recruit training. Across the Services, one- to two-thirds of recruits anticipated increased fraternization and sexual harassment/sexual assault incidents from increased gender integration (see figure 9.13). Navy recruits shared the greatest concern about sexual harassment and sexual assault incidents being more likely (65.8 percent), and a majority of Army recruits (61.5 percent) felt that fraternization among recruits was more likely with increased gender integration. Overall, Coast Guard and Air Force recruits reported the lowest levels of concern that these undesirable outcomes would be more likely with increased gender integration, but a sizeable minority still expressed concern. During study team observations, Coast Guard and Air Force leaders and instructors conducted explicit conversations about respect in training curriculum and activities. This explicit instruction

may have contributed to recruits feeling less concerned about these outcomes in response to increased gender integration.

Figure 9.13. Percentage of Recruits Who Believe Fraternization and Sexual Harassment and Sexual Assault Among Recruits Would Be More Likely to Occur With Increased Gender Integration, by Service



H. Benefits of Gender Integration

Recruits were asked to share their perspectives on the benefits of gender integration at recruit training. Army and Coast Guard recruits were able to speak to their direct experiences of gender-integrated recruit training, while Air Force¹⁷⁶ and Navy recruits described anticipated benefits of gender-integrated training. Among men who experienced integrated training, Coast Guard recruits were the most unequivocal about benefits of gender-integrated training, with many profusely emphasizing its value. Recruits from the other Services described similar benefits (or anticipated benefits) of gender integration at recruit training, including preparing for work in a gender-integrated fleet, increasing diversity of thought, building bonds and trust among male and female recruits, and generating additional motivation and competition.

1. Recruits felt gender-integrated training prepared them for working in an integrated fleet and operational environment

Recruits understood they would work with both men and women in their service careers and felt it was essential to have a training environment that prepared them to do so. This sentiment was shared by recruits of all Services and both genders. Several recruits felt segregated training was counterintuitive because training should be preparing them for their future service.

¹⁷⁶ Some Air Force recruits spoke about their experience with gender integration at BEAST, the Air Force's culminating training exercise.

... I think it's important to have both males and females in the platoon. When you get out of basic training, you're going to be working with males and females, so starting the relationship early keeps it professional early on.—Army trainee, male

In this instance, in the operational Air Force, the reality is that both male and female are supposed to work together, so to not have that is not realistic. ... If some males have skewed views about females, [the opportunity to] interact may change that, and when we are in the operational Air Force, it may enhance it. ... I think it would be helpful in that sense.—Air Force trainee, female

[Gender-segregated training] is so not representative of the military. If you train all girls, then you'll go out into the fleet with that experience, even though 95 percent in the military are men.—Coast Guard recruit, female

They're not teaching females how to work with men in the real world. We haven't gotten to work with them in the real world. If they taught us how to work with them and say, "This is how you work with them," then that would be helpful. It would be more helpful than here, where you're together but not together.—Navy recruit, female

It [gender-segregated training] wouldn't prepare you for the actual Army. There are females at every MOS, so if you didn't integrate, it wouldn't prepare you for dealing with females if you are deployed, for example.—Army trainee, male

We would lose a lot of the cohesion that we have adapted to here at boot camp [if we had gender-segregated training]. A lot of us guys, we didn't have a lot of teamwork outside of boot camp before with females. We had guy cliques and girl cliques, so we never really interacted with them apart from our girlfriends. But here, starting integration this early on makes it easier for us to be professional in the fleet.—Coast Guard recruit, male

With our female shipmates, we're learning how to interact with them. ... Being right next to our female peers and realizing we're serving together is important. You're a shipmate. You're not female. I'm not male. We're Coasties—that's it.—Coast Guard recruit, male

Recruits also felt it was important to experience mixed-gender leadership and training because they knew they would be led by and must answer to male and female superiors. Male recruits recognized having female leadership at recruit training was a critical experience for men.

It wouldn't be realistic [to have gender-segregated training] because in the operational Air Force there will always be female supervision and coworkers. You will always see someone of the opposite sex. If we are in the all-male environment, it will not help us.—Air Force trainee, male

I think that going back into preparation, it would prepare us. Some people, when they're interacting with a woman now, it's like they tense up some. So I feel like if we had more interaction now and if we get into a job and have to interact with higher or lower power

females, we wouldn't tense up because we're not used to it. We're not used to having to answer to a woman on a regular basis. It's mostly just a man telling us what to do or who to report to. If we report to more women, we would be less likely to tense up.—**Air Force trainee, male**

Our drill sergeant said that, at the end of the day, when you're in the Army, you're going to have a female CO [commanding officer]. I've always worked with females my whole life, so when we integrated it was scary because of SHARP [sexual harassment or sexual assault incidents], but after, we were cool. I feel like it would be hard if it was all males because of the egos. They're all trying to prove something.—**Army trainee, male**

Working with a different gender is getting us ready for the fleet. ... I think this is helping us get ready to work with females and know that there will be females above us [in rank who could be our supervisor].—**Coast Guard recruit, male**

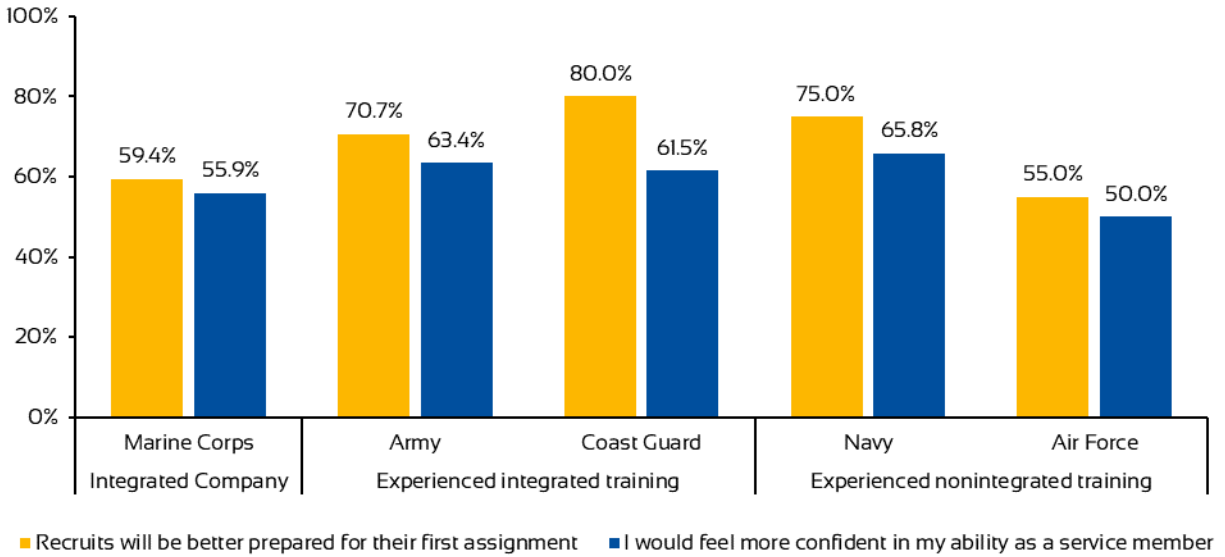
I feel like we would be more prepared for going into the actual Service itself and going to our first duty stations. We're not gonna be paired up with 39 other guys and just males in other areas. We'll interact with females and have female leadership possibly. If you're interacting with only males, and your MTIs and leaders are male, and then you go to an active base, it could be a culture shock.—**Air Force trainee, male**

Integrating helps. Let's say you're not integrated, and you don't show respect to a female that has a higher position than you. That's dumb as hell. It makes you adapt, no matter what your gender is. There shouldn't be any controversy because someone is a female.—**Army trainee, male**

The survey asked recruits to rate their level of agreement¹⁷⁷ with the following statements, imagining their Service increased opportunities for men and women to train together at recruit training: “Recruits will be better prepared for their first assignment” and “I would feel more confident in my ability as a [Marine/Sailor/Soldier/Airman/Coast Guardsman]” (see figure 9.14). Agreement with these statements was high (greater than 60 percent) among Army, Coast Guard, and Navy recruits. For Air Force and Marine Corps recruits, agreement hovered between 50 and 60 percent. It should be noted that when recruits did not agree, they typically responded “neither,” indicating neutrality; recruits rarely disagreed or mostly disagreed with either statement. Agreement (agree or mostly agree) with both better preparedness and confidence in their ability as a Marine was close to other Services overall among Integrated Company recruits. However, women in Integrated Company were much more likely to agree with these statements than men (see figure 8.16 in chapter 8 for more details). These data suggest substantial levels of optimism among recruits across Services that gender integration can enhance their readiness to become a Service member, with a very limited number feeling the opposite.

¹⁷⁷ Response options were “disagree,” “mostly disagree,” “neither,” “mostly agree,” and “agree.”

Figure 9.14. Percentage of Recruits Who Agree or Mostly Agree They Will Be Better Prepared for Their First Assignment and Will Feel More Confident in Their Ability as a Service Member With Increased Gender Integration at Recruit Training, by Service



2. Recruits described how gender integration at recruit training increases diversity of thought

Recruits described how gender-integrated training brought different perspectives to the forefront, providing learning opportunities for both genders. Recruits of both genders and from all Services described this diversity of thought as a strength of gender-integrated training.

[I recommend the Marine Corps] integrate [men and women] in platoons. We would still be able to succeed in different-gender platoons, but I feel like we work together better. We have more backgrounds and experiences to go off of, and more experience of how to get through certain situations.—Army trainee, male

We [men and women] each have different things to bring to the table.—Army trainee, male

With males and females working together, it could be helpful for them to work with us. Females have—a strong aspect about females is being organized and getting stuff together. But I think the males are less emotionally attached to stuff. They don't get temper tantrums and stuff like that. They don't go through the same stuff females go through. They both bring something to the table. Females are stronger in one aspect but not in another aspect.—Navy recruit, female

We wouldn't know how to do our jobs effectively [if we were segregated by gender at recruit training]. The whole point of training is to be good at our jobs. But if we don't

have different perspectives from different genders and backgrounds, then we won't be able to work as well.—**Coast Guard recruit, female**

We would learn more from each other [if we were integrated] because we all bring something to the table. We wouldn't have just one group of males and one group of females.—**Navy recruit, female**

Being mixed also helps minimize stereotypes. You get the other gender's opinion on things and you're like, "Oh, I didn't think about that."—**Navy recruit, male**

Several recruits described specific instances and ways they experienced this diversity of thought during gender-integrated training.

I'm on art crew. The integration definitely increases group intelligence. I know that even just for silly art projects, getting the opinions of all my shipmates means I receive insight from all my shipmates, males and females. That goes beyond the metaphor of our crew and just policy or procedure. I know some of our females will be mentors when they go off from here. I know there are studies showing that they increase group intelligence.—**Coast Guard recruit, male**

After talking to males, I'd think to myself, "That was different from what I'm used to" [in a positive way].—**Air Force trainee, female**

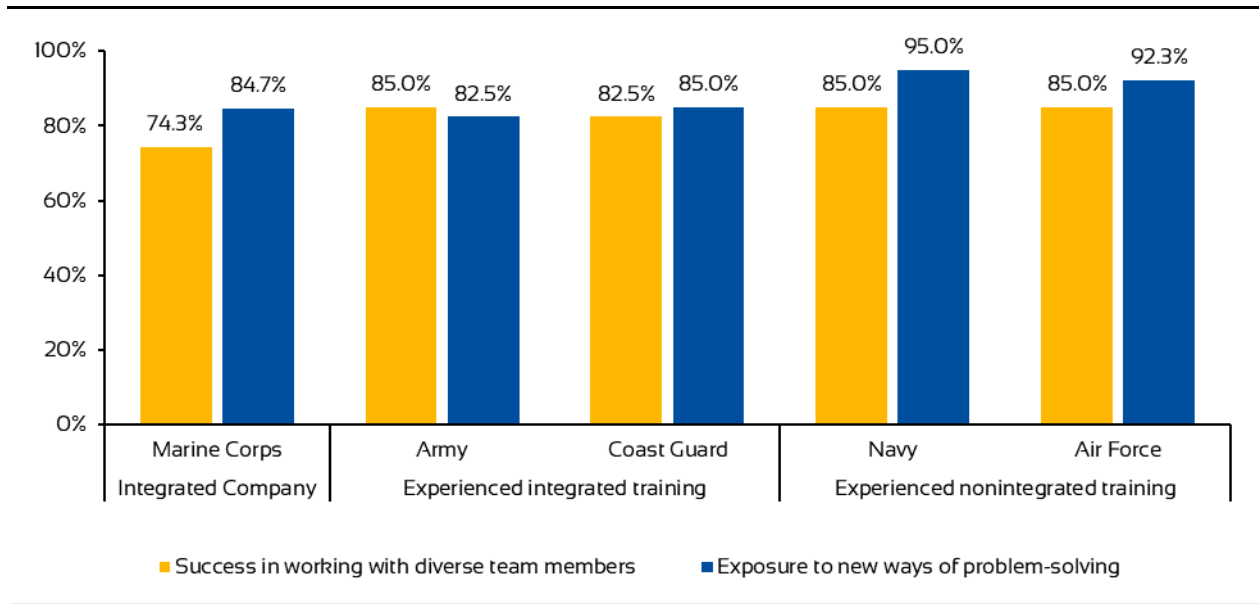
Yeah, I think both [men and women] would benefit [from gender integration at recruit training]. For example, with academic study, we beat sister division on both tests, and I believe that maybe we could share study routines or how we do our studying and how we do everything, and we could find different ways to do things. And it would help us tremendously. With athletics as well, because no one likes losing. If I could push someone in my sister division to do better and keep up and keep doing what they need to do, I think it would make them a better Sailor and perform better. Speaking for myself, my RDC was running right beside me, and I pushed myself to run at his pace, and it really helped because he's a better runner than me. Having someone do that can help you push yourself to be as good or better than them.—**Navy recruit, male**

Whenever we took the sexual harassment class, there was some video we watched ... and I remember thinking, "Why couldn't she [the girl in the video who was sexually assaulted] just pepper spray the guy?" I said that to the teacher. And one of the females said, "She shouldn't have to worry about that." I had never thought about it that way. So I was able to get a new perspective from that conversation.—**Air Force trainee, male**

The survey asked recruits to rate whether “success working with diverse team members” and “exposure to new ways of problem-solving” would be more likely to occur, less likely to occur, or no different if their Service increased gender integration at recruit training. Across all the Services, an overwhelming majority of recruits (nearly 75 percent or greater) felt success working with diverse team members and new ways of problem-solving would be more likely if gender-integrated training increased (see figure 9.15). Recruits’ emphasis on and belief in these

positive outcomes resulting from increased gender-integrated training signal a high level of value for gender diversity.

Figure 9.15. Percentage of Recruits Who Believe Success Working in Diverse Teams and Exposure to New Ways of Problem-Solving Would Be More Likely to Occur With Increased Gender Integration at Recruit Training, by Service



3. Recruits felt gender-integrated training helped create a shared bond and develop trust with recruits of the opposite gender

Recruits shared how gender-integrated training helped them develop bonds with members of the opposite gender that they felt would carry on into their next training assignment and the fleet. Working together at recruit training showed them men and women could trust one another, solidifying the confidence that fellow Service members had each other’s backs now and in the future. This benefit was even more pronounced for Air Force and Coast Guard recruits, who reported being held to the same equally high standard in training, which built an additional layer of trust between genders. Integrated training was also seen as an effective way to dispel myths or rumors that women “have it easier” in training.

As we got further along in this journey, though, our drill sergeant reiterated that the only way we would get through is teamwork. They always said we are a family. ... I think of everyone here as my brother or sister. We have all been challenged and gotten through it.—Army trainee, male

The bond we created here is between males and males, females and females, and males and females. It’s gotten to the point where they don’t even have to be physically hurting, but I would back them up. I would stick by their side. We’ve created that much of a bond.—Coast Guard recruit, male

In every situation where guys and girls work together, there's a lot of teamwork. When we had duffel bags, there were guys who were done loading theirs and they came back and helped us carry ours. There was so much teamwork going on, just like at BEAST.—
Air Force trainee, female

It should be exactly how it will be in the fleet, because why would you do it differently? I wouldn't trust the females if they had separate training. I wouldn't know if they went through the same IT sessions and classes. I don't know if they met the same standard. Now? I trust them 110 percent. In the morning, we all line up together. They're fresh out of their racks, just like me. We're screaming beside each other. We trust each other. I know that if I went down right now, she could save my life in CPR.—
Coast Guard recruit, male

... it would be way more better to have us training together. Going through hardships together before we even start going into operations.—
Navy recruit, female

There would be more respect between both genders [if men and women worked together at recruit training]. Males won't think they're better. Kids who just got out of high school think they're the best thing ever, and that would really help.—
Navy recruit, male

Before the Coast Guard, it can be up to every person about what your point of view is for gender. You may not care that there are males and females here, or you may respect one over the other or whatever. But here, where you see females going through the same thing ... when I see my female shipmates, I feel respect. They can do the same thing I can do. If I used to think that females are not as equal as males, right now, I can say they are the same or even better because they proved to us that they can do anything as difficult as us. We have the same canteen, the same piece, and the same time. We males are physically stronger, and they are biologically smaller and weaker. But they did it. That's respect right there. Being together in the program helps you to see females in a better way and for us to get this respect for each other.—
Coast Guard recruit, male

4. Recruits reported gender-integrated training generates additional motivation and competition

Another reported benefit of gender-integrated recruit training was increased motivation and competition resulting from men and women working together. Coast Guard and Army recruits who experienced integrated training described their experiences.

I'm personally not that good at running long distance, so when we run on the track here, I would be struggling to breathe. But my female shipmates would come by and motivate me to keep going. A lot of the guys like to run fast and compete. But my female shipmates would be like, "Hey, shipmate, you got this. Keep going!" I passed by 20 seconds better than what I got originally. It really helped me.—
Coast Guard recruit, male

With the males, there is more competition. And you want to compete with them and they push you a bit more.—
Army trainee, female

Navy female recruits, who did not experience gender-integrated training, felt strongly that integrated training would build in additional motivation and create a healthy competition in which men and women would work together to be the best division.

We don't get to PT with guys, but if we were able to talk with males, that would motivate us more. I worked out with males for 14 years, and they were like, "You can do this, keep going! If I can do it, why not you?"—**Navy recruit, female**

We would be able to help each other out where we're weak. Like motivating each other. That's something we can use as females—motivation. We could help brother division in studying or whatever the case may be. Just helping out where we fall short and just getting more out of training in RTC [Recruit Training Command].—**Navy recruit, female**

With integration, our division would have been half female, half male. I've been in college, and I've been in coed situations. ... We would both have to work together because we both want to be the best and get the Battle "E" flag. Now, the guy next to you will tell you, "You have to run during PT so we can get the flag." You have to rely on women to achieve your goal now. That's what happens in the fleet and in the Navy. They have to rely on us, so the RDCs split us up and bring us together—brother division versus sister division. I get we're in competition here, but I think it's at an unhealthy level. Male and female RDCs compete with each other in a friendly way. I think friendly competition is good, but now we're at a point where it's men versus women, and we kind of suck right now.—**Navy recruit, female**

I. Challenges of Gender Integration

Equally as important as asking recruits to reflect on benefits of gender integration at recruit training is collecting their perspectives on challenges. Recruits who did not experience gender-integrated training (Navy and Air Force) described anticipated benefits of gender integration in greater detail than potential challenges. For those who had experienced integrated training at the lowest unit level (Army and Coast Guard), vastly different challenges (or lack thereof) emerged.

Male and female Coast Guard recruits described training conditions where men and women were held to equally high standards, were treated in the same manner by company commanders, and fully respected one another; recruits did not come up with many challenges of gender integration. This is notable because out of all the Services the Coast Guard permits recruits the most direct male-female interaction with the least supervision.¹⁷⁸ The most prevalent challenge was raised by female recruits, who noted an absence of proper hair care products, such as hair gel, for women who are racial and ethnic minorities.

¹⁷⁸ For example, squad bay doors (male and female) are unlocked and monitored overnight by a rotating team of three recruits (teams can be mixed gender). Recruits at Cape May are supervised by one enlisted duty personnel overnight and cameras at base security. Recruits attribute their high levels of respect and professionalism to the trust placed in them by company commanders to do the right thing and strict accountability measures for those who do not. One female recruit commented, "I've never laid my head on my pillow and felt unsafe."

Army trainees, on the other hand, reported significant issues with sexism from male recruits affecting the training environment (detailed below). Female Army trainees described these issues as pervasive and prevalent in their training experience, most visible when women were in platoon leadership positions. Only a few male trainees reported noticing this behavior.

The vastly different experiences of Army and Coast Guard recruits indicate that gender integration at the lowest unit level is not enough by itself to produce desired healthy climate outcomes—social and cultural factors shape the environment by cultivating or derailing equity and respect. The findings presented in this section are in order from most discussed by recruits to least.¹⁷⁹

1. Sexism from male recruits

Sexism and perceived gender-based treatment from male recruits was the most substantial challenge to gender integration described by recruits. This issue was most prominently identified by female Army trainees but also by some Navy female recruits (who did not have an integrated training experience).

Sexism from male Army trainees, especially toward female trainees in platoon leadership positions

Army trainees described pervasive issues of sexism among recruits within platoons. Female trainees described these attitudes as a persistent and ever-present feature of the training environment for them, while only a few male trainees mentioned observing them as an issue for women. Army trainees who participated in the focus group came from two companies and eight platoons (four platoons per company), signaling this may be a widespread cultural issue rather than one problematic platoon. Trainees noted sexism from male recruits was most noticeable when female trainees were in platoon leadership positions; male and female trainees described blatant disrespect and gendered slights for female trainee leaders that were detrimental to the climate and culture of their platoons. Not all female trainees observed or experienced this type of behavior.

I ain't going to lie, but once we had a female PG [platoon guide], and people talked so much trash about her. When we had a male PG, people said mean stuff, but it wasn't the same type of stuff. The differences in what they did say would be more directed towards gender for the female PG. It is just a little different. It wasn't a major thing, but a bunch of small instances.—Army trainee, male

I've definitely heard racist and sexist things. Not from a big group of people, but from times where I didn't know the context of a conversation. I don't think you should say these things even if it's joking, but I just kind of mind my business at that point.—Army trainee, male

¹⁷⁹ Focus group data were aggregated for analysis; similarities and differences were analyzed between male and female recruits, by Service branch, and between levels of gender integration, where applicable.

Army Trainees, Female, Focus Group 1

Moderator: Is there a brotherhood/sisterhood [in your training experience]?

Trainee A: *Sometimes. Some of the males do not feel like we should be there.*

Trainee B: *It hurts their ego. They don't listen.*

Trainee C: *They're disrespectful.*

Trainee D: *We have the honor guard, and there's a female and male from our platoon that was nominated, and the female won. ... Instead of congratulating her, they were mad at the male for losing.*

Trainee A: *Our female drill sergeant said that leadership position will go to females.*

Trainee D: *Yeah, we had a female drop from PG because she was being disrespected.*

Trainee E: *I was a PG and squad leader. The males had no respect for me. We did an experiment where we gave one of the team leader badges to a male to see if they would respect him more, and they did, 10 times more.*

Trainee F: *You see that as common. There is so much disrespect. We have a female in our platoon that said she doesn't like to be called by her first name, and every week she had to tell males not to do that, and the males didn't respect this, and she snapped at them.*

Trainee E: *... And we corrected them [the male recruits] multiple times per day*

Trainee G: *I had a different experience as PG. Over the past week, I was PG during the Forge [culminating exercise]. I thought I was respected. PG is just a type of leadership role. I felt respected while I was there. Maybe calling someone out if they're moving, but not disrespecting them. I tried to let them know I'm a trainee just like them, but there were times when I had to tell them stand at attention. If a male said anything, I didn't take it to heart because we were in a rough situation. People are tired and hungry. Taking a step up and trying to lead by example. A lot of males said I was the best PG they had so far.*

Trainee H: *It depends on the type of person you present yourself as. I was PG for my platoon, and the males respected me way more than some of the male PGs. I was strict and hard, but the male we just had was strict and hard, but he was rude as well. He cussed, and I thought that was rude, and no one was paying attention. When I got mad, though, they would stop.*

Trainee I: *I feel like for the disrespect and sexism ... in my platoon, I don't really see it. They don't listen all the time, but that doesn't matter if you're a PG or squad leader, or male or female.*

Trainee F: *Before we integrated [during yellow phase], we did have a female drill sergeant for a while, and the guys [were] dreading it.*

Trainee E: *It got so bad that the males got corrective action for it. It helped at first, but then it got worse.*

Trainee F: *The males tell the female PGs, "You're not my PG."*

Trainee E: *Or they just ignore us and give us attitude. They get louder and worse if a female is up there.*

Trainee J: *The males in our platoon have to one-up each other. They always had to be better than each other.*

[Later in the focus group]

Trainee E: *... The male trainees think sexism is funny.*

Trainee F: *One of our drill sergeants is our SHARP rep. He dropped the whole platoon. And he was livid on how disrespectful, about the males being disrespectful. And I could literally hear some of the male trainees laughing.*

Trainee J: *Even when the drill sergeants do address it, the males still think it's funny.*

Trainee C: *Another thing is sometimes they'll address the issue but it will continue, and they don't want to hear more about it. And the whole company suffers. But we don't want to say anything or else it will get in trouble.*

Trainee J: *They threaten us with recycling or loss of phone time.*

Trainee I: *The male drill sergeants say they don't want to hear any more about this. The female drill sergeant sat down with all the females and talked about it to us more personally. There was a problem with racism recently. It just seemed she was more real about it. She kind of brought in a little more personality and helped it stop.*

[Trainee G says something unrelated to the discussion.]

Trainee J: *Our senior drill sergeant, he took the time when there was a female issue with males. He sat down with us to listen to our concerns. He took time to listen to what we had to say.*

Trainee F: *For [number] platoon, our drill sergeant never talked to us about that. It would have been nice to talk to a senior female drill sergeant, but we don't have that.*

Trainee E: *Yesterday I asked my senior drill sergeant if he would drive me to get feminine hygiene products. He was surprised when I told him this stuff, so he was shocked about it.*

Another female trainee focus group raised similar issues of sexism from male Army trainees, most often related to female platoon leadership positions.

Army Trainees, Female, Focus Group 2

Trainee A: *Some males don't like females. We have a female platoon guide do something, [they] won't listen. With the male assistant platoon guide, they would listen.*

Trainee B: *Everyone saw it, and she's higher ranking.*

Trainee C: *When we first integrated, they were super nice because we didn't know each other, then they know who to stay away from if they don't like them. It's the same; we have a female PG as well. We had an issue with a male who had a problem with her and female authority as a whole.*

[Later in the focus group]

Trainee C: *... but I feel like with the males, no matter what how much we can educate them, they still have that pride of "I hate females, female this, female that."*

Moderator: Do you feel that's how they [male recruits] view you?

Trainee C: *Hmmm, not necessarily me, but our platoon guide, yes. They don't respect her; I know they don't. They talk about her. That she's bossy and hypocritical, she doesn't know what she's doing.*

Trainee A: *A male in our platoon says she has no backbone to be platoon guide. She's a great platoon guide, very fit female. I think they are terrified of her. She's more fit than half the guys in our platoon. They are scared of her.*

Trainee B: *Another assistant platoon guide did not like female authority. I was a squad leader. A squad leader was leading our squad and was like, "No offense, but do you really want her to be your squad leader?" He said yes, they were talking about it, and that's all I heard.*

Trainee D: *They will say, "[She] can't do half the things I do, so why should they be in charge?" It's physical stuff. Mostly it's kind of physical.*

Trainee E: *Guys think a platoon guide should do everything, except ACFT, know how to shoot, etc. They will say, "How is she a platoon guide when she can't do half of this stuff? She can't do it, and you lead by example."*

Navy recruits, who did not experience gender-integrated training, also reported sexism from male recruits

Male and female Navy recruits described unhealthy competition between genders, such as drill instructors egging on males or females by denigrating recruits of the opposite gender, as the most problematic form of gender relations in the training environment (for more details, see section F.5). Female Navy recruits also described the following display of sexism from male recruits.

Recruit A: *I feel like, as females, when we do something, we have to do it better because we're girls and we have to prove ourselves. But guys, they don't get that. They'll do the*

bare minimum. But for us, you have to do things and be perfect because you have to prove you can be here. If it's against the rules, if guys do something, they should get kicked the fuck out now.

Recruit B: *When we were taking division pictures, we saw how the guys were lining up—we were just watching. But they [the RDCs] were saying, “Turn around and don't look.” But when we were taking our pictures, every male was laughing and pointing at us.*

Recruit C: *For them to be our brother division ... that's when the integration part comes in, like, what's the point?*

Recruit D: *We don't interact at all.*

Recruit E: *I think that's the biggest issue with RTC right now.*

2. Sexism and differential treatment from drill instructors

Male and female recruits from all Services reported perceived differences in treatment by drill instructors in the recruit training environment, including male drill instructors' perpetuation of gendered stereotypes disparaging women. These findings are presented in greater detail in section F.5. Marine Corps recruits shared similar experiences (see section F.2 in chapter 8).

3. Physical strength and standards-related challenges

Air Force and Army trainees felt women encountered more physical and strength-based challenges in recruit training than men, and several female Air Force trainees felt that BMT training standards were lowered for women. These experiences were similarly highlighted by Marine Corps recruits, especially in response to the physical nature of Marine Corps recruit training (see section G.1 in chapter 8).

I feel like even though [female] PT standards are lower than male standards, it's still a major struggle for a lot of females. In our flight, I think we had two people who failed PT. That's it. And I know in one of the female flights, they had something like 26 people fail their PT test.—Air Force trainee, male

The females have a lot of confidence issues. Not all of them, but a majority said, “I can't do this; it's too hard.” All the males would help them finish PT, and I feel like that boosted the confidence level a bit. Once they stopped saying, “I can't,” they excelled way better.—Army trainee, male

Army Trainees, Male

Trainee A: *I think with ACFT is more challenging for females, but otherwise it's equal.*

Trainee B: *It's equal, but physically we're different. A lot of females had to be recycled because of leg tucks and deadlifts and sprints.*

Air Force Trainees, Female

Trainee A: *When we do PT tests, I prefer if it's just us running. When guys ran with us, it was annoying because they ran faster and they would say, "Check, check" so we had to move.*

Trainee B: *It's less motivating too. They'll lap us, and we feel like we're not doing enough or we're not staying focused on the fact that we don't have the same endurance as them and we're not expected to.*

The social science survey asked recruits to rate whether male and female injuries and dropouts would be more likely to occur, less likely to occur, or no different if their Service increased gender integration at recruit training. Relatively small percentages of recruits across all Services believed that integration would make injuries more likely (see figure 9.16); however, recruits more frequently thought increased integration would make injuries among female recruits more likely, compared with injuries among male recruits. The Marine Corps Integrated Company had the highest percentage of recruits who felt injuries among female recruits would be more likely with increased gender-integrated training (38.0 percent); similarly, Marine Corps recruits had the highest percentage that felt injuries among male recruits would be more likely (9.6 percent). The Marine Corps has the most physically demanding recruit training, which may shape recruit perceptions about increased injury rates with more gender integration. A similar pattern was observed in recruits' beliefs about dropout rates (see figure 9.17). While a relatively small percentage of recruits believed increased integration would lead to more recruits dropping out of training, recruits more frequently believed that dropouts among females would become more likely when compared with males dropping out.

Figure 9.16. Percentage of Recruits Who Believe Male or Female Injuries Would Be More Likely to Occur With Increased Gender Integration at Recruit Training, by Service

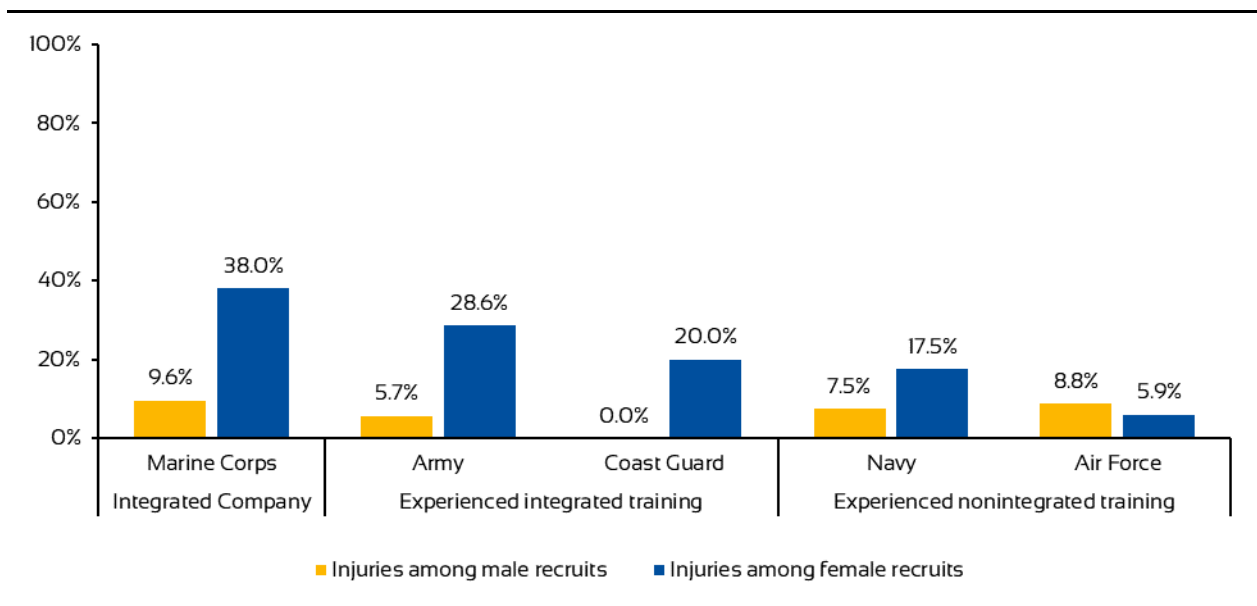
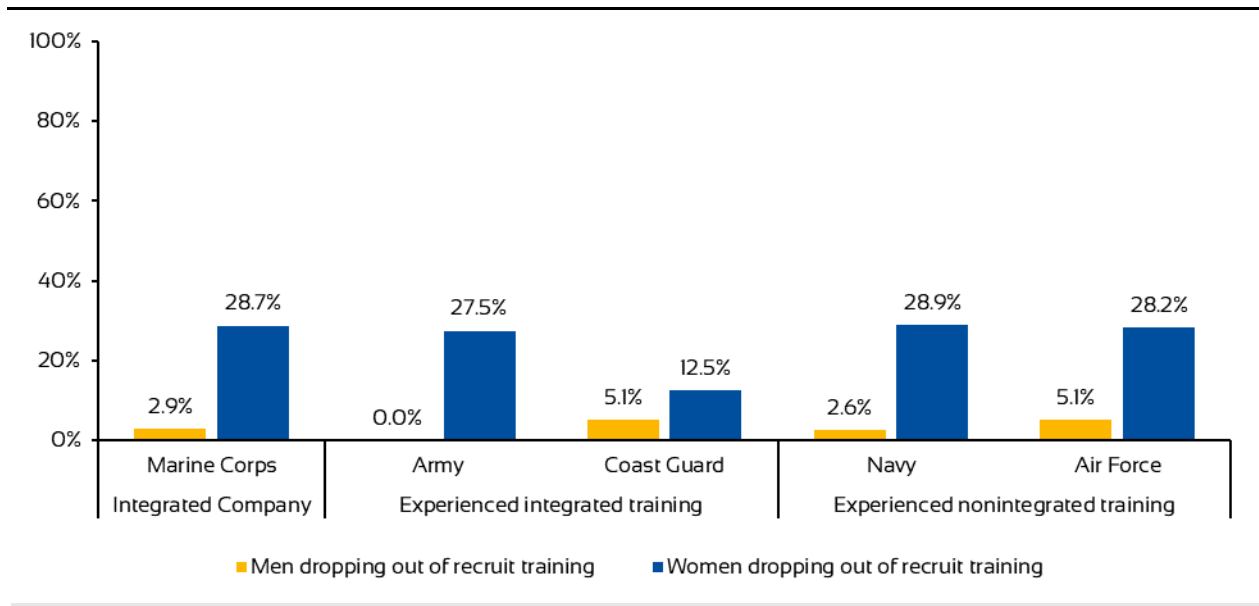


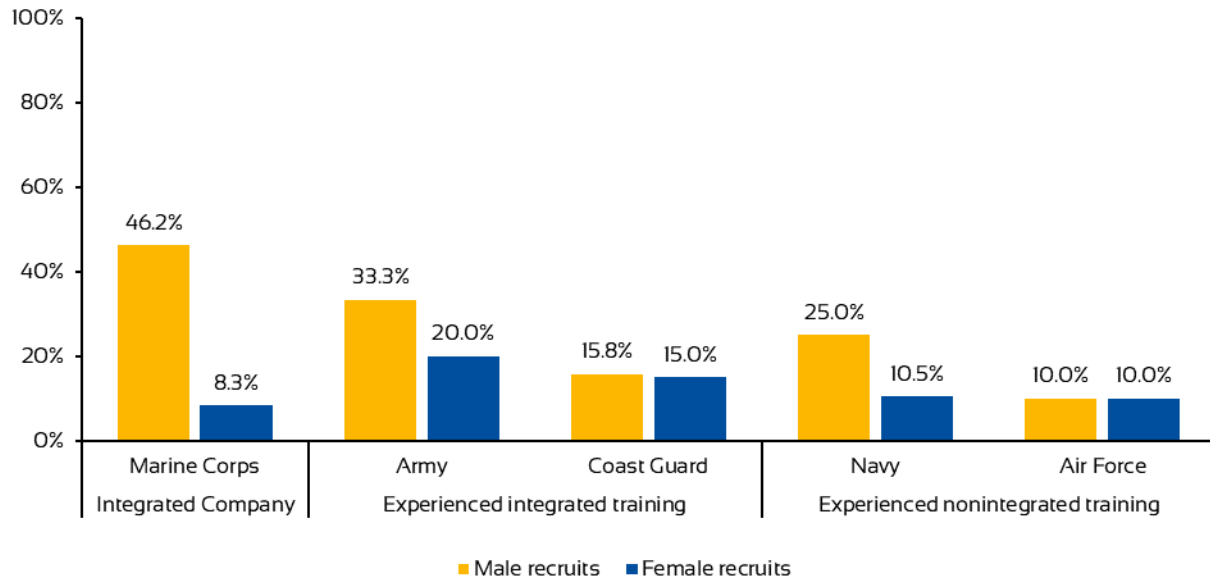
Figure 9.17. Percentage of Recruits Who Believe Men or Women Have an Increased Likelihood of Dropping Out of Training With Increased Gender Integration at Recruit Training, by Service



Recruits were asked to rate their level of agreement¹⁸⁰ on whether training standards would be lowered or raised with increased opportunities for men and women to train together at recruit training. With the exception of male Marine Corps recruits, agreement (agree or mostly agree) that training standards would be lowered with increased integration was low (33.3 percent or lower) (see figure 9.18). No discernable pattern of difference by integration experienced (integrated versus nonintegrated training) was found. These data suggest that lowered training standards in response to gender integration is not a widespread concern among recruits in other Services and is comparably more of a concern among male Marine Corps recruits.

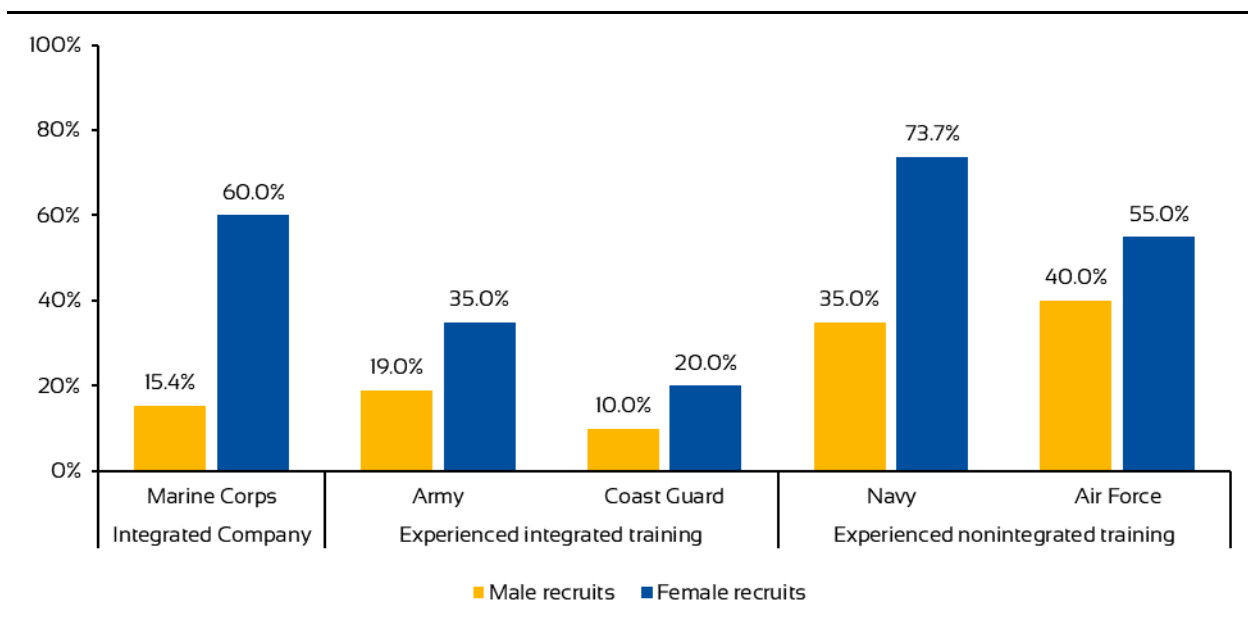
¹⁸⁰ Response options were “disagree,” “mostly disagree,” “neither,” “mostly agree,” and “agree.”

Figure 9.18. Percentage of Recruits Who Agree or Mostly Agree That Training Standards Will Be Lowered With Increased Gender Integration at Recruit Training, by Service and Gender



Recruits in the Navy and Air Force who did not experience integrated training had higher levels of agreement that training standards would be raised as a result of increased integration, compared with recruits in the Army and Coast Guard (see figure 9.19). Broadly, agreement about training standards being raised from Marine Corps Integrated Company fell in the middle of recruits who experienced gender-integrated training (Army and Coast Guard) versus those who did not (Navy and Air Force). Across all Services, women agreed or mostly agreed with the statement that training standards would be raised more frequently than men, with the largest difference between Marine Corps male and female recruits (in the Integrated Company). Over half of women in the Navy and Air Force agreed or mostly agreed training standards would be raised, while under half of males in those Services agreed or mostly agreed.

Figure 9.19. Percentage of Recruits Who Agree or Mostly Agree That Training Standards Will Be Raised With Increased Gender Integration at Recruit Training, by Service and Gender



4. Romantic distractions and fraternization

Army trainees identified fraternization and romantic distractions as problems in the training environment, challenges that were also raised by Service leaders, training cadre, and drill instructors from the other Services (see chapters 6 and 7). In the focus groups, Marine Corps respondents also discussed these issues as anticipated challenges to increased gender integration. Notably, male recruits raised the issues more in the week 2 focus groups, while female recruits raised them more in the week 11 focus groups. Army trainees described noticing “a lot of fraternization,” including “guys send[ing] notes to females in another platoon.” Army trainees colloquially referred to fraternizing romantic relationships as “battle boos” and noted drill sergeants remained vigilant about improper relationships between male and female trainees.

With [number] platoon, there’s like four fraternizing couples I can think of. And it’s annoying when these four groups are always near each other, and it’s annoying when they always mess up what we’re trying to do.—Army trainee, male

I think it depends on the situation. I’ve worked with many males and never was thought to have a “battle boo,” though it looks like it could come off that way a lot. There’s rules: Don’t touch, don’t flirt. But sometimes they still mess with each other, touch each other.—Army trainee, female

“Put your teeth away.” That’s the drill sergeant’s favorite saying.—Army trainee, female

Recruits also reported frustration with drill instructors' attempts to control the environment by assuming any male-female interaction was improper or romantically driven.

For me, I was accused of having a "battle boo." I understand how it was perceived that way. One day we were in the same line at a range, and we were talking, and the drill sergeant was giving us crap for it. There's situations where you really are just friends, though. It's just contradictory—they want us to work together, but also stay away.—

Army trainee, female

They need to be aware that males and females will eventually talk and make friendships. One of my RDCs, she told us, "You're in boot camp, you're not in love camp. You're not looking for your soulmate." So integrating males with females could trigger that at some point.—

Navy recruit, male

The other day, I spaced out and my head happened to be in the direction of a male division, and the female RDC said, "Don't look at the guys!" But I wasn't. She said I would get pregnant by the end of the year.—

Navy recruit, female

J. Army, Air Force, Navy, and Coast Guard Recruit Recommendations for Marine Corps Gender Integration and Recruit Training

Near the conclusion of the focus groups, moderators asked recruits from the other Services, "The Marine Corps is seeking to increase how much male and female recruits train together. Based on your experience, what is something the Marine Corps should keep in mind as they do this?" To provide context for recruits, the moderator briefly described the Marine Corps Integrated Company model during the focus group discussion. Responses below are primarily drawn from answers to this specific question.

Recruits shared mixed opinions about full integration, with some completely endorsing it and others being cautious of change. Recruits recommended a range of specific activities that should be more integrated, less integrated, or not integrated at all. They felt it was essential for the Marine Corps to have mixed-gender drill instructors and leadership training recruits and emphasized the importance of equality of treatment for both genders during training. They also identified comprehensive education on sexual assault and professional relationships as critical to Marine Corps gender integration efforts.

1. While most recruits recommended the Marine Corps further integrate training, some advised against more integration

Coast Guard recruits were the most emphatic in their recommendations for the Marine Corps to pursue more gender integration in their recruit training.

*Integrate.—***Coast Guard recruit, male**

Recruit training is not a gendered thing. If you can do it, you can go out to the fleet. If not, you shouldn't pass. Segregation is not necessary because you can still do the same

things. And when you're all in the fleet, you have to accomplish the same mission together, so why not learn how to do that here? So when you go out, you can complete the mission successfully.—Coast Guard recruit, female

I just want to let them know that ... don't build a wall. Don't segregate something that is not wrong. It's just ... instead of teaching people to build a wall, teach them how to work together.—Coast Guard recruit, male

To be with the same gender the whole time, that's not healthy. Just be respectful of each other. The unnatural thing is to be segregated.—Coast Guard recruit, female

We have the opportunity to do the same things as guys and do them with the same intensity. We can do it together. As long as they keep it respectful and they know that, we can all train together.—Coast Guard recruit, female

Integrate because I think we keep up with males pretty well. [Others agree.]—Coast Guard recruit, female

I like—it's good policy to keep males and females separated at night. But I think it's been widely more beneficial to have us interact.—Coast Guard recruit, female

I'm trying to word this carefully, but people just out of high school ... there is an immaturity level based on sexual interest. As someone who is older and seeing it, I think integration negates that. Rather than if we had separation, integration helps increase maturity. If they had immaturity and lustfulness toward women, then you could see that magnified if they were segregated from women. Every one of those girls in there is my sister. I have tremendous respect for each and every one of them. If someone was immature, then they could do something to them. They could look at a woman like—excuse me for saying this but—a piece of meat. How we have it separated now, it's perfect. They're with us every step of the way except for sleeping.—Coast Guard recruit, male

Recruits from the other Services also felt integration at recruit training would be beneficial for the Marine Corps.

Further in your career, you'll have to work with everyone. Male and female recruits bring different things to the table.—Army trainee, male

You need females to understand certain things and males to push harder. You need two different sides. I don't know if I could handle all the same side. [Others nod.]—Navy recruit, female

I would say, don't see this as a time limit. This can just be the start. Doesn't hurt at all to start in these 8 weeks. [Others agree.]—Navy recruit, male

Continuing the camaraderie. Building a team leads to less friction. At the end of the day, you don't see gender, you see a Soldier.—Army trainee, female

The integration will also help after training because when we are assigned our duty station, we won't have a choice but to work with males.—Army trainee, female

Some recruits, including several Coast Guard recruits, were more tempered in their endorsement of integration or felt that segregated training might be better.

It sounds like they [Marine Corps] are being forced. I'm for the change if they want it. They should test it out. If it doesn't work for them, they should go back to what works. They should compare a control with an experiment group. They should have a test run.—Coast Guard recruit, female

... our boot camp is 8 weeks, and the [service] contract is 4 years. I'm not sure how much the boot camp will change [attitudes toward gender] in an 8-week period down the line.—Navy recruit, male

Why would you fix something if it's not broken?—Coast Guard recruit, male

I don't know if the girls and guys should talk. ... I think they shouldn't talk together because I'm more focused than ever because I haven't made contact with guys. I'm just focusing on what to do. But I [do] think they should work together.—Navy recruit, female

Because guys are going to do stuff how they want to do it, and females may not be doing it how they would want to do it. And that could either lessen motivation or make females feel intimidated. So I think doing things separately would work.—Air Force trainee, female

2. Recruits recommended specific activities for gender integration and identified some they believed should not be integrated

In their recommendations to the Marine Corps, recruits from all Services identified several activities they thought were best for gender integration. Overall, recruits emphasized training events where male and female recruits could work together to accomplish a task or mission and traditional military training activities, such as drill and marching.

... marching, drill, and PT [physical training] are three big things that should be done together. Four or five female trainees were recycled because they didn't pass PT. I feel like if we were together, males could help with those things. Obviously, anatomy is different between the two, but if males could help with that, that would help us as a whole.—Air Force trainee, male

One thing I would say to the Marine Corps is we have different jobs we do. Laundry crew, work detail, stuff like that. That's integrated. I'm on work detail. We clean and

restock the classrooms, but there's no CC supervision. I can see how taking small steps like that to get their toes wet would be good. If there's a classroom, they can learn together.—Coast Guard recruit, male

Have them do more hands-on things together, not just be in class together. A lot of people learn better doing hands-on things than just being in class together in general. People can be more cooperative.—Navy recruit, female

I would say do team building together so they can have that experience. It doesn't have to be like the Army, [but] actually mingling and working on a single mission together. ... I like how the Air Force does it when there is an all-male and all-female flight. Keep all-male and -female flights but have activities where they can work together.—Air Force trainee, male

Do more team building exercises. We do them with just our division, but if we did them with brother division, it would be much better. We could get to know them.—Navy recruit, female

... as far as gender integration, how the gender integration is—if it is a team building mission, it creates a different sense. It is an actual goal, and they are working together and getting it done. ... If it's classes, activities, events, that is a way to go.—Air Force trainee, female

I know in the Marine Corps they are more physical, so they can say, like, "This Friday, females and males are together" or "Everyone with last names beginning with A to F and N to P are together. Now, see how many push-ups you can do." And that could build up morale. Competition, challenges ... you're mentally learning, but it's also fun. You're making a game out of it.—Navy recruit, female

With the combat where they do self-defense [in the Marine Corps], I think that for the basic learning and instructions, it'd be good to have them together, but then work with one another. I did jujitsu and boxing and martial arts—I think it's very helpful to work with males because in a real-world scenario you're not likely to be attacked by only females, so it's good to have some experience with self-defense against different body types. You have to learn how to defend yourself in that scenario. I think having the baseline stuff separated so you can focus and get all the information, but then during the hands-on activities, working together and integrating would be useful.—Navy recruit, female

... before slapping us together and having it be super awkward, they should sit [them] down and introduce people to each other and maybe do an exercise. We had an exercise mentality called "fit to win" with both males and females that was great.—Army trainee, male

I think they have amazing cadence, and marching with them [female recruits], there's a classic military feel when you're in formation and marching and singing cadence

[together]. I think it's more of a tradition, not what we really use today in the Navy and it's not strategic to march. But in terms of honoring that tradition, I think it would be really cool to do that beside our fellow females.—Navy recruit, male

The types of evolutions they go through, depending on the classroom or physical fitness—the Marine Corps should take that into consideration. Pick and choose which ones to integrate.—Navy recruit, male

Recruits also felt several activities should not be integrated—primarily activities that involve close physical contact between recruits where accidental grazing or touching could occur and some sensitive discussions related to sexual assault.

In boot camp, you have different personalities in different branches. I met a Marine and just talking to him, like, ... I could tell if you're a Marine or in the Army or whatever. But Marines, specifically, are easy to identify. Their boot camp is so long, and you have all these men together, so they forget women exist. There are the ones who were not raised correctly and don't have a moral compass, and so then when women come, they get stupid and say like, "That's mine." With integration, because you have these—I don't know the PC term—you have these individuals who are not very intelligent or they're the outcasts or the "bad apples" of society. I just want to disclose, my brother is in the Marines and he's a great man. There's nothing bad with them in general. But the bad apples go to the Marines because it's easy to get into with their personalities. When you go to integrating the women in the Marines, make sure there's a specific exercise where you're separated from the men so they're not "accidentally" groping them.—Coast Guard recruit, female

I think there's use in some exercises of separating them so you know in situations like this in the future when you're in close proximity to certain areas, you'll be careful. [When you're in the fleet] you'll remember from recruit training to be careful later because that would be harmful to your career.—Coast Guard recruit, female

They're big on groups [in the Coast Guard]. Normally on watch, you have four people, so you have an extra three people as witnesses. So if there's an accusation of touching, then you can have backup. Everyone travels in packs together. Back in the house, they are cleaning during the runs, but you're only really alone if you have dental or something specific to you. But we have at least two or more together to have witnesses, so they see what happens.—Coast Guard recruit, male

Navy Recruits, Female

Recruit A: *SAPR. It's more comfortable with just women. We know what's going on and how we feel. We don't want males to look at us like that. ... We're more sensitive.*

Recruit B: *But for SAPR ... especially the videos, I could see males making jokes about that stuff, and females could get real sensitive. They would make fun of that too, like, "Oh, she's sensitive."*

Recruit C: *Going off of that, sometimes people don't realize the comments they're making are wrong because that's their genuine opinion. Males could say something that they don't realize is offensive and they obviously don't know a female's background. So if we're in separate classes, then they could be more open to understanding from the people there. I also think that integrated SAPR classes challenge us to be more open with each other and understand that yeah, he said that, and I'm hurt by what you said because I was affected in this way. But now he knows for the future—"Last time, someone was taken aback by it, so I should be more careful about what I say." Goes hand-in-hand, because if we're separated, then we know how to hold each other accountable for certain comments made, but also we can understand each other in integrated classes.*

3. Recruits felt it was vital for the Marine Corps to have mixed-gender drill instructor teams

Overall, recruits from the other Services recommended the Marine Corps have mixed-gender drill instructor teams and leaders for Marine Corps recruits. Several recruits described this as a foundational first step for more gender integration at recruit training. Male recruits were more adamant than female recruits about having mixed-gender drill instructor teams and leadership.

They can phase it in. Not just, "Here's a bunch of males in the female division." Start with the DIs [drill instructors]. Start with the SDIs [senior drill instructors], make them have a female in a male division. Some things like that; just change and integrate more. Then, eventually, it can be how we have two males and one female RDC. Integrate slowly, starting with the people leading.—Navy recruit, female

Don't have same-sex instructors. Try and mix it up.—Air Force trainee, male

They definitely need to have at least one female drill sergeant with the males. A lot of males here aren't used to the female authority, and just accept that and move on.—Army trainee, female

It takes away any sexist views of things if you have both sexes incorporated in a leadership role.—Coast Guard recruit, male

Keep training the same but ... get them used to there being a female or male above them.—Coast Guard recruit, male

At the very least, having recruits learning from female instructors is great. Whether or not to integrate is up to them, but at least having a mixed team is nothing but beneficial, in my mind.—Navy recruit, male

Their RDCs definitely need to be different. They need to have two different genders, at least one male and one female. Or else you'll just have one like-minded leadership.—Navy recruit, female

The point of basic training is to build you up after breaking you down. That starts with teaching people—some people know how to respect genders, but some people don't. So by breaking that part down and then building it up, they can get rid of that or filter out the bad apples. Filter out the bad mindsets with leadership so they know that even if they have an opposite-gender RDC, they're in charge no matter what gender they are. It doesn't matter who they are. If they're a rank above you, you have to listen to them.—
Navy recruit, female

Also the CC integration. With our lead [CC] being a female ... it comes back to respect. Just respect. We've all respected her from day 1.—
Coast Guard recruit, male

Absolutely, when you get to the fleet, you mostly definitely will come across the other gender in a leadership role. She could be your direct supervisor or anyone. Could be in any position above your direct leadership as well. It's very important ... to start early and have the opposite gender above you and learn how to be a subordinate respectfully, and maybe even among the recruit leadership, how to be a superior to the opposite gender. Learning those roles and having those interactions would be great. It will happen in the fleet. One hundred percent. There's no way around it. I don't care what rate you are. I've heard stories and seen RDCs that are a certain rate that you might have in mind that's mostly male or female, but there are actually quite a few males or females in that role. Starting early is never a bad thing.—
Navy recruit, male

4. Recruits emphasized equality of treatment for male and female recruits in gender-integrated training

Recruits recommended drill instructors and other leaders show fair, consistent, and equal treatment to male and female recruits in integrated training.

Be equal. Male drill sergeants and trainees, and some females, underestimate themselves. There are times when I don't want to carry heavy things, but I know I can do it. I'm just as strong as a lot of the males. They say you can either be a strong Soldier or a smart Soldier. And I feel like we are both. I just feel like we are all equally physically and mentally strong. Don't underestimate us females.—
Army trainee, female

For me, it would be to understand that men and women are different. Being fair and consistent across the board.—
Army trainee, female

Incorporating females and males and having them work together in boot camp (similar to what we do) would help. I think it would help and work the same way in boot camp for the Marine Corps. ... I think there are some aspects of our training that they could incorporate. I think they should have same squad bay configuration. ... If they train together, I think men would respect the other more—if they are held to the same standard and see that.—
Coast Guard recruit, male

5. Recruits felt comprehensive education about sexual assault and professional relationships is critical to the Marine Corps integration efforts

Some recruits described comprehensive training and education programs around gender and gender-related issues as necessary for successful gender integration. Examples included comprehensive SAPR classes, training about respect, and communication classes about professional working relationships.

If they are going to integrate more, they need to be serious about it. Guys should have a SAPR class and know the consequences and seriousness of it.—Coast Guard recruit, male

They need to be strict about respect. If they integrate ... sexual assault class was one of [the most] serious classes we had.—Coast Guard recruit, male

At the very least, have more education about conflict resolution and how to communicate. At least frontload them with information on how to communicate.—Navy recruit, male

You have some males that don't have respect. Our sexual assault class was huge and it was 4 hours. I feel like if they had a class about respect and how to interact in a professional way.—Air Force trainee, female

... I've learned now how to communicate in the Navy because the RDCs give us instructions. Interacting with women in the Navy ... there's a problem because there's such a high SAPR rate. [Service] instructions on how to treat women is just, "Be respectful." The equivalent of that would be them saying, "Just shower and change." But they say, "You have 3 minutes to shower. Make sure this part is flush with this and this is a quarter-inch lower here." There's not a lot of specificity on how to treat women. Here [at recruit training] would be a great time to learn how to do that properly. I agree that maybe 8 weeks is not the most influential [time frame], but something has to help.—Navy recruit, male

K. Important Considerations for Gender Integration From the Army, Air Force, Navy, and Coast Guard Recruit Perspectives

Findings and analysis from the perspectives of recruits from the other Services present several important considerations for current and future gender integration efforts for Marine Corps recruit training:

- **Recruits share broad support for gender-integrated training at the lowest unit level (i.e., platoon equivalent), particularly among those who had experienced integrated training.** Army, Air Force, Navy, and Coast Guard recruits showed higher levels of support for gender-integrated training at the platoon equivalent level than Marine Corps recruits. Air Force and Navy recruits, whose training experiences were more similar to Marine Corps Integrated Company model, supported platoon-level integration more (45.0 and 60.0 percent, respectively) than Marine Corps recruits (less than 20 percent). An

overwhelming majority (87.8 to 100.0 percent) of recruits in Services who experienced integration (Army and Coast Guard) believed gender-integrated training should be implemented at the lowest unit level. Recruits who experienced gender-integrated training described many benefits to integration and felt it was essential preparation for the fleet and for their careers as service members. Those who did not experience gender-integrated training anticipated such benefits, were frustrated by their experience, and desired closer training experiences with their opposite-gender peers to feel equipped for follow-on training and their first assignments.

- **Recruits prefer and recommend being trained by mixed-gender drill instructor teams.** Recruits in the other Services are trained by mixed-gender drill instructor teams and strongly endorse this training approach. In their recommendations to the Marine Corps, recruits felt implementing mixed-gender drill instructor teams was an essential and crucial step for the Marine Corps; male recruits were more adamant than female recruits about its necessity. Recruits described relative strengths of male and female drill instructors and expressed no broad preferences for one over the other—most described their preferences as personality or connection based. Through recruits’ own words in the focus groups, their experiences with mixed-gender drill instructor teams sent the message that a “leader is a leader” in their Service—it’s about rank and authority, not gender.
- **Sexism and gender-based treatment of female recruits from male recruits and drill instructors degrades the training environment, goes against Service core values, and hinders gender integration efforts.** Recruit experiences with and perceptions of sexism and gender-based treatment, primarily from men—recruits and drill instructors—degrades the training environment for all. Reinforcement of gender stereotypes, slights against women and female recruit leadership, and the persistence of sexual harassment behaviors corrodes the Services’ core values. These behaviors and perceptions were reported as the biggest challenge of gender-integrated training environments—a difficult yet preventable problem.
- **Equity and respect are necessary ingredients for any training environment, regardless of the level of gender integration.** Equity and respect are cultivated facets of a training environment—they are not bestowed through the mere act of integrating men and women. Ensuring equity and respect in the training environment must be a deliberate, intentional, and daily effort for every Service. Male and female recruits in the Army and Coast Guard trained side by side at the platoon equivalent level, yet their recruits reported divergent interpersonal experiences. Army recruits described sexism and sexual harassment behaviors that bubbled to the surface and diminished women’s experiences in the training environment. Coast Guard recruits articulated trust and respect as foundations of their Service, reinforced by CCs and recruit accountability measures, which forged camaraderie through equity. Proactive and sustained attention to these matters is critical to any training environment where diversity is valued.

Chapter 10: Marine Corps Recruit Human and Physical Performance Outcomes

Bottom Line Up Front

- It appears the most physically demanding time period for Marine recruits occur during the first phase of training.
- While workloads tend to become reduced as training continues, the consistently elevated resting cortisol values, particularly in females, point to the cumulative nature of the training in addition to persistent psychological demands.
- There are clearly notable similarities across the currently studied gender-integrated models with regard to patterns of change across recruit training.
- Internal workload metrics (caloric expenditure per kg body weight) were fairly consistent between males and females, however there were differences in stress, activity, and sleep metrics.
- Regardless of model, the total sleep duration still fell notably below recommendations for optimizing health and recovery, particularly in highly active populations.
- There was a significant interaction between time and cohort, in their effect on Concentric Peak Force. Opposite directions of change for both absolute and relative Concentric Peak Force in the CMJ between the two female cohorts were observed, where female Series Track recruits experienced no decline in performance, whilst there was a decline in performance in female recruits in the Integrated Company. Training differences may potentially explain these results.
- Among female recruits, there was no significant interaction between cohort and time, in their effect on Relative Peak Force in the IMTP, a measure of maximal strength.

A. Workload, Sleep, and Physiological Data of Recruits throughout Training at MCRD Parris Island and San Diego

This section describes data collected from recruits at MCRD Parris Island and MCRD San Diego through information collected from the use of wearable devices and salivary cortisol. Please see Chapter 3. E. for data considerations regarding the differences in training area between the two MCRDs, which may impact differences in workload, sleep and physiological data. It is impossible for the study team to disentangle how the MCRD terrain, layout, and training schedule differences affected the differences in physical and physiological workloads between Parris Island (Series Track and Integrated Company) and San Diego (Male-Only) study training models.

1. Workload Metrics

Table 10.1: Energy Expenditures throughout Recruit Training

Integration Model	Sex	N	Energy Expenditure (kcal) Week 2	N	Energy Expenditure (kcal) Week 7 or 8	N	Energy Expenditure (kcal) Week 11
Series Track	Male	47	4500±679	39	3871±477	41	3824±468
Series Track	Female	51	3715±806	46	3136±466	42	2946±464
Integrated	Male	48	4309±657	44	3895±441	37	3491±556
Integrated	Female	48	3615±559	37	3245±412	35	2894±504
Male-Only	Male	85	4595±800	76	3950±544	74	3535±426

Values are presented as means ± standard deviations

Table 10.2: Energy Expenditures per Kg Body Weight throughout Recruit Training

Integration Model	Sex	N	Energy Expenditure (kcal/kg) Week 2	N	Energy Expenditure (kcal/kg) Week 7 or 8	N	Energy Expenditure (kcal/kg) Week 11
Series Track	Male	47	59.3±8.8	39	51.2±6.2	41	52.1±5.8
Series Track	Female	51	61.3±13.1	46	51.6±7.3	42	48.3±6.5
Integrated	Male	48	61.4±6.7	44	55.8±5.6	37	50.4±7.5
Integrated	Female	48	58.3±6.6	37	51.7±4.9	35	47.4±6.2
Male-Only	Male	85	62.0±7.9	76	53.2±5.7	74	48.2±4.6

Values are presented as means ± standard deviations

Table 10.3: Distance Covered throughout Recruit Training

Integration Model	Sex	N	Distance (km) Week 2	N	Distance (km) Week 7 or 8	N	Distance (km) Week 11
Series Track	Male	47	13.4±2.9	39	11.3±2.4	41	13.5±3.1
Series Track	Female	51	13.4±2.7	46	10.2±1.8	42	12.0±3.4
Integrated	Male	48	14.0±2.6	44	12.8±1.9	37	11.9±2.8
Integrated	Female	47	13.7±2.5	37	11.8±1.8	35	11.4±2.5
Male-Only	Male	85	15.3±2.3	76	14.1±2.1	74	12.3±2.0

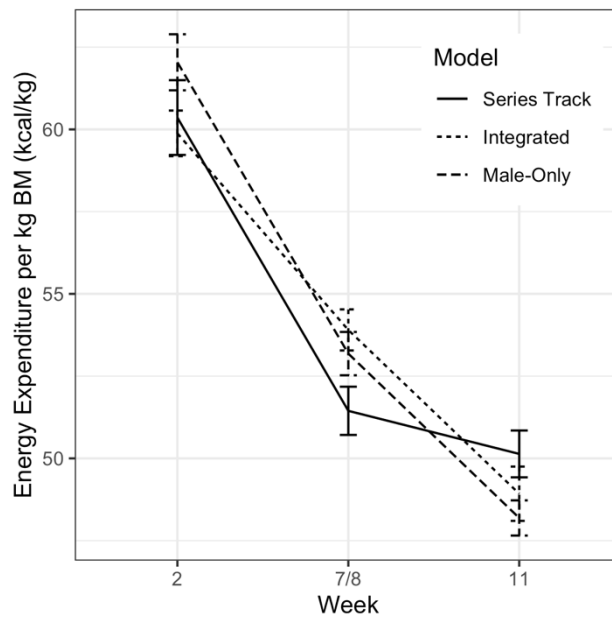
Values are presented as means ± standard deviations

Table 10.4: Step Counts throughout Recruit Training

Integration Model	Sex	N	Steps Week 2	N	Steps Week 7 or 8	N	Steps Week 11
Series Track	Male	47	22194±4347	39	18781±3643	41	22692±4921
Series Track	Female	51	23173±3966	46	18914±3223	42	22454±5826
Integrated	Male	48	22702±4049	44	20044±2979	37	20117±5067
Integrated	Female	47	24207±3592	37	20630±3224	35	21132±4055
Male-Only	Male	85	25106±3539	76	23003±3362	74	20148±2929

Values are presented as means ± standard deviations

Figure 10.1: A Comparison of Changes in Energy Expenditure per Kg Body Mass throughout Recruit Training for Series Track, Integrated, and Male-Only Model

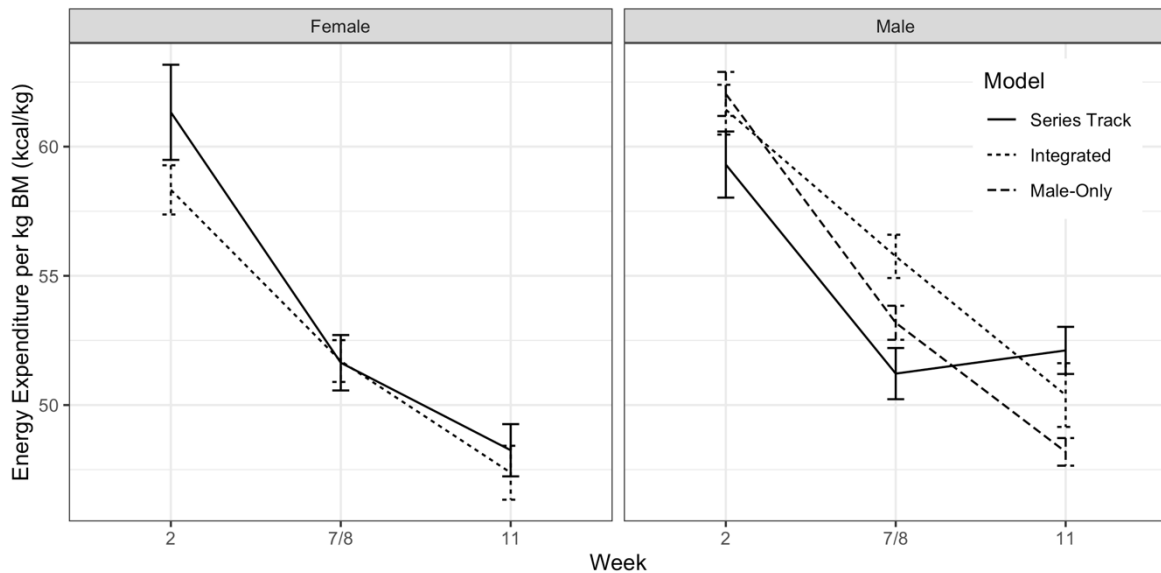


Graph represents average energy expenditure per kg body mass at week 2, 7/8, and 11 of recruit training by gender integration model

Energy Expenditure per kg body mass

A Group-by-Time interaction was found ($P < 0.001$). Simple effects of Time within Group showed significant decreases in energy expenditure per kg body mass from week 2 to week 7/8 ($P < 0.001$) which continued to decline through week 11 for all models ($P < 0.001$). This decline appeared to be slightly attenuated from week 7 to 11 for the Series Track.

Figure 10.2: A Comparison of Changes in Energy Expenditure per Kg Body Mass by Gender throughout Recruit Training for Series Track, Integrated, and Male-Only Models



Left graph represents average energy expenditure per kg body mass for females in integrated and series track at week 2, 7, and 11 of recruit training by gender integration model

Right graph represents average energy expenditure per kg body mass for males in integrated, series track, and male-only company at week 2, 7/8, and 11 of recruit training by gender integration model

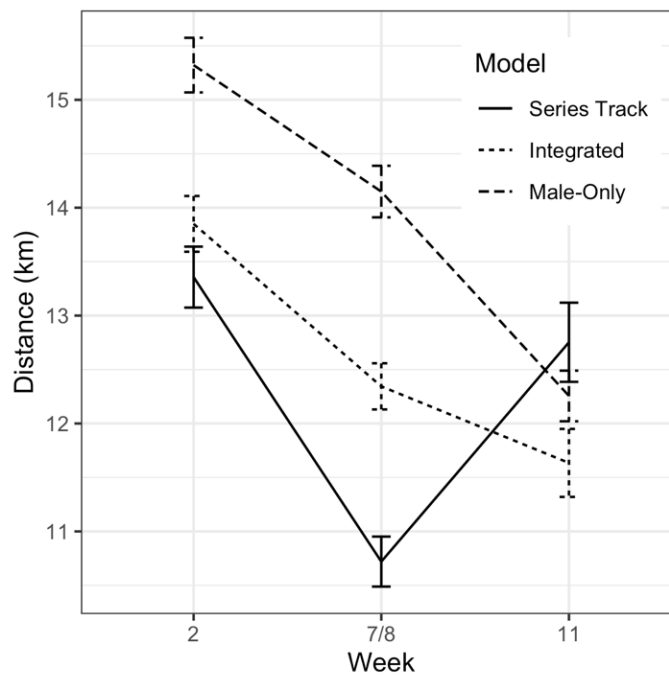
Females: Energy Expenditure per Kg body mass

No Group-by-Time interaction ($P=0.219$) or Group main effect was observed ($P>0.384$), but a Time main effect was found ($P<0.001$). Simple effects of Time showed decreased energy expenditure per kg body mass for both models. Contrasts indicated that these decreases in energy expenditure occurred from week 2 to week 7 ($P<0.001$) as well as from week 2 to week 11 ($P<0.001$) for both models.

Males: Energy Expenditure per Kg body mass

A significant Group-by-Time interaction was found ($P<0.001$). Simple effects of Time within Group showed significant decreases in energy expenditure per kg body mass for all models. Energy expenditure was lower at both week 7/8 and week 11 compared to week 2 for all models ($P<0.001$). The Series Track model demonstrated maintenance of energy expenditure from week 7 to 11, while both other models continued to show a decline.

Figure 10.3: A Comparison of Changes in Distance Covered throughout Recruit Training for Series Track, Integrated, and Male-Only Models

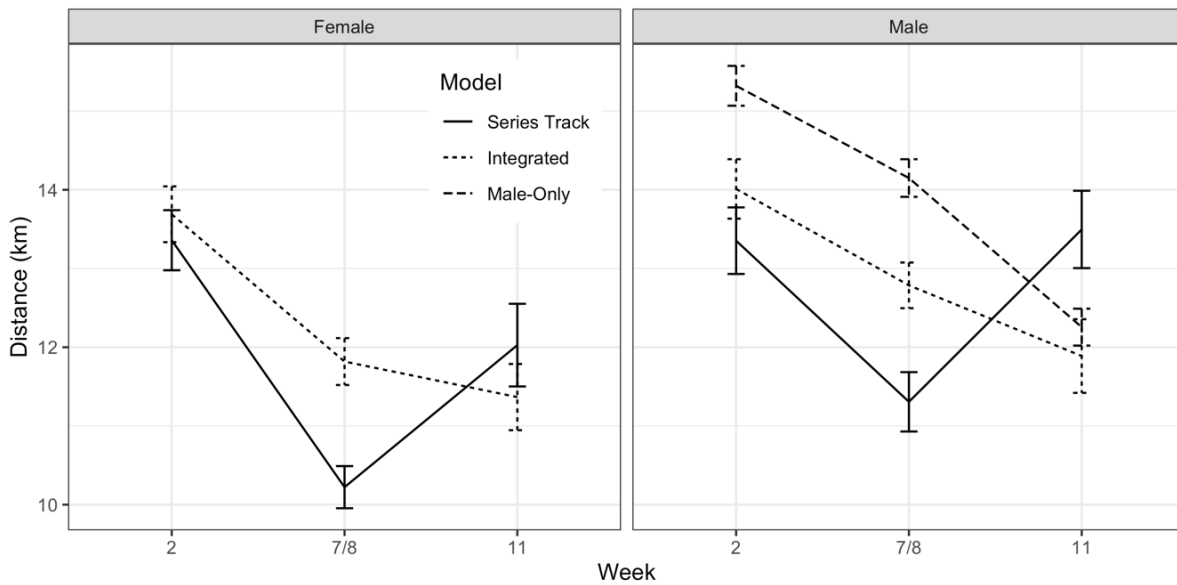


Graph represents average distance covered at week 2, 7/8, and 11 of recruit training by gender integration model

Distance Covered

A Group-by-Time interaction was found ($P < 0.001$). Distance covered decreased from week 2 to week 7/8 ($P < 0.001$) and remained lower at week 11 ($P < 0.016$) in all gender integration models. Notably, the Series Track had a rebound trend from week 7 to 11, with distance covered returning towards baseline, while both other models showed a continued reduction. Distance covered in the Male-only company was consistently higher than the other two models at weeks 2 and 7/8.

Figure 10.4: A Comparison of Changes in Distance Covered by Gender throughout Recruit Training for Series Track, Integrated, and Male-Only Models



Left graph represents average distance covered for females in integrated company and series track at week 2, 7, and 11 of recruit training by gender integration model

Right graph represents average distance covered for males in integrated company, series track, and male-only company at week 2, 7/8, and 11 of recruit training by gender integration model

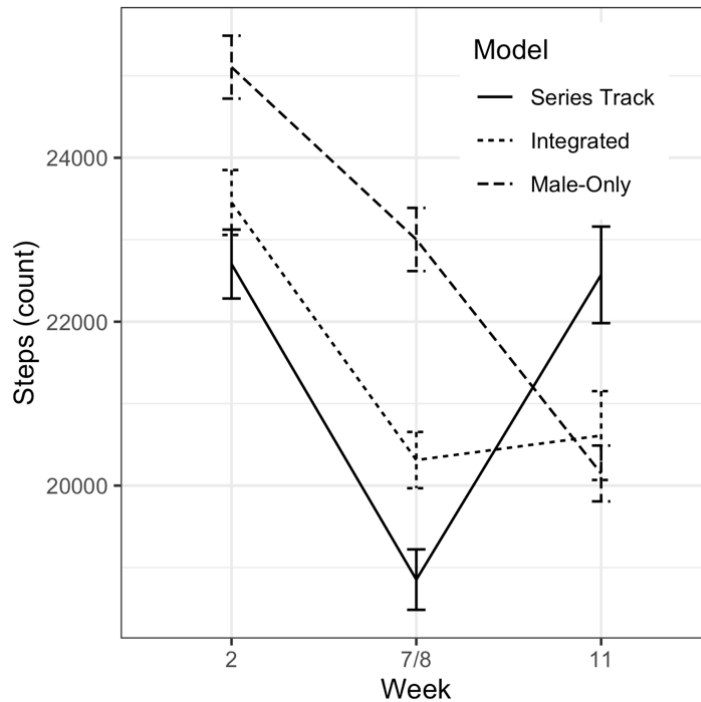
Females: Distance Covered

A Group-by-Time interaction was found ($P=0.002$). Simple effects of Time within Group showed both gender integration models decreased from week 2 to week 7 ($P<0.001$) and week 2 to week 11 ($P<0.001$). The Series Track demonstrated an increase in distance covered after week 7, though this still did not return to week 2 values.

Males: Distance Covered

A significant Group-by-Time interaction was found ($P<0.001$). Simple effects of Time within Group showed significant decreases from week 2 to week 7/8 for all models ($P<0.001$), with both the Male-only and Integrated company continuing to have lower distance covered at week 11 compared to week 2 ($P<0.001$). Series Track distances covered returned to week 2 values at week 11 ($P=0.805$). Distance covered in the Male-only company was consistently higher than the other two models at weeks 2 and 7/8.

Figure 10.5: A Comparison of Changes in Steps Taken throughout Recruit Training for Series Track, Integrated, and Male-Only Models

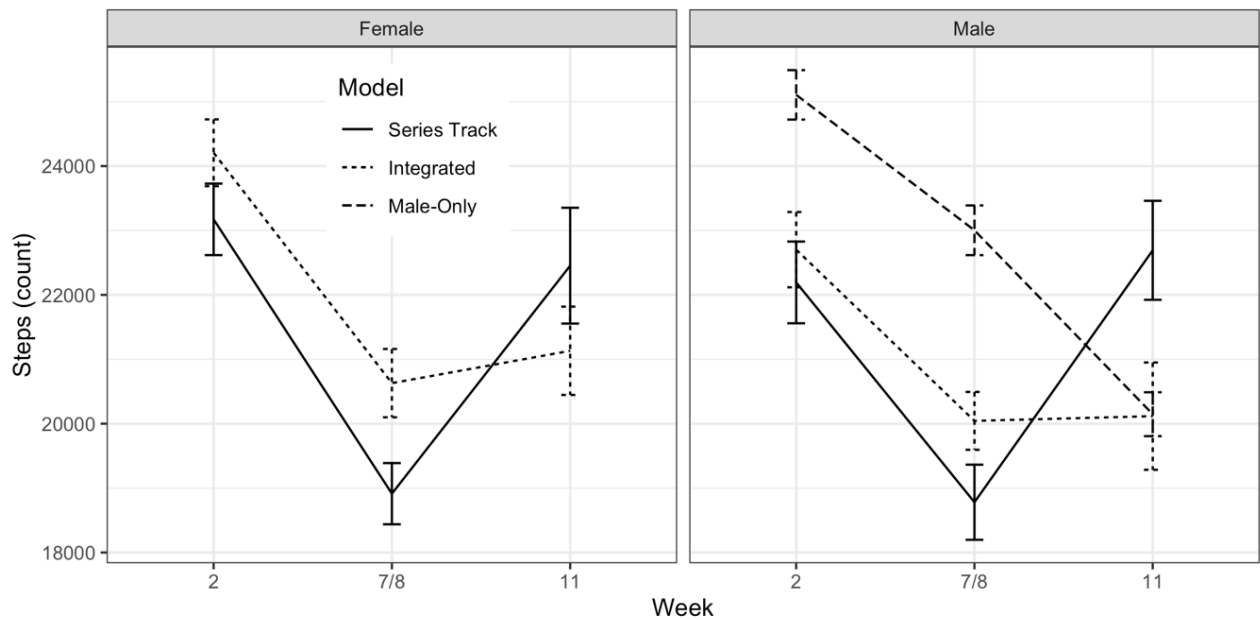


Graph represents average steps taken at week 2, 7/8, and 11 of recruit training by gender integration model

Steps Taken

A Group-by-Time interaction was found ($P < 0.001$). Simple effects of Time within Group showed significant decreases across time for all models ($P < 0.001$). This decline was seen from week 2 to week 7/8 for all models ($P < 0.001$). Series Track exhibited no difference from week 2 at week 11 ($P = 0.747$), while Integrated and Male-only company were lower at week 11 compared to week 2 ($P < 0.001$). The steps taken by the Integrated company remained consistent from week 7 to 11. Steps taken in the Male-only company were consistently higher than the other two models at weeks 2 and 7/8.

Figure 10.6: A Comparison of Changes in Steps Taken by Gender throughout Recruit Training for Series Track, Integrated, and Male-Only Models



Left graph represents average steps taken for females in integrated company and series track at week 2, 7, and 11 of recruit training by gender integration model

Right graph represents average steps taken for males in integrated, series track, and male-only company at week 2, 7/8, and 11 of MCRD recruit training by gender integration model

Females: Steps Taken

A Group-by-Time interaction was found ($P=0.125$). Simple effects of Time within Group showed decreases over time for both the Series Track and Integrated company ($P<0.001$). Both Series Track and Integrated company had a reduction in steps from week 2 to 7 ($P<0.001$). Series Track was not different from week 2 to week 11 ($P=0.227$), while Integrated company remained lower than week 2 ($P<0.001$) but was similar to week 7 values.

Males: Steps Taken

A significant Group-by-Time interaction was found ($P<0.001$). Simple effects of Time within Group showed significant decreases across time for all models ($P<0.001$). There was decrease in steps taken from week 2 to week 7/8 for all models ($P<0.001$). Series Track did not exhibit differences from week 2 at week 11 ($P=0.492$), while Integrated and Male-only company were lower at week 11 compared to week 2 ($P<0.001$). Steps taken by the recruits in the Male-only company were consistently higher than the other two models at week 2 and 7/8.

2. Sleep Metrics

Table 10.5: Sleep Duration throughout Recruit Training

Integration Model	Sex	N	Sleep Duration (h) Week 2	N	Sleep Duration (h) Week 7 or 8	N	Sleep Duration (h) Week 11
Series Track	Male	47	5.7±1.1	39	5.8±0.8	41	5.9±1.0
Series Track	Female	50	6.2±0.8	46	5.9±0.9	42	6.3±1.2
Integrated	Male	48	6.4±0.7	44	6.1±1.0	37	6.2±1.1
Integrated	Female	48	6.1±0.8	37	6.1±0.8	35	6.5±1.2
Male-Only	Male	85	6.2±0.8	76	6.8±1.3	74	6.5±0.8

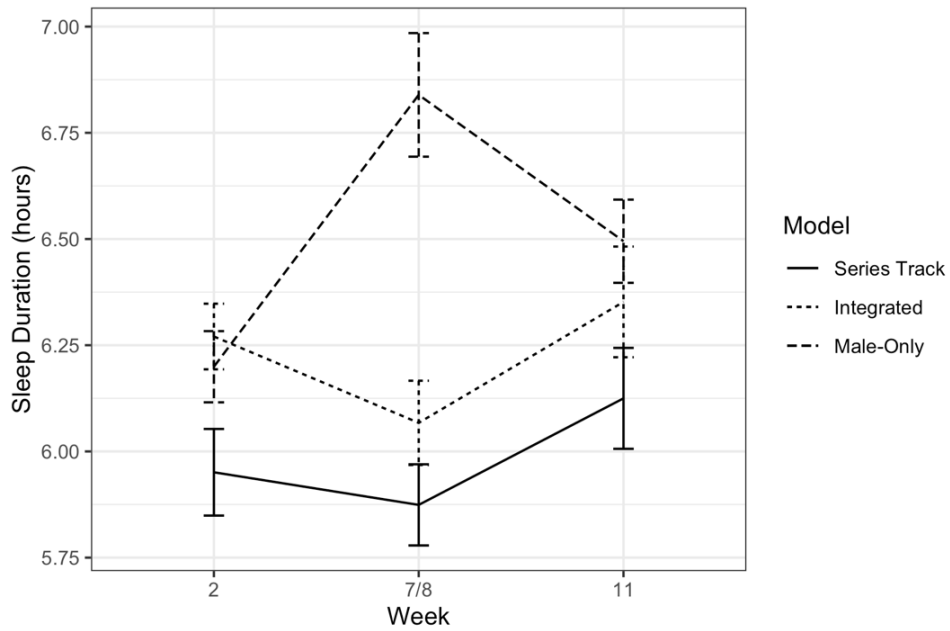
Values are presented as means ± standard deviations

Table 10.6: Sleep Continuity throughout Recruit Training

Integration Model	Sex	N	Sleep Continuity Week 2	N	Sleep Continuity Week 7 or 8	N	Sleep Continuity Week 11
Series Track	Male	44	3.3±0.8	39	3.4±0.9	41	3.4±0.9
Series Track	Female	48	4.1±0.6	46	3.9±0.7	40	4.1±0.7
Integrated	Male	48	3.5±0.6	43	3.5±0.9	35	3.4±0.8
Integrated	Female	48	4.2±0.7	37	4.1±0.8	35	4.0±0.7
Male-only	Male	84	3.3±0.7	73	3.6±0.8	74	3.3±0.8

Values are presented as means ± standard deviations

Figure 10.7: A Comparison of Changes in Sleep Duration throughout Recruit Training for Series, Integrated Track, and Male-Only Models

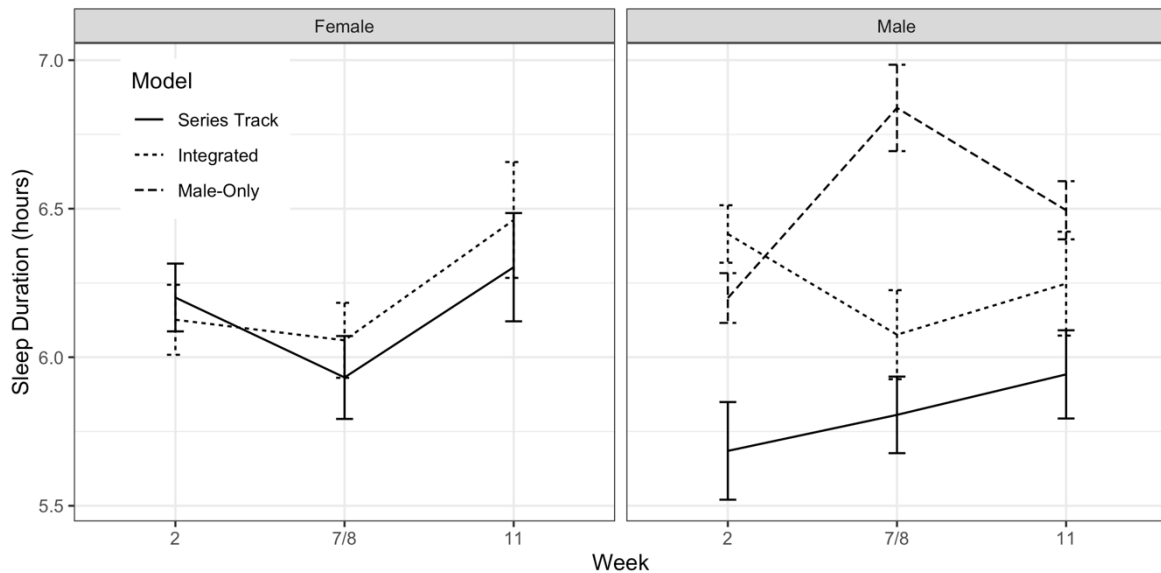


Graph represents average sleep duration at week 2, 7/8, and 11 of recruit training by gender integration model

Sleep Duration

A Group-by-Time interaction was found ($P < 0.001$). Simple effects of Time within Group showed no changes over time for Series Track and Integrated company ($P > 0.236$). Male-only company exhibited a significant effect for sleep over time, with an increase from week 2 to week 8 ($P < 0.001$) with no difference in sleep duration from week 2 to week 11 ($P = 0.071$).

Figure 10.8: A Comparison of Changes in Sleep Duration by Gender throughout Recruit Training for Series Track, Integrated, and Male-Only Models



Left graphs represent average sleep duration for females in integrated company and series track model at week 2, 7, and 11 of recruit training by gender integration model
 Right graphs represent average sleep duration for males in integrated, series track, and male-only model at week 2, 7/8, and 11 of recruit training by gender integration model

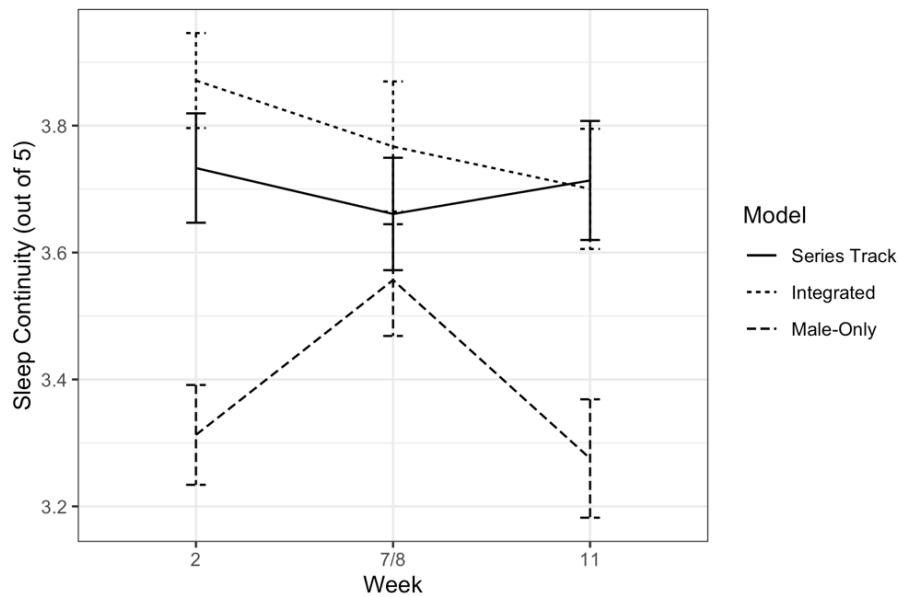
Females: Sleep Duration

No Group-by-Time interaction ($P=0.523$) or Group main effect was observed ($P>0.642$), but a Time main effect was found ($P=0.013$). Simple effects of Time, however, showed no significant effects as a function of the model. There was no significant change in sleep duration from week 2 to week 7 ($P=0.162$) or week 2 to week 11 ($P=0.123$) for either model.

Males: Sleep Duration

A significant Group-by-Time interaction was found ($P<0.001$). Simple effects of Time within Group showed no changes over time for Series Track or Integrated company ($P>0.157$). However, there were significant changes in the Male-only company, with an increase in sleep duration from week 2 to week 8 ($P<0.001$), before returning to values similar to week 2 by week 11 ($P=0.091$).

Figure 10.9: A Comparison of Changes in Sleep Continuity throughout Recruit Training for Series Track, Integrated, and Male-Only Models

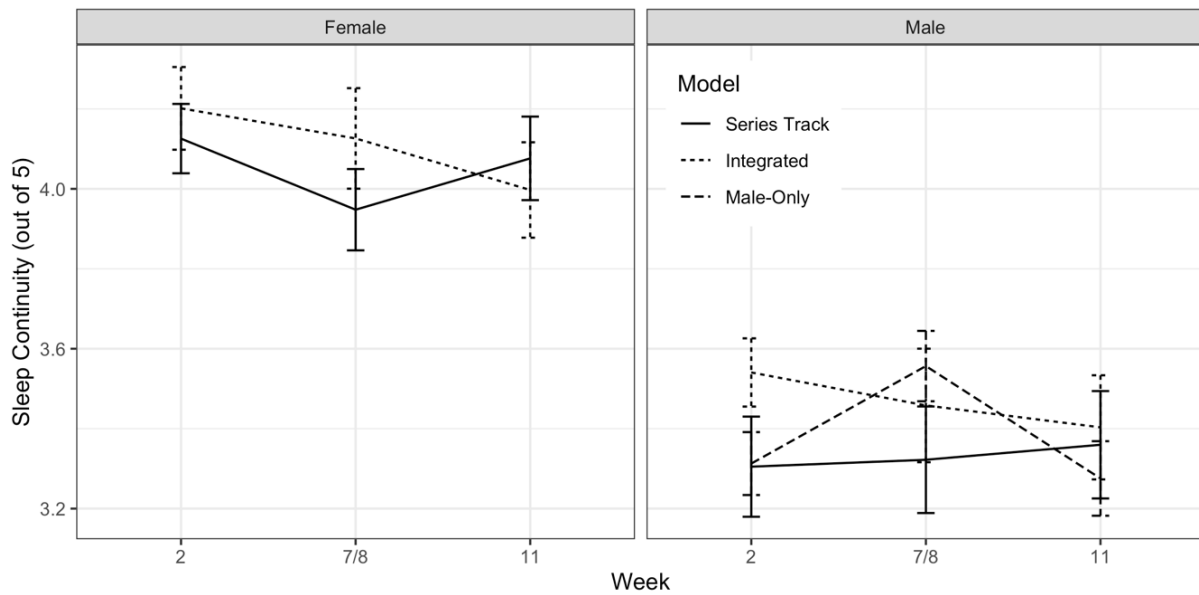


Graph represents average sleep continuity at week 2, 7/8, and 11 of recruit training by gender integration model

Sleep Continuity

A Group-by-Time interaction was observed ($P < 0.001$). Simple effects of Time within Group showed no changes over time for Series Track ($P > 0.415$). Sleep continuity in the Integrated company showed a significant change over time. Though sleep continuity did not change from week 2 to week 7 ($P = 0.304$), there was a significant decrease found from week 2 to week 11 ($P = 0.005$). Sleep continuity in the Male-only company changed over time. There was an increase from week 2 to week 8 ($P = 0.008$), but no difference was found between week 2 and week 11 ($P = 0.618$). Sleep continuity appeared to be consistently lower in the Male-only company compared to the other two models.

Figure 10.10: A Comparison of Changes in Sleep Continuity by Gender throughout Recruit Training for Series Track, Integrated, and Male-Only Models



Left graphs represent average sleep continuity for females in integrated and series track model at week 2, 7, and 11 of recruit training by gender integration model

Right graphs represent average sleep continuity for males in integrated, series track, and male-only model at week 2, 7/8, and 11 of recruit training by gender integration model

Females: Sleep Continuity

A Group-by-Time interaction approached significance ($P=0.096$). Simple effects of Time with Group showed no change over time for Series Track ($P>0.132$). There was a Time effect for sleep continuity in the Integrated company. Continuity did not decrease from week 2 to week 7 ($P=0.479$), but was lower at week 11 compared to week 2 ($P=0.028$).

Males: Sleep Continuity

A Group-by-Time interaction approached statistical significance ($P=0.058$). Simple effects of Time within Group showed no changes over time were observed for Series Track or Integrated company ($P>0.12$). There was a Time effect for the Male-Only company, with an increase in sleep continuity from week 2 to week 8 ($P=0.012$), before returning to week 2 values by week 11 ($P=0.666$).

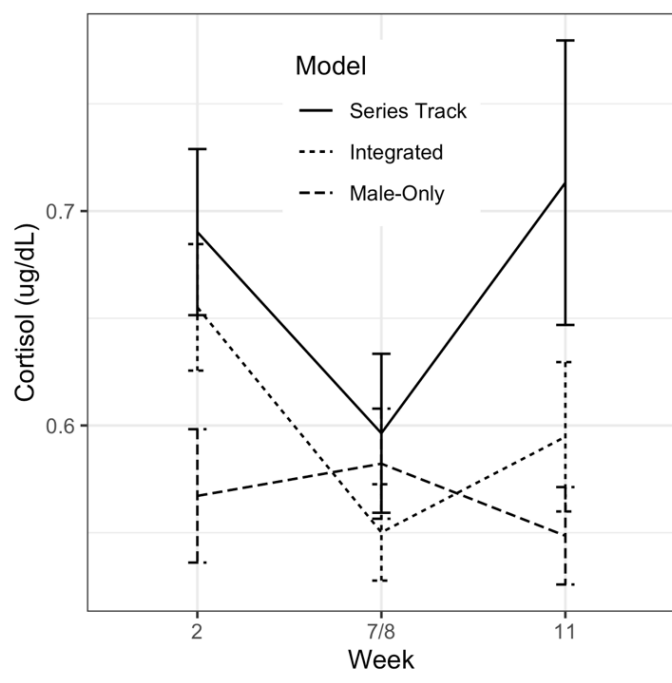
3. Cortisol

Table 10.7: Cortisol Values throughout Recruit Training

Integration Model	Sex	N	Cortisol Week 2 ug/dL	N	Cortisol Week 7 ug/dL	N	Cortisol Week 11 ug/dL
Series Track	Male	48	0.49±0.19	37	0.49±0.20	41	0.52±0.19
Series Track	Female	49	0.89±0.42	46	0.68±0.4	43	0.89±0.79
Integrated	Male	49	0.64±0.31	42	0.55±0.19	37	0.56±0.18
Integrated	Female	48	0.67±0.27	36	0.55±0.21	35	0.63±0.38
Male-Only	Male	85	0.57±0.29	75	0.58±0.22	75	0.55±0.20

Values are presented as means ± standard deviations

Figure 10.11: A Comparison of Changes in Cortisol throughout Recruit Training for Series Track, Integrated, and Male-Only Models

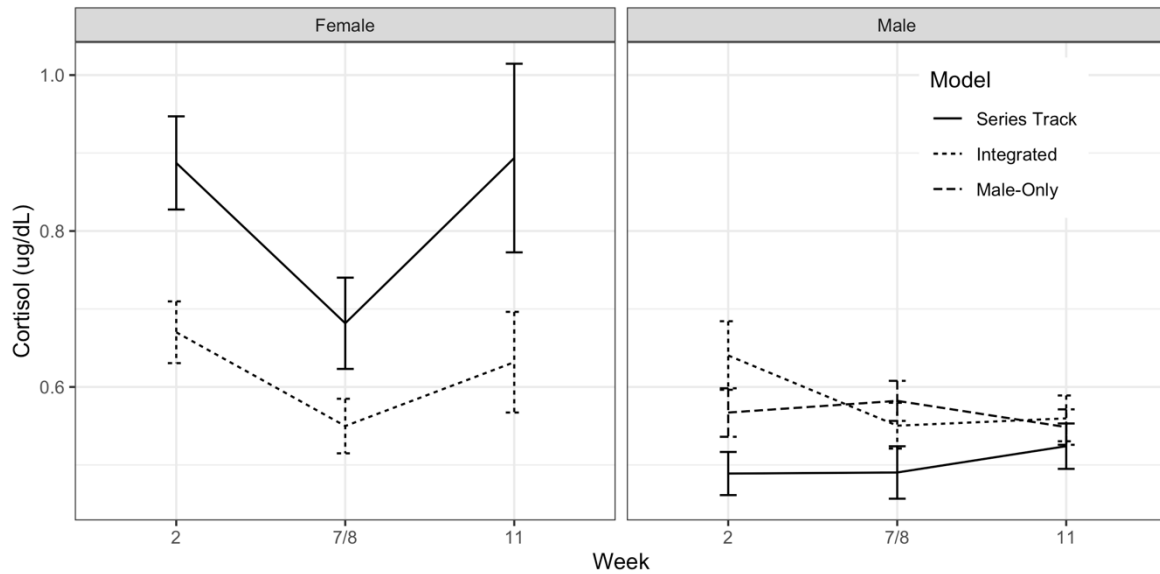


Graph represents average cortisol at week 2, 7/8, and 11 of recruit training by gender integration model

Cortisol

A Group-by-Time interaction approached statistical significance ($P=0.055$). Simple effects showed changes in cortisol over time for the Series Track and Integrated company ($P<0.05$). There were decreases in cortisol from week 2 to week 7 for Series Track ($P=0.038$) and Integrated company ($P=0.021$), but not Male-only company ($P=0.944$). All groups showed no difference from week 2 at week 11 ($P>0.22$). The Series Track had consistently higher cortisol at week 2 and week 11, particularly compared to the Male-only model.

Figure 10.12: A Comparison of Changes in Cortisol by Gender throughout Marine Corps Recruit Depots Recruit Training for Series, Integrated, and Male-Only Track Models



Left graphs represent average cortisol for females in integrated and series track model at week 2, 7, and 11 of recruit training by gender integration model
 Right graphs represent average cortisol for males in integrated, series track, and male-only model at week 2, 7/8, and 11 of recruit training by gender integration model

Females: Cortisol

A Group-by-Time interaction failed to reach significance ($P=0.574$), but a Group main effect was observed ($P=0.004$) indicating higher cortisol in Series Track compared to Integrated company regardless of time ($P=0.004$).

Males: Cortisol

A Group-by-Time interaction approached statistical significance ($P=0.065$). Simple effects of Time within Group revealed no change over time for Series Track ($P>0.482$) or Male-only company ($P>0.630$). There was a Time effect for the Integrated company, with a decrease from week 2 to week 7 ($P=0.026$), and it remained lower through week 11 ($P=0.039$).

Connor Davidson Resiliency Scale Scores as a Covariate

Baseline Connor Davidson Resiliency Scale scores were included as a covariate in the statistical models presented previously assessing interactions and main effects of Integration Model and Time on workload and cortisol throughout basic training. Resiliency scores did not affect the relationships between any variables.

Correlations between Workload Variables, Sleep, and Cortisol:

No relationships were observed between workload variables and cortisol ($r < 0.127$, $P > 0.05$). To account for repeated observations within subjects, repeated measures correlations were also conducted. Significant, albeit weak correlations were found between cortisol and energy expenditure ($r = 0.108$, $P = 0.023$), distance covered ($r = 0.127$, $P = 0.008$), steps taken ($r = 0.121$, $P = 0.012$), and sleep continuity ($r = 0.170$, $P < 0.001$), but not sleep duration ($r < 0.100$, $P > 0.10$).

B. Physical Performance (CMJ and IMTP)

Countermovement Jump (CMJ) and Isometric Mid-Thigh Pull (IMTP) tests were conducted at week 2 and week 11 of USMC recruit training in both the Series Track and Integrated Company cohorts at MCRD Parris Island, as well as in the Male Only cohort at MCRD San Diego.

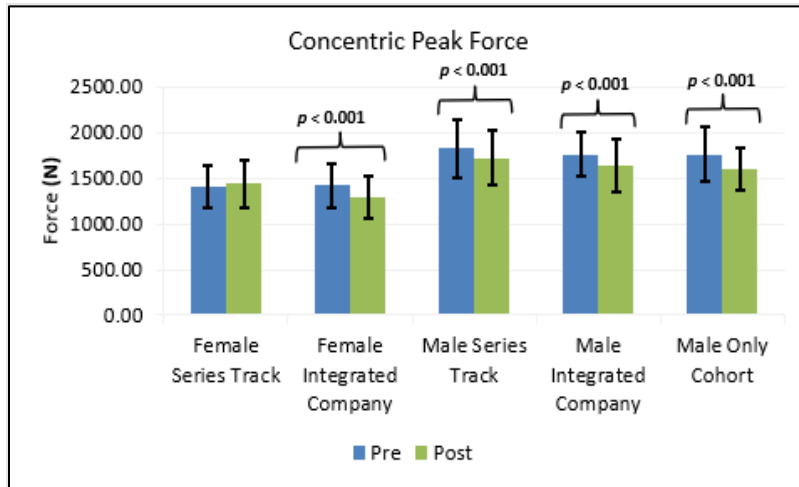
Post Crucible human performance testing: Week 11 data collection was conducted after each cohort participated in the Crucible. The Crucible takes place over 54-hours and includes food and sleep deprivation and over 45 miles of marching, which taxes the nervous and muscular systems immensely, leading to a significant decrease in physical performance. Based on recruit availability and the training schedule at each site, recruits at MCRD Parris Island were tested approximately 24 hours post-crucible and recruits at MCRD San Diego were tested approximately 72 hours post-crucible resulting in different recovery times.

1. Within Cohort Analysis

Countermovement Jump

The magnitude of change in CMJ variables from week 2 to week 11 of recruit training were analyzed. These variables included Concentric Peak Force (N), Relative Concentric Peak Force (N/kg), Peak Power (W), and Relative Peak Power (W/kg).

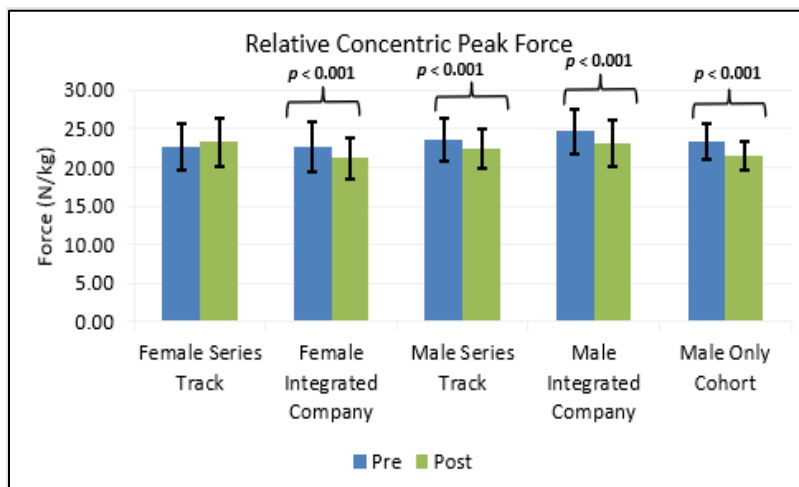
Figure 10.13: Changes in Concentric Peak Force performance from week 2 to week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego



Bars represent mean, error lines represent ± 1 standard deviation

Concentric Peak Force (N): In Series Track female recruits, Concentric Peak Force did not change significantly from week 2 (1404.36 ± 227.38 Newtons) to week 11 (1437.97 ± 253.36 Newtons) of recruit training ($p = 0.143$). Concentric Peak Force decreased significantly in Series Track male recruits from week 2 (1825.00 ± 315.00 Newtons) to week 11 (1719.75 ± 299.85 Newtons) of recruit training ($p < 0.001$). In Integrated Company female recruits, Concentric Peak Force decreased significantly from week 2 (1420.29 ± 242.37 Newtons) to week 11 (1290.20 ± 228.32 Newtons) of recruit training ($p < 0.001$). Concentric Peak Force decreased significantly in Integrated Company male recruits from week 2 (1761.18 ± 247.75 Newtons) to week 11 (1630.41 ± 288.40) of recruit training ($p < 0.001$). In the Male Only cohort, Concentric Peak Force significantly decreased from week 2 (1757.61 ± 298.58) to week 11 (1597.49 ± 229.18) of recruit training ($p < 0.001$).

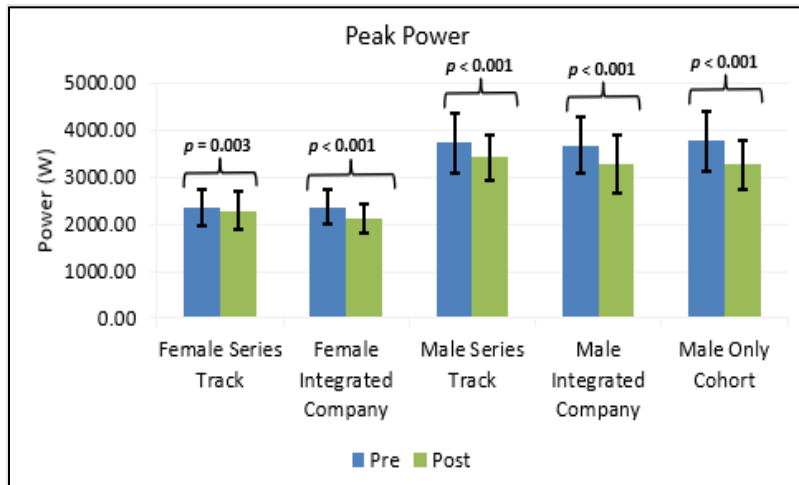
Figure 10.14: Changes in Relative Concentric Peak Force performance from week 2 to week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego



Bars represent mean, error lines represent ± 1 standard deviation

Relative Concentric Peak Force (N/kg): In Series Track female recruits, Relative Concentric Peak Force did not change significantly from week 2 (22.69 ± 2.99 N/kg) to week 11 (23.25 ± 3.15 N/kg) of recruit training ($p = 0.141$). Relative Concentric Peak Force decreased significantly in Series Track male recruits from week 2 (23.58 ± 2.87 N/kg) to week 11 (22.47 ± 2.52 N/kg) of recruit training ($p < 0.001$). In Integrated Company female recruits, Relative Concentric Peak Force decreased significantly from week 2 (22.66 ± 3.15 N/kg) to week 11 (21.17 ± 2.63 N/kg) of recruit training ($p < 0.001$). Relative Concentric Peak Force decreased significantly in Integrated Company male recruits from week 2 (24.65 ± 2.94 N/kg) to week 11 (23.09 ± 3.03 N/kg) of recruit training ($p < 0.001$). In the Male Only cohort Relative Concentric Peak Force significantly decreased from week 2 (23.35 ± 2.29) to week 11 (21.60 ± 1.84) of recruit training ($p < 0.001$).

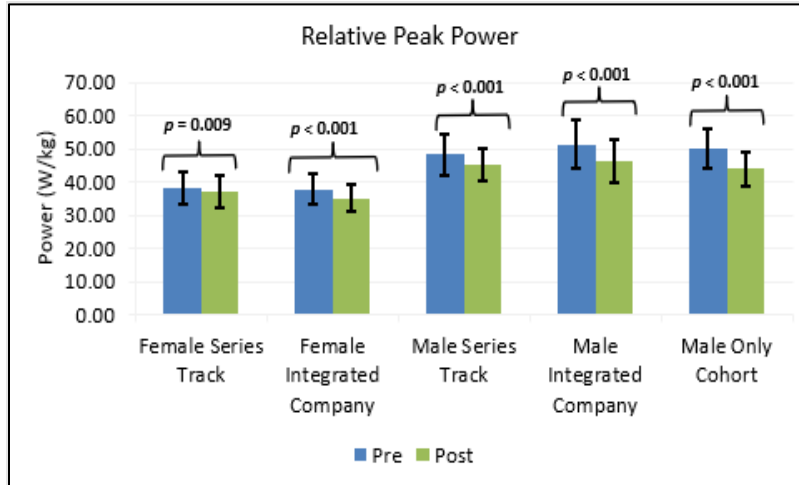
Figure 10.15: Changes in Peak Power performance from week 2 to week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego



Bars represent mean, error lines represent ± 1 standard deviation

Peak Power (W): In Series Track female recruits, Peak Power decreased significantly from week 2 (2362.03 ± 379.66 Watts) to week 11 (2290.03 ± 390.45 Watts) of recruit training ($p = 0.003$). Peak Power decreased significantly in Series Track male recruits from week 2 (3724.91 ± 623.66 Watts) to week 11 (3427.49 ± 481.35 Watts) of recruit training ($p < 0.001$). In Integrated Company female recruits, Peak Power decreased significantly from week 2 (2370.10 ± 348.04 Watts) to week 11 (2129.51 ± 306.57 Watts) of recruit training ($p < 0.001$). Peak Power decreased significantly in Integrated Company male recruits from week 2 (3668.19 ± 603.26 Watts) to week 11 (3275.50 ± 622.50 Watts) of recruit training ($p < 0.001$). In the Male Only cohort, Peak Power significantly decreased from week 2 (3762.15 ± 644.23) to week 11 (3258.18 ± 516.92) of recruit training ($p < 0.001$).

Figure 10.16: Changes in Relative Peak Power performance from week 2 to week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego



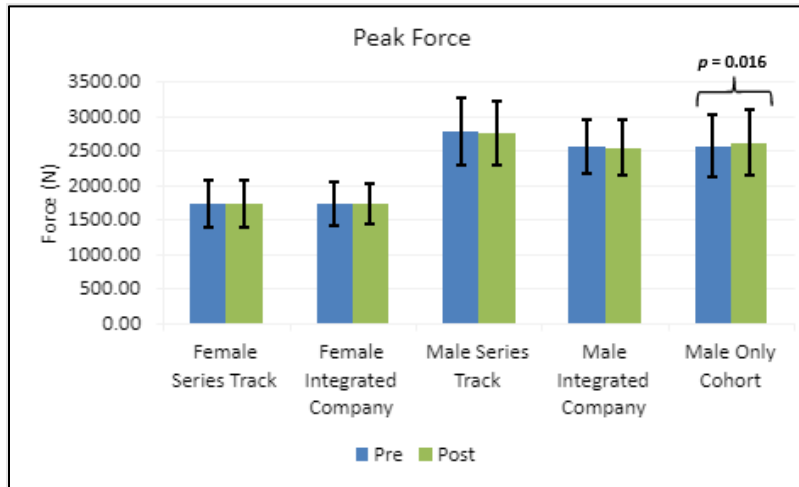
Bars represent mean, error lines represent ± 1 standard deviation

Relative Peak Power (W/kg): In Series Track female recruits, Relative Peak Power decreased significantly from week 2 (38.15 ± 4.79 W/kg) to week 11 (37.05 ± 4.83 W/kg) of recruit training ($p = 0.009$). Relative Peak Power decreased significantly in Series Track male recruits from week 2 (48.24 ± 6.32 W/kg) to week 11 (45.00 ± 4.97 W/kg) of recruit training ($p < 0.001$). In Integrated Company female recruits, Relative Peak Power decreased significantly from week 2 (37.84 ± 4.47 W/kg) to week 11 (35.11 ± 4.18 W/kg) of recruit training ($p < 0.001$). Relative Peak Power decreased significantly in Integrated Company male recruits from week 2 (51.31 ± 7.18 W/kg) to week 11 (46.33 ± 6.51 W/kg) of recruit training ($p < 0.001$). In the Male Only cohort, Relative Peak Power significantly decreased from week 2 (50.07 ± 5.98) to week 11 (43.86 ± 4.93) of recruit training ($p < 0.001$).

Isometric Mid-Thigh Pull

The magnitude of change in Isometric Mid-Thigh Pull variables from week 2 to week 11 of recruit training were analyzed. The Isometric Mid-Thigh Pull variables analyzed included Peak Force (N), Relative Peak Force (N/kg), RFD 100-200ms (Ns), RFD 100ms (Ns).

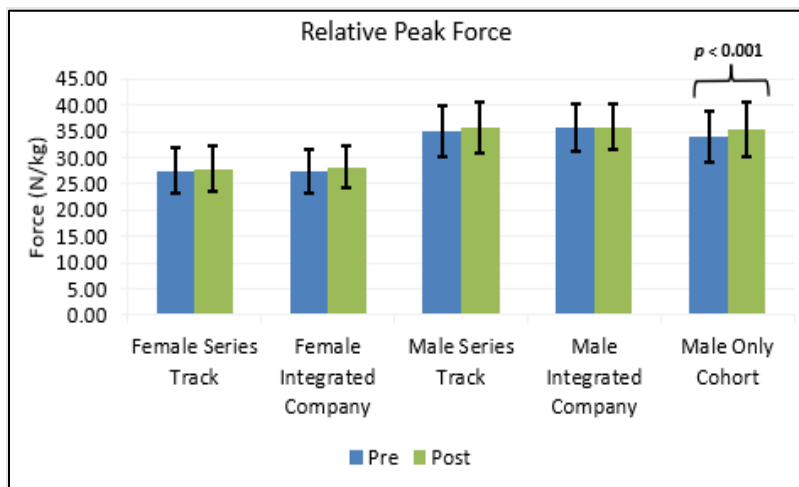
Figure 10.17: Changes in Peak Force from week 2 to week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego



Bars represent mean, error lines represent ± 1 standard deviation

Peak Force (N): In Series Track female recruits, Peak Force did not change significantly from week 2 (1733.91 ± 344.63 Newtons) to week 11 (1728.17 ± 347.55 Newtons) of recruit training ($p = 0.789$). Peak Force did not change significantly in Series Track male recruits from week 2 (2773.10 ± 488.88 Newtons) to week 11 (2747.27 ± 460.33 Newtons) of recruit training ($p = 0.443$). In Integrated Company female recruits, Peak Force did not change significantly from week 2 (1732.86 ± 315.93 Newtons) to week 11 (1722.55 ± 289.42 Newtons) of recruit training ($p = 0.664$). Peak Force did not change significantly in Integrated Company male recruits from week 2 (2561.38 ± 396.44 Newtons) to week 11 (2544.22 ± 412.65 Newtons) of recruit training ($p = 0.567$). In the Male Only cohort, Peak Force significantly increased from week 2 (2562.62 ± 454.22) to week 11 (2613.45 ± 480.47) of recruit training ($p = 0.016$).

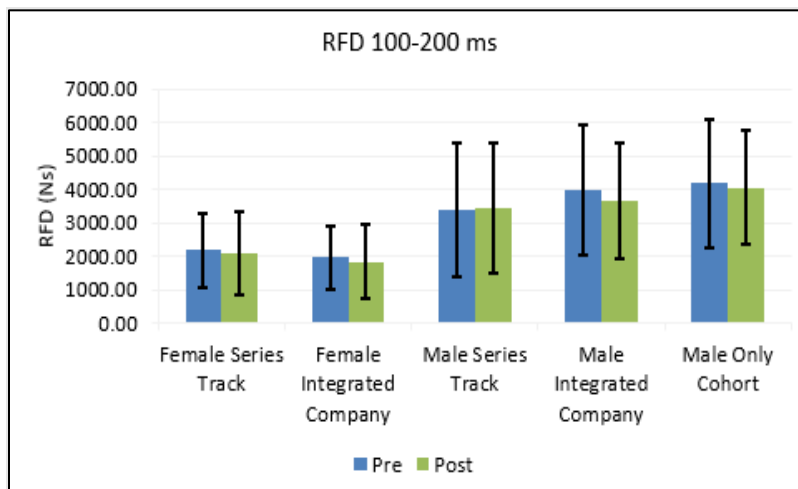
Figure 10.18: Changes in Relative Peak Force from week 2 to week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego



Bars represent mean, error lines represent ± 1 standard deviation

Relative Peak Force (N/kg): In Series Track female recruits, Relative Peak Force did not change significantly from week 2 (27.52 ± 4.33 N/kg) to week 11 (27.81 ± 4.33 N/kg) of recruit training ($p = 0.406$). Relative Peak Force did not change significantly in Series Track male recruits from week 2 (35.07 ± 4.90 N/kg) to week 11 (35.77 ± 4.88 N/kg) of recruit training ($p = 0.153$). In Integrated Company female recruits, Relative Peak Force did not change significantly from week 2 (27.47 ± 4.16 N/kg) to week 11 (28.19 ± 4.07 N/kg) of recruit training ($p = 0.082$). Relative Peak Force did not change significantly in Integrated Company male recruits from week 2 (35.72 ± 4.49 N/kg) to week 11 (35.89 ± 4.36 N/kg) of recruit training ($p = 0.682$). In the Male Only cohort, Relative Peak Force significantly increased from week 2 (33.97 ± 4.77) to week 11 (35.42 ± 5.20) of recruit training ($p < 0.001$).

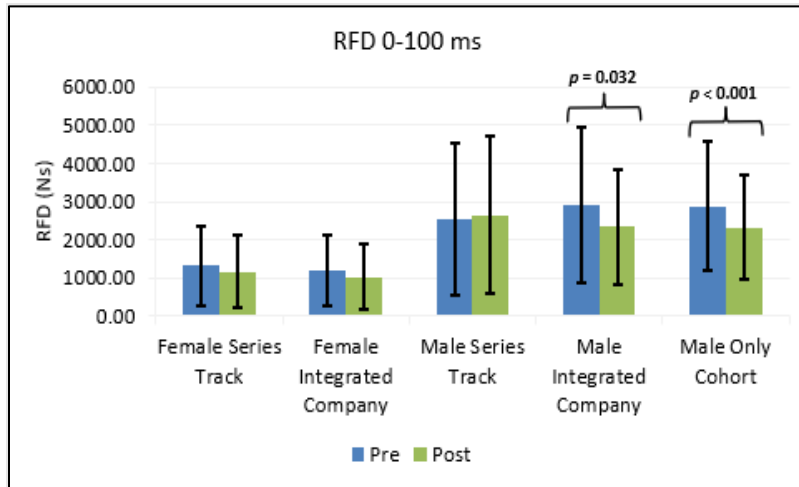
Figure 10.19: Changes in Rate of Force Development (RFD) 100-200ms from week 2 to week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego



Bars represent mean, error lines represent ± 1 standard deviation

Rate of Force Development (RFD) 100-200ms (Ns): In Series Track female recruits, RFD 100-200ms did not change significantly from week 2 (2180.70 ± 1112.91 N*s) to week 11 (2085.42 ± 1248.91 N*s) of recruit training ($p = 0.516$). RFD 100-200ms did not change significantly in Series Track male recruits from week 2 (3398.00 ± 2008.66 N*s) to week 11 (3441.81 ± 1933.72 N*s) of recruit training ($p = 0.862$). In Integrated Company female recruits, RFD 100-200ms did not change significantly from week 2 (1951.16 ± 963.26 N*s) to week 11 (1820.53 ± 1102.81 N*s) of recruit training ($p = 0.344$). RFD 100-200ms did not change significantly in Integrated Company male recruits from week 2 (3973.09 ± 1948.97 N*s) to week 11 (3664.62 ± 1724.11 N*s) of recruit training ($p = 0.203$). In the Male Only cohort, RFD 100-200ms did not significantly change from week 2 (4165.74 ± 1939.77) to week 11 (4051.86 ± 1712.59) of recruit training ($p = 0.481$).

Figure 10.20: Changes in Rate of Force Development (RFD) 0-100ms from week 2 to week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego



Bars represent mean, error lines represent ± 1 standard deviation

Rate of Force Development (RFD) 0-100ms (Ns): In Series Track female recruits, RFD 0-100ms did not change significantly from week 2 (1322.30 ± 1031.96 N*s) to week 11 (1158.16 ± 950.33 N*s) of recruit training ($p = 0.212$). RFD 0-100ms did not change significantly in Series Track male recruits from week 2 (2536.24 ± 1987.79 N*s) to week 11 (2656.33 ± 2058.45 N*s) of recruit training ($p = 0.663$). In Integrated Company female recruits, RFD 0-100ms did not change significantly from week 2 (1201.24 ± 920.44 N*s) to week 11 (1033.39 ± 840.66 N*s) of recruit training ($p = 0.254$). RFD 0-100ms decreased significantly in Integrated Company male recruits from week 2 (2912.71 ± 2040.28 N*s) to week 11 (2339.96 ± 1515.95 N*s) of recruit training ($p = 0.032$). In the Male Only cohort, RFD 0-100ms significantly decreased from week 2 (2887.50 ± 1697.72) to week 11 (2333.74 ± 1360.94) of recruit training ($p < 0.001$).

Table 10.8: Changes in countermovement jump and isometric mid-thigh pull performance from week 2 to week 11 of recruit training at Marine Corps Recruit Depot Parris Island (Series Track)

Variable name		Gender	N	Week 2 (Mean ± SD)	Week 11 (Mean ± SD)	Within subject change <i>p</i> value
Countermovement jump	Concentric Peak Force (N)	Female	76	1404.36 ± 227.38	1437.97 ± 253.36	0.143
		Male	65	1825.00 ± 315.00	1719.75 ± 299.85	<0.001
	Relative Concentric Peak Force (N/kg)	Female	76	22.69 ± 2.99	23.25 ± 3.15	0.141
		Male	65	23.58 ± 2.87	22.47 ± 2.52	<0.001
	Peak Power (W)	Female	76	2362.03 ± 379.66	2290.03 ± 390.45	0.003
		Male	65	3724.91 ± 623.66	3427.49 ± 481.35	<0.001
Relative Peak Power (W/kg)	Female	76	38.15 ± 4.79	37.05 ± 4.83	0.009	
	Male	65	48.24 ± 6.32	45.00 ± 4.97	<0.001	
Isometric mid-thigh pull	Peak Force (N)	Female	76	1733.91 ± 344.63	1728.17 ± 347.55	0.789
		Male	63	2773.10 ± 488.88	2747.27 ± 460.33	0.443
	Relative Peak Force (N/kg)	Female	76	27.52 ± 4.33	27.81 ± 4.33	0.406
		Male	63	35.07 ± 4.90	35.77 ± 4.88	0.153
	RFD 100-200ms (Ns)	Female	76	2180.70 ± 1112.91	2085.42 ± 1248.91	0.516
		Male	63	3398.00 ± 2008.66	3441.81 ± 1933.72	0.862
RFD 0-100ms (Ns)	Female	76	1322.30 ± 1031.96	1158.16 ± 950.33	0.212	
	Male	63	2536.24 ± 1987.79	2656.33 ± 2058.45	0.663	

Table 10.9: Changes in countermovement jump and isometric mid-thigh pull performance from week 2 to week 11 of recruit training at Marine Corps Recruit Depot Parris Island (Integrated Company)

Variable name		N	Week 2 (Mean ± SD)	Week 11 (Mean ± SD)	Within subject change <i>p</i> value	
Countermovement jump	Concentric Peak Force (N)	Female	51	1420.29 ± 242.37	1290.20 ± 228.32	<0.001
		Male	68	1761.18 ± 247.75	1630.41 ± 288.40	<0.001
	Relative Concentric Peak Force (N/kg)	Female	51	22.66 ± 3.15	21.17 ± 2.63	<0.001
		Male	68	24.65 ± 2.94	23.09 ± 3.03	<0.001
	Peak Power (W)	Female	51	2370.10 ± 348.04	2129.51 ± 306.57	<0.001
		Male	68	3668.19 ± 603.26	3275.50 ± 622.50	<0.001
	Relative Peak Power (W/kg)	Female	51	37.84 ± 4.47	35.11 ± 4.18	<0.001
		Male	68	51.31 ± 7.18	46.33 ± 6.51	<0.001
Isometric mid-thigh pull	Peak Force (N)	Female	51	1732.86 ± 315.93	1722.55 ± 289.42	0.664
		Male	68	2561.38 ± 396.44	2544.22 ± 412.65	0.567
	Peak Vertical Force /Body mass (N/kg)	Female	51	27.47 ± 4.16	28.19 ± 4.07	0.082
		Male	68	35.72 ± 4.49	35.89 ± 4.36	0.682
	RFD 0-100ms (Ns)	Female	51	1951.16 ± 963.26	1820.53 ± 1102.81	0.344
		Male	68	3973.09 ± 1948.97	3664.62 ± 1724.11	0.203
	RFD 0-100ms (Ns)	Female	51	1201.24 ± 920.44	1033.39 ± 840.66	0.254
		Male	68	2912.71 ± 2040.28	2339.96 ± 1515.95	0.032

Table 10.10: Changes in counter movement jump and isometric mid-thigh pull performance from week 2 to week 11 of recruit training at Marine Corps Recruit Depot San Diego

Male Only cohort		N	Week 2 (mean ± standard deviation)	Week 11 (mean ± standard deviation)	Within subject change <i>p</i> value
Counter movement Jump	Concentric Peak Force (N)	160	1757.61 ± 298.58	1597.49 ± 229.18	<0.001
	Relative Concentric Peak Force (N/kg)	160	23.35 ± 2.29	21.60 ± 1.84	<0.001
	Peak Power (W)	160	3762.15 ± 644.23	3258.18 ± 516.92	<0.001
	Relative Peak Power (W/kg)	160	50.07 ± 5.98	43.86 ± 4.93	<0.001
Isometric mid-thigh pull	Peak Force (N)	156	2562.62 ± 454.22	2613.45 ± 480.47	0.016
	Relative Peak Force (N/kg)	156	33.97 ± 4.77	35.42 ± 5.20	<0.001
	RFD 0-100ms (Ns)	156	4165.74 ± 1939.77	4051.86 ± 1712.59	0.481
	RFD 0-100ms (Ns)	156	2887.50 ± 1697.72	2333.74 ± 1360.94	<0.001

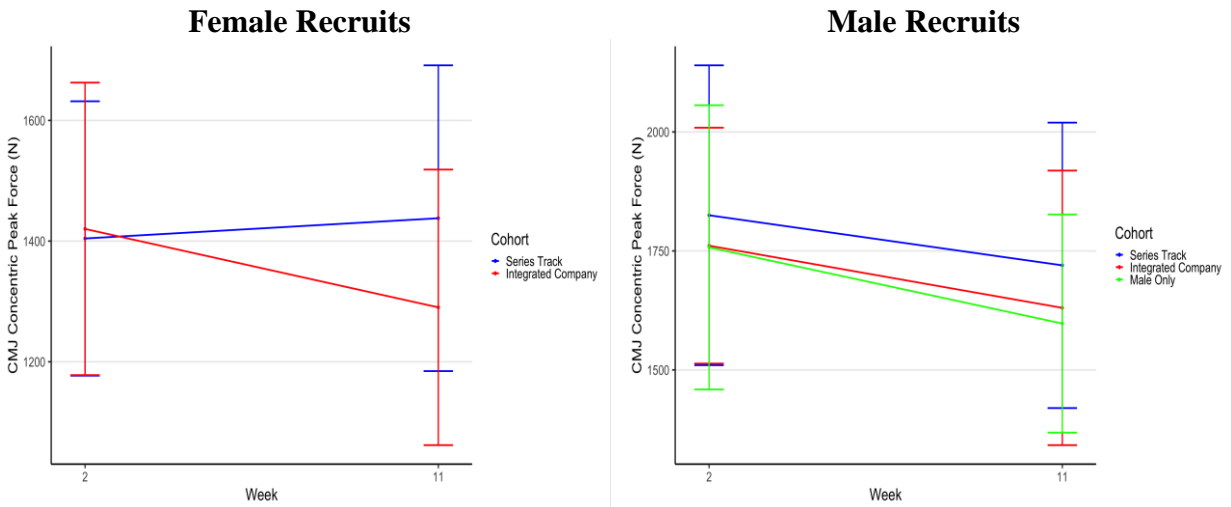
Of the 8 variables collected across all cohorts at MCRD Parris Island, several significant within group changes were observed. Several significant changes observed were in variables derived from the CMJ. The CMJ is a test that is dynamic in nature and often employed as a proxy measure of neuromuscular fatigue. The observed decrements in CMJ performance may be due to the proximity of training to week 11 data collection. Week 11 data collection was conducted approximately 24 hours following completion of the Crucible. The Crucible takes place over 54-hours and includes food and sleep deprivation and over 45 miles of marching. Acute bouts of high physiological stress tax the neuromuscular system immensely. This can often result in significant decrements in performance. However, within the sample, strength was largely preserved, as evident in the IMTP. This would suggest a degree of resilience in strength across recruits in both cohorts. CMJ performance at week 11 may have been hindered due to inadequate recovery time following the crucible. The performance decrements observed in the CMJ, should be explored for their potential in establishing measures of resiliency. In the Male Only cohort, significant decreases were observed in all four CMJ variables concurrent with increases in IMTP Peak and Relative Peak Force, and significant decreases in RFD 0-100ms.

2. Between Cohort Analysis

Countermovement Jump

The magnitude of change in CMJ variables from week 2 to week 11 of recruit training were compared between the recruit cohorts. These variables included: Concentric Peak Force (N), Relative Concentric Peak Force (N/kg), Peak Power (W), and Relative Peak Power (W/kg).

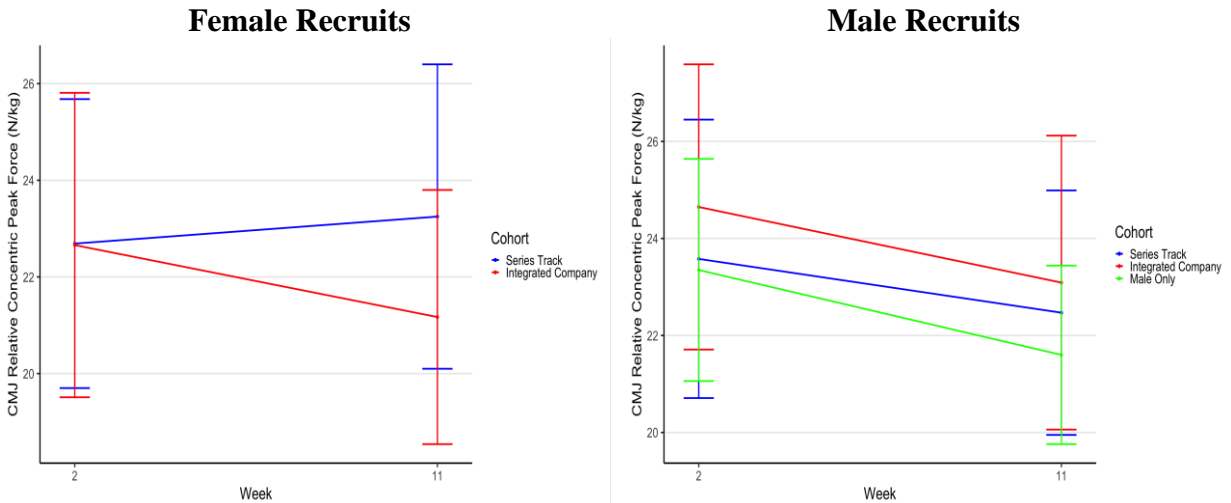
Figure 10.21: Changes in Concentric Peak Force performance from week 2 to week 11 of recruit training among recruits in the Series Track and Integrated Company at Marine Corps Recruit Depot Parris Island, and the Male Only cohort at Marine Corps Recruit Depot San Diego



Error lines represent ± 1 standard deviation

Concentric Peak Force (N): Female recruits: There was a significant interaction between time and cohort, in their effect on Concentric Peak Force ($p < 0.001$, $\eta_p^2 = 0.171$). Simple main effects of time were analyzed at each level of cohort. There was no significant main effect of time on Series Track female recruits ($p = 0.143$, $\eta_p^2 = 0.028$). There was a significant main effect of time on Integrated Company female recruits ($p < 0.001$, $\eta_p^2 = 0.459$). Male recruits: There was no significant interaction between cohort and time, in their effect on Concentric Peak Force ($p = 0.147$, $\eta_p^2 = 0.013$). There was a significant main effect of time ($p < 0.001$, $\eta_p^2 = 0.279$). The magnitude of Concentric Peak Force was significantly higher in Week 2 (mean = 1781.26, se = 18.52) than Week 11 (mean = 1649.22, se = 16.55) ($p < 0.001$).

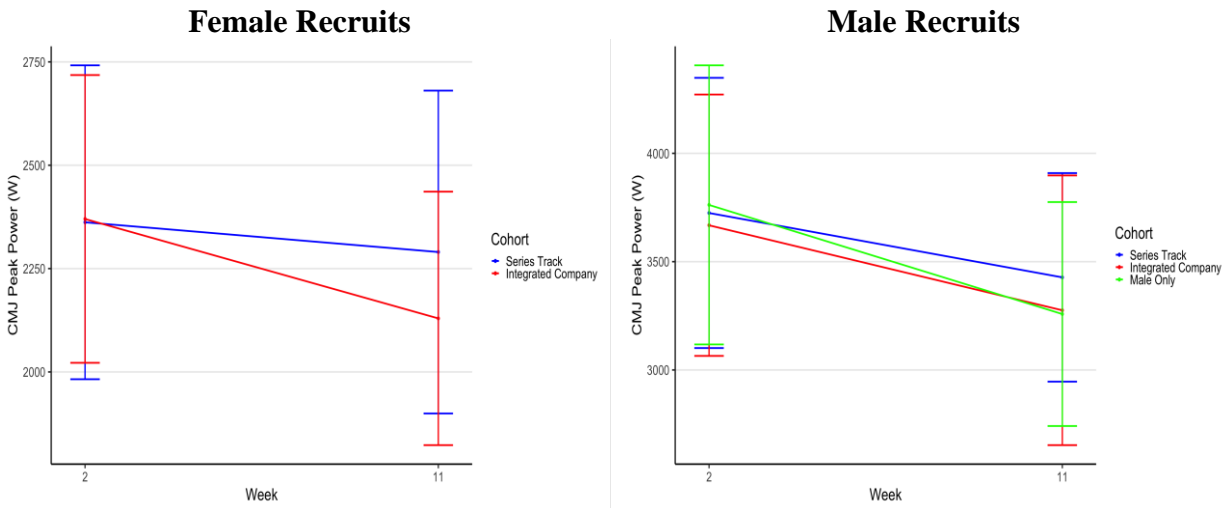
Figure 10.22: Changes in Relative Concentric Peak Force performance from week 2 to week 11 of recruit training among recruits in the Series Track and Integrated Company at Marine Corps Recruit Depot Parris Island, and the Male Only cohort at Marine Corps Recruit Depot San Diego



Error lines represent ± 1 standard deviation

Relative Concentric Peak Force (N/kg): Female recruits: There was a significant interaction between time and cohort, in their effect on Relative Concentric Peak Force ($p < 0.001$, $\eta_p^2 = 0.102$). Simple main effects of time were analyzed at each level of cohort. There was no significant main effect of time on Series Track female recruits ($p = 0.141$, $\eta_p^2 = 0.029$). There was a significant main effect of time on Integrated Company female recruits ($p < 0.001$, $\eta_p^2 = 0.266$). Male recruits: There was no significant interaction between cohort and time, in their effect on Relative Concentric Peak Force ($p = 0.178$, $\eta_p^2 = 0.012$). There were significant main effects of time ($p < 0.001$, $\eta_p^2 = 0.249$) and cohort ($p < 0.001$, $\eta_p^2 = 0.065$) on Relative Concentric Peak Force. The magnitude of Relative Concentric Peak Force was significantly higher in Week 2 (mean = 23.86, se = 0.17) than Week 11 (mean = 22.39, se = 0.15) ($p < 0.001$). In order to find the pattern of differences in Relative Concentric Peak Force depending on cohort, post hoc marginal pairwise comparisons were performed using the Bonferroni adjustment. The magnitude of Relative Concentric Peak Force was not significantly different between Series Track male recruits (mean = 23.02, se = 0.27) and Integrated Company male recruits (mean = 23.87, se = 0.26) ($p = 0.074$). The magnitude of Relative Concentric Peak Force was not significantly different between Series Track male recruits and the Male Only cohort (mean = 22.48, se = 0.17) ($p = 0.256$). The magnitude of Relative Concentric Peak Force was significantly higher in Integrated Company male recruits than the Male Only cohort ($p < 0.001$).

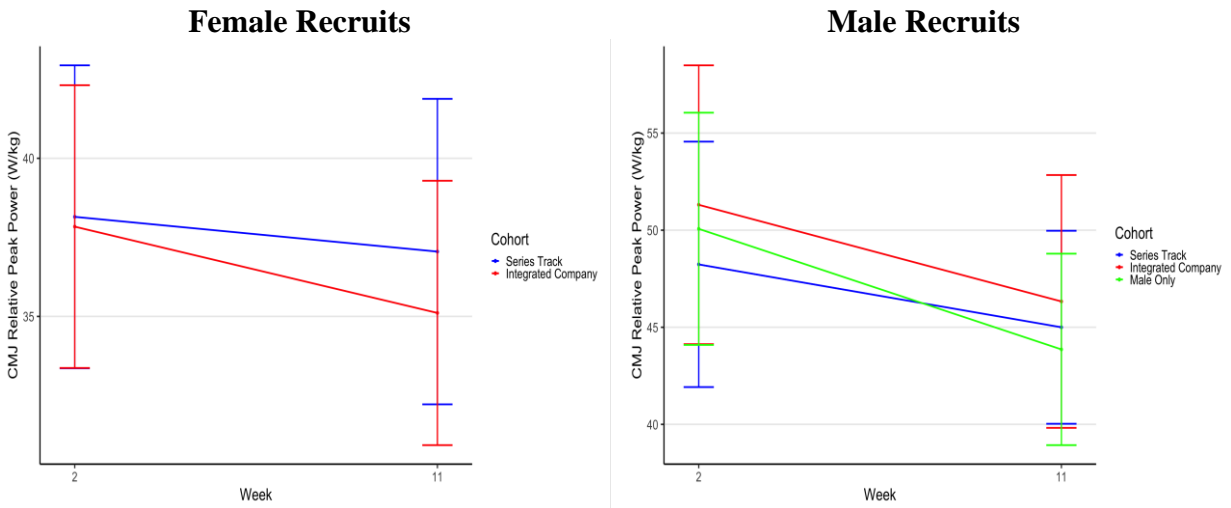
Figure 10.23: Changes in Peak Power from week 2 to week 11 of recruit training among recruits in the Series Track and Integrated Company at Marine Corps Recruit Depot Parris Island, and the Male Only cohort at Marine Corps Recruit Depot San Diego



Error lines represent ± 1 standard deviation

Peak Power (W): Female recruits: There was a significant interaction between time and cohort, in their effect on Peak Power ($p < 0.001$, $\eta_p^2 = 0.143$). Simple main effects of time were analyzed at each level of cohort. There were significant main effects of time on Series Track female recruits ($p = 0.003$, $\eta_p^2 = 0.108$) and Integrated Company female recruits ($p < 0.001$, $\eta_p^2 = 0.604$), though the effect sizes were different. Male recruits: There was a significant interaction between time and cohort, in their effect on Peak Power ($p = 0.003$, $\eta_p^2 = 0.039$). Simple main effects of time were analyzed at each level of cohort. There was a significant main effect of time on Series Track male recruits ($p < 0.001$, $\eta_p^2 = 0.431$), Integrated Company male recruits ($p < 0.001$, $\eta_p^2 = 0.658$), and Male Only cohort ($p < 0.001$, $\eta_p^2 = 0.509$), but the effect sizes were different.

Figure 10.24: Changes in Relative Peak Power from week 2 to week 11 of recruit training among recruits in the Series Track and Integrated Company at Marine Corps Recruit Depot Parris Island, and the Male Only cohort at Marine Corps Recruit Depot San Diego



Error lines represent ± 1 standard deviation

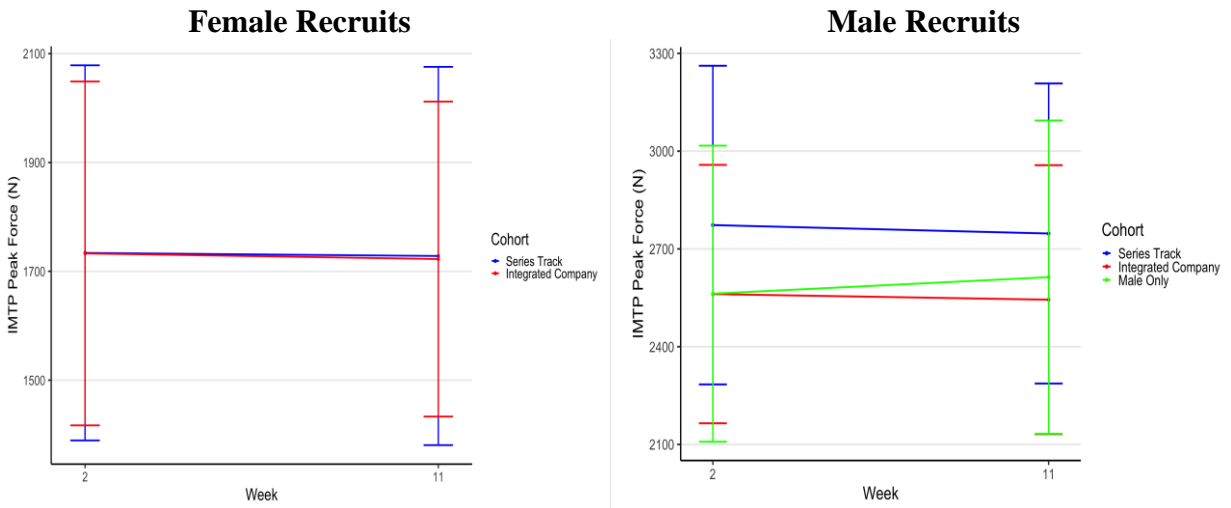
Relative Peak Power (W/kg): Female recruits: There was a significant interaction between cohort and time, in their effect on Relative Peak Power ($p = 0.010$, $\eta_p^2 = 0.051$). Simple main effects of time were analyzed at each level of cohort. There were significant main effects of time on Series Track female recruits ($p = 0.009$, $\eta_p^2 = 0.086$) and Integrated Company female recruits ($p < 0.001$, $\eta_p^2 = 0.422$), though the effect sizes were different. Male recruits: There was a significant interaction between time and cohort, in their effect on Relative Peak Power ($p < 0.001$, $\eta_p^2 = 0.065$). Simple main effects of time were analyzed at each level of cohort. There was a significant main effect of time on Series Track male recruits ($p < 0.001$, $\eta_p^2 = 0.428$), Integrated Company male recruits ($p < 0.001$, $\eta_p^2 = 0.634$), and Male Only cohort ($p < 0.001$, $\eta_p^2 = 0.601$), though the effect sizes were different.

In female recruits, all CMJ variables analyzed displayed greater decrement in the Integrated Company cohort. In male recruits, there were significant interactions between time and cohort in their effect on two of four CMJ variables analyzed (Peak Power and Relative Peak Power).

Isometric Mid-Thigh Pull

The magnitude of change in IMTP variables from week 2 to week 11 of recruit training were compared between the recruit cohorts. These variables included Peak Force (N), Relative Peak Force (N/kg), RFD 100-200ms (Ns), RFD 0-100ms (Ns).

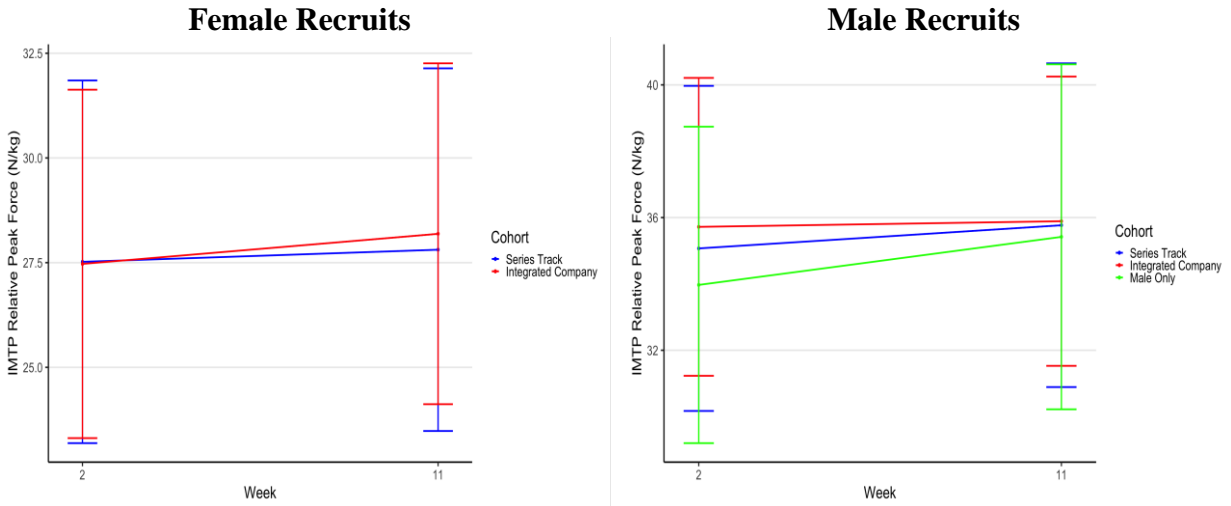
Figure 10.25: Changes in Peak Force from week 2 to week 11 of recruit training among recruits in the Series Track and Integrated Company at Marine Corps Recruit Depot Parris Island, and the Male Only cohort at Marine Corps Recruit Depot San Diego



Error lines represent ± 1 standard deviation

Peak Force (N): Female recruits: There was no significant interaction between cohort and time, in their effect on Peak Force ($p = 0.888$, $\eta_p^2 = 0.000$). There were no significant main effects of time ($p = 0.621$, $\eta_p^2 = 0.002$) or cohort ($p = 0.954$, $\eta_p^2 = 0.000$) on Peak Force. Male recruits: There was no significant interaction between cohort and time, in their effect on Peak Force ($p = 0.063$, $\eta_p^2 = 0.019$). There was no significant main effect of time on Peak Force ($p = 0.875$, $\eta_p^2 = 0.000$). There was a significant main effect of cohort ($p = 0.012$, $\eta_p^2 = 0.031$) on Peak Force. In order to find the pattern of differences in Peak Force depending on cohort, post hoc marginal pairwise comparisons were performed using the Bonferroni adjustment. The magnitude of Peak Force was significantly higher in Series Track male recruits (mean = 2760.18, se = 54.98) than Integrated Company male recruits (mean = 2552.80, se = 52.92) ($p = 0.021$). The magnitude of Peak Force was significantly higher in Series Track male recruits than the Male Only cohort (mean = 2588.03, se = 34.94) ($p = 0.026$). The magnitude of Peak Force was not significantly different between Integrated Company male recruits and the Male Only cohort ($p = 1.000$).

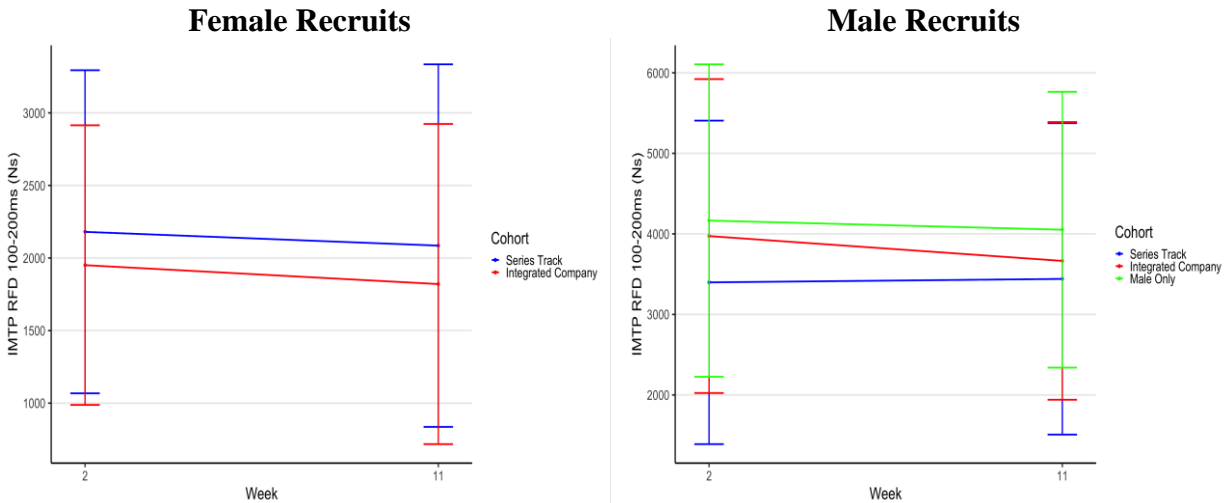
Figure 10.26: Changes in Relative Peak Force from week 2 to week 11 of recruit training among recruits in the Series Track and Integrated Company at Marine Corps Recruit Depot Parris Island, and the Male Only cohort at Marine Corps Recruit Depot San Diego



Error lines represent ± 1 standard deviation

Relative Peak Force (N/kg): Female recruits: There was no significant interaction between cohort and time, in their effect on Relative Peak Force ($p = 0.430$, $\eta_p^2 = 0.005$). There were no significant main effects of time ($p = 0.064$, $\eta_p^2 = 0.027$) or cohort ($p = 0.817$, $\eta_p^2 = 0.000$) on Relative Peak Force. Male recruits: There was a significant interaction between time and cohort, in their effect on Relative Peak Force ($p = 0.049$, $\eta_p^2 = 0.021$). Simple main effects of time were analyzed at each level of cohort. There were no significant main effects of time on Series Track male recruits ($p = 0.153$, $\eta_p^2 = 0.033$) and Integrated Company male recruits ($p = 0.682$, $\eta_p^2 = 0.003$). There was a significant main effect of time on the Male Only cohort ($p < 0.001$, $\eta_p^2 = 0.131$).

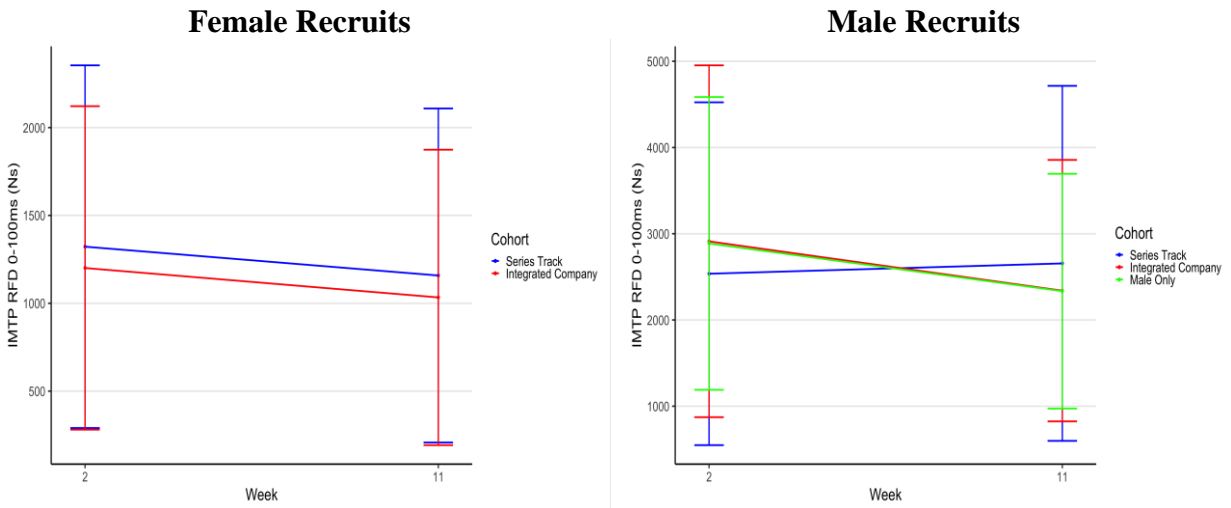
Figure 10.27: Changes in RFD 100-200ms from week 2 to week 11 of recruit training among recruits in the Series Track and Integrated Company at Marine Corps Recruit Depot Parris Island, and the Male Only cohort at Marine Corps Recruit Depot San Diego



Error lines represent ± 1 standard deviation

RFD 100-200ms (Ns): Female recruits: There was no significant interaction between cohort and time, in their effect on RFD 100-200ms ($p = 0.867$, $\eta_p^2 = 0.000$). There were no significant main effects of time ($p = 0.285$, $\eta_p^2 = 0.009$) or cohort ($p = 0.159$, $\eta_p^2 = 0.016$) on RFD 100-200ms. Male recruits: There was no significant interaction between cohort and time, in their effect on RFD 100-200ms ($p = 0.600$, $\eta_p^2 = 0.004$). There was no significant main effect of time ($p = 0.326$, $\eta_p^2 = 0.003$) on RFD 100-200ms. There was a significant main effect of cohort ($p = 0.013$, $\eta_p^2 = 0.030$) on RFD 100-200ms. In order to find the pattern of differences in RFD 100-200ms depending on cohort, post hoc marginal pairwise comparisons were performed using the Bonferroni adjustment. The magnitude of RFD 100-200ms was not significantly different between Series Track male recruits (mean = 3419.91, se = 198.14) and Integrated Company male recruits (mean = 3818.85, se = 190.71) ($p = 0.444$). The level of RFD 100-200ms was significantly lower in Series Track male recruits than the Male Only cohort (mean = 4108.80, se = 125.91) ($p = 0.011$). The magnitude of RFD 100-200ms was not significantly different between Integrated Company male recruits and the Male Only cohort ($p = 0.617$).

Figure 10.28: Changes in RFD 0-100ms from week 2 to week 11 of recruit training among recruits in the Series Track and Integrated Company at Marine Corps Recruit Depot Parris Island, and the Male Only cohort at Marine Corps Recruit Depot San Diego



Error lines represent ± 1 standard deviation

RFD 0-100ms (Ns): Female recruits: There was no significant interaction between cohort and time, in their effect on RFD 0-100ms ($p = 0.985$, $\eta_p^2 = 0.000$). There were no significant main effects of time ($p = 0.097$, $\eta_p^2 = 0.022$) or cohort ($p = 0.382$, $\eta_p^2 = 0.006$) on RFD 0-100ms. Male recruits: Data did not meet assumptions for the two-way mixed measures analysis of variance. Effects of time were analyzed at each level of cohort. There was no change in RFD 0-100ms among the Series Track male recruits (paired t test p value = 0.663). RFD 0-100ms was higher during week 2 as compared to week 11 in the Integrated Company male recruits (paired t test p value = 0.032) as well as in the Male Only cohort (paired t test p value < 0.001).

In female recruits, no significant interactions were observed between cohort and time for any of the four IMTP variables analyzed. Among male recruits, there was a significant interaction between cohort and time in their effect on Relative Peak Force, where the Male Only cohort exhibited the greatest improvement. Paired t tests showed significant decreases in RFD 0-100ms for the Integrated Company male recruits and Male Only cohort with no significant change in Series Track male recruits.

C. Conclusion

One of the clearest findings to emerge from the data was that all studied models incurred, by far, the greatest physiological stress in the early weeks of recruit training. Distance covered and caloric expenditure then began to decline by the mid-point of collection. By almost any standard, the workload values were exceedingly high, and the cortisol responses were consistent with this observation. Given the initial fitness levels of the recruits and the compromised sleep values, this is concerning from both a progression and injury prevention standpoint. The baseline physical performance testing results for the average recruit included in the study were consistent with values typically associated with sedentary and low-active individuals. Even observations by physical and human performance study team members indicated a relative lack of athleticism in

the recruits. There were also notable physical differences between the male and female recruits, which is consistent with gender-based physical parameters and capabilities. These issues make the training progression of even greater concern. Additionally, the workload progression structure may exacerbate gender-disparities due to unique physiological responses seen in females compared to males even under the same relative workloads (Walker et al., 2017). These findings are consistent with previous research on high-level and elite athletes who would have greater physiological resilience due to their training background (Walker et al., 2017; McFadden et al., 2020).

As the Marine Corps considers options for optimizing gender integration, recruit performance and injury data from this study suggest an opportunity to revise the training structure to be more scientifically and physiologically sound to enhance performance, reduce injury, and improve retention during the training process. This can be done without sacrificing the desired stress placed on the recruit to make Marines, as demonstrated by the maintained stress response throughout training, even when training load was reduced. Instead, proper progression would likely mitigate injury to otherwise very capable recruits. Given the baseline fitness levels, it would also enable the Marine Corps to physically develop otherwise low-fit recruits who, with progressive training support, may be able to establish the physicality necessary to become effective Marines. In the process, the likelihood of success would increase for more robust gender integration as a result of the recognition of differential responses to training stressors. A greater focus on teaching proper exercise progression, which was often absent during study team's observations of physical training, would be critical for further gender integration to improve opportunities for female recruit success; this approach would also benefit male recruits. With proper training and progression, the Marine Corps can optimize outcomes across both sexes and make gender integration efforts more robust without sacrificing the intent of recruit training or the warrior ethos. The return on investment would also improve during new Marines' successful transition to the next phase of their military career after recruit training. When considered in the context of the sociological findings, there appears to be an achievable and effective path forward to enhance the climate of success the Marine Corps has established over its existence.

Chapter 11: Musculoskeletal Injuries among Recruits at MCRD Parris Island and San Diego

Bottom Line Up Front

- Medical record reviewed musculoskeletal injuries during recruit training:
 - There were distinct patterns of distribution of medical record reviewed musculoskeletal injuries between the various cohorts studied. At MCRD Parris Island, the most frequent body part affected by injury was the hip among female recruits and the knee among male recruits. At MCRD San Diego in the Male Only cohort, the most frequent anatomic sub-region affected by injuries was the lower leg.
 - At both recruit training locations, a large percentage of injuries resulted in light duty.
 - At Parris Island, a greater proportion of female recruits as compared to male recruits sustained at least one injury during recruit training in the Series Track cohort as well as in the Integrated Company cohort.
- Self-reported musculoskeletal injuries during recruit training: Recruits reported not seeking medical care for a large percentage of injuries among female Series Track recruits, female Integrated Company recruits, male Integrated Company recruits, and recruits in the Male Only Cohort.

This chapter describes injury data collected from recruits at MCRD Parris Island and MCRD San Diego through medical record review and self-reported surveys. Please see Chapter 3. E. for data considerations regarding the differences in training area between the two MCRDs, which may impact the occurrence of injuries. It is impossible for the study team to disentangle how the MCRD terrain, layout, and training schedule differences affected the occurrence of injuries between the Parris Island (Series Track and Integrated Company) and San Diego (Male-Only) study training models.

A. Medical Record Reviewed Musculoskeletal Injuries During Recruit Training

1. Series Track and Integrated Company cohorts at MCRD Parris Island (source: AHLTA):

This section describes injuries for which medical care was sought during recruit training at MCRD PI. Data were analyzed for a total of 384 recruits, and 186 injuries were analyzed. Of the 384 recruits at PI, 193 recruits were in the Series track cohort (98 female recruits, 95 male recruits), and 191 recruits were in the Integrated Company cohort (85 female recruits, 106 male recruits). Of the 186 injuries that occurred during recruit training at PI, 135 occurred in the Series track cohort (98 among female recruits, 37 among male recruits), and 51 injuries occurred in the Integrated Company cohort (35 among female recruits, 16 among male recruits).

Table 11.1: Number of medical record reviewed musculoskeletal injuries per United States Marine Corps recruit during recruit training at Marine Corps Recruit Depot Parris Island (count (percent))

Number of injuries during recruit training	MCRD PI Series Track		MCRD PI Integrated Company	
	Female Recruits	Male Recruits	Female Recruits	Male Recruits
0	40 (40.8)	67 (70.5)	63 (74.1)	92 (86.8)
1	32 (32.7)	20 (21.1)	13 (15.3)	12 (11.3)
2	14 (14.3)	7 (7.4)	6 (7.1)	2 (1.9)
3	11 (11.2)	1 (1.1)	2 (2.4)	0 (0.0)
4	0 (0.0)	0 (0.0)	1 (1.2)	0 (0.0)
5	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)
Total	98	95	85	106

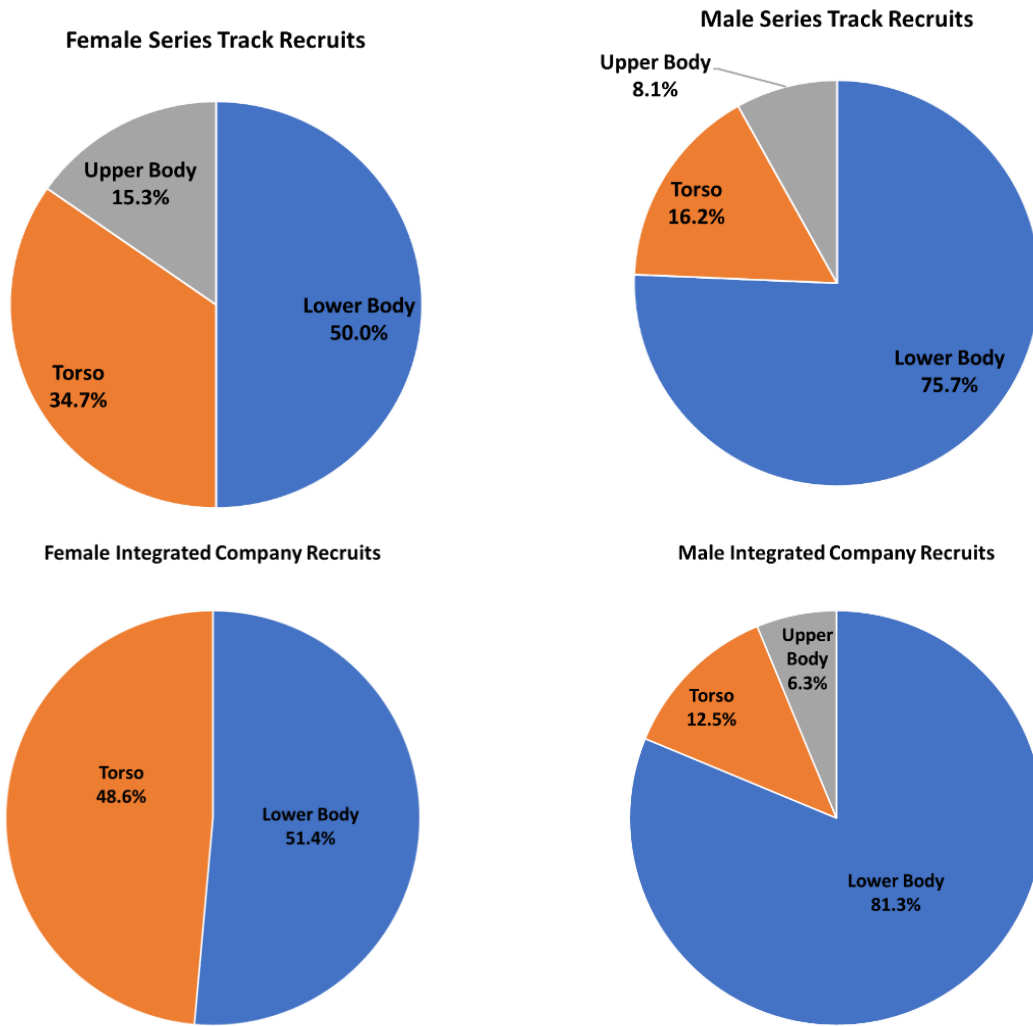
Of the 98 female recruits in the Series Track cohort, 32 recruits (32/98 = 32.7%) sustained one injury each, 14 recruits (14/98 = 14.3%) sustained two injuries each, 11 recruits (11/98 = 11.2%) sustained three injuries each, and one recruit (1/98 = 1.0%) sustained five injuries during recruit training. Of the 98 female recruits in the Series Track cohort, 40 recruits (40/98 = 40.8%) did not sustain any injuries during recruit training.

Of the 95 male recruits in the Series Track cohort, 20 recruits (20/95 = 21.1%) sustained one injury each, seven recruits (7/95 = 7.4%) sustained two injuries each, and one recruit (1/95 = 1.1%) sustained three injuries each during recruit training. Of the 95 male recruits in the Series Track cohort, 67 recruits (67/95 = 70.5%) did not sustain any injuries during recruit training.

Of the 85 female recruits in the Integrated Company cohort, 13 recruits (13/85 = 15.3%) sustained one injury each, six recruits (6/85 = 7.1%) sustained two injuries each, two recruits (2/85 = 2.4%) sustained three injuries each, and one recruit (1/85 = 1.2%) sustained four injuries during recruit training. Of the 85 female recruits in the Integrated Company cohort, 63 recruits (63/85 = 74.1%) did not sustain any injuries during recruit training.

Of the 106 male recruits in the Integrated Company cohort, 12 recruits (12/106 = 11.3%) sustained one injury each, and two recruits (2/106 = 1.9%) sustained two injuries each during recruit training. Of the 106 male recruits in the Integrated Company cohort, 92 recruits (92/106 = 86.8%) did not sustain any injuries during recruit training.

Figure 11.1: Anatomic region of medical record reviewed musculoskeletal injuries during recruit training at Marine Corps Recruit Depot Parris Island (count (percent))



The most frequent anatomic location for injuries among the recruits was the lower body among female Series Track recruits (50.0% of injuries), male Series Track recruits (75.7%), female Integrated Company recruits (51.4%), and male Integrated Company recruits (81.3%).

Table 11.2: Anatomic sub-region of medical record reviewed musculoskeletal injuries during recruit training at Marine Corps Recruit Depot Parris Island (count (percent))

Region	Body part	MCRD PI Series Track		MCRD PI Integrated Company	
		Female Recruits	Male Recruits	Female Recruits	Male Recruits
Lower body	Ankle	13 (13.3)	7 (18.9)	4 (11.4)	5 (31.3)
	Foot	9 (9.2)	2 (5.4)	3 (8.6)	0 (0.0)

	Knee	20 (20.4)	12 (32.4)	4 (11.4)	8 (50.0)
	Lower leg	7 (7.1)	6 (16.2)	3 (8.6)	0 (0.0)
	Upper leg	0 (0.0)	0 (0.0)	4 (11.4)	0 (0.0)
	Other	0 (0.0)	1 (2.7)	0 (0.0)	0 (0.0)
Torso	Hip	26 (26.5)	2 (5.4)	13 (37.1)	0 (0.0)
	Lumbar spine	5 (5.1)	1 (2.7)	2 (5.7)	1 (6.3)
	Ribs	0 (0.0)	1 (2.7)	0 (0.0)	1 (6.3)
	Thoracic spine	3 (3.1)	2 (5.4)	1 (2.9)	0 (0.0)
	Thoracic and Lumbar Spine	0 (0.0)	0 (0.0)	1 (2.9)	0 (0.0)
Upper body	Elbow	2 (2.0)	1 (2.7)	0 (0.0)	0 (0.0)
	Forearm	2 (2.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Hand and wrist	4 (4.1)	1 (2.7)	0 (0.0)	0 (0.0)
	Shoulder	7 (7.1)	1 (2.7)	0 (0.0)	1 (6.3)
Total		98	37	35	16

The most frequent body part affected by injury among the female recruits was the hip among Series Track recruits (26.5% of injuries) and Integrated Company recruits (37.1%). The most frequent body part affected by injury among the male recruits was the knee among Series Track recruits (32.4% of injuries) and Integrated Company recruits (50.0%).

Table 11.3: Event at the time of medical record reviewed musculoskeletal injuries during recruit training at Marine Corps Recruit Depot Parris Island (count (percent))

Recruit training event	MCRD PI Series Track		MCRD PI Integrated Company	
	Female Recruits	Male Recruits	Female Recruits	Male Recruits
Body Sparring	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.3)
Buddy Carry	0 (0.0)	0 (0.0)	1 (2.9)	0 (0.0)
Carrying Weight	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)
CFT	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)
Climbing Wall	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)
Confidence Course	0 (0.0)	3 (8.1)	0 (0.0)	0 (0.0)
Crucible	19 (19.4)	1 (2.7)	0 (0.0)	0 (0.0)
Crucible (ammo can lift)	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)
Crucible (Hike)	3 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)
Crucible (sparring)	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.3)
Drill	2 (2.0)	0 (0.0)	0 (0.0)	0 (0.0)
Drill (Rifle Movements)	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)
Firemans Carry	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.3)
Hiking	1 (1.0)	1 (2.7)	3 (8.6)	0 (0.0)
Marching	3 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)

MCMAP	5 (5.1)	2 (5.4)	1 (2.9)	1 (6.3)
O-course	4 (4.1)	4 (10.8)	1 (2.9)	0 (0.0)
Pell tower	0 (0.0)	0 (0.0)	1 (2.9)	0 (0.0)
Pugil Sticks	2 (2.0)	0 (0.0)	0 (0.0)	0 (0.0)
Pull-ups on PFT	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.3)
Rope Climb	0 (0.0)	0 (0.0)	1 (2.9)	0 (0.0)
Rope Swing	0 (0.0)	0 (0.0)	1 (2.9)	0 (0.0)
Running	4 (4.1)	2 (5.4)	1 (2.9)	0 (0.0)
Stairs	0 (0.0)	1 (2.7)	0 (0.0)	0 (0.0)
Walking	0 (0.0)	0 (0.0)	1 (2.9)	0 (0.0)
Wrestling	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.3)
Other	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)
Not specified	49 (50.0)	23 (62.2)	24 (68.6)	10 (62.5)
Total	98	37	35	16

Information about the event at the time of injury was not specified for a large percentage of injuries among female Series Track recruits (50.0% of injuries), male Series Track recruits (62.2%), female Integrated Company recruits (68.6%), and male Integrated Company recruits (62.5%).

Table 11.4: Type of medical record reviewed musculoskeletal injuries during recruit training at Marine Corps Recruit Depot Parris Island (count (percent))

Injury type	MCRD PI Series Track		MCRD PI Integrated Company	
	Female Recruits	Male Recruits	Female Recruits	Male Recruits
Bursitis	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Cellulitis	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.3)
Chondromalacia	0 (0.0)	2 (5.4)	0 (0.0)	0 (0.0)
Contusion	0 (0.0)	2 (5.4)	2 (5.7)	0 (0.0)
Dorsalgia	0 (0.0)	1 (2.7)	0 (0.0)	0 (0.0)
Fasciitis	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Fracture	3 (3.1)	1 (2.7)	1 (2.9)	0 (0.0)
Impingement	0 (0.0)	0 (0.0)	1 (2.9)	0 (0.0)
ITB Syndrome	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Joint effusion	0 (0.0)	1 (2.7)	0 (0.0)	0 (0.0)
Medial Tibial Stress Syndrome	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Pain	63 (64.3)	15 (40.5)	22 (62.9)	12 (75.0)
Plantar fasciitis	2 (2.0)	0 (0.0)	0 (0.0)	0 (0.0)
Sclerosis	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)
Shin splints	2 (2.0)	1 (2.7)	0 (0.0)	0 (0.0)
Sprain	5 (5.1)	2 (5.4)	1 (2.9)	2 (12.5)
Strain	8 (8.2)	2 (5.4)	2 (5.7)	0 (0.0)
Stress fracture	3 (3.1)	2 (5.4)	3 (8.6)	0 (0.0)

Stress Related Changes/ Reaction/ Response	2 (2.0)	3 (8.1)	0 (0.0)	1 (6.3)
Tendinitis/ Tendinosis/ Tendonitis/ Tendinopathy	4 (4.1)	2 (5.4)	2 (5.7)	0 (0.0)
Other	2 (2.0)	3 (8.1)	1 (2.9)	0 (0.0)
Not specified	3 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)
Total	98	37	35	16

The most frequent injury type was pain among female Series Track recruits (64.3% of injuries), male Series Track recruits (40.5%), female Integrated Company recruits (62.9%), and male Integrated Company recruits (75.0%).

Table 11.5: Mechanism/ onset of medical record reviewed musculoskeletal injuries during recruit training at Marine Corps Recruit Depot Parris Island (count (percent))

Injury mechanism/ onset	MCRD PI Series Track		MCRD PI Integrated Company	
	Female Recruits	Male Recruits	Female Recruits	Male Recruits
Traumatic	31 (31.6)	11 (29.7)	5 (14.3)	4 (25.0)
Overuse	2 (2.0)	0 (0.0)	0 (0.0)	0 (0.0)
Pre-existing	2 (2.0)	0 (0.0)	3 (8.6)	2 (12.5)
Not specified	63 (64.3)	26 (70.3)	27 (77.1)	10 (62.5)
Total	98	37	35	16

Information about the onset of injury was not specified for a large percentage of injuries among female Series Track recruits (64.3% of injuries), male Series Track recruits (70.3%), female Integrated Company recruits (77.1%), and male Integrated Company recruits (62.5%).

Table 11.6: Disposition following injury for medical record reviewed musculoskeletal injuries during recruit training at Marine Corps Recruit Depot Parris Island (count (percent))

Disposition following injury	MCRD PI Series Track		MCRD PI Integrated Company	
	Female Recruits	Male Recruits	Female Recruits	Male Recruits
Light	68 (69.4)	24 (64.9)	26 (74.3)	11 (68.8)
Full	16 (16.3)	3 (8.1)	6 (17.1)	3 (18.8)
Full (patient request)	2 (2.0)	0 (0.0)	0 (0.0)	0 (0.0)
SIQ	0 (0.0)	3 (8.1)	0 (0.0)	0 (0.0)
SIQ/Light	0 (0.0)	1 (2.7)	0 (0.0)	0 (0.0)
Other	2 (2.0)	0 (0.0)	1 (2.9)	0 (0.0)
Not specified	10 (10.2)	6 (16.2)	2 (5.7)	2 (12.5)
Total	98	37	35	16

A large percentage of injuries resulted in light duty among female Series Track recruits (69.4% of injuries), male Series Track recruits (64.9%), female Integrated Company recruits (74.3%), and male Integrated Company recruits (68.8%).

Table 11.7: Frequency and incidence of medical record reviewed musculoskeletal injuries during recruit training at Marine Corps Recruit Depot Parris Island (count (percent))

	MCRD PI Series Track		MCRD PI Integrated Company	
	Female Recruits	Male Recruits	Female Recruits	Male Recruits
Injury frequency	98/98 = 100.0	37/95 = 38.9	35/85 = 41.2	16/106 = 15.1
Injury incidence	58/98 = 59.2%	28/95 = 29.5%	22/85 = 25.9%	14/106 = 13.2%

The percent of female recruits with at least one self-reported injury during recruit training was 59.2% (58/98 = 59.2% of recruits) in the Series Track cohort, and 25.9% (22/85 = 25.9%) in the Integrated Company cohort. The percent of male recruits with at least one self-reported injury during recruit training was 29.5% (28/95 = 29.5% of recruits) in the Series Track cohort, and 13.2% (14/106 = 13.2%) in the Integrated Company cohort.

In the Series Track cohort, a greater proportion of women (0.59) as compared to men (0.29) suffered at least one injury during recruit training (Fisher's Exact test $p < 0.001$). In the Integrated Company cohort, a greater proportion of women (0.26) as compared to men (0.13) suffered at least one injury during recruit training (Fisher's Exact test $p = 0.040$).

A greater proportion of female recruits the Series Track (0.59) sustained at least one injury as compared to female recruits in the Integrated Company (0.26, Fisher's Exact test $p < 0.001$). A greater proportion of male recruits in the Series Track (0.29) sustained at least one injury as compared to male recruits in the Integrated Company (0.13, Fisher's Exact test $p = 0.005$).

2. Male Only cohort at MCRD San Diego (source: MHS Genesis):

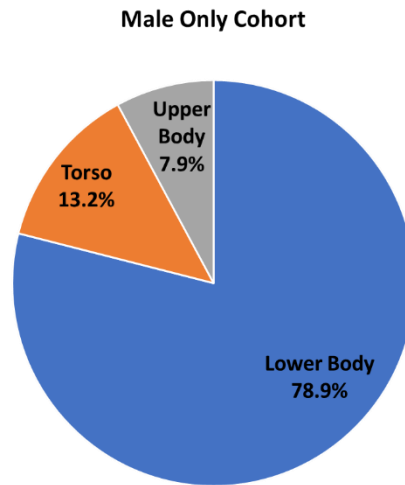
This report describes injuries for which medical care was sought during recruit training at MCRD San Diego. Data were available for 200 male recruits at MCRD San Diego, and 38 injuries were sustained in this cohort during recruit training.

Table 11.8: Number of medical record reviewed musculoskeletal injuries per United States Marine Corps recruit during recruit training in the Male Only cohort at Marine Corps Recruit Depot San Diego (count (percent))

Number of injuries during recruit training	Number of recruits
0	171 (85.5)
1	20 (10.0)
2	9 (4.5)
Total	200

Of the 200 recruits, 20 recruits (20/200 = 10.0% of the recruits) reported one injury each, and nine recruits (9/200 = 4.5%) reported two injuries each during recruit training. Of the 200 recruits, 171 recruits (171/200 = 85.5%) did not report any injuries during recruit training.

Figure 11.2: Anatomic region of medical record reviewed musculoskeletal injuries during recruit training in the Male Only cohort at Marine Corps Recruit Depot San Diego (count (percent))



The most frequent anatomic region for injuries among the recruits was the Lower body (78.9% of injuries).

Table 11.9: Anatomic sub-region of medical record reviewed musculoskeletal injuries during recruit training in the Male Only cohort at Marine Corps Recruit Depot San Diego (count (percent))

Region	Body part	Number of injuries
Lower body	Ankle	8 (21.1)
	Foot	2 (5.3)
	Knee	7 (18.4)
	Lower leg	10 (26.3)
	Upper leg	3 (7.9)
Torso	Hip	2 (5.3)
	Lumbar spine	1 (2.6)
	Ribs	0 (0.0)
	Thoracic spine	2 (5.3)
	Thoracic and Lumbar Spine	0 (0.0)
Upper body	Elbow	0 (0.0)
	Forearm	0 (0.0)
	Hand and wrist	1 (2.6)

	Shoulder	2 (5.3)
Total		38

The most frequent body part affected by injuries was the lower leg (26.3% of injuries).

Table 11.10: Recruit training event at the time of medical record reviewed musculoskeletal injuries during recruit training in the Male Only cohort at Marine Corps Recruit Depot San Diego (count (percent))

Recruit training event	Number of injuries
ADMIN MOVEMENT	5 (13.2)
CRUCIBLE	4 (10.5)
DAILY ROUTINE	1 (2.6)
HIKE	1 (2.6)
INTERVAL SPRINTS	1 (2.6)
IST	1 (2.6)
MARCHING	1 (2.6)
MCMAP	2 (5.3)
OBSTACLE COURSE	2 (5.3)
OVERUSE	11 (28.9)
PFT	1 (2.6)
RUNNING	2 (5.3)
Not Specified	6 (15.8)
Total	38

Of the 38 injuries, 11 injuries ($11/38 = 28.9\%$) were recorded as overuse.

Table 11.11: Type of medical record reviewed musculoskeletal injuries during recruit training in the Male Only cohort at Marine Corps Recruit Depot San Diego (count (percent))

Injury type	Number of injuries
Bursitis	2 (5.3)
Cellulitis	1 (2.6)
Contusion	3 (7.9)
Fasciitis	1 (2.6)
ITB Syndrome	1 (2.6)
Medial Tibial Stress Syndrome	8 (21.1)
Pain	5 (13.2)
Sprain	6 (15.8)
Strain	7 (18.4)
Stress Related Changes/ Reaction/ Response	2 (5.3)
Tendinitis/ Tendinosis/ Tendonitis/ Tendinopathy	1 (2.6)
Other	1 (2.6)

Total	38
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The most frequent injury type was Medial Tibial Stress Syndrome (21.1% of injuries).

Table 11.12: Mechanism/ onset of medical record reviewed musculoskeletal injuries during recruit training in the Male Only cohort at Marine Corps Recruit Depot San Diego (count (percent))

Injury mechanism/ onset	Number of injuries
Acute/ Traumatic	17 (44.7)
New Overuse	19 (50.0)
Preexisting Overuse	2 (5.3)
Total	38

A large percentage of injuries (50.0%) were classified as new overuse.

Table 11.13: Disposition following injury for medical record reviewed musculoskeletal injuries during recruit training at Marine Corps Recruit Depot San Diego (count (percent))

Disposition following injury	Number of injuries
Light Duty	35 (92.1)
MRP	3 (7.9)
Total	38

The majority of injuries (92.1%) led to the recruit being placed on light duty.

Table 11.14: Frequency and incidence of medical record reviewed musculoskeletal injuries during recruit training in the Male Only cohort at Marine Corps Recruit Depot San Diego (count (percent))

	Male Only cohort
Injury frequency	38/200 = 19.0
Injury incidence	29/200 = 14.5%

The number of recruits with at least one injury during recruit training was 29/200 = 14.5% of recruits.

3. Series Track cohort at MCRD Parris Island (source: MCTIMS):

This section describes injuries for which medical care was sought during recruit training at MCRD PI and recorded in the MCTIMS database. Injury data consisted of anatomic sub-location, injury type, disposition following injury, onset of injury, and event at the time of injury.

Table 11.15: Anatomic location of musculoskeletal injuries sustained during recruit training at Marine Corps Recruit Depot Parris Island from MCTIMS (count (percent))

Anatomic Location	Female Series Track recruits	Male Series Track recruits
Lower Extremity	6 (60.0)	5 (100.0)
Spine	1 (10.0)	0 (0.0)
Upper Extremity	3 (30.0)	0 (0.0)
Total	10	5

The most common anatomic location was the lower extremity for both female (60.0% of injuries) and male (100.0% of injuries) recruits.

Table 11.16: Anatomic sub-location of musculoskeletal injuries sustained during recruit training at Marine Corps Recruit Depot Parris Island from MCTIMS (count (percent))

Region	Body Part	Female Series Track recruits	Male Series Track recruits
Lower Extremity	Ankle	0 (0.0)	1 (20.0)
	Foot	1 (10.0)	0 (0.0)
	Upper Leg	0 (0.0)	1 (20.0)
	Hip	3 (30.0)	1 (20.0)
	Knee	1 (10.0)	1 (20.0)
	Lower Leg	1 (10.0)	1 (20.0)
Spine	Lumbar Spine	1 (10.0)	0 (0.0)
Upper Extremity	Shoulder	2 (20.0)	0 (0.0)
	Forearm	1 (10.0)	0 (0.0)
Total		10	5

The most common anatomic sub-location for injury in female Series Track recruits in this dataset was the hip (30.0% of injuries).

Table 11.17: Event at the time of musculoskeletal injury during recruit training at Marine Corps Recruit Depot Parris Island from MCTIMS (count (percent))

Event	Female Series Track recruits	Male Series Track recruits
Admin Movement	1 (10.0)	0 (0.0)
CFT	1 (10.0)	0 (0.0)
Close Order Drill	0 (0.0)	1 (20.0)
Confidence Course	0 (0.0)	1 (20.0)
Overuse-Non Specific	8 (80.0)	2 (40.0)
PFT/IST	0 (0.0)	1 (20.0)
Total	10	5

The most frequent event at the time of injury for both female (80.0% of injuries) and male (40.0%) recruits in the Series Track was categorized as Overuse-Non Specific.

Table 11.18: Type of musculoskeletal injuries sustained during recruit training at Marine Corps Recruit Depot Parris Island from MCTIMS (count (percent))

Injury Type	Female Series Track recruits	Male Series Track recruits
Fasciitis	1 (10.0)	0 (0.0)
ITB Syndrome	1 (10.0)	0 (0.0)
Sprain	0 (0.0)	1 (20.0)
Strain	7 (70.0)	1 (20.0)
Stress Related Changes/Reaction	1 (10.0)	1 (20.0)
Tendinitis	0 (0.0)	2 (40.0)
Total	10	5

The most common injury type in female Series Track recruits in this dataset was strain (70.0% of injuries).

Table 11.19: Onset of musculoskeletal injuries sustained during recruit training at Marine Corps Recruit Depot Parris Island from MCTIMS (count (percent))

Category	Female Series Track recruits	Male Series Track recruits
Acute/Traumatic	2 (20.0)	2 (40.0)
New Overuse	8 (80.0)	3 (60.0)
Total	10	5

A large percentage of injuries were categorized as New Overuse (80.0% of injuries in female recruits, 60.0% of injuries in male recruits).

Table 11.20: Disposition following musculoskeletal injury during recruit training at Marine Corps Recruit Depot Parris Island from MCTIMS (count (percent))

Disposition	Female Series Track recruits	Male Series Track recruits
Assign to Medical Platoon Hold	2 (20.0)	0 (0.0)
Full Duty	3 (30.0)	1 (20.0)
Light Duty	5 (50.0)	4 (80.0)
Total	10	5

The majority of injuries in this dataset resulted in recruits being placed on Light Duty (female recruits: 50.0% of injuries, male recruits: 80.0% of injuries).

B. Self-Reported Musculoskeletal Injuries During Recruit Training

This section describes self-reported injuries during USMC recruit training at MCRD Parris Island (Series Track and Integrated Company cohorts) and in the Male Only cohort at MCRD San Diego. Self-reported musculoskeletal injury data were collected at week 11 of recruit

training and were available for 467 recruits (82 female recruits in the Series Track, 58 female recruits in the Integrated Company, 76 male recruits in the Series Track, 75 male recruits in the Integrated Company, and 176 male recruits in the Male Only cohort). A total of 165 injuries were self-reported among the 467 recruits during recruit training.

The percent of female recruits with at least one self-reported injury during recruit training was 34.1% ($28/82 = 34.1\%$ of recruits) in the Series Track, and 51.7% ($30/58 = 51.7\%$) in the Integrated Company. The percent of male recruits with at least one self-reported injury during recruit training was 9.2% ($7/76 = 9.2\%$ of recruits) in the Series Track, 26.7% ($20/75 = 26.7\%$) in the Integrated Company, and 26.7% ($47/176 = 26.7\%$) in the Male Only Cohort.

Of the 82 female recruits in the Series Track, 27 recruits ($27/82 = 32.9\%$) reported one injury each, and one recruit ($1/82 = 1.2\%$) reported two injuries during recruit training. Of the 82 female recruits in the Series Track, 54 recruits ($54/82 = 65.9\%$) did not report any injuries during recruit training.

Of the 58 female recruits in the Integrated Company, 23 recruits ($23/58 = 39.7\%$) reported one injury each, six recruits ($6/58 = 10.3\%$) reported two injuries each, and one recruit ($1/58 = 1.7\%$) reported seven injuries during recruit training. Of the 58 female recruits in the Integrated Company, 28 recruits ($28/58 = 48.3\%$) did not report any injuries during recruit training.

Of the 76 male recruits in the Series Track, seven recruits ($7/76 = 9.2\%$) reported one injury each during recruit training. Of the 76 male recruits in the Series Track, 69 recruits ($69/76 = 90.8\%$) did not report any injuries during recruit training.

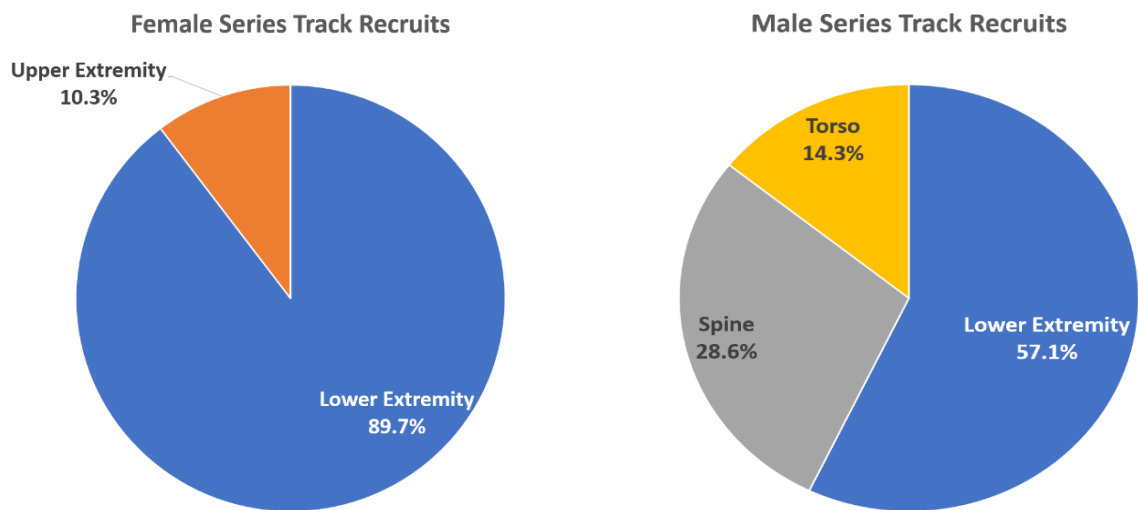
Of the 75 male recruits in the Integrated Company, 16 recruits ($16/75 = 21.3\%$) reported one injury each, two recruits ($2/75 = 2.7\%$) reported two injuries each, one recruit ($1/75 = 1.3\%$) reported three injuries, and one recruit ($1/75 = 1.3\%$) reported four injuries during recruit training. Of the 75 male recruits in the Integrated Company, 55 recruits ($55/75 = 73.3\%$) did not report any injuries during recruit training.

Of the 176 recruits in the Male Only cohort, 40 recruits ($40/176 = 22.7\%$ of the recruits) reported one injury each, four recruits ($4/176 = 2.3\%$) reported two injuries each, two recruits ($2/176 = 1.1\%$) reported three injuries each, and one recruit ($1/176 = 0.6\%$) reported six injuries during recruit training. Of the 176 recruits, 129 recruits ($129/176 = 73.3\%$) did not report any injuries during recruit training.

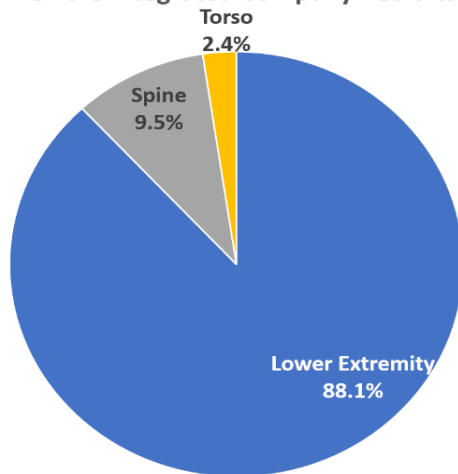
Table 11.21: Number of self-reported musculoskeletal injuries per United States Marine Corps recruit during recruit training, reported at week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego (count (percent))

Number of injuries per recruit	Female Series Track recruits	Female Integrated Company recruits	Male Series Track recruits	Male Integrated Company recruits	Male Only Cohort
0	54 (65.9)	28 (48.3)	69 (90.8)	55 (73.3)	129 (73.3)
1	27 (32.9)	23 (39.7)	7 (9.2)	16 (21.3)	40 (22.7)
2	1 (1.2)	6 (10.3)	0 (0.0)	2 (2.7)	4 (2.3)
3	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.3)	2 (1.1)
4	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.3)	0 (0.0)
5	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
6	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.6)
7	0 (0.0)	1 (1.7)	0 (0.0)	0 (0.0)	0 (0.0)
Total subjects	82	58	76	75	176

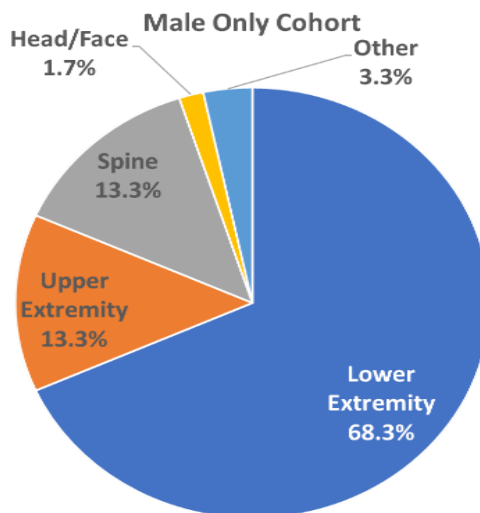
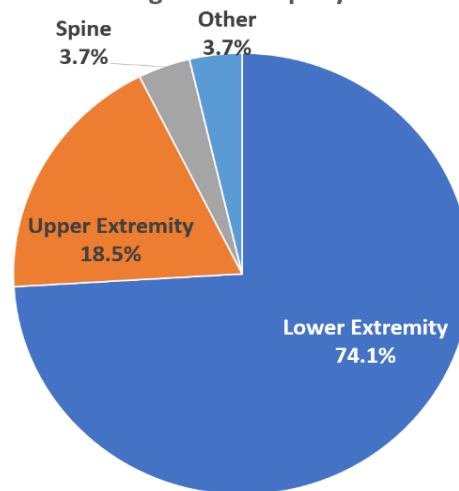
Figure 11.3: Anatomic location of self-reported musculoskeletal injuries during United States Marine Corps recruit training, reported at week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego (percent of injuries)



Female Integrated Company Recruits



Male Integrated Company Recruits



The most frequent anatomic location for injuries among the recruits was the Lower Extremity among female Series Track recruits (89.7% of injuries), female Integrated Company recruits (88.1%), male Series Track recruits (57.1%), male Integrated Company recruits (74.1%), and recruits in the Male Only Cohort (68.3%).

Table 11.22: Anatomic sub-location of self-reported musculoskeletal injuries during United States Marine Corps recruit training, reported at week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego (count (percent))

Injury anatomic location	Anatomic sub-location	Female Series Track Recruits	Female Integrated Company Recruits	Male Series Track Recruits	Male Integrated Company Recruits	Male Only Cohort
	Hip	6 (20.7)	10 (23.8)	0 (0.0)	4 (14.8)	2 (3.3)

Lower Extremity	Knee	10 (34.5)	14 (33.3)	2 (28.6)	8 (29.6)	7 (11.7)
	Ankle	4 (13.8)	2 (4.8)	2 (28.6)	1 (3.7)	12 (20.0)
	Thigh	1 (3.4)	1 (2.4)	0 (0.0)	1 (3.7)	2 (3.3)
	Lower Leg	3 (10.3)	3 (7.1)	0 (0.0)	1 (3.7)	4 (6.7)
	Foot and Toes	2 (6.9)	6 (14.3)	0 (0.0)	5 (18.5)	12 (20.0)
	Not specified	0 (0.0)	1 (2.4)	0 (0.0)	0 (0.0)	2 (3.3)
Upper Extremity	Shoulder	2 (6.9)	0 (0.0)	0 (0.0)	2 (7.4)	5 (8.3)
	Wrist	0 (0.0)	0 (0.0)	0 (0.0)	1 (3.7)	1 (1.7)
	Forearm	0 (0.0)	0 (0.0)	0 (0.0)	1 (3.7)	1 (1.7)
	Upper Arm	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.7)
	Hand and Fingers	1 (3.4)	0 (0.0)	0 (0.0)	1 (3.7)	0 (0.0)
Spine	Lumbopelvic	0 (0.0)	2 (4.8)	1 (14.3)	0 (0.0)	5 (8.3)
	Thoracic	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.7)
	Other	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (3.3)
	Not Specified	0 (0.0)	2 (4.8)	1 (14.3)	1 (3.7)	0 (0.0)
Torso	Abdomen	0 (0.0)	1 (2.4)	0 (0.0)	0 (0.0)	0 (0.0)
	Chest	0 (0.0)	0 (0.0)	1 (14.3)	0 (0.0)	0 (0.0)
Head/Face	Other	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.7)
Other	Not Specified	0 (0.0)	0 (0.0)	0 (0.0)	1 (3.7)	2 (3.3)
Total		29	42	7	27	60

The most frequent anatomic sub-location for injuries among the recruits was the knee among female Series Track recruits (34.5% of injuries), female Integrated Company recruits (33.3%), and male Integrated Company recruits (29.6%). Among male Series Track recruits, 28.6% of injuries affected the knee and ankle each. Among the Male Only Cohort 20.0% of injuries affected the ankle, and foot and toes each.

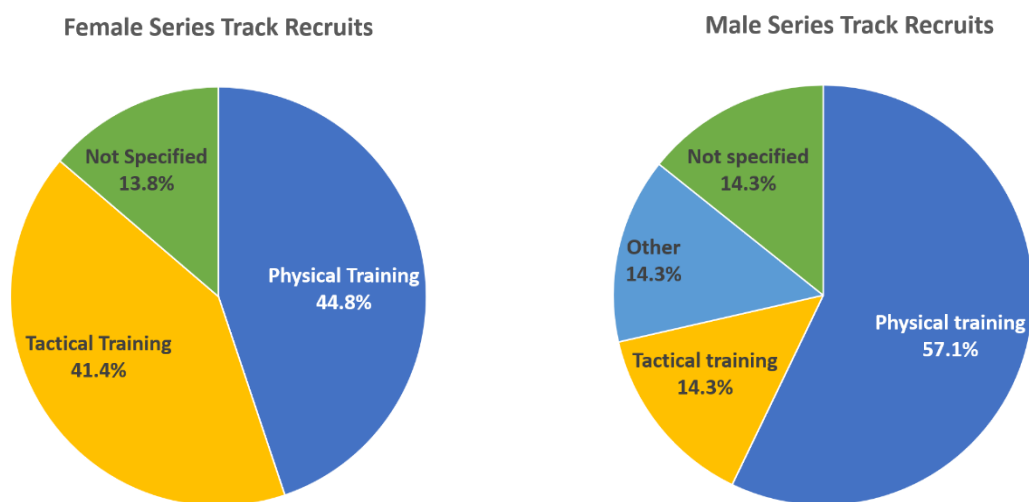
Table 11.23: Cause of self-reported musculoskeletal injuries during United States Marine Corps recruit training, reported at week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego (count (percent))

Cause of injury	Female Series Track Recruits	Female Integrated Company Recruits	Male Series Track Recruits	Male Integrated Company Recruits	Male Only Cohort
Climbing	1 (3.4)	1 (2.4)	0 (0.0)	0 (0.0)	5 (8.3)
Crushing	1 (3.4)	0 (0.0)	0 (0.0)	1 (3.7)	0 (0.0)
Direct trauma	1 (3.4)	1 (2.4)	1 (14.3)	3 (11.1)	0 (0.0)
Fall	4 (13.8)	2 (4.8)	0 (0.0)	5 (18.5)	1 (1.7)
Jump	0 (0.0)	0 (0.0)	0 (0.0)	1 (3.7)	0 (0.0)
Landing	1 (3.4)	0 (0.0)	0 (0.0)	1 (3.7)	2 (3.3)
Lifting	1 (3.4)	1 (2.4)	0 (0.0)	1 (3.7)	3 (5.0)
Marching	3 (10.3)	2 (4.8)	0 (0.0)	2 (7.4)	3 (5.0)

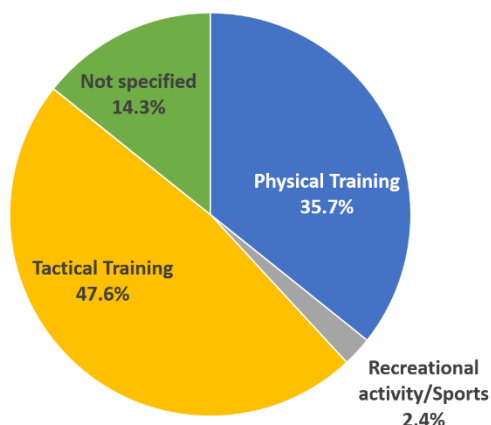
Planting	0 (0.0)	0 (0.0)	0 (0.0)	1 (3.7)	0 (0.0)
Pulling	0 (0.0)	1 (2.4)	0 (0.0)	0 (0.0)	1 (1.7)
Running	6 (20.7)	9 (21.4)	1 (14.3)	2 (7.4)	15 (25.0)
Twist/turn/slip (no fall)	3 (10.3)	4 (9.5)	1 (14.3)	1 (3.7)	3 (5.0)
Walking/hiking	0 (0.0)	8 (19.0)	0 (0.0)	0 (0.0)	7 (11.7)
Other	4 (13.8)	8 (19.0)	1 (14.3)	3 (11.1)	4 (6.7)
Not specified	4 (13.8)	5 (11.9)	3 (42.9)	6 (22.2)	16 (26.7)
Total	29	42	7	27	60

When the cause of injury was reported and could be included in a specific category, the most frequent cause of injuries among the recruits was running among female Series Track recruits (20.7% of injuries), female Integrated Company recruits (21.4%), and the recruits in the Male Only cohort (25.0%). Among male Integrated Company recruits the most frequent cause was Fall (18.5%). Among male Series Track recruits, one injury each (14.3% of injuries) was caused by Direct Trauma, Running, and Twist/turn/slip (no fall). The cause of injuries was missing in the self-reports for many injuries in all cohorts.

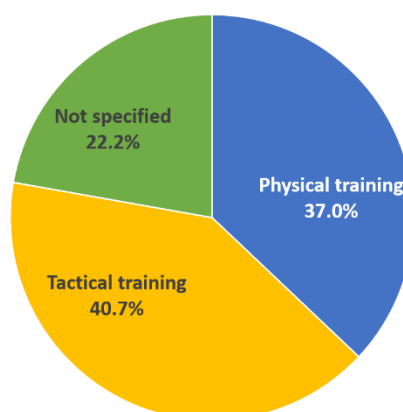
Figure 11.4: Activity when self-reported musculoskeletal injuries occurred during United States Marine Corps recruit training, reported at week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego (percent of injuries)



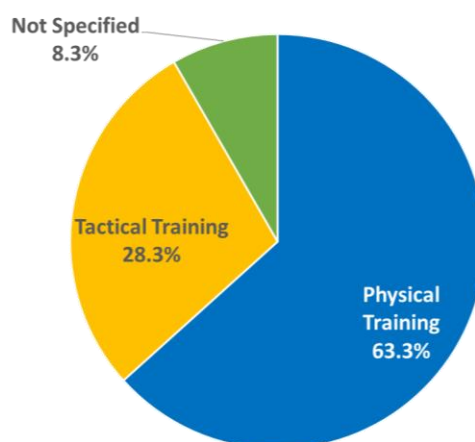
Female Integrated Company Recruits



Male Integrated Company Recruits



Male Only Cohort



The most frequent activity at the time of injury during recruit training was physical training for the female Series Track recruits (44.8% of injuries), male Series Track recruits (57.1%), and recruits in the Male Only cohort (63.3%). Tactical training was the most frequent activity at the time of injury for female Integrated Company recruits (47.6%), and male Integrated Company recruits (40.7%).

Table 11.24: Type of self-reported musculoskeletal injuries during United States Marine Corps recruit training, reported at week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego (count (percent))

Injury type	Female Series Track Recruits	Female Integrated Company Recruits	Male Series Track Recruits	Male Integrated Company Recruits	Male Only Cohort
Blister	0 (0.0)	4 (9.5)	0 (0.0)	0 (0.0)	4 (6.7)
Chondromalacia/Patellofemoral Pain	1 (3.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Dislocation	1 (3.4)	1 (2.4)	0 (0.0)	1 (3.7)	0 (0.0)
Fracture	0 (0.0)	0 (0.0)	1 (14.3)	0 (0.0)	0 (0.0)
Inflammation	0 (0.0)	1 (2.4)	0 (0.0)	0 (0.0)	0 (0.0)
Laceration/Puncture/Wound	0 (0.0)	0 (0.0)	0 (0.0)	1 (3.7)	1 (1.7)
Meniscal	0 (0.0)	1 (2.4)	0 (0.0)	0 (0.0)	0 (0.0)
Pain/Spasm/Ache	13 (44.8)	18 (42.9)	1 (14.3)	6 (22.2)	19 (31.7)
Plantar fasciitis	0 (0.0)	0 (0.0)	0 (0.0)	1 (3.7)	0 (0.0)
Shin splints	2 (6.9)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.7)
Sprain	6 (20.7)	3 (7.1)	1 (14.3)	1 (3.7)	12 (20.0)
Strain	1 (3.4)	1 (2.4)	0 (0.0)	1 (3.7)	6 (10.0)
Stress Fracture	0 (0.0)	2 (4.8)	0 (0.0)	1 (3.7)	1 (1.7)
Tear	0 (0.0)	0 (0.0)	0 (0.0)	1 (3.7)	0 (0.0)
Tendinitis/Tenosynovitis/Tendinopathy	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (3.3)
Other	2 (6.9)	2 (4.8)	1 (14.3)	1 (3.7)	3 (5.0)
Not Specified	3 (10.3)	9 (21.4)	3 (42.9)	13 (48.1)	11 (18.3)
Total injuries	29	42	7	27	60

When the injury type was reported and could be included in a specific category, the most frequent injury type was pain/spasm/ache among female Series Track recruits (44.8 of injuries), female Integrated Company recruits (42.9%), male Integrated Company recruits (22.2%), and recruits in the Male Only cohort (31.7%). The type of injury was not reported for many injuries in all cohorts.

Table 11.25: Data about whether medical care was sought for self-reported musculoskeletal injuries during United States Marine Corps recruit training, reported at week 11 of recruit training at Marine Corps Recruit Depot Parris Island and San Diego (count (percent))

Activity	Female Series Track Recruits	Female Integrated Company Recruits	Male Series Track Recruits	Male Integrated Company Recruits	Male Only Cohort
Yes	11 (37.9)	12 (38.6)	5 (71.4)	4 (14.8)	13 (21.7)
No	18 (62.1)	28 (66.7)	2 (28.6)	22 (81.5)	43 (71.7)
Not Specified	0 (0.0)	2 (4.8)	0 (0.0)	1 (3.7)	4 (6.7)
Total injuries	29	42	7	27	60

Medical care was not sought for a large percentage of injuries among female Series Track recruits (62.1% of injuries), female Integrated Company recruits (66.7%), male Integrated Company recruits (81.5%), and recruits in the Male Only Cohort (71.7%).

Self-reported musculoskeletal injury data described in this report were collected at week 11 of recruit training. If recruits dropped out of recruit training before week 11 (for any reason, including being injured), their data will not be included in this self-reported injury dataset. Also,

data about injuries that occurred after week 11 of recruit training will not be included in this dataset.

C. Self-Reported Musculoskeletal Injuries Prior to Recruit Training

This section describes self-reported injuries that occurred prior to USMC recruit training. Self-reported musculoskeletal injury data were available for 584 recruits (98 female recruits in the Series Track, 85 female recruits in the Integrated Company, 95 male recruits in the Series Track, 106 male recruits in the Integrated Company, and 200 male recruits in the Male Only cohort). A total of 154 injuries were reported among the 584 recruits prior to recruit training.

Table 11.26: Anatomic location of injuries prior to USMC recruit training (count (percent))

Injury anatomic location	Female Series Track Recruits	Female Integrated Company Recruits	Male Series Track Recruits	Male Integrated Company Recruits	Male Only Cohort Recruits
Lower Extremity	19 (59.4)	24 (72.7)	16 (55.2)	10 (66.7)	22 (48.9)
Upper Extremity	10 (31.3)	2 (6.1)	9 (31.0)	5 (33.3)	17 (37.8)
Spine	1 (3.1)	0 (0.0)	1 (3.4)	0 (0.0)	2 (4.4)
Torso	0 (0.0)	1 (3.0)	1 (3.4)	0 (0.0)	0 (0.0)
Head/Face	1 (3.1)	4 (12.1)	1 (3.4)	0 (0.0)	4 (8.9)
Other	1 (3.1)	2 (6.1)	0 (0.0)	0 (0.0)	0 (0.0)
Not Specified	0 (0.0)	0 (0.0)	1 (3.4)	0 (0.0)	0 (0.0)
Total	32	33	29	15	45

The most frequent anatomic location for injuries prior to recruit training was the Lower Extremity among female Series Track recruits (59.4% of injuries), female Integrated Company recruits (72.7%), male Series Track recruits (55.2%), male Integrated Company recruits (66.7%), and the recruits in the Male Only cohort (48.9%).

Table 11.27: Anatomic sub-location of injuries prior to USMC recruit training (count (percent))

Injury anatomic location	Anatomic sub-location	Female Series Track Recruits	Female Integrated Company Recruits	Male Series Track Recruits	Male Integrated Company Recruits	Male Only Cohort Recruits
Lower Extremity	Hip	3 (9.4)	2 (6.1)	2 (6.9)	1 (6.7)	0 (0.0)
	Knee	10 (31.3)	8 (24.2)	3 (10.3)	4 (26.7)	5 (11.1)
	Ankle	3 (9.4)	11 (33.3)	6 (20.7)	3 (20.0)	12 (26.7)
	Thigh	0 (0.0)	1 (3.0)	0 (0.0)	1 (6.7)	1 (2.2)
	Lower Leg	1 (3.1)	0 (0.0)	1 (3.4)	1 (6.7)	1 (2.2)

	Foot and Toes	2 (6.3)	2 (6.1)	4 (13.8)	0 (0.0)	2 (4.4)
	Not specified	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Other	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (2.2)
Upper Extremity	Shoulder	5 (15.6)	1 (3.0)	1 (3.4)	1 (6.7)	4 (8.9)
	Wrist	3 (9.4)	1 (3.0)	1 (3.4)	2 (13.3)	7 (15.6)
	Upper Arm	0 (0.0)	0 (0.0)	2 (6.9)	0 (0.0)	0 (0.0)
	Forearm	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.7)	1 (2.2)
	Hand and Fingers	1 (3.1)	0 (0.0)	3 (10.3)	1 (6.7)	3 (6.7)
	Elbow	1 (3.1)	0 (0.0)	1 (3.4)	0 (0.0)	1 (2.2)
	Not Specified	0 (0.0)	0 (0.0)	1 (3.4)	0 (0.0)	1 (2.2)
Spine	Lumbopelvic	1 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)	2 (4.4)
	Not Specified	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Other	0 (0.0)	0 (0.0)	1 (3.4)	0 (0.0)	0 (0.0)
Torso	Abdomen	0 (0.0)	1 (3.0)	1 (3.4)	0 (0.0)	0 (0.0)
	Chest	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Head/Face	Other	1 (3.1)	4 (12.1)	1 (3.4)	0 (0.0)	1 (2.2)
	Not Specified	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (6.7)
Other	Not Specified	1 (3.1)	1 (3.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Other	0 (0.0)	1 (3.0)	0 (0.0)	0 (0.0)	0 (0.0)
Not Specified	Not Specified	0 (0.0)	0 (0.0)	1 (3.4)	0 (0.0)	0 (0.0)
Total		32	33	29	15	45

The most frequent anatomic sub-location for injuries prior to recruit training was the knee among female Series Track recruits (31.3% of injuries) and male Integrated Company recruits (26.7%); and the ankle among female Integrated Company recruits (33.3%), male Series Track Recruits (20.7%), and the recruits in the Male Only cohort (26.7%).

Table 11.28: Cause of injuries prior to USMC recruit training (count (percent))

Cause of injury	Female Series Track Recruits	Female Integrated Company Recruits	Male Series Track Recruits	Male Integrated Company Recruits	Male Only Cohort Recruits
Climbing	0 (0.0)	1 (3.0)	1 (3.4)	0 (0.0)	0 (0.0)
Crushing	1 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)	2 (4.4)
Cutting	0 (0.0)	0 (0.0)	1 (3.4)	0 (0.0)	0 (0.0)
Direct trauma	3 (9.4)	1 (3.0)	1 (3.4)	0 (0.0)	5 (11.1)
Fall	6 (18.8)	5 (15.2)	5 (17.2)	2 (13.3)	5 (11.1)
Jump	2 (6.3)	0 (0.0)	0 (0.0)	2 (13.3)	1 (2.2)
Landing	5 (15.6)	4 (12.1)	3 (10.3)	1 (6.7)	6 (13.3)
Lifting	1 (3.1)	0 (0.0)	1 (3.4)	1 (6.7)	1 (2.2)
Marching	0 (0.0)	3 (9.1)	0 (0.0)	0 (0.0)	0 (0.0)
Planting	0 (0.0)	0 (0.0)	2 (6.9)	0 (0.0)	0 (0.0)

Pulling	0 (0.0)	1 (3.0)	0 (0.0)	1 (6.7)	1 (2.2)
Running	3 (9.4)	6 (18.2)	2 (6.9)	6 (40.0)	13 (28.9)
Twist/turn/slip (no fall)	0 (0.0)	4 (12.1)	3 (10.3)	0 (0.0)	0 (0.0)
Walking/hiking	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Whiplash	1 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Other	8 (25.0)	1 (3.0)	5 (17.2)	2 (13.3)	6 (13.3)
Not specified	2 (6.3)	7 (21.2)	5 (17.2)	0 (0.0)	5 (11.1)
Total	32	33	29	15	45

When the cause of injury was reported and could be included in a specific category, the most frequent cause of injuries among the recruits was fall among female Series Track recruits (18.8% of injuries) and male Series Track recruits (17.2%); and running among female Integrated Company recruits (18.2%), male Integrated Company recruits (40.0%), and recruits in the Male Only cohort (28.9%).

Table 11.29: Injury type prior to USMC recruit training (count (percent))

Injury type	Female Series Track Recruits	Female Integrated Company Recruits	Male Series Track Recruits	Male Integrated Company Recruits	Male Only Cohort Recruits
Blister	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Carpal Tunnel	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (11.1)
Concussion	1 (3.1)	4 (12.1)	0 (0.0)	0 (0.0)	0 (0.0)
Dislocation	2 (6.3)	2 (6.1)	0 (0.0)	0 (0.0)	1 (2.2)
Fracture	3 (9.4)	3 (9.1)	7 (24.1)	4 (26.7)	12 (26.7)
Hernia	0 (0.0)	1 (3.0)	0 (0.0)	0 (0.0)	0 (0.0)
Inflammation	0 (0.0)	1 (3.0)	0 (0.0)	0 (0.0)	0 (0.0)
Labral Tear	0 (0.0)	0 (0.0)	1 (3.4)	1 (6.7)	1 (2.2)
Laceration/Puncture/Wound	0 (0.0)	0 (0.0)	2 (6.9)	0 (0.0)	0 (0.0)
Meniscus tear	1 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Meniscal	0 (0.0)	1 (3.0)	0 (0.0)	0 (0.0)	0 (0.0)
Meniscal/ACL Tear	0 (0.0)	1 (3.0)	0 (0.0)	0 (0.0)	0 (0.0)
Pain/Spasm/Ache	1 (3.1)	2 (6.1)	2 (6.9)	3 (20.0)	2 (4.4)
Plantar fasciitis	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Shin splints	1 (3.1)	0 (0.0)	0 (0.0)	1 (6.7)	1 (2.2)
Sprain	7 (21.9)	1 (3.0)	6 (20.7)	3 (20.0)	11 (24.4)
Strain	1 (3.1)	0 (0.0)	1 (3.4)	0 (0.0)	1 (2.2)
Stress Fracture	3 (9.4)	0 (0.0)	1 (3.4)	0 (0.0)	0 (0.0)
Tear	0 (0.0)	0 (0.0)	2 (6.9)	0 (0.0)	0 (0.0)
Tendinitis/Tenosynovitis/Tendinopathy	0 (0.0)	6 (18.2)	0 (0.0)	2 (13.3)	0 (0.0)
Other	1 (3.1)	1 (3.0)	1 (3.4)	0 (0.0)	0 (0.0)
Not Specified	11 (34.4)	10 (30.3)	6 (20.7)	1 (6.7)	11 (24.4)
Total	32	33	29	15	45

When the injury type was reported and could be included in a specific category, the most frequent injury type was sprain among female Series Track recruits (21.9% of injuries); tendinitis/tenosynovitis/tendinopathy among female Integrated Company recruits (18.2%); and fracture among male Series Track recruits (24.1%), male Integrated Company recruits (26.7%), and recruits in the Male Only cohort (26.7%).

D. Conclusion

When assessing medical record reviewed musculoskeletal injuries during recruit training at MCRD PI, musculoskeletal injury incidence was higher among female recruits as compared to male recruits within the same cohort. This was true for the Series Track, as well as for the Integrated Company Cohort. When the genders were analyzed separately at MCRD PI, a greater proportion of recruits in the Series Track sustained a musculoskeletal injury as compared to the Integrated Company Cohort. This was true for female as well as for male recruits. In the Male Only cohort at MCRD SD, the proportion of recruits with at least one musculoskeletal injury during recruit training was 0.15.

Incidence of medical record reviewed injuries was not compared between MCRD PI and MCRD SD, as the sources of injury data were different. The more important finding was related to the differences between male and female recruits in terms of musculoskeletal injuries. These findings have direct relevance for gender integration implications, due to higher observed incidence of musculoskeletal injuries among female recruits in this study. Previous research has shown female military personnel who perform at the same levels of fitness as their male peers can be expected to experience similar risks of injury (Nindl et. al., 2016; Anderson et. al., 2017). Further investigation of the risk factors for and strategies for prevention of musculoskeletal injuries among female Marine Corps recruits is recommended.

Chapter 12: Self-Reported Data and Administrative Data from MCRD Parris Island and MCRD San Diego

Bottom Line Up Front

- Female Series Track recruits reported a significantly higher quantity of baseline strength training physical activity (31.6 ± 30.0 METhrs/wk) as compared to female Integrated Company recruits (20.0 ± 25.9 METhrs/wk, p value: 0.007).
- Female recruits who attrited had a baseline resilience score (63.0 ± 18.5) that was approximately 14 points lower than the baseline resilience score of female recruits who did not attrit (77.6 ± 12.3), although this difference was not statistically significant (p value: 0.059).
- Female recruits who attrited reported a statistically significantly lower baseline quantity of strength training physical activity (2.6 ± 5.8 METhrs/wk) as compared to female recruits who did not attrit (26.9 ± 28.8 METhrs/wk, p value < 0.001).
- There was a significant but low positive correlation between baseline self-reported total quantity of physical activity and Initial PFT score (correlation coefficient: 0.170, $p = 0.003$) and Initial CFT score (correlation coefficient: 0.129, $p = 0.028$) of recruits at MCRD Parris Island.

A. Self-Reported Data from Recruits at MCRD Parris Island and San Diego

This section includes data collected via survey from recruits at week 2 of recruit training at MCRDs Parris Island and San Diego.

1. Baseline Connor-Davidson Resilience Scale (CD-RISC) Data

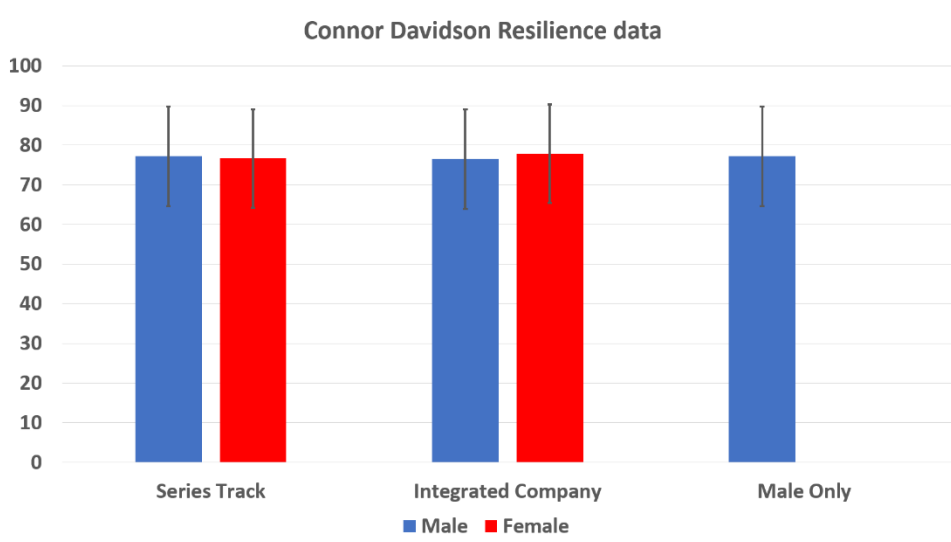
Resilience data were collected from recruits at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego.

Female Series Track recruits had a resilience score of 76.63 ± 14.20 (mean \pm SD) and male Series Track recruits had a score of 77.22 ± 12.57 . In the Integrated Company, female recruits scored 77.82 ± 10.61 and male recruits scored 76.49 ± 12.62 on the resilience scale. For the Male Only cohort, resilience score was 77.23 ± 11.84 . Baseline resilience scores were not statistically significantly different between female recruits in the Series Track and Integrated Company cohorts (independent samples t test p value: 0.523). Baseline resilience scores were not statistically significantly different between male recruits in the Series Track, Integrated Company, and Male Only cohorts (one-way ANOVA p value: 0.868).

Table 12.1: Baseline (week 2) Connor-Davidson Resilience Scale data among recruits at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego

	Series Track recruits		Integrated Company recruits		Male Only cohort		Group Comparison <i>p</i> value
	N	Mean ± SD	N	Mean ± SD	N	Mean ± SD	
Female recruits	96	76.63 ± 14.20	82	77.82 ± 10.61			0.523
Male recruits	91	77.22 ± 12.57	105	76.49 ± 12.62	200	77.23 ± 11.84	0.868

Figure 12.1: Baseline (week 2) Connor-Davidson Resilience Scale data among recruits at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego



Bars represent mean, and error lines represent ± 1 standard deviation

2. Baseline Physical Activity Data Prior to Recruit Training

Similar to all baseline data collected as a part of this study, based on availability of recruits for testing, the baseline self-reported physical activity data was collected at week 2 of recruit training. The question asked of recruits was “**Check all of the following activities that you have performed regularly during the past three months**”, but the survey was administered at week 2 of recruit training.

Table 12.2: Baseline physical activity quantity self-reported by recruits at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego (Male Only cohort). Physical activity quantity was reported at week 2 of recruit training and is measured as metabolic equivalent tasks per week (METhrs/wk).

		Series Track		Integrated Company		Male Only cohort		Group Comparison p value
		N	Mean ± SD	N	Mean ± SD	N	Mean ± SD	
Female recruits	Total (METhrs/wk)	96	86.5 ± 67.0	82	69.4 ± 68.0			0.015*
	Endurance (METhrs/wk)	96	37.4 ± 34.4	82	32.7 ± 30.9			0.345
	Strength (METhrs/wk)	96	31.6 ± 30.0	82	20.0 ± 25.9			0.007
	Sports/Other (METhrs/wk)	96	17.6 ± 36.9	82	16.7 ± 37.4			0.866
Male recruits	Total (METhrs/wk)	91	88.3 ± 77.7	104	83.3 ± 74.5	198	76.1 ± 60.1	0.375
	Endurance (METhrs/wk)	91	32.2 ± 38.8	104	31.6 ± 34.3	198	30.7 ± 31.1	0.932
	Strength (METhrs/wk)	91	31.3 ± 33.7	104	23.6 ± 26.6	198	29.4 ± 34.7	0.204
	Sports/Other (METhrs/wk)	91	24.8 ± 45.3	104	28.1 ± 45.9	198	16.0 ± 29.8	0.277*

*Non-parametric test

Female Series Track recruits reported total quantity of physical activity of 86.5 ± 67.0 METhrs/wk (mean \pm SD) and female Integrated Company recruits reported total quantity of physical activity of 69.4 ± 68.0 METhrs/wk. Baseline total quantity of physical activity was statistically significantly different between female Series Track and female Integrated Company recruits (Wilcoxon Rank Sum test p value: 0.015). Female Series Track recruits reported quantity of endurance physical activity of 37.4 ± 34.4 METhrs/wk and female Integrated Company recruits reported quantity of endurance physical activity of 32.7 ± 30.9 METhrs/wk. Baseline quantity of endurance physical activity was not statistically significantly different between female Series Track and female Integrated Company recruits (independent samples t test p value: 0.345). Female Series Track recruits reported quantity of strength training physical activity of 31.6 ± 30.0 METhrs/wk and female Integrated Company recruits reported quantity of strength training physical activity of 20.0 ± 25.9 METhrs/wk. Baseline quantity of strength training physical activity was statistically significantly different between female Series Track and female Integrated Company recruits (independent samples t test p value: 0.007). Female Series Track recruits reported quantity of sports/other physical activity of 17.6 ± 36.9 METhrs/wk and female Integrated Company recruits reported quantity of sports/other physical activity of 16.7 ± 37.4 METhrs/wk. Baseline quantity of sports/other physical activity was not statistically significantly different between female Series Track and female Integrated Company recruits (independent samples t test p value: 0.866).

Male Series Track recruits reported total quantity of physical activity of 88.3 ± 77.7 METhrs/wk (mean \pm SD), male Integrated Company recruits reported total quantity of physical activity of 83.3 ± 74.5 METhrs/wk, and recruits in the Male Only cohort reported total quantity of physical

activity of 76.1 ± 60.1 METhrs/wk. Baseline total quantity of physical activity was not statistically significantly different between male recruits in the Series Track, Integrated Company, and Male Only cohorts (one-way ANOVA p value: 0.375). Male Series Track recruits reported quantity of endurance physical activity of 32.2 ± 38.8 METhrs/wk, male Integrated Company recruits reported quantity of endurance physical activity of 31.6 ± 34.3 METhrs/wk, and recruits in the Male Only cohort reported quantity of endurance physical activity of 30.7 ± 31.1 METhrs/wk. Baseline quantity of endurance physical activity was not statistically significantly different between male recruits in the Series Track, Integrated Company, and Male Only cohorts (one-way ANOVA p value: 0.932). Male Series Track recruits reported quantity of strength training physical activity of 31.3 ± 33.7 METhrs/wk, male Integrated Company recruits reported quantity of strength training physical activity of 23.6 ± 26.6 METhrs/wk, and recruits in the Male Only cohort reported quantity of strength training physical activity of 29.4 ± 34.7 METhrs/wk. Baseline quantity of strength training physical activity was not statistically significantly different between male recruits in the Series Track, Integrated Company and Male Only cohorts (one-way ANOVA p value: 0.204). Male Series Track recruits reported quantity of sports/other physical activity of 24.8 ± 45.3 METhrs/wk, male Integrated Company recruits reported quantity of sports/other physical activity of 28.1 ± 45.9 METhrs/wk, and recruits in the Male Only cohort reported quantity of sports/other physical activity of 16.0 ± 29.8 METhrs/wk. Baseline quantity of sports/other physical activity was not statistically significantly different between male recruits in the Series Track, Integrated Company, and Male Only cohorts (Kruskal-Wallis p value: 0.277).

3. Baseline Nicotine/Tobacco Usage

This section includes an analysis of usage of nicotine containing products.

Table 12.3: Percentage of recruits who reported ever using Cigarettes (use now or previously used) at MCRD PI (Series Track and Integrated Company) and at MCRD SD (Male Only cohort) at week 2 of recruit training

	Series Track	Integrated Company	Male Only cohort	Group comparison p value
Female recruits	4/96 = 4.2%	2/83 = 2.4%		0.687
Male recruits	15/92 = 16.3%	11/104 = 10.6%	14/200 = 7.0%	0.052

The percent of female recruits who reported ever using cigarettes (use now or previously used) was 4.2% (4/96 recruits) in the Series Track cohort, and 2.4% (2/83 recruits) in the Integrated Company cohort. These differences were not statistically significant (Fisher's Exact test $p = 0.687$).

The percent of male recruits who reported ever using cigarettes was 16.3% (15/92 recruits) in the Series Track cohort, 10.6% (11/104 recruits) in the Integrated Company cohort, and 7.0% (14/200 recruits) in the Male Only cohort. These differences were not statistically significant (Fisher's Exact test $p = 0.052$).

Table 12.4: Percentage of recruits who reported ever using Cigars (use now or previously used) at MCRD PI (Series Track and Integrated Company) and at MCRD SD (Male Only cohort) at week 2 of recruit training

	Series Track	Integrated Company	Male Only cohort	Group comparison <i>p</i> value
Female recruits	1/96 = 1.0%	0/83 = 0.0%		1.000
Male recruits	16/92 = 17.4%	10/104 = 9.6%	14/200 = 7.0%	0.028

The percent of female recruits who reported ever using cigars (use now or previously used) was 1.0% (1/96 recruits) in the Series Track cohort, and 0.0% (0/83 recruits) in the Integrated Company cohort. These differences were not statistically significant (Fisher’s Exact test $p = 1.000$).

The percent of male recruits who reported ever using cigars was 17.4% (16/92 recruits) in the Series Track cohort, 9.6% (10/104 recruits) in the Integrated Company cohort, and 7.0% (14/200 recruits) in the Male Only cohort. These differences were statistically significant (Fisher’s Exact test $p = 0.028$).

Table 12.5: Percentage of recruits who reported ever using Smokeless Tobacco (use now or previously used) at MCRD PI (Series Track and Integrated Company) and at MCRD SD (Male Only cohort) at week 2 of recruit training

	Series Track	Integrated Company	Male Only cohort	Group comparison <i>p</i> value
Female recruits	2/96 = 2.1%	0/83 = 0.0%		0.500
Male recruits	12/92 = 13.0%	8/103 = 7.8%	15/200 = 7.5%	0.279

The percent of female recruits who reported ever using smokeless tobacco (use now or previously used) was 2.1% (2/96 recruits) in the Series Track cohort, and 0.0% (0/83 recruits) in the Integrated Company cohort. These differences were not statistically significant (Fisher’s Exact test $p = 0.500$).

The percent of male recruits who reported ever using smokeless tobacco was 13.0% (12/92 recruits) in the Series Track cohort, 7.8% (8/103 recruits) in the Integrated Company cohort, and 7.5% (15/200 recruits) in the Male Only cohort. These differences were not statistically significant (Fisher’s Exact test $p = 0.279$).

Table 12.6: Percentage of recruits who reported ever using Vaping/JUULing/E-cigarettes (use now or previously used) at MCRD PI (Series Track and Integrated Company) and at MCRD SD (Male Only cohort) at week 2 of recruit training

	Series Track	Integrated Company	Male Only cohort	Group Comparison <i>p</i> value
Female recruits	32/96 = 33.3%	16/83 = 19.3%		0.042
Male recruits	28/92 = 30.4%	29/105 = 27.6%	51/200 = 25.5%	0.655

The percent of female recruits who reported ever using vaping/JUULing/e-cigarettes (use now or previously used) was 33.3% (32/96 recruits) in the Series Track cohort, and 19.3% (16/83 recruits) in the Integrated Company cohort. These differences were statistically significant (Fisher’s Exact test $p = 0.042$).

The percent of male recruits who reported ever using vaping/JUULing/E-cigarettes was 30.4% (28/92 recruits) in the Series Track cohort, 27.6% (29/105 recruits) in the Integrated Company cohort, and 25.5% (51/200 recruits) in the Male Only cohort. These differences were not significant (Fisher’s Exact test $p = 0.655$).

Table 12.7: Percentage of recruits who reported ever using Cigarette (use now or previously used) at MCRD PI (Series Track and Integrated Company) at week 2 of recruit training

	Female recruits	Male recruits	Group Comparison <i>p</i> value
Series Track	4/96 = 4.2%	15/92 = 16.3%	0.007
Integrated Company	2/83 = 2.4%	11/104 = 10.6%	0.041

In the Series Track cohort, the percent of female recruits who reported ever using cigarettes (use now or previously used) was 4.2% (4/96 recruits) and the percent of males was 16.3% (15/92 recruits). These differences were statistically significant (Fisher’s Exact test $p = 0.007$).

In the Integrated Company, the percent of female recruits who reported ever using cigarettes was 2.4% (2/83 recruits) and the percent of males was 10.6% (11/104 recruits). These differences were statistically significant (Fisher’s Exact test $p = 0.041$).

Table 12.8: Percentage of recruits who reported ever using Cigar (use now or previously used) at MCRD PI (Series Track and Integrated Company) at week 2 of recruit training

	Female recruits	Male recruits	Group Comparison <i>p</i> value
Series Track	1/96 = 1.0%	16/92 = 17.4%	< 0.001
Integrated Company	0/83 = 0.0%	10/104 = 9.6%	0.003

In the Series Track cohort, the percent of female recruits who reported ever using cigars (use now or previously used) was 1.0% (1/96 recruits) and the percent of males was 17.4% (16/92 recruits). These differences were statistically significant (Fisher’s Exact test $p < 0.001$).

In the Integrated Company, the percent of female recruits who reported ever using cigars was 0.0% (0/83 recruits) and the percent of males was 9.6% (10/104 recruits). These differences were statistically significant (Fisher’s Exact test $p = 0.003$).

Table 12.9: Percentage of recruits who reported ever using Smokeless Tobacco (use now or previously used) at MCRD PI (Series Track and Integrated Company) at week 2 of recruit training

	Female recruits	Male recruits	Group Comparison p value
Series Track	2/96 = 2.1%	12/92 = 13.0%	0.005
Integrated Company	0/83 = 0.0%	8/103 = 7.8%	0.009

In the Series Track cohort, the percent of female recruits who reported ever using smokeless tobacco (use now or previously used) was 2.1% (2/96 recruits) and the percent of males was 13.0% (12/92 recruits). These differences were statistically significant (Fisher’s Exact test $p = 0.005$).

In the Integrated Company, the percent of female recruits who reported ever using smokeless tobacco was 0.0% (0/83 recruits) and the percent of males was 7.8% (8/103 recruits). These differences were statistically significant (Fisher’s Exact test $p = 0.009$).

Table 12.10: Percentage of recruits who reported ever using Vaping/JUULing/E-cigarettes (use now or previously used) at MCRD PI (Series Track and Integrated Company) at week 2 of recruit training

	Female recruits	Male recruits	Group Comparison p value
Series Track	32/96 = 33.3%	28/92 = 30.4%	0.755
Integrated Company	16/83 = 19.3%	29/105 = 27.6%	0.229

In the Series Track cohort, the percent of female recruits who reported ever using vaping/JUULing/e-cigarettes (use now or previously used) was 33.3% (32/96 recruits) and the percent of males was 30.4% (28/92 recruits). These differences were not statistically significant (Fisher’s Exact test $p = 0.755$).

In the Integrated Company, the percent of female recruits who reported ever using vaping/JUULing/e-cigarettes was 19.3% (16/83 recruits) and the percent of males was 27.6% (29/105 recruits). These differences were not statistically significant (Fisher’s Exact test $p = 0.229$).

Conclusion

Cigarette smoking in military populations is known to negatively impact physical performance (Leyk et al., 2015). When data from the Series Track and Integrated Company cohorts at MCRD PI were analyzed separately, the percentage of recruits who reported ever using cigarettes, cigars, or smokeless tobacco was statistically significantly higher in men as compared to women. In contrast, the percentage of female and male recruits who ever used Vaping/JUULing/E-cigarettes was not different. The use of vaping has grown (National Health Interview Survey, 2016). Also, a recent study among U.S. Army Soldiers showed that use of e-cigarettes and tobacco cigarettes was associated with a lower level of fitness than individuals who abstain (Dinkeloo et al., 2019). The high occurrence of ever using Vaping/JUULing/E-cigarettes among female recruits in the study, which was on par with prevalence in male recruits, needs further research to investigate the potential negative impact on performance.

B. Administrative Data

This section describes data received from directly from the USMC. Data includes CFT/PFT scores as well as information about attritions and drop-offs for recruits in the study.

1. Changes in CFT/PFT outcomes during the course of recruit training

Changes in performance between the Initial and Final administration of the CFT/PFT was analyzed.

Table 12.11: Changes in PFT scores during recruit training at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and Marine Corps Recruit Depot San Diego (Male Only cohort)

Location	Cohort	Gender	N	Initial PFT* Mean ± SD	Final PFT** Mean ± SD	Within subjects change <i>p</i> value
Parris Island	Both cohorts combined	Female	143	211.5 ± 38.8	230.9 ± 31.3	< 0.001
		Male	150	224.7 ± 41.5	247.6 ± 27.4	< 0.001
	Series Track	Female	88	208.7 ± 41.0	221.1 ± 30.3	< 0.001
		Male	75	217.7 ± 45.4	250.4 ± 25.0	< 0.001
	Integrated Company	Female	55	216.0 ± 34.9	246.6 ± 26.4	< 0.001
		Male	75	231.8 ± 36.0	244.8 ± 29.6	< 0.001
San Diego	Male Only	Male	169	215.0 ± 38.4	239.4 ± 31.0	< 0.001

*Initial PFT occurred on training day 35 at MCRD PI and training day 22 at MCRD SD

**Final PFT occurred on training day 55 at MCRD PI and training day 30 at MCRD SD

At Parris Island, PFT score for female recruits increased significantly from training day 35 (211.5 ± 38.8) to training day 55 (230.9 ± 31.3, $p < 0.001$). At Parris Island, PFT score for male recruits increased significantly from training day 35 (224.7 ± 41.5) to training day 55 (247.6 ± 27.4, $p < 0.001$).

In female Series Track recruits, PFT score increased significantly from training day 35 (208.7 ± 41.0) to training day 55 (221.1 ± 30.3 , $p < 0.001$). In male Series Track recruits, PFT score increased significantly from training day 35 (217.7 ± 45.4) to training day 55 (250.4 ± 25.0 , $p < 0.001$). In female Integrated Company recruits, PFT score increased significantly from training day 35 (216.0 ± 34.9) to training day 55 (246.6 ± 26.4 , $p < 0.001$). In male Integrated Company recruits, PFT score increased significantly from training day 35 (231.8 ± 36.0) to training day 55 (244.8 ± 29.6 , $p < 0.001$).

In the Male Only cohort at San Diego, PFT score increased significantly from training day 22 (215.0 ± 38.4) to training day 30 (239.4 ± 31.0 , $p < 0.001$).

Table 12.12: Changes in CFT scores during recruit training at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and Marine Corps Recruit Depot San Diego (Male Only cohort)

Location	Cohort	Gender	N	Initial CFT* Mean \pm SD	Final CFT** Mean \pm SD	Within subjects change p value
Parris Island	Both cohorts combined	Female	124	235.1 ± 35.5	264.4 ± 22.0	< 0.001
		Male	146	222.3 ± 48.2	254.3 ± 32.1	< 0.001
	Series Track	Female	77	225.0 ± 34.9	264.7 ± 23.3	< 0.001
		Male	69	213.8 ± 54.9	261.0 ± 28.2	< 0.001
	Integrated Company	Female	47	251.5 ± 30.2	263.9 ± 19.9	< 0.001
		Male	77	229.8 ± 40.2	248.4 ± 34.3	< 0.001
San Diego	Male Only	Male	175	237.8 ± 38.1	260.8 ± 30.6	< 0.001

*Initial CFT occurred on training day 27 at MCRD PI and training day 28 at MCRD SD

**Final CFT occurred on training day 47 at MCRD PI and training day 40 at MCRD SD

At Parris Island, CFT score for female recruits increased significantly from training day 27 (235.1 ± 35.5) to training day 47 (264.4 ± 22.0 , $p < 0.001$). At Parris Island, CFT score in male recruits increased significantly from training day 27 (222.3 ± 48.2) to training day 47 (254.3 ± 32.1 , $p < 0.001$).

In female Series Track recruits, CFT score increased significantly from training day 27 (225.0 ± 34.9) to training day 47 (264.7 ± 23.3 , $p < 0.001$). In male Series Track recruits, CFT score increased significantly from training day 27 (213.8 ± 54.9) to training day 47 (261.0 ± 28.2 , $p < 0.001$). In female Integrated Company recruits, CFT score increased significantly from training day 27 (251.5 ± 30.2) to training day 47 (263.9 ± 19.9 , $p < 0.001$). In male Integrated Company recruits, CFT score increased significantly from training day 27 (229.8 ± 40.2) to training day 47 (248.4 ± 34.3 , $p < 0.001$).

In the Male Only cohort at San Diego, CFT score increased significantly from training day 28 (237.8 ± 38.1) to training day 40 (260.8 ± 30.6 , $p < 0.001$).

Table 12.13: Changes in percentages of recruits who passed the Initial and Final PFT at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and Marine Corps Recruit Depot San Diego (Male Only cohort)

Location	Cohort	Gender	Initial PFT*	Final PFT**	Within subjects change <i>p</i> value
Parris Island	Both cohorts combined	Female	128/143 = 89.5%	140/143 = 97.9%	0.002
		Male	143/150 = 95.3%	150/150 = 100.0%	***
	Series Track	Female	77/88 = 87.5%	85/88 = 96.6%	0.021
		Male	70/75 = 93.3%	75/75 = 100.0%	***
	Integrated Company	Female	51/55 = 92.7%	55/55 = 100.0%	***
		Male	73/75 = 97.3%	75/75 = 100.0%	***
San Diego	Male Only	Male	166/169 = 98.2%	169/169 = 100.0%	***

*Initial PFT occurred on training day 35 at MCRD PI and training day 22 at MCRD SD

**Final PFT occurred on training day 55 at MCRD PI and training day 30 at MCRD SD

***Test could not be run

At Parris Island, the percentage of female recruits who passed the Initial PFT on training day 35 was 89.5% (128/143 recruits), and the percentage of female recruits who passed the Final PFT on training day 55 was 97.9% (140/143 recruits). This difference was statistically significant (McNemar's test $p = 0.002$). At Parris Island, the percentage of male recruits who passed the Initial PFT was 95.3% (143/150 recruits), and the percentage of male recruits who passed the Final PFT was 100.0% (150/150 recruits).

The percentage of female Series Track recruits who passed the Initial PFT was 87.5% (77/88 recruits), while the percentage of female Series Track recruits who passed the Final PFT was 96.6% (85/88 recruits). This difference was statistically significant (McNemar's test $p = 0.021$). The percentage of male Series Track recruits who passed the Initial PFT was 93.3% (70/75 recruits), and the percentage of male Series Track recruits who passed the Final PFT was 100.0% (75/75 recruits). The percentage of female Integrated Company recruits who passed the Initial PFT was 92.7% (51/55 recruits), and the percentage of female Integrated Company recruits who passed the Final PFT was 100.0% (55/55 recruits). The percentage of male Integrated Company recruits who passed the Initial PFT was 97.3% (73/75 recruits), while the percentage of male Integrated Company recruits who passed the Final PFT was 100.0% (75/75 recruits).

The percentage of recruits in the Male Only cohort who passed the Initial PFT on training day 22 was 98.2% (166/169 recruits), and the percentage of recruits in the Male Only cohort who passed the Final PFT on training day 30 was 100.0% (169/169 recruits).

Table 12.14: Changes in percentages of recruits who passed the Initial and Final CFT at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and Marine Corps Recruit Depot San Diego (Male Only cohort)

Location	Cohort	Gender	Initial CFT*	Final CFT*	Within subjects change <i>p</i> value
Parris Island	Both cohorts combined	Female	113/124 = 91.1%	124/124 = 100.0%	***
		Male	134/146 = 91.8%	143/146 = 97.9%	0.022

	Series Track	Female	67/77 = 87.0%	77/77 = 100.0%	***
		Male	61/69 = 88.4%	69/69 = 100.0%	***
	Integrated Company	Female	46/47 = 97.9%	47/47 = 100.0%	***
		Male	73/77 = 94.8%	74/77 = 96.1%	1.000
San Diego	Male only	Male	172/175 = 98.3%	175/175 = 100.0%	***

*Initial CFT occurred on training day 27 at MCRD PI and training day 28 at MCRD SD

**Final CFT occurred on training day 47 at MCRD PI and training day 40 at MCRD SD

***Test could not be run

At Parris Island, the percentage of female recruits who passed the Initial CFT on training day 27 was 91.1% (113/124 recruits), and the percentage of female recruits who passed the Final CFT on training day 47 was 100.0% (124/124 recruits). At Parris Island, the percentage of male recruits who passed the Initial CFT was 91.8% (134/146 recruits), and the percentage of male recruits who passed the Final CFT was 97.9% (143/146 recruits). This difference was statistically significant (McNemar's test $p = 0.022$).

The percentage of female Series Track recruits who passed the Initial CFT was 87.0% (67/77 recruits), and the percentage of female Series Track recruits who passed the Final CFT was 100.0% (77/77 recruits). The percentage of male Series Track recruits who passed the Initial CFT was 88.4% (61/69 recruits), and the percentage of male Series Track recruits who passed the Final CFT was 100.0% (69/69 recruits). The percentage of female Integrated Company recruits who passed the Initial CFT was 97.9% (46/47 recruits), and the percentage of female Integrated Company recruits who passed the Final CFT was 100.0% (47/47 recruits). The percentage of male Integrated Company recruits who passed the Initial CFT was 94.8% (73/77 recruits), and the percentage of male Integrated Company recruits who passed the final CFT was 96.1% (74/77 recruits). This difference was not statistically significant (McNemar's test $p = 1.000$).

The percentage of recruits in the Male Only cohort who passed the Initial CFT on training day 28 was 98.3% (172/175 recruits) and the percentage of recruits in the Male Only cohort who passed the Final CFT on training day 40 was 100.0% (175/175 recruits).

2. Attrition and Drop-off

The percentage of recruits who dropped off as well as the percentage of recruits who attrited was compared between the cohorts. Separate analyses were conducted for female and male recruits.

Table 12.15: Percentage of recruits who dropped-off from recruit training at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego (Male Only cohort)

	Series Track	Integrated Company	Male Only cohort	Group comparison p value
Female recruits	13/98 = 13.3%	26/85 = 30.6%		0.006
Male recruits	20/95 = 21.1%	24/106 = 22.6%	21/200 = 10.5%	0.007

The percentage of female recruits who dropped-off was 13.3% in the Series Track cohort, and 30.6% in the Integrated Company cohort. The proportions of female recruits who dropped-off were statistically significant different between the two cohorts (Fisher’s exact test p value: 0.006). The percentage of male recruits who dropped-off was 21.1% in the Series Track cohort, 22.6% in the Integrated Company cohort, and 10.5% in the Male Only cohort. The proportions of male recruits who dropped-off were statistically significant different between the three cohorts (Fisher-Freeman-Halton exact test p value: 0.007).

Table 12.16: Percentage of recruits who attrited from recruit training at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego (Male Only cohort)

	Series Track	Integrated Company	Male Only cohort	Group comparison <i>p</i> value
Female recruits	2/98 = 2.0%	3/85 = 3.5%		0.665
Male recruits	5/95 = 5.3%	9/106 = 8.5%	11/200 = 5.5%	0.526

The percentage of female recruits who attrited was 2.0% in the Series Track cohort, and 3.5% in the Integrated Company cohort. The proportions of female recruits who attrited were not statistically significantly different between the two cohorts (Fisher’s exact test p value: 0.665). The proportion of male recruits who attrited was 5.3% in the Series Track cohort, 8.5% in the Integrated Company cohort, and 5.5% in the Male Only cohort. The proportions of male recruits who attrited were not statistically significantly different between the three cohorts (Fisher-Freeman-Halton exact test p value: 0.526).

C. Associations between Injury, Self-Reported Data, and Administrative Data

This section incorporates data from self-reported surveys, administrative data collected from both MCRDs, and medical record reviewed musculoskeletal injury data. Associations between the data are described below.

Table 12.17: Comparing incidence of medical record reviewed musculoskeletal injury during recruit training between recruits who dropped-off and those who did not, at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego (Male Only cohort)

Location	Gender	Recruits who dropped-off from recruit training	Recruits who did not drop-off from recruit training	Group comparison <i>p</i> value
MCRD PI (Series Track and Integrated Company combined)	Female recruits	20/39 = 51.3%	60/144 = 41.7%	0.363
	Male recruits	17/44 = 38.6%	25/157 = 15.9%	0.003

MCRD SD (Male Only cohort)	Male recruits	7/21 = 33.3%	22/179 = 12.3%	0.018
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The percentage of female recruits at MCRD Parris Island who sustained at least one injury during recruit training was 51.3% (20/39 recruits) among those who dropped-off and 41.7% (60/144 recruits) among those who did not. This difference between groups was not statistically significant (Fisher's exact test *p* value: 0.363). The percentage of male recruits at MCRD Parris Island who sustained at least one injury during recruit training was 38.6% (17/44 recruits) among those who dropped-off and 15.9% (25/157 recruits) among those who did not. This difference between groups was statistically significant (Fisher's exact test *p* value: 0.003). The percentage of male recruits at MCRD San Diego who sustained at least one injury during recruit training was 33.3% (7/21 recruits) among those who dropped-off and 12.3% (22/179 recruits) among those who did not. This difference between groups was statistically significant (Fisher's exact test *p* value: 0.018).

Table 12.18: Comparing incidence of medical record reviewed musculoskeletal injury during recruit training between recruits who attrited and those who did not, at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego (Male Only cohort)

Location	Gender	Recruits who attrited from recruit training	Recruits who did not attrit from recruit training	Group comparison <i>p</i> value
MCRD PI (Series Track and Integrated Company combined)	Female recruits	0/5 = 0.0%	80/178 = 44.9%	0.069
	Male recruits	6/14 = 42.9%	36/187 = 19.3%	0.080
MCRD SD (Male Only cohort)	Male recruits	3/11 = 27.3%	26/189 = 13.8%	0.202

The percentage of female recruits at MCRD Parris Island who sustained at least one injury during recruit training was 0.0% (0/5 recruits) among those who attrited and 44.9% (80/178 recruits) among those who did not. This difference between groups was not statistically significant (Fisher's exact test *p* value: 0.069). The percentage of male recruits at MCRD Parris Island who sustained at least one injury during recruit training was 42.9% (6/14 recruits) among those who attrited and 19.3% (36/187 recruits) among those who did not. This difference between groups was not statistically significant (Fisher's exact test *p* value: 0.080). The percentage of male recruits at MCRD San Diego who sustained at least one injury during recruit training was 27.3% (3/11 recruits) among those who attrited and 13.8% (26/189 recruits) among those who did not. This difference between groups was not statistically significant (Fisher's exact test *p* value: 0.202).

Table 12.19: Comparison of baseline (week 2) Connor-Davidson Resilience Scale data among recruits who dropped-off and those who did not during recruit training at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego (Male Only cohort)

	Recruits who dropped-off from recruit training		Recruits who did not drop-off from recruit training		Group Comparison <i>p</i> value
	N	Mean ± SD	N	Mean ± SD	
Female recruits' resilience scale score	38	74.4 ± 13.0	140	77.9 ± 12.5	0.124
Male recruits' resilience scale score	65	76.7 ± 13.4	331	77.1 ± 12.0	0.833

Female recruits who dropped-off had a resilience score of 74.4 ± 13.0 (mean ± SD) and female recruits who did not drop off had a score of 77.9 ± 12.5 . Baseline resilience scores were not statistically significantly different between female recruits who dropped-off and female recruits who did not drop off (independent samples t test *p* value: 0.124). Male recruits who dropped-off had a resilience score of 76.7 ± 13.4 and male recruits who did not drop off had a score of 77.1 ± 12.0 . Baseline resilience scores were not statistically significantly different between male recruits who dropped-off and male recruits those who did not drop off (independent samples t test *p* value: 0.833).

Table 12.20: Comparison of baseline (week 2) Connor-Davidson Resilience Scale data among recruits who attrited and those who did not during recruit training at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego (Male Only cohort)

	Recruits who Attrited from recruit training		Recruits who did not Attrit from recruit training		Group Comparison <i>p</i> value
	N	Mean ± SD	N	Mean ± SD	
Female recruits' resilience scale score	5	63.0 ± 18.5	173	77.6 ± 12.3	0.059*
Male recruits' resilience scale score	25	75.5 ± 13.7	371	77.1 ± 12.1	0.523

*Non-parametric test

Female recruits who attrited had a resilience score of 63.0 ± 18.5 (mean ± SD) and female recruits who did not attrit had a score of 77.6 ± 12.3 . Baseline resilience scores were not statistically significantly different between female recruits who attrited and female recruits who did not attrit (Wilcoxon Rank Sum test *p* value: 0.059). Male recruits who attrited had a resilience score of 75.5 ± 13.7 and male recruits who did not had a score of 77.1 ± 12.1 . Baseline resilience scores were not statistically significantly different between male recruits who attrited and male recruits who did not attrit (independent samples t test *p* value: 0.523).

Table 12.21: Comparison of baseline physical activity quantity among recruits who dropped-off and those who did not drop-off during recruit training at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego (Male Only cohort). Physical activity quantity was reported at week 2 of recruit training and is measured as metabolic equivalent tasks per week (METhrs/wk).

		Recruits who dropped-off from recruit training		Recruits who did not drop-off from recruit training		Group Comparison p value
		N	Mean ± SD	N	Mean ± SD	
Female recruits	Total (METhrs/wk)	38	73.8 ± 76.2	140	80.0 ± 65.5	0.623
	Endurance (METhrs/wk)	38	37.6 ± 43.0	140	34.6 ± 29.6	0.684
	Strength (METhrs/wk)	38	21.4 ± 23.2	140	27.6 ± 29.9	0.237
	Sports/Other (METhrs/wk)	38	14.8 ± 36.0	140	17.8 ± 37.4	0.665
Male recruits	Total (METhrs/wk)	64	83.2 ± 69.6	329	80.4 ± 68.3	0.764
	Endurance (METhrs/wk)	64	34.5 ± 31.1	329	30.6 ± 34.3	0.404
	Strength (METhrs/wk)	64	28.2 ± 36.0	329	28.3 ± 31.9	0.987
	Sports/Other (METhrs/wk)	64	20.5 ± 41.5	329	21.4 ± 38.2	0.856

Female recruits who dropped-off reported total quantity of physical activity of 73.8 ± 76.2 METhrs/wk (mean \pm SD) and female recruits who did not drop-off reported total quantity of physical activity of 80.0 ± 65.5 METhrs/wk. Baseline total quantity of physical activity was not statistically significantly different between female recruits who dropped-off and female recruits who did not drop-off (independent samples t test p value: 0.623). Female recruits who dropped-off reported quantity of endurance physical activity of 37.6 ± 43.0 METhrs/wk and female recruits who did not drop-off reported quantity of endurance physical activity of 34.6 ± 29.6 METhrs/wk. Baseline quantity of endurance physical activity was not statistically significantly different between female recruits who dropped-off and female recruits who did not drop-off (independent samples t test p value: 0.684). Female recruits who dropped-off reported quantity of strength training physical activity of 21.4 ± 23.2 METhrs/wk and female recruits who did not drop-off reported quantity of strength training physical activity of 27.6 ± 29.9 METhrs/wk. Baseline quantity of strength training physical activity was not statistically significantly different between female recruits who dropped-off and female recruits who did not drop-off (independent samples t test p value: 0.237). Female recruits who dropped-off reported quantity of sports/other physical activity of 14.8 ± 36.0 METhrs/wk and female recruits who did not drop-off reported quantity of sports/other physical activity of 17.8 ± 37.4 METhrs/wk. Baseline quantity of sports/other physical activity was not statistically significantly different between female recruits who dropped-off and female recruits who did not drop-off (independent samples t test p value: 0.665).

Male recruits who dropped-off reported total quantity of physical activity of 83.2 ± 69.6 METhrs/wk (mean \pm SD) and male recruits who did not drop-off reported total quantity of physical activity of 80.4 ± 68.3 METhrs/wk. Baseline total quantity of physical activity was not statistically significantly different between male recruits who dropped-off and male recruits who did not drop-off (independent samples t test p value: 0.764). Male recruits who dropped-off

reported quantity of endurance physical activity of 34.5 ± 31.1 METhrs/wk and male recruits who did not drop-off reported quantity of endurance physical activity of 30.6 ± 34.3 METhrs/wk. Baseline quantity of endurance physical activity was not statistically significantly different between male recruits who dropped-off and male recruits who did not drop-off (independent samples t test p value: 0.404). Male recruits who dropped-off reported quantity of strength training physical activity of 28.2 ± 36.0 METhrs/wk and male recruits who did not drop-off reported quantity of strength training physical activity of 28.3 ± 31.9 METhrs/wk. Baseline quantity of strength training physical activity was not statistically significantly different between male recruits who dropped-off and male recruits who did not drop-off (independent samples t test p value: 0.987). Male recruits who dropped-off reported quantity of sports/other physical activity of 20.5 ± 41.5 METhrs/wk and male recruits who did not drop-off reported quantity of sports/other physical activity of 21.4 ± 38.2 METhrs/wk. Baseline quantity of sports/other physical activity was not statistically significantly different between male recruits who dropped-off and male recruits who did not drop-off (independent samples t test p value: 0.856).

Table 12.22: Comparison of baseline physical activity quantity among recruits who attrited and those who did not attrit during recruit training at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and at Marine Corps Recruit Depot San Diego (Male Only cohort). Physical activity quantity was reported at week 2 of recruit training and is measured as metabolic equivalent tasks per week (METhrs/wk).

		Recruits who attrited from recruit training		Recruits who did not attrit from recruit training		Group Comparison p value
		N	Mean \pm SD	N	Mean \pm SD	
Female recruits	Total (METhrs/wk)	5	59.4 \pm 58.3	173	79.2 \pm 68.1	0.520
	Endurance (METhrs/wk)	5	42.2 \pm 53.7	173	35.0 \pm 32.2	0.631
	Strength (METhrs/wk)	5	2.6 \pm 5.8	173	26.9 \pm 28.8	<0.001
	Sports/Other (METhrs/wk)	5	14.6 \pm 22.4	173	17.2 \pm 37.4	0.875
Male recruits	Total (METhrs/wk)	24	75.0 \pm 73.2	369	81.2 \pm 68.2	0.666
	Endurance (METhrs/wk)	24	32.4 \pm 26.4	369	31.2 \pm 34.2	0.861
	Strength (METhrs/wk)	24	22.4 \pm 30.8	369	28.7 \pm 32.7	0.356
	Sports/Other (METhrs/wk)	24	20.2 \pm 40.9	369	21.3 \pm 38.6	0.889

Female recruits who attrited reported total quantity of physical activity of 59.4 ± 58.3 METhrs/wk (mean \pm SD) and female recruits who did not attrit reported total quantity of physical activity of 79.2 ± 68.1 METhrs/wk. Baseline total quantity of physical activity was not statistically significantly different between female recruits who attrited and female recruits those who did not attrit (independent samples t test p value: 0.520). Female recruits who attrited reported quantity of endurance physical activity of 42.2 ± 53.7 METhrs/wk and female recruits who did not attrit reported quantity of endurance physical activity of 35.0 ± 32.2 METhrs/wk. Baseline quantity of endurance physical activity was not statistically significantly different between female recruits who attrited and female recruits who did not attrit (independent samples t test p value: 0.631). Female recruits who attrited reported quantity of strength training physical activity of 2.6 ± 5.8 METhrs/wk and female recruits who did not attrit reported quantity of strength training physical activity of 26.9 ± 28.8 METhrs/wk. Baseline quantity of strength

training physical activity was statistically significantly different between female recruits who attrited and female recruits who did not attrit (independent samples t test p value < 0.001). Female recruits who attrited reported quantity of sports/other physical activity of 14.6 ± 22.4 METhrs/wk and female recruits who did not attrit reported quantity of sports/other physical activity of 17.2 ± 37.4 METhrs/wk. Baseline quantity of sports/other physical activity was not statistically significantly different between female recruits who attrited and female recruits who did not attrit (independent samples t test p value: 0.875).

Male recruits who attrited reported total quantity of physical activity of 75.0 ± 73.2 METhrs/wk (mean \pm SD) and male recruits who did not attrit reported total quantity of physical activity of 81.2 ± 68.2 METhrs/wk. Baseline total quantity of physical activity was not statistically significantly different between male recruits who attrited and male recruits who did not attrit (independent samples t test p value: 0.666). Male recruits who attrited reported quantity of endurance physical activity of 32.4 ± 26.4 METhrs/wk and male recruits who did not attrit reported quantity of endurance physical activity of 31.2 ± 34.2 METhrs/wk. Baseline quantity of endurance physical activity was not statistically significantly different between male recruits who attrited and male recruits who did not attrit (independent samples t test p value: 0.861). Male recruits who attrited reported quantity of strength training physical activity of 22.4 ± 30.8 METhrs/wk and male recruits who did not attrit reported quantity of strength training physical activity of 28.7 ± 32.7 METhrs/wk. Baseline quantity of strength training physical activity was not statistically significantly different between male recruits who attrited and male recruits who did not attrit (independent samples t test p value: 0.356). Male recruits who attrited reported quantity of sports/other physical activity of 20.2 ± 40.9 METhrs/wk and male recruits who did not attrit reported quantity of sports/other physical activity of 21.3 ± 38.6 METhrs/wk. Baseline quantity of sports/other physical activity was not statistically significantly different between male recruits who attrited and male recruits who did not attrit (independent samples t test p value: 0.889).

Table 12.23: Correlations Between Baseline Total Quantity of Physical Activity and Initial PFT and Initial CFT Scores of Recruits at Marine Corps Recruit Depot Parris Island (Series Track and Integrated Company) and Marine Corps Recruit Depot San Diego (Male Only cohort)

MCRD location	Gender	Physical Activity (METhrs/wk) correlated with:	N	Correlation	p value
Parris Island (Series Track and Integrated Company cohorts combined)	All recruits	Initial PFT score	313	0.170	0.003
		Initial CFT score	289	0.129	0.028
	Female recruits	Initial PFT score	149	0.096*	0.245*
		Initial CFT score	131	0.085	0.334
	Male recruits	Initial PFT score	164	0.154	0.048
		Initial CFT score	158	0.173	0.030
San Diego (Male Only cohort)	Male recruits	Initial PFT score	168	0.080	0.300
		Initial CFT score	175	0.126	0.097

*Non-parametric test

There was a significant correlation between baseline self-reported total quantity of physical activity and initial PFT score of recruits at MCRD Parris Island (Pearson correlation coefficient: 0.170, $p = 0.003$). There was a significant correlation between baseline self-reported total quantity of physical activity and initial CFT score of recruits at MCRD Parris Island (Pearson correlation coefficient: 0.129, $p = 0.028$).

On stratification by gender, there was not a significant correlation between baseline self-reported total quantity of physical activity and initial PFT score of female recruits at MCRD Parris Island (Spearman correlation coefficient: 0.096, $p = 0.245$). There was not a significant correlation between self-reported total quantity of physical activity and initial CFT score of female recruits at MCRD Parris Island (Pearson correlation coefficient: 0.085, $p = 0.334$). There was a significant correlation between baseline self-reported total quantity of physical activity and initial PFT score of male recruits at MCRD Parris Island (Pearson correlation coefficient: 0.154, $p = 0.048$). There was a significant correlation between baseline self-reported total quantity of physical activity and initial CFT score of male recruits at MCRD Parris Island (Pearson correlation coefficient: 0.173, $p = 0.030$).

There was not a significant correlation between baseline self-reported total quantity of physical activity and initial PFT score of recruits at MCRD San Diego (Pearson correlation coefficient: 0.080, $p = 0.300$). There was not a significant correlation between baseline self-reported total quantity of physical activity and initial CFT score of recruits at MCRD San Diego (Pearson correlation coefficient: 0.126, $p = 0.097$).

Table 12.24: Association between body mass index (BMI) and occurrence of musculoskeletal injury during recruit training at Marine Corps Recruit Depots Parris Island and San Diego

	MCRD location	BMI (kg/m ²) of recruits who were injured during recruit training		BMI (kg/m ²) of recruits who were not injured during recruit training		Group comparison <i>p</i> value
		N	Mean ± SD	N	Mean ± SD	
Female Recruits	Parris Island	79	23.77 ± 2.42	101	23.90 ± 2.93	0.737
Male Recruits	Parris Island	42	25.39 ± 4.56	158	24.47 ± 3.20	0.222
Series Track Female Recruits	Parris Island	58	24.06 ± 2.42	40	23.57 ± 2.54	0.342
Series Track Male Recruits	Parris Island	28	25.32 ± 5.14	66	25.04 ± 3.31	0.788

Integrated Company Female Recruits	Parris Island	21	22.96 ± 2.30	61	24.12 ± 3.16	0.126
Integrated Company Male Recruits	Parris Island	14	25.53 ± 3.25	92	24.06 ± 3.08	0.101
Male Only Cohort Recruits	San Diego	29	23.42 ± 2.96	170	24.93 ± 3.21	0.019

At MCRD Parris Island, female recruits who sustained an injury during recruit training had a baseline BMI of 23.77 ± 2.42 kg/m² (mean ± SD) and female recruits who did not sustain an injury had a BMI of 23.90 ± 2.93 kg/m². Baseline BMI were not statistically significantly different between female recruits who sustained an injury and female recruits who did not (independent samples *t* test *p* value: 0.737). Male recruits who sustained an injury during recruit training had a baseline BMI of 25.39 ± 4.56 kg/m² and male recruits who did not sustain an injury had a BMI of 24.47 ± 3.20 kg/m². Baseline BMI were not statistically significantly different between male recruits who sustained an injury and male recruits who did not (independent samples *t* test *p* value: 0.222).

Furthermore, Series Track female recruits who sustained an injury during recruit training had a baseline BMI of 24.06 ± 2.42 kg/m² and Series Track female recruits who did not sustain an injury had a BMI of 23.57 ± 2.54 kg/m². Baseline BMI were not statistically significantly different between Series Track female recruits who sustained an injury and Series Track female recruits who did not (independent samples *t* test *p* value: 0.342). Series Track male recruits who sustained an injury during recruit training had a baseline BMI of 25.32 ± 5.14 kg/m² and Series Track male recruits who did not sustain an injury had a BMI of 25.04 ± 3.31 kg/m². Baseline BMI were not statistically significantly different between Series Track male recruits who sustained an injury and Series Track male recruits who did not (independent samples *t* test *p* value: 0.788).

Integrated Company female recruits who sustained an injury during recruit training had a baseline BMI of 22.96 ± 2.30 kg/m² and Integrated Company female recruits who did not sustain an injury had a BMI of 24.12 ± 3.16 kg/m². Baseline BMI were not statistically significantly different between Integrated Company female recruits who sustained an injury and Integrated Company female recruits who did not (independent samples *t* test *p* value: 0.126). Integrated Company male recruits who sustained an injury during recruit training had a baseline BMI of 25.53 ± 3.25 kg/m² and Integrated Company male recruits who did not sustain an injury had a BMI of 24.06 ± 3.08 kg/m². Baseline BMI were not statistically significantly different between Integrated Company male recruits who sustained an injury and Integrated Company male recruits who did not (independent samples *t* test *p* value: 0.101).

At MCRD San Diego, male recruits in the Male Only cohort, who sustained an injury during recruit training had a baseline BMI of 23.42 ± 2.96 kg/m² and male recruits who did not sustain

an injury had a BMI of 24.93 ± 3.21 kg/m². Baseline BMI were statistically significantly different between male recruits who sustained an injury and male recruits who did not (independent samples *t* test *p* value: 0.019).

Conclusion

When separate analyses were conducted for female recruits at MCRD PI, male recruits at MCRD PI, and male recruits at MCRD SD, there was no statistically significant difference in the incidence of medical record reviewed musculoskeletal injury during recruit training between recruits who attrited and those who did not. An important finding when analyzing self-reported data and administrative data from MCRD PI was that female recruits who attrited reported a statistically significantly lower quantity of baseline strength training physical activity as compared to female recruits who did not attrit. It is plausible that higher levels of strength training activities prior to recruit training may be beneficial in lowering the risk of attrition. Since this is an observational study, further investigation is warranted to determine if increased strength training prior to recruit training can influence these outcomes. These findings have direct relevance for gender integration implications, as strength training prior to recruit training may reduce the risk of attrition in female recruits.

Chapter 13: Alternate Models and Recommendations on Gender Integration at Marine Corps Recruit Training

Bottom Line Up Front

- This study conducted original interdisciplinary research for the purposes of proposing objective, data-driven alternate models and recommendations to increase gender integration at Marine Corps recruit training.
- The study team designed three alternate models within a set of assumptions to maximize the feasibility of implementation under current training conditions:
 - **Alternate model 1:** mixed-gender drill instructor teams in Integrated Company model
 - **Alternate model 2:** Integrated Company plus model, which increases the number and types of gender-integrated training events at or below the platoon level within the Integrated Company model
 - **Alternate model 3:** integrated platoon model, in which recruits fall out into integrated training platoons after morning basic daily routine (BDR); two options vary female recruit integration across a series or the company
- The study team recommends the Marine Corps implement alternate models 1 and 2 to provide Marine Corps recruits increased exposure to direct, sustained training from opposite-gender drill instructors and deliver intentional training opportunities in which male and female recruits work together in Integrated Companies and interact in meaningful ways. Alternate model 3 offers recruits the most direct exposure to training and working with members of the opposite gender, but it requires substantial changes to current Marine Corps practice.
- Evaluation, assessment, and pilot projects are outlined for the Marine Corps to assess implementation of the alternate models or other changes to gender integration at recruit training.
- The study team also offers other recommendations supporting current and future gender integration efforts at Marine Corps recruit training; recommendation categories include strategic vision, evaluation and working groups, curriculum and education, culture and social norms, recruit experience, female population, and physical and human performance.

The charge of this study was to provide objective, data-driven recommendations for policy change to increase gender integration at Marine Corps recruit training. The Marine Corps requested a study to analyze combinations of gender integrated training and make recommendations for models that integrated genders to the greatest extent possible while continuing to train Marines to established standards. Specifically, the study should address the sociological effects to increased gender integration and consider training models which maintain the same level of discipline, physical fitness, attention to detail, and camaraderie.¹⁸¹

¹⁸¹ Language comes from the study's request for proposals and performance work statement.

Implementing an interdisciplinary approach, the study team conducted a literature review; collected data from Service leaders, training cadre, drill instructors, and recruits from the Marine Corps, Army, Air Force, Navy, and Coast Guard; interviewed individuals with published research and writing on gender integration and/or recruit training who possess alternate or differing views from the Marine Corps; and completed extensive ethnographic observations of the recruit training environment for all Services.¹⁸² Results from these findings, presented in chapters 4 through 12, drove the development of alternate models and recommendations for the Marine Corps.

This chapter presents three alternate models to increase gender integration at Marine Corps recruit training:

1. **Mixed-gender drill instructor teams** for 5-and-1 and 4-and-2 Integrated Company models
2. **Integrated Company plus model**, increasing the number and types of gender-integrated training events at or below the platoon level
3. **Integrated platoon model**, in which recruits fall out into integrated training platoons after morning BDR

Following the models is a list of evaluation and assessment best practices and proposed pilot projects to implement and assess these alternate models or other changes to the Marine Corps gender integration approach at recruit training.

The study team also offers a set of recommendations, independent of the alternate models, to support current and future efforts in gender integration at Marine Corps recruit training. Recommendation categories include strategic vision, evaluation and working groups, curriculum and education, culture and social norms, recruit experience, female population, and physical and human performance.

A. Assumptions for Determining Alternate Models

The study team designed each alternate model within a set of assumptions to maximize the feasibility of implementation within current training conditions. These assumptions address legal requirements, female population levels, and Marine Corps infrastructure and training practices that align with the current operating environment.

- **Legal**
 - 10 U.S.C. § 8431, which mandates separate secure housing for male and female recruits in basic training, remains in place.
 - 10 U.S.C. § 6932, which mandates sex-based limitations for drill instructors and other personnel present in recruit living areas after the end of the training day, remains in place.

¹⁸² For extensive coverage of the study methodology, see chapter 3.

- **Female population**
 - Recruitment of women into the Marine Corps and female accessions remain at current levels.¹⁸³
 - The population of female drill instructors remains near the same level and follows a planned increase in gender integration at Marine Corps Recruit Depot (MCRD) San Diego.¹⁸⁴
- **Drill instructor teams and roles**
 - Drill instructor teams are composed of three to four drill instructors per platoon.
 - At least one drill instructor stands duty overnight in the squad bay; drill instructor on duty must be the same gender as recruits in the squad bay per 10 U.S.C. § 6932.
- **Structure of recruit training**
 - Current organizational structures of battalion, company, series, and platoon are maintained.
- **Program of Instruction**
 - Marine Corps recruit training Program of Instruction (POI) remains the same.
- **Facility and infrastructure**
 - Physical facilities and infrastructure at MCRD Parris Island and MCRD San Diego remain the same.
 - The Marine Corps operates two recruit training locations: MCRD Parris Island and MCRD San Diego.

B. Rationale and Methodology for Alternate Models

Within the set of assumptions outlined above, the study team considered a range of alternative models for gender integration at Marine Corps recruit training. The study team presumed gender integration to involve integration for drill instructors and recruits, given both are currently restricted to same-gender configurations.

The study team considered and consulted all data sources collected for the study and the scientific literature reviewed prior to the start of data collection in the process of brainstorming and drafting alternate models. Army, Air Force, Navy, and Coast Guard site visits provided useful information about the other Services' approaches to gender integration, which helped to inform the study team about potential alternative models. With the creation of each model, the study team aimed to balance increasing gender integration with maintaining fundamental aspects of the Marine Corps recruit training and transformation process. Each alternate model is supported by triangulated evidence from study findings and the literature (see appendix Q for more detail).

¹⁸³ This assumption was explicitly stated in the request for proposal and performance work statement: "The number of female recruits undergoing recruit training is anticipated to remain static (est. 3,400/year) in future years."

¹⁸⁴ USMC, 2022a

Notably, while physiological differences between training models (Integrated Company, Series Track, and Male-Only) emerged during this study, the team did not discern any clear *advantages* of one model over the others, including findings prohibitive of further gender integration. The team did find consistent differences between male and female recruits in terms of distances covered, physiological responses to stress, and musculoskeletal injuries. These differences were further amplified in measured physical parameters related to power and strength. These findings are relevant to gender integration and future integration efforts because they highlight areas of both challenge and opportunity for the Marine Corps. After considering environmental and infrastructure differences that may have partially influenced the workloads at MCRD San Diego compared with MCRD Parris Island, the remaining notable similarities give the Marine Corps considerable flexibility with regard to ideal training model implementation. In other words, the sociological considerations influencing the study team’s proposed gender integration models can serve as guiding principles without concern for the negative consequences of degradation of physical performance or Marine Corps recruit standards.

As the Marine Corps considers options for optimizing gender integration, recruit performance and injury data from this study suggest an opportunity to revise the training structure to be more scientifically and physiologically sound to enhance performance, reduce injury, and improve retention during the training process. This can be done without sacrificing the desired stress placed on the recruit to make Marines, as demonstrated by the maintained stress response throughout training, even when training load was reduced. Instead, proper progression would likely mitigate injury to otherwise very capable recruits. Given the baseline fitness levels, it would also enable the Marine Corps to physically develop otherwise low-fit recruits who, with progressive training support, may be able to establish the physicality necessary to become effective Marines. In the process, the likelihood of success would increase for more robust gender integration as a result of the recognition of differential responses to training stressors. A greater focus on teaching proper exercise progression, which was often absent during study team’s observations of physical training, would be critical for further gender integration to improve opportunities for female recruit success; this approach would also benefit male recruits. With proper training and progression, the Marine Corps can optimize outcomes across both sexes and make gender integration efforts more robust without sacrificing the intent of recruit training or the warrior ethos. The return on investment would also improve during new Marines’ successful transition to the next phase of their military career after recruit training. When considered in the context of the sociological findings, there appears to be an achievable and effective path forward to enhance the climate of success the Marine Corps has established over its existence.

Models considered but not proposed varied in the formation of integrated training units (e.g., how male and female recruits form integrated training units from segregated sleeping quarters) and the timing of integration during the training cycle (whether integrated units should be formed initially or later in the cycle). Data from site visits, focus groups, and interviews (primarily described in chapters 6 and 9) provided evidence favoring consistency and similarity in the training experience for men and women as a best practice.

The study team created alternate models with limited clarity about how Congress, the Department of Defense (DoD), or other relevant stakeholders define “integrated” training. The

Marine Corps is working under a Congressional mandate from the FY 2020 National Defense Authorization Act (NDAA) that training at the MCRDs “may not be segregated based on gender,” which is notably vague (NDAA, 2019). Given this lack of clarity, the study team worked to propose alternate models that meet different intents and definitions to provide maximum flexibility for the Marine Corps.

C. Alternate Models

This section details three alternate models: one for mixed-gender drill instructor teams and two for gender integration among recruits at recruit training, Integrated Company plus model and an integrated training platoon model.

The study team recommends the Marine Corps train recruits in the Integrated Company model with mixed-gender drill instructor teams and integrate more training events following the guidance and priority tiers outlined in the Integrated Company plus model. The combined execution of these two alternate models would provide Marine Corps recruits increased exposure to direct, sustained training from opposite-gender drill instructors and deliver intentional training opportunities for male and female recruits to work together and interact in meaningful ways. Most of the activities at Marine Corps recruit training are individually based or require individual adherence to a shared task. For this reason, the study team believes installing mixed-gender drill instructor teams in combination with the Integrated Company plus model would maximize meaningful opportunities for interaction while preserving foundational aspects of the current Marine Corps recruit training and transformation process. The integrated platoon model would offer recruits the most direct exposure to training and working with members of the opposite gender, but it requires substantial changes to current logistics, accountability, and training procedures for the Marine Corps. The implementation of any alternative approach to gender integration will benefit from the Marine Corps’s possessed strengths: Marines are deeply passionate and committed to the process of making Marines, demonstrate tremendous pride in the institution, maintain a highly controlled training environment, and inculcate strong cultural values.

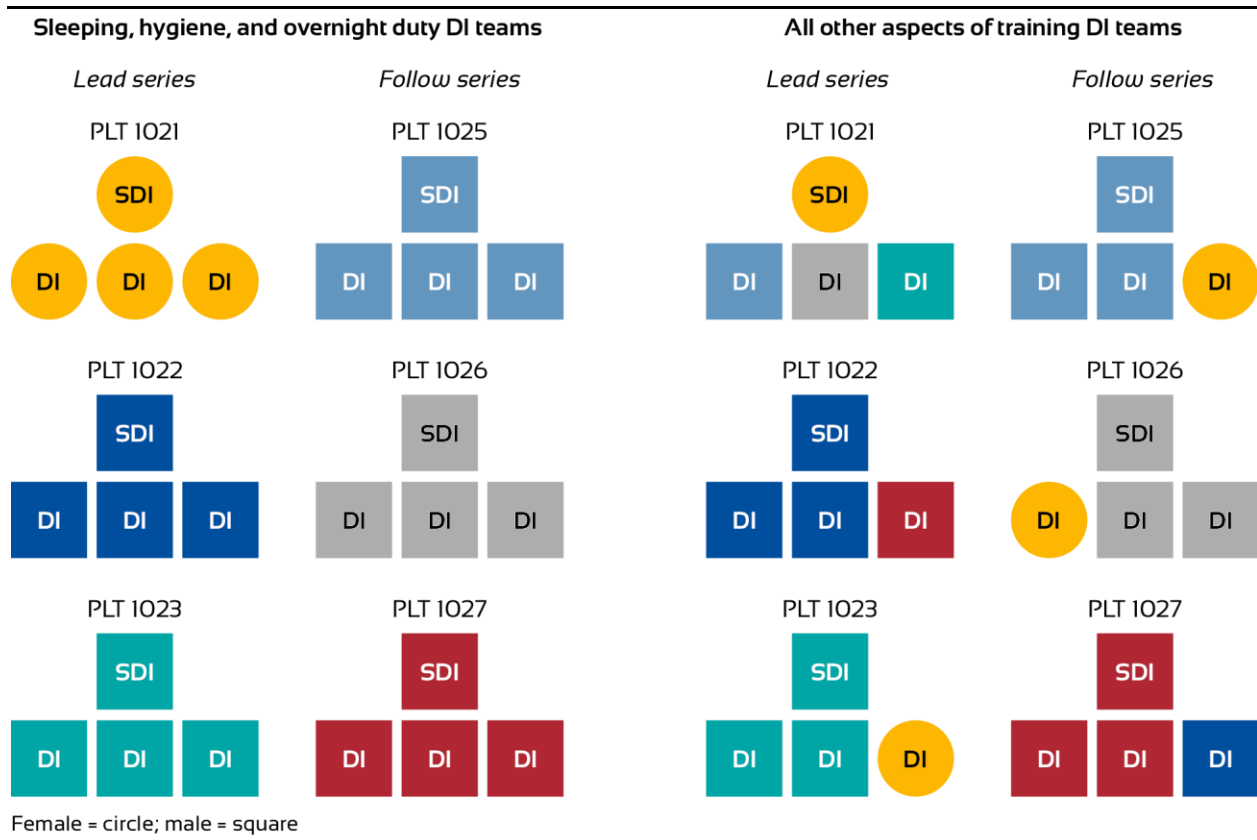
1. Alternative model 1: Mixed-gender drill instructor teams¹⁸⁵

The study team recommends the Marine Corps train recruits in the Integrated Company model with mixed-gender drill instructor teams. The Marine Corps currently conducts both the 5-and-1 and 4-and-2 Integrated Company models, with the intent of moving toward using only the 5-and-1 model at both locations as integration expands at MCRD San Diego. For this reason, the study team has provided alternate models for mixed-gender drill instructor teams for both configurations (see figures 13.1 and 13.2). In these models, same-gender drill instructor teams are paired with same-gender platoons for hygiene, sleeping, and overnight duty, and mixed-gender drill instructor teams lead recruits in all other aspects of training (including morning and evening BDR). The model was designed to intentionally preserve training and leadership from

¹⁸⁵ Physical performance and human performance data collection was limited to Marine Corps recruits and did not assess drill instructors. The performance data collected on recruits indicate the importance of drill instructor training and education on physiological differences in male and female recruits relevant to sustaining high performance.

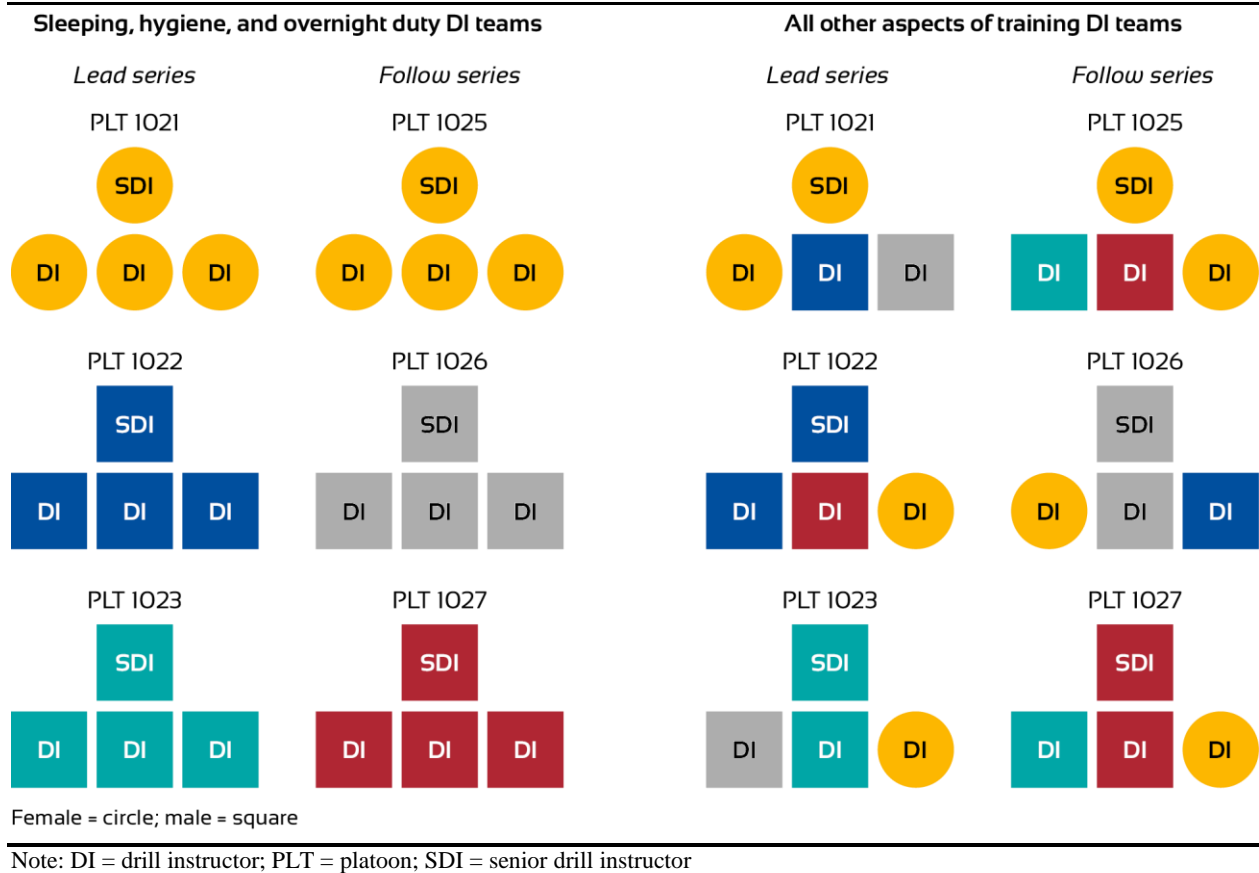
same-gender senior drill instructors for same-gender platoons, an important cornerstone of the Marine Corps recruit training approach. To provide consistency for all drill instructor teams, some male and female drill instructors (except senior drill instructors) are assigned to different training and overnight platoons. Models for the 5-and-1 and 4-and-2 Integrated Companies were designed to balance and maximize female drill instructor presence in both series.

Figure 13.1. Mixed-Gender Drill Instructor Teams for Integrated Company 5-and-1 Model



Note: DI = drill instructor; PLT = platoon; SDI = senior drill instructor

Figure 13.2. Mixed-Gender Drill Instructor Teams for Integrated Company 4-and-2 Model



Rationale

Recruit training is the foundational training and socialization experience for enlisted Marines. The Marine Corps posits “having strong leaders of both genders as role models for young recruits is integral to their assimilation into our ranks” (USMC, 2022a, p. 3), yet recruits’ primary training experiences are currently executed by same-gender drill instructor teams. Receiving direct, sustained training from drill instructors of both genders reinforces for recruits the concept that men and women are equally respected and authoritative leaders of their Service. Mixed-gender drill instructor teams also provide recruits a tangible example of successful gender-integrated teams as they learn to work with members of the opposite gender.

Marine Corps recruits who participated in the study felt being trained by both male and female drill instructors would have important benefits, having observed complementary strengths instructors of both genders exhibited in their role. Male Marine Corps recruits stated they would be better prepared for the fleet if they were trained by women and desired opportunities to learn more about women’s perspectives and experiences in the Marine Corps. Study participants from the Army, Air Force, Navy, and Coast Guard—Services that have trained recruits with mixed-gender drill instructor teams for decades—described numerous benefits for recruits and drill instructors alike. Recruits from the other Services preferred being trained by mixed-gender drill

instructor teams, and several recommended implementing this practice as a foundational step of gender integration for the Marine Corps. Participants with alternate views also reported value in training with mixed-gender drill instructor teams and felt doing so would offer several benefits for the Marine Corps. All participants with alternate viewpoints interviewed expressed strong support for recruits being trained by both male and female drill instructors and felt this arrangement is crucial to the success of gender-integrated training. Mixed-gender drill instructor teams were also recommended in the 2016 Center for Naval Analyses study, which assessed options for increasing mixed-gender recruit training for the Marine Corps (Neil et al., 2016).

Using mixed-gender drill instructor teams would also alleviate ongoing challenges and concerns for the female drill instructor population in the Marine Corps. Female drill instructors and leaders in the training cadre report widespread staffing concerns among female drill instructor teams. When female drill instructors are pulled out of a training cycle for injury, pregnancy, or allegations made against them, it can be difficult to find another female replacement because the population is already limited in numbers. With a mixed-gender team approach, male drill instructors could replace or cover for female drill instructors (except for the senior drill instructor) as long as there was enough female coverage for hygiene time and overnight duty. Some have expressed concerns that the Marine Corps transition to the 5-and-1 Integrated Company model will restrict female drill instructors' progression through leadership roles, constraining their ability to become senior drill instructors and chief drill instructors during their initial tour. Mixed-gender drill instructor teams would give battalion and company leaders more opportunities to facilitate female drill instructor advancement during their tour.

For study participants in the other Services as well as participants interviewed who possess alternate views, the benefits of mixed-gender drill instructor teams outweigh anticipated or realized challenges. Challenges reported by the other Services include biases or gender-based attitudes from drill instructors toward recruits, sexism among drill instructor peers, differential treatment of male and female recruits (a challenge reported by recruits), and unfamiliarity with training recruits of the opposite gender. These potential challenges can be mitigated with drill instructor selection processes, education, intentional training, and exposure over time. Another risk of mixed-gender drill instructor teams is the potential for increased sexual harassment and sexual assault incidents between opposite-gender drill instructors and recruits.¹⁸⁶ Training cadre and drill instructors from the other Services characterized these instances as rare, but when described, most instances involved male drill instructors and female recruits. Increased accountability measures and strict oversight are mechanisms that can be implemented to prevent these incidents and ensure swift, corrective actions when necessary. If Marine Corps drill

¹⁸⁶ The most recent public scandal involving multiple instances of inappropriate sexually based behavior by drill instructors at basic training was in 2012. General Edward Rice, Commander of Air Education and Training Command, commissioned a commander-directed investigation in 2012 led by Major General Margaret Woodward to investigate substantiated reports of sexual misconduct by military training instructors (MTIs) at Basic Military Training (BMT) ranging from unprofessional relationships to sexual assault of trainees. In response, the investigation recommended expanding female drill instructor presence and increasing mixed-gender drill instructor teams. Two recommendations made by the report were to raise the proportion of female MTIs to 25 percent of the total MTI personnel and maintain a minimum of one female MTI per instruction team, regardless of the gender of trainee flights (i.e., lowest unit level) (Air Education & Training Command, 2012; Harvey, 2012).

instructors are given the appropriate training and tools to train in a mixed-gender environment, and leadership articulates how mixed-gender training from drill instructors will produce a better Marine, Marine Corps drill instructors will thrive and excel in this mission—as they always do.

The mixed-gender drill instructor team models were designed to preserve practices important to the Marine Corps training approach. First, the Marine Corps strongly believes in the continuous presence of drill instructors in the training environment; these models continue that practice while adhering to current laws. Second, Marine Corps Service leaders, training cadre, and drill instructors felt strongly that recruits needed same-gender role models during their training. Assigning a senior drill instructor of the same gender to recruits preserves this quality of training and ensures all recruits have a same-gender drill instructor to access and emulate.

A full list of study findings supporting this alternate model is presented in appendix Q.



Major Practices Retained

- The senior drill instructor an influential mentor figure for recruits, remains same gender: female platoons have a female senior drill instructor, and male platoons have a male senior drill instructor.
- Hygiene time and daily hygiene inspections are conducted by same-gender drill instructors.
- At least one (same-gender) drill instructor stands duty overnight in the squad bay, providing around-the-clock drill instructor coverage of the training environment.



Considerations and Modifications

- The same drill instructor team is not continually with the same recruits during the training cycle because some drill instructors stand duty overnight with a different platoon than the one they train with during the day. Increased communication and coordination among drill instructors are necessary to ensure drill instructors stay abreast of relevant events, incidents, and recruit issues.
- Drill instructors who are not BDR qualified¹⁸⁷ need another drill instructor present if they run morning or evening BDR in their training platoons.
- Evening hygiene, hygiene inspections, and Taps may need to be combined at night to ensure opposite-gender drill instructors can remain with their training platoon as long as possible during the day. Alternatively, opposite-gender drill instructors can leave their training platoon for evening hygiene and hygiene inspection, return for 1 hour of free time, and then leave the squad bay after Taps. Companywide coordination about the routine order and schedule of these items would bear the greatest efficiencies.

¹⁸⁷ BDR qualified means the drill instructor can be alone with the platoon, including standing duty and running morning and evening BDR by themselves. The qualification usually takes about 1 month for new drill instructors but can take longer depending on various factors.

- Hygiene occurring during the day, such as after a physical training (PT) session, must be overseen by at least one same-gender BDR-qualified drill instructor or more than one same-gender drill instructor if one BDR-qualified instructor is not present. Platoons need to coordinate daytime hygiene sessions for the same time to ensure proper drill instructor coverage and provide opposite-gender drill instructors maximum time with their training platoon.
- All squad bays (male or female) must be locked with a “hygiene in progress” sign on the door to prevent mixed-gender drill instructor or leadership interruption when recruit nudity or changing occurs in the squad bay.



Concluding Thoughts

The study team recommends the Marine Corps train recruits in the Integrated Company model with mixed-gender drill instructor teams to better prepare them for follow-on training and their service in a fully integrated fleet. For now, the study team only advises using mixed-gender drill instructor teams for Integrated Companies to accommodate the considerable female demographic challenges facing the Service, which are exacerbated by the current integration plans for MCRD San Diego. The study team also recommends the Marine Corps work toward expanding the population of female drill instructors and incorporating women on drill instructor teams for all-male companies when population levels support the practice.

2. Alternative model 2: Integrated Company plus model

The study team recommends the Marine Corps increase gender-integrated training opportunities within the Integrated Company model to better equip basic Marines for follow-on training and their eventual service in an integrated fleet (see figure 13.3). During the study period, the Marine Corps began gender integrating targeted training events at the platoon, squad, and fireteam levels¹⁸⁸ (USMC, 2022a); integrated events include the bayonet assault course, physical training organized by ability group (circuit courses and bases), and the Crucible (USMC, 2021d). The study team recommends the Marine Corps expand these efforts and provide additional training opportunities during which male and female recruits interact with one another in a meaningful way. Training events primed for further integration are prioritized in three tiers based on three factors: (1) opportunities for recruits to work together in a meaningful way to accomplish a task or goal, (2) dialogues and conversations in which it is important for recruits to engage with gender-diverse perspectives, and (3) training events that most align with basic Marine skills used in follow-on training and the fleet. The study team recommends the Marine Corps maximize the number and types of gender-integrated training activities performed by Integrated Companies. Integration should provide progressive opportunities for recruits to work and meaningfully interact with members of the opposite gender throughout the training cycle, culminating in the execution of mixed-gender sticks at the Crucible and training during fourth phase. There is a small list of training events for which further gender integration within the Integrated Company model is not recommended for reasons detailed below. The Integrated Company plus model

¹⁸⁸ The study team did not directly observe these integrated training events because of the timing of scheduled site visits and completion of active data collection.

preserves Marine Corps primary organizing processes and fundamental approaches to recruit training while increasing the number and types of training events in which male and female recruits work together in purposeful, meaningful ways, mirroring the Marine Air-Ground Task Force (MAGTF) approach to mission accomplishment.

Figure 13.3. Integrated Company Plus Model Priority Tiers for Integration

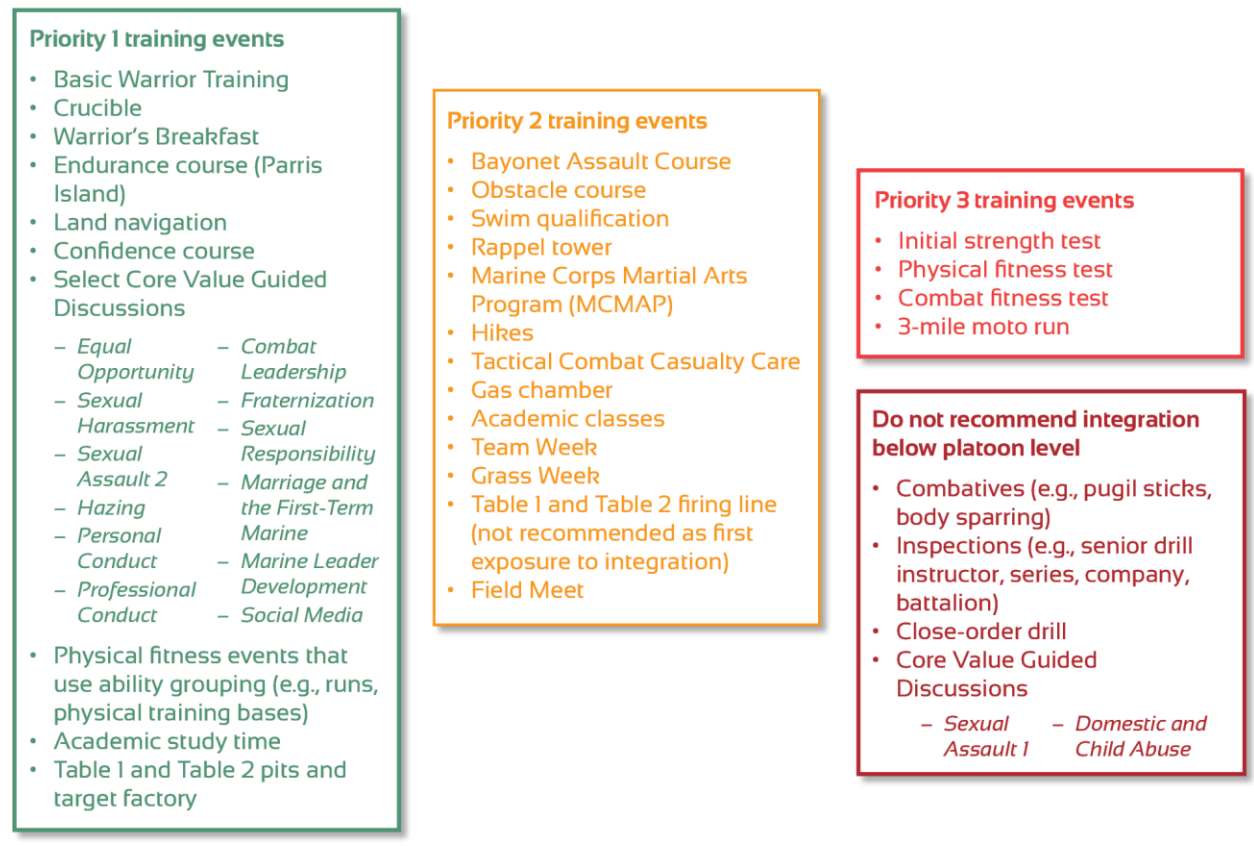
Integrated Company plus model: Integrated Company model with key training events integrated at or below the platoon level to better equip basic Marines for integrated follow-on training and fleet

Prioritization

1. Opportunities for recruits to work together in a meaningful way to accomplish a task or goal
2. Dialogues and conversations in which it is important for recruits to engage with gender-diverse perspectives
3. Training events that most align with basic Marine skills used in follow-on training and the fleet

Approach/Best Practice

Provide recruits progressive opportunities to work and directly interact with opposite-gender peers throughout the training cycle, culminating in the execution of mixed-gender sticks at the Crucible



Rationale

Marine Corps recruits understand they are entering a fully gender-integrated fleet and feel their recruit training should prepare them to do so. Men know that, as Marines, they will be working with, led by, and leading women; similarly, women know that they will be working with, led by, and leading men. Recruits anticipate serving in combat operations and executing missions alongside members of the opposite gender and desire training that prepares them to do so. Across training models and time points studied, recruits expressed a desire for more training with members of the opposite gender in tactical/field training, physical fitness, and the classroom. Even recruits in Integrated Company reported wanting more integration. Service leaders, training cadre, drill instructors, and recruits from the other Services identified numerous benefits to gender-integrated training, including preparation for the fleet, dispelling of gender biases and stereotypes, increase in trust among recruits, diversity of thought, and heightened motivation and competition. Training opportunities in which male and female recruits worked together to accomplish a goal were described as the most meaningful and engaging.

The Integrated Company plus model, with male and female recruits integrating for numerous targeted training events, mirrors the MAGTF. The MAGTF brings together aviation, ground combat, and logistics elements to accomplish missions in Marine Corps operations (USMC, 2018). Platoons or recruits from different platoons are the unique elements that come together to accomplish the mission of the training activity. A training cadre officer at San Diego described how emulating the MAGTF model through gender-integrated training would better prepare basically trained Marines.

Further up in the Marine Corps, we task organize by mission. ... So there is always [a] base unit, but Marines typically execute as a task unit, which is away from their base unit. This [targeted gender-integrated training events] is a lot like that. It prepares them to understand that they have a base unit, but there are times when missions call for them to be detached and plugged into another unit with different Marines. Our deployable forces, there is typically a core element, and you plug in with other units that give them additional capabilities. When a Marine's time is up, they will detach from their MAGTF and plug into their home unit. ... There's an opportunity to get that mentality of "I have a base unit, but I will be assigned with other Marines at some point to accomplish the mission."

In this way, the Integrated Company plus model adds another layer to a basic Marine's skills. The model gives recruits a chance to build deeply cohesive bonds with recruits in their platoon and opportunities to work with new peers to accomplish training tasks or missions.

To determine the prioritization level for gender-integrated training events, the study team evaluated the POI using three criteria: (1) opportunities for recruits to work together in a meaningful way to accomplish a task or goal, (2) dialogues and conversations in which it is important for recruits to engage with gender-diverse perspectives, and (3) training events that most align with basic Marine skills used in follow-on training and the fleet.

Priority 1 training events range from tactical training (e.g., Basic Warrior Training [BWT], land navigation) to select Core Value Guided Discussions (CVGDs) and teamwork tasks at the range (e.g., the pits, target factory tasks). The study team recommends the Marine Corps integrate more priority 1 training events than it does currently, with highest priority on tactical training (BWT and the Crucible) and select CVGDs. Priority 2 training tasks are lower priority for integration because they most often involve training or tasks completed individually by recruits in the same space as one another or do not involve active training tasks (e.g., Team Week). Tasks completed individually, shoulder-to-shoulder, have less impact than those that require direct interaction among recruits. Priority 3 training events are individual-based physical fitness tasks (e.g., initial strength test [IST], physical fitness test [PFT], combat fitness test [CFT]) that require administrative logging or are intended to be a platoon-celebratory moment, such as the moto run before graduation.

A few training events are not recommended for integration at this time within the Integrated Company model. For the physical safety and well-being of recruits in the learning environment, the study team does not recommend male and female recruits engage in body sparring or pugil stick matches against one another. Inspections and close-order drill are strictly platoon-based training activities that should continue as such in the Integrated Company plus model. Finally, certain CVGDs such as domestic/child abuse and the first sexual assault prevention and response (SAPR) discussion should remain same gender. As observed by the study team, recruits of both genders often share very personal stories in these discussions, and the same-gender dynamic protects recruits who may feel vulnerable, enabling them to be more candid about these sensitive subjects. However, the study team recommends the second SAPR CVGD be conducted with gender-diverse groups to broaden the dialogue and perspectives shared.

The Integrated Company plus model leaves in place the primary structure and process of Marine Corps recruit training—whereby most training happens within the same platoon—while increasing opportunities for male and female recruits to work together in a meaningful way during the first stage of the entry-level training (ELT) pipeline. These integration opportunities enable recruits to interact directly with opposite-gender peers rather than seeing each other execute the same training simultaneously, which, in turn, better prepares them for integrated platoons at the School of Infantry and operations in an integrated fleet.

A full list of study findings supporting this alternate model is presented in appendix Q.



Major Practices Retained

- Training in same-gender platoons within an Integrated Company continues. The proportion of training that occurs with same-gender platoons varies depending on the number of training events with greater gender integration. The Marine Corps can maintain the current integrated training model where most recruit training occurs with same-gender platoons if desired.
- Drill instructors primarily lead and train the same platoon of recruits every day. Drill instructors provide around-the-clock training and oversight of recruits.

- Most squad bay training (e.g., BDR, senior drill instructor [SDI] time, inspections) continues in same-gender platoon.
- Movement to and from major training events happens in current series or company formation.
- Platoon competition and award system culminating in the determination of the honor platoon continue without change.



Considerations and Modifications

- Recruits directly train and purposefully interact with members outside of their platoon at specific training events.
- Drill instructors may be responsible for leading and training recruits not in their platoon at specific training events. For example, drill instructors may lead recruits not in their platoon in a gender-integrated stick during the Crucible or facilitate a CVGD with a mix of recruits from their platoon and others.
- Upon arrival at training events during which gender integration occurs at or below the platoon level, new processes need to be established for dividing and integrating recruits and then re-forming same-gender platoons at the conclusion of the training event.
- Integrated Companies may need to implement additional recruit organization and accountability measures for training events that involve integration at or below the platoon level. Recruit leaders (at the stick, squad, or fireteam level) can provide accountability checks and reporting to drill instructors to ensure all recruits are present and accounted for.
- Integrated CVGDs require switching or mixing recruits at the platoon or series level to increase gender diversity in targeted small-group discussions. Increased schedule coordination at the series or company level for timing of CVGDs is necessary.
- Clear communication about and motivation for further integration for key training events must be distributed and reinforced to drill instructors and training cadre to maximize training implementation and buy-in.



Concluding Thoughts

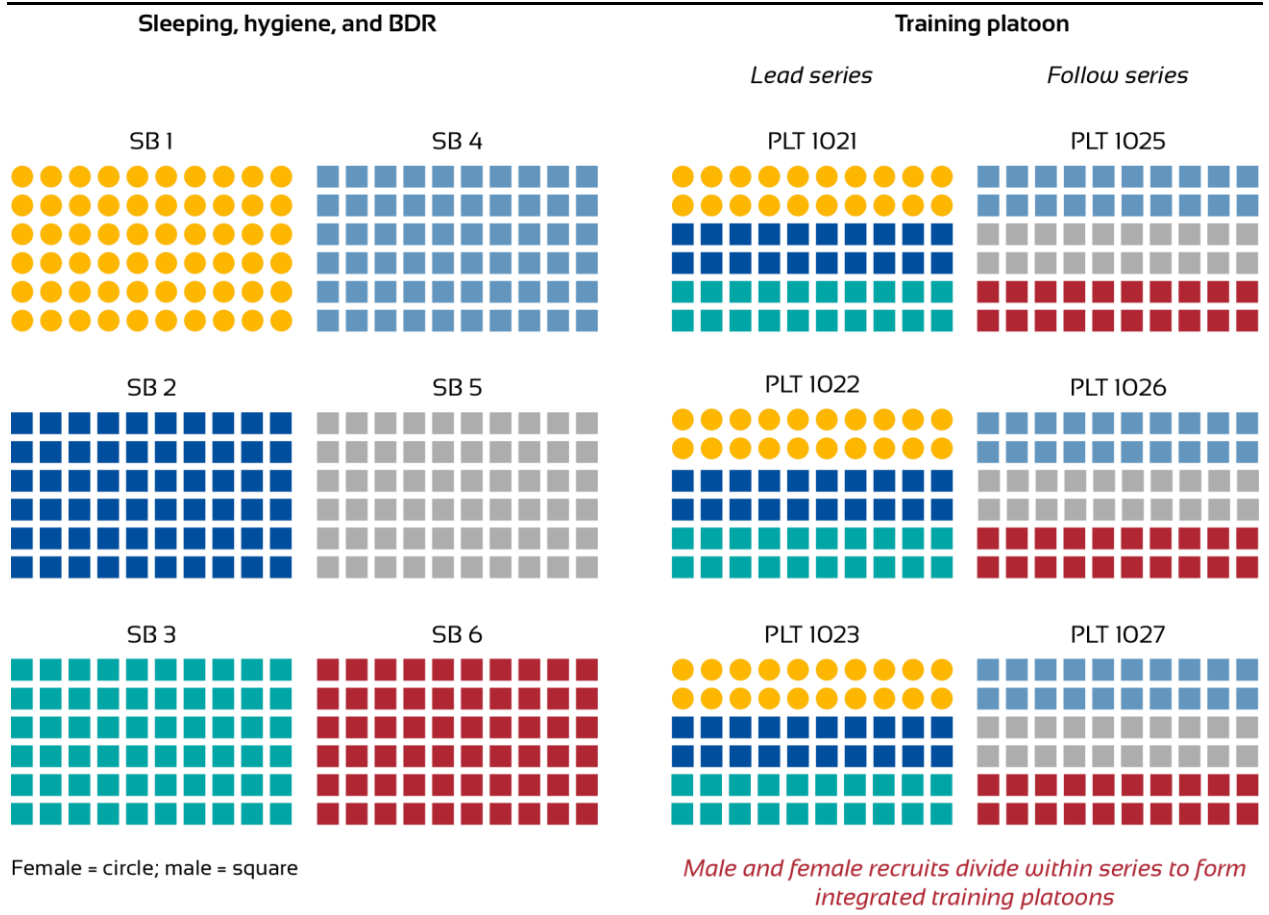
The Marine Corps has already taken steps in the direction of the recommended Integrated Company plus model. The study team recommends the Marine Corps continue to increase the quantity and quality of opportunities for men and women to interact while working toward a common goal, accomplishing a task, or engaging in important dialogues together. In doing so, the Marine Corps can more readily and fully achieve their stated integration goals, such as building cohesive units capable of engaging in diverse thought and intelligent action, perceiving each other as equals, overcoming common hardships, reducing biases, and sharing ideas (USMC, 2022a). Basic Marines trained under the Integrated Company plus model would have greater opportunities to test their teamwork and leadership skills. For this reason, the Marine Corps may

want to consider integrating the same targeted training events for Male-Only companies to give all recruits opportunities to challenge themselves by working with new individuals to accomplish a training mission and provide exposure to other forms of diversity (e.g., racial/ethnic, sexual orientation, religious, regional).

3. Alternate model 3: Integrated platoon model

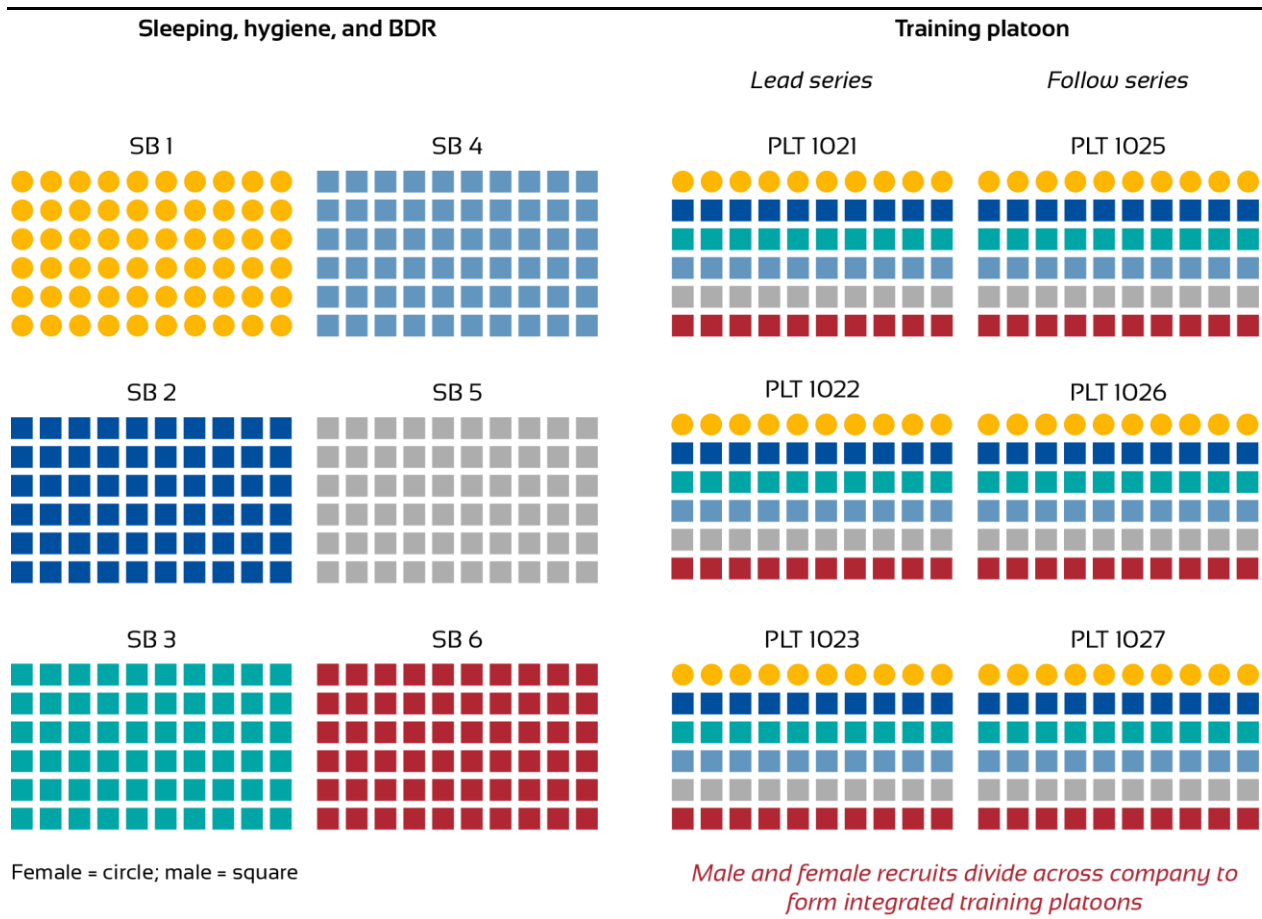
The study team proposes two options for platoon-level integration. Recruits would sleep in gender-separate squad bays and fall out after morning BDR to form integrated training platoons. All training activities after morning BDR, including those in the squad bay, would be conducted as an integrated training platoon. These models assume a female shipping schedule consistent with the current/planned 5-and-1 Integrated Company model at both MCRDs. Proportional gender differences in accessions mean that some companies at both MCRDs would remain Male-Only. In the first model, female recruits are integrated across three training platoons in a series (see figure 13.4). The second model provides an option for female recruit integration in every training platoon in the company (see figure 13.5). These options are based on the Air Force's method of forming gender-integrated training units, in which an equal proportion of male and female recruits switch into gender-integrated platoons from their same-gender squad bays, creating a similar "change" experience for most recruits.

Figure 13.4. Integrated Training Platoons With Female Recruits Integrated Across a Series



Note: BDR = basic daily routine; PLT = platoon; SB = squad bay

Figure 13.5. Integrated Training Platoons With Female Recruits Integrated Across the Company



Note: BDR = basic daily routine; PLT = platoon; SB = squad bay

In both models the same proportion of male recruits integrates to form training platoons. In figure 13.4, with female recruits integrated in three platoons, male recruits in the other series also integrate across training platoons. This provides consistency in the training experience for recruits (i.e., no recruits live and train with the same platoon members at all times) and gives drill instructors similar operating and accountability procedures between their squad bay and training platoon assignments. Determination of integrated platoon model (series versus company integration) depends on the Marine Corps's priorities for integration. Female integration across three platoons provides a more substantial group of women in each platoon, while integration across the company maximizes male recruits' exposure to training with women. The study team recommends recruits be trained by mixed-gender drill instructor teams in these platoon integration models. Overall, an integrated platoon model provides the most direct and sustained opportunities for male and female recruits to work together, but it demands the most substantial change from current Marine Corps training processes at the MCRDs.

 **Rationale**

An integrated platoon model aligns the Marine Corps with the integration approach taken by their Service peers. The Army, Air Force, Navy, and Coast Guard execute gender-integrated recruit training at the lowest unit level (i.e., platoon equivalent), and most have taken this approach to training for decades. The other Services broadly define gender-integrated training as the integration of male and female recruits in all training activities but sleeping and showering. An overwhelming majority of recruits from the Army and Coast Guard (who experienced integrated training during the study period) believed that gender-integrated training should be implemented at the lowest unit level. Recruits who had experienced integration described many benefits to gender-integrated training and felt it was essential preparation for the fleet and their careers as Service members. Recruits from the Air Force and Navy (who did not experience gender-integrated training during the study period) showed higher levels of support for platoon-level integration than Marine Corps recruits. Fewer than one-fifth of Marine Corps recruits at the end of the training cycle wanted platoon-level integration, and general support of training at the platoon level decreased from the beginning of the cycle. Female new Marines showed the highest levels of support for platoon-level integration by the end of the training cycle. Some Marine Corps training cadre supported platoon-level integration, but for most, the fluidity of training conducted in the squad bay took precedence over potential gains from platoon-level integration.

Participants with alternate viewpoints interviewed for this study overwhelmingly defined gender integration as female and male recruits training together at all levels, including within platoons. Most saw gender integration at the platoon level as necessary to consider training truly gender integrated. The integrated platoon model unquestionably fulfills the FY 2020 NDAA mandate not to segregate training by gender because all training outside of morning and evening BDR is integrated. Participants with alternate viewpoints and Service leaders and training cadre from the other Services felt gender separation in training unintentionally reinforces or gives meaning to the separation promulgating women being seen as “less than,” which could create issues in future training environments and the fleet.

Figures 13.4 and 13.5 demonstrate options for platoon-level integration with variance on how recruits are distributed into training platoons within the company. The study team views both options as viable, dependent on the Marine Corps’s goals and vision for gender integration at recruit training. The Service must ask itself: Is it more important for female recruits to train alongside a proportional number of other female recruits or for more male recruits to train alongside women in their platoon? Participants with alternate viewpoints interviewed for this study demonstrated support for both options.

Platoon-level integration can raise concerns and challenges. Conversations about gender integration in any military setting often provoke fears of increased sexual harassment and sexual assault rates. The highly controlled training environment at recruit training dramatically reduces the prevalence of these issues compared with other military settings; for the Marine Corps, continuous drill instructor presence is an institutional asset favoring prevention. A more insidious challenge with integration is sexism, gender-based treatment, and demeaning language—problems that degrade the training environment for all but nevertheless exist in same-

gender groups or settings. These challenges are easily misinterpreted as problems created by gender integration, rationale wielded against further gender integration. The problem lies outside of integration itself, however; it originates with individuals who hold sexist attitudes and beliefs, consciously or not, and settings in which it is tolerated. Gender integration sets the stage for these types of behavior and attitudes to manifest or be more apparent. Equity and respect are cultivated facets of a training environment; ensuring their presence must be a deliberate, intentional, and daily effort in any setting where diversity is valued. The study team identified several best practices from the other Services, such as core value accountability measures, prevention-based training, and others, that can be used to address common concerns and challenges to integration (see chapter 6).

A full list of study findings supporting this alternate model is presented in appendix Q.

Major Practices Retained

- The squad bay is used as an active training space. Same-gender recruits perform morning and evening BDR in the squad bay to prepare for the day. Squad bays can be used during gender-integrated daytime training activities following a model similar to the Navy's integrated divisions.
- Drill instructors lead and train the same training platoon of recruits every day. Drill instructors provide around-the-clock training and oversight of recruits.
- Platoon competition and award system culminating in the determination of the honor platoon continue without change.

Considerations and Modifications

- Recruits hygiene, sleep, and BDR (morning and evening) with recruits who live in their squad bay and conduct all other training with gender-integrated platoons. This is a significant departure from the current model in which recruits live, sleep, and train with their same-gender platoons.
- Drill instructors are responsible for one set of recruits in the squad bay and one set of recruits in a gender-integrated training platoon, only some of whom are the same. Recruits gain experience with a greater number of drill instructors rather than in-depth training from three to four drill instructors. Drill instructors are responsible for a broader swath of recruits in the company.
- The Marine Corps practice of training in the squad bay can continue but requires modification because recruits in a training platoon are living in different squad bays.
- Time to form integrated training units and reconvene in gender-separate squad bays must be planned and accounted for in the Master Training Schedule.
- Hygiene during the day, such as after a PT session, requires series and/or company coordination to ensure drill instructor oversight in the squad bay.

- Inspections (SDI, series, company, and battalion commander) can be conducted as a squad bay, a training platoon, or some combination of both (e.g., initial inspections conducted by squad bays, later inspections conducted by training platoon).
- New accountability procedures and processes must be established to ensure all recruits are present and accounted for in the squad bay at the end of the training day and with their training platoon at the start of the morning. This also applies when recruits are separated from their training platoon to hygiene in their squad bay.
- Two recruit leadership structures (or reconsideration of recruit leadership positions) may be necessary to account for leadership in squad bays and training platoons.
- Trophies for platoon competition awards may need to be modified because platoons do not share living space. Platoon trophies can be displayed elsewhere or reconceptualized (e.g., additional guidons or flyers to add to the platoon guidon).



Concluding Thoughts

The integrated platoon model requires the most substantial change from the Marine Corps's current training process at the MCRDs, but also best mirrors the conditions recruits face at their next ELT experience and in their career as a Marine. The highly controlled training environment of Marine Corps recruit training is a strong asset and the best-case scenario for mitigating challenges or concerns for increased gender integration and enforcing standards and expectations for appropriate conduct.

D. Evaluation Tools and Pilot Projects for Alternate Models

The Marine Corps requested recommendations for limited pilot projects and measures of effectiveness for the alternate models. An evaluation of each alternate model would be best served by the following practices:

- **Study multiple iterations of gender integration changes over time.** Any assessment or evaluation approach must study multiple iterations of new approaches over time. While Marine Corps recruit training involves a standardized POI, the human factor that contributes to the making of Marines cannot be ignored. Every drill instructor has different strengths, weaknesses, personality quirks, service history, and demographic identities they bring to their execution of the role. Similarly, every drill instructor team has its own team dynamics that may affect recruits' experiences. Every battalion and every company have their own culture, which often translates into what drill instructors emphasize in recruit training and with their drill instructor teams (such as physical fitness, close-order drill, or military bearing). Thus, it is impossible to disentangle singular circumstantial findings from broader enduring findings without the assessment of multiple iterations of the same model. The Marine Corps should also consider variation and repetition of other external factors such as MCRD location and time of year. Planned, methodical, repetitive evaluations are the best approach.

- **Pilot and study proposed alternate model changes in Male-Only companies.** The Marine Corps has a unique opportunity to test and evaluate the proposed alternate models while holding gender constant by studying these proposed changes in Male-Only companies. All alternate models proposed require a departure from the Marine Corps current training process of recruits living, sleeping, and training with the same platoon under the same three to four drill instructors for 13 weeks. Implementation of any of these alternate models would change the Marine Corps training process and change the amount of gender integration that occurs. The Marine Corps could study the proposed “switching” for mixed-gender drill instructor teams, integration of recruits below the platoon level at targeted training events, or platoon-level integration with Male-Only companies to assess the impact on the Marine Corps training approach independent of gender.
- **Collect data and conduct evaluations on gender integration changes at recruit training during the next stages of ELT and in the fleet.** The full impact of gender integration changes at the MCRDs cannot be comprehensively assessed in the recruit training environment. Recruit training is preparing basic Marines to continue their training in ELT and perform in the fleet. Evaluations of gender integration should incorporate a systematic study of Marines as they continue their training and enter the fleet, compared with others who experienced no gender-integrated training or less gender-integrated training. Broadening the scope of evaluation beyond the MCRDs can provide critical data and information about how gender integration affects the performance, behavior, and outcomes of basic Marines.
- **Use existing administrative data and collect new forms of data to evaluate gender integration changes.** The MCRDs already collect and assess a range of administrative data on recruits at recruit training, including attrition rates and reasons, graduation rates, separation rates, physical fitness scores (IST, PFT, CFT), academic test scores, qualification scores (rifle range, swim, martial arts), close-order drill ratings (initial and final), injury rates, and medical data. These data remain important sources of information to evaluate recruit performance and challenges when piloting or implementing changes to gender integration at recruit training. As stated above, it is important to assess and measure more than one company of recruits; gathering data that incorporate relevant variations over time is a best practice. The Marine Corps should also consider collecting new forms of data designed to assess the Marine Corps’s targeted goals for integration by measuring progress toward reducing biases, increasing unit cohesiveness, engaging in diverse thought and intelligent action, perceiving peers as equals, and sharing ideas in the context of accomplishing common goals (USMC, 2022a). Certain items may be more appropriate to measure at recruit training, while others would be better measured once Marines are further along the ELT pipeline or the fleet.
- **Collect both quantitative and qualitative forms of data.** Quantitative and qualitative data have relative strengths and weaknesses; broadly speaking, quantitative data offers breadth while qualitative data provides depth. An evaluation methodology incorporating both would provide the Marine Corps a more complete assessment of gender integration pilots or changes to current practices.
- **Gather data from MCRD stakeholders at all levels.** The proposed alternate models affect everyone at the MCRDs differently depending on their position level: Recruits go

through the experience, drill instructors must implement and execute the training, and training cadre and leaders oversee and manage the execution and the drill instructor teams. The Army, Air Force, Navy, and Coast Guard use variations of focus groups/sensing sessions, surveys, debriefs, and leadership discussions to gather recruit feedback on their experiences in training. The other Services also use similar methodologies and approaches to garner drill instructor feedback and input. This type of data can provide more granular, nuanced information designed to elicit the benefits, strengths, challenges, and course corrections needed when implementing new gender integration approaches. Data collection methods should be designed to maximize respondents' ability to share candid, honest opinions and feedback that will not negatively affect their reputations, training assignments, or career progression. Regular data collection from all MCRD stakeholders could also provide useful information on aspects of training and the training process beyond gender integration. Evaluations or assessments that do not involve data collection or input from all levels and stakeholders at the MCRDs could miss valuable and consequential information to implement gender integration models.

- Develop consistent internal and external review processes.** A combination of internal and external review is a best practice for both evaluating and implementing institutional changes. Each provides a needed dynamic for lasting success; internal review “ensure[s] consistent attention and leadership commitment,” while external review and assessment provide “objectivity, transparency, and accountability” (Schaefer et al., 2018, p. 82). Regular internal evaluation and assessment should be supplemented with periodic external review of such efforts regarding the Marine Corps’s gender integration goals, vision, progress, and implementation approach.

E. Recommendations

The study team drafted several recommendations independent of the alternate models to support and improve gender integration efforts at recruit training for the Marine Corps. These recommendations are presented below, organized by topic area, and summarized in table 13.1. A full list of study findings supporting each recommendation is presented in appendix Q.

Table 13.1. Summary of Recommendations for Gender Integration at Marine Corps Recruit Training

Recommendation Category	Recommendation
Strategic vision	Establish a Marine Corps definition and/or strategic mission/vision for gender integration in recruit training.
	Provide explicit and consistent leadership statements about how current or future changes to gender integration approaches at MCRDs connect with the broader mission of producing basically trained Marines.
Evaluation and working groups	Conduct regular evaluations of the recruit training “product”: a basically trained Marine. These evaluations should connect data from a basic Marine’s performance and outcomes in the ELT pipeline and their first fleet assignment and should be used as an opportunity to collect information relevant to the impact of the Service’s gender integration efforts.

Recommendation Category	Recommendation
	Establish and use drill instructor working groups at each stage (before, during, and after) of gender integration to more readily anticipate and identify challenges, innovative solutions, and demonstrated successes.
Curriculum and education	Review and update educational curriculum and imagery in training environments to represent women and be more inclusive of their contributions to the Marine Corps institutional legacy.
	Incorporate explicit training and socialization on respect into all education materials and training opportunities.
	Incorporate primary prevention education on sexual harassment, sexual assault, domestic abuse, and equal opportunity courses and Core Value Guided Discussions. Provide recruits education, training, and discussion about “what right looks like” in addition to course curriculum already delivered.
	Restrict those who teach key/milestone sexual harassment and sexual assault courses to full-time SAPR personnel who are subject matter experts.
Culture and social norms	Enforce a zero-tolerance policy for training cadre, drill instructors, and recruits using sexually explicit, gender-based, or derogatory language in the training environment.
	Replace gendered identifiers (e.g., “sir,” “ma’am”) in the primary salutation or response to drill instructors with gender-neutral language such as “drill instructor,” “senior drill instructor,” “senior,” “DI,” or “SDI.”
Recruit experience	Build an additional competitive element for series or companies to work toward to facilitate drill instructor and recruit investment in a shared identity beyond the platoon.
	Develop or task recruit leadership positions to aid drill instructors with recruit accountability checks when forming gender-integrated units.
Female population	Increase number of female personnel at MCRD San Diego (training cadre and leadership) while growing female drill instructor and recruit population to fulfill NDAA mandate.
	Increase efforts to recruit women into the Marine Corps.
Physical and human performance	High initial workloads coupled with injury rates and decrements in strength and power performance - warrants incorporation of a periodized approach to physical training that emphasizes progression and proper technique development.
	Potential relationship between attrition among female Marine Corps recruits and psychological resilience measured on the Connor-Davidson scale – further investigation recommended.
	Association between previous quantity of strength training in female Marine Corps recruits, and attrition and preservation of neuromuscular function – further investigation recommended.
	High relative percentage of hip injuries in female Marine Corps recruits during gender-integrated training – investigation of causes and customized injury mitigation programs recommended.

Note: DI = drill instructor; ELT = entry-level training; MCRD = Marine Corps Recruit Depot; NDAA = National Defense Authorization Act; SAPR = sexual assault prevention and response; SDI = senior drill instructor

1. Strategic vision

Leadership from the top is critical during times of change. Based on findings from this study and previous research on gender integration in the military, the study team recommends the Marine Corps establish and consistently communicate its definition and strategic vision for gender

integration at recruit training, explicitly connecting gender integration to the broader mission of making Marines.

→ **Recommendation: Establish a Marine Corps definition and/or strategic mission/vision for gender integration in recruit training.**

A consistent finding from the social science data collected for this study is the lack of a clear and shared definition of gender integration within the Marine Corps, across the different Services, and by key stakeholders, including Congress. While some common elements were identified among the other Services (e.g., most define gender-integrated training as everything but sleeping and showering), differences emerged in how Services operationalize these definitions. A sizable number of Marine Corps respondents lacked a clear sense of how the Marine Corps defined gender integration at recruit training and thus used their own interpretation. Similarly, participants with alternate viewpoints were not clear on how the Marine Corps defines integration and had differing opinions about what qualifies as gender-integrated training.

A shared definition of gender integration is important for many reasons. Because the concept has been executed in many different ways and Congressional directives have not been explicit about what gender integration means, a shared understanding is necessary to determine whether the Marine Corps approach reflects gender integration. Developing and disseminating an agreed-upon definition of gender integration that is clear to all stakeholders would have considerable benefits but would also involve risk. A vague definition enables latitude in implementation that is precluded by formal definitions. If the Marine Corps's goal is progress, however, a formal, shared definition would set a benchmark for measuring results. Internally, a shared definition and/or strategic mission/vision statement for the Marine Corps would establish guidance for leaders at all levels on how the Service defines integration, why the Service employs gender-integrated training (e.g., benefits for and its role in developing basic Marines), and what end state the Service is working toward.

A full list of study findings supporting this recommendation is presented in appendix Q.

→ **Recommendation: Provide explicit and consistent leadership statements about how current or future changes to gender integration approaches at MCRDs connect with the broader mission of producing basically trained Marines.**

In the past 3 years, the Marine Corps has implemented new approaches to gender integration at the MCRDs with the introduction and evolution of the Integrated Company model. As the institution continues to refine and potentially advance new forms of gender-integrated training, the study team recommends Marine Corps leadership provide explicit, clear, and consistent communication connecting gender integration with the broader mission of making Marines. Change is a difficult process, especially for leaders and drill instructors who are used to executing training in a particular way. Clear, consistent, and explicit leadership statements about current or future gender integration changes provide an explanation for leaders, training cadre, and drill instructors to understand how these changes support their broader mission. Inconsistent messages or absence of leadership voice can lead to assumptions, resistance to change, and frustration.

Previous research on the implementation of gender integration in U.S. and foreign military settings identifies leadership as a key ingredient to success. Clear, direct, and unwavering communication from Service leadership is especially important for countering resistance and amplifying how integration will benefit mission readiness (Schaefer et al., 2018). When the Army initially established gender-integrated recruit training, it did so “without a clear statement of goals, policies, or procedures” (Chapman, 2008, p. 68), which ultimately harmed the Service’s integration efforts. Canadian forces also found leadership was critical to integrating women in previously all-male units, noting effective integration depended on leadership directly addressing real and perceived issues rather than a “business as usual” approach (Davis, 2007, p. 76). Consistent messages communicated both internally and externally by the Marine Corps can provide clarity on the integration process and create a shared understanding about the intent of integration for all. Marines have incomparable pride in their institution and want the Marine Corps to continue to be the best in all that it does. Clear articulation of how and why gender integration at recruit training makes better Marines will serve to enhance pride in the institution and the process of making Marines.

A full list of study findings supporting this recommendation is presented in appendix Q.

2. Evaluation and working groups

Sustained attention, evaluation, and data collection create opportunities for the Marine Corps to identify what’s working and what needs to change. To be the best, the institution needs to have clear measurements of its status and how to improve. Evaluation is particularly important given the Marine Corps shift and evolution of the Integrated Company model and gender integration approach. To this end, the study team offers two recommendations: more regular and robust evaluations at the Service level and engagement of drill instructors through drill instructor working groups.

→ **Recommendation: Conduct regular evaluations of the recruit training “product”: a basically trained Marine. These evaluations should connect data from a basic Marine’s performance and outcomes in the ELT pipeline and their first fleet assignment and should be used as an opportunity to collect information relevant to the impact of the Service’s gender integration efforts.**

Based on the study team’s interviews with Service leaders, the Marine Corps appears to be the Service least reliant on data and evaluation processes to assess their basic training process and product. It was reported to the study team that the Marine Corps conducts annual reviews of the training program and curriculum and relies on accession and attrition data as key markers of success in the training environment. In a recent update to Congress, the Marine Corps announced it would establish an enterprisewide formal annual assessment to monitor its gender integration efforts (USMC, 2022a). This decision is a notable step toward improvement, but more could be done to build, strengthen, and use data and information to evaluate the Service’s approach and implementation of recruit training writ large, including gender integration. The study team recommends the Marine Corps fully use existing data sources and create new ones, as needed, to collect and assess more robust data on recruit training for the purposes of evaluation.

A best practice from the Army, Air Force, Navy, and Coast Guard identified by the study team is continuous evaluation of recruit training goals, objectives, and basically trained Service member output through engagement with multiple stakeholders and evaluation methods (see chapter 6). When properly and intentionally implemented, evaluation approaches (e.g., at recruit training, in follow-on training, and from the fleet) provide Services insight into what is working well and what needs to change. For example, the Navy implemented its Warrior Toughness mindfulness program at recruit training after recognizing the need to better prepare Sailors for the stress of operational conditions and military life. Pilot studies of the program from the Navy's Recruit Training Command showed promising results, and they continue to study Sailors as they move into the fleet (Bernacchi et al., 2019). Data and feedback loops on recruit training can also be used to assess and evaluate gender integration approaches and their effects in the training environment and on service members in the fleet. Establishing clear data pipelines and a formal reflection process for senior leaders will give the Marine Corps a tangible way to identify the strengths and challenges of recruit training to determine adequate course corrections.

A full list of study findings supporting this recommendation is presented in appendix Q.

→ **Recommendation: Establish and use drill instructor working groups at each stage (before, during, and after) of gender integration to more readily anticipate and identify challenges, innovative solutions, and demonstrated successes.**

Experienced drill instructors are a tremendous institutional asset for the Marine Corps in the process of executing new or revised approaches to gender integration. Drill instructors have granular, detailed knowledge about the training schedule, logistics, social dynamics, and operationalization of Marine Corps policies and practices. Establishing a drill instructor working group would provide the Marine Corps an organized way to harness this knowledge as the Service seeks to continue, expand, or evaluate its approach to gender integration at recruit training. Drill instructors can readily identify problems or challenges based on their day-to-day experiences and can be used as a resource to identify new solutions or innovative approaches. Drill instructor working groups would also help build buy-in for gender integration changes by engaging drill instructors as essential stakeholders in the process. A Marine Corps Service leader described how she used this approach at one of the MCRDs and found success.

I gave it to the drill instructors to go in, and they were the ones that evaluated their own processes and looked at ways they could improve it and make those changes. And so it really came from the bottom up from that point. So then they owned it, and they were all about those changes. So I think if it had come from Depot or RTR [Recruit Training Management] and mandated "You will do x, y, and z," there would have been a little bit more pushback because no one likes to be directed to make those changes. But since they [drill instructors] went through the whole process, brought up these changes, and then we presented those to RTR, and the Depot was like, "This is what we are going to do." And it was a well-thought-out plan. Higher-ups took that on, and we're good with it. And the drill instructors at a very base level because it was their plan, were completely on board with the changes because they were theirs.

Drill instructor attitudes toward gender-integrated training have been shown to affect recruits' readiness and cohesion, making it even more important to involve them in the process (Schaefer et al., 2018). Given MCRD differences in training schedules, facilities, history of gender integration, and Depot cultures, it may be best for each MCRD to establish its own working group; both working groups could come together for Service wide meetings on a regular basis.

A full list of study findings supporting this recommendation is presented in appendix Q.

3. Curriculum and education

Education is a major component of recruit training as recruits receive hundreds of hours of classroom training and education on everything from life skills to military tactics. The study team offers several recommendations to improve, update, or sharpen curriculum and education materials as they relate to gender integration and creating a more inclusive training environment. While these recommendations were drafted in conjunction with the gender integration study, they also provide broad benefits to the overall training environment.

→ **Recommendation: Review and update educational curriculum and imagery in training environments to represent women and be more inclusive of their contributions to the Marine Corps institutional legacy.**

Recruits spend a substantial amount of their training time on academic instruction and participating in CVGDs. Through ethnographic observations and review of curriculum materials, the study team found a noticeable absence and disparity of female representation in these materials.

- **Marine Corps history classes.** The coverage of women's service in the current Marine Corps history curriculum at recruit training is primarily relegated to "firsts" or milestone events and lacks acknowledgment of how women's service restrictions have historically affected their ability to contribute to the institution. It also fails to recognize and profile how, despite extensive restrictions, women have served and broken through barriers, demonstrating their courage and commitment.
- **CVGDs.** The complete absence of real female Marines in the CVGD curriculum is notable when compared with the eight contemporary or historical male Marines or Sailors used as exemplars. Excluding women from these discussion materials unintentionally sends the message that women are still marginal members of the Marine Corps institution or have not made contributions worthy of discussion or emulation.
- **Outdated and harmful gendered stereotypes and images in course materials.** Some course materials use outdated stereotypes and gendered imagery or make assumptions that take away from the effectiveness of the course material. For example, the "Marriage and the First-Term Marine" class is oriented toward male Marines married to female civilians, with couple imagery and examples supporting this presumption. Imagery in the "Domestic and Child Abuse" class depicts women as victims of abuse; no images of men as victims are included. At least one course observed at MCRD San Diego still uses male pronouns in descriptive examples of leadership principles (e.g., "his Marines").

- **Imagery in shared spaces.** Outside the classroom, recruits are exposed to imagery in buildings and common spaces such as the chow hall. Pictures in these spaces are focused heavily on Marine Corps combat operations and depictions of the warrior ethos in action. When images of Marines were distinct enough for gender identification, the images were primarily male.

The study team recommends the Marine Corps pursue a thorough review and update of all recruit training and education materials to be more inclusive of women and other diverse groups. The Marine Corps Diversity, Equity, and Inclusion Strategic Plan articulates the primacy of education training for instilling diversity, equity, and inclusion in Marine Corps culture and notes the Service's current shortcomings in this area (USMC, 2021a). The Marine Corps's focus on the structure of gender integration at recruit training has missed other ways to promote and create an inclusive culture for all, such as through its education program.

This review of all education material and imagery (e.g., course curriculum, PowerPoint slides, recruit knowledge book, CVGD guides, MCRD imagery) should be conducted by a demographically diverse team of content creators and reviewers with demonstrated expertise in principles of diversity, equity, and inclusion. The update should also correct the numerous misspellings, typos, and grammatical errors in recruit training and education materials.

The inclusion of new material provides an opportunity for the institution to deepen recruits' knowledge of Marine Corps history; expand its representation of Marines who demonstrate honor, courage, and commitment; and modernize course content to engage with the diverse recruits who enlist today.

A full list of study findings supporting this recommendation is presented in appendix Q.

→ **Recommendation: Incorporate explicit training and socialization on respect into all education materials and training opportunities.**

Respect is paramount to the strength of America's military forces; without respect, internal fissures erode trust, cohesion, camaraderie, readiness, and morale. The Marine Corps is guided by three core values—honor, courage, and commitment—all of which demand respect for self, others, and the institution. Following a recent DoD Independent Review Commission (IRC) on Sexual Assault in the Military recommendation, the study team recommends the Marine Corps do more to teach and emphasize respect at recruit training. Recommendation 3.2 from the IRC report recommends the Under Secretary of Defense for Personnel and Readiness direct the Services to educate the force about sexual harassment and sexual assault within the context of the Services' core values. In its justification for this recommendation, the Committee stated:

Beginning with recruitment, reinforced in basic training, and expanded upon in Professional Military Education (PME), Service members should comprehend and be able to apply key concepts, such as—but not limited to—consent and respect, within a framework of desirable and honorable behavior. This core values framework may reflect Service unique cultures but should explain and reinforce the links between the prevention of sexual harassment and sexual assault and their relation to improvements in military readiness. (p. 188)

The study team recommends an even broader approach to training on respect in the recruit training environment, one that weaves respect into every foundational learning opportunity for Marine Corps recruits. During instruction pertaining to core values, life skills, sexual harassment and assault, and tactical and physical training, opportunities should be created to reinforce, socialize, and normalize respect as it relates to the core values and leadership principles every Marine is expected to embody in everything they do, in and out of uniform. The study team identified multiple best practices from the Air Force and Coast Guard enforcing clear accountability policies that reinforce equity, respect, and trust in the training environment that could be modeled or incorporated at Marine Corps recruit training (see chapter 6). The Marine Corps has an opportunity to instill and socialize equity and respect during the 13 weeks of training, laying an important foundation for a Marine's future service and building an inclusive environment for gender-integrated recruit training at the MCRDs.

A full list of study findings supporting this recommendation is presented in appendix Q.

→ **Recommendation: Incorporate primary prevention education on sexual harassment, sexual assault, domestic abuse, and equal opportunity courses and Core Value Guided Discussions. Provide recruits education, training, and discussion about “what right looks like” in addition to course curriculum already delivered.**

The study team recommends the Marine Corps incorporate primary prevention education into relevant curriculum and CVGDs, including but not limited to sexual harassment, sexual assault, domestic abuse, and equal opportunity. While these trainings must cover mandated material on what constitutes unacceptable behavior, reporting options, and available resources, they should also include prevention-based and proactive material to teach recruits “what right looks like.” Proactive and prevention-based approaches could include content and conversations about healthy relationships, dating and marriage, safe and consensual sex, respect, and communication. Classes and CVGDs on these topics would offer another opportunity to emphasize how Marine Corps core values can help recruits exercise good judgment and navigate riskier situations. Recruits would also learn how to prevent abuse, sexual harassment, and sexual assault and develop healthy, professional relationships as they advance as new Marines.

Marine Corps recruits, both men and women, expressed a strong desire for proactive and prevention-based training to educate them on how to have healthy, professional work relationships with members of the opposite gender. New Marines at the end of the training cycle articulated that they would like more comprehensive training and development in this area, especially if the Marine Corps were to increase gender integration at recruit training. Recruits from the other Services also described comprehensive training and education programs around gender and gender-related issues as necessary for successful gender integration. Examples would include comprehensive SAPR classes, training about respect, and communication classes about professional working relationships. The study team highlighted prevention-based classes and curriculum on sexual harassment, sexual assault, and equal opportunity offered by the Air Force and Navy as a best practice (see chapter 6).

The study team’s recommendation for more comprehensive and proactive training on the prevention of sexual harassment and sexual assault aligns with recommendations from the DoD IRC on Sexual Assault in the Military. The Secretary of Defense has charged DoD to implement all recommendations made by the IRC, which include the following:

- **Recommendation 2.1c: The Services and National Guard Bureau should equip all leaders to develop and deliver informed prevention messages in formal and informal settings.** The IRC found that junior enlisted members wanted “to have authentic, small group discussions to explore key questions about consent, respectful workplace behavior, personal boundaries, and related prevention themes in scenario-based activities” and that commanders need to create an environment where it’s easy to identify “what right looks and sounds like” (IRC, 2021, p. 129).
- **Recommendation 2.4: Modernize prevention education and skill-building to reflect today’s generation of Service members.** The IRC emphasized tailored content, delivery, and dosage of prevention knowledge for specific audiences, stating, “Prevention messaging, practices, and programs must be tailored for the setting, prior traumas, current level knowledge, and be culturally competent for diverse populations” (IRC, 2021, pp. 145-146). Continuing, they noted, “Some Service members enter the military with very limited sexual education or understanding of consent and healthy relationships”; thus, a prevention knowledge base should not be assumed (IRC, 2021, p. 146).

Prevention-based content is best delivered by trained subject matter experts multiple times in different formats over the course of the training cycle. Those who teach or facilitate this sensitive material should be comfortable customizing the standardized content to the recruits’ needs and rectifying any harmful misconceptions recruits may have about sexual assault victims, gender stereotypes, or reporting procedures. Instructors must ensure recruits feel the classroom is a safe space to share their uninhibited opinions about these topics while keeping an open mind about others’ opinions and facilitating productive conversation aligned with course goals.

A full list of study findings supporting this recommendation is presented in appendix Q.

→ **Recommendation: Restrict those who teach key/milestone sexual harassment and sexual assault courses to full-time SAPR personnel who are subject matter experts.**

Some of the most important and sensitive subject matters covered at recruit training relate to classes and discussions about sexual harassment and sexual assault. For some recruits, these classes are their first time learning about such issues in depth. Recruits are taught definitions, Marine Corps policies, reporting options, resources, and bystander intervention practices. Most lessons provide realistic scenarios to reinforce the learning material and engage recruits in conversations about what to do if they find themselves or a friend in that situation.

Marine Corps training cadre and drill instructors are equipped with teaching materials and their own working knowledge of these subjects, but they lack true subject matter expertise to ensure that they present the material in a sensitive, accurate, and appropriate manner. Sexual harassment and sexual assault are topics that can be deeply triggering for recruits, who may have experienced some form of these behaviors and violence previously. For these reasons, the study

team recommends the Marine Corps restrict key or milestone sexual harassment and sexual assault courses to full-time SAPR personnel who are subject matter experts.

Ill-equipped personnel are a systemwide DoD issue recently identified by the IRC. DoD is now establishing a dedicated primary prevention workforce (recommendation 2.2) and requiring each Service to build its own prevention workforce. The IRC stated, “effective prevention of sexual harassment, sexual assault, and other forms of violence requires the time and dedication of full-time personnel with specific public health and behavioral social science expertise” because “double-hatted personnel lack both the capability and capacity to perform requirements essential” to prevention (IRC, 2021, p. 131).

Full-time SAPR personnel are busy individuals typically overwhelmed by current job demands; the field has been chronically understaffed. However, the Marine Corps should work toward ensuring key classes on sexual harassment and sexual assault during recruit training are taught by full-time SAPR personnel to prioritize education on these subjects for its recruits.

A full list of study findings supporting this recommendation is presented in appendix Q.

4. Cultural and social norms

The study team’s cultural and social norms recommendations address two aspects of language and its use in the training environment. Language can be a powerful enabler of or hindrance to gender integration and inclusion efforts. These recommendations prompt the Marine Corps to evaluate and recalibrate language used and tolerated in recruit training, including gendered language. Every recruit and Marine in the training environment can contribute to building a more inclusive environment that aligns with Marine Corps core values and senior leader expectations of conduct.

→ **Recommendation: Enforce a zero-tolerance policy for training cadre, drill instructors, and recruits using sexually explicit, gender-based, or derogatory language in the training environment.**

The Marine Corps standards of conduct for training personnel already prohibit profane, obscene, or unprofessional language, including sexually explicit and demeaning language (USMC 2019a, 2019b). However, the persistent use of such language in the training environment indicates more must be done to adhere to these standards. The use and acceptance of sexually explicit, gender-based, and derogatory language creates a hostile work environment and teaches recruits it is acceptable to use that type of language in the Marine Corps. Specific instances shared with the study team (detailed in chapter 4) most commonly involved male drill instructors using sexually explicit and gender-based language that is degrading to women with male recruits. Sexual and gender-focused comments or jokes are part of DoD’s continuum of harm, which conceptualizes the connection between lesser offenses, such as the use of inappropriate language, to an environment where greater offenses, such as rape and sexual assault, may occur unchecked (DoD, n.d.). Any use of sexually explicit and derogatory language in the recruit training environment is detrimental to gender integration in the Marine Corps, both in the immediate training environment and beyond.

The Marine Corps must enact a zero-tolerance policy for training cadre, drill instructors, and recruits using this type of language. Merely saying there is no tolerance for this behavior is not enough; accountability mechanisms must be in place for swift and punitive followthrough. Training cadre/drill instructors and recruits should be provided safe, confidential options to report such behavior from anyone; accountability must be a team approach, with the responsibility placed on everyone. For recruits, reporting such conduct from fellow recruits or their drill instructors should relate to upholding Marine Corps values: to *honor* one another by having the *courage* to speak up and the *commitment* to do what's right

A full list of study findings supporting this recommendation is presented in appendix Q.

→ **Recommendation: Replace gendered identifiers (e.g., “sir,” “ma’am”) in the primary salutation or response to drill instructors with gender-neutral language such as “drill instructor,” “senior drill instructor,” “senior,” “DI,” or “SDI.”**

Marine Corps recruits are taught to respond to and address their drill instructors as “sir” or “ma’am” for most of the training cycle; once recruits are Marines, they can refer to their drill instructors by their rank, having earned the right to do so. Gendered salutations and responses prime recruits to think about or visually search for a drill instructor’s gender first, before their rank or role. For female drill instructors with short hair or a bun blocked by their campaign cover, recruits must find other ways to quickly visually identify the gender of the drill instructor to respond correctly. Gendered identifiers have the potential to remind recruits of negative stereotypes they hold and could subconsciously affect the way recruits react to drill instructors of different genders. Consciously highlighting gender as a distinction requiring different reporting and response procedures runs counter to treating all drill instructors in the same equal, uniform manner.

Using gender-neutral identifiers is an unambiguous, impartial way to circumvent these issues. Employing gender-neutral identifiers eliminates the possibility of misgendering drill instructors, which can unintentionally offend or cause discord. The study team highlighted this as a best practice employed by the Army, Navy, and Coast Guard. The distinction between “recruit” and “Marine” is significant in the Marine Corps training process, which is why the study team recommends gender-neutral language such as “drill instructor,” “senior drill instructor,” “senior,” “DI,” or “SDI,” as opposed to recruits addressing all drill instructors by their rank from the start. While using “sir” and “ma’am” is not wrong, their use as the first and only response to drill instructors activates gender as their primary identity instead of their authority position of drill instructor. Teaching recruits to use gender-neutral identifiers for their drill instructors would further underscore the importance of respecting authoritative figures regardless of gender.

A full list of study findings supporting this recommendation is presented in appendix Q.

5. Recruit experience

Recruit experience recommendations address elements of the training process that could be improved or implemented with increased gender integration at recruit training. Building a new

competition at the series or company level could counteract unhealthy gendered dynamics of male and female platoons competing with one another and add another competitive element to training. Recruit leadership positions could also be more fully employed in accountability processes for the formation of gender-integrated training teams or units.

→ **Recommendation: Build an additional competitive element for series or companies to work toward to facilitate drill instructor and recruit investment in a shared identity beyond the platoon.**

Competition is a fundamental driving force in the recruit training environment, especially for the Marine Corps. Drill instructors want to be the best and want their platoons to be the best in their company and on the Depot. Platoons formally compete in contests associated with training elements, such as highest CFT or final drill score, which culminate in the designation of the honor platoon at graduation. Informally, competition and “being the best” fuels a day-to-day drive for excellence for drill instructors and recruits alike. Competition can become unhealthy when it veers into territory where drill instructors pit themselves against one another or power struggles overtake the shared mission of making Marines. When all competitions are platoon based and platoons are aligned with gender, the competitions can too easily slide into rhetoric about gender superiority. To counteract this possibility, the study team recommends the Marine Corps add another competitive element—built to be accomplished as a series or a company—to reinforce the shared mission of excellence outside the platoon structure.

The Coast Guard’s pennant program serves as a best practice example. During Coast Guard recruit training, companies (i.e., platoon equivalents) can earn pennants for completing certain tasks or events. Companies only earn the “Coast Guard pennant” if they earn all eight pennants during their training cycle—a rare but celebrated accomplishment. Something similar could be instituted by the Marine Corps, encouraging companies to work to earn pennants throughout the training cycle with the ultimate goal of earning a Marine Corps pennant as a company. Pennants could be based on the company meeting an established high standard for a particular training event (e.g., company average score for the CFT must be above a certain number) or the number of platoons who cross a threshold of excellence during a training event (e.g., at least four platoons must demonstrate a certain qualification score on the range). This type of competition would introduce a shared competitive element connecting recruits across platoons and uniting the company in pursuit of a tangible, common goal while still maintaining the traditional platoon-based competition.

Another example of shared competition is the Navy’s division flags. Similar to the Marine Corps, Navy divisions compete against one another in certain training events; however, multiple divisions can earn the event flag if they exceed a certain standard. For instance, all divisions with academic test scores above a certain level will earn a flag for their division. This type of competition creates competitive motivation oriented to a standard of excellence while preserving a visual competitive element between divisions (e.g., displaying the flags they have earned).

A full list of study findings supporting this recommendation is presented in appendix Q.

→ **Recommendation: Develop or task recruit leadership positions to aid drill instructors with recruit accountability checks when forming gender-integrated units.**

Marine Corps respondents shared concerns about recruit accountability processes with an increase in gender-integrated training. In current practice, the same drill instructor team is responsible for the recruits in their platoon for the entirety of the training cycle, and accountability systems and processes are designed for this. Drill instructors know which recruits need to go to medical on any given day and can keep track of their recruits at training events and spaces such as the range because recruits sit or are grouped together. Marine Corps training cadre and drill instructors fear it will be more difficult to keep track of recruits outside of the current platoon and drill instructor team configuration, such as in the Integrated Company plus model, where recruits are integrated at or below the platoon level for targeted training events, or the platoon integration model, where recruits form into gender-integrated training units from their gender-separate squad bays.

One option to address these concerns is to employ recruits in platoon leadership positions. Recruit leaders and those in designated positions (such as fire watch) would be given basic responsibilities to learn new skills, develop their leadership capabilities, and facilitate the platoon's execution of day-to-day training activities. Out of all the Services, the Marine Corps places the least amount of responsibility on its recruits in platoon leadership positions. This situation is largely because the Marine Corps transformation process places primacy in the authority and control of the drill instructor to develop discipline and instantaneous obedience to orders. However, the Marine Corps could use recruits as another organizing or accountability tool. For example, guides, squad leaders, or fireteams could support their drill instructors in their administrative and accountability processes to ensure the correct recruits form into a gender-integrated training unit and are back with their platoon upon completion. The Marine Corps should use the Army, Navy, Air Force, and Coast Guard as resources to identify other best practices for recruit accountability and tracking when forming gender-integrated training units.

A full list of study findings supporting this recommendation is presented in appendix Q.

6. Female population

An ongoing challenge for Marine Corps gender integration efforts is the small percentage of women in the Service. The study team offers two key recommendations: one targeted toward increasing female leadership at MCRD San Diego in the immediate term and one focused on long-term increases in the recruitment and accession of women in the Service.

→ **Recommendation: Increase the number of female personnel at MCRD San Diego (training cadre and leadership) while growing female drill instructor and recruit population to fulfill NDAA mandate.**

The Marine Corps has already begun the process of training female recruits and growing the female drill instructor population at MCRD San Diego to meet the FY 2020 congressional mandate. These efforts face a significant challenge: doubling the Marine Corps's female drill instructor population to support training half the female recruit population on the West Coast

(USMC, 2022a). As it is building the female drill instructor population at MCRD San Diego, the Marine Corps should also seek to increase the number of female leaders, training cadre, and other personnel at the Depot. This expansion would provide male recruits additional exposure to female leadership through key positions such as chief drill instructor, 1st sergeant, series commander, company commander, and other battalion and regiment leadership roles.

A full list of study findings supporting this recommendation is presented in appendix Q.

→ **Recommendation: Increase efforts to recruit women into the Marine Corps.**

Out of all the Services, the Marine Corps has the lowest percentage of women on active duty. Female active-duty Service members constitute only 8.9 percent¹⁸⁹ of the Marine Corps, compared with 21.1 percent of the Air Force, 20.4 percent of the Navy, 15.5 percent of the Army, and 15 percent of the Coast Guard (DoD Demographics, 2021; Thiesen, 2021). The Marine Corps increased the percentage of active-duty women from 7.7 percent in 2015 to 8.9 percent in 2021 and is seeking to recruit and retain a more diverse force as part of its diversity and inclusion plan and talent management 2030 strategic vision (USMC, 2021a, 2021e).

Even with this increase and the recent integration of MCRD San Diego, the Marine Corps is plagued by two core issues for gender integration: (1) most men will continue to have an all-male recruit training experience and (2) personnel and force demands on the relatively small population of female Marines, including female drill instructors, remain high. Increasing efforts to recruit and enlist women in the Marine Corps will support current and future gender integration efforts and ultimately provide a broader talent pool from which to select and develop the future leaders of the Marine Corps.

A full list of study findings supporting this recommendation is presented in appendix Q.

7. Human and Physical Performance

It is expected that every Marine possess the highest level of physical fitness regardless of age, rank, or military occupational specialty. Marine Corps recruit training consists of a physically demanding fitness program designed to transform recruits into Marines. Based on the study results and findings from the physical and human performance measurements, the study team compiled a list of recommendations, including some findings that would require further investigations.

→ **Recommendation: High initial workloads coupled with injury rates and decrements in strength and power performance - warrants incorporation of a periodized approach to physical training that emphasizes progression and proper technique development.**

Increased stress, including physical and psychological stress of training, have been shown to relate to higher injury rates (Mann JB, Bryant K, Johnstone B, Ivey P, Sayers SP, 2015). Although the study team acknowledges the importance of applying stress and physical exhaustion to recruits in the initial phase of the training program, a modified rate of progression

¹⁸⁹ Women make up 9.0 percent of enlisted active-duty members in the Marine Corps.

of physical training combined with the psychological stressors may help to sustain readiness and reduce injuries. This modified approach to training would incorporate greater periodization, particularly in the first phase of training, to optimize performance outcomes that could be maintained throughout the program. The study team also suggests that periods of higher workloads may be buffered with further nutrition and sleep considerations.

It is also important to recognize the physical capacity differences, not just between sexes, but also at the individual level. When working with a heterogeneous fitness population, it is essential to identify limitations in abilities as well as areas of opportunity for improvement. This may help to enhance training for all recruits and allow men and women to work together earlier on in the training program. This may also help to reduce attrition rates, specifically in female recruits, as female recruits who attrited reported a lower baseline quantity of strength training and physical activity compared to those who did not. Therefore, the study team would also recommend incorporating drill instructors who are experienced strength and conditioning professionals at all levels of company command. Appropriately structured training with greater emphasis on technique development and form may help to optimize performance across sexes. This may be particularly beneficial for those individuals with lower baseline fitness values and inexperience with strength training.

As the Marine Corps considers options for optimizing gender integration, recruit performance and injury data from this study suggest an opportunity to revise the training structure to be more scientifically and physiologically sound to enhance performance, reduce injury, and improve retention during the training process. This can be done without sacrificing the desired stress placed on the recruit to make Marines, as demonstrated by the maintained stress response throughout training, even when training load was reduced. Instead, proper progression would likely mitigate injury to otherwise very capable recruits. Given the baseline fitness levels, it would also enable the Marine Corps to physically develop otherwise low-fit recruits who, with progressive training support, may be able to establish the physicality necessary to become effective Marines. In the process, the likelihood of success would increase for more robust gender integration as a result of the recognition of differential responses to training stressors. A greater focus on teaching proper exercise progression, which was often absent during study team's observations of physical training, would be critical for further gender integration to improve opportunities for female recruit success; this approach would also benefit male recruits. With proper training and progression, the Marine Corps can optimize outcomes across both sexes and make gender integration efforts more robust without sacrificing the intent of recruit training or the warrior ethos. The return on investment would also improve during new Marines' successful transition to the next phase of their military career after recruit training. When considered in the context of the sociological findings, there appears to be an achievable and effective path forward to enhance the climate of success the Marine Corps has established over its existence.

A full list of study findings supporting this recommendation as well as other supporting evidence is presented in appendix Q.

→ **Recommendation: Potential relationship between attrition among female Marine Corps recruits and psychological resilience measured on the Connor-Davidson scale – further investigation recommended.**

Data from the current study and a review of relevant literature suggest that additional research examining the impact of resilience on attrition in a larger sample is warranted, including assessing interventions to increase resilience and reduce attrition, especially in female recruits, and mitigate musculoskeletal injury risk.

A full list of study findings supporting this recommendation as well as other supporting evidence is presented in appendix Q.

→ **Recommendation: Association between previous quantity of strength training in female Marine Corps recruits, and attrition and preservation of neuromuscular function – further investigation recommended.**

It is plausible that higher levels of strength training activities prior to entry-level training, particularly in female recruits, may be beneficial in preserving neuromuscular function (i.e., minimizing the impact of fatigue) following a single, high-intensity event or over the course of recruit training, which may lead to lower risk of attrition. Since this is an observational study, further investigation is warranted to determine if increased strength training leading into entry-level training can influence these outcomes.

A full list of study findings supporting this recommendation as well as other supporting evidence is presented in appendix Q.

→ **Recommendation: High relative percentage of hip injuries in female Marine Corps recruits during gender-integrated training – investigation of causes and customized injury mitigation programs recommended.**

The study team's findings support the need to investigate the causes of hip injuries in female recruits, and the utility of developing sex-specific injury prevention programs for recruits during gender-integrated training.

→ A full list of study findings supporting this recommendation as well as other supporting evidence is presented in appendix Q.

F. Conclusion

The dedication, passion, and commitment Marines exhibit for their institution are unparalleled. Those who embark on the mission of making Marines are even more dedicated because they understand that the future of the institution rests in their hands. Today's recruits are the future frontline heroes fighting for our Nation's security. Each year, a new generation of senior enlisted leaders is forged at the MCRDs. Recruits become Marines and carry on the legacy of the institution. The Marine Corps knows how to produce and reinforce strong cultural values. Prioritizing equity, respect, and inclusion as central tenets of Marine Corps values and culture

can only amplify the pride Marines have in their service and strengthen the institution from the inside out. Marines created in an environment where all are seen, respected, and treated equitably will carry those values into their everyday lives—in missions abroad, their service at home, and their role as citizens.

As a concluding note, the study team would like to thank the hundreds of participants in this study who volunteered their time and shared their thoughts with candor. This study would not have been possible without their generous dedication to the research, their kindness, and their willingness to share.

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Appendix A: Abbreviations and Acronyms

Appendix A: Abbreviations and Acronyms

1stSgt	First Sergeant
AFB	Airforce base
AIT	advanced individual training
ANOVA	analysis of variance
APG	assistant platoon guide
ASMO	administratively separated
ATC	airman training complex
AVF	All-Volunteer Force
BCT	Basic Combat Training
BDR	basic daily routine
BEAST	Basic Expeditionary Airman Skills Training
BMT	Basic Military Training
BWT	basic warrior training
CC	company commander
CDC	Child Development Center
CDI	chief drill instructor
CD-RISC	Connor-Davidson Resilience Scale
CFT	combat fitness test
CIMT	U.S. Army Center for Initial Military Training
CMJ	countermovement jump
CO	commanding officer
COD	close order drill
COVID-19	coronavirus disease 2019

CPR	cardiopulmonary resuscitation
CVGD	core values guided discussions
DEP	Delayed Entry Program
DFP	defense fighting position
DepO	Deport order
DI	drill instructor
DoD	Department of Defense
EAL	entry authorization lists
EDI	experienced drill instructor
ELISA	enzyme linked immunoassay
ELT	entry-level training
EMI	extra military instruction
FET	female engagement team
FMF	Fleet Marine Force
FORCECOM	U.S. Coast Guard Force Readiness Command
FORSCOM	U.S. Army Forces Command
FY	Fiscal Year
GIT	gender integrated training
GPS	global positioning satellites
GST	gender-segregated training
HR	heart rate
HPA	hypothalamic pituitary adrenal
HMCS	Her Majesty's Canadian Ship

IET	U.S. Army Initial Entry Training
IOM	Institute of Medicine
IMTP	isometric mid-thigh pull
IRB	Institutional Review Board
IRC	independent review commission
IST	initial strength test
IT	incentive training
ITB	Infantry Training Battalion
MAGTF	Marine Air-Ground Task Force
MCMAP	Marine Corps mixed martial arts program
MCO	Marine Corps Order
MCT	Marine Combat Training
MCRD	Marine Corps Recruit Depot
MCRD PI	Marine Corps Recruit Depot Parris Island
MCRD SD	Marine Corps Recruit Depot San Diego
MEPS	military entrance processing station
METHrs/wk	metabolic equivalent tasks hours per week
MOS	military occupational specialty
MTD	Military Training Department
MTI	military training instructor
NCO	Non-commissioned officer
NDAA	National Defense Authorization Act
OCS	Officer Candidate School

OOD	officer of the deck
OPA	Office of People Analytics
OSUT	One Station Unit Training
PEF	Preferred Enlisted For
PFT	physical fitness test
PG	platoon guide
PMI	Primary Marksmanship Instructor
POI	program of instruction
PT	physical training
RAMP	Recruit Motivation Program
RDC	recruit division commander
REM	rapid eye movement
RHE	Regimental Hold Element
ROM	restriction of movement
RPOC	recruit chief petty officer
RS	recruiting station
RSS	recruiting substation
RTC	Recruit Training Command
RTR	Recruit Training Regiment
SAPR	sexual assault prevention and response
SCD	Student Control Department
SecDef	Secretary of Defense
SDA	special duty assignment

SDI	senior drill instructor
SHARP	sexual harassment/assault response and prevention
SOI	School of Infantry
SWINTER	Servicewomen in Non-Traditional Environments and Roles
TCCC	tactical combat casualty care
TDY	temporary duty travel
TECOM	U.S. Marine Corps Training and Education Command
TRADOC	U.S. Army Training & Doctrine Command
UCMJ	Uniform Code of Military Justice
USAF	United States Air Force
USCG	United States Coast Guard
USMC	U.S. Marine Corps

Appendix B: Government-Furnished Documents Informing Literature Review

Appendix B: Government-Furnished Documents Informing Literature Review

This appendix provides the list of documents requested for review by USMC for the literature review. Some documents were obtained by the study team and others were provided by USMC. References in the first section appear in chronological order and with the same formatting as they appeared in the project's statement of work. References in the second section were provided by USMC and are listed in chronological order and with the same formatting as they appeared in the project's statement of work.

Government Reports

1. Defense Advisory Committee on Women in the Services Annual Reports, 1968 to Present.
2. Evaluation of Gender Integration at Recruit Training Command Orlando Naval Training Center, Orlando, Florida; Defense Equal Opportunity Management Institute, July 1992.
3. Presidential Commission on the Assignment of Women in the Armed Forces. Report to the President. 15 November 1992.
4. Attitudes Regarding the Assignment of Women in the Armed Forces: The Military Perspective. (Conducted for the Commission on the Assignment of Women in the Armed Forces, Roper Organization, Inc. September 1992).¹⁹⁰
5. New Opportunities for Military Women, Effects Upon Readiness, Cohesion, and Morale, RAND Corporation, 1997.
6. Gender Integration in Basic Training, GAO Testimony of Mark Gebick, Director, Military Operations and Capabilities issues, National Security and International Affairs Division, Before Subcommittee on Personnel, Committee on Armed Services, U.S. Senate, 1997.
7. Report of the Federal Advisory Commission on Gender-Integrated Training and Related Issues to the Secretary of Defense. ("Kassebaum Report"). 16 December 1997.
8. Gender Integration in Basic Training: The Services are Using a Variety of Approaches, Government Accountability Office, 1997.
9. Congressional Commission on Military Training and Gender-related Issues—Final Report, (Blair Commission Report) vols. I-IV, July 1999.
10. The Status of Gender Integration in the Military: Analysis of Selected Occupations. RAND National Defense Research Institute, 2002.
11. Women in the Armed Forces: A Report by the Employment of Women in the Armed Forces Steering Group, 2002.

¹⁸⁹ The study team was unable to obtain and review this document. The document was not available online, and the National Archives was closed to visitors because of the ongoing COVID-19 pandemic.

12. Mixed-Gender Basic Training: The U.S. Army Experience, 1973-2004. U.S. Army Training and Doctrine Command, 2008.
13. Challenge and Change in the Canadian Military: Gender and Diversity Issues. Canadian Forces Leadership Institute, 2004.
14. Women and Leadership in the Canadian Forces. Canadian Defence Academy Press, 2009.
15. Women in Ground Close Combat Roles: The Experiences of other Nations and a Review of the Academic Literature. Human Systems Group DSTL, 2009.
16. Transforming Traditions: Women, Leadership & the Canadian Navy 1942-2010. Canadian Defence Academy Press, 2010.
17. Women in Combat: Issues for Congress. Congressional Research Service (CRS). 08 November 2011.
18. Australian Human Rights Commission. Report on the Review into the Treatment of Women in the Australian Defence Force. Phase 1. 2011.
19. Australian Human Rights Commission. Report on the Review into the Treatment of Women in the Australian Defence Force. Phase 2. 2012.
20. Report to Congress on the Review of Laws, Policies and Regulations Restricting the Service of Female Members in the U.S. Armed Forces. Office of the Under Secretary of Defense Personnel and Readiness, February 2012.
21. An Analysis of Marine Corps Female Recruit Training Attrition. Center for Naval Analysis, December 2014.
22. Implications of Integrating Women into the Marine Corps Infantry. RAND Corporation, 2015.
23. Government Accountability Office, DoD is Expanding Service Opportunities for Women, but Should Monitor Long-Term Integration Progress, 2015.
24. Center for Naval Analysis, Options for Increasing Mixed-Gender Recruit Training in the Marine Corps, 2016.
25. Center for Naval Analysis, Assessment of Options to Increase Mixed-Gender Recruit Training in the Marine Corps, 2017.
26. An Assessment of Options for Increasing Gender Integration in Air Force Basic Military Training, RAND Corporation, 2018.

Government-Furnished Materials

1. Secretary of the Navy Instruction 3900.39D Human Research Protection Program, 2006.
2. Marine Corps Order 3900.18 Human Research Protection Program, 2010.

3. Department of Defense Instruction (DODI) 3216.04 Protection Of Human Subjects And Adherence To Ethical Standards In DoD-Supported Research, 2011.NAVMC 3500.18C. ELT Training and Readiness Manual, 2013.
4. Joint Secretary of Defense and Chairman of the Joint Chiefs of Staff Memorandum: Elimination of the 1994 Direct Ground Combat Definition and Assignment Rule, 2013.
5. Chairman of the Joint Chiefs of Staff Information Memorandum: Women in the Service Implementation Plan, 2013.
6. Marine Corps Recruit Training Physical Training Playbooks (Male and Female), 2015.
7. Fragmentary Order 4 (Implementation) to Marine Corps Force Integration Campaign Plan, 2015.
8. MCRDSD Depot Order 1510.32A, 2016.
9. Marine Corps Order 1510.32F, Recruit Training, 2016.
10. TECOM Order 1513 Recruit Training, 2016.
11. United States Army Training and Doctrine Command Regulation 350-6, Enlisted Initial Entry Training Policies and Administration, 2019.
12. MCRDPI Depot Order 1513.6G, 2019

Appendix C: Methodology of Literature Review

Appendix C: Methodology of Literature Review

This appendix provides an overview of the research methodology employed to support the literature review. The relevant literature consists of four components: policy documents, government research reports, public-facing DoD and Service-level information, and academic literature. Overall, the study team's approach to the literature review was to review and synthesize all required policy reports, government research reports, and USMC instructions and to search for any additional relevant reports in the grey literature to ensure the literature review is as comprehensive as possible.

Policy Documents

The research team systematically abstracted and reviewed all the Government-furnished documents in the Statement of Work, which included policies and instructions from DoD, Navy, Marine Corps, and the Army.

Government Research Reports

USMC listed policy-oriented studies and reports from government agencies, commissions, and contractors that have served to inform past and current practice around gender integration in the military. The study team retrieved all publicly available documents and worked with USMC Project Officers to obtain any documents that were not publicly available. All documents outlined in the Statement of Work were obtained with the exception of the 1992 report *Attitudes Regarding the Assignment of Women in the Armed Forces*, which was not publicly available because the National Archives remained closed because of the ongoing COVID-19 pandemic.

Public-Facing DoD and Service-Level Information

The research team also reviewed information on public-facing DoD and Service-level websites, including official websites for the Department of Defense, U.S. Army, U.S. Air Force, U.S. Navy, and U.S. Marine Corps.

Academic Literature

The study team also reviewed academic research products in the form of published systematic literature reviews, theoretical research pieces, and empirical studies that inform the assessment and development of alternate models of USMC recruit training. The study team conducted a literature search as comprehensively as possible within the allotted timeframe. The literature reviewed is not exhaustive, and there is a wealth of other information the study team could explore. The study team identified two domains at the core of the recruit training mission that guided the search for academic literature: the physical training and socialization required to transform recruits into Marines.

For the review of the academic literature, the study team searched for published studies related to gender integration, military service, and training. One search stream focused on the sociological aspects of gender-integrated training, specifically cohesion, leadership, mentorship, representation, tokenism, and gender integration, as well as studies of gender and sexual harassment and gender bias in training environments. Subject matter experts from University of

Maryland led the review of the relevant sociological literature. The study team also searched for published technical reports and peer-reviewed manuscripts that address the human performance and injury epidemiology implications of various types of gender-integrated training in USMC. Investigators from the University of South Carolina and the University of Pittsburgh led the human performance literature review.

The study team used PubMed.gov and Google Scholar to identify and search for academic literature. As listed in table B.1, the study team used numerous search terms in the review of academic literature. Researchers also used a snowball or tracing method by identifying additional, potentially relevant sources in the bibliography of key sources throughout the gathering and collecting of information.

Table B.1. Search Terms Used in Search for Relevant Literature

Search Term
National Defense Authorization Act for Fiscal Year 2020
Marine Corps integrated boot camp 2025
Parris Island integrated company
Marines + recruit training
Marines + entry level training
Marines + ELT
Marines Corps + recruit training
Marines Corps + entry level training
Marines Corps + ELT
Marines + injuries
Marines + injury
Marines Corps + injuries
Marines Corps + injury
Marines + injuries + recruit training
Marines + injury + recruit training
Marines + injuries + entry level training
Marines + injury + entry level training
Marines Corps + injuries + recruit training
Marines Corps + injury + recruit training
Marines Corps + injuries + entry level training
Marines Corps + injury + entry level training
Women military mentor role model
Military socialization entry
Marines Corps + performance
Military + performance
Military + aerobic capacity
Military + body composition
Predictors + performance
Military + endurance

Search Term
Military + strength
Military + flexibility
Military + power
Performance + training + occupation
Athlete + performance + predictors
Marine Corps + biomarkers
Military + biomarkers + predictors
Biomarkers + predictors + performance
Biomarkers + environment + stress
Fitness + tests + military

Appendix D: Recruit Social Science Survey Instrument

Appendix D: Recruit Social Science Survey Instrument

USMC Gender-Integrated Recruit Training Study [Service] Recruit Survey

Thank you for your participation. Please note you may skip any questions you do not wish to answer. Your answers will not affect your training in any way. Your answers will not be shared with your chain of command.

What is your gender?

- Female
- Male
- Prefer not to say

What is your age?

- 17–19
- 20–23
- 24–27
- 28–31
- 32–35
- 36 or older

Is your ethnicity Spanish/Hispanic/Latino?

- Yes, Spanish/Hispanic/Latino
- No, not Spanish/Hispanic/Latino
- Prefer not to say

What is your race? *Check all that apply.*

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or other Pacific Islander
- White
- Prefer not to say

What is your marital status?

- Never married
- Married
- Separated
- Divorced
- Widowed

What is the highest degree or level of school you have completed?

- High school diploma or equivalent (GED)
- Some college
- Associate's degree
- Bachelor's degree
- Master's degree or higher

Where do you consider home?

- Northeast (CT, ME, MA, NH, NY, RI, VT)
- Mid-Atlantic (DE, DC, MD, NJ, PA, VA, WV)
- Southeast (AL, FL, GA, KY, MS, NC, SC, TN)
- Midwest (IL, IN, MI, MN, OH, WI)
- Southwest (AR, LA, NM, OK, TX)
- Mountain Plains (CO, IA, KS, MO, MT, ND, NE, SD, UT, WY)
- Western (AK, AZ, CA, HI, ID, NV, OR, WA)
- U.S. Commonwealth and Territories (e.g., American Samoa, Guam, Puerto Rico, Virgin Islands)
- Elsewhere

Have any members of your family served in the military (active-duty, guard, or reserve)? *Check all that apply.*

- Mother
- Father
- Sibling
- Cousin
- Aunt or Uncle
- Grandparent
- Other family member

Why did you join the military? Check all that apply.

- Money for college, college repayment, and other education benefits
- Health care benefits
- Pay (including military retirement)
- Desire to serve your country
- Desire to travel and see new places
- Family history of military service
- Personal development, growth, and maturity
- Challenging or interesting work
- Building skills useful for civilian employment
- Security and stability of the job
- Test yourself physically or mentally
- To get away from family, personal situation, or hometown
- Other _____

How long do you see yourself serving on active duty?

- 2-4 years
- 5-8 years
- 9-12 years
- 13-16 years
- 17-20 years
- More than 20 years

During your time at recruit training, have you been trained by an instructor of the opposite sex?

- Yes
- No

During your time at recruit training, how closely have you trained with recruits of the opposite sex?

- Very closely
- Somewhat closely
- Not at all closely
- I have not trained with recruits of the opposite sex

In your opinion, at what level should male and female recruits train together in your Service's recruit training program? Check all that apply.

- [Service's lowest level unit level]
- [Service's next highest unit level]
- [Service's next highest unit level]
- [Service's highest unit level]
- Male and female recruits should not train together at all

Please rate your preference for more or less integration of men and women for the following aspects of recruit training (*check only one box for each line*):

	More integration	Satisfied with current integration	Less integration
Physical fitness training			
Classroom training			
Tactical/field training			
Inspections and training conducted in housing/sleeping quarters			

Imagine your Service increasing how frequently men and women train together at recruit training. Please rate your agreement and disagreement with the following statements (*check only one box for each line*):

	Disagree	Mostly Disagree	Neither	Mostly Agree	Agree
Recruits will maintain the same discipline and focus while training					
Recruits will maintain appropriate interactions during non-training time (e.g., meals, rest/recreation time)					
Training standards will be lowered					
Training standards will be raised					
Recruits will be better prepared for their first assignment					
Recruits will be less prepared for their first assignment					
I would feel more confident in my ability as a [Marine/Sailor/Soldier/Airman/Coast Guardsman]					

Again, imagine your Service increasing how frequently men and women train together at recruit training. From your perspective, please rate the likelihood of occurrence of the following items (*check only one box for each line*):

	More likely to occur	No difference	Less likely to occur
Training and mentorship from female instructors			
Training and mentorship from male instructors			
Fraternization (improper relationships) among recruits			
Sexual harassment and sexual assault among recruits			
Success in working with diverse team members			
Injuries among female recruits			
Injuries among male recruits			
Exposure to new ways of problem-solving			

	More likely to occur	No difference	Less likely to occur
Men dropping out of recruit training			
Women dropping out of recruit training			

Please rate how much you agree or disagree with each statement below (*check only one box for each line*):

	Disagree	Mostly Disagree	Neither	Mostly Agree	Agree
The members of my [<i>smallest recruit unit</i>] are cooperative with each other					
The members of my [<i>smallest recruit unit</i>] know that they can depend on each other					
When I face a difficult task, other recruits in my [<i>smallest recruit unit</i>] help out					
Recruits in my [<i>smallest recruit unit</i>] really respect one another					
My instructors at recruit training treat recruits fairly					
My instructors at recruit training treat me with respect					
I can rely on my instructors for help if I face a difficult problem during recruit training					

Who is best suited to serve in each type of military role (*check only one box for each line*)?

	Men	Women	Equally Men and Women
Drill instructors			
Infantry or combat roles			
Leaders at the highest levels of your Service			
Special Forces			
Intelligence roles			
Administrative roles			
Healthcare roles			
Engineering roles			

Please rate how much you agree or disagree with each statement below (*check only one box for each line*):

	Disagree	Mostly Disagree	Neither	Mostly Agree	Agree
It is usually better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family					
If a wife works, her husband should take a greater part in housework and childcare					
Most fathers should spend more time with their children than they do now					
Most mothers should spend more time with their children than they do now					
Parents should encourage just as much independence in their daughters as their sons					
Men and women should be paid the same money if they do the same work					
Women should be considered as seriously as men for jobs as executives or politicians					
A woman should have the same job opportunities as a man					
Women should be cherished and protected by men					
Many women get a kick out of teasing men by seeming sexually available and then refusing male advances					
In a disaster, women should be rescued before men					
When women lose to men in a fair competition, they typically complain about being discriminated against					

Appendix E: Recruit Focus Group Protocols

Appendix E: Recruit Focus Group Protocols

This appendix contains focus group protocols for Marine Corps recruits (weeks 2 and 11), and the other Services (Army, Air Force, Navy, and Coast Guard).

Marine Corps Recruit Focus Group Protocol, Week 2

Welcome and Ground Rules

[Orientation as participants arrive] As participants arrive, moderator and notetaker will invite participants to have a seat at the table, review the participants rights form and begin completing the survey. They will also invite participants to write their name on a name tent.

1. [WELCOME] Welcome, everyone, and thank you for joining today's discussion. We know you have busy schedules and we are glad you are all here for this discussion. My name is [NAME], and I am from a study team led by the University of Pittsburgh. University of Pittsburgh has been hired by the Marine Corps to talk to you and learn about your opinions on recruit training today. This discussion is part of a larger study being conducted by the Marine Corps to study recruit training. Your opinions are very valuable to informing that process. I'll be guiding today's conversation. My colleague, [NAME], will be taking notes.
 - a. Today we'd like to learn about your experiences at recruit training. You were invited to participate because you are currently in recruit training. In this discussion, you are the experts so my goal is to spend more time listening to you than I spend talking. That said, I do need to take care of a few housekeeping items and cover a few ground rules before we start.
2. [FORMS—NON WEARABLES SAMPLE] First, let's take care of some paperwork. Each of you should have received two documents when you arrived. One was a survey with a few questions about your background and your opinions on questions related to recruit training. The other was a participant rights form, which describes your rights as a participant in this discussion and asks if you agree to participate. To make sure everyone is comfortable with the terms of the discussion, lets read through the participant rights form together.
 - a. [FORMS—WEARABLES SAMPLE] First, let's take care of some paperwork. Each of you should have received a participant rights form when you arrived, which describes your rights as a participant in this discussion and asks if you agree to participate. To make sure everyone is comfortable with the terms of the discussion, lets read through the participant rights form together.
 - b. [READ PARTICIPANTS RIGHTS FORM ALOUD]
 - c. As it says on the form, your participation today is voluntary. By staying in the room, it shows us that you agree to participate and agree to the terms outlined in the form. However, you may leave and stop participating in the focus group at any time without penalty.

3. [GROUND RULES] Now I will go over a few ground rules.
- A focus group is a guided discussion. As the facilitator, I have a set of questions that I'd like to cover today, but we encourage open conversation.
 - The session will last about 90 minutes, and we will not take a formal break. Restrooms are located [INSERT RESTROOM LOCATION]. Please don't hesitate to step out at any time for whatever reason.
 - Your opinions and attitudes are important to us. Although we would like to hear from everyone, I'm not expecting everyone to answer all the questions. Feel free to chime in where you feel comfortable. We want this to be a group discussion.
 - We are taking notes to be sure we can accurately remember what everyone says. Only people working on the project will have access to these notes, and your responses will remain anonymous.
 - Our notes will be kept private and will not identify anyone by their real name. Our notes will not be shared with anyone in your chain of command.
 - Please speak one at a time, in a voice as loud as mine, and avoid side conversations. This will help me follow the discussion and it will also help us with our notes.
 - There may be times in the discussion where you feel differently from other people and we want to hear about that. Even though you may feel differently than people in this room, you represent others who aren't here today who may have similar feelings.
 - We want to hear the good and the bad – there are no right or wrong answers here, and we respect differences of opinion.
 - I have a lot of questions to cover, so I may need to interrupt you to keep the conversation moving. Please don't take it personally; it's simply to ensure we cover all our questions today.
 - This session is confidential; your names will not be associated with anything you say. We ask that you respect each other's privacy as well once we leave his room – in other words, what happens in the focus group stays in the focus group.
 - At the end of our study, our team will compile the results into a report. That report, which will go to Marine Corps leadership, will not identify anyone by name.
 - [QUESTIONS] Does anyone have any questions about the ground rules or about this discussion? *[Moderator to address any final questions; check with notetaker that all paperwork has been collected and is in order]*

Introductions

Thank you. Let's start with some introductory questions so we can get to know you better.

1. Now that you're at recruit training for the Marine Corps, what's the one thing you miss most about normal life?
2. What's the top reason you decided to join the Marine Corps over other Services?

3. When you told friends and family you were joining the Marine Corps, what did they say?

Interactions with Instructors and Leadership

Next, I want to ask you about the instructors and leaders you interact with at recruit training...

4. What are the characteristics of a good leader in the Marine Corps?
5. What do you see as the most important role of drill instructors in developing you as a Marine?
 - a. *[Probe if needed]*: teacher, mentor, coach, disciplinarian, leader, role model.
6. What are the characteristics of a good drill instructor?
 - a. *[Probe if needed]*: What are the characteristics of a bad drill instructor?
7. How often are you interacting with drill instructors, other instructors, staff, or leaders of the opposite sex?
 - a. *[Male groups]* What are three words you would use to describe male drill instructors?
 - b. *[Female groups]* What are three words you would use to describe female drill instructors?
8. How would you feel about being trained by *[opposite sex]* drill instructors?
 - a. *[Probe if needed]*: What are some reasons you may like being trained by drill instructors of the opposite sex? What are some reasons you wouldn't want to be trained by drill instructors of the opposite sex?
9. If the Marine Corps increased your interaction with *[opposite sex]* drill instructors, how, if at all, would that affect your training?
10. If you were in a tough situation here during recruit training, who would you go to for advice?
 - a. *[Probe if needed]*: drill instructor, other leader, chaplain, civilian advocate, ombudsman, etc.

Gender and Recruit Experiences at Recruit Training

Let's shift to talking about your experiences at recruit training...

11. What does it take to be a good Marine?
 - a. *[Probe if needed]* What, if any, are different challenges for men and women in becoming a good Marine?
12. What challenges or barriers do recruits face to successfully completing recruit training?
 - a. How, if at all, do these challenges and barriers differ for men and women?
13. *[MCRD PI only]* What is your understanding of how often and in what context you will interact with recruits of the opposite sex during recruit training?
 - a. *[Probe if needed]*: When do these interactions occur? What activities? At what point in the training cycle?

14. *[MCRD PI]* How often would you like to interact and train with recruits of the opposite sex during your time at recruit training?
 - a. *[MCRD SD]* I know female recruits are not regularly training here at MCRD San Diego, but if there were, how often would you like to interact and train with recruits of the opposite sex during your time at recruit training?
15. How would you benefit from interacting with *[opposite sex]* recruits?
16. What challenges, if any, would there be if male and female recruits had more interactions at recruit training?
17. What, if anything, would be different about your recruit training experience if the Marine Corps increased how much men and women trained together?
18. How would recruit training be different if men and women were living in the same space together?

Wrap-up and Closure

Let's move to our final questions to wrap up our discussion...

19. What have you heard, if anything, about the Marine Corps efforts to increase how often men and women train together at recruit training?
 - a. *[Probe if needed]*: Who/where did you hear that from? What do you think about it?
20. Based on your experience at recruit training so far, what is something the Marine Corps should keep in mind as they look to increase how much male and female recruits train together at recruit training?

[CONCLUDING FOCUS GROUP DISCUSSION] This concludes our discussion. Thank you for taking the time to share your knowledge with us. We will keep your information confidential—we ask that you please do so as well by not sharing what you heard with anyone else. You are welcome to take a copy of the participant rights form with you, it includes contact information if you have any questions about the study. We invite you to participate in another focus group discussion with this group during Week 11 of your training. Once again, thank you very much for participating in this discussion today.

Marine Corps Recruit Focus Group Protocol, Week 11

Welcome and Ground Rules

[Orientation as participants arrive] As participants arrive, moderator and notetaker will invite participants to have a seat at the table, review the participants rights form and begin completing the survey. They will also invite participants to write their name on a name tent.

1. [WELCOME] Welcome, everyone, and thank you for joining today's discussion. You may remember participating in a focus group discussion like this several weeks ago. We would like to hear more about your experiences in recruit training now that you've almost finished your training cycle. We know you have busy schedules and we are glad you are all here for this discussion again. While you may remember some of the information from last time, I am going to go over everything again so we're on the same page.

My name is [NAME], and I am from a study team led by the University of Pittsburgh. University of Pittsburgh has been hired by the Marine Corps to talk to you and learn about your opinions on recruit training today. This discussion is part of a larger study being conducted by the Marine Corps to study recruit training. Your opinions are very valuable to informing that process. I'll be guiding today's conversation. My colleague, [NAME], will be taking notes.

Today we'd like to learn about your experiences at recruit training. You were invited to participate because you are currently in recruit training. In this discussion, you are the experts so my goal is to spend more time listening to you than I spend talking. That said, I do need to take care of a few housekeeping items and cover a few ground rules before we start.

First, let's take care of some paperwork. Each of you should have received a participant rights form when you arrived, which describes your rights as a participant in this discussion and asks if you agree to participate. To make sure everyone is comfortable with the terms of the discussion, let's read through the participant rights form together.

[READ PARTICIPANTS RIGHTS FORM ALOUD]

As it says on the form, your participation today is voluntary. By staying in the room, it shows us that you agree to participate and agree to the terms outlined in the form. However, you may leave and stop participating in the focus group at any time without penalty.

2. [GROUND RULES] Now I will go over a few ground rules.
 - A focus group is a guided discussion. As the facilitator, I have a set of questions that I'd like to cover today, but we encourage open conversation.
 - The session will last about 90 minutes, and we will not take a formal break. Restrooms are located [INSERT RESTROOM LOCATION]. Please don't hesitate to step out at any time for whatever reason.
 - Your opinions and attitudes are important to us. Although we would like to hear from everyone, I'm not expecting everyone to answer all the questions. Feel free to chime in where you feel comfortable. We want this to be a group discussion.

- We are taking notes to be sure we can accurately remember what everyone says. Only people working on the project will have access to these notes, and your responses will remain anonymous.
- Our notes will be kept private and will not identify anyone by their real name. Our notes will not be shared with anyone in your chain of command.
- Please speak one at a time, in a voice as loud as mine, and avoid side conversations. This will help me follow the discussion and it will also help us with our notes.
- There may be times in the discussion where you feel differently from other people and we want to hear about that. Even though you may feel differently than people in this room, you represent others who aren't here today who may have similar feelings.
- We want to hear the good and the bad – there are no right or wrong answers here, and we respect differences of opinion.
- I have a lot of questions to cover, so I may need to interrupt you to keep the conversation moving. Please don't take it personally; it's simply to ensure we cover all our questions today.
- This session is confidential; your names will not be associated with anything you say. We ask that you respect each other's privacy as well once we leave his room – in other words, what happens in the focus group stays in the focus group.
- At the end of our study, our team will compile the results into a report. That report, which will go to Marine Corps leadership, will not identify anyone by name.
- [QUESTIONS] Does anyone have any questions about the ground rules or about this discussion? *[Moderator to address any final questions; check with notetaker that all paperwork has been collected and is in order]*

Introductions

Thank you. Let's start with some introductory questions...

1. Now that you've almost finished your time at MCRD [*Parris Island/San Diego*], what are you most looking forward to about your next Marine Corps training program?
2. What was your favorite memory from your time at recruit training so far?

Service Values

Now I want to talk about Marine Corps values...

3. In your own words, what would you say are the values of the Marine Corps?
4. How are those values reinforced in recruit training?

Interactions with Instructors and Leadership

Next, I want to ask you about the instructors and leaders you interact with at recruit training...

5. What are the characteristics of a good leader in the Marine Corps?
6. What are the characteristics of a good drill instructor?
 - a. *[Probe if needed]*: What are the characteristics of a bad drill instructor?
7. How often are you interacting with drill instructors, other instructors, staff, or leaders of the opposite sex?
8. What are three words you would use to describe male drill instructors?
 - a. What are three words you would use to describe female drill instructors?
9. How would [or do] you feel about being trained by *[opposite sex]* drill instructors?
 - a. *[Probe if needed]*: What are some reasons you may like being trained by drill instructors of the opposite sex? What are some reasons you wouldn't want to be trained by drill instructors of the opposite sex?
10. If the Marine Corps increased your interaction with *[opposite sex]* drill instructors, how, if at all, would that affect your training?
11. How would you feel about having two sets of drill instructor teams with one drill instructor team for your squad bay time and one for your daytime training activities?

Gender and Recruit Experiences at Recruit Training

Let's shift to talking about your experiences as a recruit at recruit training...

12. What challenges or barriers do recruits face to successfully completing recruit training?
 - a. How, if at all, do these challenges and barriers differ for men and women?
13. You have officially become a Marine. In your opinion, what does it take to become a good Marine?
 - a. *[Probe if needed]*: What, if any, are different challenges for men and women in becoming a good Marine?
14. How often and in what context did you interact with recruits of the opposite sex during your training?
 - a. *[Probe if needed]*: When do these interactions occur? What activities? At what point in the training cycle?
15. Thinking about your experiences during recruit training, what, if any, differences exist in the way male and female recruits are talked about or talked to by other recruits, instructors or leaders?
16. How much of a concern or problem is sexual harassment or sexual assault in the recruit training environment?
17. *[MCRD PI]* How often would you like to interact and train with recruits of the opposite sex during your time at recruit training?
18. How would you benefit from interacting with *[opposite sex]* recruits?
19. What challenges, if any, would there be if male and female recruits had more interactions at recruit training?

20. What, if anything, would be different about your recruit training experience if the Marine Corps increased how much men and women trained together?
21. What, if anything, would be different about your recruit training experience if you fell out of your platoons in the morning and came together to form an integrated platoon with men and women for your daytime training activities?
22. How would recruit training be different if men and women were living in the same space together?
23. I'd like you to think about your opinion of [*opposite sex*] Marines before you came to recruit training. How, if at all, has your opinion changed or evolved during recruit training?

Wrap-up and Closure

Let's move to our final questions to wrap up our discussion...

24. How well prepared do you feel for your next training assignment where men and women will train together more regularly?
25. What is one way the Marine Corps could improve recruit training for women?
26. If you were designing a new version of Marine Corps recruit training that offers more opportunities for male and female recruits to interact and work together, what would you do?
 - a. [*Probe if needed*]: When would men and women work together? How often would they work together? Would they live in the same building?
27. Based on your experience at recruit training, what is something the Marine Corps should keep in mind as they look to increase how much male and female recruits train together at recruit training?

[CONCLUDING FOCUS GROUP DISCUSSION] This concludes our discussion. Thank you for taking the time to share your knowledge with us. We will keep your information confidential—we ask that you please do so as well by not sharing what you heard with anyone else. You are welcome to take a copy of the participant rights form with you, it includes contact information if you have any questions about the study. Once again, thank you very much for participating in this discussion today.

Army, Air Force, Navy, and Coast Guard Recruit Focus Group Protocol

Welcome and Ground Rules

[Orientation as participants arrive] As participants arrive, moderator and notetaker will invite participants to have a seat at the table, review the participants rights form and begin completing the survey. They will also invite participants to write their name on a name tent.

1. [WELCOME] Welcome, everyone, and thank you for joining today's discussion. We know you have busy schedules and we are glad you are all here for this discussion. My name is [NAME], and I am from a study team led by the University of Pittsburgh. University of Pittsburgh has been hired by the Marine Corps to talk to you and learn about your opinions on recruit training today. This discussion is part of a larger study being conducted by the Marine Corps to study recruit training. Your opinions are very valuable to informing that process. I'll be guiding today's conversation. My colleague, [NAME], will be taking notes.

Today we'd like to learn about your experiences at recruit training. You were invited to participate because you are currently in recruit training. In this discussion, you are the experts so my goal is to spend more time listening to you than I spend talking. That said, I do need to take care of a few housekeeping items and cover a few ground rules before we start.

2. [FORMS] First, let's take care of some paperwork. Each of you should have received two documents when you arrived. One was a survey with a few questions about your background and your opinions on questions related to recruit training. The other was a participant rights form, which describes your rights as a participant in this discussion and asks if you agree to participate. To make sure everyone is comfortable with the terms of the discussion, lets read through the participant rights form together.

[READ PARTICIPANTS RIGHTS FORM ALOUD]

As it says on the form, your participation today is voluntary. By staying in the room, it shows us that you agree to participate and agree to the terms outlined in the form.

3. [GROUND RULES] Now I will go over a few ground rules.
 - A focus group is a guided discussion. As the facilitator, I have a set of questions that I'd like to cover today, but we encourage open conversation.
 - The session will last about 90 minutes, and we will not take a formal break. Restrooms are located [INSERT RESTROOM LOCATION]. Please don't hesitate to step out at any time for whatever reason.
 - Your opinions and attitudes are important to us. Although we would like to hear from everyone, I'm not expecting everyone to answer all the questions. Feel free to chime in where you feel comfortable. We want this to be a group discussion.

- We are taking notes to be sure we can accurately remember what everyone says. Only people working on the project will have access to these notes, and your responses will remain anonymous.
- Our notes will be kept private and will not identify anyone by their real name. Our notes and your answers to the survey will not be shared with anyone in your chain of command.
- Please speak one at a time, in a voice as loud as mine, and avoid side conversations. This will help me follow the discussion and it will also help us with our notes.
- There may be times in the discussion where you feel differently from other people and we want to hear about that. Even though you may feel differently than people in this room, you represent others who aren't here today who may have similar feelings.
- We want to hear the good and the bad – there are no right or wrong answers here, and we respect differences of opinion.
- I have a lot of questions to cover, so I may need to interrupt you to keep the conversation moving. Please don't take it personally; it's simply to ensure we cover all our questions today.
- This session is confidential; your names will not be associated with anything you say. We ask that you respect each other's privacy as well once we leave his room – in other words, what happens in the focus group stays in the focus group.
- At the end of our study, our team will compile the results into a report. That report, which will go to Marine Corps leadership, will not identify anyone by name.
- [QUESTIONS] Does anyone have any questions about the ground rules or about this discussion? *[Moderator to address any final questions; check with notetaker that all paperwork has been collected and is in order]*

Introductions

Thank you. Let's start with some introductory questions so we can get to know you better.

1. Now that you're at recruit training for [Service], what's the one thing you miss most about normal life?
2. What's the top reason you decided to join [Service] over other Services?
3. When you told friends and family you were joining the [Service], what did they say?

Interactions with Instructors and Leadership

Next, I want to ask you about the instructors and leaders you interact with at recruit training...

4. What are the characteristics of a good leader in the [Service]?
5. What do you see as the most important role of [drill instructors] in developing you as a [Soldier, Sailor, Airmen, Coast guardsman]?
6. *[Probe if needed]*: teacher, mentor, coach, disciplinarian, leader, role model.
7. What are the characteristics of a good [drill instructor]?

- a. [*Probe if needed*]: What are the characteristics of a bad [*drill instructor*]?
- 8. Are your [*drill instructors*] men, women, or a mix of men and women?
 - a. When do you interact with male [*drill instructors*]? When do you interact with female [*drill instructors*]?
- 9. What are three words you would use to describe male [*drill instructors*]?
- 10. What are three words you would use to describe female [*drill instructors*]?
- 11. Do you prefer male or female [*drill instructors*]? Tell me why.
- 12. If your Service increased your interaction with [*oppose sex*] [*drill instructors*], how, if at all, would that affect your training?
- 13. If you were in a tough situation here during recruit training, who would you go to for advice?
 - a. [*Probe if needed*]: [*drill instructor*], other leader, chaplain, civilian advocate, ombudsman, etc.

Gender and Recruit Experiences at Recruit Training

Let's shift to talking about your experiences as a recruit at recruit training...

- 14. What does it take to become a good [*Soldier, Sailor, Airmen, Coast Guardsman*]?
- 15. What challenges or barriers do recruits face to successfully completing recruit training?
 - a. How, if at all, do these challenges and barriers differ for men and women?
- 16. I'd like for you to think about your observations on how male and female recruits are treated at recruit training and whether they are treated the same or differently. By a show of hands, how many of you feel men and women are treated differently at recruit training? [*Count the number of hands aloud for the notetaker*]
 - a. [*If recruits felt men and women are mostly treated differently*] Tell me about how men and women are treated differently at recruit training.
 - b. [*If recruits felt men and women are mostly treated the same*] Tell me about a recent experience where men and women were treated the same at recruit training.
- 17. How often and in what context do you interact with recruits of the opposite sex?
 - a. [*Probe if needed*]: When do these interactions occur? What activities? At what point in the training cycle?
- 18. What, if anything, would be different about your recruit training experience if the [*Service*] increased how much men and women trained together?
- 19. How would recruit training feel if men and women were living in the same space together?
- 20. How do you think your recruit training experience would be different if you only trained with [*the same gender as participants*]?

Wrap-up and Closure

Let's move to our final questions to wrap up our discussion...

21. What is one way your Service could improve recruit training for women?
22. The Marine Corps is seeking to increase how much male and female recruits train together. Based on your experience, what is something the Marine Corps should keep in mind as they to do this?

[CONCLUDING FOCUS GROUP DISCUSSION] This concludes our discussion. Thank you for taking the time to share your knowledge with us. We will keep your information confidential—we ask that you please do so as well by not sharing what you heard with anyone else. You are welcome to take a copy of the participant rights form with you, it includes contact information if you have any questions about the study. Once again, thank you very much for participating in this discussion today.

Appendix F: Training Cadre and Instructor Interview Protocol

Appendix F: Training Cadre and Instructor Interview Protocol

Training Cadre and Instructor Interview Protocol

Overview of Study

Hello [INTERVIEWEE NAME]. My name is [NAME] and I am part of a study team led by the University of Pittsburgh. University of Pittsburgh was contracted by the Marine Corps to conduct a comprehensive study about the issues, challenges, and opportunities related to gender integration at recruit training. The purpose of the study is to help support the Marine Corps as it considers alternative approaches to gender integration at recruit training. Our study involves collecting information from the Army, Navy, Air Force, Coast Guard, and Marine Corps.

You were selected to be part of this study because of your unique perspective as [INSERT DESCRIPTION OF ROLE] at [INSTALLTION]. Over the course of the study, we'll be talking to other people like you as well as training command Service leadership and recruits from the Marine Corps and other Services. [For USMC] Part of our research involves gathering information from individuals at both MCRD Parris Island and MCRD San Diego to make sure we hear all different perspectives.

At the end of our study, we'll be compiling the results into a comprehensive report for the Marine Corps. Your responses today will not be linked to your name and no names will be included in our report.

Before we get started, I want to go over the expectations of participating in this study.

[REVIEW CONSENT FORM]

As it mentioned in the consent form, I'd like to audio record this conversation to make sure we accurately capture what you said. Only people working on this study will have access to the recording. As a reminder, your participation is completely voluntary and will not affect your job in any way. If you choose not to participate or choose not to answer any questions, you will not be affected in any way. This interview should take approximately 1 hour. We thank you for your time today to take part in this study.

[START RECORDER]

To confirm what we just discussed, today is [Month] [Day] [Year] at [Time]. Now that the recording has started, do you agree to participate in today's interview?

A. Introduction

First, I'd like to begin by talking about your role and responsibilities in your current position...

1. Tell me about your role at [installation] and your day-to-day responsibilities.
2. How long have you been in this position and/or at [installation]?

[If Air Force, Army, Navy, or Coast Guard proceed to Section B]

[If Marine Corps proceed to Section C]

B. [Army, Air Force, Navy, or Coast Guard Only] Challenges and Opportunities for Gender Integration at Recruit Training

As we discussed when we started the interview, we are here to study how your Service approaches gender integration at recruit training to inform our recommendations to the Marine

Corps for gender integration in their recruit training. The Marine Corps is working under a Congressional mandate to further integrate their recruit training within the next 4-7 years. Currently, the Marine Corps is piloting mixed gender Companies at Parris Island, however platoons remain single-gender for the duration of their training and drill instructors always train same-gender recruits (e.g., male drill instructors train male recruits, female drill instructors train female recruits).

1. In your experience as a [position], what are the most important things we as the research team need to consider about gender integration and recruit training?
 - a. [Probe if needed]: Infrastructure/facilities, social and cultural norms, physical training, injuries and injury rates, attrition of male and female recruits, staffing scheduling/availability, training schedules, standards, sexual harassment/sexual assault, fraternization, ratios of male and female recruits, etc.
2. How does your Service define gender integration in recruit training?
 - a. [Probe if needed]: integration of recruits, mixed gender interactions between recruits and instructors, quantity and quality of interactions during training, etc.
3. What are some of the biggest challenges your Service faces with gender integrated recruit training?
4. What are the benefits of gender integrated recruit training for your Service...?
 - a. ...in the recruit training environment?
 - b. ...in initial follow-on training and first assignments?
 - c. ...in a [Soldier/Sailor/Airmen/Coast guardsman]'s career?
5. What impact does gender integrated recruit training have on male recruits and female recruits?
 - a. How does recruit training shape recruits' social and cultural understanding of gender in your Service?
 - b. [Probe if needed]: through formal instruction and training, informal instruction or interactions, direct or indirect Service messages.
 - c. How, if at all, does recruit training shift recruits' ideas about gender they bring in from their home environments?
 - d. How does physically demanding training differ when men and women are training together versus training separately?
6. What challenges, if any, do female recruits face that are different than male recruits?
 - a. [Probe if needed]: Physical training, injuries and injury rates, attrition, meeting standards, sexual harassment/sexual assault, social interactions with same-gender or opposite gender recruits, minority status/low numbers at recruit training, etc.
7. What challenges, if any, do female instructors/training cadre face that are different than male instructors/training cadre?
 - a. [Probe if needed]: Schedules and duties, sexual harassment/sexual assault, gender bias or expectations, minority status/low numbers on staff, etc.

8. *[Drill instructors or those working directly with recruits]* How well does your Service prepare you to work with recruits of the opposite gender at recruit training?
 - a. How could your Service better prepare instructors for working with recruits of the opposite gender?
9. *[Drill instructors or those working directly with recruits]* What opportunities do you have to provide one-on-one mentorship and counseling with recruits?
 - a. Does this vary by the gender of recruits and instructors?
 - b. *[Probe if needed]*: What if recruits need to discuss a personal problem or a sensitive issue, who are they able to turn to?
10. Tell me about the most common sexual harassment and sexual assault issues at *[installation]* involving recruits.
 - a. What safeguards or mitigation measures have helped to reduce the prevalence of sexual harassment?
11. What would your Service lose if recruits had less interactions with recruits of the opposite gender? (e.g., if male recruits did not interact as much with female recruits)
12. What would your Service lose if recruits had less interactions with instructors of the opposite gender? (e.g., if male recruits did not interact as much with female instructors)
13. Based on your experience, what are some barriers a Service would face if they were trying to increase gender integration at recruit training?
 - a. *[Probe if needed]*: Physical infrastructure, drill instructor activities conducted in sleeping quarters, social and cultural norms, staffing schedules and availability, incoming proportion of male/female recruits, recruit safety, etc.
14. What recommendations do you have for the Marine Corps as they seek to increase gender integration at recruit training?

[Proceed to Section D for wrap-up and conclusion questions]

C. [USMC Only] Challenges and Opportunities for Gender Integration at Recruit Training

As we discussed when we started the interview, we are here to study recruit training, at the Marine Corps and the Sister Services, to inform our recommendations to the Marine Corps on future gender integration models for recruit training. We're interested in hearing about your experiences with the "on-track"/legacy model of recruit training, the integrated company model, and your thoughts on increasing gender integration at recruit training in the coming years.

1. In your experience as a *[position]*, what are the most important things we as the research team need to consider about gender integration and recruit training in the Marine Corps?
 - a. *[Probe if needed]*: Infrastructure/facilities, drill instructor activities conducted in sleeping quarters, social and cultural norms, physical training, injuries and injury rates, attrition of male and female recruits, staffing scheduling/availability, training schedules, standards, sexual harassment/sexual assault, fraternization, ratios of male and female recruits, etc.

2. How does the Marine Corps define gender integration in recruit training?
 - a. [*Probe if needed*]: integration of recruits, mixed gender interactions between recruits and instructors, quantity and quality of interactions during training, etc.
3. In your opinion, what is working well with the way the Marine Corps currently structures male and female recruits in recruit training?
 - a. [*Probe if needed*]: On-track/legacy model versus integrated company model
 - b. [*Probe if needed, MCRD SD only*]: In your opinion, what is working well with male-only recruit training at MCRD San Diego?
4. What could be improved about the way the Marine Corps structures male and female recruits to better produce Marines?
 - a. [*Probe if needed, MCRD SD only*]: What is missed at MCRD San Diego for male recruits because there are no female recruits in the training pipeline or on-site (aside from the February 2021 pilot)?
5. In your opinion, what are some of the biggest challenges the Marine Corps would face with increasing gender integration at the company level at recruit training?
 - a. [*Probe if needed*]: What would the Marine Corps lose if it increased gender integration at the company-level during recruit training?
6. In your opinion, what are some of the biggest challenges the Marine Corps would face with increasing gender integration at the platoon level at recruit training?
 - a. [*Probe if needed*]: What would the Marine Corps lose if it increased gender integration at the platoon-level during recruit training?
7. What would be some of the benefits of increasing the frequency of gender-integrated companies at recruit training?
 - a. How would male and female recruits' benefit?
 - b. How would drill instructors and training cadre benefit?
 - c. How would the broader Marine Corps benefit?
8. What would be some of the benefits of integrating men and women at the platoon level?
 - a. How would male and female recruits' benefit?
 - b. How would drill instructors and training cadre benefit?
 - c. How would the broader Marine Corps benefit?
9. What challenges, if any, do female recruits face that are different than male recruits?
 - a. [*Probe if needed*]: Physical training, injuries and injury rates, attrition, meeting standards, sexual harassment/sexual assault, social interactions with same-gender or opposite gender recruits, minority status/low numbers at recruit training, etc.
10. What challenges, if any, do female instructors/training cadre face that are different than male instructors/training cadre?

- a. *[Probe if needed]*: Schedules and duties, sexual harassment/sexual assault, gender bias or expectations, minority status/low numbers on staff, etc.
11. How does Marine Corps recruit training shape recruits' social and cultural understanding of gender?
 - a. *[Probe if needed]*: through formal instruction and training, informal instruction or interactions, direct or indirect Service messages.
 - b. How, if at all, does recruit training shift recruits' ideas about gender they bring in from their home environments?
 - c. How does physically demanding training differ when men and women are training closer together versus training completely separately?
 12. *[Drill instructors or those working directly with recruits]* What opportunities do you have to provide one-on-one mentorship and counseling with recruits?
 - a. *[Probe if needed]*: What if recruits need to discuss a personal problem or a sensitive issue, who are they able to turn to?
 13. Tell me about the most common sexual harassment and sexual assault issues at *[installation]* involving recruits.
 - a. What safeguards or mitigation measures have helped to reduce the prevalence of sexual harassment?
 14. In your opinion, what are the major benefits and drawbacks of the same-sex drill instructor and recruit model?
 15. What barriers would the Marine Corps face if they wanted recruits to be trained by Marines of both genders at recruit training?
 16. *[Drill instructors or those working directly with recruits]* What would you need to feel prepared to train recruits of the opposite gender?

D. Wrap-up and Conclusion

Let's wrap up with a few concluding questions to make sure we've covered everything you'd like to share with us today...

1. Is there anything else you want us to know that we haven't already covered?
2. What were you expecting us to ask about that we didn't?
3. Is there anyone else you recommend we talk at *[installation]*?

Thank you very much for your time today and sharing your thoughts with us.

[End recording]

Appendix G: Service Leader Interview Protocols

Appendix G: Service Leader Interview Protocols

This appendix contains Service leader interview protocols for the Marine Corps and the other Services (Army, Air Force, Navy, and Coast Guard).

Marine Corps Service Leader Interview Protocol

Overview of Study

Hello [INTERVIEWEE NAME]. My name is [NAME] and I am part of a study team led by the University of Pittsburgh. University of Pittsburgh was contracted by the Marine Corps to conduct a comprehensive study about the issues, challenges, and opportunities related to gender integration at recruit training. The purpose of the study is to help support the Marine Corps as it considers alternative approaches to gender integration at recruit training. Our study involves collecting information from the Army, Navy, Air Force, Coast Guard, and Marine Corps.

You were selected to be part of this study because of your unique perspective as [INSERT DESCRIPTION OF ROLE] at [COMMAND]. Over the course of the study, we'll be talking to senior leaders like you as well as instructors and members of the training cadre at recruit training sites, and recruits from the Marine Corps and other Services.

At the end of our study, we'll be compiling the results into a comprehensive report for the Marine Corps. Your responses today will not be linked to your name and no names will be included in our report. However, we will be identifying the types of senior leaders we talked to in a broad way, such as senior leaders from training and doctrine commands.

Before we get started, I want to go over the expectations of participating in this study.

[REVIEW CONSENT FORM]

As is mentioned in the consent form, I'd like to audio record this conversation to make sure we accurately capture what you said. Only people working on this study will have access to the recording. As a reminder, your participation is completely voluntary and will not affect your job in any way. If you choose not to participate or choose not to answer any questions, you will not be affected in any way. This interview should take approximately 1 hour. We thank you for your time today to take part in this study.

[START RECORDER]

To confirm what we just discussed, today is [Month] [Day] [Year] at [Time]. Now that the recording has started, do you agree to participate in today's interview?

Introduction

We would like to begin by talking about your role and responsibilities in your current position...

1. What are your primary areas of responsibility at [Command]?
 - a. How long have you been in this position or at this command?
2. [If not already addressed] How does your role relate to Marine Corps recruit training?

Recruit Training Basics

Now I'd like to hear about recruit training, and how it prepares recruits to Marines...

3. What are the major goals and objectives of Marine Corps recruit training?
 - a. How do you know you're successfully meeting these goals and objectives? Are there clear metrics or identified measurements?
 - b. In your opinion, how well are these goals actually being met?
 - i. Where do you see the need for improvement or change?
4. How does recruit training teach recruits about the values and expected social norms of your Service?
 - a. Which specific activities and opportunities are used to inculcate these values and norms during recruit training?
 - b. What, if any, are informal ways these values and norms are taught or reinforced during recruit training?
5. How does a recruit's experience in recruit training shape their trajectory throughout service, from their first assignment to when they leave or retire from the military?
6. In your own words, tell me how Marine Corps recruit training is unique compared to the other Services.
 - a. How is Marine Corps recruit training similar to recruit training in other Services?

Gender Integration and Recruit Training

Next, I'd like to discuss gender integration and the recruit training environment...

7. How does your Service define gender integration in recruit training?
 - a. [*Probe if needed*]: integration of recruits, mixed gender interactions between recruits and instructors, quantity and quality of interactions during training, etc.
8. The Marine Corps has trained male and female recruits separately until piloting integrated companies in 2019. Tell me about the Marine Corps rationale for maintaining a separation of men and women in the entry-level training pipeline with recruit training.
9. What are the benefits of training men and women separately at recruit training?
 - a. Benefits for male and female recruits?
 - b. Benefits for drill instructors and training cadre?
 - c. Benefits for the broader Marine Corps?
10. What have been the challenges of training men and women separately at recruit training?
 - a. [*Probe if needed*]: challenges for recruits, drill instructors/training cadre, Service leadership, broader Marine Corps force
 - b. What, if any, are the different challenges at MCRD PI versus MCRD SD because of the presence/absence of female recruits?
11. What might be the benefits of increasing gender integration at recruit training?
 - a. [*Probe if needed*]: benefits for recruits, drill instructors/training cadre, Service leadership, broader Marine Corps

12. I'd like to hear your thoughts on the integrated company model pilots that have been running at MCRD PI since 2019. What has the Marine Corps learned from these pilots related to increasing gender integration at recruit training?
 - a. What metrics or outcome measurements, if any, are used to understand the success of the integrated company pilots?
13. In February 2021, the first integrated company pilot occurred at MCRD SD. How was that pilot in comparison to the ones at MCRD PI?
 - a. What unique challenges or issues, if any, arose from piloting integration at MCRD SD?
14. What is the Marine Corps responsibility to train and socialize appropriate, equitable gender attitudes in recruits?
 - a. [*Probe if needed*]: If you had to give your Service a letter grade (between A and F) on its ability to train and socialize equitable gender attitudes in recruits, what grade would you give it and what are the reasons you would give it that grade?
 - b. When does the socialization process for gender equity begin in your Service?
 - i. Can you provide some examples of this socialization process that are top of mind?

Challenges and Opportunities with Gender-Integrated Recruit Training

Let's discuss some more specific challenges and opportunities with gender-integrated recruit training...

15. What challenges, if any, do female recruits face that are different than male recruits?
 - a. [*Probe if needed*]: Physical training, injuries and injury rates, attrition, meeting standards, sexual harassment/sexual assault, social interactions with same-gender or opposite gender recruits, minority status/low numbers at recruit training, etc.
 - b. [*Probe if needed*]: Specific challenges with legacy/on-track versus integrated company model
16. What challenges, if any, do female instructors/training cadre face that are different than male instructors/training cadre?
 - a. [*Probe if needed*]: Schedules and duties, sexual harassment/sexual assault, gender bias or expectations, minority status/low numbers on staff, etc.
 - b. [*Probe if needed*]: Specific challenges with legacy/on-track versus integrated company model
17. How big of an issue is sexual harassment and sexual assault at the MCRDs?
 - a. What safeguards or mitigation measures have helped to reduce the prevalence of sexual harassment and sexual assault at recruit training for your Service?
 - b. How concerned are you about sexual harassment and sexual assault if the Marine Corps increased gender integration at recruit training?
 - i. What are your specific concerns?

18. What are some of the biggest challenges the Marine Corps anticipates with increasing gender integration at recruit training?
 - a. *[Probe if needed]*: Infrastructure/facilities, social and cultural norms, physical training, injuries and injury rates, attrition of male and female recruits, staffing scheduling/availability, training schedules, standards, sexual harassment/sexual assault, fraternization, ratios of male and female recruits, etc.
 - b. *[Probe if needed]*: Challenges specific to MCRD PI or MCRD SD
19. What are some of the biggest benefits or new opportunities the Marine Corps anticipates with increasing gender integration at recruit training?
20. What are lessons learned from the gender-integrated training that occurs after recruit training, such as Marine Combat Training (MCT) and Infantry Training Battalion (ITB), or other gender-integrated training in the Marine Corps?
21. The Center for Naval Analysis (CNA) provided options for increasing mixed-gender recruit training in the Marine Corps with reports in September 2016 and August 2017. Tell me about how those recommendations were received by your command.
 - a. *[Probe if needed]*: proposed re-organization of training battalions, mixed-gender companies, implementing drill instructor teams with mixed genders, integrating for specific activities in program of instruction, and increasing pool of drill instructor candidates.
 - b. What were some of the high-level discussion points following the recommendations from the CNA reports?
 - c. What recommendations from the CNA reports seemed most do-able or able to be easily implemented?

Looking ahead to gender-integration at Marine Corps Recruit Training

As we discussed when we started the interview, we are here to generate independent, data-driven recommendations to the Marine Corps for gender integration in their recruit training. I'd like to ask a few questions about how the Marine Corps envisions recruit training in the future...

22. The 2020 National Defense Authorization Act (NDAA) language states that the Marine Corps recruit training “may not be segregated based on gender.” Tell me more about how Marine Corps interprets that language from Congress. What does it mean for training to not be “segregated based on gender”?
23. If Congress or higher authorities were to mandate the Marine Corps to integrate at the lowest levels, similar to other Services, what do you think would be required to make that happen?
24. In your experience as a *[position]*, what are the most important things we as the research team need to consider about recommendations for gender integration and Marine Corps recruit training?

Wrap-up and Conclusion

Let's wrap up with a few concluding questions to make sure we've covered everything in our discussion today...

25. Is there anything else you want us to know that we haven't already covered?
26. What were you expecting us to ask about that we didn't?
27. Is there anyone else you recommend we talk at [*command*] or within your Service's leadership?

Thank you very much for your time today and sharing your thoughts with us. If you have anything else you'd like our study team to know, please feel free to contact us at [name], [email], or [phone number]. [End recording]

Other Services' Service Leader Interview Protocol

Overview of Study

Hello [INTERVIEWEE NAME]. My name is [NAME] and I am part of a study team led by the University of Pittsburgh. University of Pittsburgh was contracted by the Marine Corps to conduct a comprehensive study about the issues, challenges, and opportunities related to gender integration at recruit training. The purpose of the study is to help support the Marine Corps as it considers alternative approaches to gender integration at recruit training. Our study involves collecting information from the Army, Navy, Air Force, Coast Guard, and Marine Corps.

You were selected to be part of this study because of your unique perspective as [INSERT DESCRIPTION OF ROLE] at [COMMAND]. Over the course of the study, we'll be talking to senior leaders like you as well as instructors and members of the training cadre at recruit training sites, and recruits from the Marine Corps and other Services.

At the end of our study, we'll be compiling the results into a comprehensive report for the Marine Corps. Your responses today will not be linked to your name and no names will be included in our report. However, we will be identifying the types of senior leaders we talked to in a broad way, such as senior leaders from training and doctrine commands.

Before we get started, I want to go over the expectations of participating in this study.

[REVIEW CONSENT FORM]

As it mentioned in the consent form, I'd like to audio record this conversation to make sure we accurately capture what you said. Only people working on this study will have access to the recording. As a reminder, your participation is completely voluntary and will not affect your job in any way. If you choose not to participate or choose not to answer any questions, you will not be affected in any way. This interview should take approximately 1 hour. We thank you for your time today to take part in this study.

[START RECORDER]

To confirm what we just discussed, today is [Month] [Day] [Year] at [Time]. Now that the recording has started, do you agree to participate in today's interview?

Introduction

We would like to begin by talking about your role and responsibilities in your current position...

1. What are your primary areas of responsibility at [*Command*]?
 - a. How long have you been in this position or at this command?
2. [*If not already addressed*] How does your role relate to your Service's recruit training?

Recruit Training Basics

Now I'd like to hear about recruit training, and how it prepares recruits to become [Soldiers, Sailors, Airman, Coast Guardsmen]...

3. What are the major goals and objectives of your Service's recruit training?
 - a. How do you know you're successfully meeting these goals and objectives? Are there clear metrics or identified measurements?
 - b. In your opinion, how well are these goals actually being met?
 - i. Where do you see the need for improvement or change?
4. How does recruit training teach recruits about the values and expected social norms of your Service?
 - a. Which specific activities and opportunities are used to inculcate these values and norms during recruit training?
 - b. What, if any, are informal ways these values and norms are taught or reinforced during recruit training?
5. How does a recruit's experience in recruit training shape their trajectory throughout service, from their first assignment to when they leave or retire from the military?

Gender Integration and Role of Recruit Training

Next, I'd like to discuss gender integration and the recruit training environment...

6. How does your Service define gender integration in recruit training?
 - a. [*Probe if needed*]: integration of recruits, mixed gender interactions between recruits and instructors, quantity and quality of interactions during training, etc.
7. How does your Service measure the success of gender integration at recruit training?
 - a. [*Probe if needed*]: What metrics or outcome measurements, if any, are used to understand success of gender integration at recruit training?
 - b. [*Probe if needed*]: Does your Service regularly review or discuss gender integration in the recruit training environment? If so, tell me more about this.
8. What is the [*Service*]'s responsibility to train and socialize appropriate, equitable gender attitudes in recruits?
 - a. [*Probe if needed*]: If you had to give your service a letter grade (between A and F) on its ability to train and socialize equitable gender attitudes in recruits, what grade would you give it and what are some reasons you would give it that grade?
 - b. When does the socialization process for gender equity begin in your Service?
 - i. Can you provide some examples of this socialization process that are top of mind?

9. What would be missed if your Service did not have gender-integrated recruit training or had less gender integration at recruit training?

Challenges and Opportunities with Gender-Integrated Recruit Training

Let's discuss some more specific challenges and opportunities with gender-integrated recruit training...

10. What are some of the biggest challenges your Service has faced with gender integrated recruit training?
 - a. *[Probe if needed]*: Infrastructure/facilities, social and cultural norms, physical training, injuries and injury rates, attrition of male and female recruits, staffing scheduling/availability, training schedules, standards, sexual harassment/sexual assault, fraternization, ratios of male and female recruits, etc.
11. What are the benefits of gender integrated recruit training for your Service...?
 - a. Benefits for male and female recruits?
 - b. Benefits for drill instructors and training cadre?
 - c. Benefits for the broader *[Service]*?
12. What challenges, if any, do female recruits face that are different than male recruits?
 - a. *[Probe if needed]*: Physical training, injuries and injury rates, attrition, meeting standards, sexual harassment/sexual assault, social interactions with same-gender or opposite gender recruits, minority status/low numbers at recruit training, etc.
13. What challenges, if any, do female instructors/training cadre face that are different than male instructors/training cadre?
 - a. *[Probe if needed]*: Schedules and duties, sexual harassment/sexual assault, gender bias or expectations, minority status/low numbers on staff, etc.
14. What unintended consequences, either positive or negative, has your Service experienced with gender-integrated recruit training?
15. Based on your experience, what are some barriers a Service would face if they were trying to increase gender integration at recruit training?
 - a. *[Probe if needed]*: Physical infrastructure, social and cultural norms, staffing schedules and availability, incoming proportion of male/female recruits, recruit safety, etc.
16. In a gender-integrated recruit training environment, how big of an issue is sexual harassment and sexual assault?
 - a. What safeguards or mitigation measures have helped to reduce the prevalence of sexual harassment and sexual assault at recruit training for your Service?
 - b. Are there any additional measures or safeguards you think should be put in place?

Recommendations

As we discussed when we started the interview, we are here to study how your Service approaches gender integration at recruit training to inform our recommendations to the Marine

Corps for gender integration in their recruit training. The Marine Corps is working under a Congressional mandate to further integrate their recruit training within the next 4-7 years. I'd like to ask you about your recommendations as the Marine Corps seek to integrate their recruit training...

17. In your experience as a [position], what are the most important things we as the research team need to consider about gender integration and recruit training?
18. What recommendations do you have for the Marine Corps as they seek to further integrate recruit training?
 - a. [Probe if needed]: What are feasible next steps or important first steps for a gender integration process at recruit training in a service that hasn't had broad integration previously?

Wrap-up and Conclusion

Let's wrap up with a few concluding questions to make sure we've covered everything in our discussion today...

19. Is there anything else you want us to know that we haven't already covered?
20. What were you expecting us to ask about that we didn't?
21. Is there anyone else you recommend we talk at [command] or within your Service's leadership?

Thank you very much for your time today and sharing your thoughts with us. If you have anything else you'd like our study team to know, please feel free to contact us at [name], [email], or [phone number]. [End recording]

Appendix H: Alternate Viewpoints Interview Protocol

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Alternate Viewpoints Interview Protocol

Hello [INTERVIEWEE NAME]. My name is [NAME] and I am part of a study team led by the University of Pittsburgh. University of Pittsburgh was contracted by the Marine Corps to conduct a comprehensive study about the issues, challenges, and opportunities related to gender integration at recruit training. The purpose of the study is to help support the Marine Corps as it considers alternative approaches to gender integration at recruit training. Our study involves collecting information from the Army, Navy, Air Force, Coast Guard, and Marine Corps as well as external subject matter experts such as yourself.

You were selected to be part of this study because of your unique perspective as [DESCRIBE]. Over the course of the study, we'll be talking to other subject matter experts like yourself.

At the end of our study, we'll be compiling the results into a comprehensive report for the Marine Corps. Your responses today will not be linked to your name and no names will be included in our report.

Before we get started, I want to go over the expectations of participating in this study.

[REVIEW CONSENT FORM]

As it mentioned in the consent form, we are not audio-recording today's interview to provide additional protections of your confidentiality. We will be taking notes. Only people working on this study will have access to these notes. As a reminder, your participation is completely voluntary. If you choose not to participate or choose not to answer any questions, you will not be affected in any way. This interview should take approximately 1 hour. We thank you for your time today to take part in this study.

[OBTAIN CONFIRMATION OF VERBAL CONSENT]

1. Please tell me in general terms your background experiences that have given you a set of perspectives on gender integration of military training.
2. The National Defense Authorization Act requires that Marine training *not* be segregated by gender. What would you interpret to be necessary for that requirement to be fulfilled?
3. How do you think the Marine Corps defines gender integration?
4. What do you believe are the primary goals of basic training in the Marine Corps [other service]?
 - a. How does the Marine Corps [other service] know how well those goals are achieved? How are these goals measured for success?
 - b. Are these assessments of success captured for individual recruits? And/or at group levels, with platoons or companies as a whole?
 - c. [if other service referenced] How if at all do you think things are different for the Marine Corps?
5. The Marine Corps has been experimenting with different models of how to increase gender integration, with different combinations of male and female platoons (4+2, 5+1, etc...) but the

numbers of women recruits mean there's always an all-male environment for some...can you tell us your thoughts about that? [added in later interviews]

6. Would you identify any other important goals basic training should accomplish, but may not be now?
7. How do you think a recruit's experience in basic training shapes their experience as a Marine [other service]?
 - a. How critical is it that basic training trains on physical fitness/readiness?
 - b. What about Marine Corps [other service] history? Combat tactics? Values? Culture? Discipline? Gender? Sexual and gender harassment? Professional conduct?
 - c. [if other service referenced] How if at all do you think things are different for the Marine Corps?
8. What are the most important benefits to increased gender integration at basic training?
9. What are the biggest challenges?
 - d. consider at the level of separate gender companies, integrated companies with 1 female platoon, or alternatives integrated at the platoon level
10. What would the Marine Corps lose if it did not further integrate recruit training?
11. Do you believe men and women recruits get the same training?
12. Are they held to the same standards?
13. What do you think about having mixed gender DI teams—meaning male and female DIs assigned to train men and women?
14. What do you think about gender integrated housing?
 - a. Probe specifically about squad bays in recruit training [added in later interviews]
15. What do you think is the fear if more gender integration of recruit training is implemented? What do people (you?) fear will go wrong? What are the negative consequences?
16. What positives might arise from greater integration?
17. What are the implications if there is greater integration, and it actually goes well?
18. Do you have familiarity with gender integration efforts in services other than the Marine Corps, and if so, what do you see as major lessons learned from that service or those services?
19. What should we be asking about that we haven't?
20. What are your general thoughts?

Thank you very much for your time today and sharing your thoughts with us. If you have anything else you'd like our study team to know, please feel free to contact us at [name], [email], or [phone number].

Appendix I: Injury, Nicotine, & Physical Activity Survey

Appendix I: Injury, Nicotine, & Physical Activity Survey

Pre-Training Survey

Overview

Please complete the survey below.

Thank you!

Subject ID _____

Survey date ____/____/____ (mm/dd/yyyy)

Age (in years) _____

Gender Female Male Not Specified

Height (inches) _____

Weight (lbs) _____

Dominant hand (Hand used to throw a ball) Left Right Not Specified

Dominant leg (Leg used to kick a ball) Left Right Not Specified

A musculoskeletal injury is an injury to the musculoskeletal system (bones, ligaments, muscles, tendons, etc.) that, resulted in alteration in tactical activities/training, or physical training or activities of daily living for a minimum of one day, regardless if medical attention was sought.

Yes/No

Did you have one or more musculoskeletal injuries in the past?

If yes, please fill the injury survey.
If no, the injury survey will be disabled.

Tobacco/Nicotine usage

Please complete the survey below.

Thank you!

Cigarettes

Describe your cigarette use:

Use now Previously used Never used

Number of cigarettes you smoke/smoked each day:

1-5 6-10 11-15 16-20
 21-25 26-30 31+

How many months has it been since you quit smoking cigarettes?

0 3 6 12 13+

Cigars

Describe your cigar use:

Use now Previously used Never used

Number of cigars you smoke/smoked each day:

<1 1 2 3
 4 5 6+

How many months has it been since you quit smoking cigars?

0 3 6 12 13+

Smokeless Tobacco

Describe your smokeless tobacco use:

Use now Previously used Never used

Number of cans of smokeless tobacco used each week:

<1 1 2 3
 4 5 6+

How many months has it been since you quit using smokeless tobacco?

0 3 6 12 13+

Vaping, JUULing, and e-cigarettes

Describe your Vaping, JUULing, and/or e-cigarettes habit:

Use now Previously used Never used

Number of cartridges/tanks used each week:

<1 1 2 3
 4 5 6+

How many months has it been since you quit Vaping, JUULing, and/or e-cigarettes?

0 3 6 12 13+

Injury (new form for each injury)

Please complete the survey below.

Thank you!

Injury date: Month (MM) ____ Injury date: Year (YYYY) ____

Is this a recurrent or first-time injury? ____ Recurrent ____ First-time

If recurrent, how many recurrences 1/2/3/4

Injury1: Month (MM) ____ Injury1: Year (YYYY) _____

Injury2: Month (MM) ____ Injury2: Year (YYYY) _____

Injury3: Month (MM) ____ Injury3: Year (YYYY) _____

Injury4: Month (MM) ____ Injury4: Year (YYYY) _____

Did you seek medical care for this injury? ____ Yes ____ No

Activity type: Physical training Tactical training
 Combat Occupational tasks
 Recreational activity/ Sports Motor vehicle accident
 Not specified Other _____

Cause of injury:

<input type="checkbox"/> Climbing	<input type="checkbox"/> Compression from boating	<input type="checkbox"/> Crushing
<input type="checkbox"/> Cutting	<input type="checkbox"/> Direct trauma	<input type="checkbox"/> Fall – Different level
<input type="checkbox"/> Fall – Other	<input type="checkbox"/> Fall – Same level	<input type="checkbox"/> Fall – Stairs or ladder
	<input type="checkbox"/> Jump	<input type="checkbox"/> Landing
<input type="checkbox"/> Lifting	<input type="checkbox"/> Marching	<input type="checkbox"/> Planting
<input type="checkbox"/> Pulling	<input type="checkbox"/> Running	<input type="checkbox"/> Temperature related
<input type="checkbox"/> Twist/turn/slip (no fall)		<input type="checkbox"/> Whiplash
<input type="checkbox"/> Not specified	<input type="checkbox"/> Other _____	

Which side of the body was injured?

Left Midline
 Right Not applicable

Bilateral Other _____

<u>Anatomic Location</u>	<u>Anatomical sub-location</u>	<u>Injury type</u>
<input type="checkbox"/> Head/Face	<input type="checkbox"/> Abdomen	<input type="checkbox"/> Amputation
<input type="checkbox"/> Lower Extremity	<input type="checkbox"/> Ankle	<input type="checkbox"/> Blister
<input type="checkbox"/> Spine	<input type="checkbox"/> Cervical	<input type="checkbox"/> Bursitis
<input type="checkbox"/> Torso	<input type="checkbox"/> Chest	<input type="checkbox"/> Capsulitis
<input type="checkbox"/> Upper Extremity	<input type="checkbox"/> Ear	<input type="checkbox"/> Carpal Tunnel
<input type="checkbox"/> Other _____	<input type="checkbox"/> Elbow	<input type="checkbox"/> Chondromalacia/ Patellofemoral Pain
	<input type="checkbox"/> Eye	<input type="checkbox"/> Concussion
	<input type="checkbox"/> Foot and Toes	<input type="checkbox"/> Contusion
	<input type="checkbox"/> Forearm	<input type="checkbox"/> Degenerative Joint Disease
	<input type="checkbox"/> Hand and Fingers	<input type="checkbox"/> Disc Injury
	<input type="checkbox"/> Hip	<input type="checkbox"/> Dislocation
	<input type="checkbox"/> Knee	
	<input type="checkbox"/> Lower Leg	<input type="checkbox"/> Fracture
	<input type="checkbox"/> Lumbopelvic	<input type="checkbox"/> Ganglion Cyst
	<input type="checkbox"/> Shoulder	<input type="checkbox"/> Hernia
	<input type="checkbox"/> Thigh	<input type="checkbox"/> Impingement
	<input type="checkbox"/> Thoracic	<input type="checkbox"/> Inflammation
	<input type="checkbox"/> Upper Arm	<input type="checkbox"/> Labral Tear
	<input type="checkbox"/> Wrist	<input type="checkbox"/> Laceration/Puncture/Wound
	<input type="checkbox"/> Other _____	<input type="checkbox"/> Lateral Epicondylitis
		<input type="checkbox"/> Lumbar Compression Fracture
		<input type="checkbox"/> Meniscal
		<input type="checkbox"/> Nerve
		<input type="checkbox"/> Pain/Spasm/Ache
		<input type="checkbox"/> Periostitis
		<input type="checkbox"/> Sprain
		<input type="checkbox"/> Strain
		<input type="checkbox"/> Stress Fracture
		<input type="checkbox"/> Subluxation
		<input type="checkbox"/> Tendinitis/Tenosynovitis/Tendinopathy
		<input type="checkbox"/> Other _____

Injury type location

___ Abdominal Muscles	___ Posterior Cruciate Ligament (PCL)
___ Acetabular	___ Pectorals
___ Achilles	___ Peroneal Nerve
___ Anterior Cruciate Ligament (ACL)	___ Peroneals
___ Acromioclavicular Joint	___ Pes Anserine
___ Adductor	___ Piriformis
___ Anterior Tibialis	___ Plantar Fascia
___ Anterior talofibular (ATF)	___ Popliteal
___ Bakers Cyst	___ Posterior
___ Biceps	___ Pre-Patellar
___ Both	___ Posterior talofibular (PTF)
___ Brachial Plexus	___ Quadratus Lumborum
___ Carpal (wrist)	___ Quads
___ Calcaneofibular (CF)	___ Radial Collateral Ligament
___ Clavicle	___ Radial Nerve
___ Compartment Syndrome	___ Radius
___ Costochondral	___ Radial Collateral Ligament (RCL)
___ Deltoid Ligament	___ Rib
___ Facet Joint	___ Rotator Cuff
___ Femoral Nerve	___ Sacrum
___ Femur	___ Scapula
___ Fibula	___ Sciatic Nerve
___ Finger	___ Sesmoiditis
___ Foot	___ Shin Splints
___ Gastroc-Soleus	___ SI Joint
___ Glenohumeral	___ Sternocleidomastoid
___ Gluteals	___ Sternum
___ Hamstring	___ Subacromial
___ Hand	___ Suprapatellar
___ Humerus	___ Syndesmosis
___ Ilium	___ Talus
___ Infrapatellar	___ Thoracic Outlet Syndrome
___ Intervertebral	___ Tibia
___ Ischium	___ Tibial Nerve
___ Iliotibial band	___ Tibialis Anterior
___ Lateral	___ Tibialis Posterior
___ Latissimus Dorsi	___ Toes
___ Lateral Collateral Ligament (LCL)	___ Triceps
___ Lower Trapezius	___ Turf Toe
___ Medial Collateral Ligament (MCL)	___ Ulna
___ Medial	___ Ulnar Collateral Ligament (UCL)
___ Medial Tibial Stress Syndrome	___ Ulnar Nerve
___ Median Nerve	___ Upper Trapezius
___ Metacarpal (hand)	___ Vertebrae

- Middle Trapezius
- Paraspinals
- Patella

- Wrist Extensors
- Wrist Flexors
- Other _____

Follow up:

Loss of Hearing? yes
 no

Loss of Vision? yes
 no

Duration of Loss of Consciousness No
 <1 min
 1-2 mins
 3-5 mins
 5-15 mins
 >15 mins

Duration of Post-Traumatic Amnesia No
 <1 min
 1-15 mins
 16-30 mins
 30 mins – 24 h
 >24 h

Wearing Helmet? yes
 no

Nerve Symptoms? yes
 no

Grade 1 (Microscopic tearing of fibers)
 2 (Some but not all fibers torn)
 3 (Complete tear of ligament/muscle)

What type of footwear were you wearing at the time of injury? Running Shoes
 Combat Boots
 Not Specified
 Other < Describe> _____

If you have more injury to report, take this survey again

Exercise/ Physical activity

Please complete the survey below.

Thank you!

Check all of the following activities that you have performed regularly during the **past three months**:

- | | |
|--|--|
| <input type="checkbox"/> Walking/ hiking/ marching while carrying load | <input type="checkbox"/> Walking/ hiking/ marching without carrying load |
| <input type="checkbox"/> Running | <input type="checkbox"/> Bicycling |
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Moderate sports |
| <input type="checkbox"/> Vigorous sports involving running | <input type="checkbox"/> Rowing ergometer |
| <input type="checkbox"/> Weight training | <input type="checkbox"/> Circuit training |
| <input type="checkbox"/> Calisthenics | <input type="checkbox"/> Wrestling/Martial Arts |
| <input type="checkbox"/> Yoga | <input type="checkbox"/> Other1 (list all) |
| <input type="checkbox"/> Other2 (list all) | <input type="checkbox"/> Other3 (list all) |
| <input type="checkbox"/> Other4 (list all) | |

Walking/ hiking/ marching while carrying load:

- On average, how many sessions per week? _____
- On average, how many miles per session? _____
- Average duration per session (in minutes) _____
- What was the average weight of the load (in pounds)? _____

Walking/ hiking/ marching without carrying load:

- On average, how many sessions per week? _____
- On average, how many miles per session? _____
- Average duration per session (in minutes) _____

Running:

- On average, how many sessions per week? _____
- On average, how many miles per session? _____
- Average duration per session (in minutes) _____
- What was the average weight of the load (in pounds - If none, put zero)? _____

Bicycling:

- On average, how many sessions per week? _____
- On average, how many miles per session? _____
- Average duration per session (in minutes) _____

Swimming:

On average, how many sessions per week? _____
On average, how many miles per session? _____
Average duration per session (in minutes) _____

Moderate sports: leisure volleyball, golf (not using a golf cart), double tennis:

On average, how many sessions per week? _____
Average duration per session (in minutes) _____

Vigorous sports involving running: raquetball, singles tennis, basketball, soccer:

On average, how many sessions per week? _____
Average duration per session (in minutes) _____

Rowing ergometer: vigorous effort:

On average, how many sessions per week? _____
On average, how many miles per session? _____
Average duration per session (in minutes) _____
What was the average weight of the load (in pounds)? _____
Average power output: _____

Weight training: multiple exercises, multiple sets, 6 to 12 reps/set, resting between sets:

On average, how many sessions per week? _____
Average duration per session (in minutes) _____
What was the average weight of the load (in pounds)? _____

Circuit training: multiple resistance training activities including high intensity cardio training with little or no rest between exercises; i.e. Crossfit, P90X, Gym Jones:

On average, how many sessions per week? _____
Average duration per session (in minutes) _____
What was the average weight of the load (in pounds)? _____

Calisthenics: push-ups, sit-ups, pull-ups:

On average, how many sessions per week? _____
Average duration per session (in minutes) _____
What was the average weight of the load (in pounds)? _____

Wrestling/Martial Arts

On average, how many sessions per week? _____
Average duration per session (in minutes) _____

Yoga
On average, how many sessions per week? _____
Average duration per session (in minutes) _____

Other Activity 1 (answer all questions that apply)
List Other Activity 1 _____
On average, how many sessions per week? _____
On average, how many miles per session? _____
Average duration per session (in minutes) _____
What was the average weight of the load (in pounds)? _____

Other Activity 2 (answer all questions that apply)
List Other Activity 2 _____
On average, how many sessions per week? _____
On average, how many miles per session? _____
Average duration per session (in minutes) _____
What was the average weight of the load (in pounds)? _____

Other Activity 3 (answer all questions that apply)
List Other Activity 3 _____
On average, how many sessions per week? _____
On average, how many miles per session? _____
Average duration per session (in minutes) _____
What was the average weight of the load (in pounds)? _____

Other Activity 4 (answer all questions that apply)
List Other Activity 4 _____
On average, how many sessions per week? _____
On average, how many miles per session? _____
Average duration per session (in minutes) _____
What was the average weight of the load (in pounds)? _____

Post-Training Survey

Overview

Please complete the survey below.

Thank you!

Subject ID

Survey date

___/___/_____ (mm/dd/yyyy)

Age (in years)

Gender

Female Male Not Specified

A musculoskeletal injury is an injury to the musculoskeletal system (bones, ligaments, muscles, tendons, etc.) that, resulted in alteration in tactical activities/training, or physical training or activities of daily living for a minimum of one day, regardless if medical attention was sought.

Yes No

Did you have one or more musculoskeletal injuries during recruit training?

If yes, please fill the injury survey.

If no, the injury survey will be disabled.

Injury (new form for each injury)

Please complete the survey below.

Thank you!

Injury date: Month (MM) ____ Injury date: Year (YYYY) ____

Is this a recurrent or first-time injury? ____ Recurrent ____ First-time

If recurrent, how many recurrences 1/2/3/4

Injury1: Month (MM) ____ Injury1: Year (YYYY) ____

Injury2: Month (MM) ____ Injury2: Year (YYYY) ____

Injury3: Month (MM) ____ Injury3: Year (YYYY) ____

Injury4: Month (MM) ____ Injury4: Year (YYYY) ____

Did you seek medical care for this injury? ____ Yes ____ No

Activity type: ____ Physical training ____ Tactical training
 ____ Combat ____ Occupational tasks
 ____ Recreational activity/ Sports ____ Motor vehicle accident
 ____ Not specified ____ Other _____

Cause of injury:

____ Climbing	____ Compression from boating	____ Crushing
____ Cutting	____ Direct trauma	____ Fall – Different level
____ Fall – Other	____ Fall – Same level	____ Fall – Stairs or ladder
	____ Jump	____ Landing
____ Lifting	____ Marching	____ Planting
____ Pulling	____ Running	____ Temperature related
____ Twist/turn/slip (no fall)		____ Whiplash
____ Not specified	____ Other _____	

Which side of the body was injured?

____ Left	____ Midline
____ Right	____ Not applicable
____	____ Other _____

Bilateral

<u>Anatomic Location</u>	<u>Anatomical sub-location</u>	<u>Injury type</u>
<input type="checkbox"/> Head/Face	<input type="checkbox"/> Abdomen	<input type="checkbox"/> Amputation
<input type="checkbox"/> Lower Extremity	<input type="checkbox"/> Ankle	<input type="checkbox"/> Blister
<input type="checkbox"/> Spine	<input type="checkbox"/> Cervical	<input type="checkbox"/> Bursitis
<input type="checkbox"/> Torso	<input type="checkbox"/> Chest	<input type="checkbox"/> Capsulitis
<input type="checkbox"/> Upper Extremity	<input type="checkbox"/> Ear	<input type="checkbox"/> Carpal Tunnel
<input type="checkbox"/> Other _____	<input type="checkbox"/> Elbow	<input type="checkbox"/> Chondromalacia/ Patellofemoral Pain
	<input type="checkbox"/> Eye	<input type="checkbox"/> Concussion
	<input type="checkbox"/> Foot and Toes	<input type="checkbox"/> Contusion
	<input type="checkbox"/> Forearm	<input type="checkbox"/> Degenerative Joint Disease
	<input type="checkbox"/> Hand and Fingers	<input type="checkbox"/> Disc Injury
	<input type="checkbox"/> Hip	<input type="checkbox"/> Dislocation
	<input type="checkbox"/> Knee	
	<input type="checkbox"/> Lower Leg	
	<input type="checkbox"/> Lumbopelvic	<input type="checkbox"/> Fracture
	<input type="checkbox"/> Shoulder	<input type="checkbox"/> Ganglion Cyst
	<input type="checkbox"/> Thigh	<input type="checkbox"/> Hernia
	<input type="checkbox"/> Thoracic	<input type="checkbox"/> Impingement
	<input type="checkbox"/> Upper Arm	<input type="checkbox"/> Inflammation
	<input type="checkbox"/> Wrist	<input type="checkbox"/> Labral Tear
	<input type="checkbox"/> Other _____	<input type="checkbox"/> Laceration/Puncture/Wound
		<input type="checkbox"/> Lateral Epicondylitis
		<input type="checkbox"/> Lumbar Compression Fracture
		<input type="checkbox"/> Meniscal
		<input type="checkbox"/> Nerve
		<input type="checkbox"/> Pain/Spasm/Ache
		<input type="checkbox"/> Periostitis
		<input type="checkbox"/> Sprain
		<input type="checkbox"/> Strain
		<input type="checkbox"/> Stress Fracture
		<input type="checkbox"/> Subluxation
		<input type="checkbox"/> Tendinitis/Tenosynovitis/Tendinopathy
		<input type="checkbox"/> Other _____

Injury type location

___ Abdominal Muscles	___ Posterior Cruciate Ligament (PCL)
___ Acetabular	___ Pectorals
___ Achilles	___ Peroneal Nerve
___ Anterior Cruciate Ligament (ACL)	___ Peroneals
___ Acromioclavicular Joint	___ Pes Anserine
___ Adductor	___ Piriformis
___ Anterior Tibialis	___ Plantar Fascia
___ Anterior talofibular (ATF)	___ Popliteal
___ Bakers Cyst	___ Posterior
___ Biceps	___ Pre-Patellar
___ Both	___ Posterior talofibular (PTF)
___ Brachial Plexus	___ Quadratus Lumborum
___ Carpal (wrist)	___ Quads
___ Calcaneofibular (CF)	___ Radial Collateral Ligament
___ Clavicle	___ Radial Nerve
___ Compartment Syndrome	___ Radius
___ Costochondral	___ Radial Collateral Ligament (RCL)
___ Deltoid Ligament	___ Rib
___ Facet Joint	___ Rotator Cuff
___ Femoral Nerve	___ Sacrum
___ Femur	___ Scapula
___ Fibula	___ Sciatic Nerve
___ Finger	___ Sesmoiditis
___ Foot	___ Shin Splints
___ Gastroc-Soleus	___ SI Joint
___ Glenohumeral	___ Sternocleidomastoid
___ Gluteals	___ Sternum
___ Hamstring	___ Subacromial
___ Hand	___ Suprapatellar
___ Humerus	___ Syndesmosis
___ Ilium	___ Talus
___ Infrapatellar	___ Thoracic Outlet Syndrome
___ Intervertebral	___ Tibia
___ Ischium	___ Tibial Nerve
___ Iliotibial band	___ Tibialis Anterior
___ Lateral	___ Tibialis Posterior
___ Latissimus Dorsi	___ Toes
___ Lateral Collateral Ligament (LCL)	___ Triceps
___ Lower Trapezius	___ Turf Toe
___ Medial Collateral Ligament (MCL)	___ Ulna
___ Medial	___ Ulnar Collateral Ligament (UCL)
___ Medial Tibial Stress Syndrome	___ Ulnar Nerve
___ Median Nerve	___ Upper Trapezius
___ Metacarpal (hand)	___ Vertebrae

- Middle Trapezius
- Paraspinals
- Patella

- Wrist Extensors
- Wrist Flexors
- Other _____

Follow up:

Loss of Hearing? yes
 no

Loss of Vision? yes
 no

Duration of Loss of Consciousness No
 <1 min
 1-2 mins
 3-5 mins
 5-15 mins
 >15 mins

Duration of Post-Traumatic Amnesia No
 <1 min
 1-15 mins
 16-30 mins
 30 mins – 24 h
 >24 h

Wearing Helmet? yes
 no

Nerve Symptoms? yes
 no

Grade 1 (Microscopic tearing of fibers)
 2 (Some but not all fibers torn)
 3 (Complete tear of ligament/muscle)

What type of footwear were you wearing at the time of injury? Running Shoes
 Combat Boots
 Not Specified
 Other < Describe> _____

If you have more injury to report, take this survey again

Appendix J: Connor-Davidson Resilience Scale 25 (CD-RISC-25)

Appendix J: Connor-Davidson Resilience Scale 25 (CD-RISC-25)

Connor-Davidson Resilience Scale 25 (CD-RISC-25) ©

For each item, please mark an "x" in the box below that best indicates how much you agree with the following statements as they apply to you over the last month. If a particular situation has not occurred recently, answer according to how you think you would have felt.

	not true at all (0)	rarely true (1)	sometimes true (2)	often true (3)	true nearly all the time (4)
1. I am able to adapt when changes occur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I have at least one close and secure relationship that helps me when I am stressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. When there are no clear solutions to my problems, sometimes fate or God can help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I can deal with whatever comes my way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Past successes give me confidence in dealing with new challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I try to see the humorous side of things when I am faced with problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Having to cope with stress can make me stronger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I tend to bounce back after illness, injury, or other hardships.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Good or bad, I believe that most things happen for a reason.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I give my best effort no matter what the outcome may be.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I believe I can achieve my goals, even if there are obstacles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Even when things look hopeless, I don't give up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. During times of stress/crisis, I know where to turn for help.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Under pressure, I stay focused and think clearly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I prefer to take the lead in solving problems rather than letting others make all the decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I am not easily discouraged by failure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I think of myself as a strong person when dealing with life's challenges and difficulties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I can make unpopular or difficult decisions that affect other people, if it is necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. In dealing with life's problems, sometimes you have to act on a hunch without knowing why.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I have a strong sense of purpose in life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I feel in control of my life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I like challenges.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I work to attain my goals no matter what roadblocks I encounter along the way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I take pride in my achievements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Add up your score for each column 0 + ____ + ____ + ____ + ____

Add each of the column totals to obtain CD-RISC score = _____

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01-01-18

Appendix K: Other Services' Conceptualization and Utilization of the Squad Bay

Appendix K: Other Services' Conceptualization and Utilization of the Squad Bay

Every Service has its variation of a “squad bay,” an open living and sleeping area used by recruits during recruit training. The Army and Coast Guard are the only Services that primarily use the inside of their squad bays for activities of daily living rather than as an active training space. Shared spaces in or near the barracks for the Army and Coast Guard are used as the training space, the Army uses outdoor drill pads, and the Coast Guard uses an indoor quarterdeck. The Navy and Air Force use their squad bays as active training spaces, with the Navy conducting training in that space similar to the Marine Corps. No other Service attaches as much meaning or lore to their squad bay spaces as the Marine Corps. For other Services, these spaces are seen as *another* space where training happens rather than *one of the most pivotal* spaces where training and transformation occur. Other differences between the Marine Corps and other Services are policies and expectations regarding nudity and changing in the squad bay and overnight monitoring practices. All other Services prohibit recruits from changing in the open squad bay area; they restrict changing to the head or latrine. The Marine Corps is the only Service where drill instructors spend the night in the squad bay. Each Service’s use of its squad bay space and relevant policies and practices are detailed below.

U.S. Army: Bays

Army bays are primarily used for activities of daily living, including sleeping and hygiene, in Basic Combat Training. Bays are not used by drill sergeants as a primary or active training space. Trainees for each company sleep in four gender-segregated sleeping bays (three male bays and one female bay) and fall out into their integrated platoons in the morning. During the day, trainees spend time in their gender-segregated bay for hygiene, study time, free time, and bay maintenance or cleaning. Bays have a range of workout equipment—some better stocked than others—for trainees to use during their free time. Army trainees see their bays as a place where they are not under the constant watch or pressure of the drill sergeants and can get a break from the training environment. A team of drill sergeants is assigned to every bay. Drill sergeants will conduct inspections and reviews of the bay. If the bays are not clean and organized to the drill sergeants’ standards, trainees can be held accountable through physical exercises or additional time cleaning the bays.

Even though bays are gender segregated, trainees are to conduct themselves in such a way that drill sergeants or other leaders of either gender may walk into the bay at any time. All uniform changes and showering must occur in the latrine. Latrines have entry and exit doors and individual shower and toilet stalls. Bays are locked and monitored at night by duty personnel at the battalion level. In the morning, trainees are awakened by drill sergeants or an audio announcement. They are given instructions for the day (e.g., uniform, gear, necessary equipment) and a time to meet downstairs in platoon formation on the platoon drill pads. Once outside the bays, trainees fall out into their platoons on drill pads. Concrete outdoor drill pads on the first level of the barracks are a primary training space for the Army.

U.S. Air Force: Dormitories

Air Force dormitories are used for activities of daily living and as an active training space in Air Force BMT. Trainees sleep and conduct hygiene in their dormitories, which are segregated by gender. Training activities that take place in the dormitories include weapons maintenance, preparation of uniforms and lockers, classes and group discussions, cleaning, and inspections. Air Force trainees do not do group physical fitness training in the dormitories. On the ground floor, each ATC has a covered open space used for drill, athletic training, and flight time (such as the Flight Commander's Team Building Exercises); the ground floor also houses squadron staff offices. Dormitories take up the three floors above. Dayroom spaces attached to the dormitories are used for classes and discussions. Each floor has eight dormitories, and each flight is assigned one dormitory. For the Air Force, the dormitory plays a critical role in forming and shaping trainees and is a place where trainees spend much of the training day. Trainees are empowered to take charge and assume leadership within their flights and dormitories. For example, on Sundays, trainees are instructed to "self-motivate" after the wake-up. The day before, MTIs prepare a schedule and a list of tasks for trainees to be completed on Sunday. Assigned recruit leaders in the flight, such as the dorm chief, are expected to lead the flight through the schedule, ensure they eat chow on time, and have the flight prepared for the next training day, on Monday.

Latrines in each dormitory have a door and individual toilet stalls; some latrines have open showers, and others have individual shower stalls. Trainees are instructed to change in the latrine instead of the open dormitory area. MTIs are not permitted to be in the dormitories before the trainees wake up at 0545 hours and must leave the dormitory by 2100, at lights out. Dormitories are locked and monitored at all times by squadron duty personnel through a camera security system, and trainees conduct entry control throughout the night in 2-hour rotations in teams of two, similar to the Marine Corps's use of fire watch.

U.S. Navy: Compartments

Navy compartments are used for activities of daily living and are an active training space in Navy boot camp. Each ship (i.e., barracks building) where recruits reside contains multiple compartments (i.e., squad bays), several classrooms, and a galley (i.e., dining facility). Recruits sleep in gender-segregated compartments. For nonintegrated divisions, one compartment houses the entire division. For integrated divisions, the division is split between two compartments, based on gender. Each compartment houses two halves of two divisions that combine in the morning to form two integrated divisions. Training activities that regularly occur within the compartment include physical fitness, motivational tools (instructional training exercise, intensive training, and advanced intensive training), RDC time, drill, and inspections. For integrated divisions, training activities proceed in an integrated way within the compartment in the same way they do in a nonintegrated division. Each recruit has an assigned place inside the compartment based on their rack number, and this position is consistent regardless of which compartment they are in. RDC presence is consistent within the compartment. While the Navy uses the compartment as an active training space, it is conceptualized as one of many training spaces rather than a special training space.

In the compartment, the head has an open doorway, but a wall of sinks ensures no line of sight to the toilets or showers. Toilets have individual stalls. Recruits are expected to be clothed in the compartment at all times. Changing below the PT gear level is allowed only in the head because

of the potential presence of opposite-gender RDCs. The head must be secured by recruits standing watch before an RDC enters. Compartments are monitored overnight by two ship personnel: an officer of the deck and a rover. This RDC watch team, which must be mixed gender (one male and one female), roves the ship's compartments and quarterdeck every hour.

U.S. Coast Guard: Squad Bays

Similar to the Marine Corps, the Coast Guard calls its recruit living quarters squad bays. Two companies live in the barracks together, each on its own floor. The Coast Guard's squad bays are used for activities of daily living and are an active training space in recruit training. Coast Guard barracks have a quarterdeck, which is a common area connecting all squad bays in a company. Squad bays are organized as main muster, secondary, tertiary, and female spaces. Some squad bays have a tower attached in the back where female recruits live. Towers are connected to the male squad bay but have a separate exit, sleeping area, and head. The entire company gathers in a single squad bay for roll call after Reveille and before Taps in the evening. Training, such as incentive and remedial training, occurs in the quarterdeck space. The Coast Guard uses the quarterdeck more than the actual squad bays for training in response to squad bay space constraints and integrated training purposes.

Squad bays have different configurations of the head area but share similarities. Each head has individual toilet stalls, space for a changing area (some have wall dividers), and an open shower bay. Entrances to the head are blocked by plastic curtains. If a female requests permission to enter a male squad bay (usually to go to her tower on the other side of the squad bay or talk briefly with a male recruit), a male recruit must secure the head by standing in front of it so no one can enter or leave the head until she exits. Recruits must change in the head. No recruits or Company Commanders (CCs) of the opposite gender can be present inside the head (i.e., male recruits or CCs cannot be present in a female head). CCs should not be in the head.

A rotating team of three recruits conducts security watch throughout the night. One CC serves as the duty officer for the entire regiment. Recruits are instructed to contact the duty officer in case of an emergency. The recruit security watch team must include male and female recruits; each shift is 1 hour. One recruit serves as entry control at the main entrance of the barracks while the other two recruits conduct rounds throughout the barracks building during their shift. Recruits on security watch must wake up the next recruits before the conclusion of their watch; they are also responsible for waking up any recruits who have early medical appointments. The security watch team can check the opposite-gender squad bay during their rounds and can wake up recruits of the opposite gender. Two security watch partners must be together to wake up a recruit of the opposite gender. Recruits are not allowed to touch other recruits to wake them up; they must knock on their racks or pull on their blankets. In addition to the security team, yeomen and watch coordinators (typically four to five recruits of any gender) wake up an hour before Reveille and stay up an hour after Taps to complete tasks in the quarterdeck and are not monitored by CCs during this time.

**Appendix L: Sexually Explicit and Demeaning Gender-Based Language
Described by Marine Corps Drill Instructors and Recruits in Interviews and
Focus Groups**

Appendix L: Sexually Explicit and Demeaning Gender-Based Language Described by Marine Corps Drill Instructors and Recruits in Interviews and Focus Groups

This appendix provides quotations from Marine Corps drill instructors and male recruits which informed the “cultural challenges” section (chapter 4, section F.4) titled “Use of sexually explicit and demeaning gender-based language in the training environment.”¹⁹¹

The continued use of sexually explicit and demeaning gender-based language from drill instructors in the training process harms gender integration efforts at the MCRDs and undermines the institution of the Marine Corps. While it is unclear how pervasive prohibited language use is among female drill instructors, triangulated sources shared below indicate derogatory language is a persistent issue in a male-centric training environment (i.e., male drill instructors with male recruits). Sexually explicit and gender-based language are perceived by male drill instructors as a useful training tool that can build rapport in the drill instructor-recruit relationship and motivate male recruits to perform better. A senior drill instructor at MCRD San Diego shared his perspective:

Male SDI: ... *the way I loosen them up, I sometimes say like sexual stuff 'cause we're all males just to break the ice.*

Interviewer: So like what? What's something you would say?

Male SDI: *If I'm a senior [drill instructor.] 'cause when we talk to the guys, ... I'm like, "Hey, eyeballs,¹⁹² I'm just here to fuckin' bullshit and talk. I'm here to give you a break from the drill instructors; let's talk. What do you want to talk about?" They talk about sports, whatever, blah, blah, blah, blah ... I don't know if you notice there's a hole in there in the wall. So that's where we put all the freaking, the medical chits for the drill instructors to get them. So it was like early days [in training] and ... so they can feel comfortable with me, I have to be a human to them. I tell them, "Hey, eyeballs, you see the medical chit, right? It goes in the foxhole" and then—fuck, should I say it? [I say] "Eyeballs, not the glory hole, the foxhole." And they start laughing. ... And we just broke the ice from there. We didn't continue on that road, but now they started talking more.*

[Respondent continues to talk about the importance of the SDI being seen as human.]

Interviewer: So those, like, sexual infusions ... would you say that's every day, or would you say it's twice a week? Like, how often is that a tool in your toolbox?

Male SDI: *It's really rare, to be honest. It is really rare. But even then, when we do drill, some of our ditties say some stuff, like for example, 'cause you have to relate to the kids [recruits]. If not, they won't get it. For example, peripheral vision, right? We tell them*

¹⁹¹ After receipt and review of the draft report for this study, the Marine Corps sponsor (Training and Education Command) provided the following comments: “We have taken immediate and deliberate actions to address the issues highlighted within this section. We recognize that the use of the language described by the study team runs counter to current policies for training recruits and represents a systemic issue among Marine Corps drill instructors that we are working to correct, further enabling successful gender integration efforts.”

¹⁹² “Eyeballs” is a phrase used with recruits by drill instructors as a verbal shortcut to indicate “look at me.”

what peripheral vision is—to outline to the right. ... So like, “Eyeballs, who here goes to the mall and saw a big pair of breasts? And you’re with your girlfriend, right? You don’t want to get caught. You’re not going to turn your head, right? You use your fricking (we call it) titty vision.” “Ahh, yes, sir!” They get all excited! “Eyeballs, zero! I never said that right?” “No, sir.” “Eyeballs, now we get it, right?” And you just got to interact with them, especially because they’re males. I don’t know. I don’t know how it will be with females. Maybe some females might take that as offensive. ... I mean, in Parris Island, I don’t know. There’s just female drill instructors with female recruits, and maybe they do talk about the same thing, but it’s easier ‘cause it’s female to female.

Interviewer: So that would be one tool that’s not in your toolbox anymore [if you were to train female recruits]?

Male SDI: *Probably not.*

Interviewer: And you consider that a way to build rapport with them [male recruits]?

Male SDI: *Yeah. It’s just a way to break the ice for them to get bought into the drill, for them to get bought into you because you can’t just be a fucking dick to them the whole time or they’ll quit, they’re going to say they’re going to hurt themselves. You have to make them feel comfortable around you, especially for the senior and the platoon sergeant. ... [Respondent goes on to discuss how 3rd and 4th hat drill instructors are more stern, so using this rapport-building language doesn’t work for their role on the drill instructor team.] So when [name] Company was here, we had to, like, change our ditties, pretty much. And then same thing up north [at Camp Pendleton]; there was a ditty that they use at the weapons field training battalion ... it was about some sexual stuff. And they had to cut that ditty off and they had to learn a way to get the females to learn it without saying it ‘cause ... I forgot the ditty, what it was. But yeah, like, these ways, it, like, gets the kids bought in fast. I don’t know; they are just boys. They got to giggle and get excited when you talk about stuff like that. And it’s just the way for you to buy into them.*

A female drill instructor at MCRD San Diego also shared her experiences seeing and hearing sexually explicit and derogatory gender-based language used by male drill instructors, echoing how those drill instructors employ it as a motivational tool for male recruits:

Female DI: *So male recruits have certain ditties that the male drill instructors teach them when they do certain movements, and they’re not the most politically correct ones. So that is already teaching male recruits that it’s okay to say things like that and the females don’t know that. Because even when I was a recruit, we were never taught derogatory things toward males when we were drilling, and we know how to drill the same [as] if not better than them. We still passed and/or won initial and final drill without having to say those things. So they don’t—my recruits don’t know that those recruits are learning “up the skirt” and, like, all these things that motivate the male recruits to drill better, things like that. So I think maybe if they were drilling together, maybe in the same platoon, I know for sure the male drill instructors would have to conform to new style teaching to motivate those recruits in a different way that’s not going to offend the females and things like that. And nowadays, also—I’m hearing this a lot more from the drill instructors—there’s a lot more gay male recruits going through*

recruit training. It's not going to motivate gay male recruits because it's not what they're interested in. So I just think we need to, like, get with the times on how we're teaching things like that.

Interviewer: Are there other examples of derogatory ditties that are used?

Female DI: *So when I got to [name] Company ... there's a binder, a drill binder, with the ditties that the drill instructors learn to teach the recruits. And one of them, it just ranges from "up the skirt" to, I heard, "split the clit." It's all in writing. It's in writing. I don't know how that would be pleasing for anybody, but it's in writing. What are the other ones? "Smack that whore" or "smack that bitch" when they call for, like, I don't know. This is supposed to motivate 18-, 19-, 20-year-olds? ... It's old stuff that's just been passed down. So when they go from, like, a certain movement, they reach up and smack the rifle, that's part of the ditties they would say that. Or, like, I've also heard drill instructors tell me they tell their recruits, like, when the families are around on family day, they say, "Eyeballs, are you look[ing] at the families over there?" and they point to, like, the sisters and the cousins who come in and visit and are attractive or whatever. "That's who you're performing for, you understand?" Then ... the male recruits get all excited and they perform better. But I'm like, we never got taught that, and I know that females are locked on and squared away with drills, so we don't need it. It's proof that we don't need it to learn or we don't need it to perform better. So you can get the result you want through discipline, repetition, and things like that.*

Interviewer: How often—earlier you were talking about “bitch” and “whore”—how prevalent is that language here [at MCRD San Diego]?

Female DI: *It's all the time; it's just like another word. Yeah. So I curse as well, I just don't curse at them in that sense. I'll say, "Pick up the fucking thing" or things like that, but as far as them calling them specific names, I definitely stay away from that. Especially with the females, just because it's not okay. I don't know. I just remember being—if you were to tell me that at 18, 19 years old ... so if you're going to start calling me that, I'm definitely going to not listen to what you have to say. So I had that mix of the females that put their guard up and they get an attitude, and I understand because I was like that too. I understand the ones that just completely break down crying. Like, I called one of them dumb last cycle, and she broke down in just tears. I didn't really think she was dumb; it was just, like, another word. But that's what I've been trying to tell the rest of the company, just the way you address them. Yes, you can still scream at them. Yes, you will demand of them, tell them [to] correct their deficiencies, but the way you address them has to be different. I mean, you probably shouldn't be doing that with the males either, but, like, the consequences are different for the females.*

The use of sexually explicit and derogatory gender-based language by male drill instructors was also described by male new Marines at both MCRDs during the week 11 focus groups.¹⁹³ Recruits outlined the specific types of language used and context it was used in and reflected on how they felt it motivated them and built a shared bond between them and their drill instructors. Male recruits also acknowledged the need to clean up their language if and when women are around, both in their immediate training environment and in future situations.

¹⁹³ Recruits for every focus group were sampled from more than one platoon.

New Marines, Male, Male-Only, San Diego, Focus Group 1

Moderator: How would you describe male drill instructors?

New Marine A: *They could fit more in our shoes. They can make jokes we relate to, make it fun. What our DI told us is to not fuck with the female recruits. It's easier for them to relate [to us]. Like, personally, I feel more comfortable talking about personal issues with my dad.*

Moderator: What are some examples of those jokes?

New Marine B: *Jokes that guys say are different than what girls say. For alignment of your eyes [to turn your eyes and not your head in close-order drill], they use "titty vision." When you have a girlfriend but you want to check out another hot woman's titties, you use your "titty vision" so your girlfriend doesn't notice.*

New Marine C: *A lot of phrases are personalized for male recruits.*

New Marine A: *For slings, a cadence was "reach up the skirt, pick what you like, and reach back down."*

[Others agree with "up the skirt" and mimic rifle movement.]

Moderator: And do you like that? Does it connect with you?

New Marine B: *It's just funny.*

New Marine D: *Because it's just so ridiculous, it helps us remember.*

New Marine B: *It stands out, makes us laugh. Because in the real world, people don't say that.*

New Marine E: *It's like they're throwing us a bone to make it funny. To lighten the mood. They'll never say that, but ...*

New Marine A: *They say that the M-16 is your bitch, and to slap it as hard as you like. I was in a working party for the scenarios, and they asked us what we named our rifles, and one recruit named it after a porn star. Everyone thought that was awesome.*

Moderator: Do you think female drill instructors say the same things to female recruits when they are teaching?

[Several say no.]

New Marine F: *It depends on what drill instructors are around. We got a new DI. When he first came in, we thought he was going to be strict, but when he was surrounded by other DIs, he started to lighten up.*

New Marine G: *It also depends on the platoon. Once a DI got to know us, they were able to figure out what they could say without offending anyone.*

New Marine D: *They asked what you like.*

New Marine A: *A lot of times drill instructors will ask if something they say offends you. Like, they ask if they are offended by cursing, and we say, “No, sir,” and they say, “All right, you guys are bitches!”*

New Marine D: *They won’t say it out of nowhere. They’ll ask you. And then they’ll ask you again to confirm and make sure.*

[Later in the focus group]

Moderator: How well prepared do you feel to work with women in your next training assignment?

New Marine A: *It might be better with females because living with guys for 3 months ...*

New Marine D: *We will have to be more careful about what we are saying.*

New Marine B: *Obviously, we joke, but not everyone sees it that way.*

New Marine A: *I feel like when I go home, I’ll be like, “Can I use some shitter paper?” and my mom will get mad. Even the drill instructors say that there will be adjustments when we go back home.*

New Marine F: *I’m not sure if it is integrated in MOS school.*

New Marine D: *You just have to watch out. Some of the jokes here would be very offensive. We have to act better about how we act.*

New Marine A: *Yeah, you can’t say “titty vision” anymore.*

New Marines, Male, Male-Only, San Diego, Focus Group

New Marine A: *I think you can lose some of that camaraderie [with more training from female drill instructors]. You lose those jokes. With a female DI, you have to be more professional. If you have all male drill instructors, you just say, “Yes, sir,” “Aye, sir.” But if you have a female DI, you have to be on your toes.*

Moderator: What are some common jokes you hear?

New Marine B: *Our drill instructor went up to one of our recruits and asked him where he was from, and the recruit said he played football, and the DI said, “Go back to your team and tell them I’m going to fuck all their bitches.”*

New Marine A: *Yeah, using women as an analogy to put things into a context we can understand. It’s funny and it drives it home for us a bit more.*

New Marine C: *It works. When we were getting ready for drill, we have to get a tight 45-degree angle for our arms. And one of our DIs said, “We like it tight, right?” [Several recruits grin and snicker when this is said, looking around at each other.]*

New Marine A: *The jokes—when you’re in a stressful boot camp experience, you want a joke to get through. It does tend to work to connect with us.*

Moderator: Does this same kind of joking happen in female platoons?

New Marine A: *I actually had a question about that when we were riding up north [to Camp Pendleton]. I asked what the females say, and everyone on the bus started laughing. I'm not sure if that goes on over there.*

New Marine B: *They have a different sense of humor. Maybe they are making jokes about big things or hard things.*

[Later in the focus group]

New Marine A: *You have to be careful about what you say. Our drill instructor, when he told us keep it "tight like pussy; that's how we like it, right?" and most of the platoon said, "Yes, sir," but one recruit said, "No, sir" [because he was gay]. Everyone was cracking up. So there might have been a lot of jokes around that could make him feel uncomfortable. I even made some jokes. But I didn't realize the effect those jokes could have on each other. No matter what you say to anyone, it could affect them. You just have to be mindful of what you say. But now that we know each other, we know we can make those jokes. But at the beginning, it's best to steer away.*

New Marine D: *To piggyback off of that ... we didn't know each other in the beginning. But now we know each other. We've eaten and showered together. We're not as uncomfortable with that anymore. Now our mindset has changed while being in. We now understand things, more things than we knew before. And now we know who that kid is [who's gay], and how he is. It's not a big deal anymore.*

New Marines, Male, Series Track, Parris Island

New Marine A: *Our DIs, if they correct female recruits, they were cognizant enough to alter their vocabulary. They use some words to us that they don't use with females. They have the wherewithal to understand they probably shouldn't call a female recruit this name.*

Moderator: Do you have an example?

New Marine A: *One of the things we get often, they will say our last name, we'll say, "Sir!" and he'll go, "Ho?" Male DIs will not say that to a female. Or from the first time I was here previously, we would say, "Sir?" and they would respond "Bitch?"*

New Marine B: *I didn't hear bitch with female, but yes, they say bitch, everything in the book.*

New Marine A: *They know what's acceptable outside of the house [squad bay] and here's what's acceptable in the house. I'm not calling you that. Being called a bitch or a ho, if that's the worst thing that happens to you, it is a good day. If it was the old Marine Corps, we'd strangle you. If I'm a ho, then ... it's not personal attacks.*

New Marine C: *They announce it beforehand, the DIs. "Does anyone have a problem with me saying this?"*

New Marine A: *Even the instructors that have taught us at the RTF [Recruit Training Facility], they don't cuss, they try not to. But then they will say, "Does anyone care if I*

say the F word?” “Ahhh, nooo” [mimicking confused look on face]. We’ve never been asked for permission for anything.

New Marine D: *They [drill instructors] tell us that if this bothers you, what do you think the enemy is going to call you in combat? You shouldn’t let little words get to you.*

Appendix M: Marine Corps Recruit Social Science Survey Data

Appendix M: Marine Corps Recruit Social Science Survey Data

Question 1. What is your gender?

Appendix Table M.1. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

Week 2				Week 11				Week 2		Week 11	
Integrated Company				Series Track				Male-Only			
Male		Female		Male		Female					
N	%	N	%	N	%	N	%	N	%	N	%
78	56.5	60	43.5	75	47.2	84	52.8	0	0.0	175	100.0

Question 2. What is your age?

Appendix Table M.2. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

	Week 2								Week 11								Week 2		Week 11	
	Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
	Male		Female		Male		Female		Male		Female		Male		Female					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
17–19	64	82.1	43	71.7	43	57.3	49	58.3	62	79.5	41	68.3	41	54.7	47	56	159	90.9	158	90.3
20–23	13	16.7	15	25.0	26	34.7	29	34.5	15	19.2	16	26.7	28	37.3	31	36.9	11	6.3	10	5.7
24–27	0	0.0	2	3.3	4	5.3	6	7.1	0	0	3	5	4	5.3	6	7.1	5	2.9	7	4.0
28–31	1	1.3	0	0.0	2	2.7	0	0.0	1	1.3	0	0.0	2	2.7	0	0.0	0	0.0	0	0.0
32–35	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
36 or older	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Question 3. Is your ethnicity Hispanic/Spanish/Latino?

Appendix Table M.3. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

	Week 2								Week 11								Week 2		Week 11	
	Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
	Male		Female		Male		Female		Male		Female		Male		Female					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Yes, Spanish/Hispanic/Latino	19	25.0	28	48.3	20	27.0	33	39.3	20	25.6	28	46.7	20	26.7	33	39.3	75	42.9	75	43.1
No, not Spanish/Hispanic/Latino	57	75.0	30	51.7	54	73.0	51	60.7	56	71.8	31	51.7	55	73.3	51	60.7	97	55.4	98	56.3
Prefer not to say	0	0.0	0	0.0	0	0.0	0	0.0	2	2.6	1	1.7	0	0.0	0	0.0	3	1.7	1	0.6

Question 4. What is your race? Check all that apply.

Appendix Table M.4. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

	Week 2								Week 11								Week 2		Week 11	
	Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
	Male		Female		Male		Female		Male		Female		Male		Female					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
American Indian or Alaska Native	3	3.8	3	5.0	3	4.0	7	8.3	2	2.6	3	5.0	2	2.7	6	7.1	15	8.6	14	8.0
Asian	4	5.1	2	3.3	6	8.0	7	8.3	3	3.8	2	3.3	6	8.0	7	8.3	12	6.9	12	6.9
Black or African American	17	21.8	9	15.0	12	16.0	12	14.3	18	23.1	8	13.3	13	17.3	12	14.3	12	6.9	13	7.4
Native Hawaiian or other Pacific Islander	0	0.0	0	0.0	0	0.0	3	3.6	0	0.0	0	0.0	1	1.3	3	3.6	1	0.6	2	1.1
White	52	66.7	44	73.3	53	70.7	55	65.5	50	64.1	43	71.7	52	69.3	57	67.9	130	74.3	130	74.3
Prefer not to say	7	9.0	2	3.3	1	1.3	4	4.8	6	7.7	5	8.3	2	2.7	3	3.6	3	1.7	4	2.3

Question 5. What is your marital status?

Appendix Table M.5. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

	Week 2								Week 11								Week 2		Week 11	
	Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
	Male		Female		Male		Female		Male		Female		Male		Female					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Never married	77	98.7	57	96.6	74	98.7	80	95.2	77	98.7	58	96.7	74	98.7	79	95.2	174	99.4	174	99.4
Married	1	1.3	2	3.4	1	1.3	4	4.8	1	1.3	2	3.3	1	1.3	3	3.6	0	0.0	1	0.6
Separated	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0
Divorced	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0
Widowed	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Question 6. What is the highest degree or level of school you have completed?

Appendix Table M.6. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

	Week 2								Week 11								Week 2		Week 11	
	Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
	Male		Female		Male		Female		Male		Female		Male		Female					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
High school diploma or equivalent (GED)	51	66.2	39	65.0	49	65.3	52	61.9	52	66.7	34	56.7	42	56.0	50	59.5	155	88.6	153	87.4
Some college	0	0.0	0	0.0	22	29.3	22	26.2	21	26.9	19	31.7	29	38.7	24	28.6	17	9.7	19	10.9
Associate's degree	2	2.6	5	8.3	1	1.3	6	7.1	2	2.6	4	6.7	1	1.3	6	7.1	3	1.7	3	1.7
Bachelor's degree	2	2.6	3	5.0	3	4.0	4	4.8	2	2.6	3	5.0	3	4.0	3	3.6	0	0.0	0	0.0
Master's degree or higher	1	1.3	0	0.0	0	0.0	0	0.0	1	1.3	0	0.0	0	0.0	1	1.2	0	0.0	0	0.0

Question 7. Where do you consider home?

Appendix Table M.7. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

	Week 2								Week 11								Week 2		Week 11	
	Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
	Male		Female		Male		Female		Male		Female		Male		Female					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
U.S. Commonwealth and Territories (e.g., American Samoa, Guam, Puerto Rico, Virgin Islands)	0	0.0	1	1.7	1	1.4	2	2.4	0	0.0	1	1.7	1	1.4	2	2.4	0	0.0	0	0.0
Elsewhere	1	1.3	0	0.0	1	1.4	2	2.4	1	1.3	0	0.0	0	0.0	2	2.4	1	0.6	2	1.1
Mid-Atlantic (DE, DC, MD, NJ, PA, VA, WV)	13	16.7	3	5.0	16	22.2	6	7.1	12	15.4	4	6.7	17	23.3	6	7.2	0	0.0	0	0.0
Midwest (IL, IN, MI, MN, OH, WI)	14	17.9	13	21.7	6	8.3	14	16.7	13	16.7	11	18.3	6	8.2	13	15.7	22	12.6	19	10.9
Mountain Plains (CO, IA, KS, MO, MT, NE, SD, UT, WY)	1	1.3	9	15.0	0	0.0	5	6.0	0	0.0	9	15.0	0	0.0	6	7.2	28	16.0	31	17.8
Northeast (CT, ME, MA, NH, NY, RI, VT)	12	15.4	3	5.0	14	19.4	10	11.9	13	16.7	4	6.7	16	21.9	9	10.8	0	0.0	0	0.0
Southeast (AL, FL, GA, KY, MS, NC, SC, TN)	31	39.7	10	16.7	30	41.7	17	20.2	32	41.0	11	18.3	29	39.7	17	20.5	1	0.6	0	0.0
Southwest (AR, LA, NM, OK, TX)	4	5.1	8	13.3	4	5.6	9	10.7	4	5.1	7	11.7	4	5.5	8	9.6	54	30.9	54	31.0
Western (AK, AZ, CA, HI, ID, NV, OR, WA)	2	2.6	13	21.7	0	0.0	19	22.6	3	3.8	13	21.7	0	0.0	20	24.1	69	39.4	68	39.1

Question 8. Have any members of your family served in the military (active-duty, guard, or reserve)? Check all that apply.

Appendix Table M.8. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

	Week 2								Week 11								Week 2		Week 11	
	Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
	Male		Female		Male		Female		Male		Female		Male		Female					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Mother	2	2.6	4	6.7	5	6.7	3	3.6	2	2.6	4	6.7	4	5.3	3	3.6	3	1.7	3	1.7
Father	14	17.9	13	21.7	13	17.3	14	16.7	15	19.2	14	23.3	14	18.7	14	16.7	40	22.9	39	22.3
Sibling	8	10.3	7	11.7	11	14.7	14	16.7	8	10.3	7	11.7	11	14.7	14	16.7	20	11.4	22	12.6
Cousin	19	24.4	10	16.7	22	29.3	25	29.8	17	21.8	11	18.3	24	32.0	25	29.8	42	24.0	40	22.9
Aunt or Uncle	24	30.8	18	30.0	26	34.7	31	36.9	26	33.3	18	30.0	27	36.0	34	40.5	65	37.1	61	34.9
Grandparent	31	39.7	22	36.7	34	45.3	41	48.8	30	38.5	25	41.7	35	46.7	42	50.0	71	40.6	80	45.7
Other family member	14	17.9	10	16.7	17	22.7	17	20.2	20	25.6	12	20.0	13	17.3	21	25.0	42	24.0	37	21.1

Question 9. Why did you join the military? Check all that apply.

Appendix Table M.9. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

	Week 2								Week 11								Week 2		Week 11	
	Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
	Male		Female		Male		Female		Male		Female		Male		Female					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Money for college, college repayment, and other education benefits	52	66.7	37	61.7	40	53.3	47	56.0	52	66.7	40	66.7	42	56.0	58	69.0	11	64.3	11	66.9
Health care benefits	39	50.0	26	43.3	39	52.0	43	51.2	38	48.7	36	60.0	41	54.7	41	48.8	10	57.0	10	61.7
Pay (including military retirement)	38	48.7	29	48.3	36	48.0	35	41.7	30	38.5	24	40.0	34	45.3	37	44.0	89	50.9	98	56.0
Desire to serve your country	49	62.8	34	56.7	44	58.7	39	46.4	60	76.9	38	63.3	43	57.3	42	50.0	12	72.6	11	64.6
Desire to travel and see new places	36	46.2	42	70.0	48	64.0	63	75.0	39	50.0	51	85.0	49	65.3	65	77.4	11	63.1	12	69.1
Family history of military service	22	28.2	16	26.7	23	30.7	25	29.8	28	35.9	19	31.7	22	29.3	25	29.8	48	27.4	55	31.4
Personal development, growth, and maturity	53	67.9	51	85.0	61	81.3	68	81.0	61	78.2	51	85.0	60	80.0	68	81.0	13	76.4	14	82.9
Challenging or interesting work	41	52.6	36	60.0	44	58.7	50	59.5	50	64.1	36	60.0	43	57.3	51	60.7	93	53.1	98	56.0
Building skills useful for civilian employment	38	48.7	28	46.7	45	60.0	38	45.2	44	56.4	28	46.7	46	61.3	39	46.4	93	53.1	10	59.4
Security and stability of the job	28	35.9	31	51.7	40	53.3	46	54.8	37	47.4	32	53.3	37	49.3	39	46.4	78	44.6	80	45.7
Test yourself physically or mentally	44	56.4	41	68.3	49	65.3	59	70.2	63	80.8	44	73.3	55	73.3	60	71.4	12	70.3	13	75.4
To get away from family, personal situation, or hometown	11	14.1	18	30.0	13	17.3	26	31.0	20	25.6	19	31.7	15	20.0	30	35.7	33	18.9	35	20.0
Other_____	10	12.8	4	6.7	5	6.7	13	15.5	3	3.8	1	1.7	7	9.3	6	7.1	9	5.1	9	5.1

Question 10. How long do you see yourself serving on active duty?

Appendix Table M.10. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

	Week 2								Week 11								Week 2		Week 11	
	Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
	Male		Female		Male		Female		Male		Female		Male		Female					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
2-4 years	19	26.4	25	43.1	21	28.8	20	24.1	21	27.6	23	39.7	22	29.7	18	22.2	50	29.2	44	26.5
5-8 years	29	40.3	15	25.9	24	32.9	36	43.4	26	34.2	19	32.8	23	31.1	36	44.4	77	45.0	70	42.2
9-12 years	6	8.3	4	6.9	4	5.5	6	7.2	7	9.2	6	10.3	6	8.1	7	8.6	15	8.8	20	12.0
13-16 years	0	0.0	1	1.7	1	1.4	2	2.4	0	0.0	0	0.0	1	1.4	1	1.2	2	1.2	0	0.0
17-20 years	10	13.9	10	17.2	15	20.5	13	15.7	16	21.1	9	15.5	12	16.2	11	13.6	21	12.3	19	11.4
More than 20 years	8	11.1	3	5.2	8	11.0	6	7.2	6	7.9	1	1.7	10	13.5	8	9.9	6	3.5	13	7.8

Question 11. During your time at recruit training, have you been trained by an instructor of the opposite sex?

Appendix Table M.11. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

	Week 2								Week 11								Week 2		Week 11	
	Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
	Male		Female		Male		Female		Male		Female		Male		Female					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
No	58	74.4	22	36.7	74	98.7	30	35.7	29	37.2	7	11.7	20	26.7	7	8.4	166	94.9	146	83.9
Yes	20	25.6	38	63.3	1	1.3	54	64.3	49	62.8	53	88.3	55	73.3	76	91.6	9	5.1	28	16.1

Question 12. During your time at recruit training, how closely have you trained with recruits of the opposite sex?

Appendix Table M.12. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

	Week 2								Week 11								Week 2		Week 11	
	Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
	Male		Female		Male		Female		Male		Female		Male		Female					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Somewhat closely	35	45.5	42	71.2	1	1.3	4	4.8	54	69.2	39	66.1	52	69.3	56	66.7	0	0.0	3	1.7
I have not trained with recruits of the opposite sex	12	15.6	1	1.7	56	74.7	56	67.5	0	0.0	0	0.0	3	4.0	0	0.0	169	97.7	147	85.5
Not at all closely	28	36.4	10	16.9	18	24.0	22	26.5	8	10.3	0	0.0	19	25.3	24	28.6	4	2.3	22	12.8
Very closely	2	2.6	6	10.2	0	0.0	1	1.2	16	20.5	20	33.9	1	1.3	4	4.8	0	0.0	0	0.0

Question 13. In your opinion, at what level should male and female recruits train together in your Service’s recruit training program? Check all that apply.

Appendix Table M.13.1. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

	Week 2								Week 11								Week 2		Week 11	
	Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
	Male		Female		Male		Female		Male		Female		Male		Female					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Platoon	13	16.7	22	36.7	16	21.3	22	26.2	10	12.8	15	25.0	11	14.7	13	15.5	42	24.0	22	12.6
Series	40	51.3	37	61.7	19	25.3	32	38.1	56	71.8	53	88.3	30	40.0	47	56.0	63	36.0	72	41.4
Company	42	53.8	37	61.7	42	56	34	40.5	22	28.2	20	33.3	40	53.3	38	45.2	109	62.3	96	55.2
Battalion	19	24.4	25	41.7	27	36	25	29.8	16	20.5	18	30.0	21	28.0	31	36.9	71	40.6	66	37.9
Male and female recruits should not train together at all	11	14.1	1	1.7	15	20	16	19	4	5.1	0	0.0	5	6.7	2	2.4	23	13.1	16	9.2

Appendix Table M.13.2. Change in Responses Over Time Statistical Significance Testing Results, Subset by Training Model and Gender

<i>p</i> values (Stuart-Maxwell test for marginal homogeneity)					
	Integrated Company Males	Series Track Males	Male-Only	Series Track Females	Integrated Company Females
Platoon	0.467	0.197	0.001	0.029	0.127
Series	0.008	0.016	0.216	0.009	0.002
Company	0.001	0.732	0.140	0.433	<0.001
Battalion	0.491	0.239	0.612	0.201	0.127
Male and female recruits should not train together at all	0.083	0.008	0.144	<0.001	0.317

Note: *p* values <0.05 indicate a group’s overall responses were significantly different at week 11 compared to week 2.

Appendix Table M.13.3. Difference Between Men and Women Statistical Significance Testing Results, Subset by Training Model and Training Cycle Timepoint

<i>p</i> values (Pearson's chi-squared test)				
	Week 2		Week 11	
	Integrated Company	Series Track	Integrated Company	Series Track
Platoon	0.007	0.473	0.066	0.887
Series	0.223	0.085	0.018	0.045
Company	0.357	0.050	0.516	0.308
Battalion	0.031	0.403	0.200	0.232
Male and female recruits should not train together at all	0.010	0.880	0.046	0.189

Note: *p* values <0.05 indicate male and female responses were significantly different within the training model at the timepoint indicated

Appendix Table M.13.4. Difference Between Training Models Statistical Significance Testing Results, Subset by Gender and Training Cycle Timepoint

<i>p</i> values (Pearson's chi-squared test)								
	Week 2				Week 11			
	Men			Women	Men			Women
	Integrated Company v. Series Track	Integrated Company v. All-Male	All Parris Island v. All-Male	Integrated Company v. Series Track	Integrated Company v. Series Track	Integrated Company v. All-Male	All Parris Island v. All-Male	Integrated Company v. Series Track
Platoon	0.462	0.740	0.268	0.178	0.740	0.969	0.773	0.155
Series	0.001	<0.001	0.632	0.005	<0.001	<0.001	0.007	<0.001
Company	0.789	0.002	0.175	0.012	0.002	<0.001	0.008	0.151
Battalion	0.116	0.280	0.048	0.139	0.280	0.006	0.008	0.389
Male and female recruits should not train together at all	0.332	0.949	0.329	0.001	0.949	0.460	0.375	0.229

Note: *p* values <0.05 indicate training models' responses were significantly different for the gender and timepoint indicated

Question 14. Please rate your preference for more or less integration of men and women for the following aspects of recruit training (check only one box for each line):

Appendix Table M.14.1. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

		Week 2								Week 11								Week 2		Week 11	
		Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
		Male		Female		Male		Female		Male		Female		Male		Female					
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Physical fitness training	Less integration	11	14.1	2	3.3	7	9.6	10	12.0	11	14.1	0	0.0	4	5.3	3	3.6	15	8.6	11	6.3
	More integration	19	24.4	27	45.0	26	35.6	45	54.2	11	14.1	30	50.0	37	49.3	42	50.0	82	47.1	89	51.1
	Satisfied with current integration	48	61.5	31	51.7	40	54.8	28	33.7	56	71.8	30	50.0	34	45.3	39	46.4	77	44.3	74	42.5
Classroom training	Less integration	1	1.3	2	3.3	2	2.7	0	0.0	2	2.6	0	0.0	0	0.0	2	2.4	4	2.3	5	2.9
	More integration	32	41.0	31	51.7	46	63	64	77.1	17	21.8	29	48.3	47	62.7	56	66.7	130	74.7	117	67.2
	Satisfied with current integration	45	57.7	27	45.0	25	34.2	19	22.9	59	75.6	31	51.7	28	37.3	26	31.0	40	23.0	52	29.9
Tactical/field training	Less integration	7	9.2	3	5.0	8	11.1	7	8.5	9	11.5	0	0.0	3	4.0	3	3.6	9	5.2	8	4.6
	More integration	31	40.8	44	73.3	35	48.6	61	74.4	26	33.3	39	66.1	45	60.0	56	66.7	110	63.2	95	54.3
	Satisfied with current integration	38	50.0	13	21.7	29	40.3	14	17.1	43	55.1	20	33.9	27	36.0	25	29.8	55	31.6	72	41.1
Inspections and training conducted in housing/sleeping quarters	Less integration	18	23.4	18	30.0	13	17.6	21	25.3	10	13.0	10	16.7	10	13.5	13	15.5	42	24.4	28	16.1
	More integration	12	15.6	8	13.3	15	20.3	6	7.2	4	5.2	6	10.0	9	12.2	3	3.6	36	20.9	39	22.4
	Satisfied with current integration	47	61.0	34	56.7	46	62.2	56	67.5	63	81.8	44	73.3	55	74.3	68	81.0	94	54.7	107	61.5

Appendix Table M.14.2. Change in Responses Over Time Statistical Significance Testing Results, Subset by Training Model and Gender

<i>p</i> values (Stuart-Maxwell test for marginal homogeneity)					
	Integrated Company Males	Series Track Males	Male-Only	Series Track Females	Integrated Company Females
Physical fitness training	0.202	0.120	0.421	0.0531	0.339
Classroom training	0.009	0.362	0.127	0.1934	0.339
Tactical/field training	0.349	0.164	0.074	0.0467	0.118
Inspections and training conducted in housing/sleeping quarters	0.009	0.073	0.065	0.0347	0.125

Note: *p* values <0.05 indicate a group's overall responses were significantly different at week 11 compared to week 2.

Appendix Table M.14.3. Difference Between Men and Women Statistical Significance Testing Results, Subset by Training Model and Training Cycle Timepoint

<i>p</i> values (Pearson's chi-squared test)				
	Week 2		Week 11	
	Integrated Company	Series Track	Integrated Company	Series Track
Physical fitness training	0.011	0.028	<0.001	0.864
Classroom training	0.280	0.076	0.003	0.307
Tactical/field training	0.001	0.003	<0.001	0.681
Inspections and training conducted in housing/sleeping quarters	0.674	0.045	0.429	0.126

Note: *p* values <0.05 indicate male and female responses were significantly different within the training model at the timepoint indicated

Appendix Table M.14.4. Difference Between Training Models Statistical Significance Testing Results, Subset by Gender and Training Cycle Timepoint

<i>p</i> values (Pearson's chi-squared test)								
	Week 2				Week 11			
	Men			Women	Men			Women
	Integrated Company v. Series Track	Integrated Company v. All-Male	All Parris Island v. All-Male	Integrated Company v. Series Track	Integrated Company v. Series Track	Integrated Company v. All-Male	All Parris Island v. All-Male	Integrated Company v. Series Track
Physical fitness training	0.281	<0.001	0.006	0.040	<0.001	<0.001	0.001	0.327
Classroom training	0.015	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	0.027
Tactical/field training	0.494	0.003	0.003	0.605	0.003	0.004	0.242	0.317
Inspections and training conducted in housing/sleeping quarters	0.579	0.300	0.452	0.324	0.300	0.002	0.001	0.272

Note: *p* values <0.05 indicate training models' responses were significantly different for the gender and timepoint indicated

Question 15. Imagine your Service increasing how frequently men and women train together at recruit training. Please rate your agreement and disagreement with the following statements (check only one box for each line):

Appendix Table M.15.1. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

		Week 2								Week 11								Week 2		Week 11	
		Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
		Male		Female		Male		Female		Male		Female		Male		Female					
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Recruits will maintain the same discipline and focus while training	Agree	35	44.9	50	83.3	25	33.3	51	60.7	31	39.7	45	75.0	38	50.7	45	54.2	88	50.3	64	36.6
	Disagree	34	43.6	5	8.3	37	49.3	24	28.6	34	43.6	7	11.7	25	33.3	27	32.5	69	39.4	85	48.6
	Neither	9	11.5	5	8.3	13	17.3	9	10.7	13	16.7	8	13.3	12	16.0	11	13.3	18	10.3	26	14.9
Recruits will maintain appropriate interactions during non-training time (e.g., meals, rest/recreation time)	Agree	31	39.7	46	76.7	20	27	50	59.5	26	33.3	43	71.7	27	36.0	43	51.2	70	40.0	53	30.3
	Disagree	35	44.9	10	16.7	43	58.1	22	26.2	39	50.0	11	18.3	39	52.0	35	41.7	86	49.1	91	52.0
	Neither	12	15.4	4	6.7	11	14.9	12	14.3	13	16.7	6	10.0	9	12.0	6	7.1	19	10.9	31	17.7
Training standards will be lowered	Agree	30	39.0	6	10.2	36	48.6	12	14.3	36	46.2	5	8.3	33	44.6	13	15.5	54	31.0	53	30.6
	Disagree	34	44.2	41	69.5	23	31.1	55	65.5	28	35.9	48	80.0	22	29.7	56	66.7	78	44.8	65	37.6
	Neither	13	16.9	12	20.3	15	20.3	17	20.2	14	17.9	7	11.7	19	25.7	15	17.9	42	24.1	55	31.8
Training standards will be raised	Agree	16	20.8	36	60.0	15	20	41	48.8	12	15.4	36	60.0	15	20.5	46	54.8	28	16.1	30	17.5
	Disagree	36	46.8	9	15.0	41	54.7	17	20.2	43	55.1	9	15.0	35	47.9	16	19.0	77	44.3	64	37.4
	Neither	25	32.5	15	25.0	19	25.3	26	31.0	23	29.5	15	25.0	23	31.5	22	26.2	69	39.7	77	45.0
Recruits will be better prepared for their first assignment	Agree	32	41.0	53	91.4	31	41.9	61	72.6	35	44.9	47	78.3	38	51.4	60	73.2	81	47.1	79	45.7
	Disagree	12	15.4	1	1.7	17	23	11	13.1	11	14.1	2	3.3	8	10.8	6	7.3	27	15.7	17	9.8
	Neither	34	43.6	4	6.9	26	35.1	12	14.3	32	41.0	11	18.3	28	37.8	16	19.5	64	37.2	77	44.5
Recruits will be less prepared for their first assignment	Agree	11	14.1	3	5.2	10	13.5	6	7.2	10	12.8	5	8.3	10	13.3	6	7.1	21	12.1	14	8.1
	Disagree	29	37.2	45	77.6	32	43.2	58	69.9	33	42.3	38	63.3	33	44.0	56	66.7	78	45.1	82	47.7
	Neither	38	48.7	10	17.2	32	43.2	19	22.9	35	44.9	17	28.3	32	42.7	22	26.2	74	42.8	76	44.2
I would feel more confident in my ability as a Marine	Agree	22	28.6	51	85.0	24	32	54	65.1	28	36.8	48	80.0	24	32.4	55	65.5	51	29.3	57	32.9
	Disagree	6	7.8	2	3.3	10	13.3	4	4.8	10	13.2	5	8.3	6	8.1	6	7.1	17	9.8	23	13.3
	Neither	49	63.6	7	11.7	41	54.7	25	30.1	38	50.0	7	11.7	44	59.5	23	27.4	106	60.9	93	53.8

*For simplicity, “agree/mostly agree” has been consolidated to “agree,” and “disagree/mostly disagree” has been consolidated to “disagree”

Appendix Table M.15.2. Change in Responses Over Time Statistical Significance Testing Results, Subset by Training Model and Gender

<i>p</i> values (Stuart-Maxwell test for marginal homogeneity)					
	Integrated Company Males	Series Track Males	Male-Only	Series Track Females	Integrated Company Females
Recruits will maintain the same discipline and focus while training	0.535	0.014	0.006	0.517	0.382
Recruits will maintain appropriate interactions during non-training time (e.g., meals, rest/recreation time)	0.642	0.371	0.021	0.041	0.758
Training standards will be lowered	0.299	0.488	0.189	0.892	0.354
Training standards will be raised	0.275	0.406	0.313	0.558	1.000
Recruits will be better prepared for their first assignment	0.815	0.520	0.094	0.216	0.025
Recruits will be less prepared for their first assignment	0.749	1.000	0.458	0.822	0.062
I would feel more confident in my ability as a Marine	0.088	0.449	0.168	0.715	0.376

Note: *p* values <0.05 indicate a group's overall responses were significantly different at week 11 compared to week 2.

Appendix Table M.15.3. Difference Between Men and Women Statistical Significance Testing Results, Subset by Training Model and Training Cycle Timepoint

<i>p</i> values (Pearson's chi-squared test)				
	Week 2		Week 11	
	Integrated Company	Series Track	Integrated Company	Series Track
Recruits will maintain the same discipline and focus while training	<0.001	0.003	<0.001	0.858
Recruits will maintain appropriate interactions during non-training time (e.g., meals, rest/recreation time)	<0.001	<0.001	<0.001	0.137
Training standards will be lowered	0.001	<0.001	<0.001	<0.001
Training standards will be raised	<0.001	<0.001	<0.001	<0.001
Recruits will be better prepared for their first assignment	<0.001	<0.001	<0.001	0.017
Recruits will be less prepared for their first assignment	<0.001	0.003	0.050	0.016
I would feel more confident in my ability as a Marine	<0.001	<0.001	<0.001	<0.001

Note: *p* values <0.05 indicate male and female responses were significantly different within the training model at the timepoint indicated

Appendix Table M.15.4. Difference Between Training Models Statistical Significance Testing Results, Subset by Gender and Training Cycle Timepoint

<i>p</i> values (Pearson's chi-squared test)								
	Week 2				Week 11			
	Men			Women	Men			Women
	Integrated Company v. Series Track	Integrated Company v. All-Male	All Parris Island v. All-Male	Integrated Company v. Series Track	Integrated Company v. Series Track	Integrated Company v. All-Male	All Parris Island v. All-Male	Integrated Company v. Series Track
Recruits will maintain the same discipline and focus while training	0.292	0.356	0.118	0.007	0.356	0.762	0.179	0.012
Recruits will maintain appropriate interactions during non-training time (e.g., meals, rest/recreation time)	0.209	0.709	0.342	0.091	0.709	0.888	0.589	0.012
Training standards will be lowered	0.253	0.471	0.059	0.760	0.471	0.024	0.016	0.205
Training standards will be raised	0.563	0.610	0.121	0.409	0.610	0.026	0.017	0.772
Recruits will be better prepared for their first assignment	0.398	0.684	0.543	0.015	0.684	0.595	0.575	0.570
Recruits will be less prepared for their first assignment	0.739	0.963	0.658	0.596	0.963	0.457	0.324	0.912
I would feel more confident in my ability as a Marine	0.412	0.423	0.946	0.025	0.423	0.828	0.763	0.073

Note: *p* values <0.05 indicate training models' responses were significantly different for the gender and timepoint indicated

Question 16. Again, imagine your Service increasing how frequently men and women train together at recruit training. From your perspective, please rate the likelihood of occurrence of the following items (check only one box for each line):

Appendix Table M.16.1. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

		Week 2								Week 11								Week 2		Week 11	
		Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
		Male		Female		Male		Female		Male		Female		Male		Female					
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Training and mentorship from female instructors	Less likely to occur	11	14.1	2	3.4	10	13.3	4	4.8	6	7.8	1	1.7	2	2.7	7	8.3	11	6.3	8	4.6
	More likely to occur	52	66.7	34	57.6	46	61.3	43	51.2	53	68.8	42	70.0	58	77.3	41	48.8	120	69.0	143	82.7
	No difference	15	19.2	23	39.0	19	25.3	37	44.0	18	23.4	17	28.3	15	20.0	36	42.9	43	24.7	22	12.7
Training and mentorship from male instructors	Less likely to occur	7	9	3	5.1	6	8.2	4	4.8	5	6.6	2	3.3	5	6.7	6	7.1	11	6.3	7	4.0
	More likely to occur	32	41	41	69.5	35	47.9	54	64.3	32	42.1	43	71.7	38	50.7	54	64.3	57	32.8	56	32.4
	No difference	39	50	15	25.4	32	43.8	26	31.0	39	51.3	15	25.0	32	42.7	24	28.6	106	60.9	110	63.6
Fraternization (improper relationships) among recruits	Less likely to occur	4	5.1	6	10.2	3	4	10	12.3	1	1.3	8	13.3	9	12.0	8	9.5	6	3.4	15	8.7
	More likely to occur	59	75.6	24	40.7	48	64	46	56.8	53	68.8	21	35.0	51	68.0	49	58.3	127	73.0	126	72.8
	No difference	15	19.2	29	49.2	24	32	25	30.9	23	29.9	31	51.7	15	20.0	27	32.1	41	23.6	32	18.5
Sexual harassment and sexual assault among recruits	Less likely to occur	8	10.3	11	18.6	5	6.7	4	4.9	4	5.2	13	22.0	8	10.7	9	10.7	17	9.8	17	9.8
	More likely to occur	51	65.4	21	35.6	52	69.3	50	61.0	46	59.7	15	25.4	47	62.7	47	56.0	122	70.1	124	71.7
	No difference	19	24.4	27	45.8	18	24	28	34.1	27	35.1	31	52.5	20	26.7	28	33.3	35	20.1	32	18.5
Success in working with diverse team members	Less likely to occur	6	7.8	1	1.7	4	5.6	1	1.2	3	3.9	0	0.0	3	4.0	1	1.2	19	11.0	8	4.6
	More likely to occur	50	64.9	52	88.1	48	66.7	75	89.3	47	61.8	54	90.0	59	78.7	70	83.3	110	64.0	127	73.4

	No difference	21	27.3	6	10.2	20	27.8	8	9.5	26	34.2	6	10.0	13	17.3	13	15.5	43	25.0	38	22.0
Injuries among female recruits	Less likely to occur	4	5.3	5	8.5	2	2.8	3	3.6	4	5.2	3	5.0	3	4.0	5	6.0	2	1.2	5	2.9
	More likely to occur	35	46.1	22	37.3	30	41.7	34	40.5	30	39.0	22	36.7	31	41.3	27	32.1	61	35.3	70	40.5
	No difference	37	48.7	32	54.2	40	55.6	47	56.0	43	55.8	35	58.3	41	54.7	52	61.9	110	63.6	98	56.6
Injuries among male recruits	Less likely to occur	14	18.7	15	25.4	10	13.5	19	22.6	13	17.3	9	15.0	9	12.0	14	16.7	13	7.5	16	9.2
	More likely to occur	7	9.3	4	6.8	9	12.2	7	8.3	9	12.0	4	6.7	7	9.3	6	7.1	21	12.1	21	12.1
	No difference	54	72	40	67.8	55	74.3	58	69.0	53	70.7	47	78.3	59	78.7	64	76.2	139	80.3	136	78.6
Exposure to new ways of problem-solving	Less likely to occur	2	2.6	0	0.0	2	2.7	0	0.0	2	2.6	0	0.0	1	1.3	0	0.0	3	1.8	3	1.8
	More likely to occur	58	74.4	54	90.0	58	79.5	78	95.1	59	75.6	57	96.6	65	86.7	79	94.0	120	70.2	134	78.8
	No difference	18	23.1	6	10.0	13	17.8	4	4.9	17	21.8	2	3.4	9	12.0	5	6.0	48	28.1	33	19.4
Men dropping out of recruit training	Less likely to occur	16	20.5	16	26.7	11	15.3	19	23.2	12	15.6	14	23.7	16	21.3	18	21.4	31	18.0	30	17.5
	More likely to occur	7	9	1	1.7	13	18.1	4	4.9	2	2.6	2	3.4	12	16.0	3	3.6	19	11.0	15	8.8
	No difference	55	70.5	43	71.7	48	66.7	59	72.0	63	81.8	43	72.9	47	62.7	63	75.0	122	70.9	126	73.7
Women dropping out of recruit training	Less likely to occur	9	11.5	8	13.3	5	6.8	9	11.0	6	7.8	8	13.6	8	10.7	7	8.3	17	9.9	16	9.4
	More likely to occur	29	37.2	12	20.0	27	37	25	30.5	29	37.7	10	16.9	30	40.0	26	31.0	60	34.9	44	25.7
	No difference	40	51.3	40	66.7	41	56.2	48	58.5	42	54.5	41	69.5	37	49.3	51	60.7	95	55.2	111	64.9

Appendix Table M.16.2. Change in Responses Over Time Statistical Significance Testing Results, Subset by Training Model and Gender

<i>p</i> values (Stuart-Maxwell test for marginal homogeneity)					
	Integrated Company Males	Series Track Males	Male-Only	Series Track Females	Integrated Company Females
Training and mentorship from female instructors	0.227	0.025	0.001	0.390	0.272
Training and mentorship from male instructors	0.653	0.882	0.449	0.761	0.584
Fraternization (improper relationships) among recruits	0.160	0.032	0.038	0.696	0.658
Sexual harassment and sexual assault among recruits	0.178	0.381	0.921	0.080	0.221
Success in working with diverse team members	0.319	0.030	0.011	0.249	0.607
Injuries among female recruits	0.491	0.888	0.125	0.293	0.713
Injuries among male recruits	0.707	0.815	0.740	0.549	0.358
Exposure to new ways of problem-solving	0.970	0.272	0.074	0.564	0.103
Men dropping out of recruit training	0.075	0.507	0.590	0.867	0.717
Women dropping out of recruit training	0.526	0.451	0.038	0.829	0.779

Note: *p* values <0.05 indicate a group's overall responses were significantly different at week 11 compared to week 2.

Appendix Table M.16.3. Difference Between Men and Women Statistical Significance Testing Results, Subset by Training Model and Training Cycle Timepoint

<i>p</i> values (Pearson's chi-squared test)				
	Week 2		Week 11	
	Integrated Company	Series Track	Integrated Company	Series Track
Training and mentorship from female instructors	0.010	0.019	0.246	0.001
Training and mentorship from male instructors	0.004	0.115	0.004	0.172
Fraternization (improper relationships) among recruits	<0.001	0.165	<0.001	0.220
Sexual harassment and sexual assault among recruits	0.003	0.365	<0.001	0.642
Success in working with diverse team members	0.008	0.002	0.001	0.488
Injuries among female recruits	0.517	0.956	0.958	0.456
Injuries among male recruits	0.594	0.287	0.506	0.650
Exposure to new ways of problem-solving	0.052	0.010	0.003	0.223
Men dropping out of recruit training	0.158	0.025	0.456	0.025
Women dropping out of recruit training	0.089	0.535	0.026	0.354

Note: *p* values <0.05 indicate male and female responses were significantly different within the training model at the timepoint indicated

Appendix Table M.16.4. Difference Between Training Models Statistical Significance Testing Results, Subset by Gender and Training Cycle Timepoint

<i>p</i> values (Pearson's chi-squared test)								
	Week 2				Week 11			
	Men			Women	Men			Women
	Integrated Company v. Series Track	Integrated Company v. All-Male	All Parris Island v. All-Male	Integrated Company v. Series Track	Integrated Company v. Series Track	Integrated Company v. All-Male	All Parris Island v. All-Male	Integrated Company v. Series Track
Training and mentorship from female instructors	0.661	0.291	0.079	0.728	0.291	0.049	0.087	0.023
Training and mentorship from male instructors	0.692	0.651	0.043	0.772	0.651	0.126	0.008	0.506
Fraternization (improper relationships) among recruits	0.193	0.017	0.783	0.087	0.017	0.020	0.321	0.021
Sexual harassment and sexual assault among recruits	0.715	0.307	0.654	0.003	0.307	0.013	0.033	0.001
Success in working with diverse team members	0.862	0.058	0.388	0.959	0.058	0.126	0.704	0.429
Injuries among female recruits	0.588	0.914	0.049	0.450	0.914	0.663	0.714	0.843
Injuries among male recruits	0.632	0.522	0.055	0.891	0.522	0.186	0.314	0.954
Exposure to new ways of problem-solving	0.726	0.220	0.268	0.239	0.220	0.823	0.850	0.484
Men dropping out of recruit training	0.227	0.007	0.817	0.552	0.007	0.171	0.965	0.948
Women dropping out of recruit training	0.588	0.743	0.915	0.369	0.743	0.162	0.037	0.134

Note: *p* values <0.05 indicate training models' responses were significantly different for the gender and timepoint indicated

Question 17. Please rate how much you agree or disagree with each statement:

Appendix Table M.17.1. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

		Week 2								Week 11								Week 2		Week 11	
		Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
		Male		Female		Male		Female		Male		Female		Male		Female					
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
The members of my platoon are cooperative with each other	Agree	37	47.4	23	38.3	45	61.6	49	58.3	36	46.2	26	44.1	37	49.3	44	52.4	110	63.2	133	77.3
	Disagree	29	37.2	24	40.0	10	13.7	25	29.8	29	37.2	25	42.4	20	26.7	20	23.8	38	21.8	16	9.3
	Neither	12	15.4	13	21.7	18	24.7	10	11.9	13	16.7	8	13.6	18	24.0	20	23.8	26	14.9	23	13.4
The members of my platoon know that they can depend on each other	Agree	28	35.9	19	31.7	41	56.2	53	63.1	43	55.1	35	59.3	49	67.1	61	72.6	97	56.1	144	83.7
	Disagree	26	33.3	18	30.0	9	12.3	13	15.5	26	33.3	15	25.4	12	16.4	16	19.0	34	19.7	10	5.8
	Neither	24	30.8	23	38.3	23	31.5	18	21.4	9	11.5	9	15.3	12	16.4	7	8.3	42	24.3	18	10.5
When I face a difficult task, other recruits in my platoon help out	Agree	51	65.4	41	68.3	61	82.4	67	80.7	49	62.8	45	76.3	64	86.5	67	80.7	144	82.8	158	91.9
	Disagree	10	12.8	6	10.0	2	2.7	6	7.2	13	16.7	9	15.3	4	5.4	8	9.6	13	7.5	8	4.7
	Neither	17	21.8	13	21.7	11	14.9	10	12.0	16	20.5	5	8.5	6	8.1	8	9.6	17	9.8	6	3.5
Recruits in my platoon really respect one another	Agree	26	33.3	15	25.0	41	56.2	38	45.8	29	37.2	22	37.3	30	40.0	33	39.3	86	49.7	88	51.5
	Disagree	29	37.2	27	45.0	8	11	24	28.9	35	44.9	21	35.6	21	28.0	22	26.2	45	26.0	30	17.5
	Neither	23	29.5	18	30.0	24	32.9	21	25.3	14	17.9	16	27.1	24	32.0	29	34.5	42	24.3	53	31.0
My instructors at recruit training treat recruits fairly	Agree	33	42.3	20	33.3	41	56.2	32	39.0	61	78.2	44	75.9	59	80.8	70	84.3	101	58.7	159	93.0
	Disagree	28	35.9	27	45.0	21	28.8	28	34.1	9	11.5	4	6.9	2	2.7	5	6.0	33	19.2	3	1.8
	Neither	17	21.8	13	21.7	11	15.1	22	26.8	8	10.3	10	17.2	12	16.4	8	9.6	38	22.1	9	5.3
My instructors at recruit training treat me with respect	Agree	21	27.3	19	32.2	34	46.6	19	22.6	54	70.1	37	62.7	55	74.3	68	81.0	78	45.1	149	86.6
	Disagree	40	51.9	28	47.5	25	34.2	39	46.4	11	14.3	4	6.8	5	6.8	6	7.1	46	26.6	8	4.7
	Neither	16	20.8	12	20.3	14	19.2	26	31.0	12	15.6	18	30.5	14	18.9	10	11.9	49	28.3	15	8.7
I can rely on my instructors for help if I face a difficult problem during recruit training	Agree	33	42.3	21	35.0	45	60.8	34	41.0	57	73.1	45	76.3	69	92.0	68	81.0	103	59.2	156	90.7
	Disagree	32	41.0	27	45.0	11	14.9	32	38.6	10	12.8	2	3.4	2	2.7	8	9.5	35	20.1	5	2.9
	Neither	13	16.7	12	20.0	18	24.3	17	20.5	11	14.1	12	20.3	4	5.3	8	9.5	36	20.7	11	6.4

Note: For simplicity, “agree/mostly agree” has been consolidated to “agree,” and “disagree/mostly disagree” has been consolidated to “disagree”

Appendix Table M.17.2. Change in Responses Over Time Statistical Significance Testing Results, Subset by Training Model and Gender

<i>p</i> values (Stuart-Maxwell test for marginal homogeneity)					
	Integrated Company Males	Series Track Males	Male-Only	Series Track Females	Integrated Company Females
The members of my platoon are cooperative with each other	0.960	0.097	0.001	0.082	0.549
The members of my platoon know that they can depend on each other	0.006	0.040	<0.001	0.071	0.004
When I face a difficult task, other recruits in my platoon help out	0.766	0.343	0.027	0.778	0.095
Recruits in my platoon really respect one another	0.142	0.020	0.156	0.342	0.316
My instructors at recruit training treat recruits fairly	<0.001	<0.001	<0.001	<0.001	<0.001
My instructors at recruit training treat me with respect	<0.001	<0.001	<0.001	<0.001	<0.001
I can rely on my instructors for help if I face a difficult problem during recruit training	<0.001	<0.001	<0.001	<0.001	<0.001

Note: *p* values <0.05 indicate a group's overall responses were significantly different at week 11 compared to week 2.

Appendix Table M.17.3. Difference Between Men and Women Statistical Significance Testing Results, Subset by Training Model and Training Cycle Timepoint

<i>p</i> values (Pearson's chi-squared test)				
	Week 2		Week 11	
	Integrated Company	Series Track	Integrated Company	Series Track
The members of my platoon are cooperative with each other	0.483	0.017	0.789	0.904
The members of my platoon know that they can depend on each other	0.649	0.348	0.560	0.296
When I face a difficult task, other recruits in my platoon help out	0.871	0.403	0.129	0.556
Recruits in my platoon really respect one another	0.520	0.021	0.368	0.938
My instructors at recruit training treat recruits fairly	0.493	0.072	0.368	0.302

My instructors at recruit training treat me with respect	0.813	0.006	0.069	0.471
I can rely on my instructors for help if I face a difficult problem during recruit training	0.672	0.003	0.120	0.108

Note: *p* values <0.05 indicate male and female responses were significantly different within the training model at the timepoint indicated

Appendix Table M.17.4. Difference Between Training Models Statistical Significance Testing Results, Subset by Gender and Training Cycle Timepoint

<i>p</i> values (Pearson's chi-squared test)								
	Week 2				Week 11			
	Men			Women	Men			Women
	Integrated Company v. Series Track	Integrated Company v. All-Male	All Parris Island v. All-Male	Integrated Company v. Series Track	Integrated Company v. Series Track	Integrated Company v. All-Male	All Parris Island v. All-Male	Integrated Company v. Series Track
The members of my platoon are cooperative with each other	0.004	0.299	0.251	0.051	0.299	<0.001	<0.001	0.046
The members of my platoon know that they can depend on each other	0.005	0.055	0.170	0.001	0.055	<0.001	<0.001	0.218
When I face a difficult task, other recruits in my platoon help out	0.025	0.004	0.072	0.220	0.004	<0.001	<0.001	0.593
Recruits in my platoon really respect one another	0.001	0.048	0.380	0.032	0.048	<0.001	0.001	0.436
My instructors at recruit training treat recruits fairly	0.224	0.077	0.024	0.420	0.077	0.001	0.002	0.389
My instructors at recruit training treat me with respect	0.038	0.308	0.006	0.263	0.308	0.005	0.005	0.021
I can rely on my instructors for help if I face a difficult problem during recruit training	0.002	0.008	0.204	0.713	0.008	0.001	0.061	0.088

Note: *p* values <0.05 indicate training models' responses were significantly different for the gender and timepoint indicated

Question 18. Who is best suited to serve in each type of military role (check only one box for each line)?

Appendix Table M.18.1. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

		Week 2								Week 11								Week 2		Week 11	
		Integrated Company				Series Track				Integrated Company				Series Track				Male-Only			
		Male		Female		Male		Female		Male		Female		Male		Female					
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Drill instructors	Equally Men and Women	54	69.2	44	73.3	59	79.7	75	89.3	66	84.6	55	94.8	64	85.3	78	92.9	123	72.4	147	86.5
	Men	24	30.8	11	18.3	15	20.3	3	3.6	11	14.1	2	3.4	11	14.7	4	4.8	45	26.5	23	13.5
	Women	0	0.0	5	8.3	0	0	6	7.1	1	1.3	1	1.7	0	0.0	2	2.4	2	1.2	0	0.0
Infantry or combat roles	Equally Men and Women	28	35.9	41	69.5	30	41.1	52	61.9	30	38.5	41	69.5	30	40.0	65	77.4	65	38.0	64	37.4
	Men	50	64.1	16	27.1	43	58.9	32	38.1	48	61.5	17	28.8	45	60.0	19	22.6	106	62.0	107	62.6
	Women	0	0.0	2	3.4	0	0.0	0	0.0	0	0.0	1	1.7	0	0.0	0	0.0	0	0.0	0	0.0
Leaders at the highest levels of your Service	Equally Men and Women	66	84.6	53	88.3	65	87.8	75	89.3	67	85.9	53	89.8	67	89.3	75	89.3	147	85.5	156	91.2
	Men	10	12.8	1	1.7	6	8.1	4	4.8	10	12.8	1	1.7	5	6.7	4	4.8	20	11.6	12	7.0
	Women	2	2.6	6	10.0	3	4.1	5	6.0	1	1.3	5	8.5	3	4.0	5	6.0	5	2.9	3	1.8
Special Forces	Equally Men and Women	31	40.3	47	79.7	31	41.9	58	69.0	33	42.3	51	86.4	35	46.7	65	77.4	65	38.2	74	43.3
	Men	46	59.7	11	18.6	43	58.1	23	27.4	45	57.7	8	13.6	39	52.0	18	21.4	104	61.2	97	56.7
	Women	0	0.0	1	1.7	0	0	3	3.6	0	0.0	0	0.0	1	1.3	1	1.2	1	0.6	0	0.0
Intelligence roles	Equally Men and Women	55	70.5	46	76.7	62	83.8	57	67.9	62	80.5	51	86.4	60	80.0	68	81.0	130	75.6	148	86.5
	Men	1	1.3	0	0.0	0	0	1	1.2	2	2.6	0	0.0	0	0.0	1	1.2	4	2.3	4	2.3
	Women	22	28.2	14	23.3	12	16.2	26	31.0	13	16.9	8	13.6	15	20.0	15	17.9	38	22.1	19	11.1
Administrative roles	Equally Men and Women	59	75.6	50	83.3	60	83.3	63	75.0	63	80.8	54	91.5	60	80.0	67	79.8	139	80.8	148	86.5
	Men	2	2.6	0	0.0	0	0.0	0	0.0	0	0.0	1	1.7	1	1.3	0	0.0	6	3.5	1	0.6
	Women	17	21.8	10	16.7	12	16.7	21	25.0	15	19.2	4	6.8	14	18.7	17	20.2	27	15.7	22	12.9
Healthcare roles	Equally Men and Women	58	74.4	51	85.0	57	77	65	77.4	59	75.6	53	91.4	57	76.0	72	85.7	132	76.7	141	82.5
	Men	0	0.0	1	1.7	0	0	1	1.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Women	20	25.6	8	13.3	17	23	18	21.4	19	24.4	5	8.6	18	24.0	12	14.3	40	23.3	30	17.5
Engineering roles	Equally Men and Women	64	82.1	55	91.7	64	86.5	73	86.9	64	82.1	57	96.6	64	85.3	77	91.7	131	76.6	142	83.0
	Men	14	17.9	5	8.3	9	12.2	8	9.5	13	16.7	2	3.4	11	14.7	4	4.8	39	22.8	29	17.0
	Women	0	0.0	0	0.0	1	1.4	3	3.6	1	1.3	0	0.0	0	0.0	3	3.6	1	0.6	0	0.0

Appendix Table M.18.2. Change in Responses Over Time Statistical Significance Testing Results, Subset by Training Model and Gender

<i>p</i> values (Stuart-Maxwell test for marginal homogeneity)					
	Integrated Company Males	Series Track Males	Male-Only	Series Track Females	Integrated Company Females
Drill instructors	0.004	0.096	<0.001	0.223	0.004
Infantry or combat roles	0.593	0.796	0.564	0.009	0.584
Leaders at the highest levels of your Service	0.607	0.717	0.152	1.000	0.946
Special Forces	0.763	0.195	0.164	0.160	0.368
Intelligence roles	0.160	0.564	0.006	0.038	0.058
Administrative roles	0.319	0.584	0.046	0.285	0.102
Healthcare roles	0.819	1.000	0.157	0.197	0.435
Engineering roles	0.587	0.607	0.038	0.368	0.180

Note: *p* values <0.05 indicate a group's overall responses were significantly different at week 11 compared to week 2.

Appendix Table M.18.3. Difference Between Men and Women Statistical Significance Testing Results, Subset by Training Model and Training Cycle Timepoint

<i>p</i> values (Pearson's chi-squared test)				
	Week 2		Week 11	
	Integrated Company	Series Track	Integrated Company	Series Track
Drill instructors	0.013	<0.001	0.112	0.046
Infantry or combat roles	<0.001	0.009	0.001	<0.001
Leaders at the highest levels of your Service	0.014	0.611	0.010	0.758
Special Forces	<0.001	<0.001	<0.001	<0.001
Intelligence roles	0.534	0.056	0.384	0.608
Administrative roles	0.325	0.204	0.063	0.557
Healthcare roles	0.115	0.630	0.017	0.118
Engineering roles	0.104	0.600	0.031	0.031

Note: *p* values <0.05 indicate male and female responses were significantly different within the training model at the timepoint indicated

Appendix Table M.18.4. Difference Between Training Models Statistical Significance Testing Results, Subset by Gender and Training Cycle Timepoint

<i>p</i> values (Pearson's chi-squared test)								
	Week 2				Week 11			
	Men			Women	Men			Women
	Integrated Company v. Series Track	Integrated Company v. All-Male	All Parris Island v. All-Male	Integrated Company v. Series Track	Integrated Company v. Series Track	Integrated Company v. All-Male	All Parris Island v. All-Male	Integrated Company v. Series Track
Drill instructors	0.139	0.615	0.396	0.011	0.615	0.331	0.556	0.894
Infantry or combat roles	0.512	0.846	0.941	0.111	0.846	0.876	0.741	0.326
Leaders at the highest levels of your Service	0.576	0.271	0.936	0.423	0.271	0.319	0.563	0.536
Special Forces	0.839	0.489	0.572	0.353	0.489	0.886	0.551	0.327
Intelligence roles	0.119	0.341	0.478	0.401	0.341	0.446	0.150	0.542
Administrative roles	0.268	0.592	0.345	0.230	0.592	0.345	0.321	0.044
Healthcare roles	0.702	0.959	0.819	0.454	0.959	0.210	0.141	0.307

Note: *p* values <0.05 indicate training models' responses were significantly different for the gender and timepoint indicated

Question 19. Please rate how much you agree or disagree with each statement below (check only one box for each line):

Appendix Table M.19.1. Number and Percent of Male and Female Recruits Indicating Response, by Training Model and Timepoint in Training Cycle

		Week 2								Week 11								Week 2		Week 11	
		Integrated				Series				Integrated				Series				All-Male			
		Male		Female		Male		Female		Male		Female		Male		Female					
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
It is usually better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family	Agree	15	19.2	3	5.0	17	23	6	7.2	11	14.3	3	5.0	18	24.0	6	7.1	40	23.1	40	23.7
	Disagree	38	48.7	50	83.3	35	47.3	64	77.1	35	45.5	47	78.3	41	54.7	70	83.3	70	40.5	75	44.4
	Neither	25	32.1	7	11.7	22	29.7	13	15.7	31	40.3	10	16.7	16	21.3	8	9.5	63	36.4	54	32.0
If a wife works, her husband should take a greater part in housework and childcare	Agree	54	70.1	39	66.1	50	67.6	54	65.1	54	70.1	36	60.0	61	83.6	59	70.2	100	57.8	107	62.9
	Disagree	10	13.0	11	18.6	10	13.5	13	15.7	6	7.8	7	11.7	2	2.7	11	13.1	24	13.9	18	10.6
	Neither	13	16.9	9	15.3	14	18.9	16	19.3	17	22.1	17	28.3	10	13.7	14	16.7	49	28.3	45	26.5
Most fathers should spend more time with their children than they do now	Agree	68	87.2	51	86.4	59	80.8	70	83.3	61	80.3	47	78.3	66	89.2	71	84.5	133	76.9	132	78.1
	Disagree	0	0.0	0	0.0	3	4.1	1	1.2	2	2.6	2	3.3	0	0.0	2	2.4	5	2.9	6	3.6
	Neither	10	12.8	8	13.6	11	15.1	13	15.5	13	17.1	11	18.3	8	10.8	11	13.1	35	20.2	31	18.3
Most mothers should spend more time with their children than they do now	Agree	52	66.7	44	73.3	46	63.9	56	66.7	49	63.6	41	68.3	50	66.7	60	71.4	114	66.3	107	62.9
	Disagree	6	7.7	2	3.3	3	4.2	5	6.0	6	7.8	3	5.0	3	4.0	1	1.2	8	4.7	8	4.7
	Neither	20	25.6	14	23.3	23	31.9	23	27.4	22	28.6	16	26.7	22	29.3	23	27.4	50	29.1	55	32.4
Parents should encourage just as much independence in their daughters as their sons	Agree	58	74.4	57	95.0	53	72.6	78	92.9	61	80.3	57	95.0	64	85.3	82	98.8	138	79.8	137	81.1
	Disagree	6	7.7	1	1.7	7	9.6	1	1.2	6	7.9	0	0.0	5	6.7	0	0.0	17	9.8	13	7.7
	Neither	14	17.9	2	3.3	13	17.8	5	6.0	9	11.8	3	5.0	6	8.0	1	1.2	18	10.4	19	11.2
Men and women should be paid the same money if they do the same work	Agree	70	89.7	60	100.0	66	89.2	81	97.6	66	85.7	58	96.7	72	96.0	81	96.4	152	87.9	152	90.5
	Disagree	1	1.3	0	0.0	3	4.1	1	1.2	3	3.9	0	0.0	0	0.0	1	1.2	4	2.3	5	3.0
	Neither	7	9.0	0	0.0	5	6.8	1	1.2	8	10.4	2	3.3	3	4.0	2	2.4	17	9.8	11	6.5
	Agree	68	88.3	59	98.3	67	90.5	82	97.6	71	92.2	58	96.7	68	90.7	84	100.0	150	87.2	148	88.1

Women should be considered as seriously as men for jobs as executives or politicians	Disagree	0	0.0	0	0.0	2	2.7	1	1.2	0	0.0	1	1.7	2	2.7	0	0.0	4	2.3	6	3.6
	Neither	9	11.7	1	1.7	5	6.8	1	1.2	6	7.8	1	1.7	5	6.7	0	0.0	18	10.5	14	8.3
A woman should have the same job opportunities as a man	Agree	72	93.5	60	100.0	66	89.2	83	98.8	68	88.3	59	98.3	66	88.0	82	98.8	154	89.0	157	92.4
	Disagree	1	1.3	0	0.0	2	2.7	1	1.2	2	2.6	0	0.0	6	8.0	0	0.0	9	5.2	5	2.9
	Neither	4	5.2	0	0.0	6	8.1	0	0.0	7	9.1	1	1.7	3	4.0	1	1.2	10	5.8	8	4.7
Women should be cherished and protected by men	Agree	63	82.9	38	63.3	59	80.8	51	61.4	61	80.3	27	45.8	57	76.0	37	44.6	131	75.7	128	75.7
	Disagree	2	2.6	6	10.0	1	1.4	6	7.2	2	2.6	12	20.3	6	8.0	6	7.2	7	4.0	8	4.7
	Neither	11	14.5	16	26.7	13	17.8	26	31.3	13	17.1	20	33.9	12	16.0	40	48.2	35	20.2	33	19.5
Many women get a kick out of teasing men by seeming sexually available and then refusing male advances	Agree	48	63.2	21	36.2	31	43.1	33	40.7	32	42.7	18	30.0	29	38.7	25	30.5	78	45.6	79	47.9
	Disagree	10	13.2	21	36.2	17	23.6	27	33.3	16	21.3	26	43.3	23	30.7	32	39.0	22	12.9	27	16.4
	Neither	18	23.7	16	27.6	24	33.3	21	25.9	27	36.0	16	26.7	23	30.7	25	30.5	71	41.5	59	35.8
In a disaster, women should be rescued before men	Agree	52	67.5	13	22.4	40	54.8	13	15.7	52	67.5	10	16.7	43	58.1	16	19.3	88	50.9	91	54.5
	Disagree	6	7.8	24	41.4	8	11	31	37.3	6	7.8	24	40.0	4	5.4	27	32.5	23	13.3	14	8.4
	Neither	19	24.7	21	36.2	25	34.2	39	47.0	19	24.7	26	43.3	27	36.5	40	48.2	62	35.8	62	37.1
When women lose to men in a fair competition, they typically complain about being discriminated against	Agree	44	56.4	33	55.0	32	43.2	41	48.8	37	49.3	24	40.0	27	36.5	40	47.6	101	58.4	87	52.4
	Disagree	9	11.5	15	25.0	10	13.5	23	27.4	15	20.0	20	33.3	21	28.4	24	28.6	25	14.5	27	16.3
	Neither	25	32.1	12	20.0	32	43.2	20	23.8	23	30.7	16	26.7	26	35.1	20	23.8	47	27.2	52	31.3

Note: For simplicity, “agree/mostly agree” has been consolidated to “agree,” and “disagree/mostly disagree” has been consolidated to “disagree”

Appendix Table M.19.2. Percent Agreement with Each Statement by Gender, Training Model and Timepoint in Training Cycle

			Gender Roles				Equal Opportunity and Treatment				Sexism			
											Benevolent		Hostile	
<i>Gender</i>	<i>Model</i>	<i>Week</i>	Better if man achiever outside home	If wife works, man do more house/child work	Most fathers should spend more time with kids than now	Most mothers should spend more time with kids than now	Parents should encourage as much independence in daughters as sons	Men and women should be paid same if doing same work	Women should be considered as seriously for men for executives or politicians	Woman should have same job opportunities as a man	Women should be cherished and protected by men	In a disaster, women should be rescued before men	Many women get a kick out of teasing men sexually	When women lose to men in a fair fight, they typically complain about being
Male	Series Track	2	23.0%	67.6%	80.8%	63.9%	72.6%	89.2%	90.5%	89.2%	80.8%	54.8%	45.3%	43.2%
Male	Series Track	11	24.0%	83.6%	89.2%	66.7%	85.3%	96.0%	90.7%	88.0%	76.0%	58.1%	38.7%	36.5%
Male	Integrated Company	2	19.2%	70.1%	87.2%	66.7%	74.4%	89.7%	88.3%	93.5%	82.9%	67.5%	64.1%	56.4%
Male	Integrated Company	11	14.3%	70.1%	80.3%	63.6%	80.3%	85.7%	92.2%	88.3%	80.3%	67.5%	44.9%	49.3%
Male	Male-Only	2	23.1%	57.8%	76.9%	66.3%	79.8%	87.9%	87.2%	89.0%	75.7%	50.9%	46.9%	58.4%
Male	Male-Only	11	23.7%	62.9%	78.1%	62.9%	81.1%	90.5%	88.1%	92.4%	75.7%	54.5%	50.9%	52.4%
Male	TOTAL	11	21.5%	69.4%	81.2%	64.0%	81.9%	90.6%	89.7%	90.4%	76.9%	58.5%	46.6%	47.9%
Female	Series Track	2	7.2%	65.1%	83.3%	66.7%	92.9%	97.6%	97.6%	98.8%	61.4%	15.7%	42.9%	48.8%
Female	Series Track	11	7.1%	70.2%	84.5%	71.4%	98.8%	96.4%	100.0%	98.8%	44.6%	19.3%	32.1%	46.4%
Female	Integrated Company	2	5.0%	66.1%	86.4%	73.3%	95.0%	100.0%	98.3%	100.0%	63.3%	22.4%	38.3%	55.0%
Female	Integrated Company	11	5.0%	60.0%	78.3%	68.3%	95.0%	96.7%	96.7%	98.3%	45.8%	16.7%	30.0%	40.0%
Female	TOTAL	11	6.3%	66.0%	81.9%	70.1%	97.2%	96.5%	98.6%	98.6%	45.1%	18.2%	31.3%	43.8%

Appendix Table M.19.3. Sample Size by Gender, Training Model, and Timepoint in the Training Cycle

			Gender Roles				Equal Opportunity and Treatment				Sexism			
											Benevolent		Hostile	
<i>Gender</i>	<i>Model</i>	<i>Week</i>	Better if man achieves outside home	If wife works, man do more house/child work	Most fathers should spend more time with kids than now	Most mothers should spend more time with kids than now	Parents should encourage as much independence in daughters as sons	Men and women should be paid same if doing same work	Women should be considered as seriously for men for executives or politicians	Woman should have same job opportunities as a man	Women should be cherished and protected by men	In a disaster, women should be rescued before men	Many women get a kick out of teasing men sexually	When women lose to men in a fair fight, they typically complain about being discriminated against
Male	Series Track	2	74	74	73	72	73	74	74	74	73	73	75	74
Male	Series Track	11	75	73	74	75	75	75	75	75	75	74	75	74
Male	Integrated Company	2	78	77	78	78	78	78	77	77	76	77	78	78
Male	Integrated Company	11	77	77	76	77	76	77	77	77	76	77	78	75
Male	Male-Only	2	173	173	173	172	173	173	172	173	173	173	175	173
Male	Male-Only	11	169	170	169	170	169	168	168	170	169	167	175	166
Male	TOTAL	11	321	320	319	322	320	320	320	322	320	318	328	315
Female	Series Track	2	83	83	84	84	84	83	84	84	83	83	84	84
Female	Series Track	11	84	84	84	84	83	84	84	83	83	83	84	84
Female	Integrated Company	2	60	59	59	60	60	60	60	60	60	58	60	60
Female	Integrated Company	11	60	60	60	60	60	60	60	60	59	60	60	60
Female	TOTAL	11	144	144	144	144	143	144	144	143	142	143	144	144

Appendix Table M.19.4. Marine Corps Recruit Gender Attitude Change over Time

Average Percent Agreement in Week 2 and Week 11 with McNemar Exact Test of difference (exact p-value), by Gender and Training Model

		<i>Gender Roles</i>				<i>Equal Opportunity/Treatment</i>				<i>Sexism</i>			
		<i>Better if man achiever outside home</i>	<i>If wife works, man should do more house/child work</i>	<i>Most fathers should spend more time with kids than now</i>	<i>Most mothers should spend more time with kids than now</i>	<i>Parents should encourage as much independence in daughters as sons</i>	<i>Men and women should be paid same if doing same work</i>	<i>Women should be considered as seriously for men for executives or politicians</i>	<i>Women should have same job opportunities as a man</i>	<i>Benevolent</i>		<i>Hostile</i>	
										<i>Women should be cherished and protected by men</i>	<i>In a disaster, women should be rescued before men</i>	<i>Many women get a kick out of teasing men sexually</i>	<i>When women lose to men in a fair fight, they typically complain about being discriminated against</i>
<i>All</i>	Week 2	17.3%	63.6%	81.9%	67.0%	82.4%	92.0%	91.5%	92.9%	73.3%	44.6%	47.7%	53.6%
	Week 11	16.7%	68.6%	81.7%	66.4%	86.5%	92.6%	92.4%	92.9%	67.4%	46.6%	41.9%	46.8%
	Difference	-0.6%	5.0%	-0.2%	-0.7%	4.1%	0.7%	0.9%	0.0%	-5.9%	2.0%	-5.7%	-6.8%
	p=	0.801	0.056	1.000	0.862	0.053	0.755	0.644	1.000	0.010	0.397	0.018	0.004
	N	462	459	459	461	460	461	460	462	457	472	455	457
<i>Male</i>	Week 2	22.3%	62.8%	80.7%	65.9%	77.3%	89.0%	88.6%	90.0%	78.5%	56.4%	50.6%	54.6%
	Week 11	21.3%	69.4%	81.7%	63.7%	81.7%	90.9%	89.6%	90.3%	77.5%	59.2%	46.7%	48.2%
	Difference	-0.9%	6.6%	0.9%	-1.3%	4.4%	1.9%	0.9%	0.3%	-0.9%	2.9%	-4.0%	-6.4%
	p=	0.780	0.035	0.810	0.757	0.141	0.405	0.743	1.000	0.801	0.306	0.198	0.027
	N	319	317	316	317	317	318	316	319	316	314	328	313
<i>Female</i>	Week 2	6.3%	65.5%	84.6%	69.4%	93.7%	98.6%	97.9%	99.3%	61.7%	18.4%	41.0%	51.4%
	Week 11	6.3%	66.9%	81.8%	70.1%	97.2%	96.5%	98.6%	98.6%	44.7%	18.4%	31.3%	43.8%
	Difference	0.0%	1.4%	-2.8%	0.7%	3.5%	-2.1%	0.7%	-0.7%	-17.0%	0.0%	-9.7%	-7.6%
	p=	1.000	0.878	0.523	1.000	0.180	0.375	1.000	1.000	0.000	1.000	0.024	0.090
	N	143	142	143	144	143	143	144	143	141	141	144	144
<i>Series</i>	Week 2	14.7%	66.5%	82.7%	65.4%	83.3%	93.6%	94.3%	94.3%	70.3%	34.2%	44.0%	46.5%
	Week 11	14.7%	76.8%	87.2%	69.9%	92.3%	96.2%	95.6%	93.6%	59.5%	38.1%	35.2%	42.0%
	Difference	0.0%	10.3%	4.5%	4.5%	9.0%	2.5%	1.3%	-0.6%	-11.0%	3.9%	-8.8%	-4.5%
	p=	1.000	0.026	0.230	0.311	0.007	0.388	0.774	1.000	0.012	0.392	0.029	0.337
	N	157	155	156	156	156	157	158	157	155	155	159	157

<i>Integrated</i>	Week 2	13.1%	68.2%	86.7%	69.3%	83.8%	94.2%	92.7%	96.3%	73.9%	48.5%	52.9%	56.3%
	Week 11	10.2%	63.3%	79.3%	65.7%	86.8%	90.5%	94.1%	92.7%	65.7%	46.3%	38.4%	45.2%
	Difference	-2.9%	-2.2%	-7.4%	-3.6%	2.9%	-3.6%	1.5%	-3.7%	-8.2%	-2.2%	-14.5%	-11.1%
	p=	0.344	0.749	0.064	0.522	0.541	0.267	0.774	0.180	0.052	0.664	0.002	0.017
	N	137	135	135	137	136	137	136	136	134	134	138	135
<i>Male-Only</i>	Week 2	23.2%	57.4%	77.4%	66.7%	80.4%	88.6%	88.0%	88.8%	75.6%	51.2%	46.9%	58.2%
	Week 11	23.8%	63.3%	78.6%	63.7%	81.0%	91.0%	88.0%	92.3%	76.2%	54.8%	50.9%	52.7%
	Difference	0.6%	5.9%	1.2%	-3.0%	0.6%	2.4%	0.0%	3.6%	0.6%	3.6%	4.0%	-5.5%
	p=	1.000	0.193	0.878	0.603	1.000	0.454	1.000	0.210	1.000	0.392	0.382	0.175
	N	168	169	168	168	168	167	166	169	168	166	175	165

Appendix N: Demographic Profiles of Marine Corps Recruits

Appendix N: Demographic Profiles of Marine Corps Recruits

This appendix features demographic profiles from the social science survey data for MCRD Parris Island (Series Track and Integrated Company) and MCRD San Diego (Male Only).

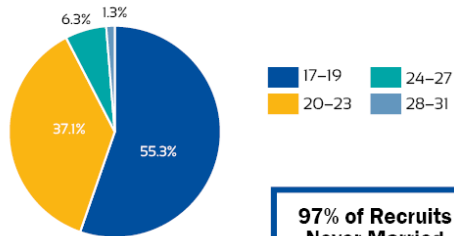


U.S. Marine Corps, Marine Corps Recruit Depot Parris Island, Series Track: Recruit Sample Demographics (N = 159)

Sample Population of Recruits by Gender

	Male	Female
N	75	84
Percent	47.2%	52.8%

Percentage of Recruits by Age Group

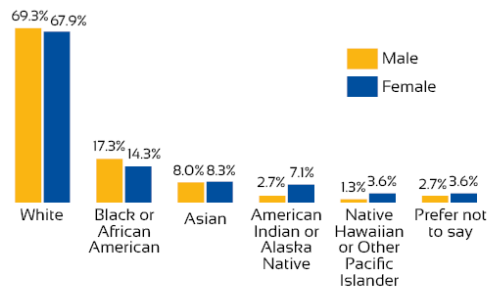


97% of Recruits Never Married

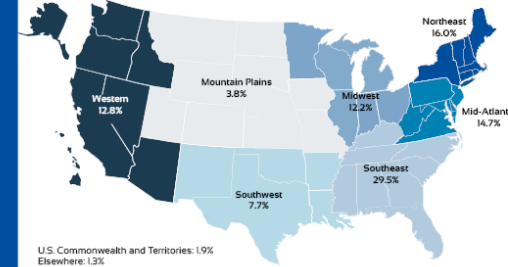
Top Five Reasons for Joining the Military by Gender¹

Rank	Male	Female
1	Personal growth, development, and security	Personal growth, development, and security
2	Test yourself physically or mentally	Desire to travel and see new places
3	Desire to travel and see new places	Test yourself physically or mentally
4	Challenging or interesting work	Challenging or interesting work
5	Building skills useful for civilian employment	Money for college, college repayment, and other

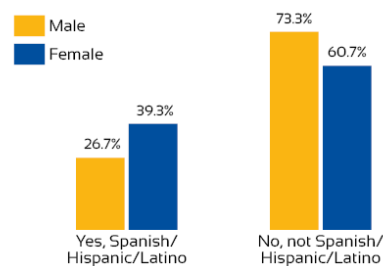
Race of Recruits by Gender²



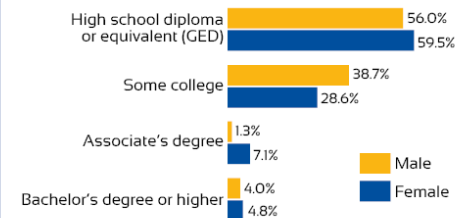
Where Recruits Consider Home⁴



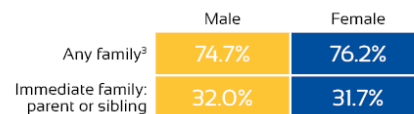
Spanish/Hispanic/Latino Ethnicity by Gender



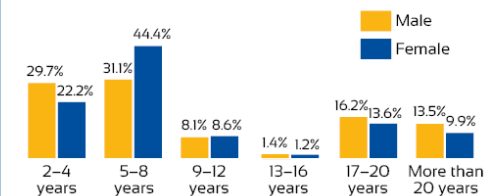
Education Level of Recruits by Gender



Percentage of Recruits With Family Who Served in the Military by Gender



Anticipated Service Length by Gender



Note: Recruits were surveyed at week 2 and week 11; female recruits were oversampled for purposes of this study. 194 recruits were surveyed at week 2; as a result of attrition in the training cycle, 160 were surveyed at week 11. From week 2 to week 11, 21 males and 14 females dropped from the sample, and 1 additional male recruit completed a survey at week 11. The sample population represents recruits surveyed at both time points (N = 159). Unless otherwise noted, data in these figures are from week 11.

¹Responses are from week 2 survey.

²Recruits were instructed to select all races that apply.

³Response options included Mother, Father, Sibling, Cousin, Grandparent, Aunt or Uncle, and Other family member.

⁴No male recruits reported Mountain Plains, Western, or Elsewhere as their home region, likely because males originating from these regions are assigned to train at Marine Corps Recruit Depot San Diego.

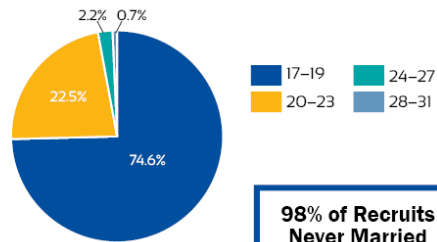


U.S. Marine Corps, Marine Corps Recruit Depot Parris Island, Integrated Company: Recruit Sample Demographics (N = 138)

Sample Population of Recruits by Gender

	Male	Female
N	78	60
Percent	56.5%	43.5%

Percentage of Recruits by Age Group

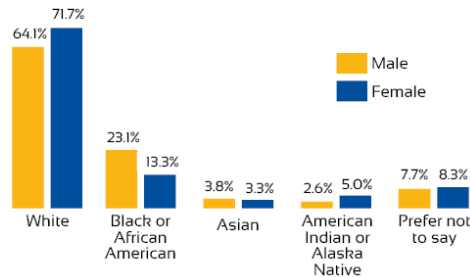


98% of Recruits Never Married

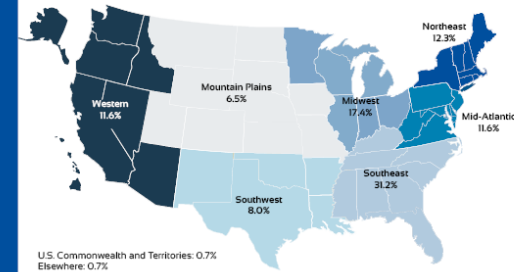
Top Five Reasons for Joining the Military by Gender¹

Reason	Male	Female
Personal growth, development, and security	1	Personal growth, development, and security
Money for college, college repayment, and other	2	Desire to travel and see new places
Desire to serve your country	3	Test yourself physically or mentally
Test yourself physically or mentally	4	Money for college, college repayment, and other
Challenging or interesting work	5	Challenging or interesting work

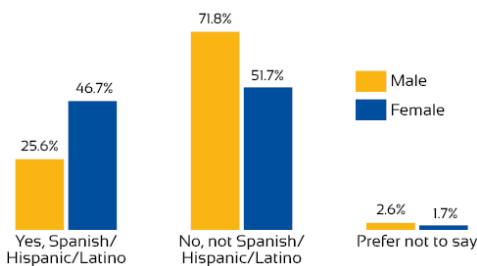
Race of Recruits by Gender²



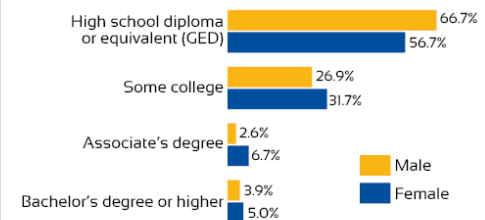
Where Recruits Consider Home⁴



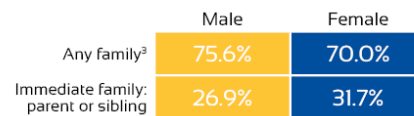
Spanish/Hispanic/Latino Ethnicity by Gender



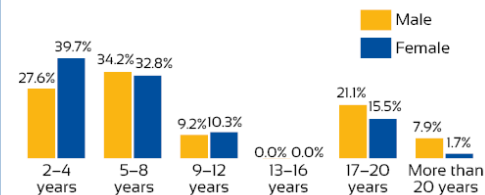
Education Level of Recruits by Gender



Percentage of Recruits With Family Who Served in the Military by Gender



Anticipated Service Length by Gender



Note: Recruits were surveyed at week 2 and week 11; female recruits were oversampled for purposes of this study. 193 recruits were surveyed at week 2; as a result of attrition in the training cycle, 138 were surveyed at week 11. From week 2 to week 11, 28 males and 27 females dropped from the sample. The sample population represents recruits surveyed at both time points (N = 138). Unless otherwise noted, data in these figures are from week 11.

¹Responses are from week 2 survey.

²Recruits were instructed to select all races that apply. No recruits reported Native Hawaiian or other Pacific Islander as their race.

³Response options included Mother, Father, Sibling, Cousin, Grandparent, Aunt or Uncle, and Other family member.

⁴No male recruits reported Mountain Plains as their home region, likely because males originating from this region are assigned to train at Marine Corps Recruit Depot San Diego.

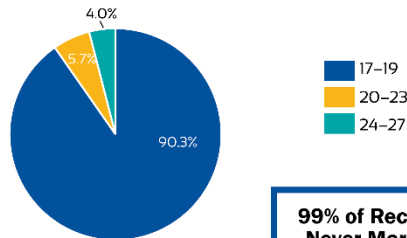


U.S. Marine Corps, Marine Corps Recruit Depot San Diego: All-Male Company, Recruit Sample Demographics (N = 175)

Sample Population of Recruits by Gender

	Male	Female
N	175	0
Percent	100.0%	0.0%

Percentage of Recruits by Age Group

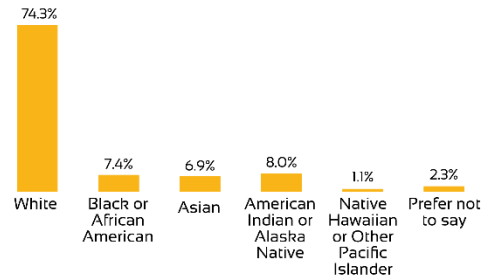


99% of Recruits Never Married

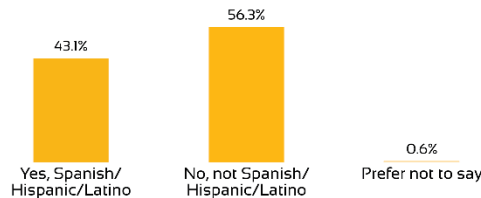
Top Five Reasons for Joining the Military¹

1	Personal growth, development, and security
2	Desire to serve your country
3	Test yourself physically or mentally
4	Money for college, college repayment, and other education benefits
5	Desire to travel and see new places

Race of Recruits²



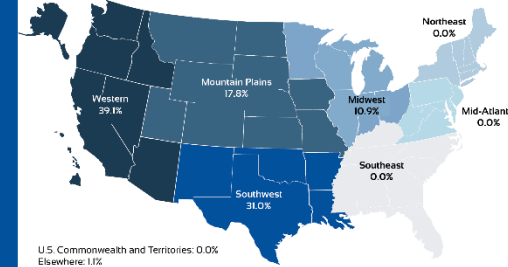
Spanish/Hispanic/Latino Ethnicity



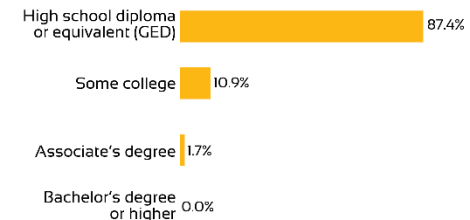
Percentage of Recruits With Family Who Served in the Military



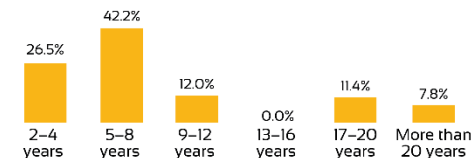
Where Recruits Consider Home⁴



Education Level of Recruits



Anticipated Service Length



Note: Recruits were surveyed at week 2 and week 11 in the training cycle. 200 recruits were surveyed at week 2; as a result of attrition in the training cycle, 176 recruits were sampled at week 11. From week 2 to 11, 26 recruits dropped from the sample, and 1 additional recruit completed a survey at week 11. The sample population represents recruits surveyed at both time points (N = 175). Unless otherwise noted, data in these figures are from week 11. Percentages were calculated based on the number of nonmissing responses to each question.

¹ Responses are from week 2 survey.

² Recruits were instructed to select all races that apply.

³ Response options included Mother, Father, Sibling, Cousin, Aunt or Uncle, Grandparent and Other family member.

⁴ No recruits reported Mid-Atlantic, Northeast, or Southeast as their home region, likely because recruits originating from those regions are assigned to train at Marine Corps Recruit Depot Parris Island.

Appendix O: Army, Air Force, Navy, and Coast Guard Recruit Social Science Survey Data

Appendix O: Army, Air Force, Navy, and Coast Guard Recruit Social Science Survey Data

Question 1. What is your gender?

Appendix Table O.1. Number and Percent of Male and Female Recruits Indicating Response, by Service

Army				Navy				Air Force				Coast Guard			
Male		Female		Male		Female		Male		Female		Male		Female	
N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
21	51.2	20	48.8	20	50.0	20	50.0	20	50.0	20	50.0	20	50.0	20	50.0

Question 2. What is your age?

Appendix Table O.2. Number and Percent of Male and Female Recruits Indicating Response, by Service

	Army				Navy				Air Force				Coast Guard			
	Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
17–19	20	95.2	17	89.5	9	45.0	14	70.0	16	80.0	10	50.0	6	30.0	10	50.0
20–23	0	0.0	2	10.5	5	25.0	5	25.0	3	15.0	3	15.0	10	50.0	5	25.0
24–27	1	4.8	0	0.0	3	15.0	0	0.0	1	5.0	3	15.0	3	15.0	3	15.0
28–31	0	0.0	0	0.0	3	15.0	1	5.0	0	0.0	3	15.0	1	5.0	2	10.0
32–35	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
36 or older	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	5.0	0	0.0	0	0.0

Question 3. Is your ethnicity Hispanic/Spanish/Latino?

Appendix Table O.3. Number and Percent of Male and Female Recruits Indicating Response, by Service

	Army				Navy				Air Force				Coast Guard			
	Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Yes, Spanish/Hispanic/Latino	4	19.0	6	30.0	3	15.0	6	31.6	5	25.0	6	30.0	3	15.0	6	30.0
No, not Spanish/Hispanic/Latino	17	81.0	13	65.0	17	85.0	13	68.4	13	65.0	14	70.0	17	85.0	14	70.0
Prefer not to say	0	0.0	1	5.0	0	0.0	0	0.0	2	10.0	0	0.0	0	0.0	0	0.0

Question 4. What is your race? Check all that apply.

Appendix Table O.4. Number and Percent of Male and Female Recruits Indicating Response, by Service

	Army				Navy				Air Force				Coast Guard			
	Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
American Indian or Alaska Native	1	4.8	0	0.0	0	0.0	1	5.0	0	0.0	0	0.0	1	5.0	3	15.0
Asian	0	0.0	2	10.0	1	5.0	1	5.0	1	5.0	1	5.0	0	0.0	2	10.0
Black or African American	4	19.0	7	35.0	3	15.0	5	25.0	7	35.0	9	45.0	2	10.0	4	20.0
Native Hawaiian or other Pacific Islander	0	0.0	0	0.0	0	0.0	1	5.0	0	0.0	1	5.0	0	0.0	1	5.0
White	15	71.4	11	55.0	16	80.0	12	60.0	14	70.0	9	45.0	17	85.0	16	80.0
Prefer not to say	2	9.5	1	5.0	0	0.0	1	5.0	0	0.0	2	10.0	0	0	0	0

Question 5. What is your marital status?

Appendix Table O.5. Number and Percent of Male and Female Recruits Indicating Response, by Service

	Army				Navy				Air Force				Coast Guard			
	Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Never married	20	95.2	20	100.0	16	80.0	19	95.0	19	95.0	17	85.0	17	85.0	17	85.0
Married	1	4.8	0	0.0	4	20.0	1	5.0	1	5.0	3	15.0	3	15.0	3	15.0
Separated	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Divorced	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Widowed	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Question 6. What is the highest degree or level of school you have completed?

Appendix Table O.6. Number and Percent of Male and Female Recruits Indicating Response, by Service

	Army				Navy				Air Force				Coast Guard			
	Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
High school diploma or equivalent (GED)	21	100.0	15	75.0	12	60.0	12	60.0	14	70.0	9	45.0	7	35.0	9	45.0
Some college	0	0.0	3	15.0	4	20.0	6	30.0	5	25.0	5	25.0	7	35.0	2	10.0
Associate's degree	0	0.0	1	5.0	0	0.0	0	0.0	0	0.0	1	5.0	3	15.0	1	5.0
Bachelor's degree	0	0.0	1	5.0	4	20.0	2	10.0	1	5.0	3	15.0	3	15.0	8	40.0
Master's degree or higher	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	10.0	0	0.0	0	0.0

Question 7. Where do you consider home?

Appendix Table O.7. Number and Percent of Male and Female Recruits Indicating Response, by Service

	Army				Navy				Air Force				Coast Guard			
	Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
U.S. Commonwealth and Territories (e.g., American Samoa, Guam, Puerto Rico, Virgin Islands)	1	4.8	0	0.0	1	5.0	0	0.0	0	0.0	0	0.0	0	0.0	1	5.0
Elsewhere	0	0.0	0	0.0	0	0.0	2	10.0	0	0.0	0	0.0	0	0	0	0.0
Mid-Atlantic (DE, DC, MD, NJ, PA, VA, WV)	1	4.8	1	5.3	2	10.0	2	10.0	2	10.0	0	0.0	7	36.8	3	15.0
Midwest (IL, IN, MI, MN, OH, WI)	3	14.3	2	10.5	2	10.0	4	20.0	2	10.0	3	15.8	1	5.3	1	5.0
Mountain Plains (CO, IA, KS, MO, MT, NE, SD, UT, WY)	0	0.0	3	15.8	0	0.0	0	0.0	0	0.0	1	5.3	0	0.0	0	0.0
Northeast (CT, ME, MA, NH, NY, RI, VT)	0	0.0	0	0.0	3	15.0	3	15.0	2	10.0	3	15.8	2	10.5	2	10.0
Southeast (AL, FL, GA, KY, MS, NC, SC, TN)	9	42.9	8	42.1	3	15.0	3	15.0	5	25.0	7	36.8	5	26.3	5	25.0
Southwest (AR, LA, NM, OK, TX)	3	14.3	0	0.0	5	25.0	2	10.0	3	15.0	2	10.5	2	10.5	3	15.0
Western (AK, AZ, CA, HI, ID, NV, OR, WA)	4	19.0	5	26.3	4	20.0	4	20.0	6	30.0	3	15.8	2	10.5	5	25.0

Question 8. Have any members of your family served in the military (active-duty, guard, or reserve)? Check all that apply.

Appendix Table O.8. Number and Percent of Male and Female Recruits Indicating Response, by Service

	Army				Navy				Air Force				Coast Guard			
	Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Mother	0	0.0	3	15.0	0	0.0	0	0.0	1	5.0	2	10.0	3	15.0	5	25.0
Father	5	23.8	2	10.0	3	15.0	5	25.0	8	40.0	10	50.0	9	45.0	6	30.0
Sibling	3	14.3	4	20.0	6	30.0	7	35.0	6	30.0	4	20.0	5	25.0	3	15.0
Cousin	9	42.9	8	40.0	7	35.0	5	25.0	2	10.0	4	20.0	5	25.0	7	35.0
Aunt or Uncle	6	28.6	7	35.0	8	40.0	7	35.0	7	35.0	5	25.0	9	45.0	8	40.0
Grandparent	9	42.9	10	50.0	11	55.0	8	40.0	12	60.0	9	45.0	12	60.0	12	60.0
Other family member	5	23.8	2	10.0	3	15.0	5	25.0	4	20.0	2	10.0	7	35.0	5	25.0

Question 9. Why did you join the military? Check all that apply.

Appendix Table O.9. Number and Percent of Male and Female Recruits Indicating Response, by Service

	Army				Navy				Air Force				Coast Guard			
	Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Money for college, college repayment, and other education benefits	10	47.6	18	90.0	10	50.0	12	60.0	14	70.0	15	75.0	11	55.0	11	55.0
Health care benefits	10	47.6	10	50.0	9	45.0	8	40.0	10	50.0	11	55.0	10	50.0	12	60.0
Pay (including military retirement)	15	71.4	8	40.0	9	45.0	11	55.0	9	45.0	8	40.0	9	45.0	15	75.0
Desire to serve your country	8	38.1	8	40.0	13	65.0	8	40.0	10	50.0	11	55.0	17	85.0	14	70.0
Desire to travel and see new places	12	57.1	12	60.0	12	60.0	15	75.0	11	55.0	12	60.0	15	75.0	15	75.0
Family history of military service	5	23.8	2	10.0	2	10.0	4	20.0	6	30.0	8	40.0	9	45.0	6	30.0
Personal development, growth, and maturity	13	61.9	14	70.0	15	75.0	16	80.0	18	90.0	15	75.0	16	80.0	16	80.0
Challenging or interesting work	7	33.3	10	50.0	10	50.0	6	30.0	6	30.0	6	30.0	9	45.0	13	65.0
Building skills useful for civilian employment	14	66.7	9	45.0	13	65.0	3	15.0	13	65.0	9	45.0	9	45.0	4	20.0
Security and stability of the job	11	52.4	9	45.0	9	45.0	6	30.0	10	50.0	11	55.0	7	35.0	12	60.0
Test yourself physically or mentally	8	38.1	10	50.0	12	60.0	10	50.0	9	45.0	7	35.0	8	40.0	10	50.0
To get away from family, personal situation, or hometown	2	9.5	3	15.0	5	25.0	5	25.0	3	15.0	4	20.0	0	0.0	2	10.0
Other	1	4.8	0	0.0	2	10.0	3	15.0	0	0.0	0	0.0	1	5.0	0	0.0

Question 10. How long do you see yourself serving on active duty?

Appendix Table O.10. Number and Percent of Male and Female Recruits Indicating Response, by Service

	Army				Navy				Air Force				Coast Guard			
	Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
2-4 years	6	30.0	2	10.0	1	5.3	4	20.0	5	25.0	1	5.3	2	10.0	3	15.0
5-8 years	4	20.0	9	45.0	10	52.6	3	15.0	1	5.0	7	36.8	4	20.0	4	20.0
9-12 years	4	20.0	2	10.0	5	26.3	3	15.0	4	20.0	1	5.3	3	15.0	1	5.0
13-16 years	0	0.0	1	5.0	0	0.0	0	0.0	0	0.0	3	15.8	0	0.0	0	0.0
17-20 years	5	25.0	3	15.0	1	5.3	8	40.0	7	35.0	3	15.8	4	20.0	8	40.0
More than 20 years	1	5.0	3	15.0	2	10.5	2	10.0	3	15.0	4	21.1	7	35.0	4	20.0

Question 11. During your time at recruit training, have you been trained by an instructor of the opposite sex?

Appendix Table O.11. Number and Percent of Male and Female Recruits Indicating Response, by Service

	Army				Navy				Air Force				Coast Guard			
	Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
No	0	0.0	1	5.0	2	10.0	0	0.0	0	0.0	0	0.0	3	15.0	0	0.0
Yes	21	100.0	19	95.0	18	90.0	20	100.0	20	100.0	20	100.0	17	85.0	20	100.0

Question 12. During your time at recruit training, how closely have you trained with recruits of the opposite sex?

Appendix Table O.12. Number and Percent of Male and Female Recruits Indicating Response, by Service

	Army				Navy				Air Force				Coast Guard			
	Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Somewhat closely	5	23.8	5	25.0	4	20.0	11	55.0	12	60.0	16	80.0	5	25.0	3	15.0
I have not trained with recruits of the opposite sex	0	0.0	1	5.0	10	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not at all closely	0	0.0	3	15.0	4	20.0	8	40.0	8	40.0	2	10.0	0	0.0	0	0.0
Very closely	16	76.2	11	55.0	2	10.0	1	5.0	0	0.0	2	10.0	15	75.0	17	85.0

Question 13. In your opinion, at what level should male and female recruits train together in your Service’s recruit training program?
Check all that apply.

Appendix Table O.13. Number and Percent of Male and Female Recruits Indicating Response, by Service

	Army				Navy				Air Force				Coast Guard			
	Male		Female		Male		Female		Male		Female		Male		Female	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
[Service’s lowest level unit level]	17	81.0	19	95.0	10	50.0	14	70.0	11	55.0	7	35.0	20	100.0	20	100.0
[Service’s next highest unit level]	8	38.1	8	40.0	15	75.0	13	65.0	13	65.0	16	80.0	6	30.0	8	40.0
[Service’s next highest unit level]	6	28.6	7	35.0	7	35.0	11	55.0	3	15.0	5	25.0	5	25.0	7	35.0

[Service's highest unit level]	7	33.3	6	30.0	3	15.0	8	40.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Male and female recruits should not train together at all	0	0.0	0	0.0	0	0.0	2	10.0	0	0.0	1	5.0	0	0.0	0	0.0

Question 14. Please rate your preference for more or less integration of men and women for the following aspects of recruit training (check only one box for each line):

Appendix Table O.14. Number and Percent of Male and Female Recruits Indicating Response, by Service

		Army				Navy				Air Force				Coast Guard			
		Male		Female		Male		Female		Male		Female		Male		Female	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Physical fitness training	Less integration	3	14.3	1	5.0	1	5.0	1	5.0	0	0.0	0	0.0	0	0.0	1	5.0
	More integration	7	33.3	3	15.0	5	25.0	9	45.0	6	30.0	3	15.0	4	20.0	1	5.0
	Satisfied with current integration	11	52.4	16	80.0	14	70.0	10	50.0	14	70.0	17	85.0	16	80.0	18	90.0
Classroom training	Less integration	1	4.8	1	5.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	More integration	3	14.3	4	20.0	13	65.0	11	55.0	11	55.0	5	25.0	3	15.0	0	0.0
	Satisfied with current integration	17	81	15	75.0	7	35.0	9	45.0	9	45.0	15	75.0	17	85.0	20	100.0
Tactical/field training	Less integration	1	4.8	0	0.0	1	5.0	2	10.0	0	0.0	0	0.0	0	0.0	1	5.3
	More integration	4	19	7	35.0	15	75.0	15	75.0	13	68.4	8	40.0	5	26.3	3	15.8

	Satisfied with current integration	16	76.2	13	65.0	4	20.0	3	15.0	6	31.6	12	60.0	14	73.7	15	78.9
Inspections and training conducted in housing/sleeping quarters	Less integration	3	14.3	2	10.0	2	10.0	3	15.0	0	0.0	2	10.0	0	0.0	3	15.0
	More integration	2	9.5	2	10.0	3	15.0	7	35.0	2	11.1	2	10.0	0	0.0	1	5.0
	Satisfied with current integration	16	76.2	16	80.0	15	75.0	10	50.0	16	88.9	16	80.0	20	100.0	16	80.0

Question 15. Imagine your Service increasing how frequently men and women train together at recruit training. Please rate your agreement and disagreement with the following statements (check only one box for each line):

Appendix Table O.15. Number and Percent of Male and Female Recruits Indicating Response, by Service

		Army				Navy				Air Force				Coast Guard			
		Male		Female		Male		Female		Male		Female		Male		Female	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Recruits will maintain the same discipline and focus while training	Agree	12	57.1	13	65.0	9	45.0	11	55.0	8	40.0	13	65.0	19	95.0	19	95.0
	Disagree	7	33.3	4	20.0	7	35.0	6	30.0	7	35.0	6	30.0	1	5.0	1	5.0
	Neither	2	9.5	3	15.0	4	20.0	3	15.0	5	25.0	1	5.0	0	0.0	0	0.0
Recruits will maintain appropriate interactions during non-training time (e.g., meals, rest/recreation time)	Agree	12	57.1	12	60.0	5	25.0	12	60.0	11	55.0	13	65.0	19	95.0	16	80.0
	Disagree	7	33.3	3	15.0	8	40.0	5	25.0	6	30.0	5	25.0	1	5.0	1	5.0
	Neither	2	9.5	5	25.0	7	35.0	3	15.0	3	15.0	2	10.0	0	0.0	3	15.0
Training standards will be lowered	Agree	7	33.3	4	20.0	5	25.0	2	10.5	2	10.0	2	10.0	3	15.8	3	15.0
	Disagree	10	47.6	11	55.0	13	65.0	16	84.2	14	70.0	14	70.0	13	68.4	13	65.0
	Neither	4	19.0	5	25.0	2	10.0	1	5.3	4	20.0	4	20.0	3	15.8	4	20.0
Training standards will be raised	Agree	4	19.0	7	35.0	7	35.0	14	73.7	8	40.0	11	55.0	2	10.0	4	20.0
	Disagree	9	42.9	7	35.0	9	45.0	3	15.8	3	15.0	5	25.0	9	45.0	8	40.0
	Neither	8	38.1	6	30.0	4	20.0	2	10.5	9	45.0	4	20.0	9	45.0	8	40.0
	Agree	13	61.9	16	80.0	15	75.0	15	75.0	13	65.0	9	45.0	15	75.0	17	85.0

Recruits will be better prepared for their first assignment	Disagree	1	4.8	1	5.0	0	0.0	1	5.0	0	0.0	2	10.0	0	0.0	0	0.0
	Neither	7	33.3	3	15.0	5	25.0	4	20.0	7	35.0	9	45.0	5	25.0	3	15.0
Recruits will be less prepared for their first assignment	Agree	2	9.5	1	5.3	0	0.0	1	5.3	0	0.0	3	15.0	0	0.0	1	5.0
	Disagree	13	61.9	17	89.5	16	80.0	14	73.7	14	70.0	9	45.0	17	85.0	13	65.0
	Neither	6	28.6	1	5.3	4	20.0	4	21.1	6	30.0	8	40.0	3	15.0	6	30.0
I would feel more confident in my ability as a [Sailor/Soldier/Airman/Coast Guardsman]	Agree	10	47.6	16	80.0	14	70.0	11	61.1	12	60.0	8	40.0	11	55.0	13	68.4
	Disagree	1	4.8	1	5.0	1	5.0	2	11.1	3	15.0	3	15.0	0	0.0	1	5.3
	Neither	10	47.6	3	15.0	5	25.0	5	27.8	5	25.0	9	45.0	9	45.0	5	26.3

Note: “agree/mostly agree” has been consolidated to “agree,” and “disagree/mostly disagree” has been consolidated to “disagree”

Question 16. Again, imagine your Service increasing how frequently men and women train together at recruit training. From your perspective, please rate the likelihood of occurrence of the following items (check only one box for each line):

Appendix Table O.16. Number and Percent of Male and Female Recruits Indicating Response, by Service

		Army				Navy				Air Force				Coast Guard			
		Male		Female		Male		Female		Male		Female		Male		Female	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Training and mentorship from female instructors	Less likely to occur	0	0.0	1	5.3	1	5.0	2	10.0	0	0.0	2	10.0	0	0.0	2	10.0
	More likely to occur	12	57.1	9	47.4	12	60.0	12	60.0	13	65.0	7	35.0	8	40.0	13	65.0
	No difference	9	42.9	9	47.4	7	35.0	6	30.0	7	35.0	11	55.0	12	60.0	5	25.0
Training and mentorship from male instructors	Less likely to occur	1	4.8	0	0.0	0	0.0	0	0.0	2	10.0	0	0.0	1	5.0	0	0.0
	More likely to occur	9	42.9	11	57.9	8	40.0	11	55.0	6	30.0	7	36.8	2	10.0	3	15.0

	No difference	11	52.4	8	42.1	12	60.0	9	45.0	12	60.0	12	63.2	17	85.0	17	85.0
Fraternization (improper relationships) among recruits	Less likely to occur	3	15.0	1	5.3	2	10.0	4	20.0	3	15.0	7	35.0	3	15.0	1	5.0
	More likely to occur	15	75.0	9	47.4	12	60.0	8	40.0	6	30.0	7	35.0	3	15.0	10	50.0
	No difference	2	10.0	9	47.4	6	30.0	8	40.0	11	55.0	6	30.0	14	70.0	9	45.0
Sexual harassment and sexual assault among recruits	Less likely to occur	5	23.8	1	5.3	1	5.0	1	5.6	3	15.0	8	42.1	4	20.0	0	0.0
	More likely to occur	9	42.9	10	52.6	16	80.0	9	50.0	6	30.0	7	36.8	3	15.0	15	75.0
	No difference	7	33.3	8	42.1	3	15.0	8	44.4	11	55.0	4	21.1	13	65.0	5	25.0
Success in working with diverse team members	Less likely to occur	0	0.0	0	0.0	0	0.0	2	10.0	0	0.0	0	0.0	1	5.0	0	0.0
	More likely to occur	19	90.5	15	78.9	18	90.0	16	80.0	19	95.0	15	75.0	16	80.0	17	85.0
	No difference	2	9.5	4	21.1	2	10.0	2	10.0	1	5.0	5	25.0	3	15.0	3	15.0
Injuries among female recruits	Less likely to occur	1	5.6	3	17.6	1	5.0	5	25.0	2	11.8	2	11.8	1	5.0	0	0.0
	More likely to occur	7	38.9	3	17.6	3	15.0	4	20.0	0	0.0	2	11.8	3	15.0	5	25.0
	No difference	10	55.6	11	64.7	16	80.0	11	55.0	15	88.2	13	76.5	16	80.0	15	75.0
Injuries among male recruits	Less likely to occur	3	16.7	5	29.4	3	15.0	5	25.0	2	11.8	2	11.8	1	5.0	1	5.0
	More likely to occur	2	11.1	0	0.0	1	5.0	2	10.0	2	11.8	1	5.9	0	0.0	0	0.0

	No difference	13	72.2	12	70.6	16	80.0	13	65.0	13	76.5	14	82.4	19	95.0	19	95.0
Exposure to new ways of problem-solving	Less likely to occur	0	0.0	1	5.3	0	0.0	0	0.0	0	0.0	1	5.0	0	0.0	0	0.0
	More likely to occur	16	76.2	17	89.5	20	100.0	18	90.0	18	94.7	18	90.0	16	80.0	18	90.0
	No difference	5	23.8	1	5.3	0	0.0	2	10.0	1	5.3	1	5.0	4	20.0	2	10.0
Men dropping out of recruit training	Less likely to occur	8	38.1	8	42.1	5	25.0	13	68.4	9	47.4	10	50.0	3	15.0	2	10.5
	More likely to occur	0	0.0	0	0.0	1	5.0	0	0.0	1	5.3	1	5.0	0	0.0	2	10.5
	No difference	13	61.9	11	57.9	14	70.0	6	31.6	9	47.4	9	45.0	17	85.0	15	78.9
Women dropping out of recruit training	Less likely to occur	3	14.3	3	15.8	4	21.1	7	36.8	7	36.8	5	25.0	2	10.0	4	20.0
	More likely to occur	3	14.3	8	42.1	6	31.6	5	26.3	3	15.8	8	40.0	1	5.0	4	20.0
	No difference	15	71.4	8	42.1	9	47.4	7	36.8	9	47.4	7	35.0	17	85.0	12	60.0

Question 17. Please rate how much you agree or disagree with each statement:

Appendix Table O.17. Number and Percent of Male and Female Recruits Indicating Response, by Service

		Army				Navy				Air Force				Coast Guard			
		Male		Female		Male		Female		Male		Female		Male		Female	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
The members of my [smallest recruit unit] are cooperative with each other	Agree	13	61.9	11	55.0	12	60.0	4	20.0	12	60.0	16	80.0	16	80.0	14	73.7
	Disagree	5	23.8	8	40.0	6	30.0	11	55.0	7	35.0	2	10.0	0	0.0	4	21.1
	Neither	3	14.3	1	5.0	2	10.0	5	25.0	1	5.0	2	10.0	4	20.0	1	5.3
The members of my [smallest recruit unit] know that they can depend on each other	Agree	15	71.4	12	60.0	11	55.0	10	50.0	11	55.0	17	85.0	15	75.0	14	70.0
	Disagree	1	4.8	4	20.0	7	35.0	5	25.0	4	20.0	2	10.0	3	15.0	3	15.0
	Neither	5	23.8	4	20.0	2	10.0	5	25.0	5	25.0	1	5.0	2	10.0	3	15.0
When I face a difficult task, other recruits in my [smallest recruit unit] help out	Agree	20	95.2	20	100.0	16	80.0	14	70.0	18	90.0	20	100.0	19	95.0	17	85.0
	Disagree	1	4.8	0	0.0	1	5.0	3	15.0	1	5.0	0	0.0	1	5.0	3	15.0
	Neither	0	0.0	0	0.0	3	15.0	3	15.0	1	5.0	0	0.0	0	0.0	0	0.0
Recruits in my [smallest recruit unit] really respect one another	Agree	7	33.3	5	25.0	3	15.0	4	20.0	9	45.0	16	80.0	15	75.0	14	70.0
	Disagree	9	42.9	11	55.0	10	50.0	15	75.0	7	35.0	1	5.0	4	20.0	6	30.0
	Neither	5	23.8	4	20.0	7	35.0	1	5.0	4	20.0	3	15.0	1	5.0	0	0.0
My instructors at recruit training treat recruits fairly	Agree	21	100.0	16	84.2	19	95.0	12	60.0	17	85.0	13	65.0	20	100.0	18	90.0
	Disagree	0	0.0	0	0.0	0	0.0	7	35.0	0	0.0	4	20.0	0	0.0	2	10.0
	Neither	0	0.0	3	15.8	1	5.0	1	5.0	3	15.0	3	15.0	0	0.0	0	0.0
My instructors at recruit training treat me with respect	Agree	21	100.0	16	88.9	20	100.0	15	75.0	18	90.0	11	55.0	18	90.0	18	90.0
	Disagree	0	0.0	0	0.0	0	0.0	3	15.0	0	0.0	6	30.0	2	10.0	2	10.0
	Neither	0	0.0	2	11.1	0	0.0	2	10.0	2	10.0	3	15.0	0	0.0	0	0.0
I can rely on my instructors for help if I face a difficult problem during recruit training	Agree	20	95.2	18	100.0	20	100.0	15	75.0	19	95.0	14	70.0	16	80.0	14	70.0
	Disagree	0	0.0	0	0.0	0	0.0	2	10.0	0	0.0	3	15.0	3	15.0	5	25.0
	Neither	1	4.8	0	0.0	0	0.0	3	15.0	1	5.0	3	15.0	1	5.0	1	5.0

Note: For simplicity, “agree/mostly agree” has been consolidated to “agree,” and “disagree/mostly disagree” has been consolidated to “disagree”

Question 18. Who is best suited to serve in each type of military role (check only one box for each line)?

Appendix Table O.18. Number and Percent of Male and Female Recruits Indicating Response, by Service

		Army				Navy				Air Force				Coast Guard			
		Male		Female		Male		Female		Male		Female		Male		Female	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Drill instructors	Equally Men and Women	20	95.2	20	100.0	20	100.0	17	85.0	18	90.0	19	95.0	20	100.0	18	90.0
	Men	1	4.8	0	0.0	0	0.0	1	5.0	2	10.0	1	5.0	0	0.0	2	10.0
	Women	0	0.0	0	0.0	0	0.0	2	10.0	0	0.0	0	0.0	0	0.0	0	0.0
Infantry or combat roles	Equally Men and Women	12	57.1	11	55.0	12	60.0	13	65.0	9	45.0	10	50.0	11	55.0	10	50.0
	Men	9	42.9	9	45.0	8	40.0	7	35.0	11	55.0	10	50.0	9	45.0	10	50.0
	Women	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Leaders at the highest levels of your Service	Equally Men and Women	19	90.5	20	100.0	20	100.0	17	85.0	17	85.0	18	90.0	20	100.0	17	85.0
	Men	1	4.8	0	0.0	0	0.0	2	10.0	1	5.0	0	0.0	0	0.0	1	5.0
	Women	1	4.8	0	0.0	0	0.0	1	5.0	2	10.0	2	10.0	0	0.0	2	10.0
Special Forces	Equally Men and Women	12	60.0	17	85.0	9	45.0	14	70.0	8	42.1	17	85.0	11	55.0	13	68.4
	Men	8	40.0	3	15.0	11	55.0	6	30.0	11	57.9	3	15.0	9	45.0	4	21.1
	Women	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	10.5
Intelligence roles	Equally Men and Women	18	85.7	17	85.0	19	95.0	15	75.0	15	75.0	20	100.0	17	89.5	16	80.0
	Men	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Women	3	14.3	3	15.0	1	5.0	5	25.0	5	25.0	0	0.0	2	10.5	4	20.0
Administrative roles	Equally Men and Women	17	81.0	18	90.0	18	90.0	16	80.0	15	75.0	18	90.0	19	95.0	16	80.0
	Men	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

	Women	4	19.0	2	10.0	2	10.0	4	20.0	5	25.0	2	10.0	1	5.0	4	20.0
Healthcare roles	Equally Men and Women	18	85.7	15	75.0	18	90.0	14	70.0	15	75.0	18	90.0	19	95.0	16	80.0
	Men	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Women	3	14.3	5	25.0	2	10.0	6	30.0	5	25.0	2	10.0	1	5.0	4	20.0
Engineering roles	Equally Men and Women	18	85.7	17	85.0	20	100.0	16	80.0	16	80.0	20	100.0	20	100.0	17	85.0
	Men	3	14.3	3	15.0	0	0.0	4	20.0	4	20.0	0	0.0	0	0.0	3	15.0
	Women	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Question 19. Please rate how much you agree or disagree with each statement below (check only one box for each line):

Appendix Table O.19.1. Number and Percent of Male and Female Recruits Indicating Response, by Service

		Army				Navy				Air Force				Coast Guard			
		Male		Female		Male		Female		Male		Female		Male		Female	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
It is usually better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family	Agree	2	9.5	0	0.0	1	5.0	2	10.0	2	10.0	2	10.0	1	5.0	1	5.0
	Disagree	16	76.2	20	100.0	13	65.0	16	80.0	11	55.0	17	85.0	15	75.0	16	80.0
	Neither	3	14.3	0	0.0	6	30.0	2	10.0	7	35.0	1	5.0	4	20.0	3	15.0
If a wife works, her husband should take a greater part in housework and childcare	Agree	12	57.1	6	30.0	13	65.0	9	45.0	11	55.0	4	20.0	12	60.0	12	60.0
	Disagree	8	38.1	8	40.0	3	15.0	4	20.0	2	10.0	6	30.0	7	35.0	3	15.0
	Neither	1	4.8	6	30.0	4	20.0	7	35.0	7	35.0	10	50.0	1	5.0	5	25.0
Most fathers should spend more time with their children than they do now	Agree	13	65.0	14	70.0	16	80.0	15	75.0	11	55.0	11	55.0	12	60.0	12	60.0
	Disagree	1	5.0	0	0.0	0	0.0	1	5.0	1	5.0	1	5.0	2	10.0	2	10.0
	Neither	6	30.0	6	30.0	4	20.0	4	20.0	8	40.0	8	40.0	6	30.0	6	30.0
Most mothers should spend more time with their children than they do now	Agree	10	50.0	12	60.0	15	75.0	12	60.0	9	45.0	10	50.0	10	50.0	8	40.0
	Disagree	3	15.0	0	0.0	0	0.0	1	5.0	1	5.0	1	5.0	2	10.0	3	15.0
	Neither	7	35.0	8	40.0	5	25.0	7	35.0	10	50.0	9	45.0	8	40.0	9	45.0
	Agree	19	90.5	19	100.0	18	90.0	19	95.0	16	80.0	19	95.0	17	89.5	20	100.0

Parents should encourage just as much independence in their daughters as their sons	Disagree	0	0.0	0	0.0	0	0.0	0	0.0	1	5.0	0	0.0	1	5.3	0	0.0
	Neither	2	9.5	0	0.0	2	10.0	1	5.0	3	15.0	1	5.0	1	5.3	0	0.0
Men and women should be paid the same money if they do the same work	Agree	19	90.5	19	95.0	16	80.0	20	100.0	19	95.0	20	100.0	20	100.0	20	100.0
	Disagree	0	0.0	0	0.0	1	5.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Neither	2	9.5	1	5.0	3	15.0	0	0.0	1	5.0	0	0.0	0	0.0	0	0.0
Women should be considered as seriously as men for jobs as executives or politicians	Agree	19	90.5	20	100.0	19	95.0	19	95.0	20	100.0	19	95.0	20	100.0	20	100.0
	Disagree	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Neither	2	9.5	0	0.0	1	5.0	1	5.0	0	0.0	1	5.0	0	0.0	0	0.0
A woman should have the same job opportunities as a man	Agree	20	95.2	20	100.0	18	90.0	20	100.0	19	95.0	20	100.0	20	100.0	18	90.0
	Disagree	0	0.0	0	0.0	1	5.0	0	0.0	0	0.0	0	0.0	0	0.0	1	5.0
	Neither	1	4.8	0	0.0	1	5.0	0	0.0	1	5.0	0	0.0	0	0.0	1	5.0
Women should be cherished and protected by men	Agree	11	55.0	8	40.0	13	65.0	13	65.0	13	65.0	9	45.0	11	55.0	12	60.0
	Disagree	4	20.0	0	0.0	4	20.0	1	5.0	3	15.0	0	0.0	2	10.0	5	25.0
	Neither	5	25.0	12	60.0	3	15.0	6	30.0	4	20.0	11	55.0	7	35.0	3	15.0
Many women get a kick out of teasing men by seeming sexually available and then refusing male advances	Agree	7	35.0	6	31.6	7	35.0	8	42.1	3	15.0	4	20.0	4	22.2	9	45.0
	Disagree	6	30.0	10	52.6	7	35.0	5	26.3	9	45.0	10	50.0	9	50.0	6	30.0
	Neither	7	35.0	3	15.8	6	30.0	6	31.6	8	40.0	6	30.0	5	27.8	5	25.0
In a disaster, women should be rescued before men	Agree	8	38.1	1	5.0	5	25.0	0	0.0	6	30.0	2	10.0	11	55.0	6	30.0
	Disagree	6	28.6	11	55.0	3	15.0	8	40.0	5	25.0	11	55.0	3	15.0	6	30.0
	Neither	7	33.3	8	40.0	12	60.0	12	60.0	9	45.0	7	35.0	6	30.0	8	40.0
When women lose to men in a fair competition, they typically complain about being discriminated against	Agree	9	45.0	8	40.0	3	15.0	8	40.0	6	30.0	8	40.0	7	35.0	7	35.0
	Disagree	5	25.0	7	35.0	7	35.0	5	25.0	6	30.0	10	50.0	11	55.0	7	35.0
	Neither	6	30.0	5	25.0	10	50.0	7	35.0	8	40.0	2	10.0	2	10.0	6	30.0

Note: For simplicity, “agree/mostly agree” has been consolidated to “agree,” and “disagree/mostly disagree” has been consolidated to “disagree”

Appendix Table O.19.2. Percent Agreement with Each Statement by Gender and Service

<i>Gender Service</i>		Gender Roles				Equal Opportunity and Treatment				Sexism			
		Benevolent		Hostile		Benevolent		Hostile		Benevolent		Hostile	
		Better if man achieve outside home	If wife works, man should do more house/child work	Most fathers should spend more time with kids than now	Most mothers should spend more time with kids than now	Parents should encourage as much independence in daughters as sons	Men and women should be paid same if doing same work	Women should be considered as seriously for men for executives or politicians	Women should have same job opportunities as a man	Women should be cherished and protected by men	In a disaster, women should be rescued before men	Many women get a kick out of teasing men sexually	When women lose to men in a fair fight, they typically complain about being discriminated against
Male	Marine Corps	21.7%	69.3%	81.3%	64.2%	81.7%	90.7%	89.8%	90.4%	77.0%	58.8%	46.7%	47.6%
Male	Air Force	10.0%	55.0%	55.0%	45.0%	80.0%	95.0%	100.0%	95.0%	65.0%	30.0%	15.0%	30.0%
Male	Army	9.5%	57.1%	65.0%	50.0%	90.5%	90.5%	90.5%	95.2%	55.0%	38.1%	38.1%	45.0%
Male	Coast Guard	5.0%	60.0%	60.0%	50.0%	89.5%	100.0%	100.0%	100.0%	55.0%	55.0%	30.0%	35.0%
Male	Navy	5.0%	65.0%	80.0%	75.0%	90.0%	80.0%	95.0%	90.0%	65.0%	25.0%	35.0%	15.0%
	Exact p-value	0.079	0.442	0.007	0.133	0.741	0.274	0.392	0.683	0.028	0.002	0.031	0.025
Male	Civilian	33.3%		66.3%	55.7%	69.9%	90.8%	86.6%	84.2%				
Female	Marine Corps	6.3%	66.0%	81.9%	70.1%	97.2%	96.5%	98.6%	98.6%	45.1%	18.2%	31.3%	43.8%
Female	Air Force	10.0%	20.0%	55.0%	50.0%	95.0%	100.0%	95.0%	100.0%	45.0%	10.0%	20.0%	40.0%
Female	Army	0.0%	30.0%	70.0%	60.0%	100.0%	95.0%	100.0%	100.0%	40.0%	5.0%	35.0%	40.0%
Female	Coast Guard	5.0%	60.0%	60.0%	40.0%	100.0%	100.0%	100.0%	90.0%	60.0%	30.0%	45.0%	35.0%
Female	Navy	10.0%	45.0%	75.0%	60.0%	95.0%	100.0%	95.0%	100.0%	65.0%	0.0%	45.0%	40.0%
	Exact p-value	0.663	0.000	0.028	0.052	0.695	0.932	0.450	0.210	0.355	0.037	0.358	0.959
Female	Civilian	16.3%		73.4%	62.1%	89.0%	97.9%	96.6%	95.7%				

Notes: Exact p-value from Fisher's Exact test with p<0.05 indicating significant difference across Services.

Cells in bold represent significant difference between indicated Service and USMC (p<0.05).

Civilian sample is not included in significance testing, included for reference.

Marine Corps recruits measured at Week 11.

Appendix Table O.19.3. Sample Size by Gender and Service

		Gender Roles				Equal Opportunity and Treatment				Sexism			
		Benevolent		Hostile		Benevolent		Hostile		Benevolent		Hostile	
<i>Gender</i>	<i>Service</i>	Better if man achiever outside home	If wife works, man should do more house/child work	Most fathers should spend more time with kids than now	Most mothers should spend more time with kids than now	Parents should encourage as much independence in daughters as sons	Men and women should be paid same if doing same work	Women should be considered as seriously for men for executives or politicians	Women should have same job opportunities as a man	Women should be cherished and protected by men	In a disaster, women should be rescued before men	Many women get a kick out of teasing men sexually	When women lose to men in a fair fight, they typically complain about being discriminated against
Male	Marine Corps	323	322	321	324	322	322	322	324	322	320	330	317
Male	Air Force	20	20	20	20	20	20	20	20	20	20	20	20
Male	Army	21	21	20	20	21	21	21	21	20	21	21	20
Male	Coast Guard	20	20	20	20	19	20	20	20	20	20	20	20
Male	Navy	20	20	20	20	20	20	20	20	20	20	20	20
Male	Civilian	4235		4320	4100	4333	4257	4256	4227				
Female	Marine Corps	144	144	144	144	143	144	144	143	142	143	144	144
Female	Air Force	20	20	20	20	20	20	20	20	20	20	20	20
Female	Army	20	20	20	20	19	20	20	20	20	20	20	20
Female	Coast Guard	20	20	20	20	20	20	20	20	20	20	20	20
Female	Navy	20	20	20	20	20	20	20	20	20	20	20	20
Female	Civilian	4228		4494	4383	4500	4444	4442	4423				

Note: Marine Corps recruits measured at Week 11.

Appendix P: Demographic Profiles of Army, Air Force, Navy, and Coast Guard Recruits

Appendix P: Demographic Profiles of Army, Air Force, Navy, and Coast Guard Recruits

This appendix features demographic profiles from the social science survey data for the Army, Air Force, Navy, and Coast Guard data.

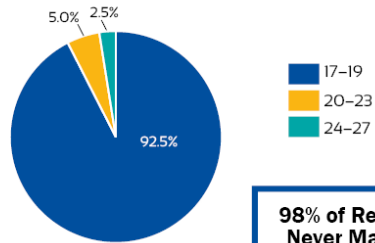


U.S. Army, Fort Jackson, Recruit Sample Demographics (N = 41)

Sample Population of Recruits by Gender

	Male	Female
N	21	20
Percent	51.2%	48.8%

Percentage of Recruits by Age Group

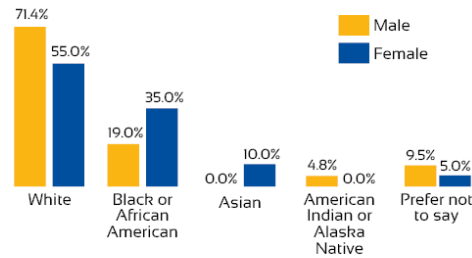


98% of Recruits Never Married

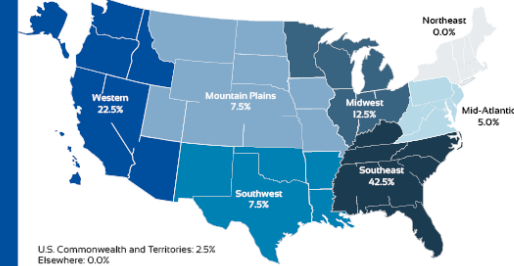
Top Five Reasons for Joining the Military by Gender

	Male	Female
1	Pay (including military retirement)	Money for college, college repayment, and other education benefits
2	Building skills useful for civilian employment	Personal development, growth, and maturity
3	Personal development, growth, and maturity	Desire to travel and see new places
4	Desire to travel and see new places	Test yourself physically or mentally
5	Security and stability of the job	Challenging or interesting work
		Healthcare benefits

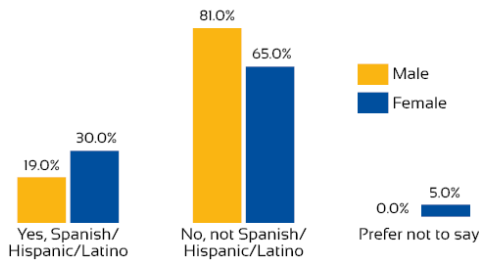
Race of Recruits by Gender¹



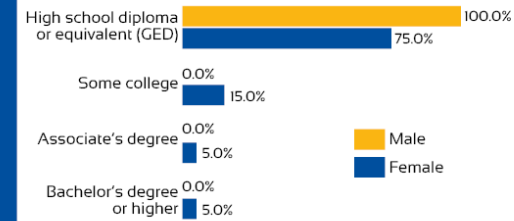
Where Recruits Consider Home³



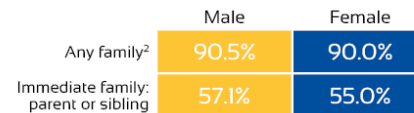
Spanish/Hispanic/Latino Ethnicity by Gender



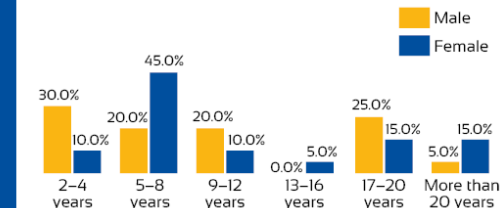
Education Level of Recruits by Gender



Percentage of Recruits With Family Who Served in the Military by Gender



Anticipated Service Length by Gender



Note: Recruits were surveyed at week 10 (out of 10) in the training cycle. Percentages were calculated based on the number of nonmissing responses to each question.

² Response options included Mother, Father, Sibling, Grandparent, Cousin, Aunt or Uncle, and Other family member.

³ No female recruits reported Southwest or U.S. Commonwealth and territories as their home region, and no male recruits reported

¹ Recruits were instructed to select all races that apply. No recruits reported Native Hawaiian or other Pacific Islander as their race. Mountain Plains as their home region.

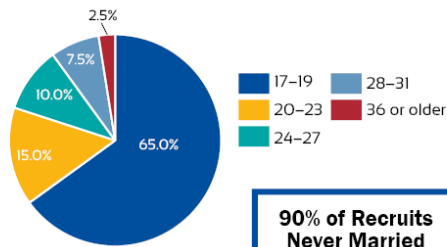


U.S. Air Force, Lackland Air Force Base, Recruit Sample Demographics (N = 40)

Sample Population of Recruits by Gender

	Male	Female
N	20	20
Percent	50.0%	50.0%

Percentage of Recruits by Age Group

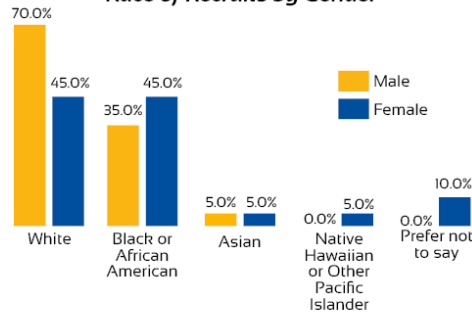


90% of Recruits Never Married

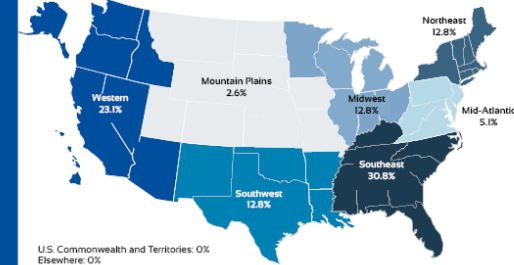
Top Five Reasons for Joining the Military by Gender

	Male	Female
1	Personal growth, development, and security	1 Personal growth, development, and security Money for college, college repayment, and other
2	Money for college, college repayment, and other education benefits	2 Desire to travel and see new places
3	Building skills useful for civilian employment	3 Healthcare benefits Security and stability of the job Desire to serve your country
4	Desire to travel and see new places	
5	Healthcare benefits	
	5 Security and stability of the job	
	Desire to serve your country	

Race of Recruits by Gender¹

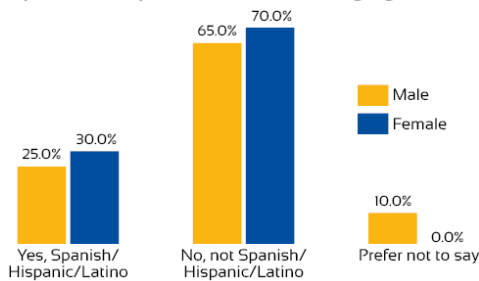


Where Recruits Consider Home³

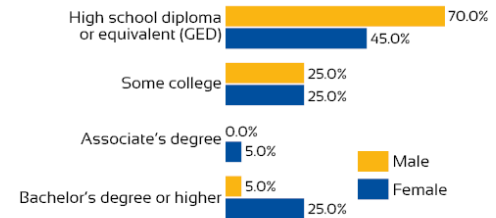


U.S. Commonwealth and Territories: OX
Elsewhere: OX

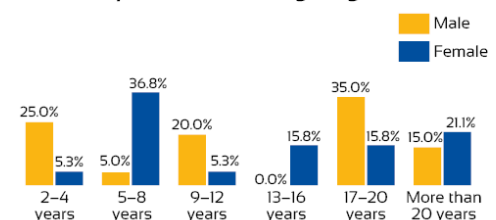
Spanish/Hispanic/Latino Ethnicity by Gender



Education Level of Recruits by Gender



Anticipated Service Length by Gender



Percentage of Recruits With Family Who Served in the Military by Gender

	Male	Female
Any family ²	95.0%	80.0%
Immediate family: parent or sibling	85.0%	75.0%

Note: Recruits were surveyed at week 7 (out of 7) in the training cycle. Percentages were calculated based on the number of nonmissing responses to each question

¹ Recruits were instructed to select all races that apply. No recruits reported American Indian or Alaska Native as their race.

² Response options included Mother, Father, Sibling, Grandparent, Cousin, Aunt or Uncle, and Other family member.

³ No female recruits reported Mid-Atlantic as their home region, and no male recruits reported Mountain Plains as their home region

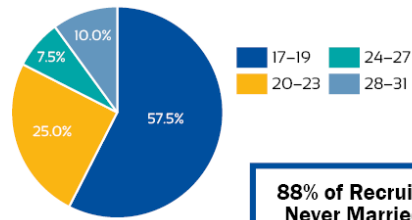


U.S. Navy, Naval Station Great Lakes, Recruit Sample Demographics (N = 40)

Sample Population of Recruits by Gender

	Male	Female
N	20	20
Percent	50.0%	50.0%

Percentage of Recruits by Age Group

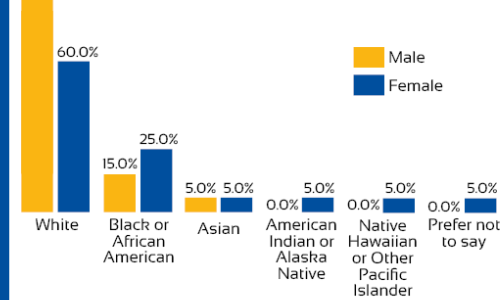


88% of Recruits Never Married

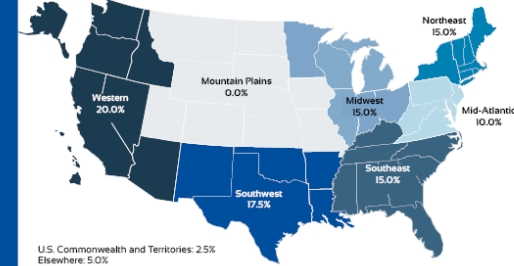
Top Five Reasons for Joining the Military by Gender¹

	Male	Female
1	Personal growth, development, and security	Personal growth, development, and security
2	Desire to serve your country Building skills useful for civilian employment	Desire to travel and see new places
3	Desire to travel and see new places Test yourself physically or mentally	Money for college, college repayment, and other education benefits
		Pay (including military retirement)
		Test yourself physically or mentally

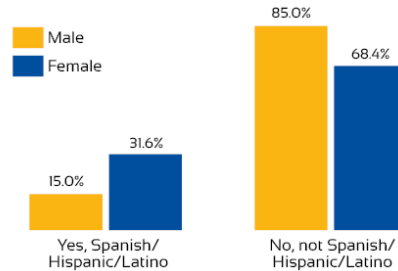
Race of Recruits by Gender¹



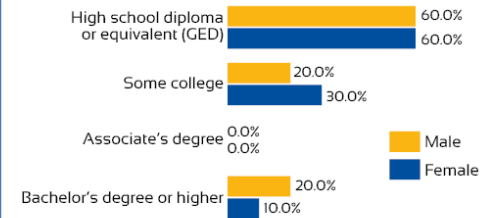
Where Recruits Consider Home³



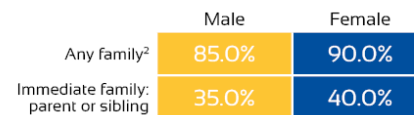
Spanish/Hispanic/Latino Ethnicity by Gender



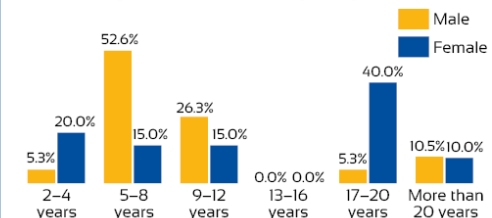
Education Level of Recruits by Gender



Percentage of Recruits With Family Who Served in the Military by Gender



Anticipated Service Length by Gender



Note: Recruits were surveyed at either week 6 or 7 (out of 8) in the training cycle. Percentages were calculated based on the number of nonmissing responses to each question.

¹Recruits were instructed to select all races that apply.

² Response options included Mother, Father, Sibling, Grandparent, Cousin, Aunt or Uncle, and Other family member.

³ No female recruits reported U.S. Commonwealth and territories as their home region, and no male recruits reported Elsewhere as their home region.

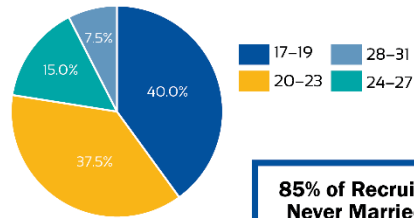


U.S. Coast Guard, Cape May, Recruit Sample Demographics (N = 40)

Sample Population of Recruits by Gender

	Male	Female
N	20	20
Percent	50.0%	50.0%

Percentage of Recruits by Age Group

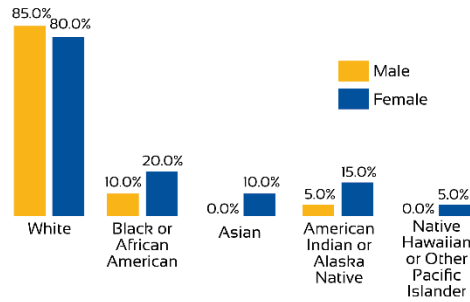


85% of Recruits Never Married

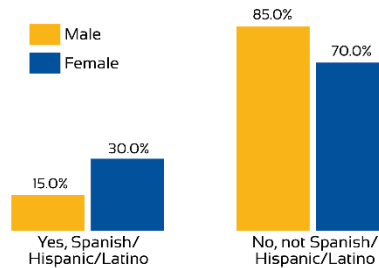
Top Five Reasons for Joining the Military by Gender

	Male		Female
1	Desire to serve your country	1	Personal development, growth, and maturity
2	Personal development, growth, and maturity	2	Desire to travel and see new places
3	Desire to travel and see new places	3	Pay (including military retirement)
4	Money for college, college repayment, and other education benefits	4	Desire to serve your country
5	Healthcare benefits	4	Challenging or interesting work

Race of Recruits by Gender¹



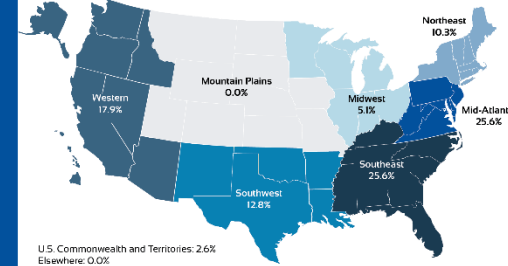
Spanish/Hispanic/Latino Ethnicity by Gender



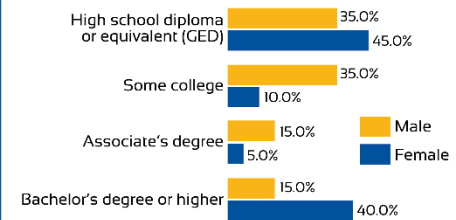
Percentage of Recruits With Family Who Served in the Military by Gender

	Male	Female
Any family ²	90.0%	90.0%
Immediate family: parent or sibling	55.0%	45.0%

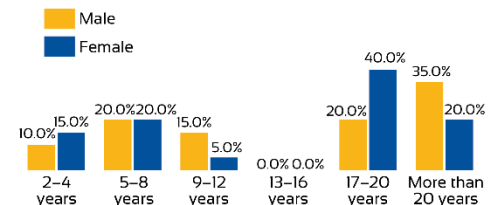
Where Recruits Consider Home³



Education Level of Recruits by Gender



Anticipated Service Length by Gender



Note: Recruits were surveyed at weeks 4, 5, 7, and 8 (out of 8) in the training cycle. Percentages were calculated based on the number of nonmissing responses to each question.

¹ Recruits were instructed to select all races that apply.

² Response options included mother, father, sibling, cousin, aunt or uncle, grandparent, and other family member.

³ No male recruits reported Southwest or U.S. Commonwealth and Territories as their home region.

**Appendix Q: Findings Supporting Alternate Models and Recommendations
for Gender Integration at Marine Corps Recruit Training**

Appendix Q: Findings Supporting Alternate Models and Recommendations for Gender Integration at Marine Corps Recruit Training

This appendix presents a comprehensive overview of literature, study findings, and supporting evidence for each alternate model and recommendation. Findings and supporting evidence for each alternate model and recommendation are organized by data source and includes references to the corresponding chapter of the report where the findings were originally presented.

A. Alternate model 1: mixed-gender drill instructor teams

Literature review:

- Gender-integrated training also implies consideration of gender-integrated leadership teams. Drill instructors play a key role in supporting or opposing such efforts. Past research finds Army drill sergeants with negative views of gender-integrated basic training produce Soldiers who perform more poorly and have lower morale (Mottern, 1997). Exposure to mixed-gender drill instructor teams may enhance cohesion and build role models of both genders, while also modelling positive cross-gender teamwork, gender integration, cohesion, and unit performance (Dooley, 1998) (chapter 2).

Service leader, training cadre, and drill instructor interviews:

- Marine Corps training cadre and drill instructors spoke emphatically and in great detail about the benefits of drill instructors working more closely with one another. Male and female drill instructors, who were once separated into their own training spaces, were able to learn new approaches to the job or different techniques to produce better training outcomes (chapter 4).
- Most female drill instructors felt it was part of their duty as a woman to prepare their female recruits for life in a male-dominated fleet. Female drill instructors described candid, explicit conversations during the training cycle about what it's like to be a woman in the Marine Corps. Conversations covered a variety of hardships they might face, often conveyed through drill instructors' personal experiences. These informal mentoring moments were intended not just to prepare female recruits for what awaits but also to remind them they were strong enough to face and overcome these challenges (chapter 4).
- While Service leaders, training cadre, and instructors from the other Services described benefits to experiencing leadership by the opposite gender, there was specific emphasis on the importance of male recruits being trained and led by women. Familiarizing male recruits with female leadership in the form of a drill instructor sets the tone for military service in an integrated environment and identifies recruits who show trouble adjusting to military culture (chapter 6).
- A benefit of mixed-gender drill instructor teams, according to members of the other Services, is that they provide recruits a real-life example of successful gender integration. Recruits see their drill instructor team working together in a professional

manner while executing the mission. Another important message recruits receive from seeing mixed-gender drill instructor teams is the idea that a superior is a superior, regardless of their gender (chapter 6).

- Many interviewees felt mixed-gender drill instructor teams give recruits the opportunity to seek counsel or support from more than one type of person as they progress through basic training (chapter 6).
- Drill instructors also benefit from their experiences on mixed-gender drill instructor teams. Service leaders reflected on how male and female drill instructors learn from one another in their experiences working together (chapter 6).
- All Services except the Marine Corps employ mixed-gender drill instructor teams to train recruits; Marine Corps female and male drill instructors work together in the Integrated Company model. Drill instructors and training cadre working with opposite-gender peers noted the benefits of learning best practices and new methods from each other, engaging in healthy competition to push themselves to do better, and building mutual trust. Male and female drill instructors may learn or think differently; bringing diverse ideas and perspectives together was seen to strengthen their training approaches. Just as drill instructors aim to instill in recruits respect for and trust in their peers, they build camaraderie founded on mutual trust and respect by working closely together to train recruits (chapter 7).

Recruit focus groups:

- An overwhelming majority of recruits favored training with drill instructors of both genders and having mixed-gender drill instructor teams. Recruits and new Marines felt being trained by both men and women would result in profound benefits, citing different strengths they perceived men and women bring to the drill instructor role. Men felt female drill instructors paid more attention to detail, were more disciplined, and created a more mentally challenging environment for recruits. They also felt they would be better prepared for the fleet if they were trained by women and could understand their perspectives of their experiences in the Marine Corps. Women felt male drill instructors were better at teaching and staying focused on the training task (as opposed to being mired in discipline and attention to detail) and were less degrading in their training approach (chapter 8).
- Having experienced training from both male and female drill instructors, recruits from the other Services did not have strong opinions about whether they preferred same-gender or opposite-gender drill instructors. While some recruits expressed a preference, most recruits said they had no preference about instructor gender. Other recruits expressed preferences based on personality and their connection with certain drill instructors that were not based on gender (chapter 9).
- Recruits from the other Services also felt it was important to experience mixed-gender leadership and training because they knew they would be led by and must answer to male and female superiors. Male recruits recognized having female leadership at recruit training was a critical experience for men (chapter 9).

- Overall, recruits from the other Services recommended the Marine Corps have mixed-gender drill instructor teams and leaders for Marine Corps recruits. Several recruits described this as a foundational first step for more gender integration at recruit training. Male recruits were more adamant than female recruits about having mixed-gender drill instructor teams and leadership (chapter 9).
- Recruits in the other Services are trained by mixed-gender drill instructor teams and strongly endorse this training approach. In their recommendations to the Marine Corps, recruits felt implementing mixed-gender drill instructor teams was an essential and crucial step for the Marine Corps; male recruits were more adamant than female recruits about its necessity. Recruits described relative strengths of male and female drill instructors and expressed no broad preferences for one over the other—most described their preferences as personality or connection based. Through recruits’ own words in the focus groups, their experiences with mixed-gender drill instructor teams sent the message that a “leader is a leader” in their Service—it’s about rank and authority, not gender (chapter 9).

Recruit social science survey:

- At week 11, 89.0 percent of new Marines in Integrated Company, 89.3 percent of new Marines in Series Track, and 86.5 percent of new Marines in the Male-Only model believed men and women were equally suited to serve as drill instructors. Of all the roles in which new Marines believed men and women were equally suited to serve, these were some of the highest percentages. The percentage of recruits who felt men and women were equally suited to be drill instructors increased over time; there were statistically significant changes from week 2 for men ($p = 0.004$) and women ($p = 0.004$) in Integrated Company and men in the Male-Only model ($p < 0.001$) (chapter 8).
- In the Army, Air Force, Navy, and Coast Guard, mixed-gender drill instructor teams are responsible for training recruits, contrasting with the Marine Corps, where recruits are trained exclusively by same-gender drill instructor teams. The social science survey asked recruits if they had an instructor of the opposite gender during their time at recruit training. The overwhelming majority of recruits in other Services (90.0 percent or greater for Army, Coast Guard, Navy, and Air Force) reported training under an instructor of the opposite gender (chapter 9).

Ethnographic observations:

- The Marine Corps senior drill instructor, colloquially known as “boss,” “senior,” or “SDI,” leads the platoon of recruits and provides mentorship to and oversight of the other drill instructors on the team. Among recruits, the SDI’s role is to offer calm but firm guidance, direction, and mentorship. Drill instructor behaviors intend to encourage and teach recruits to trust and seek counsel from the SDI and to view the SDI as a “parental figure” for the platoon. When recruits speak in classrooms, their introduction usually includes their platoon number and senior drill instructor’s name.

- Marines who have gone through boot camp report that they remember their senior drill instructor's name for the rest of their lives (chapter 4).
- Marine Corps Service leaders, training cadre, and drill instructors felt it was critical for recruits to have same-gender drill instructor role models throughout the arduous training process. The senior drill instructor was described as the most important role for gender alignment because they act as a stern yet fair parental figure. Recruits also felt this alignment of gender was important, reflecting that they learned to become a woman or a man through the same-gender mentoring of their drill instructors (chapter 4).
 - The Army, Air Force, Navy, and Coast Guard have trained male and female recruits with mixed-gender drill instructor teams for decades in preparation for their entry into an integrated Service; the study team has identified this as a best practice (chapter 6).

Interviews with participants who possess alternate views:

- All participants expressed strong support for both male and female drill instructors training both male and female recruits, and in fact they saw such arrangements as crucial for the success of gender integration (chapter 5).
- It was common for participants to note that gender integrated training requires both male and female drill instructors to be leading gender integrated units (chapter 5).
- Participants also noted that a mixed-gender training environment won't feel normal to many drill instructors, that both male and female instructors will have biases, that male drill instructors might be afraid to work with female recruits out of fear of being accused of conduct in which they did not engage, and problems of drill instructors potentially becoming personally involved with recruits. Participants also saw solutions to these challenges that included mixed-gender drill instructor teams providing the opportunity to police the emergence of any potential inappropriate relationships, integrating awareness of the issues into drill instructor trainings and orientations, and just time itself overcoming some of the issues (e.g., a mixed-gender environment not feeling normal) as mixed-gender training environments become more familiar (chapter 5).
- Most participants discussed the value of having mixed-gender drill instructor teams. Our participants felt that separating recruits by gender, as well as separating drill instructors by gender according to the recruits they work with, leads to different training experiences for recruits. In their view, mixed-gender drill instructor teams would have the benefits of both male and female recruits being able to look up to both men and women as leaders, recruits seeing capable women performing at a high level, recruits being in environments more similar to what they see in the fleet, and a role modeling of the notion of men and women fighting together (chapter 5).
- Participants noted several additional benefits of mixed-gender drill instructor teams. They noted especially that female drill instructors will have positive consequences for male recruits in learning to respond to female authority and having role models who are women. Several participants noted that need for recruits to get used to the idea

that they have to follow orders from both women and men, and that learning this is especially important for male recruits. Participants also saw benefits in mixed-gender drill instructor teams in recruits seeing men and women having positive working relationships with each other and in profound positive consequences resulting from seeing male and female drill instructors standing side by side and talking as equals. Participants believe there tends to be an underlying myth perpetuated in the Military Services that women can't lead men and vice versa, and that mixed-gender drill instructor teams would be an important step in overcoming this (chapter 5).

B. Alternate model 2: Integrated Company plus

Literature review:

- Initial or entry-level training is foundational to Service members' readiness. This intense socialization and indoctrination process to military service builds the social and cultural foundation of Service members (Gaddes et al., 2019). In general, leaders of the U.S. Military Services agree that "the quality of basic training has a direct effect on operational readiness," and "the primary purpose of basic training is to transform recruits into group members of cohesive military units" (U.S. Congress, 1999a, p. 81) (chapter 2).
- The literature on cohesions has given rise to several typologies: The distinction between *task* and *social* cohesion has emerged as particularly important and enduring (Mullen & Copper, 1994; Zaccaro & Lowe, 1988). Task cohesion refers to a shared commitment among group members to achieve a goal, whereas social cohesion refers to emotional bonds among group members (chapter 2).
- Compared with those in male-only outfits, men training in integrated outfits in the Corps of Cadets showed more positive perceptions of women's motivation and character without altering perceptions of male cadets (Boldry et al., 2001). Early experience with integrated training appears to socialize recruits into less discriminatory attitudes toward women and assessments of women (chapter 2).
- Gender-separate recruit training socializes men and women and can unintentionally foster fear and suspicion of the other rather than developing the cross-gender or even within-gender cohesion for women (Archer, 2013; Fosher et al., 2018). Men especially receive messages that capricious women Marines can end a man's career through claims about sexual impropriety (Archer, 2013; Fosher et al., 2018; Lane & Fosher, 2020) (chapter 2).
- Entry-level socialization is enhanced when it replicates occupation practice with fidelity, when recruits 'train as they fight' (Dooley, 1998). Early mixed-gender socialization and training establish the foundation for later occupational effectiveness. The opening of combat occupational specialties to women demands renewed consideration of what is lost by not engaging in early gender-integrated training and socialization (chapter 2).
- Some evidence indicates gender integration has the potential to interfere with group cohesion (Schaefer et al., 2015). For example, interpersonal relationships, which are

an element of social cohesion, are more easily established between persons with similar experiences and demographic characteristics (Reagans, 2012). On average, more homogenous groups exhibit higher levels of group cohesion (Jehn et al., 1999; O'Reilly et al., 1989) and less relational conflict (Pelled et al., 1999) than less homogenous groups. However, although cohesion generally has a positive relationship with performance, there are negative consequences to the high cohesion that might result from forming highly homogenous groups. For example, excessive cohesion can lead to groupthink and polarized attitudes and subsequently to deficient judgments (Dion, 2004). Group diversity can have the benefits of facilitating realistic appraisals of situations and de-escalations of commitment to failing courses of action (Whyte & Auer-Rizzi, 2000). If there are potential negative effects on cohesion of greater group diversity, these consequences can be offset and managed as discussed below (chapter 2).

- Scarpate & O'Neill (1992) found gender-integrated training improved women's performance and did not adversely affect men's performance in either readiness or cohesion. Other research and reviews of studies in military settings have relatively consistently found no negative effects of gender integration on cohesion (Goldstein, 2003; Hoiberg, 1991; Knarr et al., 2014; Pinch et al., 2004). The state of the research literature on gender integration and unit cohesion in military settings led MacCoun and Hix (2010) to conclude that any effects of gender integration on weakening cohesion, if they exist at all, appear to be weak and fleeting (chapter 2).
- For example, research has identified the role of leadership as important in successful gender-integration of groups. In mixed-gender groups, cohesion is highest when both men and women feel they are respected and treated fairly by leaders (Chrobot-Mason & Aramovich, 2013), and the shared experience of stressful training activities increases unit cohesion for both women and men (Bartone et al., 2002). Similarly, women in male-dominated fields who feel they have been treated fairly and not been discriminated against perform better and feel more integrated in male-dominated groups (Richman et al., 2011) (chapter 2).
- The overwhelming result in military contexts, however, has been that gender integration of units has not eroded cohesion or performance (Gebicke, 1997; Simutis & Mottern, 1996; U.S. Army, 2015; Gebicke, 1993). Recruits have supported the gender integration of training (Herres, 1992). Research has found women who completed USMC training prior to the integration of combat training feel less accepted as members of the USMC than women who completed training after integration (Dooley, 1998). Research also shows gender-segregated training can perpetuate feelings of superiority among men (Halpern et al., 2011), and gender-integrated training reduces stereotypical perceptions about the motivations and character of women (Boldry et al., 2001) (chapter 2).

Service leader, training cadre, and drill instructor interviews:

- From the perspective of the other Services, the most prevalent benefit of gender-integrated recruit training is that it prepares recruits for the fleet or operational forces; it is part of mission readiness. Many felt it is not only important for recruits to learn

how to work with members of the opposite gender, it is crucial that integration starts early. Recruits learn a variety of things in basic training, so gender-integrated training from the beginning sets the tone for the rest of their military service. Service leaders, training cadre, and instructors felt recruits benefit from learning the boundaries of and skills to form professional relationships with members of the opposite gender in the training environment before getting to the fleet or operational forces (chapter 6).

- Service leaders, training cadre, and instructors felt that gender divisions may unintentionally reinforce or give meaning to the separations, which could create issues in future training environments and in the military's operational forces (chapter 6).
- One of the major benefits of gender integration described by the other Services is its ability to dismantle gender biases and stereotypes recruits may bring with them (chapter 6).
- Another major benefit of gender integration described by the other Services is that integration brings diverse thought, strengthening the overall team and developing recruits' ability to engage with their training. Providing opportunities for diversity of thought in the basic training environment is seen as enhancing and reinforcing lessons and core values already being taught (chapter 6).
- There is shared acknowledgment among Service leaders, training cadre, and instructors from the other Services that sexual harassment issues happen in the recruit training environment but are not seen as the most pressing or critical challenge related to gender integration. Although Service leaders, training cadre, and instructors spoke about these issues at length, they did not exclusively categorize them as a problematic manifestation of gender integration. Rather, they saw them as an element of the recruit training environment, where many young adults are placed together in close quarters for the first time while learning how to behave in a professional working environment (chapter 6).
- Through focus groups and ethnographic observations, male and female recruits in the other Services emphasized how working together to achieve a goal helped build genuine trust and respect for one another. Completing task-based exercises in mixed-gender teams presents recruits with irrefutable evidence that both genders are equally able to accomplish goals, can be trusted team members, and provide valuable insights into problem solving. Integrated classes can also improve cohesion and teamwork by introducing recruits to new ideas and opinions (chapter 6).
- The Integrated Company plus model, with male and female recruits integrating for numerous targeted training events, mirrors the MAGTF. The MAGTF brings together aviation, ground combat, and logistics elements to accomplish missions in Marine Corps operations (USMC, 2018). Platoons or recruits from different platoons are the unique elements that come together to accomplish the mission of the training activity. In this way, the Integrated Company plus model adds another layer to a basic Marine's skills. The model gives recruits a chance to build deeply cohesive bonds with recruits in their platoon and opportunities to work with new peers to accomplish training tasks or missions (chapter 11).

Recruit focus groups:

- The most pervasive benefit of gender-integrated recruit training described by Marine Corps recruits was better preparation for the fleet. Both male and female recruits felt that gender-integrated recruit training would better prepare them for their work as Marines. Across all training models, recruits felt that gender-integrated training pays off down the line, especially in combat operations (chapter 8).
- Recruits felt one of the most powerful aspects of gender integration in recruit training is the ability to draw on the different perspectives and strengths of each gender. Recruits described yearning for different perspectives in recruit training and having an appreciation for the strengths they see in opposite-gender recruits (chapter 8).
- Male and female recruits described how gender-integrated training pushed and motivated them to be better, faster, and stronger. Competition between genders adds a spark to the fire of self-motivation and perseverance necessary at recruit training. Several recruits shared how their experiences with gender-integrated training motivated them. Recruits felt integration would be motivational in both directions—female recruits would be motivated by males, and male recruits would be motivated by females (chapter 8).
- Recruits felt that gender-integrated training leads to the development of stronger bonds between men and women, which will carry forward in their next training program and their careers as Marines (chapter 8).
- Several male recruits reflected on how integrated training put an end to their preconceived notions that female recruits might have it easier or do less in training. This sentiment was most consistently expressed by male recruits in the Integrated Company model (chapter 8).
- Recruits often conflated series and company-level integration because they were not acutely aware of the differences between the 4-and-2 and 5-and-1 Integrated Company models. Recruits who were training in Series Track often described the Integrated Company model when describing their preferred level of integration. In the focus groups, no notable differences by training model emerged regarding recruits favoring series and company-level integration (chapter 8).
- Discussions about preferences for integration in the focus groups provided additional details to elaborate on survey data. Recruits from all training models at both time points wanted to see more gender integration at training events. The greatest expressed support for gender-integrated training was for combat and tactical training events in phase 3, including land navigation, BWT, and the Crucible. It is worth noting that even those in Integrated Company, who were the most integrated, wanted more integration at these and other training events. All recruits, regardless of gender, desired the ability to work with members of the opposite gender in integrated teams because they felt it would mirror real-world operational scenarios, where men and women work together. Recruits also felt integrated teams would be more effective and each gender would bring different strengths to the team. Unique reasons for desiring more gender-integrated training events emerged. Female recruits and new Marines wanted increased gender integration of training activities to gain more

- respect from their male peers, while male recruits and new Marines felt integration could provide a chance for them to help their female peers when they are struggling with training, especially with physical aspects (chapter 8).
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 - Recruits from the other Services understood they would work with both men and women in their service careers and felt it was essential to have a training environment that prepared them to do so. This sentiment was shared by recruits of all Services and both genders. Several recruits felt segregated training was counterintuitive because training should be preparing them for their future service (chapter 9).
 - Recruits described how gender-integrated training brought different perspectives to the forefront, providing learning opportunities for both genders. Recruits of both genders and from all Services described this diversity of thought as a strength of gender-integrated training (chapter 9).
 - Recruits from the other Services shared how gender-integrated training helped them develop bonds with members of the opposite gender that they felt would carry on into their next training assignment and the fleet. Working together at recruit training showed them men and women could trust one another, solidifying the confidence that

fellow service members had each other's backs now and in the future. This benefit was even more pronounced for Air Force and Coast Guard recruits, who reported being held to the same equally high standard in training, which built an additional layer of trust between genders. Integrated training was also seen as an effective way to dispel myths or rumors that women “have it easier” in training (chapter 9).

- Another reported benefit of gender-integrated recruit training was increased motivation and competition resulting from men and women working together. Coast Guard and Army recruits who experienced integrated training described their experiences. Navy female recruits, who did not experience gender-integrated training, felt strongly that integrated training would build in additional motivation and create a healthy competition in which men and women would work together to be the best division (chapter 9).
- Coast Guard recruits were the most emphatic in their recommendations for the Marine Corps to pursue more gender integration in their recruit training. Recruits from the other Services also felt integration at recruit training would be beneficial for the Marine Corps (chapter 9).
- In their recommendations to the Marine Corps, recruits from all Services identified several activities they thought were best for gender integration. Overall, recruits emphasized training events where male and female recruits could work together to accomplish a task or mission and traditional military training activities, such as drill and marching. Recruits also felt several activities should not be integrated—primarily activities that involve close physical contact between recruits where accidental grazing or touching could occur and some sensitive discussions related to sexual assault (chapter 9).
- Recruits who experienced gender-integrated training described many benefits to integration and felt it was essential preparation for the fleet and for their careers as Service members. Those who did not experience gender-integrated training anticipated such benefits, were frustrated by their experience, and desired closer training experiences with their opposite-gender peers to feel equipped for follow-on training and their first assignments (chapter 9).

Recruit social science survey:

- Although differences in gender attitudes were not clear, consistent, or large for recruits in the Series Track and Integrated Company models (when comparing over time), Integrated Company recruits appear to have experienced declines in sexist attitudes, especially in hostile sexist attitudes. The survey data are simply not detailed enough to conclude that the Integrated Company model was the cause of these declines. However, it is notable that recruits who experienced gender-integrated training exhibited some of the largest changes in hostile sexism of all groups, suggesting that increasing gender integration at recruit training could be beneficial in that area (chapter 8).
- The culture of exceptionalism and excellence in the Marine Corps may drive high expectations of men as partners and fathers, even when such men otherwise hold

views supportive of traditional gendered divisions of labor. Female new Marines also held husbands and fathers to high standards. It may be possible to capitalize on the culture of exceptionalism and excellence in the Marine Corps by making gender equality a source of pride and expectation for all Marines (chapter 8).

- The high levels of agreement with various aspects of equal opportunity and treatment among both male and female new Marines are encouraging for increased gender integration in recruit training. High levels of endorsement of these views can be built upon by implementing a policy of increased gender integration. Such implementation would match reality with rhetoric and provide clear, observable evidence that women experience equal opportunities and equal treatment at Marine Corps recruit training from the beginning. Exposing recruits to the daily, active practice of equality of opportunity and treatment from day 1 may also lead to a convergence of male and female Marine attitudes about gender equality (chapter 8).
- In both Series Track and Integrated Company, 67.9 percent of new Marines said they trained “somewhat closely” with recruits of the opposite gender. However, 26.3 percent of new Marines in Integrated Company responded that they trained “very closely” with recruits of the opposite gender, compared with only 3.1 percent in Series Track. New Marines in Series Track more often reported training “not at all closely” with recruits of the opposite gender (27.0 percent) than new Marines in Integrated Company (only 5.8 percent). These responses suggest that recruit experiences with gender integration in Series Track and Integrated Company were perceived as only marginally different because the majority of new Marines from both models felt they trained “somewhat closely” with recruits of the opposite gender (chapter 8).
- Gender was significantly associated with more confidence in one’s ability as a Marine with increased integration within both training models at MCRD Parris Island.¹⁹⁴ A majority (80.0 percent in Integrated Company and 65.5 percent in Series Track) of female new Marines agreed or mostly agreed that increased integration would increase their confidence in their ability as a Marine, compared with only 36.8 percent of men in Integrated Company and 32.4 percent in Series Track. Gender was also significantly associated with better preparedness for first assignments with increased integration¹⁹⁵ within both training models at MCRD Parris Island. Women in both training models felt strongly that they would be better prepared for their first assignment with more gender integration, while male agreement was dramatically lower (with about half across training models agreeing or mostly agreeing). Across training models, men who did not agree or mostly agree largely responded “neither” rather than “disagree” or “mostly disagree” for both confidence in ability and preparedness for first assignment (chapter 8).
- Although majorities of both genders in Integrated Company foresaw greater opportunity for benefits from increased integration, more women believed this statement at week 11 than men. A significant association was found between gender and views on working with diverse team members within Integrated Company ($p =$

¹⁹⁴ Integrated Company, $p < 0.001$; Series Track, $p < 0.001$

¹⁹⁵ $p = 0.05$ for Integrated Company; $p = 0.016$ for Series Track

0.001). A majority of males (61.8 percent) and most females (90.0 percent) in Integrated Company believed success in working with diverse team members would be more likely with increased integration. Regarding exposure to new ways of problem-solving, a significant association was found between gender and those who believed it would increase with further integration within Integrated Company ($p = 0.003$). Approximately three-quarters of males (75.6 percent) and almost all females (96.6 percent) in Integrated Company believed they would likely be more exposed to new ways of problem-solving with increased integration. The Marine Corps has touted “diverse thought and intelligent action” as a major impetus for their gender integration efforts, and new Marines agreed these processes would continue to increase with more gender-integrated training (USMC, 2022a) (chapter 8).

- The survey also asked recruits and new Marines about their desire for gender-integrated training at each level. Support for training with opposite-gender recruits at the platoon level was low across training models and gender and decreased over the course of the training cycle. The change in support was statistically significant only for the Male-Only model ($p = 0.001$) and women in Series Track ($p = 0.029$). At week 11 in the training cycle, a higher proportion of female new Marines in Integrated Company were supportive of training with male recruits at the platoon level compared with their male counterparts; however, the association between gender and support for training at the platoon level was only of borderline statistical significance ($p = 0.066$) (chapter 8).
- Recruits were asked to rate their preferred integration level (more integration, less integration, or satisfied with current integration) for four categories of training activities: physical fitness, classroom training, tactical/field training, and inspections and training conducted in housing/sleeping quarters. Except for male new Marines in Integrated Company, more of whom were satisfied with current integration levels, approximately half to two-thirds of new Marines in each training model favored more integration in physical fitness training, classroom training, and tactical/field training. Fewer new Marines across training models favored more integration in inspections and training conducted in squad bays (chapter 8).
- Recruits were asked to rate their preferred integration level (more integration, less integration, or satisfied with current integration) for four categories of training activities: physical fitness, classroom training, tactical/field training, and inspections and training conducted in housing/sleeping quarters. Except for male new Marines in Integrated Company, more of whom were satisfied with current integration levels, approximately half to two-thirds of new Marines in each training model favored more integration in physical fitness training, classroom training, and tactical/field training. Fewer new Marines across training models favored more integration in inspections and training conducted in squad bays. Importantly, when new Marines did not favor more integration, they usually reported being satisfied with current levels of integration. In the case of men in Integrated Company, while a smaller proportion favored more integration across all training aspects, most were satisfied with current levels of integration at week 11: 71.8 percent for physical fitness training, 75.6 percent for classroom training, 55.1 percent for tactical/field training, and 81.8 percent for inspections and training conducted in the squad bays. New Marines rarely

avored less integration in any of the four training categories. Overall, inspections and training conducted in squad bays were the most common training aspect for which new Marines favored less integration (14.6 percent of Integrated Company, 14.6 percent of Series Track, 16.1 percent of Male-Only). Notably, no women in Integrated Company favored less integration in physical fitness, classroom, and tactical/field training (chapter 8).

- Recruits in the Navy and Air Force who did not experience gender-integrated training generally favored more integration in their training activities, compared with recruits in the Army and Coast Guard who experienced gender-integrated training (see figure 9.8). Classroom and tactical/field training garnered the most support for increased gender integration among Navy and Air Force recruits; support for these training activities was greater than support among Marine Corps recruits in Integrated Company. The vast majority of Army and Coast Guard recruits who did not prefer more integration indicated they were satisfied with current integration levels in all training activities; the same was true for Navy and Air Force recruits. Across all Services, recruits rarely favored less integration for any training activity. Examining recruit preferences for integration of training activities by gender reveals notable differences by gender and Service (see figure 9.9 for male recruit preferences and figure 9.10 for female recruit preferences). For the most part, male recruits from the Army, Coast Guard, Navy, and Air Force expressed a desire for more integration in training activities than their fellow female recruits; exceptions included physical fitness training for male Navy recruits and tactical/field training for male Army recruits. The opposite pattern emerged from the Marine Corps Integrated Company recruits: a much greater proportion of female recruits wanted more gender-integrated training in these training categories than their male counterparts. Male recruits from the Marine Corps Integrated Company favored more integration for training activities at proportions akin to Army and Coast Guard recruits, who experienced integrated training at the lowest unit level. Female recruits from the Marine Corps Integrated Company, on the other hand, favored more integration, akin to the Navy and Air Force, who did not experience gender-integrated training. These striking differences may indicate that male recruits in the Marine Corps have divergent perspectives on gender integration from their male counterparts in all other Services, regardless of gender-integrated training levels (chapter 9).
- The survey asked recruits to rate their level of agreement with the following statements, imagining their Service increased opportunities for men and women to train together at recruit training: “Recruits will be better prepared for their first assignment” and “I would feel more confident in my ability as a [Marine/Sailor/Soldier/Airman/Coast Guardsman].” Agreement with these statements was high (greater than 60 percent) among Army, Coast Guard, and Navy recruits. For Air Force and Marine Corps recruits, agreement hovered between 50 and 60 percent. It should be noted that when recruits did not agree, they typically responded “neither,” indicating neutrality; recruits rarely disagreed or mostly disagreed with either statement. Agreement (agree or mostly agree) with both better preparedness and confidence in their ability as a Marine was close to other Services overall among Integrated Company recruits. However, women in Integrated Company were much more likely to agree with these statements than men. These data suggest substantial

levels of optimism among recruits across Services that gender integration can enhance their readiness to become a Service member, with a very limited number feeling the opposite (chapter 9).

- The survey asked recruits to rate whether “success working with diverse team members” and “exposure to new ways of problem-solving” would be more likely to occur, less likely to occur, or no different if their Service increased gender integration at recruit training. Across all the Services, an overwhelming majority of recruits (nearly 75 percent or greater) felt success working with diverse team members and new ways of problem-solving would be more likely if gender-integrated training increased. Recruits’ emphasis on and belief in these positive outcomes resulting from increased gender-integrated training signal a high level of value for gender diversity (chapter 9).

Ethnographic observations:

- The squad bay is a central space where tenets of the Marine Corps recruit training process intersect and are reinforced. It is more than a living or training space for the Marine Corps; it holds significant cultural meaning in the transformation process. The Marine Corps’s use of the squad bay reinforces fundamental elements of the Marine Corps basic training and transformation process, including an unrelenting training environment, around-the-clock presence of the drill instructor(s), stripping recruits of their individual identities in favor of a team mindset, and instant and willing obedience to orders marking acceptance of the complete control and authority of the drill instructor (chapter 4).

Interviews with participants who possess alternate views:

- Participants noted that being in the same space or alongside each other is not the same as interacting with each other, and gender integration in their view involves breaking down barriers in interaction (chapter 5).
- Participants expressed the view that more gender integrated training would minimize ways that female and male recruits are treated differently in training now; for example, one participant stated that women are treated hands off in training and not afforded the same discipline as men, a situation that more gender integration could help resolve in the participant’s view (chapter 5).
- A small number of participants did not see platoon integration as essential and rather saw value in an approach that takes incremental steps toward full gender integration. Many participants sidestepped the question of which model might be better by noting steps that can be taken toward integration and can be part of any model. These included recommending mixed-gender time in professional and social environments, making chow halls and squad bays better equipped for mixed-gender environments, having recruits work together across genders in situations where they earn mutual respect, having opposite gender drill instructors do things such as leading recruits back from chapel, and integrating core values training to every extent possible (chapter 5).

- Participants discussed several benefits of an integrated training environment. These include the value of integrating women at day one to increase force readiness, Marine recruits learning respect for others early in the process, training as they fight, building cohesion across genders from the start of training, and building a more capable and cohesive force. Participants believed that more gender integration in training would normalize mixed-gender relations in the Marine Corps and increase performance for both women and men. In general, they felt that the force will be more effective when it is integrated better and where practices match the espoused gender equality values of the Marine Corps. They also felt that more gender integration would better reflect the gender-integrated society from which recruits come. Benefits for women in the Marine Corps in particular that participants saw resulting from more gender integration of training included the value of women starting from day one in being treated equally, women being better prepared for later residing in units that are integrated, and reducing harmful stereotypes of women in the Marine Corps, particularly that there will be less fear and mistrust of female colleagues among men if they have gone through training with women. When training is gender-segregated, participants felt that women constantly have to prove themselves in that they are seen as not qualified because it is believed they went through softer training with lower standards. More gender-integrated training should help overcome these issues. Ultimately, participants felt that more gender-integrated training would help in the retention of female Marines. For men in the Marine Corps, participants believed that more gender-integrated training would instill messages that women can do the same thing, and if they can't, they don't get to complete recruit training. Men, like women, would have to learn to work in gender-integrated environments from the day they enter the Marine Corps, better preparing them for the fleet (chapter 5).

C. Alternate model 3: Integrated platoons

Literature review:

- Initial or entry-level training is foundational to Service members' readiness. This intense socialization and indoctrination process to military service builds the social and cultural foundation of Service members (Gaddes et al., 2019). In general, leaders of the U.S. Military Services agree that "the quality of basic training has a direct effect on operational readiness," and "the primary purpose of basic training is to transform recruits into group members of cohesive military units" (U.S. Congress, 1999a, p. 81).
- Gender-integrated training has been shown to alter perceptions and evaluations of women in military settings. Research from basic military training in Norway found training and living alongside women in initial-entry training affects men's views of women's competence and leadership, perhaps by exposing men to counter-stereotypical information about women. Women were randomly assigned to some squads but not others for 8 weeks of boot camp, when squads live together in the same room and train together (Dahl et al., 2018). Men with women assigned to their squad had a 24 percent higher likelihood of thinking mixed-gender teams performed equally well as same-gender teams. The authors also noted men assigned to all-male

squads increased their belief that same-gender teams outperform mixed-gender teams (Dahl et al., 2018). There were no differences between the beliefs of men in same- or mixed-gender squads on whether women would make better leaders at higher levels. Similarly designed research found exposure to women as squad mates eliminated gender discrimination in evaluations of a hypothetical squad leader. In one European study, men in male-only squads rated female squad leader candidates more poorly than male candidates with the exact same credentials, whereas men in integrated squads showed no difference in ratings of male or female candidates (Finseraas et al., 2016). Recent research by the U.S. Army Research Institute found that a year after the integration of women in previously closed positions and occupations, male Soldiers showed shifts to more neutral and positive perceptions of women (U.S. GAO, 2015). These studies suggest meaningful, intense, and relevant exposure to mixed-gender entry training eliminated gender discrimination in evaluation of women as peers and near-peer leaders (chapter 2).

- Compared with those in male-only outfits, men training in integrated outfits in the Corps of Cadets showed more positive perceptions of women's motivation and character without altering perceptions of male cadets (Boldry et al., 2001). Early experience with integrated training appears to socialize recruits into less discriminatory attitudes toward women and assessments of women (chapter 2).
- Gender-separate recruit training socializes men and women and can unintentionally foster fear and suspicion of the other rather than developing the cross-gender or even within-gender cohesion for women (Archer, 2013; Fosher et al., 2018). Men especially receive messages that capricious women Marines can end a man's career through claims about sexual impropriety (Archer, 2013; Fosher et al., 2018; Lane & Fosher, 2020) (chapter 2).
- Entry-level socialization is enhanced when it replicates occupation practice with fidelity, when recruits 'train as they fight' (Dooley, 1998). Early mixed-gender socialization and training establish the foundation for later occupational effectiveness. The opening of combat occupational specialties to women demands renewed consideration of what is lost by not engaging in early gender-integrated training and socialization (chapter 2).
- Some evidence indicates gender integration has the potential to interfere with group cohesion (Schaefer et al., 2015). For example, interpersonal relationships, which are an element of social cohesion, are more easily established between persons with similar experiences and demographic characteristics (Reagans, 2012). On average, more homogenous groups exhibit higher levels of group cohesion (Jehn et al., 1999; O'Reilly et al., 1989) and less relational conflict (Pelled et al., 1999) than less homogenous groups. However, although cohesion generally has a positive relationship with performance, there are negative consequences to the high cohesion that might result from forming highly homogenous groups. For example, excessive cohesion can lead to groupthink and polarized attitudes and subsequently to deficient judgments (Dion, 2004). Group diversity can have the benefits of facilitating realistic appraisals of situations and de-escalations of commitment to failing courses of action (Whyte & Auer-Rizzi, 2000). If there are potential negative effects on cohesion of

greater group diversity, these consequences can be offset and managed as discussed below (chapter 2).

- Scarpate & O'Neill (1992) found gender-integrated training improved women's performance and did not adversely affect men's performance in either readiness or cohesion. Other research and reviews of studies in military settings have relatively consistently found no negative effects of gender integration on cohesion (Goldstein, 2003; Hoiberg, 1991; Knarr et al., 2014; Pinch et al., 2004). The state of the research literature on gender integration and unit cohesion in military settings led MacCoun and Hix (2010) to conclude that any effects of gender integration on weakening cohesion, if they exist at all, appear to be weak and fleeting (chapter 2).
- For example, research has identified the role of leadership as important in successful gender-integration of groups. In mixed-gender groups, cohesion is highest when both men and women feel they are respected and treated fairly by leaders (Chrobot-Mason & Aramovich, 2013), and the shared experience of stressful training activities increases unit cohesion for both women and men (Bartone et al., 2002). Similarly, women in male-dominated fields who feel they have been treated fairly and not been discriminated against perform better and feel more integrated in male-dominated groups (Richman et al., 2011) (chapter 2).
- The overwhelming result in military contexts, however, has been that gender integration of units has not eroded cohesion or performance (Gebicke, 1997; Simutis & Mottern, 1996; U.S. Army, 2015; Gebicke, 1993). Recruits have supported the gender integration of training (Herres, 1992). Research has found women who completed USMC training prior to the integration of combat training feel less accepted as members of the USMC than women who completed training after integration (Dooley, 1998). Research also shows gender-segregated training can perpetuate feelings of superiority among men (Halpern et al., 2011), and gender-integrated training reduces stereotypical perceptions about the motivations and character of women (Boldry et al., 2001) (chapter 2).

Service leader, training cadre, and drill instructor interviews:

- Service leaders, instructors, and other members of the training cadre across all Services felt integrated training is defined by the integration of male and female recruits in all activities but sleeping and hygiene (chapter 6).
- From the perspective of the other Services, the most prevalent benefit of gender-integrated recruit training is that it prepares recruits for the fleet or operational forces; it is part of mission readiness. Many felt it is not only important for recruits to learn how to work with members of the opposite gender, it is crucial that integration starts early. Recruits learn a variety of things in basic training, so gender-integrated training from the beginning sets the tone for the rest of their military service. Service leaders, training cadre, and instructors felt recruits benefit from learning the boundaries of and skills to form professional relationships with members of the opposite gender in the training environment before getting to the fleet or operational forces (chapter 6).

- Service leaders, training cadre, and instructors felt that gender divisions may unintentionally reinforce or give meaning to the separations, which could create issues in future training environments and in the military's operational forces (chapter 6).
- One of the major benefits of gender integration described by the other Services is its ability to dismantle gender biases and stereotypes recruits may bring with them (chapter 6).
- Another major benefit of gender integration described by the other Services is that integration brings diverse thought, strengthening the overall team and developing recruits' ability to engage with their training. Providing opportunities for diversity of thought in the basic training environment is seen as enhancing and reinforcing lessons and core values already being taught (chapter 6).
- The long history of gender integration and the erasure of gender as an identity of consequence for training units is a testament to how large-scale changes that were once socially or structurally inconceivable became a standard practice over time. The difficulty some Army, Air Force, Navy, and Coast Guard interviewees had in thinking of challenges related to gender integration is a notable finding (chapter 6).
- There is shared acknowledgment among Service leaders, training cadre, and instructors from the other Services that sexual harassment issues happen in the recruit training environment but are not seen as the most pressing or critical challenge related to gender integration. Although Service leaders, training cadre, and instructors spoke about these issues at length, they did not exclusively categorize them as a problematic manifestation of gender integration. Rather, they saw them as an element of the recruit training environment, where many young adults are placed together in close quarters for the first time while learning how to behave in a professional working environment (chapter 6).

Recruit focus groups:

- The most pervasive benefit of gender-integrated recruit training described by Marine Corps recruits was better preparation for the fleet. Both male and female recruits felt that gender-integrated recruit training would better prepare them for their work as Marines. Across all training models, recruits felt that gender-integrated training pays off down the line, especially in combat operations (chapter 8).
- Recruits felt one of the most powerful aspects of gender integration in recruit training is the ability to draw on the different perspectives and strengths of each gender. Recruits described yearning for different perspectives in recruit training and having an appreciation for the strengths they see in opposite-gender recruits (chapter 8).
- Male and female recruits described how gender-integrated training pushed and motivated them to be better, faster, and stronger. Competition between genders adds a spark to the fire of self-motivation and perseverance necessary at recruit training. Several recruits shared how their experiences with gender-integrated training motivated them. Recruits felt integration would be motivational in both directions—

female recruits would be motivated by males, and male recruits would be motivated by females (chapter 8).

- Recruits felt that gender-integrated training leads to the development of stronger bonds between men and women, which will carry forward in their next training program and their careers as Marines (chapter 8).
- Several male recruits reflected on how integrated training put an end to their preconceived notions that female recruits might have it easier or do less in training. This sentiment was most consistently expressed by male recruits in the Integrated Company model (chapter 8).
- Recruits desiring platoon-level integration felt that all training, aside from sleeping and hygiene, should be integrated. Other recruits expressed interest in platoon-level integration but found it difficult to sort through the variety of challenges it might bring, especially logistic and time challenges affecting the training schedule. Recruits were also concerned that platoon-level integration of daytime training activities would break the bond developed from 24 hours a day, 7 days a week, contact. In the focus groups, no notable differences by training model emerged in favor of platoon-level integration (chapter 8).
- Discussions about preferences for integration in the focus groups provided additional details to elaborate on survey data. Recruits from all training models at both time points wanted to see more gender integration at training events. The greatest expressed support for gender-integrated training was for combat and tactical training events in phase 3, including land navigation, BWT, and the Crucible. It is worth noting that even those in Integrated Company, who were the most integrated, wanted more integration at these and other training events. All recruits, regardless of gender, desired the ability to work with members of the opposite gender in integrated teams because they felt it would mirror real-world operational scenarios, where men and women work together. Recruits also felt integrated teams would be more effective and each gender would bring different strengths to the team. Unique reasons for desiring more gender-integrated training events emerged. Female recruits and new Marines wanted increased gender integration of training activities to gain more respect from their male peers, while male recruits and new Marines felt integration could provide a chance for them to help their female peers when they are struggling with training, especially with physical aspects. Recruits and new Marines also expressed a desire for more integration at physical fitness training events. Other areas recruits expressed a desire for more integration included classroom training, the confidence course, obstacle courses, hikes, and the rifle range. Recruits' opinions about integrated MCMAP training were mixed—some felt they would like to have an integrated MCMAP, while others felt it should remain more separate. Similarly, some recruits and new Marines (both male and female) wanted to see close-order drill integrated, while others had concerns about women always being the “little end” of the formation because of their height, and cohesion concerns with drill because they wouldn't be together as a platoon 24 hours a day, 7 days a week. Both male and female recruits and new Marines agreed that they would not want combative training such as pugil sticks or body sparring to be integrated, pointing to differences in the

- physiological makeup of men and women, even those of the same weight, that might cause issues (chapter 8).
- Recruits from the other Services understood they would work with both men and women in their service careers and felt it was essential to have a training environment that prepared them to do so. This sentiment was shared by recruits of all Services and both genders. Several recruits felt segregated training was counterintuitive because training should be preparing them for their future service (chapter 9).
 - Recruits described how gender-integrated training brought different perspectives to the forefront, providing learning opportunities for both genders. Recruits of both genders and from all Services described this diversity of thought as a strength of gender-integrated training (chapter 9).
 - Recruits from the other Services shared how gender-integrated training helped them develop bonds with members of the opposite gender that they felt would carry on into their next training assignment and the fleet. Working together at recruit training showed them men and women could trust one another, solidifying the confidence that fellow Service members had each other's backs now and in the future. This benefit was even more pronounced for Air Force and Coast Guard recruits, who reported being held to the same equally high standard in training, which built an additional layer of trust between genders. Integrated training was also seen as an effective way to dispel myths or rumors that women "have it easier" in training (chapter 9).
 - Another reported benefit of gender-integrated recruit training was increased motivation and competition resulting from men and women working together. Coast Guard and Army recruits who experienced integrated training described their experiences. Navy female recruits, who did not experience gender-integrated training, felt strongly that integrated training would build in additional motivation and create a healthy competition in which men and women would work together to be the best division (chapter 9).
 - Male and female Coast Guard recruits described training conditions where men and women were held to equally high standards, were treated in the same manner by company commanders, and fully respected one another; recruits did not come up with many challenges of gender integration. This is notable because out of all the Services the Coast Guard permits recruits the most direct male-female interaction with the least supervision.¹⁹⁶ The most prevalent challenge was raised by female recruits, who noted an absence of proper hair care products, such as hair gel, for women who are racial and ethnic minorities. Army trainees, on the other hand, reported significant issues with sexism from male recruits affecting the training environment. Female Army trainees described these issues as pervasive and prevalent in their training experience, most visible when women were in platoon leadership positions. Only a few male trainees reported noticing this behavior. The vastly different experiences of

¹⁹⁶ For example, squad bay doors (male and female) are unlocked and monitored overnight by a rotating team of three recruits (teams can be mixed gender). Recruits at Cape May are supervised by one enlisted duty personnel overnight and cameras at base security. Recruits attribute their high levels of respect and professionalism to the trust placed in them by company commanders to do the right thing and strict accountability measures for those who do not. One female recruit commented, "*I've never laid my head on my pillow and felt unsafe.*"

Army and Coast Guard recruits indicate that gender integration at the lowest unit level is not enough by itself to produce desired healthy climate outcomes—social and cultural factors shape the environment by cultivating or derailing equity and respect (chapter 9).

- Coast Guard recruits were the most emphatic in their recommendations for the Marine Corps to pursue more gender integration in their recruit training. Recruits from the other Services also felt integration at recruit training would be beneficial for the Marine Corps (chapter 9).
- In their recommendations to the Marine Corps, recruits from all Services identified several activities they thought were best for gender integration. Overall, recruits emphasized training events where male and female recruits could work together to accomplish a task or mission and traditional military training activities, such as drill and marching (chapter 9).
- Recruits who experienced gender-integrated training described many benefits to integration and felt it was essential preparation for the fleet and for their careers as Service members. Those who did not experience gender-integrated training anticipated such benefits, were frustrated by their experience, and desired closer training experiences with their opposite-gender peers to feel equipped for follow-on training and their first assignments (chapter 9).

Recruit social science survey:

- Although differences in gender attitudes were not clear, consistent, or large for recruits in the Series Track and Integrated Company models (when comparing over time), Integrated Company recruits appear to have experienced declines in sexist attitudes, especially in hostile sexist attitudes. The survey data are simply not detailed enough to conclude that the Integrated Company model was the cause of these declines. However, it is notable that recruits who experienced gender-integrated training exhibited some of the largest changes in hostile sexism of all groups, suggesting that increasing gender integration at recruit training could be beneficial in that area (chapter 8).
- The culture of exceptionalism and excellence in the Marine Corps may drive high expectations of men as partners and fathers, even when such men otherwise hold views supportive of traditional gendered divisions of labor. Female new Marines also held husbands and fathers to high standards. It may be possible to capitalize on the culture of exceptionalism and excellence in the Marine Corps by making gender equality a source of pride and expectation for all Marines (chapter 8).
- The high levels of agreement with various aspects of equal opportunity and treatment among both male and female new Marines are encouraging for increased gender integration in recruit training. High levels of endorsement of these views can be built upon by implementing a policy of increased gender integration. Such implementation would match reality with rhetoric and provide clear, observable evidence that women experience equal opportunities and equal treatment at Marine Corps recruit training from the beginning. Exposing recruits to the daily, active practice of equality of

opportunity and treatment from day 1 may also lead to a convergence of male and female Marine attitudes about gender equality (chapter 8).

- Gender was significantly associated with more confidence in one's ability as a Marine with increased integration within both training models at MCRD Parris Island.¹⁹⁷ A majority (80.0 percent in Integrated Company and 65.5 percent in Series Track) of female new Marines agreed or mostly agreed that increased integration would increase their confidence in their ability as a Marine, compared with only 36.8 percent of men in Integrated Company and 32.4 percent in Series Track. Gender was also significantly associated with better preparedness for first assignments with increased integration¹⁹⁸ within both training models at MCRD Parris Island. Women in both training models felt strongly that they would be better prepared for their first assignment with more gender integration, while male agreement was dramatically lower (with about half across training models agreeing or mostly agreeing). Across training models, men who did not agree or mostly agree largely responded "neither" rather than "disagree" or "mostly disagree" for both confidence in ability and preparedness for first assignment (chapter 8).
- Although majorities of both genders in Integrated Company foresaw greater opportunity for benefits from increased integration, more women believed this statement at week 11 than men. A significant association was found between gender and views on working with diverse team members within Integrated Company ($p = 0.001$). A majority of males (61.8 percent) and most females (90.0 percent) in Integrated Company believed success in working with diverse team members would be more likely with increased integration. Regarding exposure to new ways of problem-solving, a significant association was found between gender and those who believed it would increase with further integration within Integrated Company ($p = 0.003$). Approximately three-quarters of males (75.6 percent) and almost all females (96.6 percent) in Integrated Company believed they would likely be more exposed to new ways of problem-solving with increased integration. The Marine Corps has touted "diverse thought and intelligent action" as a major impetus for their gender integration efforts, and new Marines agreed these processes would continue to increase with more gender-integrated training (USMC, 2022a) (chapter 8).
- Recruits were asked to rate their preferred integration level (more integration, less integration, or satisfied with current integration) for four categories of training activities: physical fitness, classroom training, tactical/field training, and inspections and training conducted in housing/sleeping quarters. Except for male new Marines in Integrated Company, more of whom were satisfied with current integration levels, approximately half to two-thirds of new Marines in each training model favored more integration in physical fitness training, classroom training, and tactical/field training. Fewer new Marines across training models favored more integration in inspections and training conducted in squad bays. Importantly, when new Marines did not favor more integration, they usually reported being satisfied with current levels of integration. In the case of men in Integrated Company, while a smaller proportion

¹⁹⁷ Integrated Company, $p < 0.001$; Series Track, $p < 0.001$

¹⁹⁸ $p = 0.05$ for Integrated Company; $p = 0.016$ for Series Track

favored more integration across all training aspects, most were satisfied with current levels of integration at week 11: 71.8 percent for physical fitness training, 75.6 percent for classroom training, 55.1 percent for tactical/field training, and 81.8 percent for inspections and training conducted in the squad bays. New Marines rarely favored less integration in any of the four training categories. Overall, inspections and training conducted in squad bays were the most common training aspect for which new Marines favored less integration (14.6 percent of Integrated Company, 14.6 percent of Series Track, 16.1 percent of Male-Only). Notably, no women in Integrated Company favored less integration in physical fitness, classroom, and tactical/field training (chapter 8).

- An overwhelming majority (87.8 percent to 100.0 percent) of recruits in the other Services with gender-integrated recruit training (Army and Coast Guard) believed that gender integration should be implemented at the lowest unit level (see figure 9.7). Navy and Air Force recruits, who did not experience gender-integrated training, showed less support for integrated training at the lowest unit level (60.0 percent and 45.0 percent, respectively) but showed much higher support than any Marine Corps training model. Support for gender-integrated training at the platoon level was low among Marine Corps recruits in every model, with support never reaching above 20 percent. These data suggest that most recruits who experience gender-integrated training prefer integration at the lowest unit level (chapter 9).
- Recruits in the Navy and Air Force who did not experience gender-integrated training generally favored more integration in their training activities, compared with recruits in the Army and Coast Guard who experienced gender-integrated training (see figure 9.8). Classroom and tactical/field training garnered the most support for increased gender integration among Navy and Air Force recruits; support for these training activities was greater than support among Marine Corps recruits in Integrated Company. The vast majority of Army and Coast Guard recruits who did not prefer more integration indicated they were satisfied with current integration levels in all training activities; the same was true for Navy and Air Force recruits. Across all Services, recruits rarely favored less integration for any training activity. Examining recruit preferences for integration of training activities by gender reveals notable differences by gender and Service (see figure 9.9 for male recruit preferences and figure 9.10 for female recruit preferences). For the most part, male recruits from the Army, Coast Guard, Navy, and Air Force expressed a desire for more integration in training activities than their fellow female recruits; exceptions included physical fitness training for male Navy recruits and tactical/field training for male Army recruits. The opposite pattern emerged from the Marine Corps Integrated Company recruits: a much greater proportion of female recruits wanted more gender-integrated training in these training categories than their male counterparts. Male recruits from the Marine Corps Integrated Company favored more integration for training activities at proportions akin to Army and Coast Guard recruits, who experienced integrated training at the lowest unit level. Female recruits from the Marine Corps Integrated Company, on the other hand, favored more integration, akin to the Navy and Air Force, who did not experience gender-integrated training. These striking differences may indicate that male recruits in the Marine Corps have divergent perspectives on

- gender integration from their male counterparts in all other Services, regardless of gender-integrated training levels (chapter 9).
- The survey asked recruits to rate their level of agreement with the following statements, imagining their Service increased opportunities for men and women to train together at recruit training: “Recruits will be better prepared for their first assignment” and “I would feel more confident in my ability as a [Marine/Sailor/Soldier/Airman/Coast Guardsman].” Agreement with these statements was high (greater than 60 percent) among Army, Coast Guard, and Navy recruits. For Air Force and Marine Corps recruits, agreement hovered between 50 and 60 percent. It should be noted that when recruits did not agree, they typically responded “neither,” indicating neutrality; recruits rarely disagreed or mostly disagreed with either statement. Agreement (agree or mostly agree) with both better preparedness and confidence in their ability as a Marine was close to other Services overall among Integrated Company recruits. However, women in Integrated Company were much more likely to agree with these statements than men. These data suggest substantial levels of optimism among recruits across Services that gender integration can enhance their readiness to become a Service member, with a very limited number feeling the opposite (chapter 9).
 - The survey asked recruits to rate whether “success working with diverse team members” and “exposure to new ways of problem-solving” would be more likely to occur, less likely to occur, or no different if their Service increased gender integration at recruit training. Across all the Services, an overwhelming majority of recruits (nearly 75 percent or greater) felt success working with diverse team members and new ways of problem-solving would be more likely if gender-integrated training increased. Recruits’ emphasis on and belief in these positive outcomes resulting from increased gender-integrated training signal a high level of value for gender diversity (chapter 9).

Ethnographic observations:

- When conducting sustained integration during the training cycle at the lowest unit level (i.e., platoon equivalent), integrating from the first day of training is a best practice. If integrated training units are to conduct most of the training cycle together, integration at the start of training maximizes recruits’ ability to build cohesion with their peers and sets the expectation that male and female recruits will work with one another (chapter 6).
- The Air Force’s method of forming gender-integrated training units is a best practice because it establishes a consistent integration process for male and female trainees. An equal proportion of male and female recruits switch into gender-integrated training units from their same-gender sleeping units—creating a similar “change” experience for most trainees. In contrast, the Army implements the least desirable integration approach: Only a certain number of male trainees switch into a different gender-integrated training platoon from their assigned sleeping bay as women “displace” them, creating divergent integration implications for men and women. This type of integration process subtly signals women as “other,” a disruptive factor requiring incorporation into male training spaces for integration. It also creates different integration experiences for all women

compared with most men: Female trainees train with one-quarter of the individuals they share their sleeping bay with, while most men have a substantial overlap between their bay and fellow platoon trainees (chapter 6).

Interviews with participants who possess alternate views:

- Participants overwhelmingly defined gender integration as female and male recruits training together at all levels, to include within platoons. Well over half of the participants interviewed said that they would define training as gender integrated only if platoons were integrated. A common response from the participants was that gender integration occurs when recruits do everything alongside each other (some qualified this to say except sleeping in the same room) (chapter 5).
- Participants profess the belief that training that is not integrated all the way down to the platoon level is doing damage, and that the only times they have seen training meaningfully integrated has been when it's at the level of the platoon (or its equivalent in another Service). They emphasized the important distinction to be made between not separated by gender and actually being integrated at the platoon level (i.e. between no longer segregated and actually integrated). Several of the participants made the comment that recruits should train as they will fight, and that fighting happens in gender integrated platoons (chapter 5).
- Participants noted that being in the same space or alongside each other is not the same as interacting with each other, and gender integration in their view involves breaking down barriers in interaction (chapter 5).
- There was some shared view among the participants that the Marine Corps is oriented toward following the letter but not the spirit of the gender integration FY2020 NDAA directive from Congress. According to the participants, a model of same-gender platoons in integrated companies satisfies the requirement that training not be gender segregated, but in the minds of the participants, it's not consistent with the spirit of the directive to actually increase gender integration. Also, several participants pointed out the Marine Corps' approach of assigning same-gender drill instructors to recruits was inconsistent with the spirit of gender integration. Thus, in the views of the participants, co-locating platoons of female recruits with platoons of male recruits, and having the recruits largely trained by drill instructors of the same gender as themselves might allow the Marine Corps to claim training has been gender integrated, but it's not in their view true gender integration (chapter 5).
- Some participants favored full integration of squad bays, but given laws, that is moot in many respects. Others were strongly opposed, including some with extensive experience with recruit training. Most, a group that also included participants who had extensive experience with Marine Corps recruit training, favored greater integration that falls short of men and women sleeping in the same spaces or sharing latrines. They see lack of integration of training and other activities that happen in squad bays as a missed opportunity to create a more integrated environment. They favor men and women continuing to sleep in separate spaces but coming together as

much as possible otherwise, including squad bay activities and training other than sleeping and hygiene (chapter 5).

- Participants expressed the view that more gender integrated training would minimize ways that female and male recruits are treated differently in training now; for example, one participant stated that women are treated hands off in training and not afforded the same discipline as men, a situation that more gender integration could help resolve in the participant's view (chapter 5).
- One point where participants expressed a range of perspectives was essentially whether it's more important that all male recruits train alongside female recruits in meaningful ways or that all female recruits are training alongside sufficient numbers of other female recruits (as well as how many is sufficient). Multiple participants expressed the view that every male recruit should train closely with at least one female recruit. Some said this could be achieved by not keeping the same people together all the time during the training cycle, and others through having at least one female recruit in every platoon. There was a sense among these participants that having some companies or platoons integrated and others not will have negative consequences. Other participants felt that there should be some critical mass of female recruits in units that include any female recruits. Some said that the Marine Corps must avoid female recruits being spread too thin, that having just one or two women in training groups will lead to problems (chapter 5).
- Participants had different perspectives on whether female recruits should be spread out to maximize the number of male recruits who train alongside women versus making sure female recruits are surrounded by enough other female recruits to have proper support in place. There were also divergent views around the idea of having a critical mass of women in place before integrating training groups, with some feeling it is necessary in order to give women safer spaces for entry. Other participants felt this perspective perpetuated a harmful stereotype that women need other women to be able to succeed. Participants with this view expressed that a belief that women need to be surrounded by other women sets up an unrealistic experience in that the female recruits will likely spend their Marine careers with relatively few women around them (chapter 5).
- Participants discussed several benefits of an integrated training environment. These include the value of integrating women at day one to increase force readiness, Marine recruits learning respect for others early in the process, training as they fight, building cohesion across genders from the start of training, and building a more capable and cohesive force. Participants believed that more gender integration in training would normalize mixed-gender relations in the Marine Corps and increase performance for both women and men. In general, they felt that the force will be more effective when it is integrated better and where practices match the espoused gender equality values of the Marine Corps. They also felt that more gender integration would better reflect the gender-integrated society from which recruits come. Benefits for women in the Marine Corps in particular that participants saw resulting from more gender integration of training included the value of women starting from day one in being treated equally, women being better prepared for later residing in units that are integrated, and reducing harmful stereotypes of women in the Marine Corps,

particularly that there will be less fear and mistrust of female colleagues among men if they have gone through training with women. When training is gender-segregated, participants felt that women constantly have to prove themselves in that they are seen as not qualified because it is believed they went through softer training with lower standards. More gender-integrated training should help overcome these issues. Ultimately, participants felt that more gender-integrated training would help in the retention of female Marines. For men in the Marine Corps, participants believed that more gender-integrated training would instill messages that women can do the same thing, and if they can't, they don't get to complete recruit training. Men, like women, would have to learn to work in gender-integrated environments from the day they enter the Marine Corps, better preparing them for the fleet (chapter 5).

D. Strategic Vision Recommendations

→ **Recommendation: Establish a Marine Corps definition and/or strategic mission/vision for gender integration in recruit training.**

Literature review:

- Communication is paramount to the facilitation and success of any integration process. The Army implemented gender-integrated recruit training in the 1970s and then returned to gender-separate recruit training in the early 1980s. When the Army initially established gender-integrated recruit training, it did so “without a clear statement of goals, policies, or procedures” (Chapman, 2008, p. 68), which ultimately harmed the Services’ integration efforts. Consistent messages communicated both internally and externally from the Services can provide clarity on the integration process and create a shared understanding about the intent of integration. Clear, direct, and unwavering communication from Service leadership is especially important for providing messaging to counter resistance and amplify how integration will benefit mission readiness (Schaefer et al., 2008) (chapter 2).

Service leader, training cadre, and drill instructor interviews:

- A sizable number of Marine Corps respondents did not have a clear sense of how the Marine Corps defined gender integration at recruit training. For example, a senior Service leader requested support from one of his aides during his interview to find the Marine Corps definition. The Service leader reported he did not know what the statute definition is. His aide pointed him to the Marine Corps Force Integration Campaign Plan¹⁹⁹ but commented that there are continued ongoing discussions about the “level” of integration that should occur at training. The lack of clarity was also apparent among those in leadership positions at the MCRDs. Without a shared or widely known Service definition, respondents primarily defined gender integration by the structure of integration—how men and women are positioned within platoons and companies. Most Marine Corps respondents defined gender integration as integration

¹⁹⁹ During the interview, it was referred to incorrectly as the “Marine Corps Female Integration Plan.”

at the company level, with men and women executing the same training at the same time. Definitions of integration “at the company level” where recruits engage in the “same training at the same time” obfuscate articulations of what it means to be integrated: What does a recruit in an integrated environment experience? Is integration seeing one another? Standing next to one another? Interacting? Several respondents identified these disparities within the Marine Corps approach to integration, indicating the true meaning of integration remains unclear (chapter 4).

Interviews with participants who possess alternate views:

- Participant views on how the Marine Corps defines gender integration did not generate the same consistency of themes as those from the experts’ own definitions. For example, virtually all the participants defined gender integration as requiring integration at the platoon level, but there were no themes around which all agreed regarding perceptions of Marine Corps definitions of gender integration. This only reinforces the idea that the Marine Corps may lack a clear articulation of their definition of gender integration, because our experts didn’t share a common understanding of the Marine Corps’ definition (chapter 5).
- Several of the participants stated that they don’t have a strong sense of how the Marine Corps defines gender integration. This was manifested in a few ways. Some simply had strong understandings of gender integration in other Services but less experience with the Marine Corps. Others have felt in the past as though they had a good sense of this, but they recognize views are changing in the Marine Corps, and they don’t feel confident that their experiences reflect the current thinking in the Marine Corps. Third, some felt that the Marine Corps has not had a consistent enough message on gender integration for them to be able to identify a Marine Corps perspective (chapter 5).

→ **Recommendation: Provide explicit and consistent leadership statements about how current or future changes to gender integration approaches at MCRDs connect with the broader mission of producing basically trained Marines.**

Literature review:

- For example, research has identified the role of leadership as important in successful gender-integration of groups. In mixed-gender groups, cohesion is highest when both men and women feel they are respected and treated fairly by leaders (Chrobot-Mason & Aramovich, 2013), and the shared experience of stressful training activities increases unit cohesion for both women and men (Bartone et al., 2002). Similarly, women in male-dominated fields who feel they have been treated fairly and not been discriminated against perform better and feel more integrated in male-dominated groups (Richman et al., 2011) (chapter 2).
- Effective leadership is especially important for building cohesion in gender-integrated units (Siebold & Lindsay, 1999); promoting a command climate that reinforces the normality of mixed-gender cohesion should have positive results (Davis, 2007; Neil et al., 2016) (chapter 2).

- Instructors are powerful role models in the recruit training environment and can set the tone for gender-integrated environments demonstrating professional mixed-gender interactions and ensuring all recruits are treated with respect and fairness (Schaefer et al., 2018) (chapter 2).
- Leaders, from the highest ranks of military service to the smallest unit level groups, serve as facilitators for gender integration processes. Leaders who articulate and demonstrate their commitment to integration set the tone for all others, leading to greater integration success (Schaefer et al., 2015; Schaefer et al., 2018). Drill instructors are pivotal all-encompassing leaders, teachers, and role models for recruits (Schaefer et al., 2018). The commitment of both male and female drill instructors to gender-integrated training is necessary for the success of all recruits; instructor attitudes toward gender-integrated training have been shown to affect recruits' readiness and cohesion (Schaefer et al., 2018) (chapter 2).
- Communication is paramount to the facilitation and success of any integration process. The Army implemented gender-integrated recruit training in the 1970s and then returned to gender-separate recruit training in the early 1980s. When the Army initially established gender-integrated recruit training, it did so "without a clear statement of goals, policies, or procedures" (Chapman, 2008, p. 68), which ultimately harmed the Services' integration efforts. Consistent messages communicated both internally and externally from the Services can provide clarity on the integration process and create a shared understanding about the intent of integration. Focus groups with Service members have also identified the need for strong communication to help dispel myths surrounding gender integration, particularly related to standards (Gaddes et al., 2017). Clear, direct, and unwavering communication from Service leadership is especially important for providing messaging to counter resistance and amplify how integration will benefit mission readiness (Schaefer et al., 2008) (chapter 2).
- Without visible involvement and commitment by senior leaders, "Progress on integration is difficult or impossible to achieve," according to stakeholders and senior leaders involved in the integration process (Schaefer et al., 2018, p. 68). Canadian Forces documented the role leadership has played throughout integration of women in previously all-male units. From 1979 to 1985, the Servicewomen in Non-Traditional Environments and Roles (SWINTER) trials assessed the effects of women's employment on the operational effectiveness of all-male units. The trial research concluded that the "adoption of a 'business as usual' approach" would not provide sufficient guidance in creating positive integration of women into previously all-male domains (Davis, 2007, p. 76). Effective integration would depend on leadership in addressing real and perceived issues such as: compromised selection and training standards, harassment of women, resistance to change, restrictions in range of tasks that supervisors assign women, differences in the physical strength and aggressiveness of women and men, women's fearfulness, emotionality and pregnancy, sexual relationships between men and women who are working together, and rumors of women's homosexuality. Although women were not assigned combat duties in the SWINTER trials, the trials did provide an opportunity for further policy development and a rethinking of the ways the Canadian Forces could or should be

responsive to changes in social practice and attitudes during the 1980s (Davis, 2007) (chapter 2).

Service leader, training cadre, and drill instructor interviews:

- Gender integration in which male and female recruits have direct, meaningful interaction with one another necessitates a departure from the stringent platoon-only training approach, a course of action that may require institutional and interpersonal adjustments supported by leadership communication on how these changes align with integration goals (chapter 4).

Interviews with participants who possess alternate views:

- Participants noted that the Marine Corps approach to diversity has essentially been that everyone is treated the same; everyone's a Marine. However, they see a consequence of this approach as not recognizing gender as something to value because of the benefits that diversity brings. As a result, they feel that the masculine ideal of the Marine is perpetuated, and it can lead to attitudes geared toward protecting women, benevolent sexism, and misguided beliefs that female Marines should overwhelmingly have female mentors and leaders (chapter 5).
- Several participants noted how crucial it is that gender integration efforts be top down with strong support from senior leadership because there will be resistance from enlisted personnel, the officer ranks, and retired Marine Corps personnel. In the case of senior Marine Corps leadership, participants stressed that senior leadership must be on board in thinking that further gender integration will not be harmful to the Marine Corps. In addition to leadership seeing integration as important, participants noted that top leadership needs to *say* how important it is, to stress it publicly, and to not privately say something different: they have to be convinced, and work to convince others, that the result of further gender integration will be a better Marine Corps. Otherwise, participants believe the efforts are unlikely to be successful. More than one participant gave the perspective that platoon cohesion being a potential barrier to successful gender integration is not a valid concern but that Marine leadership needs to believe that and stress it to others (chapter 5).
- In terms of public perceptions, participants noted that a sophisticated public information campaign will be necessary to sell what is happening as an elite process that will produce a better Marine Corps. Participants argued that successful integration will require Marine leaders to think about both their own views and public views, requiring a complex process of implementation. Public perceptions include not just the general public but also the retired military community, many of whom participants noted believe that gender integration is a change imposed from the outside that will reduce effectiveness and readiness, that it will make the Marine Corps "softer." Participants noted that changing these beliefs will take time, but it will happen, and it will require the attention of leadership (chapter 5).
- The biggest challenge, according to several participants, will be inculcating a brand new culture to incoming recruits while at the same time attempting to manage (or ideally change) the mindsets of current Marines who have grown up as Marines in a culture that

devalues women. To many of the participants, this will involve focusing on how integration will be helpful to the Marines and build a stronger Marine Corps. To successfully communicate gender equity as a core value of the Marine Corps, however, it must in fact be one (chapter 5).

E. Evaluation and Working Group Recommendations

→ **Recommendation: Conduct regular evaluations of the recruit training “product”: a basically trained Marine. These evaluations should connect data from a basic Marine’s performance and outcomes in the ELT pipeline and their first fleet assignment and should be used as an opportunity to collect information relevant to the impact of the Service’s gender integration efforts.**

Literature review:

- Frequent status checks are essential to monitoring gender-integration initiatives. Canadian military commanders and those involved in gender-integration processes report the value of developing a clear set of metrics that can be monitored to assess and track the progress of integration. Clear data monitoring and frequent assessments have helped the Canadian Forces “reaffirm commitment to integration and identify areas of strength and weakness during the integration process” (Schaefer et al., 2015, p. 61). Data monitoring and assessments have included tracking the number of female recruits, releases, and promotions across occupations over time and collecting data on any problems or complaints that emerge (Schaefer et al., 2015).

Service leader, training cadre, and drill instructor interviews:

- The Army, Air Force, Navy, and Coast Guard collect feedback from various stakeholders at different times to assess and evaluate their success in meeting recruit training goals and objectives. Each Service has its own feedback loop intended to prompt reflection, evaluation, and course corrections if needed. These feedback mechanisms and evaluation processes can identify issues related to gender and gender-integrated training by providing regular data and information to commanders and senior leaders responsible for oversight of recruit training (chapter 6).

→ **Recommendation: Establish and use drill instructor working groups at each stage (before, during, and after) of gender integration to more readily anticipate and identify challenges, innovative solutions, and demonstrated successes.**

Service leader, training cadre, and drill instructor interviews:

- Drill instructors are the day-to-day leaders, mentors, and teachers for recruits and are responsible for recruits during training. Drill instructors for all Services assume a variety of roles during the training cycle, including teaching and developing practical skills and knowledge, mentoring recruits and modeling appropriate behavior and attitudes, motivating recruits for success during and after recruit training, applying

and instilling discipline, ensuring the safety and welfare of recruits, and mentoring and teaching junior drill instructors (chapter 7).

- Drill instructors have granular, detailed knowledge about the training schedule, logistics, social dynamics, and operationalization of Marine Corps policies and practices. Establishing a drill instructor working group would provide the Marine Corps an organized way to harness this knowledge as the Service seeks to continue, expand, or evaluate its approach to gender integration at recruit training. Drill instructors can readily identify problems or challenges based on their day-to-day experiences and can be used as a resource to identify new solutions or innovative approaches. Drill instructor working groups would also help build buy-in for gender integration changes by engaging drill instructors as essential stakeholders in the process. A Marine Corps Service leader described how she used this approach at one of the MCRDs and found success (chapter 11).

F. Curriculum and Education Recommendations

→ **Recommendation: Review and update educational curriculum and imagery in training environments to represent women and be more inclusive of their contributions to the Marine Corps institutional legacy.**

Ethnographic observations:

- Marine Corps history is framed through combat operations and wartime engagements and highlights the individual heroic actions of Marines who were awarded the Medal of Honor, Navy Cross, or Silver Star. As a result of using this lens to present the material, heroic women in the Marine Corps are notably absent from the curriculum, as are contextual explanations of their omission. The coverage of women's service in the current Marine Corps history curriculum at recruit training is primarily relegated to "firsts" or milestone events and lacks acknowledgment of the ways women's service restrictions have affected their ability to contribute to the institution. It also fails to recognize and profile how, despite extensive restrictions, women have served and broken through barriers, demonstrating their courage and commitment. As such, women's pivotal and sustained contributions beyond combat operations are not acknowledged or codified in the historical curriculum in any substantial way. The dearth of women's history in Marine Corps curriculum combined with descriptive disparities between groups who experienced similar historical barriers to service fails to teach male and female recruits that their institution values the contributions of male and female Marines equally. (chapter 4).
- Representation and inclusion are important aspects of gender integration at recruit training. Presenting the contributions of women through a broader lens that goes beyond combat operations could highlight the myriad ways that Marines demonstrate honor, courage, and commitment and remove any messaging—intentional and overt or simply negligent—that women in the Marine Corps are afterthoughts rather than assets (chapter 4).

- Of the 51 CVGDs outlined in the Core Values Playbook at MCRD Parris Island, 10 honor real Marines and Sailors for their heroic and courageous actions. Of the 33 CVGDs outlined in the Recruit Training Guided Discussions document used at MCRD San Diego, 8 honor real Marines and Sailors. Recruits learn about the scenarios or backgrounds of these Marines and Sailors and engage with discussion questions based on the topic. All 10 CVGDs featuring real Marines or Sailors are men; in total, 8 individual men are highlighted. The complete absence of real female Marines from the CVGDs is notable, given women have been serving in the Marine Corps for over 100 years. Their exclusion sends the message that women are still marginal members of the Marine Corps institution or have not made contributions worthy of discussion or emulation (chapter 4).
- In a “Marine Corps Leadership” class at MCRD San Diego, the study team observed several PowerPoint slides that used male pronouns in the descriptive examples of leadership principles (chapter 4).
- Outdated gendered perspectives and imagery in course materials that perpetuate men as the default Marine characterize a missed opportunity for the Marine Corps to provide relevant, inclusive instruction to recruits (chapter 4).
- Outside the classroom, recruits are exposed to imagery in buildings and common spaces, such as the chow hall. Images in these spaces are focused heavily on Marine Corps combat operations and depictions of the warrior ethos in action. When images of Marines are distinct enough for gender identification, the images are primarily male. Greater care should be taken to ensure that women are represented in images that adorn all training spaces. Further, these images should show female Marines in their full, contemporary breadth of roles. A best practice example of inclusive imagery observed by the study team is the “Recruit Training” exhibit at the MCRD Parris Island Museum, which features a wide range of diverse images, including women and racial and ethnic minorities (chapter 4).

Interviews with participants who possess alternate views:

- Participants also discussed cultural challenges to increased gender integration. These included that changes need to go beyond just increasing the extent to which male and female recruits train alongside each other. Among the issues that participants feel need attention are the vetting and probing of incoming male recruits and drill instructors for biases along with changes to imagery, uniforms, gear, ditties, and so on. Participants noted challenges in highlighting the history of women in the Marine Corps even though it’s relatively limited (chapter 5).

→ **Recommendation: Incorporate explicit training and socialization on respect into all education materials and training opportunities.**

Literature review:

- Male drill instructors employ tactics for motivating lagging male Marines through degrading gendered language, comparing men’s performance to that of women and

referring to them using derogatory terms for women and their genitalia (Archer, 2013; Fosher et al., 2018). Research suggests that for both men and women, gender stereotypes are reinforced starting from the first day of training rather than reduced or actively worked against (chapter 2).

- Hypermasculinity has been found to be associated with lower levels of cohesion in mixed-gender military units (Rosen et al., 2003). In analyses of other countries' experiences with gender-integrated training, negative effects of integration on cohesion occurred when there was evidence of enduring negative gender stereotyping from men (Cawkill et al., 2009) (chapter 2).
- Culture, particularly at the unit or smallest group level of interaction, can have a substantial influence on integration efforts. Cultural ideals and norms that promote, uphold, or allow hostility toward women are particularly harmful for success in gender integration. Mixed-gender units with greater levels of sexual harassment in the Army were found to be “less cohesive, less accepting of women, and less ready for combat” than units with lower levels of sexual harassment (Schaefer et al., 2015, p. 23). Units with cultural norms that promote equity, diversity, and inclusion are less likely to be negatively affected by integration; and integration may increase cohesion among these groups (Schaefer et al., 2015) (chapter 2).

Recruit focus groups:

- Recruits from the Navy and Army shared several specific instances of sexual harassment at recruit training. Recruits from these two Services had different integration experiences, one fully integrated and one completely gender segregated, yet both described specific cases they knew of or had experienced. These reports illustrate that gender integration is not solely responsible for mitigating these issues—the social and cultural environment is of primary importance. Air Force and Coast Guard recruits, also with opposing integration experiences, did not describe or experience sexual harassment as pervasive issues at recruit training. Intentional training, education, and socialization on respect combined with robust accountability measures and drill instructor oversight—whether in gender-integrated or nonintegrated environments—are best practices for creating a safe, healthy environment that does not tolerate insidious, degrading behaviors (chapter 9).
- Recruit experiences (from the other Services) with and perceptions of sexism and gender-based treatment, primarily from men—recruits and drill instructors—degrades the training environment for all. Reinforcement of gender stereotypes, slights against women and female recruit leadership, and the persistence of sexual harassment behaviors corrodes the Services' core values. These behaviors and perceptions were reported as the biggest challenge of gender-integrated training environments—a difficult yet preventable problem (chapter 9).
- Equity and respect are cultivated facets of a training environment—they are not bestowed through the mere act of integrating men and women. Ensuring equity and respect in the training environment must be a deliberate, intentional, and daily effort for every Service. Male and female recruits in the Army and Coast Guard trained side by side at the platoon equivalent level, yet their recruits reported divergent interpersonal experiences. Army

recruits described sexism and sexual harassment behaviors that bubbled to the surface and diminished women's experiences in the training environment. Coast Guard recruits articulated trust and respect as foundations of their Service, reinforced by CCs and recruit accountability measures, which forged camaraderie through equity. Proactive and sustained attention to these matters is critical to any training environment where diversity is valued (chapter 9).

DoD IRC:

- Following a recent DoD Independent Review Commission (IRC) on Sexual Assault in the Military recommendation, the study team recommends the Marine Corps do more to teach and emphasize respect at recruit training. Recommendation 3.2 from the IRC report recommends the Under Secretary of Defense for Personnel and Readiness direct the Services to educate the force about sexual harassment and sexual assault within the context of the Services' core values. In its justification for this recommendation, the Committee stated: "Beginning with recruitment, reinforced in basic training, and expanded upon in Professional Military Education (PME), Service members should comprehend and be able to apply key concepts, such as—but not limited to—consent and respect, within a framework of desirable and honorable behavior. This core values framework may reflect Service unique cultures but should explain and reinforce the links between the prevention of sexual harassment and sexual assault and their relation to improvements in military readiness (p. 188)." The study team recommends an even broader approach to training on respect in the recruit training environment, one that weaves respect into every foundational learning opportunity for Marine Corps recruits (chapter 11).

Recruit social science survey:

- The social science survey asked recruits to rate whether "sexual harassment and sexual assault among recruits" and "fraternization among recruits" would be more likely to occur, less likely to occur, or no different if their Service increased gender integration at recruit training. Across the Services, one- to two-thirds of recruits anticipated increased fraternization and sexual harassment/sexual assault incidents from increased gender integration (see figure 9.13). Navy recruits shared the greatest concern about sexual harassment and sexual assault incidents being more likely (65.8 percent), and a majority of Army recruits (61.5 percent) felt that fraternization among recruits was more likely with increased gender integration. Overall, Coast Guard and Air Force recruits reported the lowest levels of concern that these undesirable outcomes would be more likely with increased gender integration, but a sizeable minority still expressed concern. During study team observations, Coast Guard and Air Force leaders and instructors conducted explicit conversations about respect in training curriculum and activities. This explicit instruction may have contributed to recruits feeling less concerned about these outcomes in response to increased gender integration (chapter 9).

Ethnographic observations:

- While the Air Force SAPR class and facilitated discussions aim to ensure trainees are well informed about sexual harassment and assault definitions and reporting procedures, the overall goal is to teach trainees how to establish and maintain respectful, professional relationships, which will improve morale and mission readiness. The Air Force and Navy model how open, authentic conversations among recruits led by qualified instructors can encourage healthy thinking and help recruits learn what appropriate behavior looks like in their Services. Services expect recruits to apply core values to help themselves and/or others in difficult or inappropriate situations, and respect undergirds all conversations in SAPR classes and facilitated discussions. Although only the Coast Guard officially identifies respect as a core value, all of the Services' core values are tied into discussed scenarios to underscore how they should be used to guide every decision and action, echoing the DoD IRC statement that "treating your fellow Service member with dignity and respect should be integral to a Marine, Sailor, Airman, Guardian, or Soldier's identity" (IRC, 2021, p. 189). Sexual harassment and sexual assault violate every core value and have no place in any Service. Ensuring recruits are educated in the most effective manner about how to prevent and respond to sexual harassment and sexual assault and develop healthy, respectful, and professional relationships is key to creating a safe environment for all service members (chapter 6).
- A best practice drawn from the Navy and Coast Guard is the imposition of clear, memorable, and gender-neutral standards of conduct for recruits. From the first day, Navy and Coast Guard recruits are taught there will be "no recruit-to-recruit contact." This rule forbidding any touching is a part of the RTC Commanding Officer's "Top Six" in the Navy, which are policies all recruits must abide by while at basic training: no sexual assault/harassment, no racism/discrimination/sexism, no fraternization, no recruit-to-recruit contact, no hazing, and no substance abuse. Recruits are required to internalize these rules; pithy phrases such as "no touching anyone" and "no recruit-to-recruit contact" are clear, simple, and gender-neutral policies for recruits to memorize (chapter 6).

Interviews with participants who possess alternate views:

- Participants also saw little things that highlight elements of culture such as masculinity as being important and accumulating during training (such as in gender separation and associated messages). Additionally, because loyalty is another important element of Marine culture, participants noted that few speak up about issues related to negative treatment of women, sometimes because they don't believe leaders in fact want change. There was also a sense among participants that women tend to be seen as a threat to the culture because it's a culture of masculinity, with the result being biases against women at all levels. Participants overwhelmingly noted how strong the Marine Corps culture is. They also noted that a consequence of there being a strong culture is that it can be changed if there is a will and accountability. The Marine Corps relies on culture to train, and the Marine Corps knows best how to inculcate a culture (chapter 5).

→ **Recommendation: Incorporate primary prevention education on sexual harassment, sexual assault, domestic abuse, and equal opportunity courses and Core Value Guided Discussions. Provide recruits education, training, and discussion about “what right looks like” in addition to course curriculum already delivered.**

Literature review:

- Culture, particularly at the unit or smallest group level of interaction, can have a substantial influence on integration efforts. Cultural ideals and norms that promote, uphold, or allow hostility toward women are particularly harmful for success in gender integration. Mixed-gender units with greater levels of sexual harassment in the Army were found to be “less cohesive, less accepting of women, and less ready for combat” than units with lower levels of sexual harassment (Schaefer et al., 2015, p. 23). Units with cultural norms that promote equity, diversity, and inclusion are less likely to be negatively affected by integration; and integration may increase cohesion among these groups (Schaefer et al., 2015) (chapter 2).

DoD IRC:

- The study team’s recommendation for more comprehensive and proactive training on the prevention of sexual harassment and sexual assault aligns with recommendations from the DoD IRC on Sexual Assault in the Military. The Secretary of Defense has charged DoD to implement all recommendations made by the IRC, which include the following:
 - **Recommendation 2.1c: The Services and National Guard Bureau should equip all leaders to develop and deliver informed prevention messages in formal and informal settings.** The IRC found that junior enlisted members wanted “to have authentic, small group discussions to explore key questions about consent, respectful workplace behavior, personal boundaries, and related prevention themes in scenario-based activities” and that commanders need to create an environment where it’s easy to identify “what right looks and sounds like” (IRC, 2021, p. 129).
 - **Recommendation 2.4: Modernize prevention education and skill-building to reflect today’s generation of Service members.** The IRC emphasized tailored content, delivery, and dosage of prevention knowledge for specific audiences, stating, “Prevention messaging, practices, and programs must be tailored for the setting, prior traumas, current level knowledge, and be culturally competent for diverse populations” (IRC, 2021, pp. 145-146). Continuing, they noted, “Some Service members enter the military with very limited sexual education or understanding of consent and healthy relationships”; thus, a prevention knowledge base should not be assumed (IRC, 2021, p. 146).

Recruit focus groups:

- Based on focus group discussions, recruits and new Marines were clearly aware of the punitive repercussions of sexual harassment and assault and resources available should they become a victim. Much of the training and education on these issues focuses on what not to do. Men and women expressed a strong desire for proactive

and primary prevention-based training to educate them on how to have healthy, professional work relationships with members of the opposite gender. New Marines articulated that they would like more comprehensive training and development in this area, especially if the Marine Corps were to increase gender integration at recruit training (chapter 8).

- Some recruits from the other Services described comprehensive training and education programs around gender and gender-related issues as necessary for successful gender integration. Examples included comprehensive SAPR classes, training about respect, and communication classes about professional working relationships (chapter 9).

Ethnographic observations:

- Education and information on sexual harassment, sexual assault, and equal opportunity are primarily taught through classes and supplemented with informal discussions in every Service’s recruit training program. The Air Force Sexual Assault Prevention and Response (SAPR) class and “What Now, Airman?” and “Risky Business” guided discussions are exemplars of how Services should teach this critical and sensitive material, using a prevention-based curriculum that helps recruits meaningfully engage with the material and discuss real-life scenarios they may face in the near future under the guidance of trained personnel and subject matter experts (chapter 6).
- Air Force SAPR instructors demonstrate that primary prevention²⁰⁰ is not only about raising awareness on the prevalence of sexual harassment and assault in the Service but also about taking comprehensive action and educating Service members to stop sexual violence before it occurs. Air Force instructors teach mandated foundation material²⁰¹ while taking a holistic and respect-based approach to SAPR education. This includes framing discussions around how to have professional relationships, the importance of communication and consent, and direct challenges to harmful stereotypes about both genders. During the SAPR class, instructors encourage trainees to talk to each other about their opinions and experiences and provide common, real-world examples of actions and comments constituting sexual harassment. Although instructors still maintain full control of the class, they enable trainees to learn from each other and gain new perspectives. Importantly, instructors clearly identify behaviors that are acceptable and unacceptable in the Air Force, rather than only telling trainees what not to do or leaving misinformation uncorrected (chapter 6).
- The Air Force and Navy designed safe, intentional classroom dialogues, facilitated by drill instructors, through which recruits can openly express opinions about sexual

²⁰⁰ Primary prevention constitutes “improving physical environments in barracks and installations, teaching basic sexual education and developing healthy communication skills for sexual activities, and strengthening and enforcing policies that prohibit hazing, stalking, and harassment, and increasing knowledge about military culture and violence prevention” (IRC, 2021, p. 28).

²⁰¹ Including the definition of sexual assault, what behaviors can lower personal risk, the continuum of harm, and reporting options.

harassment, sexual assault, and equal opportunity. Every Air Force trainee participates in six “What Now, Airman?” guided discussions, which cover topics including integrity, abuse of power, loyalty, teamwork, being a wingman, and righteousness. While most of the lesson plans are not explicitly tied to SAPR-related topics, trainees can raise questions or invite such conversations during this time. “Risky Business,” on the other hand, is specifically designed to talk about potentially precarious situations trainees might encounter when they leave basic training, such as underage drinking and parties at follow-on training. The course also addresses healthy sexuality and how to develop positive relationships. The Navy’s bystander intervention and equal opportunity classes are structured in a small-group, guided discussion format with exercises intended to engage recruits in uninhibited conversations about gender stereotypes. These conversations, designed to help recruits express themselves and arrive at a grounded understanding of complex issues, include dialogue to develop recruits’ ability to recognize and prevent abuse, assault, and harassment (chapter 6).

→ **Recommendation: Restrict those who teach key/milestone sexual harassment and sexual assault courses to full-time SAPR personnel who are subject matter experts.**

Ethnographic observations:

- Instructors who teach SAPR without expert knowledge can inadvertently send damaging messages about sexual assault, consent, and gender at an impressionable time, as was witnessed by the study team. This challenge is not specific to the Marine Corps—the study team also observed other Services struggling with proper delivery of this critical course content to their recruits (chapter 4).
- Ill-equipped personnel are a systemwide DoD issue recently identified by the DoD Independent Review Commission (IRC) on Sexual Assault in the Military. DoD is now establishing a dedicated primary prevention workforce (recommendation 2.2). The IRC stated, “Effective prevention of sexual harassment, sexual assault, and other forms of violence requires the time and dedication of full-time personnel with specific public health and behavioral social science expertise” because “double-hatted personnel lack both the capability and capacity to perform requirements essential” to prevention (IRC, 2021, p. 131) (chapter 4).
- Unconscious biases or gender stereotypes from instructors can arise in sustained or brief moments in the training environment and influence recruits. At a SHARP class at Fort Jackson, the study team observed a male drill sergeant teaching a mixed-gender class of recruits about SHARP definitions/issues, reporting procedures, and available resources and support. Throughout the course, the instructor often directed his body or turned toward the row of female recruits to deliver the information. In some instances, he specifically addressed the women (e.g., “*Ladies, when it comes to reporting...*”) on course subject matter that pertained to every recruit in the classroom, regardless of gender (chapter 6).

- Air Force SAPR classes are taught by professional civilian experts (including a retired Airman) familiar with the subject matter. The experts are proficient and fluent in the content, and their primary job is teaching SAPR, thereby reducing the likelihood that the course will be sidelined or shirked in favor of other responsibilities. They teach and tailor the standardized content to their audience and their specific Service. SAPR instructors in the Air Force are regularly evaluated to ensure trainees receive accurate information on how to prevent and respond to sexual harassment and assault and the instructors' teaching methods are effective (chapter 6).

G. Culture and Social Norm Recommendations

→ **Recommendation: Enforce a zero-tolerance policy for training cadre, drill instructors, and recruits using sexually explicit, gender-based, or derogatory language in the training environment.**

Literature review:

- Messages that women are devalued, harmful, distracting, or otherwise a problem as Marines are pervasive and received early in recruit training, sometimes explicitly and sometimes inadvertently from drill instructors (Archer, 2013; Fosher et al., 2018) (chapter 2).
- Male drill instructors employ tactics for motivating lagging male Marines through degrading gendered language, comparing men's performance to that of women and referring to them using derogatory terms for women and their genitalia (Archer, 2013; Fosher et al., 2018). Research suggests that for both men and women, gender stereotypes are reinforced starting from the first day of training rather than reduced or actively worked against (chapter 2).
- Hypermasculinity has been found to be associated with lower levels of cohesion in mixed-gender military units (Rosen et al., 2003). In analyses of other countries' experiences with gender-integrated training, negative effects of integration on cohesion occurred when there was evidence of enduring negative gender stereotyping from men (Cawkill et al., 2009) (chapter 2).
- Instructors are powerful role models in the recruit training environment and can set the tone for gender-integrated environments demonstrating professional mixed-gender interactions and ensuring all recruits are treated with respect and fairness (Schaefer et al., 2018) (chapter 2).

DoD Continuum of Harm:

- Sexual and gender-focused comments or jokes are part of DoD's continuum of harm, which conceptualizes the connection between lesser offenses, such as the use of inappropriate language, to an environment where greater offenses, such as rape and sexual assault, may occur unchecked (DoD, n.d.).

Service leader, training cadre, and drill instructor interviews:

- Female drill instructors reported experiencing sexist treatment in the recruit training environment, another unique challenge experienced by this population. Some male drill instructors actively address any gender-based treatment they notice from male recruits. However, female drill instructors reported their peers also engage in disparaging and sexist behavior. The persistence of sexism and gender-based treatment harms all in the training environment—female drill instructors and leaders experiencing it, men who continue to engage in these behaviors, recruits who absorb all aspects of their training experience, and the Marine Corps more broadly (chapter 4).
- The continued use of sexually explicit and demeaning gender-based language from drill instructors in the training process harms gender integration efforts at the MCRDs and undermines the institution of the Marine Corps. Specific instances shared with the study team most commonly involved male drill instructors using sexually explicit and gender-based language with male recruits that is degrading to women. While it is unclear how pervasive prohibited language use is among female drill instructors, triangulated sources indicate derogatory language is a persistent issue in a male-centric training environment (i.e., male drill instructors with male recruits). Sexually explicit and gender-based language are perceived by male drill instructors as a useful training tool that can build rapport in the drill instructor-recruit relationship and motivate male recruits to perform better (chapter 4).
- Male drill instructors and male recruits have developed a concrete understanding that it is wrong to use sexually explicit and derogatory gender-based language around women, yet what is strikingly absent in these discussions is any acknowledgment of its inappropriateness in the Marine Corps as a whole. Male drill instructors and recruits consciously describe how they must alter what they say when they are around women in the Marine Corps, yet there is no verbal recognition that this language goes against the standards of conduct, sexual harassment policies, or core values and tenets of the institution at large (chapter 4).
- Gender-based perceptions, comments, or jokes among recruits of the opposite gender can derail the cohesion building process that is often a fundamental part of the recruit training process (chapter 6).
- Female drill instructors across all Services reported verbal and nonverbal sexism from male recruits and their male peers (chapter 7).
- When recruits and drill instructors begin interacting more regularly and purposefully in mixed-gender settings, any gender-based remarks can undermine the training environment by damaging trust and respect. Drill instructors must address and correct sexist language they hear from recruits, notice in their peers, and use themselves. When drill instructors recognize and challenge offensive language and attitudes, they set a positive example for male and female recruits for how their Services hold accountable those who communicate discriminatory intentions, knowingly or not (chapter 7).
- Drill instructors' use of inappropriate sexual and gender-based language was discussed by new Marines in the week 11 focus groups. Male drill instructors were cited as using degrading gendered and sexual language, most often with or around male recruits. Male

recruits felt this motivated them, casting the jokes as a moment of levity during the challenges of recruit training, and understood them to be a bonding activity shared by men (chapter 8).

Focus groups:

- Male drill instructors and male recruits have developed a concrete understanding that it is wrong to use sexually explicit and derogatory gender-based language around women, yet what is strikingly absent in these discussions is any acknowledgment of its inappropriateness in the Marine Corps as a whole. Male drill instructors and recruits consciously describe how they must alter what they say when they are around women in the Marine Corps, yet there is no verbal recognition that this language goes against the standards of conduct, sexual harassment policies, or core values and tenets of the institution at large (chapter 4).

Ethnographic observations:

- The Air Force and Coast Guard offer multiple best practices for enforcing clear accountability policies that reinforce equity and trust in the training environment. The Air Force employs a progressive discipline system when trainees violate or do not meet the standards set at basic training. The Coast Guard offers an effective demonstration of how Services can hold their recruits accountable by clearly setting rules and standards when recruits arrive at basic training and following through swiftly should they choose to violate those rules and standards (chapter 6).

Interviews with participants who possess alternate views:

- Participants commonly expressed the belief that the Marine Corps is attending relatively carefully to logistical issues in gender integration but not enough to cultural issues. One issue raised by the participants is that they don't feel the Marine Corps is giving enough attention to language used in training, terms used by drill instructors, the ways male and female recruits can be pitted against each other, and so on (chapter 5).
- Several participants discussed language used by drill instructors that might lead recruits to view female recruits as inferior to male recruits. Participants noted that drill instructors have often been strong advocates for gender integration and gender equity, but also that drill instructors do not tend to have social science educations, training in gendered language and its consequences, and not always a full understanding of what sexual harassment really is. Participants thus saw drill instructor training as crucial; that drill instructors be trained to not use gendered language, to identify biases, and to recognize the value of gender integration (chapter 5).
- Participants also saw little things that highlight elements of culture such as masculinity as being important and accumulating during training (such as in gender separation and associated messages). Additionally, because loyalty is another important element of Marine culture, participants noted that few speak up about issues related to negative

treatment of women, sometimes because they don't believe leaders in fact want change (chapter 5).

- Participants also discussed cultural challenges to increased gender integration. These included that changes need to go beyond just increasing the extent to which male and female recruits train alongside each other. Among the issues that participants feel need attention are the vetting and probing of incoming male recruits and drill instructors for biases along with changes to imagery, uniforms, gear, ditties, and so on (chapter 5).

→ **Recommendation:** Replace gendered identifiers (e.g., “sir,” “ma’am”) in the primary salutation or response to drill instructors with gender-neutral language such as “drill instructor,” “senior drill instructor,” “senior,” “DI,” or “SDI.”

Ethnographic observations:

- Completion of the Crucible marks a defining moment in the transformation process. Recruits have earned the privilege to be a Marine. The receipt of the Eagle, Globe, and Anchor at the end of the Crucible marks the personal end of the transformation, a moment where every recruit knows they've given their all and achieved something only “The Few, The Proud” are able to. They can now address their drill instructors by their rank rather than as sir or ma'am, look their drill instructors in the eye, and finally resume referring to themselves in the first person, saying “I” rather than “this recruit” (chapter 4).
- The Army, Navy, and Coast Guard effectively de-emphasize gender in an integrated environment by using nongendered identifiers to refer and respond to their drill instructors and enlisted training cadre. Instead of saying “ma'am” or “sir,” recruits in these Services refer to their drill instructors using their ranks or roles followed by their last names. Employing gender-neutral identifiers eliminates the possibility of misgendering drill instructors, which can unintentionally offend or cause discord. By teaching recruits to use gender-neutral identifiers for their drill instructors, Services underscore the importance of respecting authoritative figures regardless of gender (chapter 6).

H. Recruit Experience Recommendations

→ **Recommendation:** Build an additional competitive element for series or companies to work toward to facilitate drill instructor and recruit investment in a shared identity beyond the platoon.

Ethnographic observations:

- Competition is a deliberate strategy to motivate recruits to continually improve their performance as they achieve each milestone toward becoming a Marine. A competitive element is built into every aspect of recruit training—from inspections to physical fitness to the acquisition of academic knowledge—serving as an omnipresent reminder that “good enough” never is. To be a Marine is to be the very best (chapter 4).

- While competition in the recruit training environment fuels motivation and drive, it can also contribute to unhealthy dynamics where platoons and drill instructor teams pit themselves against one another, even within the same company. With platoons organized by gender and competition based around platoons, competition can morph into claims of gender superiority. Recruits and drill instructors relayed instances where they felt this occurred or anticipated it occurring. Without careful attention and oversight, the lines of healthy competition can easily be crossed in competitions between platoons with recruits of the opposite gender. Competition can be used as a guise to distance or “other” female platoons and drill instructors in a way that runs counter to broader Service integration goals (chapter 4).
- The Coast Guard’s pennant program serves as a best practice example. During Coast Guard recruit training, companies (i.e., platoon equivalents) can earn pennants for completing certain tasks or events. Companies only earn the “Coast Guard pennant” if they earn all eight pennants during their training cycle—a rare but celebrated accomplishment. Something similar could be instituted by the Marine Corps, encouraging companies to work to earn pennants throughout the training cycle with the ultimate goal of earning a Marine Corps pennant as a company. Pennants could be based on the company meeting an established high standard for a particular training event (e.g., company average score for the CFT must be above a certain number) or the number of platoons who cross a threshold of excellence during a training event (e.g., at least four platoons must demonstrate a certain qualification score on the range). This type of competition would introduce a shared competitive element connecting recruits across platoons and uniting the company in pursuit of a tangible, common goal while still maintaining the traditional platoon-based competition (chapter 11)
- Another example of shared competition is the Navy’s division flags. Similar to the Marine Corps, Navy divisions compete against one another in certain training events; however, multiple divisions can earn the event flag if they exceed a certain standard. For instance, all divisions with academic test scores above a certain level will earn a flag for their division. This type of competition creates competitive motivation oriented to a standard of excellence while preserving a visual competitive element between divisions (e.g., displaying the flags they have earned) (chapter 11).

→ **Recommendation: Develop or task recruit leadership positions to aid drill instructors with recruit accountability checks when forming gender-integrated units.**

Ethnographic observations:

- Out of all the Services, the Marine Corps places the least amount of responsibility on its recruits in platoon leadership positions. This situation is largely because the Marine Corps transformation process places primacy in the authority and control of the drill instructor to develop discipline and instantaneous obedience to orders. However, the Marine Corps could use recruits as another organizing or accountability tool. For example, guides, squad leaders, or fireteams could support their drill instructors in their administrative and accountability processes to ensure the correct recruits form into a gender-integrated training unit and are back with their platoon upon completion. The

Marine Corps should use the Army, Navy, Air Force, and Coast Guard as resources to identify other best practices for recruit accountability and tracking when forming gender-integrated training units (chapter 11).

I. Female Population Recommendations

→ **Recommendation: Increase the number of female personnel at MCRD San Diego (training cadre and leadership) while growing female drill instructor and recruit population to fulfill NDAA mandate.**

Ethnographic observations:

- As it is building the female drill instructor population at MCRD San Diego, the Marine Corps should also seek to increase the number of female leaders, training cadre, and other personnel at the Depot. This expansion would provide male recruits additional exposure to female leadership through key positions such as chief drill instructor, 1st sergeant, series commander, company commander, and other battalion and regiment leadership roles (chapter 11).

Interviews with participants who possess alternate views:

- Additionally, they generally discussed the importance of women being represented in leadership positions if training is said to be gender integrated (chapter 5).
- Participants saw it as especially important that there are more women in leadership positions, particularly as drill instructors (chapter 5).

→ **Recommendation: Increase efforts to recruit women into the Marine Corps.**

Service demographics:

- Among all the Services, the Marine Corps has the smallest percentage of female active-duty members, at 8.9 percent.²⁰² Comparatively, the Air Force has the highest percentage of women on active duty, at 21.1 percent, followed by the Navy (20.4 percent), Army (15.5 percent), and Coast Guard (15 percent) (Department of Defense, 2021; Thiesen, 2021). The Marine Corps increased its percentage of active-duty women from 7.7 percent in 2015 to 8.9 percent in 2021 and is seeking to recruit and retain a more representative force by following its diversity and inclusion plan and talent management 2030 strategic vision (USMC, 2021a, 2021e). Gender integration efforts are made exponentially more difficult with such a small population of women for two reasons: (1) most men will continue to have an all-male training experience and (2) fewer women in the population creates a strain on the Service to produce an adequate number of female drill instructors each year (chapter 4).

²⁰² Women comprise 9.0 percent of enlisted active-duty members in the Marine Corps.

Service leader, training cadre, and drill instructor interviews:

- With the exception of the Coast Guard, all of the Services noted they are “*are always hurting for females*” in the drill instructor role, in the words of an enlisted male Navy training cadre member. Female representation in leadership is important to all Services, and adequately staffing their female drill instructor populations is a challenge. The paucity of women in the Services as a whole and of women who possess the physical and occupational readiness to be a drill instructor in particular has significant personal and professional repercussions for female drill instructors. Service leaders interviewed from the Marine Corps, Air Force, Navy, and Army²⁰³ reported an urgent and critical need for more female drill instructors. Each Service falls short of desired staffing levels of female drill instructors at its recruit training locations. While all value exposing as many recruits as possible to female leadership and authority in this crucial stage, they lack the personnel to fully manifest that value (chapter 7).

Interviews with participants who possess alternate views:

- Although participants expressed different perspectives on how women should be represented in training, they all recognized that it’s a complex issue without easy solutions. By and large, participants were not willing to work with an assumption that female representation in the Marine Corps must stay at about 10 percent.²⁰⁴ They thought it was necessary for the Corps to recruit more women, to create better models of gender integrated training, and to ease the pressures on the female drill instructor pool. Participants noted that as long as the Marine Corps is about 90 percent men and 10 percent women, there will always be male-only spaces and always be pressures on women who are drill instructors. Participants also noted that women make up a higher percentage of the population eligible for the Marine Corps than do men and that increasing the number of women recruited would increase the quality of the force. Although participants felt that 10 percent women is too low, most did not have a magic number. One did note from the research literature that getting to 15 percent women should have significant positive returns (chapter 5).
- Participants saw it as especially important that there are more women in leadership positions, particularly as drill instructors (chapter 5).

J. Physical and Human Performance Recommendations

→ **Recommendation: High initial workloads coupled with injuries rates and decrements in strength and power performance - warrants incorporation of a periodized approach to physical training which emphasizes progression and proper technique development**

Findings from current study

²⁰³ Army Service leaders expressed a need for more female drill sergeants across the Service. Locally, drill sergeants in Fort Jackson felt they no longer faced this issue at their Basic Combat Training location.

²⁰⁴ Currently, women comprise 8.9 percent of the active-duty personnel in the Marine Corps (Department of Defense, 2021).

During this period, recruits cover around 14 km a day, expend ~4,000 calories, and sleep an average of 6 hours a night with the goal of optimizing physical performance levels. All three gender integration models studied experienced the greatest workload period during the first phase (week 2) of the training cycle which was followed by declining workloads at week 7/8 and week 11. This occurred in conjunction with several decrements in strength and power performance metrics from week 2 to week 11.

The most physically demanding time for Marine recruits occurred during the first phase of training. Workloads tended to become reduced as training continued. This included declines in distance covered and steps from week 2 to week 7/8 which remained lower at week 11 in all gender integration models. Significant decreases in energy expenditure per kg body mass also occurred from week 2 to week 7/8 which continued to decline through week 11 for all models. Despite declines in workloads, resting cortisol values remained elevated, particularly in females, pointing to the cumulative nature of the training demands and lack of recovery from initial workloads. Although proximity of post testing to Crucible may have influenced outcomes, recruits still experienced declines in power and strength measures including concentric peak force and peak power. In addition, total sleep duration fell notably below recommendations for optimizing health and recovery, particularly in highly active populations. This may have also influenced the elevated cortisol values and hindered recovery.

There were also some notable sex differences apparent. Males tended to cover greater distances than females and this was further influenced based on the training model used. Importantly, female recruits who attrited reported a lower baseline quantity of strength training physical activity compared to female recruits who did not attrit. Females also reported a greater percentage of injury rates than males throughout recruit training. This potentially indicates the need for a more progressive approach to training in an effort to impact attrition and reduce injury risk.

Supporting Evidence

If workloads are progressed too rapidly without a sufficient physical capacity, an increased risk of injury may occur (Gabbett, 2016). Proper progression is essential so that recruits can adapt to handle the high training loads experienced during initial training. Appropriately applied training can lead to increased resiliency and optimized performance. While periods of intense training are necessary to provide an overload stimulus to maximize adaptations, reduced training periods may be incorporated into a training program to allow for adequate recovery and enhance adaptations. Under ideal conditions, this periodization process may help to improve performance. Whereas overload coupled with inadequate recovery may lead to unwanted underperformance, excess fatigue, and injury (Mujika I, Halson S, Burke LM, Balagué G, Farrow D, 2018). Combined with adequate sleep and nutrition which act to buffer the negative effects of increased training demands (Halsen SL, 2014), a periodized training approach may help to enhance performance and reduce the risk of injury.

→ **Recommendation: Potential relationship between attrition among female Marine Corps recruits and psychological resilience measured on the Connor-Davidson scale – further investigation recommended**

Findings from current study

Female recruits who attrited scored about 14 points lower on the Connor-Davidson Resilience Scale than female recruits who did not attrit (Attrited: 63.0 ± 18.5 , Did Not Attrit: 77.6 ± 12.3 ; Wilcoxon Rank Sum test, $p = 0.059$). While there was no statistically significant difference, the number of female recruits who attrited was very low ($N=5$), which likely resulted in low statistical power as well as skewed data. The impact of resilience on attrition in female recruits may have been masked by these factors.

Supporting Evidence

It has been reported that resilience to adversity is one of the eight primary factors that positively impacts Service member retention. There are several psychological factors associated with resilience, including hardiness, which is a mindset associated with resilience, good health, and high performance under stressful conditions. A greater level of resilience relates to a greater ability to cope with stressors and plays an important role in maintaining physiological performance (Leon-Guereno, Tapia-Serrano, & Sanchez-Miguel. 2020; Nindl et al., 2018). Military personnel encounter numerous cognitive, emotional, social, and physiological stressors and an inability to cope will likely impact performance and can be detrimental to the individual, team, or mission (Nindl et al., 2018). Previous research has demonstrated that having a hardier mindset is associated with successful training completion in a variety of military populations. Further, hardiness was a significant predictor of attrition from Cadet Basic Training at West Point. In a large cohort of male Marine recruits, those with higher measures of positive hardiness also demonstrated higher measures of grit, grit ambition, sensation seeking, training expectations, positive ways of coping, physical & mental health, fitness scores, and lower measures of depression. In addition, research in military populations using the CD-RISC found that higher levels of resilience were related to greater success in stressful environments, such as basic training (Ledford et al., 2020). In athletic populations, greater resilience has been found to relate to fewer injuries (Leon-Guereno et al., 2020).

→ **Recommendation: Association between previous quantity of strength training in female Marine Corps recruits, and attrition and preservation of neuromuscular function – further investigation recommended**

Findings from current study

CMJ concentric peak force and CMJ relative concentric peak force significantly decreased from week 2 to week 11 in the three cohorts of male recruits, and in the female recruits in the Integrated Company. The observed declines in performance may be indicative of acute neuromuscular fatigue following participation in the Crucible just prior to week 11 testing. In contrast, female recruits in the Series Track demonstrated no significant changes in performance between these two time points. It is interesting to note that the female recruits in the Series Track reported significantly higher baseline strength training physical activity than female recruits in the Integrated Company (31.6 ± 30.0 METhr/wk vs. 20.0 ± 25.9 METhr/wk; independent samples t test, $p = 0.007$). Also, Female recruits who attrited reported significantly less strength

training activity than female recruits who did not attrit (Attrited: 2.6 ± 5.8 METhr/wk, Did Not Attrit: 26.9 ± 28.8 METhr/wk; independent samples t test, $p < 0.001$).

Supporting Evidence

There is a strong supporting evidence for the interrelationship between strength training activity and neuromuscular function, musculoskeletal injury risk, improved performance, and attrition. Strength training programs and/or higher levels of strength, specifically in females, has been demonstrated to be related to: improvement in performance on strength assessments, including occupational/combat-related tasks; and reduced risk of MSI. Previous research has demonstrated that lower strength/fitness levels and MSI during recruit training are related to attrition. It then follows that strength training programs prior to entry level training have the potential to improve muscle characteristics, thereby improving performance of occupational tasks and mitigating MSI risk, positively impacting attrition.

Strength training programs, ranging from 14-weeks to 6-months, have been demonstrated to increase muscular strength and endurance in females. These programs have been found to significantly decrease sex-differences in physical performance; improve performance in lifting and occupations tasks; and increase the percentage of women qualifying for “heavy” and/or “very heavy” Military Occupational Specialties from 24% to 78%. The National Strength and Conditioning Association’s second Blue Ribbon Panel of Military Physical Readiness determined muscular strength and power as the most critical fitness metrics required to successfully accomplish common military tasks (Nindl et al., 2015a; Nindl et al., 2015b) and excel in battlefield performance (Friedl et al., 2015). Further, the summary findings of the 2014 US Department of Defense Health Affairs Women in Combat symposium recommended the inclusion of resistance training, emphasizing strength and power development, to successfully integrate women into combat-centric MOSs.

Given the study was an observational study, and not designed to continuously monitor training volume during recruit training, differences in training volume between cohorts during recruit training may also potentially explain these results.

→ **Recommendation: High relative percentage of hip injuries in female Marine Corps recruits during gender-integrated training – investigation of causes and customized injury mitigation programs recommended**

Findings from current study

In medical chart reviewed injuries, the most frequent body part affected by injury among the female recruits was the hip among Series Track recruits (26.5% of injuries) and Integrated Company recruits (37.1%). In contrast, the most frequent body part affected by injury among the male recruits was the knee among Series Track recruits (32.4% of injuries) and Integrated Company recruits (50.0%).

Supporting Evidence

Previous studies have shown relatively higher percentage of injuries affecting the hip in women as compared to men, when training in sex-integrated units. A study of the patterns of musculoskeletal injuries among women and men during the United States Marine Corps Ground Combat Element Integrated Task Force work-up and assessment phases in sex-integrated units showed that the most frequent sub-location for injuries was the hip (24%) in women and foot/toes (26%) in men (Lovalekar M, *et al.*, 2020).

These differences in anatomic distribution of injuries between women and men when training in sex-integrated units may be explained by differences in biomechanical as well as physical characteristics between the sexes.

Appendix R: References

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