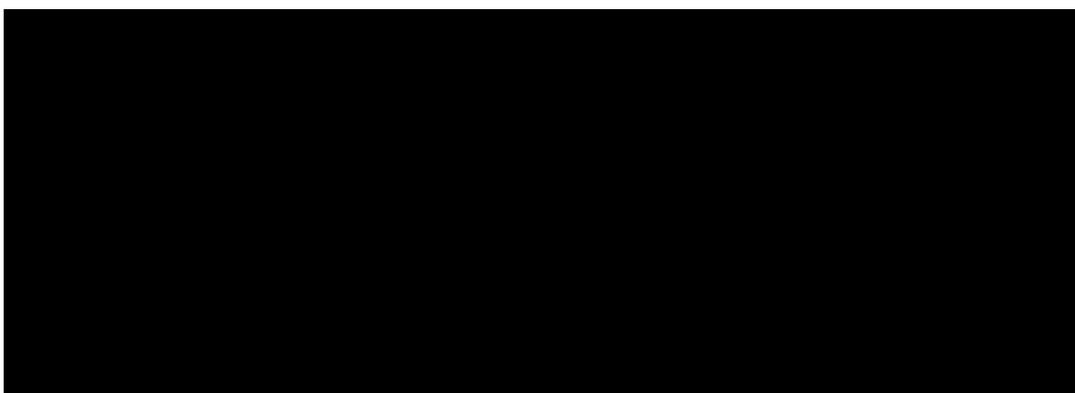


A Quick-Look Analysis of the GCE ITF Baseline Climate Survey

January 2015





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Photography Credit: U.S. Marine Corps [REDACTED] of Delta Company, Infantry Training Battalion (ITB), School of Infantry-East (SOI-E), kneels during an accountability drill after completing a 20-kilometer hike at Camp Geiger, North Carolina, Oct. 28, 2013. Delta Company is the first company at ITB with female students as part of a measured, deliberate, and responsible collection of data on the performance of female Marines when executing existing infantry tasks and training events. The Marine Corps is soliciting entry-level female Marine volunteers to attend the eight-week basic infantryman and infantry rifleman training courses at ITB. (U.S. Marine Corps photo by [REDACTED], Combat Camera, SOI-E/Released)

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January 2015

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Abstract

The Commandant of the Marine Corps has tasked the Ground Combat Element (GCE) Integrated Task Force (ITF) to train and operate as an integrated combat arms unit. Dedicated research teams are observing the unit's performance in an operational environment, conducting physiological testing, and collecting survey data on Marine volunteers' experiences and opinions regarding morale, readiness, and unit cohesion. The combined results of these separate research efforts will provide information to Marine Corps leadership to inform gender integration policy decisions. This quick-look analysis provides CNA's initial analysis of the GCE ITF Baseline Climate Survey fielded in November 2014. The survey informs a variety of issues, with a particular interest in intangibles that cannot be measured in other ways. Intangibles include motivations to join the Marine Corps and to volunteer for the GCE ITF, and Marines' attitudes and opinions regarding integrated units, especially with regard to morale, readiness, and unit cohesion.

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Executive Summary

The Ground Combat Element Integrated Task Force (GCE ITF) is a special purpose unit designed by the Marine Corps Operational Test and Evaluation Activity (MCOTEA) to determine if female Marines can effectively serve in ground combat units and ground combat military occupational specialties (MOSs). During the tenure of the task force, MCOTEA is collecting and analyzing data on individual and unit performance of male and female Marine volunteers to inform Marine Corps leadership decisions on gender integration of previously closed units and MOSs.

CNA is supporting MCOTEA's experimental assessment plan for the GCE ITF by developing and fielding three opinion/climate surveys at different times over the duration of the task force: November 2014 (Baseline), February 2015, and during May and June 2015, when volunteers return to Camp Lejeune as they complete the GCE ITF's "test" deployment. This report provides a quick-look analysis of the initial GCE ITF climate survey. In November 2014, CNA analysts invited 100 percent of then-current GCE ITF volunteers to take the baseline GCE ITF climate survey: 95 percent agreed to take the survey; 5 percent declined.

Who are the GCE ITF volunteers?

GCE ITF volunteers' paygrades range from E2 through E5. Female volunteers are slightly skewed toward the higher noncommissioned officer paygrades compared with male volunteers, which implies that female Marine volunteers are slightly older, on average, than the men. Overall, 98 percent of GCE ITF volunteer survey respondents meet the Marine Corps' height and weight standards. All of the men can do at least three pull-ups, while 6 percent of the women did not meet this requirement.

Men participating in the GCE ITF are, on average, better marksmen than the women with a slightly higher percentage of them scoring in the expert category in both rifle and pistol marksmanship scores, although these differences are not statistically significant. Furthermore, there does not appear to be a significant difference in cognitive ability between male and female GCE ITF Marine volunteers: Scores on the Armed Forces Qualification Test and the General Classification Test are fairly similar for the two groups. Finally, the data on GCE ITF participants indicate that male volunteers are more likely women to have deployment experience.

What motivated Marines to volunteer?

The survey results indicate a diversity of motivation among volunteers. We find that there are some GCE ITF Marine volunteers who are *opposed* to women in ground combat units (at least 10 to 15 percent of the men and about 4 to 7 percent of the women). There also are volunteers who support having women in ground combat units. This opinion mix helps to make the GCE ITF a realistic test because those kinds of perspectives and motivations will exist in ground combat units if or when the USMC leadership opens up those units to female Marines. In addition, there are volunteers who are motivated and hope to see female Marines *succeed* in ground combat units—about 20 percent of men and 75 percent of women.

What are the key concerns of volunteer Marines?

GCE ITF Marine volunteers are distributed along the continuum of support for and opposition to gender integration in ground combat units and PMOSs. Among those who are opposed, the key concerns are that unit cohesion and combat effectiveness will decrease and that there will be increases in allegations of sexual assault and sexual harassment. Among female volunteers, we found that there were concerns of whether they have the requisite strength for the combat arms positions and the physical resiliency to maintain combat tempo. An overarching concern among both male and female volunteers was a commitment to standards and a fair evaluation of gender integration in combat units and PMOSs.

Will integration affect recruiting and retention?

Recommending Marine Corps service to others and a preference to remain in the Corps in the future are measures of the value that Marines place on their time in service and an overall sense of morale.

Currently, most GCE ITF Marine volunteers plan to continue their service in the Marine Corps, and most will recommend service in the Marine Corps to either a male or a female relative or close friend; female Marines tended to be more enthusiastic than male Marines on both of these measures. At the outset, these data *are suggestive* that the Marine Corps will not experience quantitative changes in recruiting and retention under gender integration.

What are the perceived trade-offs when women serve in combat roles?

We applied principal components analysis (PCA) to determine gender-specific response patterns regarding potential outcomes and concerns associated with gender integration of ground combat units and combat arms PMOSs. With regard to the potential outcomes resulting from gender integration, the first principal component identifies a spectrum of support for women in combat roles. Subsequent components identify trade-offs between increases in opportunities for women and other outcomes. We found that, regardless of whether volunteers in the GCE ITF support or do not support women in combat roles, the volunteers recognized trade-offs between increased opportunities for women and (1) unit cohesion, (2) a risk to women in a combat role, and (3) a risk to the opportunities of male Marines. Both male and female volunteers were distributed across each of these spectrums, though there was a statistically significant tendency for the female Marines to be less concerned about the additional risks faced in combat situations.

Similarly, for the concerns that female volunteers had, the first component indicates a measure of confidence versus anxiety regarding their service in ground combat units or PMOSs. Female volunteers tended to be *unconcerned* about being the only woman in a unit, fitting in generally, and having to suppress their femininity. Subsequent components indicated trade-offs between personal concerns (privacy, hygiene, level of comfort reporting harassment) and external concerns (support from family and friends) and between external sources of support and job competency.

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Glossary

AFQT	Armed Forces Qualification Test
CFT	Combat Fitness Test
CMC	Commandant of the Marine Corps
DOR	Drop on Request
EAS	End of Active Service
GCE ITF	Ground Combat Element Integrated Task Force
GCT	General Classification Test
HQMC	Headquarters Marine Corps
IRB	Institutional Review Board
ITF	Integrated Task Force
MCFIP	Marine Corps Force Integration Plan
MCOTEA	Marine Corps Operational Test and Evaluation Activity
MCTFS	Marine Corps Total Force System
MOS	Military Occupational Specialty
NJP	Non-Judicial Punishment
PCA	Principal Components Analysis
PFT	Physical Fitness Test
PMOS	Primary Military Occupational Specialty
POW	Prisoner of War
RECC	Reserve End-of-Current Contract
SecDef	Secretary of Defense
SMCR	Selected Marine Corps Reserve
UDP	Unit Deployment Program
YOS	Years of Service

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Introduction

In January 2013, the Secretary of Defense (SecDef) rescinded the 1994 Direct Ground Combat Definition and Assignment Rule. These actions shifted to the Service Chiefs the responsibility to open combat arms opportunities to women and to justify any military occupational specialties (MOSs) or billets that are to be closed to them.

In response to the SecDef's actions, the Marine Corps developed the Marine Corps Force Integration Plan (MCFIP) to investigate the possible expansion of occupational and assignment opportunities available to female Marines. A key line of effort for MCFIP is the establishment of a Ground Combat Element (GCE) Integrated Task Force (ITF) consisting of volunteer male and female Marines. Some female Marine volunteers have been trained in combat arms MOSs and others are assigned to the unit in their original non-combat-arms MOSs. The Commandant of the Marine Corps (CMC) has tasked the GCE ITF to train and operate as an integrated combat arms unit. Dedicated research teams will observe the unit's performance in an operational environment; collect survey data on Marine volunteers' experiences and opinions regarding morale, readiness, and unit cohesion; and perform physiological testing. The combined results of these separate research efforts will provide information to Marine Corps leadership to inform gender integration policy decisions.

The GCE ITF

On February 20, 2014, the CMC authorized the formation of the GCE ITF, and the Assistant CMC assigned the design and conduct of the GCE ITF's experimental activities to the Marine Corps Operational Test and Evaluation Activity (MCOTEA).

Mission

The Marine Corps has established the GCE ITF and is conducting research on its experiences in order to collect data regarding the integration of female Marines into combat arms units and MOSs. According to the MCFIP campaign plan [1], the mission of the GCE ITF is as follows:

Conduct an experiment to assess the physical requirements associated with performing individual and collective tasks for

previously closed MOSs and open MOSs in closed units and enable research and analysis on individual and unit performance including moral and cohesion in order to inform CMC decisions on integration of female Marines into previously closed MOSs and units.

ITF structure¹

MCOTEA designed the task force to consist of approximately 320 Marine volunteers—both male and female Marines. In addition, there are 255 directed-assignment billets; among these are Marines who are filling GCE ITF leadership positions at various levels across the unit.

Fully qualified volunteers met the following qualifications:

- Active-duty Marine or a drilling member of the Selected Marine Corps Reserve (SMCR) on active duty
- Paygrade of E5 or below
- Sergeant with less than 9 years of service (YOS) as of September 1, 2014
- A drilling member of the SMCR eligible and available for active-duty operational support orders funded by Headquarters Marine Corps (HQMC) beginning on or around June 1, 2014, through September 30, 2015
- Having an end-of-active-service (EAS)/reserve-end-of-current-contract (RECC) date after October 1, 2015
- Capable of completing a third-class male physical fitness test (PFT) (age 17 to 26) if female and volunteering for a ground combat MOS²

Marine volunteer participation in the research consists of a 12-month period with (1) an individual training phase for female volunteer participants for ground combat primary MOS (PMOSs), attending the relevant ground combat MOS school, (2) a unit training period, and (3) an experimental event period.

The female Marine volunteers were first sent to ground combat MOS schools and then assigned into an integrated (male and female) combat arms unit. In addition, in support of establishing gender-neutral occupational standards for open, non-ground-

¹ We obtained information on the GCE ITF's structure from [1].

² Although Marines are required to take the PFT and the combat fitness test (CFT) each year, the volunteer qualifications did not include a CFT criterion.

combat MOSs in ground combat units, the GCE ITF is measuring gender integration effects on the provisional rifle company mission.

GCE ITF Marine volunteers can “drop on request” (DOR) at any time and are not required to specify a reason for their decisions. Marine volunteers also can be removed from the research due to injury, other medical reasons, or legal reasons. Because attrition was expected, MCOTEA selected more Marine volunteers for the GCE ITF than needed. In Table 1, we show MCOTEA’s starting number of randomly selected volunteers by unit membership and gender. As of November 2014, almost all volunteers had checked into the GCE ITF and workup training had begun. There were 369 Marine volunteers—275 men and 94 women—present and accounted for at the unit; 17 Marine volunteers—9 men and 8 women—had not yet reported, and the remaining had DORed.

Table 1. MCOTEA’s initially targeted GCE ITF volunteer population by occupational assignment and gender

GCE ITF occupational assignment	Total Marine Volunteers	
	Female	Male
Infantry	127	214
Provisional infantry	23	53
Total	150	267

Source: Approved Institutional Review Board Document. May 2014 Revision #1. *Ground Combat Element Integrated Task Force Experimental Assessment Plan*.

Analyzing intangibles with surveys

The potential advantages and disadvantages of integrating women into combat MOSs and units are diverse [2-4]. One approach is to distinguish between tangible and intangible factors. Examples of tangible factors include whether members of the unit have the strength to perform the mission promotion rate changes, and logistical requirements. Tangible factors are relatively easy to define and measure, although collecting data on them may be a challenge.

Intangible factors are difficult to measure and often escape precise definition. For this analysis, we group intangible factors into those that apply to the individual, such as attitude or perception, enthusiasm, or motivation, and those that apply to a group, such as unit cohesion or operational momentum. The division is not completely distinct because certain factors, such as morale, apply to both an individual and a group and because certain individual factors, such as perceptions, both contribute to

and are highly dependent on the mix of opinions within a group and the backgrounds and biases of its members.

There are some indirect metrics to assess intangible factors. For example, the number of non-judicial punishments (NJPs) or an increase in divorce rates can be symptomatic of poor discipline or morale. But indirect methods are usually based on episodic events that require a long time period for comparison. The established method to measure and analyze intangible factors, at a particular point in time, is using opinion or climate surveys.

Issues addressed

CNA is supporting the Marine Corps' GCE ITF research effort by developing and fielding three opinion/climate surveys at different times over the duration of the task force. CNA will analyze survey responses for insights into intangible factors associated with mission success that may be influenced by the possible integration of women into combat units and MOSSs. The opportunity to participate in GCE ITF climate surveys will be offered to all Marine GCE ITF volunteers in the GCE ITF at the time CNA fields each survey. In addition to survey data collection and analysis, CNA will conduct focus groups and structured interviews with GCE ITF volunteers and assigned staff members following their return to Camp Lejeune from the MCOTEA research phase.

Our GCE ITF survey will inform a variety of issues, with a particular interest in intangibles that cannot be measured in other ways. For this initial baseline survey analysis, we focus on the following:

- What motivated Marines to volunteer for the GCE ITF? What concerns and hopes do volunteers have about the GCE ITF at the beginning of the task force?
- What are Marine volunteers' military career plans? What factors are most important to volunteers with regard to their military career plans? Is gender integration a top factor?
- What are male and female Marine volunteers' initial attitudes and perceptions regarding gender integration?
- Do these initial attitudes and perceptions regarding gender integration vary by their previous Marine Corps experiences, such as deployment history and recent assignments in which the participant worked on a regular basis with male and female Marines?
- Do female Marine volunteers believe that they possess the physical abilities to meet the demands of their GCE ITF positions? Do male Marine volunteers

believe that female Marine volunteers have the physical abilities to meet the demands of their GCE ITF positions?

- Do female Marines feel accepted by their peers in the GCE ITF? Is there variation in perceived acceptance levels by paygrade and MOS?
- Are Marine volunteers inclined to encourage others to join the Marine Corps? Does their willingness to support Marine Corps recruiting efforts vary by volunteers' gender or by the potential recruits' gender?
- Is gender integration of the force related to a Marine volunteer's willingness to recommend service in the Marine Corps to others?

We will address further experiences and perspectives in the middle and final GCE ITF surveys and related documents, along with how Marines' opinions have changed over time. In addition, we will look for emergent trends in overall response patterns.

Organization of this report

The purpose of this report is to document methods and initial results from the baseline GCE ITF survey. The first section describes the survey: the methodology of developing questions, review of the protocol by the human subject research institutional review board (IRB), fielding the survey to GCE ITF volunteers, and collecting and analyzing the baseline survey data.

The next section uses the baseline survey data, along with information about Marines from the demographic data stored in the Marine Corps Total Force System (MCTFS) to characterize GCE ITF Marines. If GCE ITF Marines are representative of Marines in ground combat units and MOSs, this provides the inference to conclude that the GCE ITF experiment results are applicable to other ground combat units.

Subsequent sections focus on intangible factors. First, we analyze responses to survey questions intended to measure GCE ITF volunteers' motivations—why they joined the Marine Corps, why they volunteered for the GCE ITF, and what they think or hope the future holds for them. Next, we look at the volunteer Marines' perceptions about the integration of women in combat units and MOSs, using a form of statistical analyses to highlight different group-level trends within the larger volunteer population.

Since this is an interim report, we do not report conclusions, but rather provide initial analysis for thought and consideration as the GCE ITF progresses.

Survey Approach³

Survey development and delivery

CNA developed three surveys for GCE ITF Marine volunteers to be fielded at distinct times: a baseline survey once all Marines have reported to Camp Lejeune (“Baseline,” November 2014, this report), a mid-task force survey following the workup phase but before departure for the experiment phase (“Mid,” anticipated February 2015), and a final survey on completion of the experiment phase and the Marine volunteers’ return to Camp Lejeune (“Final,” anticipated May/June 2015).

The surveys collect information on volunteers’ motivations, attitudes, perceptions, and opinions with regard to gender integration and unit readiness, cohesion, and morale throughout the GCE ITF. We will use the three surveys to assess changes in Marines’ attitudes and opinions about gender integration in the GCE ITF and their perceptions of gender integration’s effects on readiness, unit cohesion, and morale. The Baseline survey (see Appendix A) also includes questions regarding volunteers’ motivations to join the GCE ITF; the Mid and Final surveys include questions to assess their experiences in the GCE ITF that are not in the Baseline survey.

For the Baseline, the CNA study team administered the survey to GCE ITF Marine volunteers in mid-November 2014 at the GCE ITF command building at Camp Lejeune, North Carolina. We describe the standardized method that we developed to administer the survey in Appendix B.

³ Requesting perceptions and opinions using a climate survey is considered human subjects research. Furthermore, military personnel are considered a population of particular concern because they are at risk of coercion. CNA submitted its research protocol—including survey delivery, data collection, data storage, and analysis approach—to its IRB, Western IRB, and obtained approval to undertake this research.

Participation rate

In November 2014, the CNA study team members administered the Baseline survey to all GCE ITF volunteers who were at the unit at that time: 369 Marine volunteers in total—275 men (75 percent), and 94 women (25 percent). Of these, 19 participants declined to take the survey (5 percent). Across genders, 95 percent of volunteers responded to the survey questions.

After completion of survey administration, the CNA study team verified that all Marine volunteers had had the opportunity to take the survey. The team did this by cross-referencing the list of Marines who had been offered the opportunity to respond to the survey with the unit’s GCE ITF volunteer roster. All absent were Marine volunteers who either had dropped on request (DORed) or had not yet joined the unit (see Table 2).⁴

Table 2. GCE ITF Marine volunteers by gender and Baseline survey participation status

GCE ITF occupational assignment	Total Marine Volunteers		
	Females	Males	Total
Took the Baseline survey	90	260	350
Declined survey participation	4	15	19
Total Marines who made a survey participation decision	94 (95.6%)	275 (94.5%)	369 (94.8%)
Drop on request	16	6	22
Not yet reported to unit	8	9	17
Total	108	300	408

Source: CNA comparison of MCOTEVA volunteer roster used to track participants during survey administration and GCE ITF unit volunteer roster, as of November 21, 2014.

We include all completed Baseline surveys in this analysis. For our analysis of volunteers’ backgrounds and demographic characteristics, we matched the

⁴ Additional Marine volunteers have DORed since the Baseline survey was administered, and we expect there to be further attrition.

completed Baseline surveys to MCOTEA's volunteers' database by GCE ITF identification number.⁵

Analytical approach

Over the course of this research, we will perform statistical analyses on relevant manpower data and quantitative and qualitative information collected via surveys and focus groups or interviews with GCE ITF participants. The purpose of these surveys is to evaluate GCE ITF perceptions, opinions, and attitudes as different points in time during their ITF assignment and to compare responses across time for any changes. The survey effort is not intended to facilitate course corrections or changes in GCE ITF's execution but rather to gauge Marine volunteers' attitudes and experiences over time. In particular, we caution against disseminating any interim findings to GCE ITF unit leaders, assigned staff, or volunteers, because doing so risks behavioral changes among GCE ITF participants that compromise the unit's natural progression of experiences and the validity of the final data.

In general, we use the following analytical approach. We describe survey responses using mean values or proportions, followed by a gender-based comparison. We note when male and female volunteers' response patterns were different and if the differences are statistically significant—that is, the differences are greater than expected by chance.

Most survey questions were closed-ended with check-box selections or multiple-choice options. For some questions, we included a free-text field in which respondents could type in their own responses. We reviewed and analyzed these write-in responses and, when appropriate, we incorporated them into existing response categories; otherwise, we created a new category. In addition, participants had the opportunity to provide free-text commentary on the GCE ITF. Our approved research protocol limits sharing these comments outside the study team members; however, we summarize them and use general versions as examples.

When a large number of responses were collected on a particular topic, we used a statistical technique called principal components analysis (PCA). PCA reduces large numbers of responses to a smaller set of component responses that capture the

⁵ Later in this research, we will not perform longitudinal analysis on Marines who attrite from the task force. Similarly, if Marines chose to decline responding to the baseline survey but choose to take a subsequent survey, their responses will be included in the subsequent analysis but cannot be used in longitudinal analyses.

variability of opinion in the surveyed group, but each component requires interpretation. Using this higher order analysis, we are able to identify patterns in intangible properties of the unit through the variety of responses—at times capturing themes of the surveyed population’s attitudes, opinions, and perceptions.

Implications and inferences from survey participation

Participation rates

The GCE ITF participation rate was 95 percent—a very high rate compared with other equivalent surveys, which are usually web or mail based [5]. This is partly a result of the GCE ITF S-3 (operations) staff’s efforts to ensure that all Marine volunteers reported at a scheduled day and time to a secure classroom environment monitored only by CNA study team members. Once there, each volunteer had the opportunity to take the survey or decline participation without any command influence. Some of the participation was likely explained by the Marine’s motivation and interest in the topic.

High voluntary survey participation also may serve as a measure of shared purpose and mission. A key to high participation rates is that participants believe that their responses or the analysis from their responses are required to improve a process or product [6-7]. This belief that responses will be used, along with some of the comments we saw in the free-text portions of the survey, suggest a high level of trust between the GCE ITF Marine volunteers and their leadership. It also suggests that Marine volunteers believe that their participation in the GCE ITF will assist Marine Corps leadership in its assessment of gender integration in combat roles.

Survey power and limitations

Intangible factors, such as unit cohesion and peer effects, are difficult topics to quantitatively analyze because the Marine Corps does not have established, objective measures of these characteristics. Yet, they are important group properties that can significantly affect a military unit’s fighting capability. We apply and will continue to use statistical methods and textual analysis on the survey data to draw out complex factors.

One concern in opinion surveys is that a sizable minority—or even a majority—of the population of interest declines to take the survey specifically because people have opinions that they do not wish to share [8]. Survey analysis methods assume that non-respondents are randomly distributed across the spectrum of opinions [9]; if

this form of self-selection is present, the survey results are not representative of the population as a whole, even if a majority takes the survey.

In fielding the GCE ITF survey, we were concerned that Marines strongly opposed to women in combat units would decline to take the survey leaving the opinions of Marines strongly in favor of women in ground combat units. If this were the case, then it would give the false appearance of participants who are overwhelmingly in favor of integration. However, because of the 95-percent survey response rate, we do not believe the survey sample population is selected towards those who strongly favor integration.

Our results are susceptible to actual survey item response bias, but this is true of all opinion surveys. We cannot determine if a large proportion of Marine volunteers participating in the survey chose to provide responses that do not reflect their actual opinions, and we cannot know how misrepresentation affects our findings. The diversity of responses, however, is evidence that many participants did not have reservations in expressing themselves along the entire spectrum of opinions. In addition, large numbers did respond with neutral sentiments that could be symptomatic of true neutrality or disinterest. Analytically it is not feasible to identify which of the two sentiments applies to a particular individual.

GCE ITF Volunteer Marines' Characteristics

Because of the GCE ITF's experimental design, the unit has a denser concentration of female Marines than the rest of the Marine Corps. Of the 353 GCE ITF Marine volunteers who took the survey, 263 were men (75 percent) and 90 were women (25 percent). In comparison, the overall gender distribution of enlisted Marines is approximately 93 percent men and 7 percent women. In later reports, we will explore how GCE ITF survey participants differ from the Marine Corps at large, but for now we concentrate on other important demographic, ability, and experience characteristics of the GCE ITF survey participants and how these characteristics differ by gender.

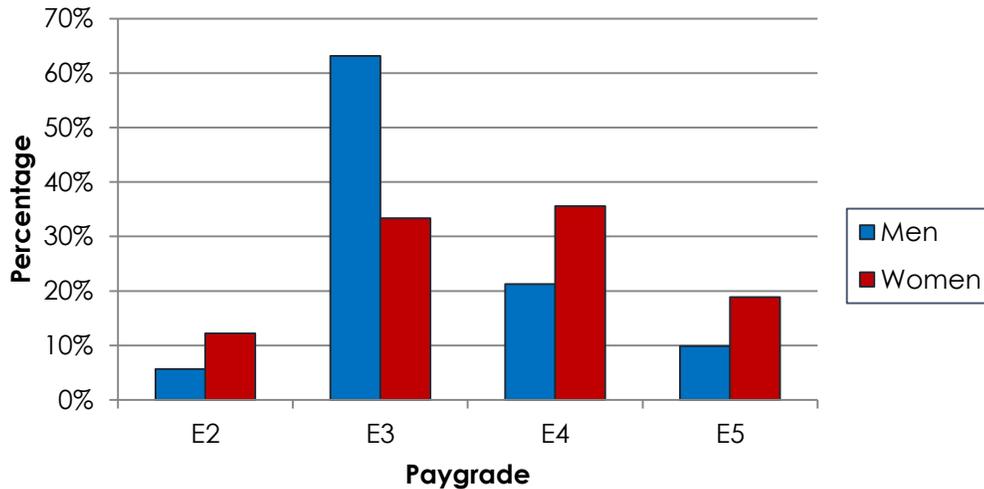
Demographics

To participate in the GCE ITF, Marines must be in paygrades E5 and below. Overall, 7 percent of the survey participants were in paygrade E2, 56 percent were in E3, 25 percent were in E4, and 12 percent were in E5. As seen in Figure 1, the paygrade distribution differs somewhat by gender. Female Marine volunteers are skewed to the higher GCE ITF eligible paygrades compared to the male GCE ITF volunteers. Because of the difference in the paygrade distribution between men and women, female GCE ITF participants are slightly older on average than male participants; the average ages of participants are 22.8 for women and 22.5 for men. This age difference between the male and female populations is not statistically significant.

Another important characteristic of GCE ITF volunteers is their physical fitness. Ninety-eight percent of GCE ITF participants met the Marine Corps' gender-specific height and weight standards. Although not statistically significant, men met the standards at slightly higher rates than women: 98 and 97 percent, respectively. Another physical fitness measure is the number of pull-ups the Marines were able to perform on their PFTs. To meet the volunteer eligibility requirements for ground combat PMOSs, GCE ITF participants were supposed to obtain, at least, a class 3 male PFT score. However, the women volunteers in the provisional infantry PMOSs were not required to meet the class 3 male PFT score benchmark. Roughly 6 percent of the female volunteers did not meet the 3-pull-up requirement, whereas all men

participating in the GCE ITF met the requirement. The women not meeting the 3-pull-up requirement were those in provisional infantry PMOSSs.

Figure 1. GCE ITF respondents' paygrade distribution by gender

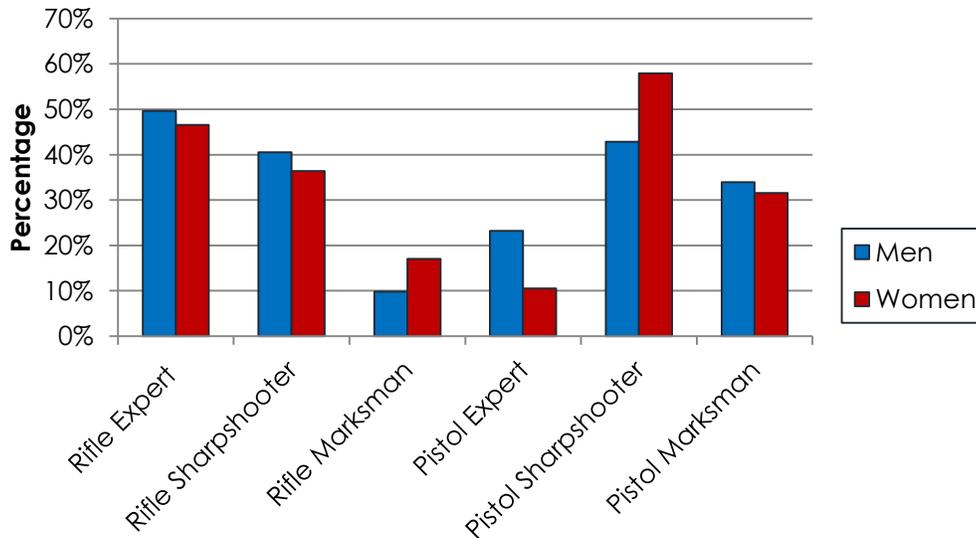


Source: CNA analysis of GCE ITF Baseline survey data.

We also examine both rifle and pistol marksmanship scores for GCE ITF survey participants. To be considered an expert in rifle marksmanship, a Marine must score between 305 and 350, while the pistol expert score is between 345 and 400. To be considered a sharpshooter in rifle marksmanship, one must score between 280 and 304, while the pistol sharpshooter score is between 305 and 344. To receive the score of marksman, the rifle score must be between 250 and 279, while the pistol marksman score is between 245 and 304. Figure 2 displays the percentage of men and women receiving both rifle and pistol scores in the expert, sharpshooter, and marksman categories, respectively. The difference between the percentage of men and women scoring as pistol and rifle experts is not statistically significant.

Finally, Armed Forces Qualification Test (AFQT) score is an important cognitive ability measure for the Marine Corps. The average AFQT score for GCE ITF participants was 60.4; the average female score, at 62.4, is slightly higher than the average male score of 59.7, however, they are not statistically significant. The average General Classification Test (GCT) score also differed slightly by gender, with men performing better on average than women with scores of 106.4 and 104.6, respectively, but again the differences are not statistically significant. Therefore, we find no evidence of cognitive ability differences in the men and women participating in the GCE ITF.

Figure 2. Rifle and pistol marksmanship categories by gender^a



Source: CNA analysis of GCE ITF Baseline survey data

^a To be considered an expert in rifle marksmanship, a Marine must score between 305 and 350, while the pistol expert score is between 345 and 400. To be considered a sharpshooter in rifle marksmanship, a Marine must score between 280 and 304, while the pistol sharpshooter score is between 305 and 344. To receive the score of marksman, the rifle score must be between 250 and 279, while the pistol marksman score is between 245 and 304.

Marine Corps experience

Because GCE ITF participants are required to be in the more junior paygrades, around 4 percent of volunteers had just completed training and had not yet reported to their first unit. This statistic was consistent for both men and women. Marines who have not yet reported to their first duty stations will have limited experience working with other Marines and will not have deployed. In this section, we explore differences in Marines' experiences for those who had previously worked at other Marine Corps duty stations.

Experience in most recent unit

The male and female volunteers participating in the GCE ITF are coming from different types of previous units; the men are likely coming to the GCE ITF from

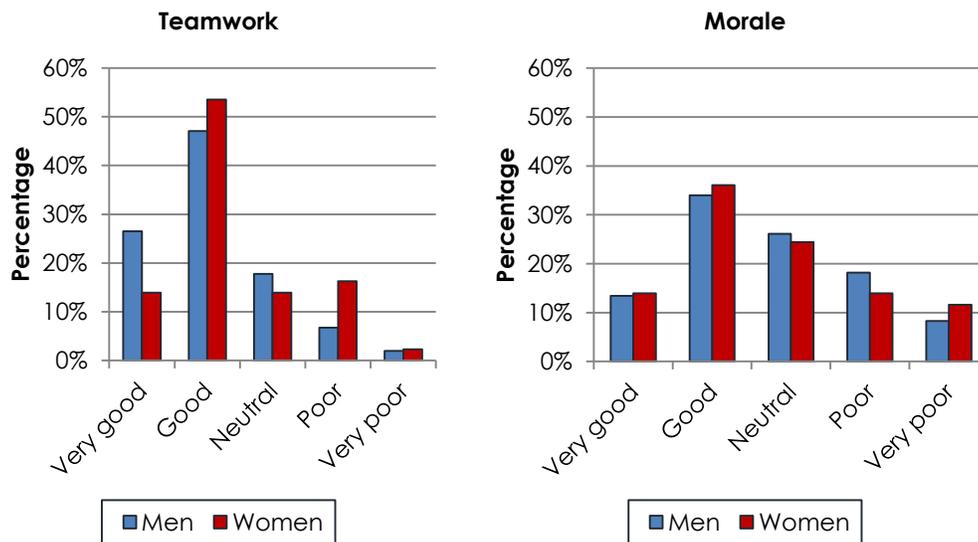
combat units, whereas, the women are not. Any male and female response differences when asked about their previous units could potentially be explained by the differences in previous unit types between men and women.

Characteristics of the unit

One survey question asked how volunteers would rate on a Likert scale the following characteristics of their previous units: discipline, teamwork, morale, performance, and trust. There were no notable differences in the perceived quality of unit discipline observed between male and female Marine survey respondents. However, there slight differences in male and female responses for the other perceived unit characteristics explored in the survey (see Figure 3 and Figure 4).

In general, male Marines reported better perceived teamwork in their previous units than did female respondents: 74 percent of men reported their previous units' teamwork was either "good" or "very good," while 67 percent of women reported the same. However, the male and female difference in reported perceived unit teamwork was not statistically significant. In addition, women were slightly more optimistic about their previous unit's morale than were men, but this difference was not statistically significant: 50 percent of women reported either "good" or "very good" morale, and 47 percent of men reported the same.

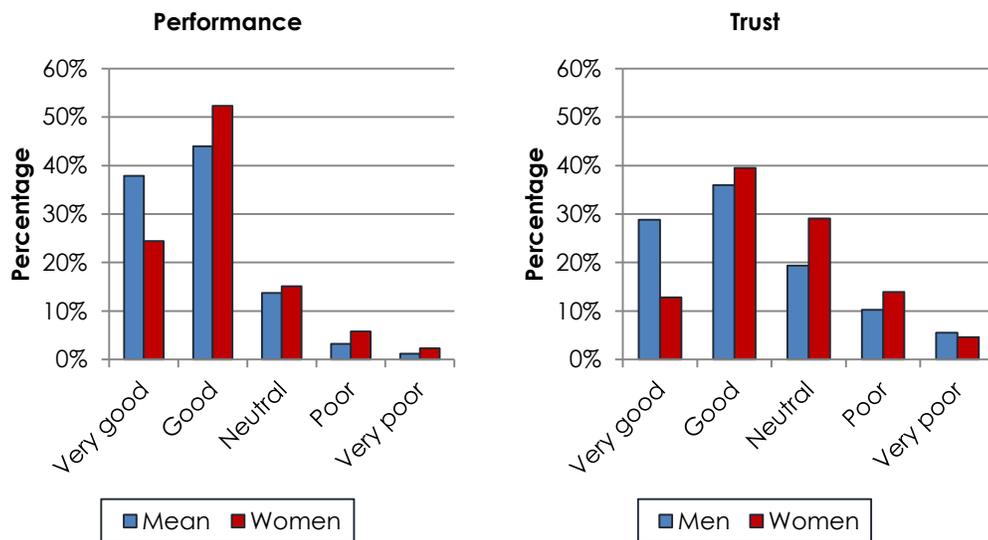
Figure 3. Perceived teamwork and morale at previous units, by gender



Source: CNA analysis of GCE ITF Baseline survey data

Furthermore, we find no statistically significant gender difference in reported perceptions regarding previous units' performance: 82 percent of men indicated "good" or "very good" previous-unit performance, while 77 percent of women indicated "good" or "very good" performance. On the other hand, men did report a significantly higher level of trust in their previous units than did women with 65 percent of men reporting "good" or "very good" trust levels and 52 percent of women reporting "good" or "very good" unit trust levels.

Figure 4. Perceived performance and trust at previous units, by gender



Source: CNA analysis of GCE ITF Baseline survey data

Top factors related to fulfilling a unit's mission

Volunteers who were assigned to other units before reporting to the GCE ITF were asked about the top three factors that enabled them to fulfill their previous units' missions. Two of the top factors that volunteers indicated were important for fulfilling the unit's mission were the same for both men and women. They indicated that "having SNCOs/NCOs who led by example" and "having unit members who work together as a team" were important for fulfilling the unit's mission. Men, however, indicated that "unit morale" was the third most important factor in fulfilling a unit's mission, whereas this factor was not in the top three responses for female Marine respondents. On average, women believed that "unit training/individual training" mattered more than "unit morale."

Working with women in a unit

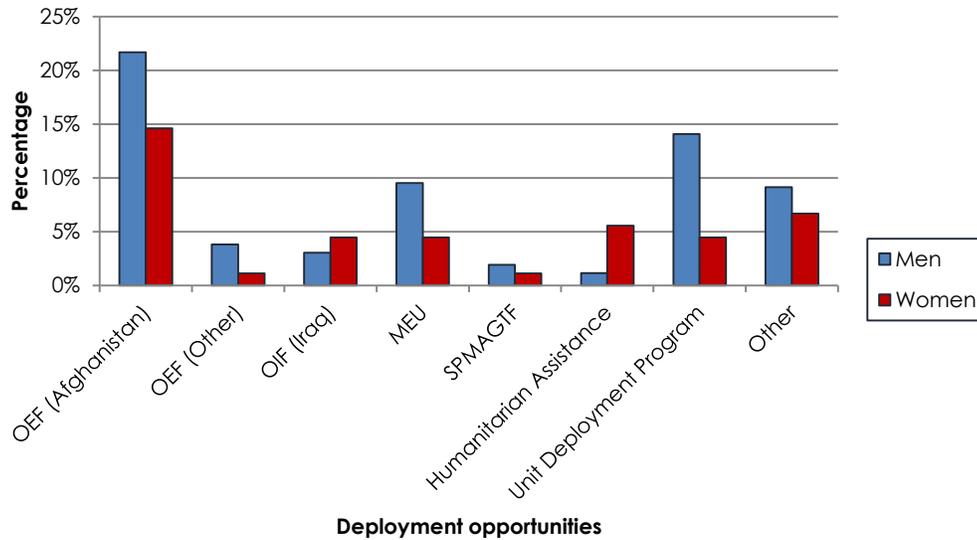
Overall, the majority (56 percent) of GCE ITF Marine volunteers who completed the Baseline survey indicated that they had not recently worked in a unit where they interacted regularly with male and female Marines. This was driven by a low percentage of male Marines indicating that they had interacted regularly with male and female Marines (22 percent), while 91 percent of female respondents reported recent experience working regularly with both male and female Marines.

Deployments

Another important Marine experience is deployment. About 40 percent of GCE ITF survey participants had deployed. This deployment experience differed significantly for men and women. Approximately 44 percent of men had deployed, compared with 31 percent of women. Figure 5 reports the different Marine deployment opportunities since 2005 and how GCE ITF survey respondents' experiences differ by gender. As indicated in the figure, a higher proportion of male Marines had deployed across most deployment opportunities except for Operation Iraqi Freedom (OIF) deployments, where 4 percent of women had deployed versus 3 percent of men⁶, and humanitarian assistance deployments, where 6 percent of women had deployed versus 1 percent of men.

⁶ OIF deployments ended in 2011. More of the women have had an opportunity for an OIF deployment, because they are slightly older and in more senior paygrades than the men.

Figure 5. Deployments by deployment opportunity and gender



Source: CNA analysis of GCE ITF Baseline survey data

Summary

In this section, we have examined the backgrounds of male and female GCE ITF Marine volunteers. We find that the male and female volunteer populations participating in the GCE ITF somewhat differ in terms of demographic, ability, and experience measures. As we begin to explore differences in survey responses in subsequent sections of this report, keep in mind that response differences in both the male and female populations might not completely be explained by underlying gender differences, but could be a result of the varying backgrounds of male and female GCE ITF volunteers. In future study reports, we will statistically control for these background differences between men and women. In addition, as we continue our research, we will include a comparison of the background characteristics of GCE ITF volunteers to the Marine Corps at large. This will provide some insights to Marine Corps leadership regarding how generalizable the GCE ITF survey results are to GCE units across the Marine Corps.

Motivations of GCE ITF Volunteers

In this section, we examine GCE ITF Marine volunteers' responses to questions asking why they decided to volunteer for the GCE ITF and their motivations for joining and remaining in the Marine Corps. A distinction we use in this part of our analysis is identifying “push” and “pull” factors. Push factors are motivations to get away from a current or previous situation; pull factors draw the Marine into a new situation. Push factors for Marines volunteering for the GCE ITF included getting out of a unit with a poor command climate and avoiding a deployment; for example, “avoiding college” is a push factor for a Marine to join the Marine Corps. Pull factors are associated with incentives of a new situation, and those incentives include both *benefits*—defined incentives, such as retirement or a bonus—and *opportunities*—including advanced training, possibility of travel, and choice in future assignments.

GCE ITF participation

Two survey questions specifically asked respondents why they volunteered for the GCE ITF and what they personally hoped or expected from the experience. In each case, respondents picked three reasons (unranked) from a list, or wrote in their own reasons.

GCE ITF volunteers' hopes and expectations

The most commonly selected personal *hopes or expectations* from the GCE ITF were associated with participants' increasing their personal physical fitness (59 percent) and being more competitive for promotion (55 percent).⁷ A large proportion of participants hope to use the GCE ITF to get a better billet assignment in the future (48 percent of men) or to laterally move to a different MOS (34 percent of women).

A majority of female Marines (74 percent) expressed hope that the GCE ITF will show that women *can* serve successfully in ground combat units; about 5 percent of

⁷ Each Marine can choose three responses, so the totals for all responses add to more than 100 percent.

female participants hope or expect that the GCE ITF will show that female Marines *cannot* serve successfully in ground combat units. Of male Marine volunteers, 19 percent hoped that the GCE ITF will show that women *can* serve successfully in a ground combat unit, and 16 percent hoping or expecting that it will show that women *cannot* serve successfully in a ground combat unit.

Reasons for volunteering

The most commonly selected reason for *volunteering to join* the GCE ITF was “to contribute directly to an important time in Marine Corps history” (chosen by 60 percent of all respondents). This response was the most common for male Marines (60 percent). However, the most common response among female respondents was that they volunteered for the challenge (67 percent), while 31 percent of men selected this response.

The motivations to specifically demonstrate that female Marines *can* or *cannot* successfully serve in a ground combat unit were not in the top three most common responses for either gender: 44 percent of female Marines and 11 percent of male Marines were motivated by helping to show that women *can* serve successfully; 11 percent of men and 7 percent of women were motivated by helping to show that women *cannot* serve successfully. Note that these motivations to volunteer for the GCE ITF are quantitatively different from the hopes or expectations of the participants discussed earlier. These differences indicate that volunteers’ “reason for volunteering” were not correlated perfectly with their “hopes and expectations” but rather that there are differences between the two.⁸

There were gender differences across response patterns. Beyond their contribution to Marine Corps history, male volunteers tended to be motivated by push factors, such as wanting “to do something different” (54 percent) or avoiding an alternate assignment (40 percent); female volunteers were motivated by pull factors, particularly the opportunity to develop and validate gender-neutral standards (53 percent).

Curiosity seemed to play a role in both expectations and motivations to volunteer for the GCE ITF. Using the write-in option, about 10 percent of respondents stated that they wanted to understand how integration will work, or if leadership is conducting the “experiment” in a fair manner. Some expressed the following general notion: I’m an average Marine, and if I can work in an integrated unit so can any other Marine.

⁸ We will investigate the extent and nature of these differences as we continue our research.

Joining the Marine Corps

In the baseline survey, we asked participating Marines to provide their reasons for joining the Marine Corps. Eleven options were provided (see question 9 in Appendix A), and Marines either chose three from the list or wrote in three reasons (or a combination of provided options and write-ins).

Overall, the most frequent responses were “to serve the country/defend the nation” (67 percent), “for the challenge” (56 percent), and “to be part of something bigger than myself” (45 percent). These were the most common three responses for both men and women, but among women, the most common answer was “for the challenge” (69 percent) and “to defend the nation” was second (61 percent).

The general response patterns of male and female Marines to other reasons for joining the Marine Corps also were similar: education benefits (28 percent for both), seeing the world (22 percent for men, 31 percent for women), leadership training (18 percent for both), and family tradition (14 percent for men, 11 percent for women) accounted for most other responses.

For both genders, pull motivations (i.e., reasons drawing them into the Marine Corps) were more common than push motivations, such as wanting to avoid college or getting away from their hometown. If there was a gender-related pattern, it was that male Marines in the GCE ITF tended to cite *benefits* of joining the Marine Corps, such as pay (8 percent), health benefits (5 percent), and retirement (4 percent). No female Marines listed retirement benefits as a motivation. Instead, female GCE ITF volunteers appear to have joined the Marine Corps looking for *opportunity*. Along with seeing the world (31 percent), 11 percent of female volunteers wrote in a reason for joining the Marine Corps associated with the pride and respect of being in the Corps, or of such duty, as taking part in humanitarian assistance missions.

The largest write-in category was male Marines’ interest in opportunities to experience combat (7 percent). No female volunteers cited this reason as a motivation to join the Marine Corps.

Recruiting and retention

Career choices

Marines were asked how much longer they intended to stay in the service, with three possible choices:

- Until retirement
- Past the present obligation but not until retirement
- Just until the end of the present obligation

The distribution of responses is relatively even with approximately one-third of Marines falling into each timeframe. The even distribution, however, is driven by male Marines. GCE ITF female volunteers were less likely to respond that they were remaining in the Marine Corps until the end of the present obligation—14 percent. The remaining 86 percent of female volunteers were split evenly between staying in the Marine Corps past the present obligations and staying until retirement.

The survey asked Marine volunteers to indicate the three most important factors influencing their decision to remain in the Marine Corps. Overall, the most commonly selected factors were associated with career advancement and command climate: promotion opportunities (30 percent), deployment considerations (27 percent), job satisfaction (24 percent), and quality of leadership (24 percent). Male and female Marines' response patterns were similar to those indicating their reasons for joining the Marine Corps: men tended to indicate such benefits as pay and health care; women were more likely to select value statements, such as defending their country or a consideration of Marine Corps core values.

Two responses were available for Marines to indicate whether gender integration factored into their choice to stay in the Marine Corps: (1) integrating ground combat units and (2) keeping ground combat units male only. These two responses were selected by 11 percent of the total (and 11 percent of both male and female Marines).

Female Marines selected the first response only. Based on their other Baseline survey responses, integrating ground combat units appears to be a favorable factor in their decision to stay in the Marine Corps. When queried subsequently in the survey if they would tell their monitor that they “preferred an assignment to a ground combat unit below the battalion level,” the majority of female Marine volunteers (69 percent) responded that they would, 24 percent were not sure if they would tell their monitor that and 7 percent said that they would not.

Male Marines divided their selections between the two responses: 5 percent selected that integrating ground combat units would factor into their choice to remain in the Marine Corps, and 6 percent responded that keeping ground combat units male only would factor into their choice. Based on responses to other survey questions, both selections indicated similar motivation: this 11 percent of male Marines appears less inclined to remain in the Marine Corps if ground combat elements are integrated.⁹

⁹ This was the only survey question in which a group of participants misunderstood the choice.

However, only 3 of those 27 men reported recent experience with women in a previous unit (and all 3 reported negative experiences).

Recommending Marine Corps service

We asked GCE ITF volunteers if they had already recommended, or intended in the future to recommend, military service in the Marine Corps to a relative or close friend. The survey asked separate questions for recommending Marine Corps service to men or women. We also asked if a change in policy to allow women in ground combat PMOSs and units would change their inclination to recommend Marine Corps service to others.

The majority of GCE ITF Marine volunteers indicated that they planned to recommend military service in the Marine Corps to a close male relative or friend (75 percent) or to a close female relative or friend (57 percent). Most (62 percent) Marine volunteers also responded that they already had recommended service in the Marine Corps to a male or female relative or close friend; a proportion of those (26 percent of the total) had previously recommend the Marine Corps to *both* a male and a female relative or close friend.

GCE ITF female Marines are *more likely* than male Marines to recommend service to male relatives or friends (93 percent for female volunteers, 69 percent for male volunteers) and to female relatives or friends (91 percent for female volunteers, 45 percent for male volunteers). A sizable portion of *male* volunteers stated that they would *never* recommend service to a friend or relative, either male (31 percent) or female (55 percent).

Policy changes to allow women to serve in ground combat units or PMOSs will not change the inclinations of most volunteers to recommend service to either male or female friends or relatives: 67 to 77 percent of volunteers chose the no-effect answer to these questions.

When volunteers indicated that a policy change would affect their recommendation of Marine Corps service to others, the potential effect initially appears negative. Among volunteers, 26 percent indicated that a change in policy would make them less likely to recommend service to a male and/or female friend or relative; 11 percent would be more likely to make this recommendation.

This difference needs to be tempered by the responses to the previous questions about whether the volunteer would ever recommend service in the Marine Corps to a friend or relative: the majority of those who said a policy change would make them less likely to recommend service had already said that they would never make the recommendation in the first place. Our analysis indicates that at least among the GCE ITF volunteers who responded to the Baseline survey there will be little or no

quantitative difference in the overall effect on Marine Corps recruiting. There will be marginal changes in the pattern of Marines recommending service; for example, more potential recruits will be encouraged by female Marines they know well, rather than by male Marines.

We did not find evidence that male Marines' responses to these questions were influenced by recent experiences if they had been assigned to a unit where they worked closely with female Marines.

Summary: Volunteers' motivations

By and large, volunteers were motivated to join the GCE ITF because they wanted to be present at an important time in Marine Corps history, to find out how the experiment was being conducted, and to be sure that the "right" decisions will be made. Furthermore, Marine volunteers, regardless of gender, were broadly motivated by other common goals, such as using the time to increase physical fitness, or angling for a better or different kind of assignment after the GCE ITF.

GCE ITF volunteers joined the Marine Corps for a variety of reasons. Major motivations included serving their country or the opportunity to be part of something larger than themselves. The majority of Marines in the GCE ITF seem to have had a positive service experience, based on their interest in remaining in the service and recommending the Marine Corps to others.

These findings, bolstered by the free text comments, suggest that the majority of Marine volunteers who responded to the Baseline survey are motivated to ensure that ground combat units are composed of qualified Marines.

Volunteers' Attitudes Regarding Gender Integration

Previous integration experiences

The majority (56 percent) of survey respondents indicated that they had not recently worked in a unit where they interacted regularly with male and female Marines. This was driven by low numbers among male Marines (22 percent); 91 percent of female participants in the GCE ITF had worked regularly with both male and female Marines.

Respondents with recent experience in an integrated unit were asked for their perspectives on the influence of women in that unit on the following intangible factors: teamwork, morale, discipline, performance, and trust.

The general perspective was that women made no difference in these factors (greater than 60 percent of all respondents to each factor said that the presence of female Marines had no effect) but, at the margins, there was a trend in response by gender. Among male Marines, a greater number reported that women degraded these factors than reported that women improved them; exceptions were an improvement to morale, and no difference in teamwork. Among female Marines, a greater number indicated that having women in their previous unit improved these factors, and a smaller number indicated that women degraded these factors.

We looked to see if there were differences among male Marines who reported previous recent experience working with female Marines and their reported motivations for volunteering for the GCE ITF. Were those with positive experiences more motivated to prove that female Marines can serve successfully, and those with more negative experiences more likely to want to prove that female Marines cannot serve successfully? Examining survey responses, we found no correlation between male Marines' previous integration experiences and being motivated to volunteer for the GCE ITF specifically to prove that women can or cannot serve successfully. Rather, we found that male Marines with a positive experience of working with female Marines were slightly less likely to be responding to push factors (that is, less likely to have joined GCE ITF because they were trying to get out of a previous assignment or because they wanted to do something different). They were slightly

more motivated by the challenges associated with the GCE ITF than their counterparts who had negative experiences working with female Marines.

Volunteer opinions and insights on GCE ITF integration

Physically prepared?

We asked GCE ITF Marine volunteers whether they and their peers had the physical abilities to meet the requirements of the GCE ITF position (see Appendix A, survey questions 20-22). When asked about personal fitness levels, a majority of Marines indicated that they were physically able to meet the requirements of their GCE ITF position. There was no gender difference in Marines' self-assessments of their physical preparedness: proportions were the same among the men and women, and about 5 percent thought they did not have the strength.

Roughly one-third of GCE ITF volunteers indicated that all male Marines in the task force have the physical abilities for their positions: 37 percent of male volunteers and 29 percent of female volunteers thought that all male Marines had the requisite physical ability. The remaining two-thirds indicated that some but not all male Marines had the physical ability for their ITF role: 62 percent of male volunteers and 71 percent of female volunteers. One (male) Marine thought that none of the male Marines were physically able excepting himself. Although there were differences in the proportions, male and female responses were not statistically different.

The majority of GCE ITF volunteers (86 percent of men, 80 percent of women) agreed that some but not all female volunteers had the physical ability for their GCE ITF positions. Male and female Marines differed in their perceptions of female physical ability at the boundaries: 8 percent of the male volunteers (versus 20 percent of the women) indicated that *all* the female volunteers had the requisite physical abilities. Meanwhile, 5 percent of male respondents (and no female respondents) indicated that *none* of the female volunteers had the physical abilities for their positions.

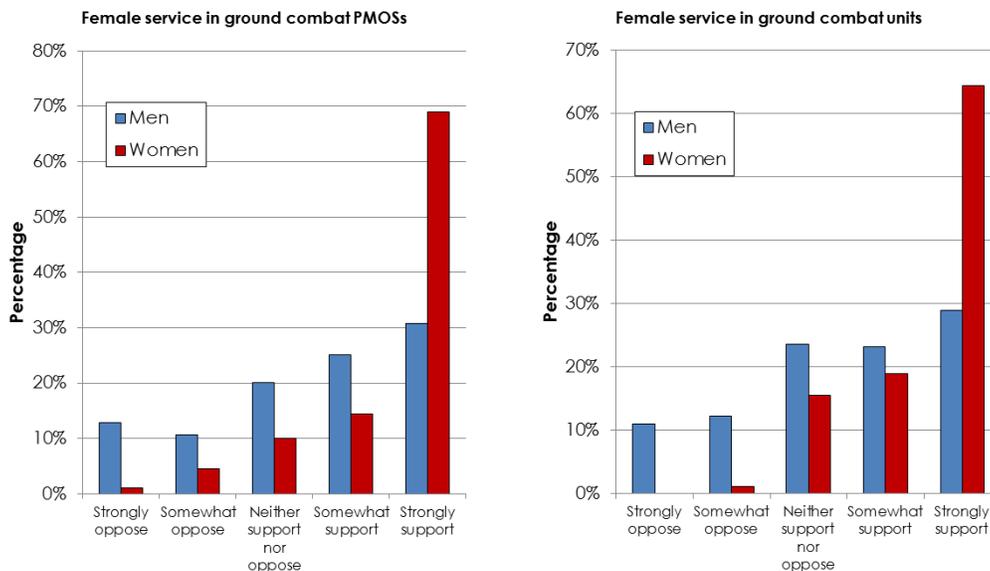
Survey questions about physical abilities were followed by questions about using physical screening tests to determine if Marines are qualified for service in ground combat units or a ground combat PMOS. We also collected volunteers' opinions regarding assignment of women who passed a physical screening test to serve in ground combat units or a ground combat PMOS.

There was strong support for a screening test to determine if Marines are qualified for service in ground combat units or a ground combat PMOS: 84 percent were in favor of a PMOS screening test, and 75 percent favored screening Marines before

assigning them to a ground combat unit. Support was stronger among female volunteers, but the difference was not statistically significant in either case.

Once a female Marine has demonstrated she is physically qualified, most volunteers support assignment of that Marine to a ground combat element (60 percent) or PMOS school (63 percent). However, the support for assigning physically qualified female Marines to ground combat elements or PMOS schools was much stronger among female volunteers than among male volunteers (see Figure 6).

Figure 6. Support among GCE ITF Marines for assigning physically qualified female Marines in ground combat PMOSs and to ground combat units



Source: CNA analysis of GCE ITF Baseline survey data

With a few exceptions, female volunteers did not oppose assignment of physically capable female Marines to ground combat units or ground combat PMOS schools, whereas a proportion of male volunteers opposed (10 to 12 percent) or even strongly opposed (10 to 12 percent) those assignments of female Marines regardless of their physical abilities. We also note that physical strength concerns were common in free text comments, although several noted the need for a common standard rather than a prohibition against women in specific PMOSs or roles.

Specific concerns of female volunteers

Two additional questions for only female volunteers asked about possible issues or apprehensions that they could have serving in support of a ground combat element, and then asked about the same concerns of serving in a combat arms PMOS. There was a free text field for mentioning additional concerns.

Response patterns were similar in the two questions. The majority of female Marine volunteers (51 to 92 percent) indicated that each potential issue was not a concern. Specific issues that did raise concerns for a large proportion of respondents were doing a good job and whether they have the physical strength for the role they will fill, particularly with regard to classification in a ground combat PMOS. Several free text responses noted longer term concerns about resiliency to injury and stress.

We applied principal components analysis to the responses from female-specific questions. We found that the first principal component provides a measure of confidence versus anxiety among female volunteers regarding their service in a ground combat unit or PMOS. Female volunteers tended to be *unconcerned* about being the only woman in a unit, fitting in generally, and having to suppress their femininity. Those with lower scores had concerns on those same issues.

The next two components indicate trade-off considerations by female volunteers between personal concerns (privacy, hygiene, level of comfort reporting harassment) and external concerns:

- Component 2 indicates a trade-off between personal concerns and concerns about support from family and friends.
- Component 3 is about the distinction between personal concerns and concerns about peer perceptions (male and female) and fitting into a combat unit.

The fourth component is a discriminant between concerns regarding support and competency, including physical strength. We did not find a relationship between age or time in service with any of the components. Many of these trade-offs were explicitly discussed in the free text comments, with concerns noted about balancing time with family and deployments.

In the female-specific section of the survey, female volunteers noted concerns about pregnancy and female hygiene; male volunteers also mentioned these concerns in free-text comments in other parts of the survey. It will be interesting to see if these concerns remain following the unit's deployment. Another common concern in free-text comments associated with female-specific questions was that the Marine Corps' current gender-normed PFT and CFT scoring system contributes to a perception that women are not on a common footing with men. Several female volunteers felt that unit integration may be preempting the standardization of criteria.

Perceptions Regarding Future Gender Integration in Combat Roles

The survey asked volunteers if they supported women serving in ground combat PMOSs or being assigned to ground combat units in non-combat-arms PMOSs. We provided survey participants a list of 24 potential outcomes resulting from women being assigned to ground combat units or serving in combat arms PMOSs and asked if they thought each outcome was more or less likely following a change in policy.

Women serving in combat roles

Male and female volunteers responded differently to questions regarding their support for women serving in ground combat PMOSs. On the whole, male volunteers were neutral or positive toward support of women serving in a PMOSs associated with artillery or armor. They generally were not supportive of women serving in general infantry PMOSs, particularly not in a specialized infantry PMOS, such as reconnaissance or special operations (critical skills operator (CSO)). Support among men for women serving in these PMOSs ranged between 16 and 22 percent.

A similar pattern was seen among male volunteers regarding their support for women in non-ground-combat PMOSs being assigned to ground combat elements: most were neutral, 40 percent supported female assignments to armor or artillery units, and 22 to 30 percent supported assignment of women to general infantry or specialized infantry units. The majority of male volunteers (52 percent) opposed assignment of female Marines to reconnaissance or special operations units.

Among female volunteers, the majority supported women serving in ground combat PMOSs or being assigned to ground combat units. About 6 to 16 percent of female volunteers opposed women serving in a ground combat PMOSs, and 4 to 11 percent opposed assignment of women to ground combat units.

Most male Marines in the GCE ITF had no recent experience working closely with female Marines. The important comparison will be perceptions and support at the start of the GCE ITF with perceptions and support after their units' mission is completed.

Gender integration outcomes

Rather than analyze response patterns by gender for each outcome, we applied principal components analysis to determine composite factors that together capture the differences in the opinions expressed. From each respondent's 48 data entries, PCA identified 6 components that explained the majority of the variation in the data. Components require some interpretation to determine an appropriate label.

The first component divides responses regarding the potential outcomes of women in ground combat PMOSs or units into positives and negatives (see Table 3). Essentially, if a Marine thinks assignment of women will have positive effects, they will score highly on this component; volunteers with concerns regarding assignment of women to ground combat units will have negative scores.

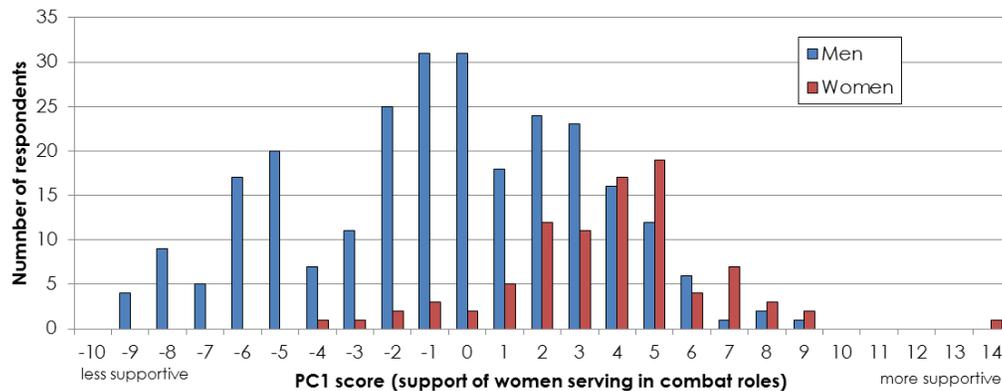
Table 3. Potential outcomes regarding women in ground combat PMOS or unit

Response outcome	Eigenvalue	
An increase in unit cohesion	0.1577	Positively associated outcomes
Female Marines being treated equally by their peers/fellow Marines	0.1527	
An increase in unit combat effectiveness	0.1483	
Female Marines having the physical capabilities required for their jobs	0.1455	
Increased professional behavior	0.1452	
Female Marines being treated equally by leadership	0.1377	
Female Marines getting direct combat experience	0.1019	
Increased female Marines lateral move opportunities	0.0197	Unassociated outcomes
An increase in female duty assignment opportunities	-0.0371	
An increase in female Marine promotion opportunities	-0.0710	
A decrease in male Marine promotion opportunities	-0.1212	Negatively associated outcomes
An increase in non-deployable Marines	-0.1272	
Enemies targeting women as POWs	-0.1371	
A double standard in expectations based on gender	-0.1566	
Male Marines feeling obligated to protect female Marines	-0.1630	
A unit being vulnerable to combat casualties	-0.1698	
Intimate relationships [...] causing problems	-0.1713	
Some Marines getting preferential treatment	-0.1770	
Male Marines being distracted from their jobs	-0.1770	
Female Marines being at risk of sexual harassment or assault	-0.1787	
A decrease in unit cohesion	-0.1816	
A decrease in unit combat effectiveness	-0.1819	
An increase in sexual harassment allegations	-0.1888	
An increase in sexual assault allegations	-0.1909	

Note that following outcomes associated with female Marine opportunities—to increase assignments and lateral moves, or to be promoted—do not weigh heavily (see Table 3). This suggests that female opportunity is not a consideration when Marines in the GCE ITF weigh gender integration as positive or negative.

We found a statistically significant difference between scores of women and men on principal component 1 (PC1), support of women in combat roles, largely driven by the distribution of women on the positive end and by the men being relatively evenly divided between positive and negative responses (see Figure 7).

Figure 7. Distribution of Principal Component 1 (PC1) (support of women in combat roles) scores of male and female Marines in the GCE ITF



Source: CNA analysis of GCE ITF Baseline survey data

Once PCA identifies the major response component, it removes it from subsequent analysis. Subsequent response components generally reflect where the group perceives trade-offs rather than a judgment. The next three components (PC2, PC3 and PC4) are trade-offs between certain factors and female opportunity (not considered in the first principal component):

- PC2 is ostensibly a trade-off between those Marines who thought that integration increases opportunities for female Marines (combat experience, lateral moves and assignments) and those who thought that it decreases unit effectiveness, including unit cohesion, combat effectiveness, and increases in combat casualties.
- PC3 indicates a perceived trade-off between female opportunity and risk to female safety—from both sexual assault and being targeted as prisoners for war (POWs).

- PC4 is a trade-off between female opportunity and male opportunity: To what extent will greater female opportunity and possibility of promotion lead to decreased promotion rates for men?
- PC5 is a trade-off between those who perceive female opportunity as a fair playing field and those who envision it as a form of preference.

There was a statistically significant difference between male and female responses on PC3, with women perceiving more opportunity than risk for themselves, and, as with PC1, male responses were spread across the spectrum. There was no statistically significant difference in the responses of male and female Marines to PC2, PC4, and PC5. Marines are clustered around the middle of the distribution in all components, indicating that—though there are Marines with strong opinions—the majority is neutral or ambivalent.

The sixth component distinguishes between those whose concerns are mostly in garrison (allegations of sexual assault) and casualties on the battlefield (i.e., concerns of adversaries targeting women or male Marines feeling obligated to protect female Marines).

Of note, these are the *perceived* trade-offs on the part of the volunteers in the GCE ITF, not necessarily the perceived trade-offs among Marines as a whole, or the actual trade-offs Marines will experience if or when ground combat units and PMOSs are integrated. The longitudinal component of this research will allow us to track whether and how *perceived* trade-offs change during the course of the GCE ITF.

Summary

All GCE ITF volunteers, who had reported to the unit by November 18, 2014, were given the opportunity to respond to the Baseline GCE ITF climate survey; 95 percent completed the survey, and only 5 percent declined participation. The high survey response rate maximizes the inferential and statistical power available to the study team as it fields and incorporates into the analysis the results of the upcoming Mid and Final GCE ITF surveys.

Who are the GCE ITF volunteers?

GCE ITF volunteers' paygrades range from E2 through E5, female volunteers are slightly skewed towards the higher noncommissioned officer paygrades compared with males, which implies that female Marine volunteers are slightly older, on average, than the men. Overall, 98 percent of GCE ITF volunteer survey respondents meet the Marine Corps' height and weight standards. All of the men can do at least three pull-ups, while 6 percent of the women did not meet this requirement. Men participating in the GCE ITF are, on average, better marksmen than the women with a slightly higher percentage of them scoring in the expert category in both rifle and the pistol marksmanship scores, although these differences are not statistically significant. Furthermore, there does not appear to be a significant difference in cognitive ability between male and female GCE ITF Marine volunteers: AFQT and GCT scores are fairly similar between the two groups. Finally, the data on GCE ITF participants indicate that male volunteers are more likely women to have deployment experience. These demographic, ability, and experiential differences between male and female GCE ITF Marine volunteers will be important to consider as we examine response differences in the Mid and Final surveys, moving forward.

What motivated Marines to volunteer?

Is potential bias underlying volunteers' motivations to participate in the GCE ITF? Are volunteers motivated to ensure mission failure or mission success to forward personal agendas regarding gender integration efforts?

The survey results indicate a diversity of motivation among volunteers. We find that there are some GCE ITF Marine volunteers who are *opposed* to women in ground combat units (at least 10 to 15 percent of the men and about 4 to 7 percent of the women). There also are volunteers who support having women in ground combat units. This opinion mix helps to make the GCE ITF a realistic test because those kinds of perspectives and motivations will exist in ground combat units if or when the USMC leadership opens up those units to female Marines. In addition, there are volunteers who are motivated and hope to see female Marines *succeed* in ground combat units—about 20 percent of men and 75 percent of women. We do not know to what extent these differing viewpoints are representative of the Marine Corps population as a whole; however, they do indicate that there is a mix of opinions on gender integration in ground combat units that is consistent with previous survey research on this topic [10-11].

What are the key concerns of volunteer Marines?

GCE ITF Marine volunteers are distributed along the continuum of support for and opposition to gender integration in ground combat units and PMOSs. Among those who are opposed, the key concerns are that unit cohesion and combat effectiveness will decrease and that there will be increases in allegations of sexual assault and sexual harassment.

Among female volunteers, we found that there were concerns of whether they have the requisite strength for the combat arms positions and the physical resiliency to maintain combat tempo.

An overarching concern among both male and female volunteers was a commitment to standards and a fair evaluation of gender integration in combat units and PMOSs. Several female volunteers were concerned that differences in PFT/CFT assessments would prevent women and men from being treated equally.

Will integration affect recruiting and retention?

Recommending Marine Corps service to others and a preference to remain in the Corps in the future are measures of the value that Marines place on their time in service and an overall sense of morale.

Currently, most GCE ITF Marine volunteers plan to continue their service in the Marine Corps, and most will recommend service in the Marine Corps to either a male or a female relative or close friend; female Marines tended to be more enthusiastic than male Marines on both of these measures. In each case, only small numbers of volunteers indicated that a policy change regarding women in ground combat units or PMOSs factored into their decisions to remain in the Marine Corps or to recommend service to others. At the outset, these data *are suggestive* that the Marine Corps will not experience quantitative changes in recruiting and retention under gender integration.

Notably, however, relatively few male GCE ITF Marine volunteers had recent experience working alongside women. The responses to these kinds of recruiting and retention survey questions will be tracked over the course of the GCE ITF to see if the experience of an integrated environment changes volunteers' perspectives.

What are the perceived trade-offs when women serve in combat roles?

We applied principle components analysis (PCA) to determine gender-specific response patterns regarding potential outcomes and concerns associated with gender integration of ground combat units and combat arms PMOSs. With regard to the potential outcomes resulting from gender integration, the first principal component identifies a spectrum of support for women in combat roles. Subsequent components identify trade-offs between increases in opportunities for women and other outcomes. We found that, regardless of whether volunteers in the GCE ITF support or do not support women in combat roles, the volunteers recognized trade-offs between increased opportunities for women and (1) unit cohesion, (2) a risk to women in a combat role, and (3) a risk to the opportunities of male Marines. Both male and female volunteers were distributed across each of these spectrums, though there was a statistically significant tendency for the female Marines to be less concerned about the additional risks faced in combat situations.

Similarly, for the concerns that female volunteers had, the first component indicate a measure of confidence versus anxiety regarding their service in ground combat units or PMOSs. Female volunteers tended to be *unconcerned* about being the only woman in a unit, fitting in generally, and having to suppress their femininity. Subsequent components indicated trade-offs between personal concerns (privacy, hygiene, level of comfort reporting harassment) and external concerns (support from family and friends) and between external sources of support and job competency.

There was diversity among female volunteers in their support to women serving in combat roles and in their concerns. Some are concerned about their personal privacy,

hygiene, and “fitting in,” but others see a trade-off with family or friend support, or peer respect and perceptions.

What will future analysis tell us?

The Baseline survey provides insight into the previous military experiences, motivations, and attitudes of the GCE ITF volunteers during the unit’s early weeks—after the majority of volunteers had reported to the unit. Many male volunteers do not have recent experience in a gender-integrated unit, and female members do not have previous experience in a ground combat unit. Marine volunteers’ demographic characteristics and initial motivations for joining the GCE ITF will not change. But, as they add to their experiences, we anticipate that there may be changes (positive or negative) in how much and why volunteers support women in ground combat roles. Their concerns and trade-off perceptions also may change.

This initial survey provides the baseline data to allow comparative analysis of attitudinal changes in GCE ITF Marine volunteers during their 9-month assignment to the GCE ITF. It also will provide the potential to support research examining the extent to which unit performance and Marine volunteers’ attitudes regarding gender integration, unit readiness, morale, and cohesion are correlated.

Appendix A: Survey Questions

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Marine Corps Ground Combat Element Integrated Task Force Climate Survey

Your Marine Corps Experiences

In this section, we ask about your Marine Corps experiences prior to your assignment to the GCE ITF.

- 1) What types of deployments have you done? *Check all that apply.*
 - a. OEF (Afghanistan, from Sept. 11, 2001, to present)
 - b. OEF (CJTF-HOA, Philippines, etc.; from Sept. 11, 2001, to present)
 - c. OIF (Iraq)
 - d. MEU
 - e. SPMAGTF operations
 - f. Humanitarian Assistance/Disaster Relief
 - g. Unit Deployment Program (UDP) Okinawa
 - h. Other
 - i. I have not deployed yet

- 2) Have you just completed entry level training and not yet reported to your first duty station?
 - a. Yes (skip to Q7)
 - b. No

- 3) In your opinion, which of the following are the top THREE factors that enable you to fulfill your unit's mission? *Choose 3 that best apply.*
 - a. Having SNCOs/NCOs who lead by example
 - b. Length of time serving together
 - c. Individual unit members' technical capabilities
 - d. Having officers who lead by example
 - e. Unit morale
 - f. Clear task objectives
 - g. Unit training/individual training
 - h. Trust among unit members
 - i. Unit members who get along well socially
 - j. Having only male Marines in the unit
 - k. Having unit members who work together as a team

4) Thinking about the most recent unit in which you worked, how would you rate that unit's ...?

Characteristic	Very good	Good	Neither good nor bad	Poor	Very poor
a. Teamwork					
b. Morale					
c. Discipline					
d. Performance					
e. Trust					

5) *In your most recent assignment prior to participating in the GCE ITF, did you work on a regular basis with both male and female Marines?*

- a. Yes
- b. No (skip to Q7)

6) Thinking about the unit in which you worked on a regular basis with both male and female Marines, among all the factors that affect how well a unit works together, how much did the aspect of having female Marines in the unit affect each of the following....?

Characteristic	Significantly improved	Slightly improved	No effect	Slightly degraded	Significantly degraded	No basis to judge
a. Teamwork						
b. Morale						
c. Discipline						
d. Performance						
e. Trust						

Volunteering for the GCE ITF

- 7) Why did you volunteer to participate in the GCE ITF? (*Choose 3 that best apply*)
- a. For the challenge
 - b. To help show that female Marines *can serve* successfully in a ground combat unit
 - c. To avoid an upcoming deployment
 - d. To get out of my previous unit assignment
 - e. To contribute directly to an important time in Marine Corps history
 - f. To help show that female Marines *cannot serve* successfully in a ground combat unit
 - g. To move to Camp Lejeune
 - h. To do something different
 - i. To help the Marine Corps develop and validate gender neutral occupational standards
 - j. Some other reason(s) _____
- 8) What are your personal hopes/expectations regarding your participation in the GCE ITF? (*Choose 3 that best apply*)
- a. That I will be able to laterally move to a ground combat PMOS
 - b. That female Marines will show that they *can serve successfully* in a ground combat unit
 - c. That my physical fitness level will improve (i.e., achieve higher PFT and CFT scores)
 - d. That my marksmanship will improve (i.e., achieve higher rifle and pistol marksmanship score)
 - e. That I will be able to laterally move to some other non-ground-combat PMOS
 - f. That I will be more competitive for promotion
 - g. That I will be able to get a better billet assignment after the GCE ITF is over
 - h. That female Marines will show that they *cannot serve successfully* in a ground combat unit
 - i. Some other reason(s) _____

Your thoughts on recommending service in the Marine Corps to others

- 9) Why did you join the Marine Corps? *Choose 3 that best apply.*
- Pay and allowances
 - Education benefits/GI bill
 - Retirement benefits
 - Health benefits
 - Family tradition
 - For leadership training
 - For the challenge
 - To serve my country/to defend the nation
 - To be part of something bigger than myself
 - Needed a job
 - To see the world
 - Some other reason _____
- 10) Would you ever recommend to a **male** family member or close friend that he pursue service in the Marine Corps?
- Yes, and I have done so before
 - Yes, but I have not done so to date
 - No
- 11) Given the policy to allow women to serve in ground combat PMOSs and units, are you more or less likely to recommend to a **male** family member or close friend that he join the Marine Corps?
- More likely to recommend
 - No effect
 - Less likely to recommend
- 12) Would you ever recommend to a **female** family member or close friend that she pursue service in the Marine Corps?
- Yes, and I have done so before
 - Yes, but I have not done so to date
 - No
- 13) Given the policy to allow women to serve in ground combat PMOSs and units, are you more or less likely to recommend to a **female** family member or close friend that she join the Marine Corps?
- More likely to recommend
 - No effect
 - Less likely to recommend

Ground Combat PMOSs

Since January 2013, the Secretary of Defense has opened service in primary military occupational specialties (PMOSs) to women where the primary mission is to engage in direct ground combat. These include PMOSs within several occupational fields, including 03 (infantry), 08 (artillery), and 18 (tank and assault amphibious vehicle). We refer to these as GROUND COMBAT PMOSs.

14) Please indicate how strongly you agree or disagree with the following statements regarding **ground combat PMOSs**: I support allowing female Marines to serve in....

Type of unit	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
a. All field artillery PMOSs					
b. All tank PMOSs					
c. All assault amphibious vehicle PMOSs					
d. The reconnaissance PMOS					
e. The critical skill operator PMOS					
f. All other infantry PMOSs					

Marines may believe that there are benefits or challenges associated with the new policy that allows female Marines to serve in ground combat PMOSs.

15) In your opinion, are the following outcomes more or less likely by opening service in **ground combat PMOSs** to female Marines?

Outcome	Definitely more likely	Somewhat more likely	Neither more or less likely	Somewhat less likely	Definitely less likely
a. Increased professional behavior					
b. Intimate relationships among a unit's Marines (or Sailors) causing problems					
c. Enemies targeting women as POWs					
d. An increase in unit combat effectiveness					
e. A unit being vulnerable to combat casualties					
f. A decrease in male Marine promotion opportunities					
g. Male Marines feeling obligated to protect female Marines					
h. An increase in unit cohesion					

Outcome	Definitely more likely	Somewhat more likely	Neither more or less likely	Somewhat less likely	Definitely less likely
i. Male Marines being distracted from their jobs					
j. Female Marines having the physical capabilities required for their jobs					
k. Female Marines being treated equally by their peers/fellow Marines					
l. Female Marines being treated equally by leadership					
m. An increase in non-deployable Marines					
n. A double standard in expectations based on gender					
o. Female Marines getting direct combat experience					
p. Female Marines being at risk of sexual harassment or assault					
q. Increased female Marine lateral move opportunities					
r. A decrease in unit combat effectiveness					
s. A decrease in unit cohesion					
t. An increase in female duty assignment opportunities					
u. An increase in female Marine promotion opportunities					
v. Some Marines getting preferential treatment					
w. An increase in sexual harassment allegations					
x. An increase in sexual assault allegations					

16) Please provide any other outcome NOT listed above that you believe would result from allowing female Marines to serve in **ground combat PMOSs**.

Type your response here:

Ground Combat Element Assignments

Under current policy, the Marine Corps may assign female Marines in any **non-ground-combat** PMOS to ground combat element (GCE) units. Currently, the Marine Corps is assigning female Marines to GCE units at the Battalion level or below, *but not to* Infantry, Reconnaissance, and Marine Special Operations Battalions. For example, a female administrator or communicator can be assigned to serve in an artillery battery.

- 17) Please indicate how strongly you agree or disagree with the following statements regarding **non-ground-combat PMOSs**: I support allowing female Marines in any **non-ground-combat PMOS** (such as administration, logistics, communications and supply) to be assigned to....

Type of unit	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
a. An Infantry unit					
b. A Reconnaissance unit					
c. A Marine Special Operations Battalion					
d. Any other ground combat element unit (such as ANGLICO, LAAD, artillery, tank, and amphibious assault vehicle units)					

Marines may believe that there are benefits or challenges associated with the new policy that allows the Marine Corps to assign female Marines in any non-ground-combat PMOS to ground combat element (GCE) units at the Battalion level or below.

- 18) In your opinion, will the following outcomes be more or less likely as females Marines in **non-ground-combat PMOSs** are assigned to GCE units at the Battalion level or below?

Outcome	Definitely more likely	Somewhat more likely	Neither more or less likely	Somewhat less likely	Definitely less likely
a. Increased professional behavior					
b. Intimate relationships among a unit's Marines (or Sailors) causing problems					
c. Enemies targeting women as POWs					
d. An increase in unit combat effectiveness					
e. A unit being vulnerable to combat casualties					
f. A decrease in male Marine promotion opportunities					

Outcome	Definitely more likely	Somewhat more likely	Neither more or less likely	Somewhat less likely	Definitely less likely
g. Male Marines feeling obligated to protect female Marines					
h. An increase in unit cohesion					
i. Male Marines being distracted from their jobs					
j. Female Marines having the physical capabilities required for their jobs					
k. Female Marines being treated equally by their peers/fellow Marines					
l. Female Marines being treated equally by leadership					
m. An increase in non-deployable Marines					
n. A double standard in expectations based on gender					
o. Female Marines getting direct combat experience					
p. Female Marines being at risk of sexual harassment or assault					
q. Increased female Marine lateral move opportunities					
r. A decrease in unit combat effectiveness					
s. A decrease in unit cohesion					
t. An increase in female duty assignment opportunities					
u. An increase in female Marine promotion opportunities					
v. Some Marines getting preferential treatment					
w. An increase in sexual harassment allegations					
x. An increase in sexual assault allegations					

19) Please provide any other outcome NOT listed above that you believe would result from the assignment of female Marines in **non-ground-combat PMOSs** to ground combat element units at the Battalion level or below.

Type in your response here: _____

Physical Demands of Service in Ground Combat Element Units

Service in ground combat units and PMOSs—including those in the 03 (infantry), 08 (artillery), and 18 (tank and assault amphibious vehicle) occupational fields—or service in ground combat element (GCE) units requires Marines to be foot mobile, carry heavy loads, and spend extended periods in a field environment.

- 20) Do you think that you have the physical abilities to meet the requirements of your GCE ITF positions?
- Yes
 - No
- 21) Do you think that the **female Marines** in your GCE ITF unit have the physical abilities to meet the requirements of their GCE ITF position?
- Yes, they all do
 - Some of them do; some of them do not
 - No, none of them do
- 22) Do you think that the **male Marines** in your GCE ITF unit have the physical abilities to meet the requirements of their GCE ITF position?
- Yes, they all do
 - Some of them do; some of them do not
 - No, none of them do
- 23) How strongly do you support or oppose putting into place a specific screening test to determine whether a Marine (male or female) is physically qualified to attend a **ground combat PMOS school**?
- Strongly support
 - Somewhat support
 - Neither support nor oppose
 - Somewhat oppose
 - Strongly oppose
- 24) For those female Marines who can meet the physical demands of service in **ground combat PMOSs** (infantry, artillery, and tank/assault amphibious vehicle), how strongly do you support or oppose their service in **ground combat PMOSs**?
- Strongly support
 - Somewhat support
 - Neither support nor oppose
 - Somewhat oppose
 - Strongly oppose

- 25) How strongly do you support or oppose putting into place a specific screening test to determine whether a Marine (male or female) in a **non-ground-combat PMOS** is physically qualified to serve in a ground combat element (GCE) unit?
- a. Strongly support
 - b. Somewhat support
 - c. Neither support not oppose
 - d. Somewhat oppose
 - e. Strongly oppose
- 26) For those female Marines in a **non-ground-combat PMOS** (e.g., 01xx Admin) who can pass a GCE physical screening test, how strongly do you support or oppose their assignment to a GCE unit?
- a. Strongly support
 - b. Somewhat support
 - c. Neither support nor oppose
 - d. Somewhat oppose
 - e. Strongly oppose

Your Thoughts Regarding Your Military Career

- 27) Which of the following statements best describes your current Marine Corps career intentions?
- a. Definitely stay in until retirement
 - b. Probably stay in until retirement
 - c. Definitely stay in beyond my present obligation, but not necessarily until retirement
 - d. Probably stay in beyond my present obligation, but not necessarily until retirement
 - e. Definitely leave upon completion of my present obligation
 - f. Probably leave upon completion of my present obligation
- 28) What THREE factors do you consider most important to you when deciding whether to remain in the Marine Corps? *Choose 3 that best apply.*
- a. Pay and allowances/bonuses
 - b. Education benefits
 - c. Quality of leadership
 - d. Promotion opportunity in my MOS
 - e. Duty location
 - f. Retirement benefits
 - g. Integration of female Marines into ground combat units
 - h. Current economic situation and civilian job market
 - i. Family hardship
 - j. Health benefits
 - k. Deployment-related considerations
 - l. USMC core values
 - m. Having only male Marines in ground combat units and PMOSs
 - n. Camaraderie
 - o. To serve and defend my country
 - p. Job satisfaction
 - q. Family satisfaction with military
 - r. Other factor(s)_____

OTHER COMMENTS

- 29) Are there any other comments, concerns, or issues about allowing female Marines to serve in ground combat PMOSs and units that you feel the Marine Corps leadership should be made aware of? If so, please provide them below.
Type in your response here: _____

Female Marines Only

REGARDING ASSIGNMENT TO GROUND COMBAT UNITS IN A SUPPORTING NON-GROUND-COMBAT PMOS (such as admin, supply, communications, or logistics)

- 30) Please indicate how strongly you agree or disagree with the following statement: Under the current policy that allows female Marines in **non-ground-combat PMOSs** to be assigned to GCE units in a support role at the Battalion level or below (for example, assignment to an artillery battalion or tank platoon), I will tell my monitor that I prefer such an assignment.
- a. Strongly agree
 - b. Agree
 - c. Not sure
 - d. Disagree
 - e. Strongly disagree

- 31) What concerns do you have if you were to be assigned to a GCE unit at the Battalion level or below in a support role (for example, you could be assigned to an admin billet in an artillery battalion)?

Concerns	Definitely a concern	Slight concern	Not a concern
a. The deployment pace			
b. My family would not support me			
c. My friends would not support me			
d. The physical strength required			
e. Pressure to suppress my femininity			
f. Being viewed differently by my male peers			
g. Being viewed differently by my female peers			
h. Fitting into the unit			
i. It being hard if I was the only female Marine in a unit			
j. Personal hygiene/sanitary concerns			
k. Feeling less comfortable reporting sexual assault/harassment			
l. Personal privacy in the field			
m. Not being able to do a good job			

- 32) Please provide any other concerns NOT listed above that you would have from being assigned in a support role to a GCE unit at the Battalion level or below.

Type in your response here: _____

REGARDING SERVICE IN A GROUND COMBAT PMOS

33) What concerns do you have if you were to serve in a **ground combat PMOS**?

Concerns	Definitely a concern	Slight concern	Not a concern
a. The deployment pace			
b. My family would not support me			
c. My friends would not support me			
d. The physical strength required			
e. Pressure to suppress my femininity			
f. Being viewed differently by my male peers			
g. Being viewed differently by my female peers			
h. Fitting into the unit			
i. It being hard if I was the only female Marine in a unit			
j. Personal hygiene/sanitary concerns			
k. Feeling less comfortable reporting sexual assault/harassment			
l. Personal privacy in the field			
m. Not being able to do a good job			

34) Please provide any other concerns NOT listed above that you would have if you were to serve in a **ground combat PMOS**?

Type in your response here: _____

Appendix B: Survey Delivery Methods

This appendix documents the survey administration method used to field the Baseline GCE ITF survey to Marine volunteers at Camp Lejeune over two weeks in November 2014.

We developed a standardized method for delivering the survey to groups of GCE ITF volunteer Marines. The survey was encoded into software on 30 ASUS tablets (see Figure 8) running Windows 8.1. Tablets were positioned in 2 rows of tables (15 tablets per row) in a classroom space at the GCE ITF's command building.

Figure 8. Promotional picture of the ASUS laptop/tablets used to collect survey responses



Introductory briefing

When we determined that all Marines in the room were GCE ITF volunteers (along with a single enlisted Marine from the MCOTEA Research Monitor program to serve as an ombudsman), a member of the CNA survey study team provided an introductory brief, outlined in Figure 9.

The brief explains the purpose of the survey and encourages participants to read the informed consent statement. It also makes clear that participation is voluntary, and responses will be held in confidence. In accordance with the IRB protocol, Marines taking the survey are assured that their responses will not be tied to them by name and that data will be reported to Marine Corps leadership only in aggregate form.

Taking the survey

Following the introduction brief, each volunteer is logged in by a survey administrator from CNA using his or her assigned EID number.

The first screen is a welcome page that reiterates much of the introductory brief. The Marines select “Continue” and are taken to the informed consent statement that must read before continuing. When the Marine clicks that he or she has read the informed consent statement, the Marine then is asked to *Submit* to the survey or *Decline*.

In the event that a Marine declined to take the survey, there was no record of his or her participation on the tablet. Those who declined were asked to identify themselves to survey administrators to be checked off a participation list and were instructed to return to their scheduled activities for the day. They were thanked for their participation and were informed that they still could participate in later surveys if they chose to do so.

Marines who consented to take the survey answered a series of questions using the touch screen or keyboard/mouse on the tablet. During the response period, Marines were not discouraged from talking among themselves. They were encouraged to ask questions of the administrators if they needed clarifying information about the information that the survey was requesting. When they finished the survey, they selected a “Submit” button to end the session; they were thanked for their participation and were instructed to return to their scheduled activities for the day.

Survey proctors discouraged Marines from talking among themselves during the introduction brief but not during the survey process. If a Marine did not have a view on the subject matter, he or she was free to discuss with peers and arrive at an opinion in the room. Based on administrator observations, this type of dialogue was relatively limited, though no data were collected. In general, we found that conversation died down as the volunteers progressed through the survey. Administrators responded to a variety of issues raised by participants, mostly clearing up confusion on the meaning of some questions.

Figure 9. Text used in briefing GCE ITF participants at the start of each survey session

Outline of the Survey Brief:

Wait until the research monitor is in place and all officers and chain of command have left the room.

Ask to ensure everyone in the room at a computer is a volunteer. Direct assignments should be asked to leave: they are not included in the protocol.

1. Thank the volunteers for being here today.
2. Introduce yourself, CNA, and your colleagues: CNA is an independent, not-for-profit think-tank that conducts policy and operations analysis for the Marine Corps.
3. Explain the source and purpose of the survey: Commandant asked us to run a survey to assess unit cohesion and morale through this process.
4. Explain the timing of the survey: three sessions - now to get baseline data; in February next year as your training is wrapping up; and, finally, when you return from deployment. After the final survey, you can take part in a focus group to discuss your experiences, if you wish to do that.
5. Explain the tablet: This survey is being administered on a tablet. It is touch sensitive. It runs Windows8. You cannot keep it - it stays here.
6. How it will work: Survey monitors will come around to each person, open up your and start up the survey - we will enter your GCEID number and turn the tablet over to you
7. It will welcome you, you click continue. It then will ask you to read the informed consent statement. I know you've had to read other informed consent statements - this one applies specifically to this survey. At the end of the informed consent, you will be asked to agree that you have read it, and then you will be asked if you wish to take the survey.
8. Two items to note:
 - 1) This survey is voluntary - you can decline to take the survey. After reading the informed consent if you do not wish to take the survey, you can select "decline". But don't hit "decline" if you want to take the survey because that will kick you out of the system. *If you choose to decline, please let us know* - we will note that you were here and keep you from being asked to come back to do the survey.
 - 2) Your responses will be treated in confidence and your information is only available to CNA researchers. When we write reports on the survey, your name and information will not be associated with the information that you enter. The only situation where we can't guarantee confidentiality is if you express an intent to break the law or UCMJ.
9. If you have questions about the survey questions, please ask us. If you have questions or concerns about the research, you are welcome to ask us, or you can approach a member of the research monitoring team (research monitor raise your hand!).
10. When you have answered all the questions, there will be no more and the "continue" button won't work. At that point, you can enter "Submit." Fold the tablet to the closed position and you are free to return to your unit.

Marines initially were allowed or instructed by their unit leaders to remain in the room until all had completed the survey. This method worked poorly and was changed to direct Marines to close the tablet and leave the room as soon as they completed their surveys.

Survey group size and timing

Survey groups in a session varied in size between 19 and 39 Marines. Four sessions had more than 30 Marines; since 30 is the number of tablets available, the additional Marines were asked to sit at the back of the room for the introduction brief and fill in as others completed the survey. This worked well and did not prolong the testing periods.

Initially, sessions were scheduled for 90 minutes; we determined that an hour was sufficient to allow participants to complete the survey, and GCE ITF leadership programmed in extra time. Observations indicate that Marines completed their survey within 40 minutes; the earliest finished 20 minutes after the completion of the training brief, and some took as long as 45 minutes, but we did not have any Marines who required 60 minutes. For the second week, the session times were decreased to 60 minutes without any complications.

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The CNA Corporation

This report was written by CNA Corporation's Resource Analysis Division (RAD).

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