

Marine Corps Study Misses the Mark

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In August, the Marine Corps completed a two and a half year, \$36 million dollar series of studies that examined the possible impacts of integrating women into combat occupations. On 10 September, they issued a four-page, unsigned, undated, summary of their research findings that concluded that women degrade combat effectiveness, contribute to increased injury rates and may negatively impact recruiting and retention.

A review of over 380 pages of this research shows that the primary study was inherently flawed and that the limited information the Marines released hid a myriad of problems and weaknesses associated with the design, small volunteer pool, and lack of generalizability of the findings. Significantly, the conclusion of the more complete, unreleased analysis acknowledges that women do not negatively impact unit cohesion, that the study sought to measure the impacts of integration in the absence of established combat standards, that female volunteers in the study had no operating force experience in ground combat units, and that better physical screening would have all but eliminated the rates of injury for women.

Evidence in the longer versions of the study also contradicts the general conclusion that all male infantry teams performed better than other teams. For example, the research indicates that mixed gender teams are better at solving complex problems, have fewer disciplinary problems, and will likely increase the recruiting pool. The results also showed that non-infantry male Marines outshot infantry trained Marines and that setting valid standards will likely improve overall combat effectiveness.

When the Secretary of Defense rescinded the combat exclusion policy in 2013, the Services were tasked with setting valid occupational standards. The 2014 National Defense Authorization Act further entrenched this, requiring that “outcome-based standards” be developed to “accurately predict performance of actual, regular and recurring duties of a military occupation” and that they be applied to “measure individual capabilities.”

This shift from generic fitness standards that are age and gender normed towards performance-based, job specific standards is not just a response to gender integration, it is an acknowledgement that current occupational standards were often loosely based or non-existent.

While the Army has some well-defined elite infantry training standards in the form of its Ranger School standards, the Marines have historically assumed that any male should be capable of infantry occupations simply because of his sex. In other words, until now, the only required standard for an infantry Marine has not been his individual capabilities or physical and mental qualifications but has simply been his biology and a passing Physical Fitness Test (PFT) score; the latter is an achievement most female Marines also meet.

In unpublished portions of the research the Marines acknowledge this as a limitation, stating “they relied heavily on the fundamental assumption that simply because a Marine in a particular ground combat arms MOS is a male, he should be capable of performing all of the physical tasks” of a combat occupation. They also concluded “perhaps the single-most important result of this almost three year process” has been “to essentially deconstruct many collective ground combat arms tasks to identify what individual tasks and standards an individual Marine must achieve...to be a fully contributing member of that unit.”

Although the Marines had clear directives from DOD and acknowledged the limitations of their current standards for infantry, their studies did

not focus on establishing quantifiable job specific performance standards. Instead, their main research effort, the Ground Combat Element Integrated Task Force (GCEITF) had as its objective “to evaluate the physical performance of individual Marine volunteers in the execution of individual and collective tasks in an operational environment” and to “estimate the effect of gender integration.”

The problem with this objective was that the Marines were seeking to evaluate the physical performance of Marines in the absence of quantifiable job-specific standards. Not only did they lack clear standards at the start of the research program, but they failed to define or outline criteria for evaluating success or “combat effectiveness” at any point whatsoever in their research. Throughout the analyses, the only criteria used to measure achievement or combat effectiveness appears to be absolute speed and accuracy when completing a select number of physically demanding tasks: in other words, no standard was established to be met, and each task was turned into an absolute competition.

Since the study does not establish minimum operational standards associated with combat tasks and duties, and it fails to measure study participants against job-specific standards, this research does little to further the discussion on gender integration. The conclusion that all-male groups, on average, performed faster than integrated groups has been taken as proof that there are risks to gender integration and that the inclusion of female Marines would therefore render the Marines less combat effective, regardless of any individual Marines’ qualifications, male or female. Despite the importance placed on speed, the study does not define how fast a task needs to be accomplished or under what conditions to meet combat effective screening criteria. They just say that men are faster, therefore better. Although it is interesting that all male teams - on average - performed better than integrated ones, the results do not tell us whether the integrated teams performed adequately. Moreover, an unexpected and unreported finding was that males with no infantry training consistently

outshot their infantry trained counterparts on three of the four weapons tested and tied them on the fourth.

The Marine study came to mixed conclusions when it came to morale and cohesion. This is significant since it is often assumed that women spoil the “band of brothers” dynamic that is considered essential to combat effectiveness. In a widely circulated editorial, retired Marine General Gregory Newbold stated that the mysterious bonds between men are “what tempers the steel of an infantry unit” and “serves as the basis of its combat power.” The Marine Corps’ study does not demonstrate a clear link between gender integration and a loss of group cohesion. Participants were asked questions that measured cohesion levels at several stages in the study. Overall it was reported that there was “no significant difference” in cohesion levels between gender integrated and all-male units and that “gender integration, in and of itself, will not have a significant impact on unit morale.” The research also found that “gender-neutral standards facilitate task cohesion in integrated units.” The Marines’ own research counters one of the most prolific arguments used to keep women out of combat roles. Moreover, their research indicates that the development of gender-neutral standards might actually enhance group cohesion within the Corps.

There are several issues with the applicability and generalizability of the findings. The study claims that the impact of gender integration on small units in the study “are generalizable to larger unit effectiveness,” yet later in the findings contradicts this, stating that due to small population sizes and possible selection bias “caution should be used when considering the generalizability of findings.” In terms of selection problems, effort was made to include a population that was representative of the Marines; however, it was acknowledged “Our sourcing of volunteers from the operating forces means accepting variations in some important respects, such as Time in Service, Time in MOS, training levels, and physiological development.

We cannot be certain that male and female participants were totally equitable in these characteristics.” It was also noted that all of the female Marines had “no operating force experience in ground combat units” and that “even with the training period prior to the experimental phase designed to mitigate differences in training and physiological development, some differences likely remained” between volunteers.

In addition to possible selection bias issues, there was a clear problem of simply having enough participants for each of the elements of the study to draw any reliable conclusions. When describing the volunteer pool, it was admitted that “in some MOSs there is only a small quantity of males and females ... In the extreme cases of the experiment, there were no more than three males (i.e., PIMG) and females (i.e., tanks) completing the entire experimental phase.” The study compares what it considers ‘low density’ and ‘high density’ gender integrated groups to all-male units. However, due to drop out rates and issues with numbers of volunteers, often the ‘high density’ groups contained only 2 women and analysis of some tasks could not be completed at all due to a lack of participants.

Another issue associated with the volunteer population and representativeness relates to selection and physical requirements. There has been significant attention given to the relatively high rates of injury for women in the Marine study. However, the longer reports show that “when fitness is considered, female injury rates are similar/the same as male injury rates” and that “a stricter physical screening tool would have eliminated all the female Marines who sustained injury and were dropped during ITB” (infantry initial entry training). They also conclude that “it is unknown how much a stricter (higher) physical screen would have improved the physical performance of female volunteers” during the integrated task force testing.

Female volunteers were allowed to participate in the GCEITF experiment if they could meet minimum male fitness scores; scores the Marines no longer believe correlate to combat occupational success. Additionally, female Marines are held to a stricter body mass index (25%) than men (27.5%). According to their own analysis, “This appears to be counterproductive, especially for enabling females to enter physically demanding MOSs” since a higher body mass index in women is more advantageous for physically demanding jobs than a lower body mass index.

By the Marines’ own admission, “ground combat units have many years of historical bias, much of which will take time to eliminate.” This bias isn’t just evident in ground combat units; it’s also evident in the design, research and published findings of this set of studies. At best, the research amounts to a competition between groups of men and women with different qualifications and experience. In the absence of standards or evidence about the performance of individuals, the results do not indicate if some women outperformed some men or whether women are capable of performing combat duties. The fact that the Marines felt confident concluding women negatively impact combat units despite the poor design, inconsistent volunteer pool, small numbers of participants and confounding results regarding both women and men’s performance indicates a clear intent to keep women out.