

Gender Differences in and Costs of Misbehavior Among DON Enlisted Personnel

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Abstract

This report documents an analysis of gender differences in misbehavior rates among enlisted personnel in the Department of the Navy (DON). Using indicators found in personnel data from the US Marine Corps (USMC) and the US Navy (USN), we show that, between fiscal year (FY) 1999 and FY 2015, male misbehavior rates were higher than female rates for every indicator, in every year for both services. Using data from FY 2015, we estimate that higher male misbehavior rates in the USMC (USN) resulted in about 1,400 (2,000) extra incidents of misbehavior and imposed about \$57 (\$197) million in extra costs. Based on these results, we conclude that excluding costs associated with higher rates of male misbehavior renders cost-benefit analyses of increasing gender integration incomplete. In addition, we recommend that the DON improve cost estimates of misbehavior to allocate resources toward prevention and response as effectively and efficiently as possible.

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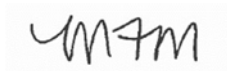
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Executive Summary

In March 2018, the President's Budget request for the Department of the Navy (DON) for fiscal year (FY) 2019 was \$203.2 billion. Of that total, \$47.5 billion was requested for the active duty portions of the US Navy (USN) and US Marine Corps (USMC) military personnel (MP) accounts. Despite the size of both the total DON budget and the MP account requests, the increase in demand for USN and USMC forward presence, improved readiness, and lethality continues to put pressure on the DON to operate more efficiently and effectively.

At the same time, the DON seeks to maintain, and perhaps even increase, female representation among uniformed personnel across all paygrades and military occupations. The DON's goals for more efficiency and effectiveness and for gender integration naturally give rise to a discussion about the costs and benefits of increased female representation. To that end, the Assistant Secretary of the Navy (Financial Management and Comptroller) (ASN(FM&C)) asked CNA to examine the costs and benefits associated with greater gender integration and to assess the potential impact on DON personnel budgets and manning.

Background and motivation

Discussions about increasing the female share of DON uniformed personnel have typically focused on expected costs. For example, previous analyses have focused on the cost and manning implications of lower female retention. Pregnancy has also been a focal point in terms of both the limitations it places on operational assignment and the medical and convalescence costs it imposes.

It is entirely appropriate—even necessary—for the DON to include the costs associated with gender differences in retention and with pregnancy when preparing budgets and projecting manning rates. A comprehensive assessment, however, should also take into account potential benefits of gender integration that may offset these costs. In particular, the DON should consider costs that may be disproportionately associated with the men who make up the majority of the force. For example, several studies have shown that male servicemembers are more likely than female servicemembers to engage in various types of misbehavior including being involved in drug- and alcohol-related incidents and committing certain kinds of crimes. Such misbehavior in the military workplace can be quite costly and can lower productivity. Costs may be incurred by victims, through investigating and adjudicating the misbehavior, through lost workdays and employee dismissal due to misbehavior, and by leaders who must

address misbehavior rather than engage in other productive activities. In addition, resources for prevention and response are less likely to be allocated efficiently and effectively if the costs of misbehavior are poorly understood. To our knowledge, however, gender differences in misbehavior rates—and the costs associated with misbehavior—have not been systematically studied in the USN and USMC.

The goal of this analysis is twofold. First, it is intended to support efforts to provide a comprehensive assessment of the costs and benefits of increasing gender integration. Second, it aims to provide the DON with more information about the costs of misbehavior so that resources for prevention and response can be allocated as effectively and efficiently as possible.

Defining and measuring misbehavior

We define misbehavior as offenses covered by the punitive articles of the Uniform Code of Military Justice (UCMJ). As such, misbehavior can range from minor disciplinary infractions to serious criminal offenses. Service responses to misbehavior range from actions that are administrative to actions that are punitive and/or judicial. Based on this definition, we measure misbehavior by certain events recorded in enlisted personnel records. Specifically, for Sailors, we use placement in a disciplinary status, demotions, and misconduct-related separations as indicators of misbehavior. For Marines, we use nonjudicial punishments (NJPs), courts-martial, demotions, and misconduct-related separations. Our measures likely undercount misbehavior incidents because personnel records do not contain such information as conduct resulting in an unofficial reprimand.

With the understanding that our measure is a conservative lower bound, we compute misbehavior rates by gender using these observable personnel record indicators and find that DON active duty enlisted men had higher rates of misbehavior than women in every year between FY 1999 and FY 2015. Depending on the specific indicator of misbehavior and the service, male misbehavior rates were, on average, 1.5 to 2.5 times higher than female rates. Using data from FY 2015 and applying the female misbehavior rates to the male population, we further estimate that the higher rates of male misbehavior generated about 1,400 extra misbehavior incidents in the USMC and about 2,000 extra incidents of misbehavior in the USN.

Identifying and calculating costs

Based on reviews of the research literature and DON policies and budgets, we made a comprehensive list of the types of costs related to misbehavior, which we grouped into three categories: (i) costs that are directly generated by the misbehavior itself (e.g., missed

workdays, loss of or damage to property, and costs generated by addressing victims' needs); (ii) response-related costs (e.g., leadership time and the investigation and adjudication of alleged offenses); and (iii) costs that result from other outcomes of misbehavior (e.g., gapped billets and administrative and punitive separations).

For each cost type, we then captured existing per-incident dollar estimates or calculated them ourselves using budget data. Then, applying these per-incident costs to the estimates of extra misbehavior incidents, we calculate that, in FY 2015, male misbehavior generated extra annual costs of about \$57 million for the USMC and \$197 million for the USN.

Notably, we were unable to find existing estimates, or to compute our own, for many of the identified cost types because the information is not collected or is not reported in databases made available to CNA. Thus, like our counts of misbehavior incidents, our estimates of the total costs of extra male misbehavior are also conservative and probably constitute a lower bound.

Conclusions and recommendations

We conclude the following:

- There are indeed gender differences in rates of misbehavior. Men have higher misbehavior rates than women in the USN and USMC active component enlisted forces.
- Not accounting for the costs associated with higher rates of male misbehavior renders cost-benefit analyses of increasing gender integration incomplete.
- The costs of misbehavior, including its potential drag on readiness, are not captured and monitored as well as they could be. There are many missing cost estimates for the effects of misbehavior. In addition, it takes more than a routine effort to collect the recorded information to assess just how costly misbehavior is.

We recommend the following to the DON:

- Be aware of how cost-benefit analyses of gender integration can be incomplete. Continue to strive for a comprehensive comparison.
- Keep improving cost estimates of misbehavior in order to allocate resources toward prevention and response as effectively and efficiently as possible.

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Introduction

In FY 2018, the active component portion of the Military Personnel, Navy (MPN) and the Military Personnel, Marine Corps (MPMC) account authorities in the FY 2019 President's Budget were \$32.6 billion and \$14.9 billion, respectively. Despite the large size of the requests, the demand for increased readiness has put pressure on the overall Navy (USN) and Marine Corps (USMC) budgets and on the MPN and MPMC accounts in particular. Thus, the Department of the Navy (DON) must strive for the most effective and efficient use of personnel resources.

At the same time, the DON is seeking to increase female representation among uniformed personnel both up and down the rank hierarchy and across a widening range of military occupations. To assess the potential impact of deeper gender integration on DON personnel budgets, the Assistant Secretary of the Navy (Financial Management and Comptroller) (ASN(FM&C)) asked CNA to study the costs and benefits associated with gender differences in retention and other behaviors and career outcomes. This report documents an analysis of the extra costs imposed by relatively high rates of misbehavior among male enlisted Sailors and Marines.

Background and motivation

Discussions of gender integration in the military have typically focused on expected costs associated with increasing female shares of personnel inventories. The greatest and most visible costs arise from the fact that, compared to enlisted men, enlisted women have, on average, lower retention rates, which increases recruiting and training costs. Specifically, enlisted women have been shown to have higher bootcamp injury and first-term attrition rates and lower reenlistment rates.¹

Much attention has also been placed on the extra costs that arise because of a distinctly female factor: pregnancy. The primary concern associated with pregnancy is its effects on manning and distribution when pregnancy makes women undeployable or unable to serve at sea. Historically, this was one of the main arguments against allowing women to serve on submarines [2]. Although this objection was eventually overcome, the extra costs of pregnancy

¹ One of the companion papers for this project [1] documents and analyzes higher post-bootcamp, pre-fleet losses for female enlisted Sailors relative to male enlisted Sailors.

still matter. To determine how much they matter, the Navy's Bureau of Medicine and Surgery (BUMED) sponsored a 2014 CNA study [3] to estimate the number and costs of unplanned pregnancies in the USN. The study found that, in FY 2012, there were 2,240 unplanned pregnancies among enlisted Sailors and that the total cost associated with these pregnancies was just over \$62 million, primarily in terms of the opportunity costs of lost duty days for the pregnant Sailors and the monetary costs associated with maternity health care and actual delivery. This estimate does not include the costs associated with restrictions on deployment and assignment to sea duty.

Discussions of the benefits of gender integration have been more limited. Reference [4], a 1997 RAND study looking at the initial effects of repealing the combat exclusion laws in 1993, found that, not only did gender integration not harm unit cohesion, it was perceived to have a positive effect by raising the level of professional standards.² Consistent with this early result, a 2011 CNA study [2] found that the presence of enlisted women in the crews of surface ships was positively correlated with male reenlistment rates and the presence of senior enlisted women was positively correlated with the reenlistment rates of male and female Sailors with long initial contracts.³

Also excluded from cost-benefit analyses of gender integration is any accounting for ways that men generate higher costs than women. In particular, there is substantial evidence that, among enlisted military personnel, men are more likely than women to misbehave. For example, a 1999 CNA study on unplanned losses found that, although the overall unplanned loss rate was higher for women than for men (largely because of pregnancy), men were more likely to have unplanned losses for disciplinary reasons [7]. More specifically, reference [8] found that, from FY 2004 to FY 2012, male enlisted Sailors were more likely than female enlisted Sailors to be involved in alcohol-related incidents, including driving under the influence (DUI), and, from FY 2009 to FY 2012, men were more likely to be involved in drug-related incidents. Similarly, results from the 2015 DOD Health Related Behaviors Survey (HRBS) indicate that, across the services, men are more likely than women to binge drink, drink heavily, and engage in hazardous or disoriented drinking [9]. Finally, data from DOD annual reports on sexual assault in the military consistently indicate that military sexual assault (MSA) is a crime that is almost exclusively committed by male servicemembers.

² The impetus for the repeals was the push to provide equal opportunities for women, not expected benefits to the services (see [5]).

³ Similarly, reference [6] found that more time serving under female executive officers and commanding officers increases the retention of male and female junior officers in the surface warfare and aviation communities.

These observed gender differences in misbehavior rates suggest that male servicemembers generate extra misbehavior-related costs in much the same way that female servicemembers generate extra costs associated with pregnancy. This paper provides a rough estimate of the potential magnitude of these costs.

Approach

The analytical approach for this effort mirrored the two-step approach used in reference [3] to calculate the costs of unplanned pregnancies: first count the number of relevant incidents, then estimate the various costs associated with each incident, and multiply.

In the first step, we used personnel and other data to quantify gender differences in misbehavior rates among enlisted personnel in each service from FY 1999 to FY 2015. Then, focusing on the data for FY 2015 (the most recent year), we calculated how many extra misbehavior incidents occurred because of higher male misbehavior rates.

In the second step, we reviewed DON policy and budget documents, as well as research studies on misbehavior in the military, to identify the types of costs that misbehavior imposes. We then applied budget amounts and other researchers' per-incident estimates of the various costs associated with misbehavior to the extra misbehavior incidents counted in step 1. To the extent possible, we accounted for the fact that costs are expected to vary according to the seriousness of the misbehavior.

We acknowledge, and even emphasize, that this approach does not constitute a comprehensive assessment of misbehavior-related costs. Such an assessment would require obtaining additional data for both steps—an effort that was beyond the scope of this study. For example, accurate counts of misbehavior would require more detailed information on the types of misbehavior that occur, including information about the victims of more serious offenses. Similarly, accurate estimates of costs would require more detailed information for nearly every type of cost, especially distinctions between the fixed and variable costs associated with the DON response to misbehavior.

Given that we are missing information about both incidents and costs, we believe that we have underestimated the costs of extra misbehavior by men. Thus, ultimately, the results of this study are not conclusive. Instead, they are suggestive of not only how to take a more holistic approach to calculating the costs and benefits of gender integration but also how to think about better managing personnel and personnel costs.

Report outline

The remainder of this report is divided into four main sections. In the first main section, we define the misbehavior that is considered in this study; in the second, we identify the types of costs associated with that misbehavior. These sections are based on our reviews of policy and research literature; combined, they inform our approach to estimating the misbehavior-related costs. In the third main section, we use personnel data to estimate gender differences in misbehavior among DON enlisted personnel and establish that male rates are, indeed, higher than female rates. In the last main section, we estimate the costs associated with extra male misbehavior. Finally, we conclude the report by summarizing our results and identifying policy implications.

Misbehavior in the Military Setting

Misbehavior by servicemembers can range from minor disciplinary infractions subject to only administrative actions to more serious offenses subject to military courts-martial and potential punitive discharge from the service. This section defines the types of misbehavior considered in this study and then briefly describes the DON procedural responses to, and the range of potential outcomes associated with, more serious and less serious offenses.

Types of misbehavior

The types of misbehavior considered in this study are offenses that could be covered by the Uniform Code of Military Justice (UCMJ).⁴ Most of the over 50 offenses covered by the punitive articles of the UCMJ would be considered crimes in the civilian world. Murder, robbery, sexual assault, possession of controlled substances, and drunk driving fall into this category.⁵ Other offenses covered by the UCMJ would not be crimes in the civilian world but would still be considered inappropriate behavior in a civilian workplace. These offenses include malingering or being absent without leave, being drunk at work, and disrespecting a superior.⁶

This subsection distinguishes between minor and serious offenses. It also calls out two specific types of misbehavior: substance misuse and abuse, and sexual assault. In addition to having distinct gender components, as noted in the introduction, these two types of misbehavior receive considerable policy focus.

Minor offenses

In the most general terms, minor offenses are any behavior that doesn't contribute to good order and discipline. More specifically, according to reference [11], the DON guideline for determining whether an offense can be considered minor is based on the potential punishment

⁴ The UCMJ is codified in Title 10 of United States Code, Subtitle A, Part II, Chapter 47, Subchapter X: Punitive Articles. This discussion of the UCMJ and the references cited reflect UCMJ provisions as of 2016. It does not incorporate the UCMJ reform that occurred via the Military Justice Act of 2016, which was signed into law as part of the National Defense Authorization Act of FY 2017, but did not become effective until January 2019.

⁵ These offenses are covered by punitive articles 118, 122, 120, 112a, and 111, respectively [10].

⁶ These offenses are covered by punitive articles 115, 86, 112, and 89, respectively [10].

for it. If an offense *could not* result in a punitive discharge⁷ or more than one year's confinement at court-martial (CM), it is generally considered minor.⁸ Using this guideline and the maximum punishments allowed under the UCMJ (found in Appendix 12 of [10]), examples of minor offenses include (but are not limited to) the following:

- Unapproved absence of fewer than 30 days
- Contempt or disrespect toward a noncommissioned or petty officer who is not a superior
- Dereliction in performance of duties through neglect or culpable inefficiency (and not resulting in death or grievous bodily harm)
- Simple assault
- Wrongful appropriation of \$500 or less
- Various forms of drunkenness and disorderly conduct

Serious offenses

Following the guideline that defines a minor offense, a potentially serious offense is anything else—that is, an offense that *could* result in a punitive discharge or more than one year's confinement at CM. Using this guideline and the maximum punishments allowed under the UCMJ (Appendix 12 reference [10]), examples of serious offenses include (but are not limited to) the following:

- Murder, manslaughter, and other forms of assault (beyond simple assault)
- Sexual assault and other sexual misconduct, such as broadcasting or distributing an indecent recording
- Larceny
- Drunk or reckless operation of a vehicle, aircraft, or vessel
- Wrongful use, possession, or manufacture of controlled substances

⁷ A punitive discharge is a discharge imposed by sentence of a CM. The differences between punitive and administrative discharges are discussed later in this section.

⁸ This is a general guideline based on the maximum punishment that could be imposed if the offense were tried by general court-martial. Reference [10] indicates that whether an offense is minor also depends on such factors as the circumstances surrounding the commission of the offense and the offender's age, rank, duty assignment, record, and experience.

Substance misuse and abuse

As indicated by the examples of minor and serious offenses, drug and alcohol misuse and abuse can fall into either category depending on the code that is violated. They can also contribute to other types of misbehavior, both minor and serious. For example, a 2009 study of binge drinking among active duty military personnel found that binge drinkers in the military are more likely to get into a fight, report to work drunk, work below their normal performance level, drink and drive, and fail to promote [12].

The DON has multiple policies and programs addressing substance misuse and abuse. In particular, Secretary of the Navy Instruction (SECNAVINST) 5300.28D, *Military Substance Abuse Prevention and Control* [13], spells out the DON policies on pre- and in-service military drug and alcohol abuse, including impaired driving, as well as policies guiding detection and deterrence. References [14] and [15] then provide additional guidance for implementing the DON policy in the USN and USMC, respectively.

Sexual harassment and assault

As with substance misuse and abuse, sexual harassment may be considered serious or minor, depending on the specifics of the case. In general, sexual harassment is a civil charge, but it can be charged under Article 93, *Cruelty and maltreatment*, and can receive punishments that define serious offenses [10]. Sexual assault, in contrast, is a criminal act and is a serious offense.

The DON has separate policies for sexual harassment and sexual assault. DON, USN, and USMC policies on sexual harassment are defined in [16], [17], and [18], respectively, and DON, USN, and USMC policies on sexual assault are defined in [19], [20], and [18], respectively. For each offense, the policies provide definitions and guidance for prevention (including training) and response (including victim's assistance programs).

Procedural responses to misbehavior⁹

In the military services, commanding officers (COs) have broad discretion in deciding how to address misbehaviors committed by their subordinates. When a military member misbehaves or is accused of misbehaving, COs are legally required to respond with some type of investigation. Then, depending on the results of the investigation, the CO can respond in one of

⁹ Except where otherwise indicated, most of this subsection is summarized from reference [11].

four ways: take no action, take administrative action, conduct nonjudicial punishment (NJP) proceedings, or initiate CM proceedings.

To choose among these responses, the CO takes into account “the nature of and circumstances surrounding the offense and the extent of the harm caused by the offense, including the offense’s effect on morale, health, safety, welfare, and discipline” [10].¹⁰ The *Manual for Courts-Martial United States* [10] calls the disposition decision one of the most important and difficult decisions facing a commander.

This subsection describes NJP as the formal procedural response to minor offenses and CM as the formal procedural response to serious offenses.

Nonjudicial punishment

Article 15 of the UCMJ (10 United States Code § 815-Art. 15) gives COs the authority to impose specific disciplinary punishments for minor offenses without the intervention of a CM. This is why they are known as “nonjudicial” punishments. Reference [10] further explains that the purpose of NJP is to provide commanders with “an essential and prompt means of maintaining good order and discipline” and to promote “positive behavior changes in servicemembers without the stigma of a court-martial.”

Before an NJP is conducted, the CO may, but is not required to, investigate the charge using a Disciplinary Review Board (DRB) and/or an Executive Officer Inquiry (XOI). DRBs are used for misbehavior by enlisted personnel and are conducted by the command’s senior enlisted leaders, who use its results to make recommendations to the executive officer (XO). The XO, in turn, may conduct an XOI, and either dismiss the charges or forward them to the CO with a recommendation about whether to conduct NJP proceedings.

If the CO decides that NJP is the appropriate procedural response, the CO will hold an NJP hearing—known as “Captain’s Mast” in the USN and “Office Hours” in the USMC—that follows a specific format and guidelines and that can result in one of four basic outcomes. The CO’s options follow:

¹⁰ Reference [10] also lists other factors that may be taken into account in making a disposition decision: the availability and admissibility of evidence, the willingness of the victim or others to testify, cooperation of the accused in the apprehension or conviction of others, possible improper motives or biases of the person(s) making the allegation(s), availability and likelihood of prosecution of the same or similar and related charges against the accused by another jurisdiction, appropriateness of the authorized punishment to the particular accused or offense, and the character and military service of the accused.

- Dismiss the charges, which equates to an acquittal.
- Dismiss the charges and impose administrative/nonpunitive measures.
- Find the accused guilty and impose an appropriate NJP.¹¹
- Terminate the NJP before making a finding and refer the matter to CM or a superior authority for disposition.¹²

To impose an NJP, the CO must be convinced by a preponderance of the evidence that the accused committed every element of each charged offense.¹³

Unless they are attached to or embarked on a vessel, servicemembers can refuse NJP at any time during the process up to the point when the CO imposes punishment. Such a refusal will terminate the NJP proceedings. If the member refuses NJP, the CO retains all administrative and other disciplinary options, including taking the charges to CM.

Court-martial

CMs try the more serious military offenses that are listed in the punitive articles of the UCMJ. They constitute the judicial processes of the military justice system.

CMs (like NJPs) begin with an accusation of misbehavior and a subsequent investigation or inquiry. There are five main types of investigation that vary in terms of time and scope. The most basic and most frequently used investigations are Preliminary Inquiries (PIs) and Command Investigations (CIs), which are conducted by the command [11]. For more serious offenses, Courts of Inquiry, Boards of Inquiry, and Article 32 (UCMJ) Investigations may be used. These inquiries must be convened by a General Court-Martial Convening Authority (GCMCA) [10].

In addition, reference [21] mandates that the following incidents be referred to the Naval Criminal Investigative Service (NCIS) whether they occur on base or off base and regardless of civilian investigation involvement:

- Actual, suspected, or alleged major criminal offenses (punishable under the UCMJ by more than one year of confinement)

¹¹ A guilty finding at an NJP hearing does not constitute a criminal conviction.

¹² Punishment of a minor offense at NJP will bar a subsequent CM for the same offense, but punishment of a serious offense at NJP will not bar a subsequent CM for the same offense.

¹³ According to reference [11], a preponderance of the evidence means that it is simply more likely than not that a charge is true. It is the least stringent standard of proof and requires less certainty than clear and convincing evidence and substantially less than belief beyond a reasonable doubt.

- Noncombat deaths when the cause of death is not medically attributable to disease or natural causes
- Fires or explosions of unknown origin affecting DON property or property under DON control
- Theft or loss of ordnance or controlled substances
- Disappearance of a command member
- All instances of suspected fraud against the government within the DON; actual or suspected acts of espionage, terrorism, sabotage, assassination, and actual, suspected, or attempted defection of DON personnel
- Internal security incidents, such as loss, compromise, or suspected compromise of classified information and national security cases
- Suspected sex-related offenses as defined under Articles 120 and 125 of the UCMJ

If charges are referred to a CM, one of three types may be held, again depending on the seriousness of the offense. First is the summary court-martial (SCM), which applies to the least serious offenses. An SCM can be convened by the CO and applies only to enlisted personnel. It consists of only one officer (appointed by the CO) as the military judge and is the simplest procedure. Next is the special court-martial (SPCM)—a full criminal trial for both enlisted personnel and officers. It can be convened by a CO and consists of a military judge, trial counsel, defense counsel, and a minimum of three officers sitting as a panel of court members (i.e., a jury). Last is the general court-martial (GCM), which is used for the most serious offenses. It can be convened only by a general or flag officer, and it consists of a military judge, trial counsel, defense counsel, and at least five court members. For SPCMs and GCMs, the military judge is an officer who is a member of the bar of a federal court or a member of the bar of the highest court of a state and who is certified to be qualified for duty as a military judge by the Judge Advocate General of his or her service [10].

Outcomes of misbehavior

The procedural responses to misbehavior can result in a range of outcomes from nonpunitive administrative actions to sentences of confinement and even death. These outcomes primarily affect the misbehaving servicemember but may also affect his or her unit or command. Of key interest to this study is behaviors that can result in misconduct-related separations because, as we discuss in the next section, they are especially costly in the DON's closed military personnel system.

Administrative actions

The most minor types of misbehavior can be addressed with nonpunitive, administrative actions and can be imposed with or without an NJP proceeding. Reference [11] lists several options available to COs, including the following:

- Informal resolution at the lowest level of the chain of command, such as informal counseling, providing an apology, and so on
- Leadership tools designed to correct unacceptable behavior, such as verbal or written nonpunitive censure, admonitions, or reprimands
- Denial of privileges (but not rights), such as the use of recreational facilities
- Use of evaluations to document unacceptable behavior
- Reassignment, early transfer, or delay of transfer
- Administrative separation

NJPs

NJPs imposed following a guilty finding from an NJP hearing vary with the type and severity of the offense. There are eight categories of NJP:

- Diminished rations
- Correctional custody
- Arrest in quarters
- Forfeiture of pay
- Reduction in grade (i.e., demotion)
- Extra duties
- Restriction
- Reprimand/admonition

The maximum punishments (in terms of duration or dollar amount) that can be imposed depend not only on the seriousness of the offense but also on the ranks of both the servicemember receiving the punishment and the CO imposing it. In general, more senior COs may impose more severe punishments and may impose punishments on more senior servicemembers. See Table 10 in Appendix A for a summary of NJP punishment limitations.

Judicial punishments

Judicial punishments are imposed by CMs. The 10 general categories of judicial punishments follow:

- Death
- Dismissal or discharge
- Confinement
- Restriction
- Hard labor without confinement
- Forfeiture of pay and allowances
- Fine
- Reduction to next inferior rate
- Reduction to lowest paygrade
- Reprimand

The type of punishment depends on the article that has been violated and the type of CM. SCMs can impose only limited punishments, and SPCMs can impose more severe ones. GCMs can impose the maximum punishment established for each offense under the *Manual for Courts-Martial* [10]. Table 11 in Appendix A provides a maximum punishment chart for CMs.

Misconduct-related separations

Misconduct-related separations are involuntary separations (from the servicemember's perspective) and, in most cases, the separation occurs before the member completes his or her obligated service. Misconduct separations can result from both minor and serious offenses, and they fall into one of two categories—administrative or punitive—depending on their seriousness. Understanding these categories matters for how we analyze the data on misbehavior in the USN and the USMC.

Administrative separations

Some misconduct separations occur via the administrative separation process, which assesses whether a member's conduct conforms to the requirements of good order and discipline. The main purpose of administrative separations is to determine the servicemember's suitability for continued service in the military, and the separations can be initiated for a variety of reasons—

some related to what we are considering misbehavior and some not.¹⁴ Administrative separations for enlisted personnel fall into two categories defined by the characterization of service:

- General discharge (under honorable conditions): Applied when the servicemember provided honest and faithful service, but the negative aspects of that service outweighed the positive aspects [11].
- Other-than-honorable discharge: Applied when the servicemember demonstrated one or more aspects or a pattern of misconduct that constituted a significant departure from expected behavior [11].

Punitive separations

Servicemembers who are separated under the military justice system are punitively separated. Two categories of punitive separations are again defined by the characterization of service:

- Bad conduct discharge: Adjudged by an SPCM or a GCM or used when an accused has been repeatedly convicted of minor offenses and whose punitive separation appears to be necessary. A bad conduct discharge is less severe than a dishonorable discharge and is designed as a punishment for bad conduct rather than for serious offenses of either a civilian or military nature [10].
- Dishonorable discharge: Adjudged only by a GCM and reserved for those who should be separated under conditions of dishonor, after having been convicted of offenses usually recognized in civilian jurisdictions as felonies, or of offenses of a military nature requiring severe punishment [10].

Mandatory misconduct separation

Current USN and USMC policies identify several offenses for which a misconduct separation is mandatory. These are listed in Table 1. Mandatory misconduct separations may also be required if a servicemember commits multiple minor disciplinary infractions or displays a pattern of misconduct.¹⁵ The mandatory separations that result from these misbehaviors may be administrative or punitive depending on the seriousness of the offense.

¹⁴ Reasons for administrative separation that we do not classify as misbehavior include poor performance, weight control issues, and health issues. Policies on administrative separations are provided in [22] for the USMC and in [23] and [24] for the USN.

¹⁵ See reference [22] and references [25] and [26] for more information on USMC and USN policies, respectively.

Table 1. Misbehaviors that constitute mandatory basis for separation

USN	USMC
Misconduct that could have led to death or serious bodily injury	
Sexual misconduct	Sexual misconduct
Sexual harassment	Sexual harassment
Drug abuse	Drug abuse
Illicit use of prescription/over-the-counter medications	Illicit use of prescription/over-the-counter medications
Supremacist or extremist conduct	Supremacist or extremist conduct
Second substantiated DUI (date-dependent)	Second substantiated DUI
Alcohol treatment rehabilitation failure	
Family Advocacy Program failure	

Source: Reference [11].

Summary

The types of misbehavior considered here are offenses covered by the punitive articles of the UCMJ. This section distinguished between minor and serious offenses and described the procedural responses to misbehavior in each category as well as the potential outcomes imposed on servicemembers who are found guilty of each type of misbehavior. Table 2 summarizes these features of military misbehavior to help inform both the discussion of misbehavior-related costs and the investigation of gender differences in misbehavior rates.

Table 2. Responses and outcomes associated with minor and serious offenses

Outcome		Response by type of offense				
		Minor offenses			Serious offenses	
		Less serious	More serious		SPCM	GCM
		Non-punitive	NJP	SCM		
No separation	Administrative action	✓				
	Reprimand	✓	✓	✓	✓	✓
	Demotion		✓	✓	✓	✓
Administrative separation	General discharge	✓	✓	✓		
	Other-than-honorable discharge		✓	✓		
Punitive separation	Bad-conduct discharge				✓	✓
	Dishonorable discharge					✓

The Costs of Misbehavior in the Military Setting

Misbehavior by servicemembers imposes costs on both the DON and the Department of Defense overall, as well as on all the individuals involved. This is acknowledged in the stated purpose of the UCMJ, which links promoting justice and maintaining good order and discipline with promoting efficiency and effectiveness in the military establishment [10].

In this section, we identify several types of costs associated with misbehavior and discuss three key features of these costs. First, we note whether the identified costs arise directly from the misbehavior or indirectly as a result of the DON response or the subsequent outcome. Second, we indicate the Navy appropriations category with which each type of cost is most likely to be associated—either military personnel (MP) or operations and maintenance (OM). Third, we consider the extent to which the costs are related to the seriousness of the offense that has been committed.

We also provide actual cost estimates when available from existing research. We note, however, that such research is limited: even though the costs associated with misbehavior seem to be significant, only a few studies discuss these cost implications and none of them look at misbehavior overall as opposed to just one type.

Personnel and readiness costs

Misbehavior imposes personnel and readiness costs. We consider them together because they often represent different sides of the same coin, with personnel costs being the monetary costs of misbehavior and readiness costs being the opportunity costs of misbehavior. These costs predominantly arise directly from misbehavior or indirectly from the outcomes of misbehavior.

Command time and attention

Every case of misbehavior generates costs in terms of command time and attention. To some extent, these costs are direct since leaders naturally respond to events in their units. But, because of the legal requirement that COs address all cases of misbehavior by servicemembers under their command, these costs also result from the DON response to misbehavior and are, therefore, also indirect. Given that the procedural responses to minor offenses (e.g., DRBs, XOIs,

and NJPs) are less formal and complex than the procedural responses to serious offenses (e.g., Article 32 investigations and GCMs), these costs are expected to increase with the seriousness of the misbehavior. Command time and attention should be considered a readiness cost that is imposed as COs and other members of the leadership team spend time dealing with misbehavior rather than doing other things, such as focusing on overall unit performance or mentoring unit members who are not misbehaving.

We did not find any estimates of these costs. Indeed, as part of an evaluation of DOD's policies and programs to prevent and treat domestic abuse, the Government Accountability Office (GAO) concluded that domestic abuse has a negative effect on readiness, mostly because of the amount of time spent by COs and others on this issue, but that measuring this effect would be difficult, if not cost prohibitive [27].¹⁶

Missed workdays and impaired performance

Missed workdays and impaired performance are direct readiness costs of misbehavior. They increase with the seriousness of the misbehavior, which may be defined, at least in part, in terms of the numbers of days missed or impaired.

In a comprehensive study of the economic burden of alcohol misuse in the US military in the mid-2000s, Harwood et al. [32] estimated that, across the services, alcohol may have been responsible for 912,000 workdays with impaired performance and 320,000 missed workdays per year. Then, assuming that each workday with impaired performance reduces productivity by 25 percent and that each full workday lost was valued at the FY 2006 average daily base pay of \$120 for an active duty servicemember (ADSM), the authors estimated the total cost of such absenteeism and impaired performance to be about \$67 million in that year.

Victims of sexual assault are also likely to miss work and suffer from impaired performance. We do not have estimates of the extent or costs of this effect for DON military personnel, but a recent study of the health impacts of MSA [33] cited data from the National Center for Injury Prevention and Control, indicating that civilian victims lose an average of about 8 paid workdays and 13 unpaid household labor days per assault. Nationwide, lost productivity at work and in domestic tasks was estimated to be 1.1 million days in 1995.

¹⁶ Although domestic violence is not explicitly covered by the punitive articles of the UCMJ, domestic violence charges can be made under Article 120 (Rape), Article 124 (Maiming), Article 128 (Assault), and Article 134 (General Article) [28]. In addition, USMC and USN family advocacy programs provide guidelines for the separation of members who commit domestic violence [29] and [30]. We also note that, in March 2018, the House of Representatives passed a bill to amend Article 128 to include more specific definitions of domestic violence [31].

Gapped billets

Both personnel and readiness costs may arise when misconduct results in assignment restrictions for misbehaving servicemembers or causes them to be removed from full-duty assignments, either during or after the adjudication process. For example, reference [32] estimated that, DOD-wide, 10,400 ADSMs are unable to deploy each year because of drinking. They estimated the cost of these missed deployments to be \$510 million for 2006—equal to 10,400 times an estimated \$49,000 to train an additional ADSM. For the USN, reference [7] estimated the average cost of an unplanned loss to be \$12,800 in FY 1999. This estimate includes costs associated with increases in training requirements and permanent-change-of-station (PCS) moves.

More generally, in the USN, Sailors removed from full duty assignments for misconduct should be placed in disciplinary status, or in what is called Transient, Patient, Prisoner, or Holdee (TPPH) billets. But this creates a cost to the Navy from gapping these Sailors' full-duty billets. Reference [34] finds that, in general, each man-year of overexecution of non-full-duty billets (of which TPPH is an example) relative to full-duty billets translates into one less Sailor in the distributable inventory. This doesn't change even if the Navy quickly fills the billet that was temporarily gapped because of a Sailor's misconduct. As long as the Sailor who misbehaved is filling a TPPH billet, there is one less Sailor in distributable inventory, which creates a gap somewhere in the fleet, even if not in the misbehaving Sailor's command. The only way to avoid incurring readiness costs associated with gapped billets is to maintain additional inventory to compensate for each additional removal from full duty (and incur personnel costs). Reference [34] does not provide a cost estimate, but it would be straightforward to calculate the cost of each discipline-related TPPH billet by paygrade.

These are indirect costs of misbehavior because they result from the DON response. They increase with the seriousness of the misbehavior because confinement likelihoods and lengths are greater for more serious offenses.

Recruiting and training costs to replace early separations

Misbehavior that results in early or unplanned separations of servicemembers requires the services to recruit and train replacements, which increases personnel costs. Like the costs of gapped billets, these replacement costs are indirect costs resulting from the DON response to misbehavior.

The costs to recruit and train a servicemember vary with the member's military occupation—personnel in more skilled jobs are often more expensive to recruit initially and, by definition, require more, and more expensive, training. Thus, the average cost of misbehavior-related

separations will only increase with the seriousness of the offense if higher quality Sailors who receive more training are also more likely to commit more serious offenses. Regardless of the cost, however, the likelihood that this type of cost will be incurred at all increases with the seriousness of the misbehavior in question.

Reference [35] estimated that, from 1994 to 2009, the DOD-wide average cost to replace a servicemember separated under the DOD's old policy on homosexual conduct was \$52,800 in 2009 dollars. The figures for the average Sailor and Marine were above and below this average, respectively. Specifically, the estimated average cost to recruit and train a separated Sailor was approximately \$115,000, while the estimated average cost to recruit and train a separated Marine was approximately \$50,000.¹⁷ Although homosexual conduct is no longer considered to be misconduct (and we do not include homosexual "misconduct" in our analysis of personnel data), these replacement costs are expected to be indicative of overall average replacement costs.¹⁸

Decreased unit cohesion and morale

Finally, in addition to these tangible costs that can be theoretically, if not easily, translated into monetary terms, servicemember misbehavior can also impose direct but intangible readiness costs in terms of decreased unit cohesion and morale, at both the unit level and service wide. For example, the "Army Gold Book" notes that crime by its servicemembers erodes unit and team cohesion, as well as individual and family trust, tarnishes the service's reputation, and violates the sacred trust owed to the nation [36]. And, more specifically, the 2010 annual report on sexual assault in the military asserts the following:

The crime of sexual assault takes an immeasurable toll on the victim and diminishes the Department of Defense's overall capability by undermining core values, degrading mission readiness, subverting strategic goodwill, and raising financial costs. [37]

We found no estimates of this type of readiness cost, but, consistent with the guidance that disposition decisions depend on the CO's estimate of the effects of an offense on unit morale, we expect these costs to increase with the seriousness of the offense and the extent to which it is visible beyond the offender's own unit.

¹⁷ These values were calculated by CNA by dividing total recruiting and training costs for each service by the service-specific number of separations. See Appendix C for more details.

¹⁸ The CNA study of unplanned losses due to pregnancy [3] used the \$52,800 average replacement cost in its calculations.

Other direct costs

In addition to direct personnel and readiness costs, misbehavior also imposes direct costs in two other categories: health care and lost property or funds.

Health care

Servicemembers' misbehavior can also result in higher costs to the military health system. These are direct costs that arise because of the misbehavior's effects on the health of either the people who engage in the misbehavior or those who may be victims of it. In either case, we expect these costs to increase with the seriousness of the misbehavior.

We were able to find only two estimates of misbehavior-related health costs. First, reference [32] estimated that, among active duty Prime beneficiaries, the average per-patient cost to treat chronic pancreatitis associated with binge drinking was \$6,000 in 2006. This translated to an additional \$147 million in medical costs across the DOD. These costs may be paid for with both OM and MP funds. Second, reference [38] reported that the Department of Veterans Affairs (VA) spends approximately \$10,880 on healthcare costs per MSA survivor.

Loss of property or funds

Theft and procurement fraud, two types of potential misbehavior by servicemembers, imposes direct costs that are valued in terms of the value of the lost property or funds. These costs increase with the seriousness of the offense by definition.

The 2015 NCIS Annual Crime Report [39] indicates that, in that calendar year, the numbers of larceny incidents reported in the DON were 637 for the USMC and 1,296 for the USN. The total (average) values of these thefts were \$6,673,271 (\$10,476) and \$5,694,053 (\$4,394), respectively. In addition, the number of procurement fraud cases for the DON as a whole was 299, and the total value of recovered amounts was \$7,027,771.

Indirect costs—prevention, response, and support

The most obvious response-related costs of misbehavior are the investigation and adjudication costs associated with NJPs and the military justice system. Less obvious are the costs associated with DON programs to prevent and respond to certain types of misbehavior. These costs of misbehavior are primarily OM costs, though the fact that military personnel are required to implement the programs means that they also include MP-related costs.

Investigation

Investigation costs are indirect costs that result from the DON response to misbehavior. Like the costs associated with command time and attention, per-incident investigation costs are expected to increase with the seriousness of the offense.

Our review of the literature did not reveal any pure estimates of the costs of command-level investigations of minor offenses. Reference [35], however, does provide estimates of non-legal administrative costs associated with homosexual conduct separations that include CIs (as well as pastoral counseling of servicemembers and the processing of separation paperwork). The per-separation estimates (in 2009 dollars) for the USMC, US Army (USA), and US Air Force (USAF) were \$911, \$2,470, and \$752, respectively.¹⁹ We have no information to indicate whether these costs are likely to be higher or lower for the types of misbehavior we are considering in this study, but they do provide a benchmark in the absence of other data.

Information on the numbers of investigations of more serious criminal incidents reported to NCIS is available in the NCIS annual reports on crime. For example, recent incident data for six major investigative areas are shown in Table 3.

Table 3. Reported incidents by investigative area, calendar years 2014-2016

Investigative area	2014	2015	2016
Death	240	250	266
Adult sexual assault	1,461	1,552	1,522
Child sexual abuse	387	392	419
Narcotics	2,289	2,262	2,250
Procurement fraud	223	219	177
Property crime	2,055	1,906	1,641

Source: DON Annual Crime Reports for 2015 [39] and 2016 [40].

In addition, DON budget submissions give an indication of the total cost of investigating DON-related crime. For example, the FY 2016 DON OM budget for Investigative and Security Services was approximately \$650 million [41]. This funding provided for NCIS agents and support at more than 19 field offices and 191 locations in 41 countries, as well as 7,949 NCIS-conducted

¹⁹ These values were calculated by CNA by dividing total non-legal administrative costs for each service by the service-specific number of separations. See Appendix C for more details. According to reference [35], the Navy did not provide this information because changes in separation processes in the last part of the study period made it difficult to make an accurate estimate.

investigations, including 4,986 investigations related to family and sexual violence, 734 investigations related to economic crimes, and 717 investigations related to property crimes.²⁰ The budget information does not, however, provide enough detail to calculate the per-incident costs of investigations, either on average or by investigation type.

Adjudication

If the results of an investigation merit making a formal charge, adjudication costs are incurred. These are indirect costs that vary with the adjudication method: the time required and the number of participants increase as the method becomes more formal, moving from NJP to SCM, SPCM, and GCM. Thus, per-incident adjudication costs are expected to increase with the seriousness of the offense.

Information on adjudication costs mirrors information on investigation costs. First, although we lack comprehensive estimates of costs associated with DON adjudication processes, some estimates of adjudication costs in other military settings and for specific offenses do exist. For example, reference [32] reported the DOD-wide average cost of adjudicating DUI arrests to be approximately \$1,100 and the average cost of adjudicating non-DUI alcohol-related arrests to be approximately \$2,400.²¹ In addition, reference [35] provides estimates of the legal administrative costs associated with the services' reviews of homosexual conduct cases. These costs include paralegal work, attorneys' counseling of servicemembers, and board hearings. The per-separation estimates for the USMC, USA, and USAF were \$416, \$1,189, and \$423 respectively.²² Finally, in 2010, DOD estimated that legal expenses resulting from MSA cases averaged \$40,000 per case [38].

Second, although the costs associated with DON adjudication processes are not identifiable in DON budget documents, statistics on the numbers of proceedings and supporting processes are available. According to the FY 2016 UCMJ Annual Report [44], the DON delivered 8,921

²⁰ The Operations and Maintenance, Marine Corps (OMMC) budget request [42] did not include these costs, implying that the OMN budget covers them for both services.

²¹ Specifically, these figures include "costs for military police and other judicial and administrative costs." A later study [43] analyzing the cost-effectiveness of the Alcohol Misconduct Prevention Program implemented by the USAF between 2010 and 2012 translated the midpoint of these two estimates—\$1,750—to \$2,000 in 2013 dollars.

²² These values were calculated by CNA by dividing total legal administrative costs for each service by the service-specific number of separations. According to reference [35], the USN did not provide this information because changes in separation processes during the study period made it too difficult to generate accurate estimates in the time allowed.

NJPs and tried 332 SCMs, 343 SPCMs, and 224 GCMs in that fiscal year. In addition, the DON had numerous pending CMs and other legal workload. For example, at any given time during FY 2016, the USMC had about 200 CM and 40 Article 32 preliminary hearings pending, with an additional 40 pending post-Article 32 referral/disposition decisions, 80 pending prosecutorial merit memoranda, and 180 pending requests for legal services.

Sexual harassment and assault prevention and response

To implement its policies on sexual assault prevention and response (SAPR), the DON maintains a SAPR office (DON-SAPRO). The FY 2018 budget request [41] for SAPR was \$21.6 million in OMN funds.²³

The DON also incurs costs to support the Victim's Legal Counsel Organization (VLCO). Established in response to a 2013 DOD directive, the VLCO provides legal representation to MSA victims.²⁴ Specifically, judge advocates are detailed to advocate on victims' behalf by providing legal counsel throughout the investigation and CM processes [11]. DON budget requests include numbers of victims supported but do not provide enough information to calculate the costs of this support, either overall or by case. All sexual assaults are serious offenses.

Drug and alcohol abuse prevention and treatment

DON policies on drug and alcohol abuse also provide for robust prevention programs that require OM funding. Specifically, the FY 2018 OMN budget request [41] justification includes \$2,971,000 for six civilian employees to support the Navy Alcohol Prevention program. It also includes funding for three key elements of the DON drug demand reduction program: testing, prevention, and education and outreach. For example, it notes that the Navy/Marine Corps Public Health Center (NMCPHC) establishes command and control of the three drug testing laboratories, and the Chief of Naval Personnel establishes Navy urinalysis testing requirements, ensures annual quality assurance inspections at the Navy drug laboratories, and

²³ We could not find a SAPR line item in earlier budget requests. We also note that the estimated cost to produce the FY 2017 DOD report on MSA was approximately \$3,345,000, including \$2,870,000 in expenses and \$474,000 in DOD labor [45].

²⁴ In August 2013, the Secretary of Defense directed that each service immediately implement a victim legal advocacy program to provide legal advice and representation to MSA victims [23]. This directive followed heavy scrutiny of the services' response to MSA in the early months of 2013, which resulted from a series of scandals and a Pentagon report estimating that 26,000 cases of unwanted sexual contact occurred in 2012, a 37 percent increase from the previous year [46].

manages the military education and training programs. The budget does not, however, include separate line items for these efforts.²⁵

Summary

This section identified and described several types of costs that are imposed by misbehavior among DON servicemembers. There are no comprehensive estimates of misbehavior-related DON costs, but separate studies indicate that they are substantial, both in terms of direct monetary costs and in terms of readiness. The fact that many of the costs are indirect, difficult to calculate, and fall across appropriation categories may partially explain why comprehensive estimates are not available.

Table 4 summarizes the cost types and cost estimates presented in this section. To support the presentation of our own cost calculations in a later section, Table 4 sorts the cost types into three categories: direct costs, response-related costs, and outcome-related costs. Then, to tie them to the different types of misbehavior described in the previous section, it maps the available cost estimates to types of offenses and DON responses.

²⁵ The relevant sections of the request are, respectively, the Military Manpower and Personnel Management and Other Personnel subactivity groups of the Servicewide Support activity group in the Administration and Servicewide Activities.

Table 4. Costs of misbehavior reported in the reviewed literature by cost category and seriousness of offense

Types of costs	Minor offenses			Serious offenses	
	Least serious	More serious		SPCM	GCM
	Non-punitive	NJP	SCM		
Direct costs of misbehavior					
Missed workdays	Daily base pay for each missed day [32]				
Workdays with impaired performance	Daily base pay *.25 for each day with impaired performance [32]				
Health care		\$6,000 per ADISM binge drinker (2006) [32] \$10,800 per MSA victim (2004) [38]			
Loss of property or funds		\$6,489 per DON incident (2015) [39]			
Reduced unit cohesion and morale	Not available (N/A)				
Response-related costs of misbehavior					
Command time and attention	N/A				
Investigation	\$911 for CIs in the USMC (2009) [35]				
Adjudication	\$416 for USMC admin separations (2009) [35]				
		\$1,100 for DUI arrests and \$2,400 for non-DUI alcohol-related arrests (2006) [32]			\$40,000 per MSA case (2010) [38]
SAPR	\$21.6 million for the total 2018 DON SAPRO budget [41]				
Drug and alcohol abuse treatment and prevention	\$2.9 million for 2018 Navy Alcohol Prevention Program [41]				
Outcome-related costs of misbehavior					
Gapped billets	\$12,800 per unplanned loss (1999) [7]				
Recruiting and training	\$115,000 for a Sailor; \$50,000 for a Marine (2009) [35]				

Source: Dollar values come directly from indicated references. Assignments to cost categories are based on the authors' judgment.

Gender Differences in Misbehavior Among DON Enlisted Personnel

In this section, we use USMC and USN personnel and other data from FY 1999 to FY 2015 to determine whether enlisted men and women in the active components of each service misbehave at different rates. We focus on enlisted personnel because they constitute the majority of each force. This means that they likely account for the majority of misbehavior and ensures that sample sizes are large enough for analysis.

The available personnel data do not allow us to observe actual misbehavior; the data capture only misbehaviors that generate records of either a DON procedural response or a response outcome. Thus, to estimate gender differences in misbehavior rates, we compare the number and shares of men and women with specific misbehavior records, noting both average differences and changes in differences over time.

Since not all misbehavior generates a record in the data to which we have access, we are likely estimating lower bounds on the true incidence of misbehavior among DON personnel. Furthermore, we cannot be certain that the data are measuring the same sets of behaviors over time or for both men and women. Specifically, we cannot be sure that men and women are consistently held to the same standards. Nor can we say whether year-to-year changes in the numbers of misbehavior records represent changes in the behavior of enlisted personnel as opposed to changes in perceptions of what constitutes misbehavior or changes in how commanders address it.²⁶

The available misbehavior records are slightly different across the two services because they have different approaches to data collection and dissemination. Thus, each service-specific subsection begins with notes about the data sources and a list of the records we analyze. In all the figures in this section, counts are shown with columns (gray for men and black for women) and percentages are shown with lines (square markers for men and triangular markers for women). To the extent practical, the figures' vertical axes use the same scale to facilitate comparisons across services and/or across misbehavior indicators.

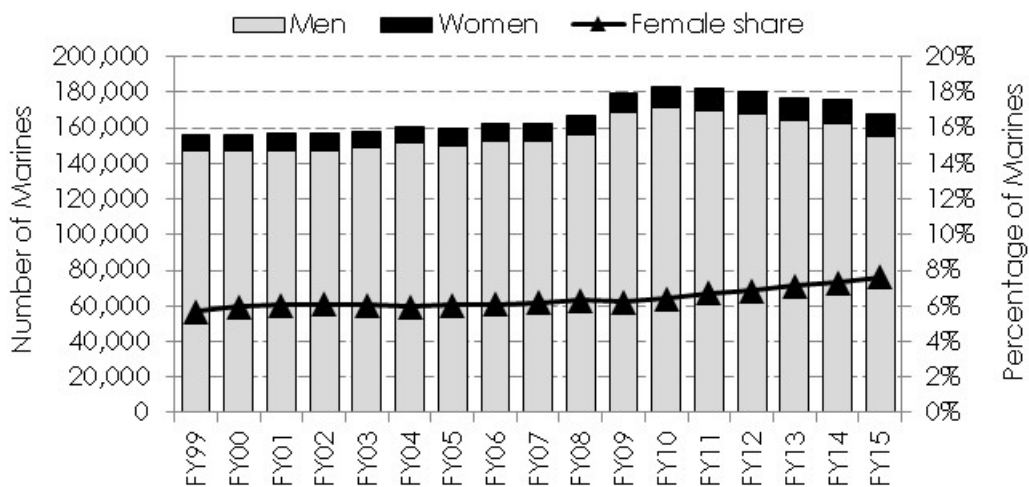
²⁶ In fact, during our study period, there was a documented decrease in the use of NJPs and CMs to address misbehavior. See Appendix B for a discussion of this issue.

USMC

The USMC data source is end-of-month snapshots from the Marine Corps Total Force Data Warehouse (TFDW), and the analyses apply to the population that was present at the start of each FY as indicated by the end-of-September snapshots. Based on this data source, the misbehavior-related records we analyze for enlisted Marines are NJPs, CMs, demotions, and misconduct-related separations.

For context, Figure 1 shows total USMC enlisted endstrength and the female share of that endstrength at the start of each FY. In our timeframe, the enlisted Marine population ranged from a low of 156,144 in FY 1999 to a high of 183,099 in FY 2010. FY 2015 endstrength was 167,546, very near the period average of 167,136. Female representation among enlisted Marines rose from 5.7 percent of endstrength in FY 1999 to 7.7 percent in FY 2015. Because men are such a large majority of USMC enlisted endstrength, they are also a large majority of the Marines with misbehavior records of all types.

Figure 1. Marine Corps enlisted endstrength and female representation by fiscal year



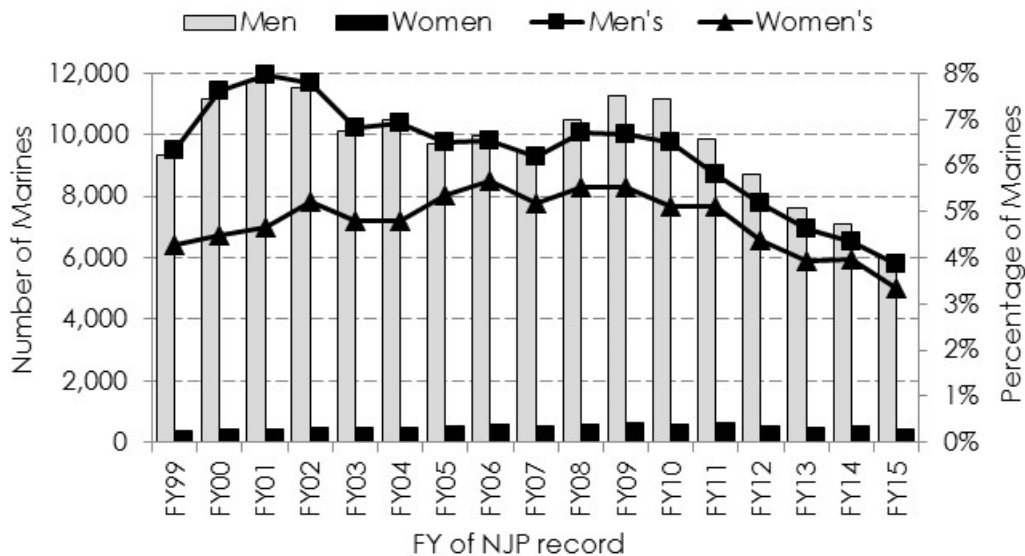
Source: CNA tabulations of TFDW September end-of-month snapshots, FY99–FY15.

NJPs

Figure 2 shows the numbers and percentages of male and female enlisted Marines with NJPs on record over the data period. Specifically, these are Marines who were accused of offenses

for which NJP was the appropriate response and whose COs decided there was enough supporting evidence to initiate NJP proceedings. Thus, the data represent the number of Marines who were credibly charged with minor offenses, which means they serve as an imprecise proxy for minor misbehavior among male and female enlisted Marines.

Figure 2. Number and percentage of enlisted Marines with NJPs by gender and fiscal year



Source: CNA tabulations using TFDW data, FY99–FY15.

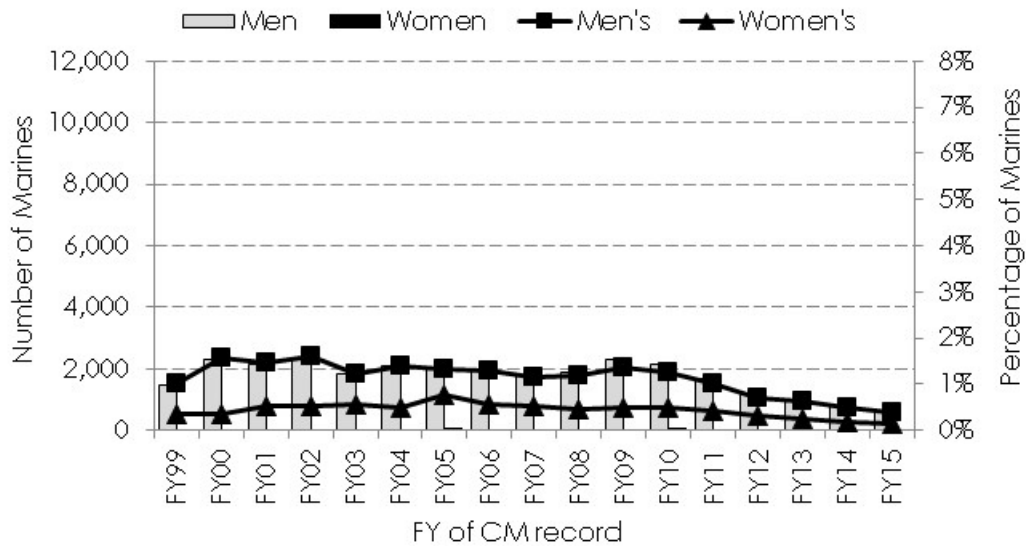
The data show that, in every FY of the study period, the percentage of men with NJP records was higher than the percentage of women with NJP records. As a result, the average male percentage was higher than the average female percentage: 6.3 percent for men versus 4.8 percent for women. The data also show, however, that the difference between men's and women's NJP rates decreased over time. In FY 1999, the men's percentage of 6.3 was 1.48 times higher than the women's percentage of 4.3. In FY 2015, however, the men's percentage of 3.9 was only 1.16 times higher than the female percentage of 3.3.

CMs

The numbers and percentages of male and female enlisted Marines with a CM on record are shown in Figure 3. Similar to the NJP data, the CM data capture the number of Marines who were charged with offenses for which CM was the appropriate procedural response and for which there was enough supporting evidence to initiate CM proceedings, but they do not

capture case outcomes. Thus, these data represent the number of Marines who were credibly charged with more serious offenses, which means they serve as an imprecise proxy for more severe misbehavior among male and female Marines.

Figure 3. Number and percentage of enlisted Marines with court-martial records by gender and fiscal year



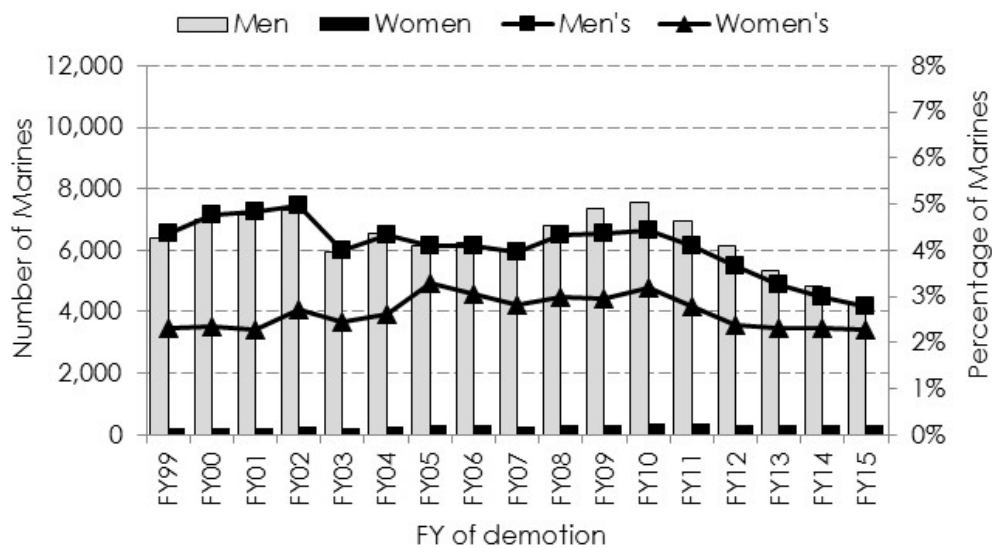
Source: CNA tabulations using TFDW data, FY99–FY15.

The data show that CM is used less frequently than NJP. Indeed, CM is used so much less frequently that, when using the NJP scale for the vertical axis, the number of enlisted women with CM records doesn't even show up on the chart. In fact, the average number of female CM records over the period was only 45 per year; the average number of male CM records was 1,730 per year. The data also show that, as with NJP, men are more likely than women to have CM records. Between FY 1999 and FY 2015, the average percentage of men with a CM record was 1.1 percent compared to 0.4 percent for women. Again, though, the male-female difference in CM percentages narrowed over the period: in FY 1999 the male percentage was 2.89 times higher than the female percentage, and in FY 2015 it was 2.55 times higher. Also note that the gender differences in CM rates are larger than the gender differences in the NJP rates. Given that CM is used for more serious offenses, this indicates that, among enlisted Marines, men are more likely than women to commit more serious offenses.

Demotions

Demotion is a possible outcome of both NJP and CM proceedings. Because we do not observe the outcomes of NJPs and CMs, we analyze demotion as its own outcome. Figure 4 shows the numbers and percentages of enlisted men and women who were demoted during the data period. Men were more likely than women to be demoted in each FY. The average demotion rates for men and women were 4.1 and 2.6 percent, respectively. The gender difference in demotion rates decreased over the study period. In FY 1999, the men's rate was 1.88 times higher than the women's rate; in FY 2015, the men's rate was only 1.22 times higher.

Figure 4. Number and percentage of enlisted Marines demoted by gender and fiscal year



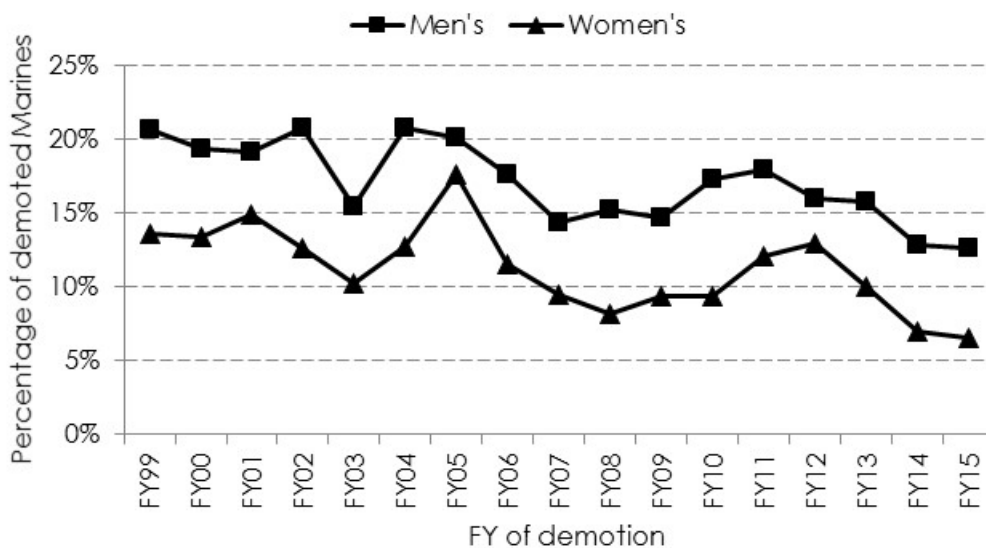
Source: CNA tabulations using TFDW data, FY99–FY15.

We can also examine the severity of demotions by comparing Marines' paygrades before and after demotions. Given that the maximum demotion that can be imposed at NJP is reduction by one paygrade, but the maximum demotion that can be imposed at CM is reduction to the lowest grade, demotions of greater severity (i.e., demotions of more than one paygrade) are associated with more serious misbehavior.²⁷ Thus, this measure indicates how the seriousness of misbehavior varies by gender.

²⁷ See the NJP punishment limitations and the CM maximum punishments in Table 10 and Table 11 in Appendix A.

Figure 5 shows the percentage of demoted Marines who were demoted by more than one paygrade. These data show that most demotions are for one paygrade but that male Marines are more likely than female Marines to be demoted by more than one grade. This gender difference increased over the data period: the percentage of men being more severely demoted increased from 1.52 times the women's percentage to 1.92 times the women's percentage. Thus, the demotion data serve as another indicator that, among enlisted Marines, male misbehavior is more serious than female misbehavior.

Figure 5. Percentage of demoted enlisted Marines who were demoted two or more grades by gender and fiscal year



Source: CNA tabulations using TFDW data, FY99–FY15.

Misconduct-related separations

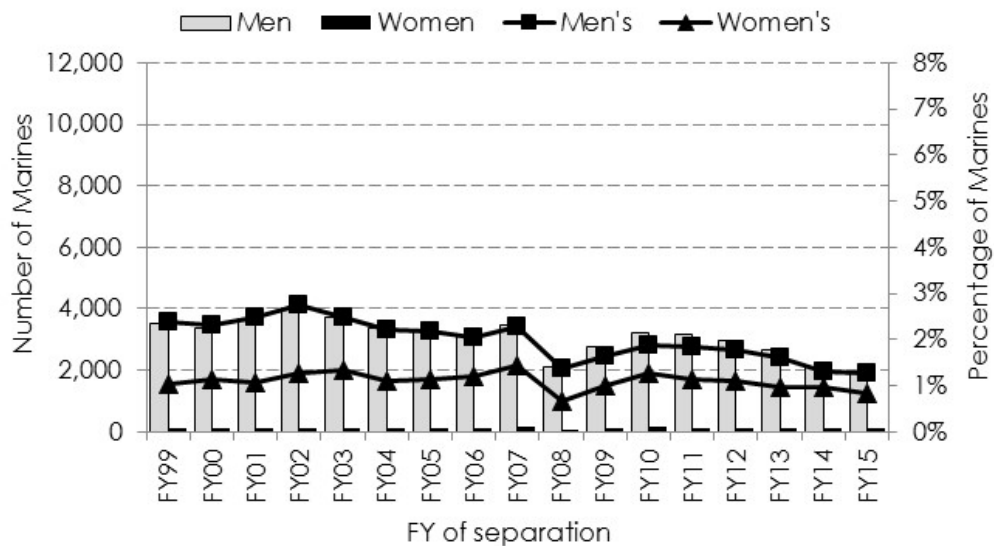
Another outcome of misbehavior is separation from the service. To identify misconduct-related separations in the personnel data, we used a combination of service separation codes and DOD loss codes. First, we identified personnel assigned separation codes for the following types of discharge from the USMC: dishonorable, GCM-ordered, bad conduct, less than honorable, and general.

Then, because both general and less-than-honorable discharges can occur for reasons not related to misconduct, we used DOD loss codes to exclude non-misconduct-related separations

from these two groups.²⁸ For men (women), this reduced the number of general discharges by 68.9 (74.4) percent and the number of less-than-honorable discharges by 1.8 (3.8) percent.

Figure 6 shows the number and percentage of all enlisted Marines who separated from the service for misconduct-related reasons, by gender and FY for the study period. Over this period, the number of male misconduct separations generally decreased as total enlisted endstrength decreased. At the same time, the number of female misconduct separations increased as the number of women in the enlisted force increased.

Figure 6. Number and percentage of enlisted Marines who separated from the service for misconduct-related reasons by gender and fiscal year



Source: CNA tabulations using TFDW data, FY99–FY15.

Note: Misconduct-related separations are defined as all dishonorable, bad-conduct, and GCM-ordered discharges, as well as less-than-honorable and general discharges with misconduct-related loss codes.

Figure 6 also shows that the percentage of male Marines who separated for misconduct-related reasons was consistently higher than the percentage of female Marines who separated for misconduct-related reasons. For the whole period, the average misconduct separation rates

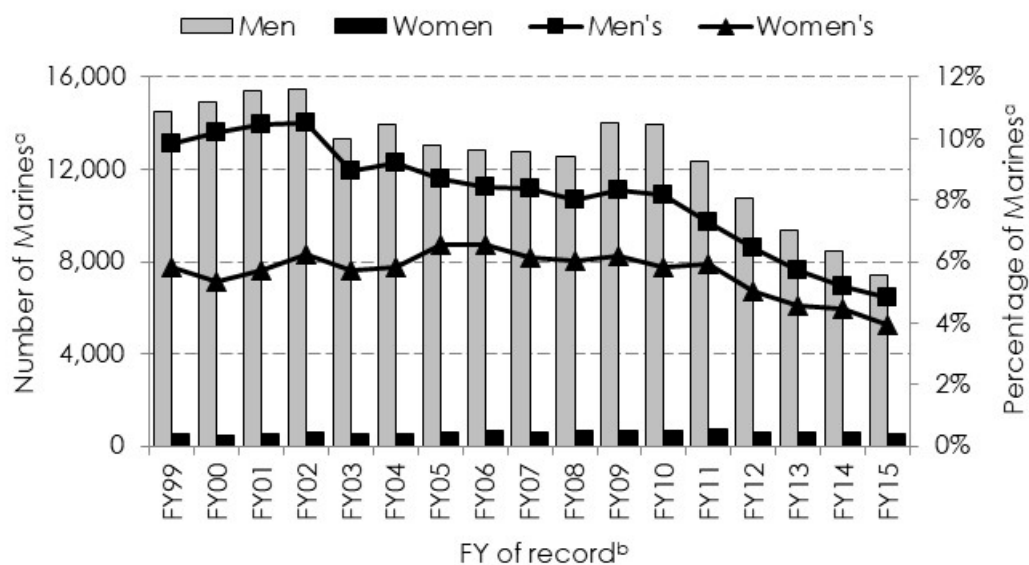
²⁸ For example, based on this definition, we did not include losses that were coded as being related to personality disorder, homosexuality, fraudulent entry, weight control failure, failed physical standards, unsatisfactory performance, medical, or parenthood/pregnancy. For more details on separation and loss codes, see Appendix C.

for men and women were 2.0 percent and 1.1 percent, respectively. The gender difference in misconduct-related loss rates decreased over the period as the ratio of the men’s rate to the women’s rate decreased from 2.29 to 1.53; the average ratio was 1.8.

Any record of misbehavior

Finally, we provide an overall indicator of misbehavior in the USMC. Specifically, Figure 7 shows the counts and shares of Marines with any of the misbehavior-related records analyzed here—that is, NJP, CM, demotion, *or* misconduct-related separation. Since personnel can experience more than one outcome in the same year, it is not the sum of the totals. (For example, a demotion of one paygrade could be the result of either an NJP proceeding or a CM.)

Figure 7. Number and percentage of enlisted Marines with any record of misbehavior by gender and fiscal year



Source: CNA tabulations using TFDW data, FY99–FY15.

^a Because the maximum number (percentage) of Marines with any misconduct record is 15,503 (10.5) percent, the vertical axis bound for number (percentage) of Marines is 16,000 (12 percent), rather than 12,000 (8 percent) as in the other figures in this section.

^b Misbehavior records include NJPs, CMs, demotions, *or* misconduct-related separations. Personnel can experience both outcomes in the same year, so this is not the simple sum of the two outcomes.

The data show that men were more likely than women to misbehave in every FY of the study period. The average overall misbehavior rates for men and women were 8.1 and 5.6 percent,

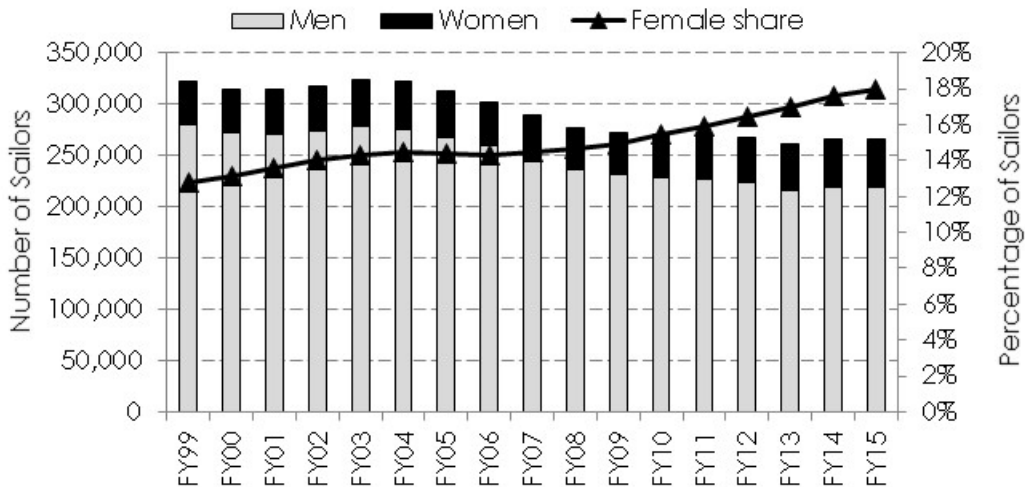
respectively. The gender difference in the overall misbehavior rate decreased over the study period as the ratio of the men’s rate to the women’s rate decreased from 1.69 to 1.23.

USN

The USN data source is end-of-month snapshots from the Enlisted Master File (EMF), and we track counts of misbehavior-related outcomes in each FY for the population present at the start of the FY, as indicated by end-of September snapshots. The outcomes we analyze for enlisted Sailors are placement in disciplinary status, demotions, misconduct-related separations, and misconduct-related early separations.

For context, Figure 8 shows total USN enlisted endstrength and the female shares of that endstrength at the start of each FY. From FY 1999 to FY 2015, the enlisted Sailor population ranged from a low of 260,904 in FY 2013 to a high of 324,440 in FY 2003. The period average endstrength was 292,246. Female representation among enlisted Sailors rose from 12.8 percent in FY 1999 to 18.0 percent in FY 2015. Although women are better represented among enlisted Sailors than among enlisted Marines, men still constitute a large majority of Sailors and, therefore, also a large majority of the Sailors with misbehavior records of all types.

Figure 8. Navy enlisted endstrength and female representation by fiscal year

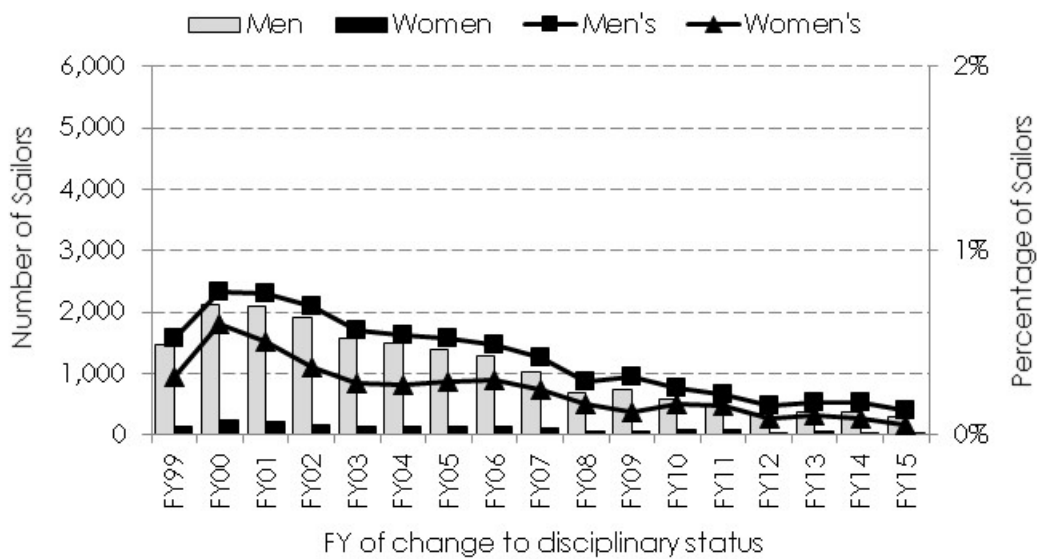


Source: CNA tabulations of EMF September end-of-month snapshots, FY99-FY15.

Placement in disciplinary status

The first indicator of misbehavior in the USN is removal from full-duty or student status and subsequent placement in disciplinary status.²⁹ Figure 9 shows the number and percentage of male and female enlisted Sailors who were placed in disciplinary status in each FY of the study period.

Figure 9. Number and percentage of enlisted Sailors placed in disciplinary status by gender and fiscal year



Source: CNA tabulations using EMF data, FY99–FY15.

Note: The vertical axis bounds are smaller in this figure than in the other figures in this section: 6,000 versus 12,000 for the number of Sailors and 2 percent versus 8 percent for the percentage of Sailors.

The data show that, in any given year, very few Sailors were placed in disciplinary status; over the study period, the maximum was 2,362 in FY 2000—just 0.75 percent of enlisted endstrength. The data also show that male Sailors were more likely than female Sailors to be placed in disciplinary status. The study period average percentages were 0.4 for men and 0.2 for women. Finally, although the misbehavior rates according to this indicator decreased for

²⁹ This is captured by changes in the Accounting Category Code (ACC) in the EMF data.

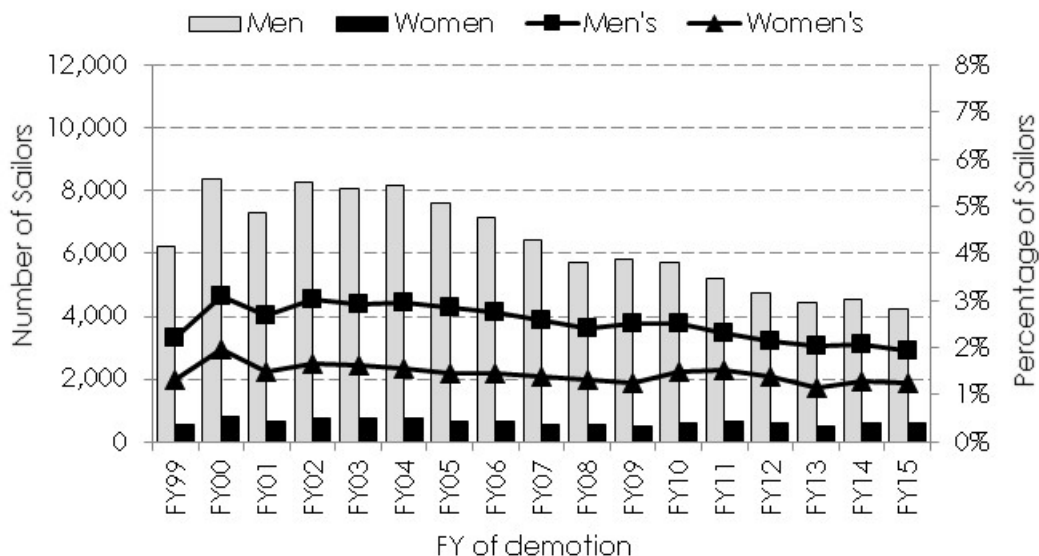
both men and women, the gender difference increased as the ratio of the male rate to the female rate increased from 1.69 to 2.33.

We did not find specific criteria for placement in disciplinary status, but a more detailed look indicates that the misbehavior leading to placement in disciplinary status was probably more serious for men than for women. First, the data showed that, on average, men were less likely than women to go from disciplinary status back to full duty and were more likely to leave the Navy following disciplinary status. Second, among Sailors who did return to full duty, men were in disciplinary status for an average of just over 7 months, while women were in disciplinary status on average for just less than 6 months.

Demotions

Figure 10 shows the number and percentage of male and female Sailors who were demoted in each FY of the study period. Reflecting men’s and women’s population sizes, the data show that more men than women were demoted. They also show that male Sailors are more likely than female Sailors to be demoted. The average demotion rates were 2.5 percent for men and 1.4 percent for women. The gender difference decreased over time as the ratio of the male rate to the female rate decreased from 1.70 in FY 1999 to 1.55 in FY 2015.

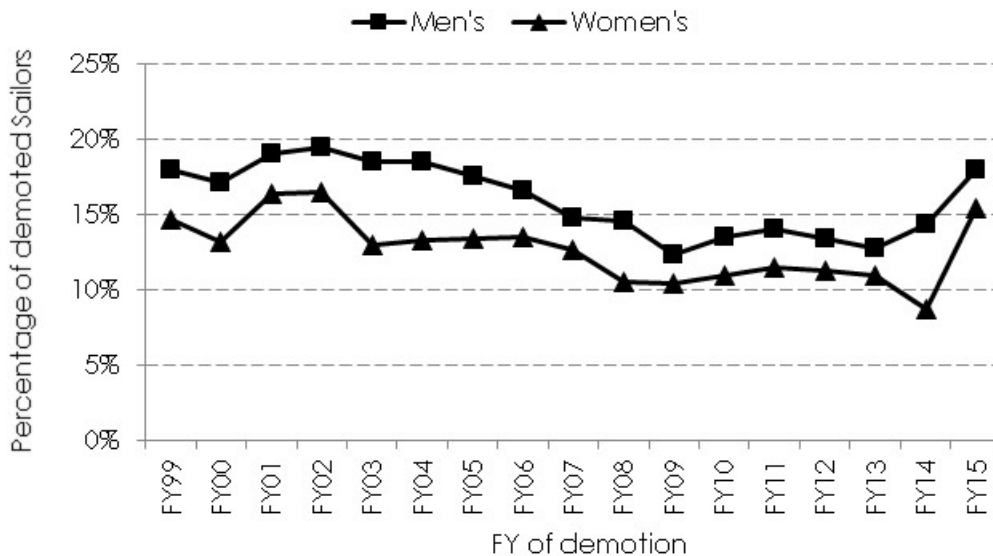
Figure 10. Number and percentage of enlisted Sailors demoted by gender and fiscal year



Source: CNA tabulations using EMF data, FY99–FY15.

As we did for enlisted Marines, we also examine the relative severity of demotions for male and female Sailors by comparing the percentages of male and female demotions that were more than one paygrade. In the absence of legal action data for the USN, this is a useful proxy for CMs, which may result in a reduction to lowest paygrade, versus NJPs, which may result in a reduction of only one paygrade. These data are presented in Figure 11 and show that male Sailors were more likely than female Sailors to experience this outcome in every year of the data period. The average percentages of demotions that were for more than one paygrade were 16.0 percent for men and 12.7 percent for women. The male-female difference decreased slightly from 1.22 in FY 1999 to 1.17 in FY 2015.

Figure 11. Percentage of demoted enlisted Sailors who were demoted for two or more grades by gender and fiscal year



Source: CNA tabulations using EMF data, FY99-FY15.

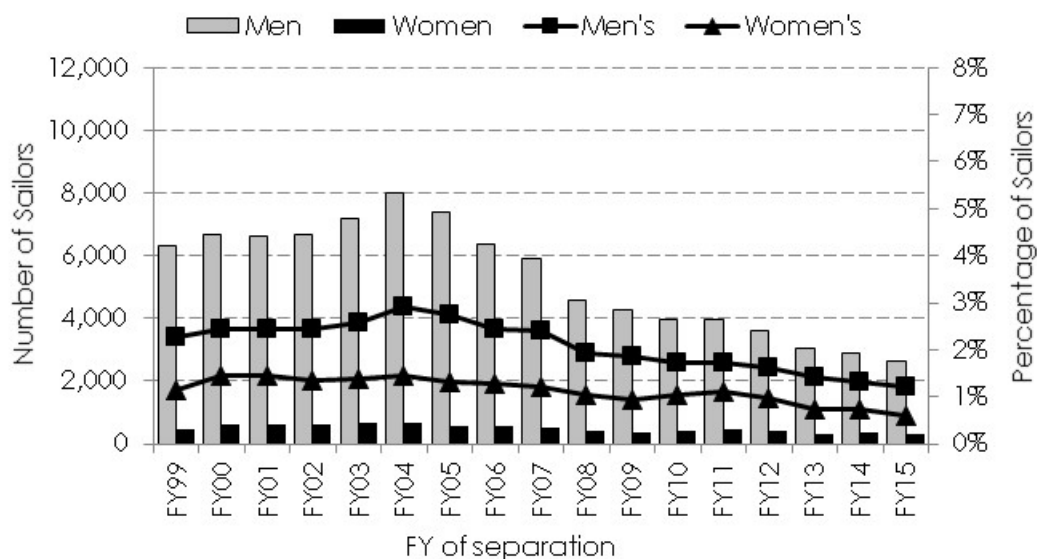
Misconduct-related separations

To identify misconduct-related separations in the USN personnel data, we again used a combination of service separation and DOD loss codes. First, we identified personnel assigned separation codes for bad-conduct, other-than-honorable, and general discharges; the EMF data do not include information on dishonorable discharges. Then, to exclude separations for reasons not related to misconduct from the general and other-than-honorable discharges, we

again used DOD loss codes.³⁰ Making this correction had a smaller impact on counts of misconduct-related separations for Sailors than for Marines. For male (female) Sailors, the correction reduced the number of general discharges by 21.8 (43.3) percent and the number of less-than-honorable discharges by only 0.5 (1.0) percent.

Figure 12 shows the number and percentage of all Sailors who separated from the service for misconduct-related reasons, by gender and FY. Over the data period, the number of annual misconduct-related separations was greater for men (average equal to 5,297 separations) than for women (average equal to 490 separations), but the two series followed generally the same trends, decreasing from peaks in FY 2004 to period minimums in FY 2015. The figure also shows that men were consistently more likely than women to be separated for misconduct-related reasons. Specifically, the average misconduct separation rate for men was 2.1 percent compared to 1.1 percent for women. This gender difference also increased very slightly over the period as the ratio of the male rate to the female rate increased from 1.95 to 1.99.

Figure 12. Number and percentage of enlisted Sailors who separated from the service for misconduct-related reasons by gender and fiscal year



Source: CNA tabulations using EMF data, FY99–FY15.

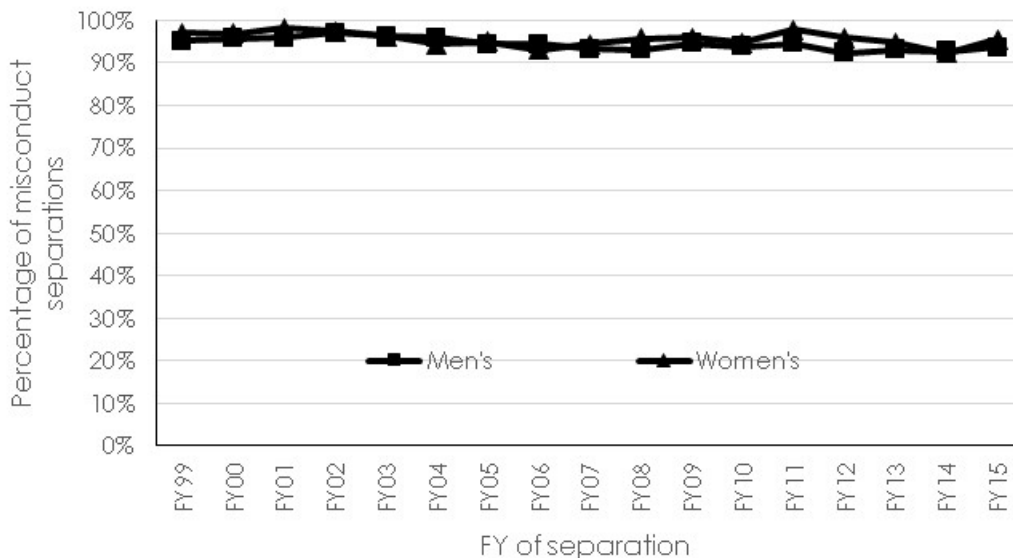
Note: Misconduct-related separations are defined as all bad-conduct discharges, as well as other-than-honorable and general discharges with misconduct-related loss codes.

³⁰ See Appendix C for details on separation and loss codes.

Early misconduct-related separations

The next indicator of misbehavior among USN personnel is *early* misconduct-related separations. Compared to all misconduct-related separations, this indicator provides a more precise indicator of separations that impose recruiting and training costs because it captures separating Sailors who have not stayed long enough to fill the obligations that were determined to satisfy a minimum return on the Navy’s recruiting and training investments. Specifically, Figure 13 shows the shares of misconduct-related separations who also left their last full-duty assignments more than three months before their end-of-active-obligated-service (EAOS) dates.³¹ By restricting our attention to misconduct-related separations, we are accounting for the fact that a Sailor may also leave an assignment early for reasons other than misbehavior, such as medical reasons or the needs of the Navy.

Figure 13. Percentage of enlisted Sailor misconduct-related separations who also separated early by gender and fiscal year



Source: CNA tabulations using EMF data, FY99–FY15.

Note: Early separation is defined as having left a fully-duty billet more than 3 months before SEAOS.

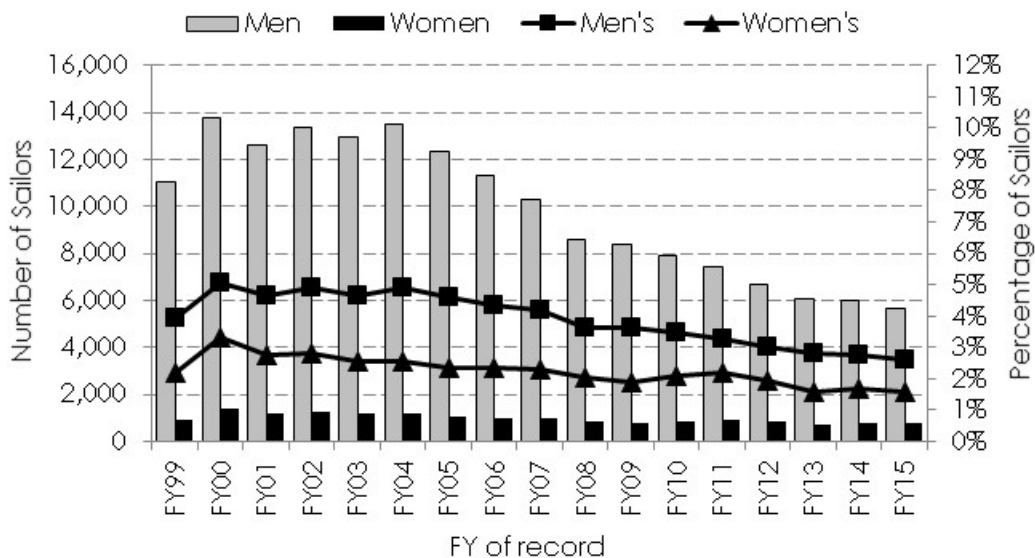
³¹ The EMF variable used to define the EAOS data was the soft EAOS (SEAOS) date. Using this variable takes contract extensions into account.

The data show that, over the course of the study period, a large majority of misconduct-related separations were, in fact, early by our definition, and that this was true for both men and women. Specifically, the average early separation share of all misconduct-related separations was 95 percent for both groups. Underlying data indicate that, on average, male and female Sailors who left the Navy for misconduct-related reasons left their last full-duty billets about 30 months before their SEAOS dates.

Any record of misbehavior

Again, we conclude the service-specific data analysis with an overall indicator of misbehavior defined as the number of personnel with any misbehavior record. For the USN, this includes records indicating placement in disciplinary status, any demotion, *or* any misconduct-related separation. The data are presented in Figure 14.

Figure 14. Number and percentage of enlisted Sailors with any record of misbehavior by gender and fiscal year



Source: CNA tabulations using EMF data, FY99-FY15.

^a The vertical axes in this figure are set to match the axes for the corresponding figure for the USMC.

^b Misbehavior records include placement in disciplinary status, demotion, or misconduct-related separation. Personnel can experience both outcomes in the same year, so this is not the simple sum of the two outcomes.

The data show that, as with every other indicator, men were more likely than women to misbehave in every FY of the study period. The average overall misbehavior rates for men and women were 3.9 and 2.2 percent, respectively, and the gender difference in the overall misbehavior rate decreased over the study period, as the male-female ratio decreased from 1.78 in FY 1999 to 1.66 in FY 2015.

Summary

The data presented in this section showed that, for every indicator for both services, male misbehavior rates were higher than female rates in every FY of the data period. To summarize these results, Table 5 shows the study-period average misbehavior rates by indicator, service, and gender, as well as the average male-to-female ratios and the changes to the ratios over time.

Starting with the average rates and ratios, the data show the following. The average demotion rates for male and female Marines were higher than the average demotion rates for male and female Sailors. The gender difference is, however, slightly larger for Sailors. The average percentages of all demotions that were by more than one paygrade are also higher for Marines than for Sailors. In this case, however, the gender difference is larger for Marines. The misconduct-related separation rates were roughly the same for male Marines and Sailors and for female Marines and Sailors, so the gender differences in this indicator are the same for the two services. For Sailors, the average percentage of misconduct-related separations that were also early separations was the same for men and women—about 95 percent.

Turning to the service-specific indicators, the average rates at which male and female Marines had NJP records are high compared to the rates for the other indicators, but the male-female ratio is relatively low. In contrast, rates at which male and female Marines had CM records are similar to the rates for the other indicators, but the male-female difference is relatively high, indicating that male Marines are especially more likely to commit serious offenses. In the USN, the average rates at which male and female Sailors were placed in disciplinary status are low relative to the other indicators, but the gender difference is similar.

Finally, the average rates at which male and female Marines had any type of misbehavior record are substantially higher than the rates for male and female Sailors, largely because of the high rates at which Marines had NJP records. This provides some indication of how much minor misbehavior in the USN active component enlisted force may not be captured by the disciplinary status, demotion, and separation indicators that we examine.

Table 5. Average misbehavior rates from FY99 to FY15 by service gender, and misbehavior indicator

Indicator	USMC				USN			
	Male (M)	Female (F)	M/F ratio ^a	Change M/F ratio ^b	Male (M)	Female (F)	M/F Ratio ^a	Change M/F ratio ^b
Demotions	4.1%	2.6%	1.5	-0.7	2.5%	1.4%	1.7	-0.1
Demotions of 2 or more grades ^c	17.1%	11.3%	1.5	0.4	16.0%	12.7%	1.3	-0.1
Misconduct-related separations	2.0%	1.1%	1.8	-0.8	2.1%	1.1%	1.9	0.0
Early separations ^d					94.5%	95.6%	1.0	0.0
NJPs	6.3%	4.8%	1.3	-0.3				
CMs	1.1%	0.4%	2.6	-0.3				
In disciplinary status					0.4%	0.2%	1.7	0.6
Any misbehavior record ^e	8.1%	5.6%	1.4	-0.5	3.9%	2.2%	1.7	-0.1

Sources: CNA calculations from TFDW data for the USMC and EMF data for the USN.

^a. The average male rate divided by the average female rate; ratios greater than 1 indicate that the male rate is higher.

^b. The FY15 ratio minus the FY99 ratio.

^c. Demotions of 2 or more grades is a subset of all demotions and the male and female averages represent the average percentages of all demotions.

^d. Early separations are a subset of all misconduct-related separations and the male and female averages represent the average percentages of all misconduct-related separations.

^e. Personnel can experience more than one outcome in the same year, so this rate is less than the sum of each individual rate.

The changes in the male/female ratios shown in Table 5 tell different stories for the two services. The gender differences in misbehavior among enlisted Marines generally decreased over the study period. Looking at each figure in this section shows that these relative changes were driven by relatively large decreases in men's misbehavior rates. The only exception to this pattern is the increase in the gender difference in demotions of more than one paygrade. For this indicator, the female percentage decreased more than the male percentage.

In contrast, the gender differences in misbehavior among enlisted Sailors generally stayed about the same or decreased very slightly, indicating that misbehavior rates, as measured by these indicators, decreased at similar rates for men and women. The exception to this pattern is placement in disciplinary status, for which the gender difference increased. Because there were so few Sailors placed in disciplinary status, this increase is not reflected in the change in the gender difference in the overall misbehavior rate.

In summary, depending on the indicator and the service, male misbehavior rates are roughly 1.5 to 2.5 times higher than female rates. Thus, despite the imprecision of these indicators as measures of misbehavior rates, combined they provide strong evidence that, among DON active component enlisted personnel, men are more likely than women to misbehave. The next step is to explore the extent to which these higher rates of male misbehavior impose extra costs.

Cost Implications of Gender Differences in Misbehavior Rates

The previous section established that male DON enlisted personnel misbehave at higher rates than female DON enlisted personnel. This section explores the cost implications of this extra male misbehavior.

Focusing on the most recent year of the data period, we translate FY 2015 gender differences in misbehavior rates into extra misbehavior incidents across each force. We then map the different indicators of misbehavior to the different types of misbehavior-related costs and use existing type-specific, per-incident cost estimates to generate rough estimates of the total cost of extra male misbehavior in the USMC and USN in FY 2015.

Extra misbehavior incidents

To calculate how much extra male misbehavior occurred in FY 2015, for each misbehavior indicator analyzed in the previous section, we calculated the number of incidents that would have occurred if men misbehaved at the same (lower) rates as women, and compared this to the number of actual incidents. The results for the USMC are shown in Table 6 and the results for the USN are shown in Table 7. The two tables have the following elements in common:

- Column 1 identifies the gender and misbehavior indicator.
- Columns 2 and 3 show actual FY 2015 data by gender—the numbers of personnel with misbehavior records and the associated misbehavior rates, respectively.
- Columns 4 and 5 show the extra misbehavior calculation—the hypothetical counts of misbehavior records and the applied rates, respectively.
- Finally, column 6 shows the differences between the hypothetical counts and the actual counts—the estimated number of extra misbehavior incidents for each indicator.

The data in the two tables generally speak for themselves. We give them meaning by using them, in combination with other data, to calculate the extra costs of male misbehavior next.

Table 6. Extra misbehavior due to higher male misbehavior rates in FY15: USMC

Gender	FY 2015 misbehavior		Male rate set to female rate		Extra misbehavior
	Count	Rate ^a	Count	Rate	
NJPs					
Men	5,982	3.9%	5,153	3.3%	829
Women	424	3.3%	424	3.3%	0
Total	6,406	3.8%	5,577	3.3%	829
CMS					
Men	621	0.4%	243	0.2%	378
Women	20	0.2%	20	0.2%	0
Total	641	0.4%	263	0.2%	378
Demotions: only 1 paygrade					
Men	4,288	2.8%	3,512	2.3%	776
Women	289	2.3%	289	2.3%	0
Total	4,577	2.7%	3,801	2.3%	776
Demotions: 2 or more paygrades					
Men	542	0.4%	231	0.1%	311
Women	19	0.1%	19	0.1%	0
Total	561	0.3%	250	0.1%	311
Misconduct-related separations^b					
Men	1,952	1.3%	1,288	0.8%	664
Women	106	0.8%	106	0.8%	0
Total	2,058	1.2%	1,394	0.8%	664
Any misbehavior^c					
Men	7,440	4.8%	6,064	3.9%	1,376
Women	499	3.9%	499	3.9%	0
Total	7,939	4.7%	6,563	3.9%	1,376

Sources: CNA calculations from TFDW data.

^a The misbehavior rate is the number of personnel with misbehavior records divided by the relevant FY15 endstrength: 154,808 for men and 12,738 for women. The FY15 female share was 7.6 percent.

^b Misconduct-related separations are defined as all dishonorable, bad-conduct, and GCM-ordered discharges, as well as less-than-honorable and general discharges with misconduct-related loss codes.

^c Misbehavior records include NJPs, CMs, demotions, **or** misconduct-related separations. Personnel can experience more than one outcome in the same year, so it is not the sum of the totals.

Table 7. Extra misbehavior due to higher male misbehavior rates in FY15: USN

Gender	FY 2015 misbehavior		Male rate set to female rate		Extra misbehavior
	Count	Rate ^a	Count	Rate	
Sailors in disciplinary status					
Men	287	0.13%	123	0.06%	164
Women	27	0.06%	27	0.06%	0
Total	314	0.1%	150	0.1%	164
Demotions: only 1 paygrade					
Men	3,473	1.6%	2,307	1.1%	1,166
Women	505	1.1%	505	1.1%	0
Total	3,978	1.5%	4,233	1.1%	1,166
Demotions: 2 or more paygrades					
Men	763	0.3%	420	0.2%	343
Women	92	0.2%	92	0.2%	0
Total	855	0.3%	512	0.2%	343
Misconduct-related separations^b					
Men	2,623	1.2%	1,320	0.6%	1,303
Women	289	0.6%	289	0.6%	0
Total	2,912	1.1%	1,609	0.6%	1,303
Early misconduct-related separations^c					
Men	2,458	1.1%	1,320	0.6%	1,197
Women	276	0.6%	276	0.6%	0
Total	2,734	1.0%	1,537	0.6%	1,197
Any misbehavior^d					
Men	5,674	2.6%	3,426	1.6%	2,248
Women	750	1.6%	750	1.6%	0
Total	6,424	2.4%	4,176	1.6%	2,248

Sources: CNA calculations from EMF data.

^a The misbehavior rate is the number of personnel with misbehavior records divided by the relevant FY15 endstrength: 218,672 for men and 47,869 for women. The FY15 female share was 18.0 percent.

^b Misconduct-related separations are defined as all bad-conduct discharges, as well as other-than-honorable and general discharges with misconduct-related loss codes.

^c Early separations are a subset of misconduct-related separations.

^d Misbehavior records include placement in disciplinary status, any demotion, **or** any misconduct-related separation. Personnel can experience all three outcomes in the same year, so it is not the sum of the totals.

Extra misbehavior costs

Calculating the costs of extra misbehavior is difficult for several reasons. First, per-incident cost types and amounts vary with the seriousness of the misbehavior and the exact offense that has been committed. This means that cost calculations require more detailed information about the misbehavior itself than is available in the services' personnel data. Second, budget data are not organized in a way that facilitates calculating the incremental, or even average, costs of misbehavior incidents. As shown earlier, DON budget justifications include program-level expenses, but it is not possible to determine how much of any given program budget is related to misbehavior.³² The fact that misbehavior-related costs cut across budget categories (MP and OM) and activities (medical and investigation) is an additional complicating factor. Finally, some types of costs—such as reputational costs and readiness costs due to reduced unit cohesion and morale—are difficult to translate into dollar terms.

Given these difficulties, it was beyond the scope of this study to generate comprehensive estimates of the costs imposed by extra male misbehavior in the USMC and the USN. Instead, we did what we could with the available data and the type-specific cost estimates found in the existing literature and summarized in Table 4. The specific assumptions used for each cost type for each service are described in Appendix D. Here, we note two important features of the estimates and their implications.

First, our cost estimates are incomplete. We could not make estimates for every cost type because we lacked either the data to estimate the number of extra misbehavior incidents or information on per-incident costs, or both. Second, the underlying assumptions are based on our understanding of the policies and research reviewed in the two background sections of this report. They are intended to generate conservative estimates for each cost type, but without more information we do not know for sure that this is true in every case. Combined, these two features mean that our cost estimates represent rough-order-of-magnitude estimates that are designed to serve as lower bounds on the costs of extra misbehavior among male DON enlisted personnel. They are not designed for use in cost-benefit analyses or policy evaluations.

With that background in mind, our estimates of the costs of extra male misbehavior in FY 2015 are presented in Table 8 for the USMC and in Table 9 for the USN. Although the entries in each table are for different amounts, they share some characteristics.

³² For example, the OMN budget [41] includes a total for NCIS and information on the numbers of investigations undertaken, but there is no way to determine what share of the budget goes to criminal as opposed to other investigations or to other activities.

Table 8. Estimated costs of extra male misbehavior in FY15 for the USMC by cost category and type

Cost category and type	Extra misbehavior incidents	Cost per incident	Extra cost
Direct costs			
Individual			
Missed workdays	579 missed days	\$245	\$142,033
Impaired performance	598 impaired days	\$61	\$36,674
Health care	N/A	N/A	N/A
Victim			
Missed workdays	N/A	N/A	N/A
Impaired performance	N/A	N/A	N/A
Gapped billets	N/A	N/A	N/A
Recruiting and training	N/A	\$55,239	N/A
Health care	N/A	N/A	N/A
Lost property or funds	31 cases of lost property	\$10,476	\$320,568
Reduced unit cohesion & morale	N/A	N/A	N/A
<i>Subtotal</i>			\$499,275
Response-related costs			
O-5 CO time and attention	1,376 misbehavior incidents	\$1,673	\$2,302,656
O-6 CO time and attention	378 CMs	\$1,971	\$745,063
Investigations of minor offenses	829 NJPs	\$1,006	\$833,974
Adjudication of serious offenses	378 CMs	\$43,478	\$16,434,684
SAPR	N/A	N/A	N/A
Drug & alcohol abuse programs	N/A	N/A	N/A
<i>Subtotal</i>			\$20,316,377
Outcome-related costs			
Missed days due to confinement	N/A	\$245	N/A
Gapped billets	N/A	N/A	N/A
Recruiting and training	664 separations	\$55,239	\$36,678,696
<i>Subtotal</i>			\$36,678,696
Total			\$57,494,348

Source: See Appendix D for methods and assumptions.

Table 9. Estimated costs of extra male misbehavior in FY15 for the USN by cost category and type

Cost category and type	Extra misbehavior incidents	Cost per incident	Extra cost
Direct costs			
Individual			
Missed workdays	2,058 days	\$256	\$526,848
Impaired performance	996 days	\$64	\$63,744
Health care	N/A	N/A	N/A
Victim			
Missed workdays	N/A	N/A	N/A
Impaired performance	N/A	N/A	N/A
Gapped billets	N/A	N/A	N/A
Recruiting and training	N/A	\$127,050	N/A
Health care	N/A	N/A	N/A
Lost property or funds	154 cases of lost property	\$4,394	\$681,823
Reduced unit cohesion & morale	N/A	N/A	N/A
<i>Subtotal</i>			\$1,272,415
Response-related costs			
O-5 CO time and attention	2,248 misbehavior incidents	\$1,733	\$3,895,125
O-6 CO time and attention	343 demotions of more than 1 paygrade	\$2,025	\$693,957
Investigations of minor offenses	1,166 demotions	\$1,006	\$1,173,089
Adjudication of serious offenses	494 separations for serious offenses or CM	\$43,478	\$21,465,376
SAPR	N/A	N/A	N/A
Drug & alcohol abuse programs	N/A	N/A	N/A
<i>Subtotal</i>			\$27,227,373
Outcome-related costs			
Missed days due to confinement	N/A		N/A
Gapped billets: Disciplinary status	41,747 days	\$317	\$13,239,272
Gapped billets: Pending separation	13,829 days	\$264	\$3,652,219
Recruiting and training	1,197 early separations	\$127,050	\$152,103,632
<i>Subtotal</i>			\$168,995,122
Total			\$197,494,910

Source: See Appendix D for methods and assumptions.

At roughly \$500,000 for the USMC and \$1.2 million for the USN, our estimates of the direct costs of extra misbehavior in FY 2015 are the lowest of the three cost categories. This is primarily because they are the least complete. In particular, we could not estimate the costs associated with providing health care to misbehaving servicemembers or any of the costs associated with victims of misbehavior. For these types of costs, we lacked the information required to estimate both the number of extra incidents and the per-incident costs.

Our estimates of extra response-related costs are substantially higher—approximately \$20.3 million for the USMC and approximately \$27.2 million for the USN. Within this category, the highest costs for both services are those associated with adjudicating extra serious offenses. This is driven by the high per-incident cost. The second highest cost in this category is the cost of O-5 CO time and attention as every extra misbehavior incident requires extra CO time. Missing from the response-related costs are estimates of extra costs associated with prevention and response programs.

Finally, for both services, we estimate that the greatest costs of extra male misbehavior are in the outcome-related category. Specifically, for the USMC, we estimate that the extra misconduct-related separations generated approximately \$36.7 million in extra recruiting and training costs. For the USN, our estimates of extra recruiting and training costs are even higher at approximately \$152.1 million. The cross-service difference is due to both numbers of extra incidents (the USN had more extra misconduct-related separations because it has more members overall) and a higher per-incident cost. For the USN, we were also able to estimate the extra costs of gapped billets—approximately \$16.9 million—based on the extra time spent by misbehaving Sailors in a non-full-duty status.

Summary

Using data from FY 2015, we estimate that higher rates of misbehavior among male active component Marines resulted in 1,376 extra misbehavior incidents, which, in turn, imposed roughly \$57 million in extra costs for the USMC. For the USN, we estimate that higher rates of misbehavior among male active component Sailors resulted in 2,248 extra misbehavior incidents and imposed roughly \$197 million in extra costs. These cost estimates are likely to underestimate the extra costs of male misbehavior among DON personnel for three reasons. First, our estimates of extra misbehavior are likely to be underestimates because the available personnel records only capture misbehavior that generates an official response. Second, the assumptions used to generate the cost estimates were intended to be conservative. Third, the estimates are incomplete. In particular, we could not estimate the costs associated with providing health care to misbehaving servicemembers or any of the costs associated with victims of misbehavior.

Conclusion

As part of an effort to assess the potential impact of greater gender integration on DON personnel budgets, this study estimated the extra costs imposed by relatively high rates of misbehavior among male active component enlisted Sailors and Marines. We conclude this report with a summary of our results followed by our main takeaways and recommendations.

Summary of results

Gender differences in misbehavior

For the purposes of this study, we defined misbehavior as offenses covered by the punitive articles of the UCMJ, which links promoting justice and maintaining good order and discipline with promoting efficiency and effectiveness in the military establishment. Based on this definition, misbehavior ranges from minor disciplinary infractions to serious criminal offenses, and the responses to misbehavior accordingly range from administrative, to punitive, to judicial.

To quantify gender differences in misbehavior, we used several indicators available in USMC and USN personnel data. The indicators for each service were:

- USMC: NJPs, CMs, demotions, and misconduct-related separations
- USN: placement in disciplinary status, demotions, and misconduct-related separations

By definition, these data capture only misbehaviors that generate records of either a DON procedural response or a response outcome. This means that they are probably lower bounds on the true incidence of misbehavior among DON personnel.

Our summaries of the data showed that for every indicator for both services, male misbehavior rates were higher than female rates in every year between FY 1999 and FY 2015. Depending on the indicator and the service, male misbehavior rates were, on average, roughly 1.5 to 2.5 times higher than female rates. Thus, despite the imprecision of these indicators as measures of misbehavior rates, combined, they provide strong evidence that, among DON enlisted personnel, men are more likely than women to misbehave.

Costs of extra male misbehavior

Misbehavior among DON servicemembers imposes costs in three broad categories. The first category includes costs that are directly generated by the misbehavior itself, such as missed or impaired workdays, health care, loss of property or funds, and reduced unit cohesion and morale. Direct costs also include any costs associated with victims of misbehavior, such as health care, missed or impaired workdays, and replacement of any victims who leave the service in response to the misbehavior. The second category is response-related costs that the DON incurs as it tries to manage misbehavior. These costs include CO time, investigation and adjudication of misbehavior incidents, and formal prevention and response programs, such as SAPR and victim assistance. The final category of costs is outcome-related costs. This cost category includes costs that accrue when misbehaving servicemembers are removed from full-duty assignments and, therefore, create gapped billets, or when they are separated from the service entirely and must be replaced. As a rule, all costs of misbehavior increase with the seriousness of the offense, the complexity of the response, and the severity of the outcome.

To generate rough estimates of the costs imposed by extra male misbehavior, we used data from FY 2015 to estimate the number of extra misbehavior incidents combined with existing estimates of costs in each cost category. Our results are as follows. For the USMC, we estimated that higher rates of misbehavior among male Marines resulted in 1,376 extra misbehavior incidents, which, in turn, imposed roughly \$57 million in extra costs. For the USN, we estimated that higher rates of misbehavior among male Sailors resulted in 2,248 extra misbehavior incidents and imposed roughly \$197 million in extra costs. These estimates are, however, likely to underestimate the extra costs of male misbehavior among DON personnel for three reasons: the available personnel records do not capture all misbehavior, the assumptions used to generate the cost estimates were intended to be conservative, and the cost estimates themselves are incomplete.

Takeaways and recommendations

The main purpose of this effort was to help ASN(FM&C) assess the potential impact of greater gender integration on DON MP and OM budgets. In the past, such assessments have focused on gender differences in behavior that are likely to increase costs as the female shares of personnel inventories increase. Here, we looked at gender differences in behavior that are likely to *decrease* costs as the female shares of personnel inventories increase. A comprehensive cost-benefit analysis of greater gender integration should take both types of differences into account; cost-benefit analyses that fail to do so are incomplete.

More generally, greater understanding of the costs imposed by misbehavior among servicemembers can help to allocate related resources more efficiently and effectively. Specifically, misbehavior is expected to reduce readiness, and the DON recognizes this implicitly by spending substantial amounts to prevent and respond to misbehavior of all types. The DON should determine if its efforts to prevent and respond to misbehavior are as cost effective as possible. This analysis showed, however, that the information required to determine the cost-effectiveness of these efforts is either not collected at all or not collected in a way that facilitates its use for analysis.

Therefore, to both understand the impact of greater gender integration and improve resource allocation to manage, prevent, and respond to misbehavior, we recommend that the DON collect data on misbehavior at a greater level of detail than is available now and collect and report budget information in ways that would make incremental cost calculations easier.

Appendix A: NJP Punishment Limitations and CM Maximum Punishments

The types of NJPs that can be imposed and the limitations associated with them are summarized in Table 10; the types of punishments and the associated maximums that can be imposed by each type of CM are summarized in Table 11.

Table 10. NJP punishment limitations

Punishment	Imposed by flags/generals in command on the following:			Imposed by O-4 to O-6 on the following:			Imposed by O-3 & below and OICs ^h on the following:			
	Officers	E-4 to E-9	E-1 to E-3	Officers	E-4 to E-9	E-1 to E-3	Officers	E-4 to E-9	E-1 to E-3	
Diminished rations ^a		No	3 days		No	3 days		No	3 days	
Correctional Custody ^b		No	30 days		No	30 days		No	7 days	
Arrest in Quarters ^c	30 days	No			No			No		
Forfeitures ^{d,e}	1/2 of 1 mo for 2 mos			No	1/2 of 1 mo for 2 mos		No	7 days		
Reduction ^{d,f}	No	1 grade		No	1 grade		No	1 grade		
Extra duties ^g	No	45 days		No	45 days		No	14 days		
Restriction ^g		60 days		30 days	60 days		15 days	14 days		
Reprimand/admonition ^d		Yes				Yes			Yes	

Source: Reference [11], Appendix (F).

^a. Includes bread and water; may be awarded only if attached to or embarked in a vessel and may not be combined with other restraint punishment or extra duties.

^b. May not be combined with restriction or extra duties.

^c. May not be combined with restriction.

^d. May be imposed in addition to or in lieu of all other punishments.

^e. Shall be expressed in dollar amounts only.

^f. Navy chief petty officers (E-7 to E-9) may not be reduced at NJP; USMC noncommissioned officers (E-6 to E-9) may not be reduced at NJP.

^g. Restriction and extra duties may be combined to run concurrently, but the combination may not exceed the maximum possible for extra duties.

^h. Officers in charge (OICs), regardless of rank, have NJP authority over enlisted personnel only. OICs and USMC CC may only reduce personnel within their promotion authority. Restriction imposed on commissioned and warrant officers may not exceed 15 days when imposed by a CO below the grade of major or lieutenant commander.

Table 11. Maximum punishment chart for courts-martial

Punishment	Imposed by SCM on:		Imposed by SPCM on:		Imposed by GCM on:		
	E-4 & below	E-5 & above	Enlisted members	Officers & warrant officers	Enlisted members	Warrant officers	Officers
Death	No		No			Yes ^a	
Dismissal	No		No		No		Yes
Dishonorable discharge	No		No		Yes		No
Bad-Conduct discharge	No		Yes	No	Yes		No
Confinement	30 days	No	12 months	No		Yes	
Restriction	60 days		60 days			60 days	
Hard labor without confinement	45 days	No	90 days	No	3 months		No
Forfeiture of all pay and allowances	No		No			Yes	
Forfeiture of two-thirds pay per month	1 month ^b		12 months			Yes	
Fine	Yes ^{c, d}		Yes ^{c, d}			Yes	
Reduction to next inferior rate	Yes		Yes	No	Yes		No
Reduction to lowest paygrade	Yes	No	Yes	No	Yes		No
Reprimand	Yes		Yes			Yes	

Source: Reference [11], Appendix (C).

^a. Where authorized or mandatory.

^b. May extend payment up to two months.

^c. If given, a fine or a fine and forfeiture combination may not exceed the maximum amount of forfeitures that may be adjudged in a case.

^d. At SCM, a fine may not be combined with forfeitures.

Appendix B: Trends in DON NJPs and CMs

Over the course of the study period, there was a DOD-wide decrease in the use of NJPs and CMs. In response to this trend, Secretary of Defense James Mattis issued a memo in August 2018 exhorting commanders to place proper emphasis on military discipline and to use these procedural responses provided by the UCMJ to their best effect. He wrote,

The military justice system is a powerful tool that preserves good order and discipline while protecting the civil rights of Service members. It is a commander's duty to use it. Military leaders must not interfere with individual cases, but fairness to the accused does not prevent military officers from appropriately condemning and eradicating malignant *behavior* from our ranks. Leaders must be willing to choose the harder right over the easier wrong. Administrative actions should not be the default method to address illicit conduct simply because it is less burdensome than the military justice system. Leaders cannot be so risk-averse that they lose their focus on forging disciplined troops ready to ferociously and ethically defeat our enemies on the battlefield. [47]

This appendix shows data on DON trends in NJPs and CMs, then discusses potential underlying drivers of these trends and considers their implications for this analysis.

Official DON data

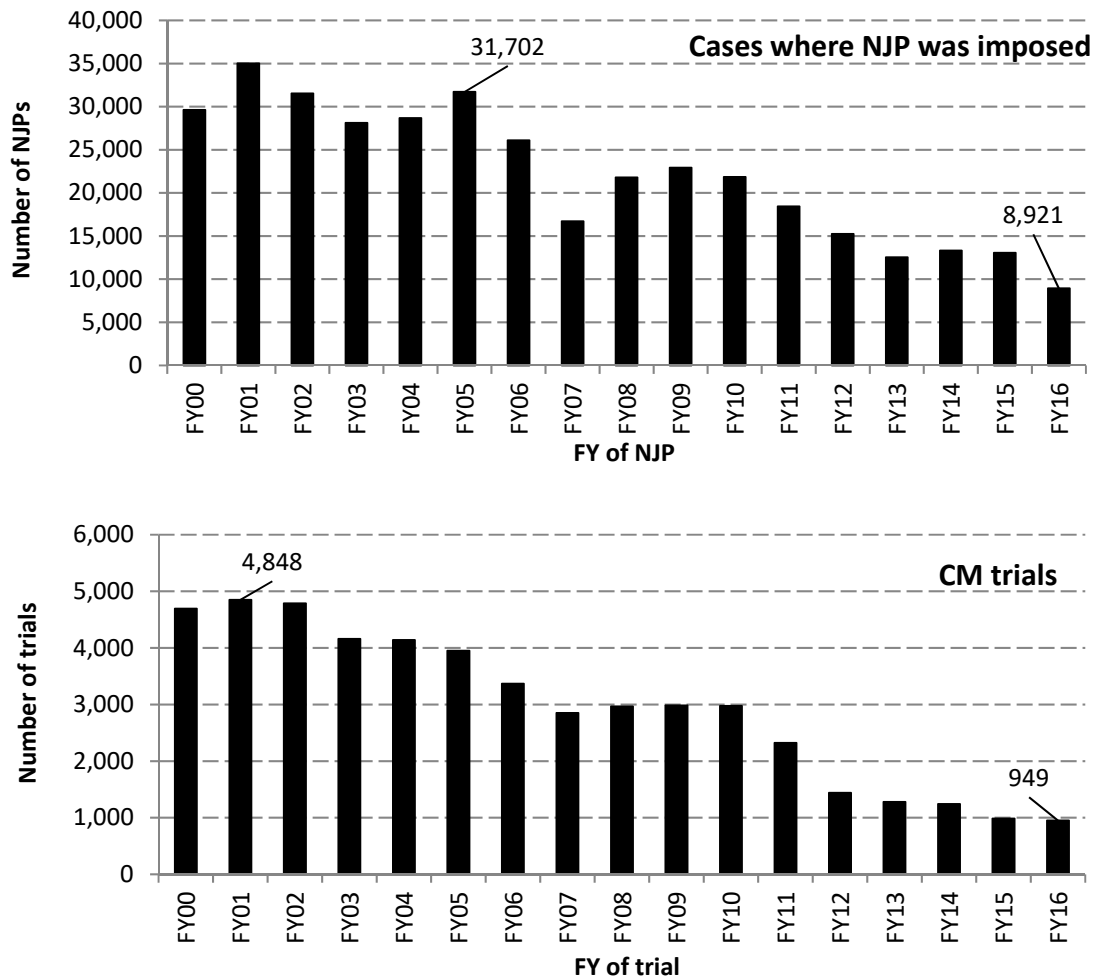
Since 1952, the military services have provided Congress, the Secretary of Defense, and the service secretaries with joint annual reports on the operation of the UCMJ. The data presented here come from the DON sections of the joint annual reports for FY 2000 through FY 2016; they are not directly comparable to the USMC data presented in the main text.

DON-level trends

For each year from FY 2000 to FY 2016, Figure 15 includes two charts. The top chart shows the number of DON cases in which an NJP was imposed and the bottom chart shows the number of CM trials held. Both charts show substantial declines in the number of UCMJ actions over the data period. For NJP, the data show a pronounced downward trend after FY 2005: from FY

2005 to FY 2016, the number of cases in which an NJP was imposed decreased by nearly 72 percent, while average active duty endstrength fell by only about 6 percent. For CM trials, the data show that the decline started a bit earlier: from FY 2001 to FY 2016, the number of CM trials fell by 80 percent, while average active duty endstrength fell by only 8 percent.

Figure 15. Numbers of DON cases where NJP was imposed^a and DON CM trials^b, FY00–FY16



Source: CNA figures using data reported in the FY00–FY16 Annual Reports of the Code Committee on Military Justice, found at www.armfor.uscourts.gov.

^a. The data include NJPs imposed on both men and women.

^b. The data include CM trials for both men and women and for officers as well as enlisted.

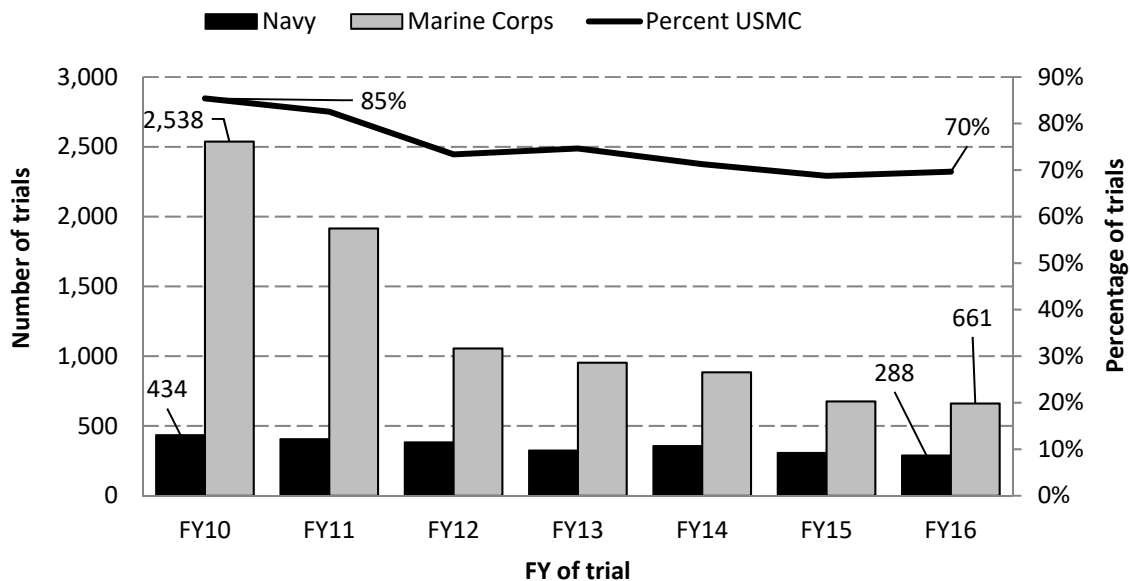
Trends in CM trials by service

Starting in FY 2010, the annual reports' data on DON CM trials have been broken out by service. The NJP data are not disaggregated.

Total CM trials

Figure 16 shows the numbers of total CM trials by service. The columns show that the annual number of USN CM trials decreased substantially—from 434 per year to 288, or by over 33 percent; but the decrease in the annual number of USMC CM trials was even larger—from 2,538 to 661 or 74 percent. Thus, the decrease in total DON CM trials was primarily driven by the decrease in USMC CM trials. As a result, the USMC share of the DON total fell from 85 percent in FY 2010 to less than 70 percent in FY 2016. The fact that the USMC conducts more CM trials than the USN despite having a much lower endstrength indicates that the two services respond to misbehavior differently, or that the USMC has much higher underlying misbehavior rates, or some combination of both.

Figure 16. Number of CM trials by service and USMC percentage of total, FY10–FY16



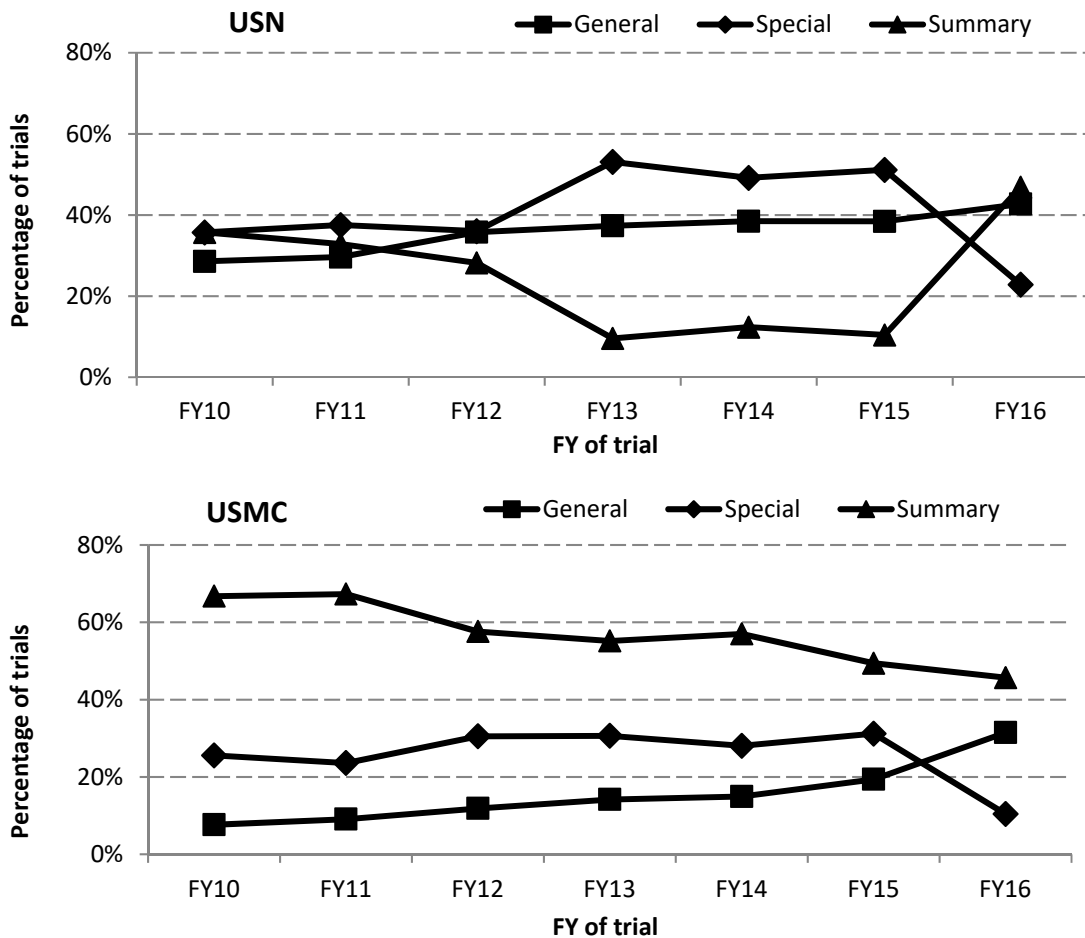
Source: CNA figures using data reported in the FY10–FY16 Annual Reports Pursuant to the Uniform Code of Military Justice, found at www.armfor.uscourts.gov.

Note: These data include CM trials for both men and women and for officers as well as enlisted.

CM trends by service—CM trial types

Figure 17 shows how the service-specific distributions of trials across the three types of CMs have changed since FY 2010. Of primary note is the fact that, for both services, GCMs’ share of total trials increased—from 29 percent to 43 percent for the USN and from 8 percent to over 30 percent for the USMC. This means that as the annual number of total CM trials in each service has fallen, the numbers of SCM and SPCM trials have fallen faster than the number of GCM trials. This pattern of change may indicate that the services are choosing to handle less serious offenses by other means.

Figure 17. Distribution of trials by CM type for the USN and USMC, FY10–FY16



Source: CNA figures using data reported in the FY10–FY16 Annual Reports Pursuant to the Uniform Code of Military Justice, found at www.armfor.uscourts.gov.

Note: These data include CM trials for both men and women and for officers as well as enlisted.

Potential underlying drivers

We did not conduct our own analysis to determine what caused the decreases in NJPs and CM trials in the DON. A *Military Times* article [48] written in response to the Mattis memo, offered the following possible explanations for the DOD-wide trend based on interviews with DOD officials:

1. Commanders may have opted to use administrative disciplinary procedures, rather than NJPs and CMs, because they are easier and less time-consuming.
2. In response to pressure from Congress, commanders may have focused on investigating and trying MSA cases at the expense of other offenses.
3. The actual incidence of misbehavior may have fallen as the share of recruits requiring behavior-related waivers has declined. [48]

Implications for this analysis

We cannot verify the extent to which any of the potential drivers suggested by the *Military Times* actually applies to the USMC and the USN. If they do apply, however, there are two basic implications for the analysis presented in this report.

First, the different drivers have conflicting implications for how to interpret the data. If drivers 1 and 2 apply, then there were changes in the way that commanders addressed misbehavior over our study period, and the observed decreases in misbehavior records (especially the NJP and CM records for the USMC) overstate the decrease in the incidence of misbehavior among DON personnel. In contrast, if driver 3 applies, the decreases in misbehavior records may indicate actual decreases in the underlying misbehavior rates among DON personnel.

Second, the lack of clarity here further illustrates the importance of collecting (and reporting) more detailed data.

Appendix C: Defining Misconduct-Related Separations

The personnel records of each Sailor and Marine who leave the active component include two variables that describe the nature of the separation. The first is the service separation category, and the second is the DOD loss code. In this appendix, we describe both variables and how we used them to define misconduct-related separations for the USMC and the USN.

Service separation categories

Service separation categories, which are slightly different for the two services, indicate the type of separation that has occurred. The categories are listed in Table 12 and, for each service, we classified them into three groupings that inform our definitions of misconduct-related separations.

Table 12. CNA classification of USMC and USN separation categories

Misconduct classification	USMC separation category	USN separation category
Definitely misconduct	Dishonorable discharge General court-martial order Bad conduct discharge	Bad conduct discharge
Potentially misconduct	Discharge under less than honorable conditions General discharge	Other than honorable discharge General discharge
Not misconduct	Honorable discharge Retirement certificate Armed Forces of U.S. report of transfer or discharge Military service special order Clemency Death Unknown	Honorable discharge Released to inactive duty Uncharacterized service Death Other/unknown

Source: Classifications based on CNA's interpretation of USMC and USN policies.

To classify the service separation categories, we started with those that correspond to the service characterizations that can result from misbehavior as identified in Table 2 in the main

text. Specifically, separation categories associated with the punitive separations that result from SPCMs or GCMs were considered to be “definitely” misconduct-related separations. In contrast, separation categories associated with administrative separations that may result from NJPs or SCMs were considered to be only “potentially” misconduct-related separations because they may also be associated with separations that occur for other reasons. Separations in the remaining categories were considered to be not related to misconduct.

DOD loss codes

DOD loss codes indicate specific reasons for separation, and each servicemember’s record is assigned only one DOD loss code even if he or she has left the service for multiple reasons. Since it is up to the person entering the data to determine which code to assign, there is a subjective element to the assignment (and interpretation) of DOD loss codes and each code can be associated with multiple service separation categories.

The DOD loss codes are the same across the services. There are 322 codes that correspond to approximately 115 unique code descriptions. Based on our interpretation of current USMC and USN policies and the definitions of misconduct provided in the main text, Table 13 groups the unique code descriptions into two groups of broader categories—those we considered to be related to misconduct and those we did not consider to be misconduct related. In addition, within the misconduct grouping, we distinguish between misconduct that occurs while in service and misconduct that is related to fraudulent entry.

Table 13. CNA classifications of DOD loss code categories

Misconduct		Not misconduct
In-service	Fraudulent entry	
Drug-related	Drug-related	Personality disorder
Alcohol-related	Alcohol-related	Homosexuality
Pattern of misconduct		Other fraudulent or erroneous entry
Sex-related		Weight control failure
Failure to support dependents		Failed physical standards
Other ^a		Unsatisfactory performance
		Parenthood
		Medical
		Pregnancy
		Hardship
		Early release ^b
		Reduction in force
		Enter an officer program ^c
		Reached EAOS
		Retirement
		Other reasons ^d

Source: Classifications based on CNA's interpretation of USMC and USN policies.

^a Includes the following code descriptions: serious offenses; CMs; in lieu of trial by CM; civil conviction; absent without leave for 30 or more days; desertion; chronic default; Military Personnel Security Program; shirking; unsanitary habits; misconduct that is not elsewhere classified.

^b Includes the following code descriptions: early release under an authorized program or circumstance; Voluntary Separation Incentive (VSI); Special Separation Benefit (SSB).

^c Includes the following code descriptions: accept a commission or warrant in another branch of service; enrollment in a service academy; enter an officer training program.

^d Includes the following code descriptions: death; alien; conscientious objector; secretarial authority; competent authority without board action; interdepartmental transfer; miscellaneous/general.

Misconduct-related separations

Combining all the data in the study period, Table 14 and Table 15 show cross-tabulations of the service separation categories and DOD loss code categories for the USMC and the USN, respectively. The tables show key features of the samples that informed our definitions of misconduct-related separations for both services.

Table 14. Service separation codes by DOD loss code categories for the USMC

Service separation category	DOD loss code category					In-service misconduct share
	In-service misconduct	Fraudulent entry	Not misconduct	Missing	Total	
Definitely misconduct related						
Dishonorable discharge	728	0	1	0	729	99.9%
GCM order	14	0	13	0	27	51.9%
Bad conduct discharge	10,108	1	102	0	10,211	99.0%
Total	10,850	1	116	0	10,967	98.9%
Potentially misconduct related						
Discharge under less than honorable conditions	40,510	10	744	0	41,264	98.2%
General discharge	4,898	16	10,809	0	15,723	31.2%
Total	45,408	26	11,553	0	56,987	79.7%
Not misconduct related						
Honorable discharge	540	89	55,118	0	55,747	1.0%
Retirement certificate	193	0	16,674	0	16,867	1.1%
Armed Forces of US report of transfer or discharge	488	5	349,749	0	350,242	0.1%
Military service special order	150	5,001	44,735	0	49,886	0.3%
Clemency	2	0	0	0	2	100.0%
Death	15	0	3,033	0	3,048	0.5%
Unknown	7	197	3,334	195	3,733	0.2%
Total	1,395	5,292	472,643	195	479,525	0.3%

Source: CNA tabulations of TFDW data for men and women and FY99-FY15 combined.

Table 15. Service separation codes by DOD loss code categories for the USN

Service separation category	DOD loss code category				In-service misconduct share
	In-service misconduct	Fraudulent entry	Not misconduct	Total	
Definitely misconduct related					
Bad conduct discharge	5,861	0	43	5,904	99.3%
Potentially misconduct related					
Other than honorable discharge	57,806	18	209	58,033	99.6%
General discharge	33,346	511	11,127	44,984	74.1%
Total	91,152	529	11,336	103,017	88.5%
Not misconduct related					
Honorable discharge	4,202	104	158,016	162,322	2.6%
Released to inactive duty	5	0	369,152	369,157	0.0%
Uncharacterized service	5,120	11,632	63,093	79,845	6.4%
Death	0	0	2,779	2,779	0.0%
Other/unknown	0	0	54	54	0.0%
Total	9,327	11,736	593,094	614,157	1.5%

Source: CNA tabulations of EMF data for men and women and FY99-FY15 combined.

First, the data show that, for both services, nearly all—about 99 percent—of the records coded with “definitely misconduct” service separation categories also carry misconduct-related DOD loss codes.

Likewise, nearly all of the records coded with “not misconduct” service separation categories also carry DOD loss codes that are not misconduct related. For both services, there is, however, one exception to this pattern. Most of the fraudulent entry misconduct loss codes are associated with the “Military service special order” separation category in the USMC data and with the “Uncharacterized service” separation category in the USN data. Additional analysis of these data showed that the vast majority of losses in these two categories (95 percent of “Military service special order” separations and 89 percent of “Uncharacterized service” separations) are bootcamp attrites.

Finally, the data show how records coded with “potentially misconduct” separation categories are distributed across the three categories of DOD loss codes. Specifically, for the USMC approximately 80 percent of these records have misconduct-related loss codes, which means that about 20 percent have loss codes that are not misconduct related. The distribution for the USN is 89 percent with misconduct-related loss codes and 11 percent not-misconduct-related loss codes.

Thus, based on our understanding of USMC and USN policies combined with these features of the data, we defined misconduct-related separations as all separations coded with the “definitely misconduct” service separation categories, plus separations coded with both “potentially misconduct” service separation categories *and* misconduct-related DOD loss codes. We did not include losses in the two separation categories primarily associated with bootcamp attrition even when they were coded with fraudulent entry loss codes because bootcamp attrition does not impose many of the costs we considered here. The relevant cells in each table are shaded with light gray.

Appendix D: Estimating the Costs of Extra Male Misbehavior

To estimate the costs of extra misbehavior among male Marines and Sailors shown in Table 8 and Table 9 in the main text, we used a two-step approach. We first estimated the number of extra incidents and then the per-incident costs. This appendix describes the approaches and underlying assumptions used in each step for each service. It does not address the cost types for which we made no cost estimates due to lack of information and data. (These costs types are indicated with “N/A” in the two tables.)

USMC

Direct costs

To estimate the number of extra misbehavior incidents contributing to the different types of direct costs, we used DOD loss codes combined with assumptions specific to each cost type. We begin with a general description of how we used the loss codes. Relevant data are shown in Table 16.

Table 16. FY15 misconduct-related separations and estimated extra separations for male Marines by DOD loss code category

DOD loss code category	Actual misconduct-related separations		Estimated extra separations ^a
	Count	Share of total	
Pattern of misconduct	597	30.6%	203
Civil conviction	5	0.3%	2
Drug related	844	43.3%	287
Alcohol related	34	1.7%	12
Serious offense	354	18.1%	120
AWOL 30+	6	0.3%	2
Sexual perversion	2	0.1%	1
CM (Other)	39	2.0%	13
In lieu of CM	70	3.6%	24
Total	1,951	100.0%	664

Source: CNA tabulations of TFDW data.

^a Equal to 664 total estimated extra separations times the share of FY15 misconduct-related separations.

The first three columns of Table 16 show the underlying reasons for male misconduct-related separations in FY 2015 as indicated by nine categories of DOD loss codes. Then, assuming that the 664 “extra” male misconduct-related separations (refer to Table 6) were distributed the same way, we estimated the number of extra separations in each category, as shown in the last column of the table. The specific application of these estimates, the additional assumptions, and the per-incident costs are further described for each cost type.

Missed workdays for misbehaving Marines

We estimated 579 missed workdays assuming the following:

- There were two extra separations for being AWOL for more than 30 days, and each separating Marine was AWOL for 40 days during the FY \Rightarrow 80 missed workdays.
- Twenty of the 203 extra losses for a pattern of misconduct were for being AWOL between 3 and 30 days, and each separating Marine was AWOL for 10 days during the FY \Rightarrow 200 missed workdays.
- Each of the extra 12 Marines who separated for alcohol-related reasons missed at least 1 workday during the FY \Rightarrow 12 missed workdays.
- Each of the extra 287 Marines who separated for drug-related reasons missed at least 1 workday during the FY \Rightarrow 287 missed workdays.

The cost of each missed workday was valued at \$245, which is a weighted average of the 2015 daily paygrade-specific DOD composite rates for the USMC, with the weights equal to each paygrade’s share of male Marines with any misconduct-related record in FY 2015.

Workdays with impaired performance for misbehaving Marines

We estimated 598 days of impaired performance assuming the following:

- Each of the extra 12 Marines who separated for alcohol-related reasons had at least 2 days of impaired performance during the FY \Rightarrow 24 days with impaired performance.
- Each of the extra 287 Marines who separated for drug-related reasons had at least 2 days of impaired performance during the FY \Rightarrow 574 days with impaired performance.

Following reference [32], the cost of each impaired workday was assumed to be 25 percent of the cost of a total work day: \$61.33.

Lost property or funds

The 2015 NCIS Annual Crime Report [39] indicates that there were 2,497 total criminal incidents reported for the USMC. Of these, 637—or 25.5 percent—were cases of property crime and the average reported value of lost property was \$10,476. We estimated the number of lost property incidents to be 31—25.5 percent of the 120 extra misconduct-related separations due to the commission of a serious offense.

Response- and outcome-related costs

The estimates of response-related costs were made using estimated numbers of extra misbehavior incidents from Table 6 in the main text and cost estimates from the literature. Assumptions for each cost type follow.

Command time and attention

We assumed that all 1,376 extra misbehavior incidents took an average of two days' worth of time for an O-5 CO, valued at the 2015 USMC O-5 daily composite rate of \$837 (times 2 is \$1,673).

Similarly, we assumed that the 378 extra CMs took an average of two days' worth of time for an O-6 CO, valued at the 2015 USMC O-6 daily composite rate of \$986 (times 2 = \$1,971).

Investigation of minor offenses

We assumed that each of the 829 extra NJPs required a command-level investigation and the cost of each investigation was assumed to be \$1,006. This value is the implied per-incident cost of a command-level investigation for the USMC from reference [35]. Specifically, we calculated the average non-legal administrative cost of separating servicemembers under DOD's past homosexual conduct policy by dividing the total non-legal administrative costs of these separations by the number of separations: $\$398,300/437 = \911 . We then updated this figure from 2009 dollars to 2015 dollars using a standard adjustment for inflation.

Adjudication of serious offenses

We assumed that each of the 378 extra CMs imposed a cost of \$43,478. This is from DOD's estimate that, in 2010, legal expenses resulting from MSA cases averaged \$40,000 per case [38]. We then updated this figure from 2010 dollars to 2015 dollars using a standard adjustment for inflation.

Recruiting and training

We assumed that each of the 664 extra misconduct-related separations imposed extra recruiting and training costs of \$55,239. This value is the implied average recruiting and training costs for the USMC from reference [35]. Specifically, we calculated the average cost of separating servicemembers under DOD's past homosexual conduct policy by dividing the total replacement cost (less administrative costs) of these separations by the number of separations: $\$21,968,600/437 = \$50,271$. We then updated this figure from 2009 dollars to 2015 dollars using a standard adjustment for inflation.

USN

Direct costs

To estimate the number of extra misbehavior incidents contributing to the different types of direct costs, we again used DOD loss codes combined with various cost-specific assumptions. We begin with a general description of how we used the loss codes. Relevant data are shown in Table 17.

Table 17. FY15 misconduct-related separations and estimated extra separations for male Sailors by DOD loss code category

DOD loss code category	Actual misconduct-related separations		Estimated extra separations ^a
	Count	Share of total	
Pattern of misconduct	442	16.9%	220
Civil conviction	43	1.6%	21
Drug related	854	32.6%	424
Alcohol related	149	5.7%	74
Serious offense	899	34.3%	447
AWOL 30+	34	1.3%	17
Sexual perversion	6	0.2%	3
Misconduct, n.e.c.	32	1.2%	16
CM (Other)	95	3.6%	47
In lieu of CM	69	2.6%	34
Total	2,623	100.0%	1,303

Source: CNA tabulations of EMF data.

^a Equal to 1,303 total estimated extra separations times the share of FY15 misconduct-related separations.

The first three columns of Table 17 show the underlying reasons for male misconduct-related separations in FY 2015 as indicated by ten categories of DOD loss codes. Then, assuming that the 1,303 “extra” male misconduct-related separations (refer back to Table 7) were distributed the same way, we estimated the number of extra separations in each category, as shown in the last column of the table. The specific application of these estimates, the additional assumptions, and the per-incident costs are further described for each cost type.

Missed workdays for misbehaving Sailors

We estimated 2,058 missed workdays assuming the following:

- There were 34 extra separations for being AWOL for more than 30 days, and each separating Sailor was AWOL for 40 days during the FY \Rightarrow 1,360 missed workdays

- 20 of the 220 extra separations for a pattern of misconduct were for being AWOL between 3 and 30 days, and each separating Sailor was AWOL for 10 days during the FY \Rightarrow 200 missed workdays
- Each of the extra 74 Sailors who separated for alcohol-related reasons missed at least one workday during the FY \Rightarrow 74 missed workdays
- Each of the extra 424 Sailors who separated for drug-related reasons missed at least one workday during the FY \Rightarrow 424 missed workdays

The cost of each missed workday was valued at \$256, which is a weighted average of the 2015 daily DOD composite rate for the USN, with the weights equal to each paygrade's share of male misconduct-related separations in FY 2015.

Workdays with impaired performance for misbehaving Sailors

We estimated 996 days of impaired performance assuming the following:

- Each of the extra 74 Sailors who separated for alcohol-related reasons had at least 2 days of impaired performance during the FY \Rightarrow 148 days with impaired performance.
- Each of the extra 424 Sailors who separated for drug-related reasons had at least 2 days of impaired performance during the FY \Rightarrow 848 days with impaired performance.

Following reference [32], the cost of each impaired workday was assumed to be 25 percent of the cost of a total work day: \$64.

Lost property or funds

The 2015 NCIS Annual Crime Report [39] indicates that there were 3,729 total criminal incidents reported for the USN. Of these, 1,296—or 34.8 percent—were cases of property crime and the average reported value of lost property was \$4,394. We estimated the number of lost property incidents to be 155—34.8 percent of the 444 extra misconduct-related separations due to the commission of a serious offense.

Response- and outcome-related costs

The estimates of response-related costs were made using the estimated numbers of extra misbehavior incidents from Table 7 and cost estimates from the literature. Assumptions for each cost type follow.

Command time and attention

We assumed that all 2,248 extra misbehavior incidents took an average of two days' worth of time for an O-5 CO, valued at the 2015 USN O-5 daily composite rate of \$866 (times 2 is \$1,733).

Similarly, we assumed that each of the 343 extra demotions of more than one grade took an average of two days' worth of time for an O-6 CO, valued at the 2015 USN O-6 daily composite rate of \$1,102 (times 2 = \$2,025).³³

Investigation of minor offenses

We assumed that each of the extra 1,166 one-paygrade demotions required a command-level investigation, and the cost of each investigation was assumed to be \$1,006, as described above.³⁴

Adjudication of serious offenses

We assumed that each of the extra 447 separations for serious offenses and each of the 47 extra separations for CM imposed a cost of \$43,478, as described above.

Gapped billets

To calculate the costs of extra gapped billets, we used extra misbehavior estimates from two of our misbehavior indicators along with the daily enlisted DOD composite rates for FY 2015.

First, we considered the extra Sailors placed in disciplinary status. In FY 2015, 73.2 percent of male Sailors placed in disciplinary status were initially in full duty (rather than student) status. Therefore, we assumed that 72.3 percent, or 120, of the extra 164 Sailors in disciplinary status were removed from full duty status and, therefore, caused a full-duty billet to be gapped somewhere in the fleet. The data also show that, on average, these male Sailors spent 348 days in disciplinary status. This translates to a total of 41,747 extra days (164 * 348) spent by Sailors in a non-full-duty status, but still counting against enlisted endstrength. The cost of each of these days was valued at \$317, which is a weighted average of the 2015 daily DOD composite rate for the USN, with the weights equal to each paygrade's share of male Sailors placed in disciplinary status in FY 2015.

Second, we considered the extra misconduct-related separations. In FY 2015, 18.7 percent of male misconduct-related separations were never placed in disciplinary status, but were observed in pending separation status between their last full-duty assignments and leaving the Navy. Therefore, we assumed that 18.7 percent, or 244, of the 1,303 extra misconduct-related separations spent some time in pending separation status before being processed out and, therefore, also created gapped billets somewhere in the fleet. The data show that, on average, these male Sailors spent 57 days in pending separation status. This translates to an additional 13,829 extra days (244 * 57) spent by Sailors in pending separation status. The cost of each of these days was valued at \$264, which is a weighted average of the 2015 daily DOD composite

³³ In this application, demotions of more than one paygrade are a proxy for CMs.

³⁴ In this application, demotions of only one paygrade are a proxy for NJPs.

rate for the USN, with the weights equal to each paygrade's share of male misconduct-related separations who never appeared in disciplinary status, but did appear in pending separation status in FY 2015.

Recruiting and training

We assumed that each of the 1,197 extra misconduct-related early separations imposed extra recruiting and training costs of \$127,050. This value is the implied average replacement cost for the USN from reference [35]. Specifically, we calculated the average cost of separating servicemembers under DOD's past homosexual conduct policy by dividing the total replacement costs by the number of separations: $\$104,900,000/913 = \$114,896$. We then updated this figure from 2009 dollars to 2015 dollars using a standard adjustment for inflation.

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Abbreviations

ADSM	active duty servicemember
AMPP	Alcohol Misconduct Prevention Program
ARI	alcohol-related incident
ASN(FM&C)	Office of the Assistant Secretary of the Navy (Financial Management and Comptroller)
BOI	Board of Inquiry
BUMED	Bureau of Medicine and Surgery
CA	convening authority
CI	Command Investigation
CM	court-martial
CO	commanding officer
COI	Court of Inquiry
DOD	Department of Defense
DON	Department of the Navy
DRB	Disciplinary Review Board
EAOS	end of active obligated service
EMF	Enlisted Master File
FBI	Federal Bureau of Investigation
FY	fiscal year
GAO	Government Accountability Office
GCM	general court-martial
GCMCA	General Court-Martial Convening Authority
HRBS	Health Related Behaviors Survey
IO	investigating officer
JAGMAN	Judge Advocate General Manual
LR	Litigation-Report Investigation
MCO	Marine Corps Order
MPN	Military Personnel, Navy
MILPERSMAN	Military Personnel Manual
MPT&E	Manpower, Personnel, Training & Education
MSA	military sexual assault
NCIS	Naval Criminal Investigative Service
NJP	nonjudicial punishment
NMCPHC	Navy/Marine Corps Public Health Center
OIC	officer in charge

OJAG	Office of the Judge Advocate General
OMMC	Operations and Maintenance, Marine Corps
OMN	Operations and Maintenance, Navy
PCS	permanent change of station
PI	Preliminary Inquiry
ROI	return on investment
RQC	reenlistment qualification code
SAPR	sexual assault prevention and response
SCM	summary court-martial
SEAOS	soft end of active obligated service
SECNAV	Secretary of the Navy
SPCM	special court-martial
TFDW	Total Force Data Warehouse
TPPH	Transient, Patient, Prisoner, or Holdee
UCMJ	Uniform Code of Military Justice
USA	US Army
USAF	US Air Force
USMC	US Marine Corps
USN	US Navy
VA	Veterans Administration
VLC	Victim's Legal Counsel
VLCO	VLC Organization
XO	executive officer
XOI	Executive Officer Inquiry

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