ABSTRACT  Recently, there has been increasing concern regarding the problem of sexual violence in the military. Because sexual harassment and assault are more closely intertwined in the military than in most civilian contexts, the military context affords a unique opportunity to study the interrelationships between these two types of sexual violence. In this review, we briefly summarize existing research on military sexual trauma prevalence rates, effects on victims, and risk factors, as well as prevention and response programs in the military context. In each of these topic areas, we emphasize issues unique to the complex interplay between sexual harassment and assault in the military and make recommendations for future research.

INTRODUCTION
In the past decade, there has been increasing concern among political and military leaders, as well as the American public, regarding the incidence of sexual harassment and assault in the military.1,2 In response, the Department of Defense (DoD) has undertaken a variety of measures to enhance the prevention, surveillance, and reporting of sexual aggression and to increase support for victims, primarily through the Sexual Assault Prevention and Response (SAPR) programs and processes under the Uniform Code of Military Justice (UCMJ).3 Additionally, programmatic research on these problems has proliferated, resulting in a number of recent reviews.4–14 For instance, Turchik and Wilson12 comprehensively summarized evidence regarding prevalence, risk factors, associated outcomes, and related policy. From a different angle, Bell and Reardon5 expertly reviewed issues regarding the clinical care of veterans with a history of sexual victimization. Here, we focus on an issue that has not been adequately addressed to date: the complex interplay between sexual harassment and sexual assault in the military context.

BACKGROUND AND DEFINITIONS
Much of the available research on military victims of sexual harassment and assault has been conducted on treatment-seeking veterans through the efforts of the Department of Veterans Affairs (VA). The bulk of this work has focused on lifetime prevalence rates of military sexual victimization and on its long-term health impacts. Because similar clinical considerations are relevant for victims of both severe harassment and sexual assault,5 most VA research has assessed both types of victimization together as part of a broader category labeled military sexual trauma (MST), defined as:

Psychological trauma, which in the judgment of a mental health professional employed by the Department, resulted from a physical assault of a sexual nature, battery of a sexual nature, or sexual harassment which occurred while the Veteran was serving on active duty or active duty for training. (p. 1)15

In contrast, the DoD defines and responds to sexual harassment and assault separately, in line with distinctions made in the military and civilian criminal justice systems. Sexual harassment refers to unwelcome sexual advances, requests, or other sexualized behavior that are pervasive enough to create a hostile working environment or that involve the threat/promise of employment-related punishments/rewards (i.e., quid pro quo).16 Sexual assault, on the other hand, is defined as:

... intentional sexual contact, characterized by use of force, threats, intimidation, abuse of authority, or when the victim does not or cannot consent. Sexual assault includes rape, forcible sodomy (oral or anal sex) and other unwanted sexual contact that is aggravated, abusive, or wrongful (to include unwanted and inappropriate sexual contact) or other attempts to commit these acts. (p. 93)17

Despite DoD differentiation between sexual harassment and assault, there are undeniably behaviors that qualify as both; in particular, the most extreme instances of sexual harassment involving nonconsensual sexual contact meet both criteria. In the military environment, this area of overlap is much greater than in most civilian contexts, because the military “workplace” often has broad boundaries; at the extreme, work space and life space merge completely during an operational deployment. Also, in military environments, the use of authority to pressure a subordinate into sexual contact
constitutes not only sexual harassment but also sexual assault, even though this is not the case in the civilian legal system. In the military, the level of coercion that can be facilitated through the use of rank and authority can be just as serious as the threat or use of physical force.

The complexity involved in defining sexual trauma within the DoD compared to the VA further reflects the multifaceted nature of the responsibilities the DoD has with respect to this problem. The services must implement programs and policies both to prevent and respond to sexual violence, and they must prosecute perpetrators as well as care for victims. Additionally, each of the service branches is responsible for surveillance and public and political accounting. Most importantly, all of these roles are secondary to the primary DoD mission of defense, which sometimes requires leaders to send personnel into harm’s way even as they seek to protect them from sexual trauma.  

RESEARCH REVIEW

Although there is more funding and interest now than there has been before for research on sexual harassment and assault among service members, this body of literature is still in its formative stages. Also, certain aspects of these problems have been addressed more than others, leaving significant gaps in what we know about their dynamics. For instance, although both VA and DoD researchers have made important strides in studying sexual aggression among service members, more work in military operational contexts is particularly needed. Below, we briefly review what is already known about four important issues related to sexual harassment and assault in the military: (1) prevalence rates; (2) effects on victims; (3) unique risk or protective factors, especially those that are military-specific; and (4) prevention program outcomes. As will become evident, there has been much more attention to the first two issues than the latter two. In addition, across topics, it is important to recognize that almost all research on sexual aggression among service members to date has focused on victims. In fact, we are aware of only one program of research that has assessed the perpetration of sexual aggression by military personnel. Therefore, unless explicitly noted, the discussion that follows pertains to service members who are victims of sexual aggression.

Estimating Prevalence Rates

By law, VA treatment facilities must provide care for problems resulting from sexual trauma that occurred during active duty service or military training, and VA service providers are required to assess all patients for MST using two specific screening questions: While you were in the military (1) did you receive uninvited and unwanted sexual attention, such as touching, cornering, pressure for sexual favors, or verbal remarks? and (2) did someone ever use force or threat of force to have sexual contact with you against your will? This screening program provides the VA with epidemiological data regarding the lifetime prevalence of MST among treatment-seeking veterans. In these data, 15% to 36% of women and 1% to 2% of men screened positive for MST.

Within the DoD, official epidemiological surveillance of sexual harassment and assault historically has been conducted via periodic administrations of the Workplace and Gender Relations Survey (WGRS). Since it was first fielded in 1988, this survey has undergone some substantial revisions, but the core assessments consistently have included separate measures of sexual harassment and assault. Up until the most recent iteration of the WGRS, sexual harassment was assessed using the validated Sexual Experiences Questionnaire whereas sexual assault was assessed using one or two questions developed for the WGRS. On the basis of data from the WGRS over the approximate period of the War on Terror (2002–2012), about 8% to 9% of women and 1% to 3% of men reported coercive sexual harassment (e.g., quid pro quo promises of job benefits or threats of negative consequences). Annual prevalence rates for harassment involving other types of unwanted sexual attention (e.g., repeated, unwanted requests for dates) have ranged from 22% to 31% for women and 5% to 7% for men. During about the same time frame (2006–2012) annual sexual assault prevalence rates ranged from 4% to 7% for women and from 1% to 2% for men.

A number of other studies have reported prevalence rates for sexual trauma in military populations. Unfortunately, extreme heterogeneity in sample characteristics, study design, and construct measurement make it difficult to compare prevalence estimates across research efforts. In particular, some seminal studies have followed the VA’s lead, using a combined assessment operationalizing MST, whereas other studies have assessed sexual harassment and assault separately. The breadth of these methodological differences likely creates some confusion for research consumers.

There have been multiple attempts to compare the prevalence of sexual victimization in military versus civilian populations, and some have concluded that military rates are comparatively high. Specifically for workplace sexual harassment, initial evidence does seem to support this conclusion. In early administrations of the WGRS, the same sexual harassment measures were administered to military personnel as had previously been used in research with civilian federal employees; results indicated that sexual harassment was substantially higher among male and female service members than in this civilian population. A more recent meta-analysis also concluded that the prevalence of sexual harassment is significantly higher in the military than in three different civilian contexts (university, government, and nongovernment), even after controlling for variation in type of assessment measure and sampling strategy.

More studies have compared military versus civilian rates for sexual assault than for harassment, but the results also have been more mixed. Perhaps the best and most recent
comparative data come from the National Intimate Partner and Sexual Violence Survey, in which the prevalence of sexual assault among military and civilian women did not significantly differ.\textsuperscript{40} Although this runs counter to the expectations of some, it is not unprecedented. For instance, an early study found that although overall rates of violence were lower among military personnel than in the general population, this difference was less pronounced for sexual assault than for other types of aggression.\textsuperscript{41} The authors point out that even finding comparable rates of sexual aggression for military and civilian populations may indicate a problem for the military. It is difficult to know how military populations that are heavily screened and fully employed should be compared with their civilian counterparts, and as a rule, the military cannot afford to tolerate levels of problem behavior that may be common among civilians.

**Documenting Effects on Victims**

Considerable research has focused on the impact of sexual victimization while in the military, primarily for female service members. Evidence shows that long-term effects can be serious and wide ranging, including physical (e.g., chronic health problems, pain, obesity), mental (e.g., post-traumatic stress, depression), and behavioral (e.g., substance abuse, eating disorders, employment difficulties, relationship problems) consequences.\textsuperscript{11,23,34} Current evidence suggests that the consequences of sexual harassment and assault are similar. Like sexual assault, sexual harassment has been linked to poorer overall physical health, mental health symptoms such as depression, and work-related problems.\textsuperscript{42,43} Unfortunately, few researchers have directly compared the impact of sexual harassment versus sexual assault among military personnel, and the comparison is complicated by the fact that victims of sexual assault often have experienced sexual harassment as well.\textsuperscript{44} For those who have experienced multiple incidents involving both of these types of sexual victimization, more severe cumulative effects are likely; in military populations, operational stressors such as combat exposure may further add to these cumulative effects.\textsuperscript{43,45}

Although not as many studies have examined the impact of sexual trauma on military men, the consequences appear to be no less deleterious.\textsuperscript{6,46} Male service members are significantly less likely than their female counterparts to be sexually victimized, however military men who are the victims of sexual aggression report just as many or more trauma symptoms.\textsuperscript{29,32,47,48} Finally, a number of studies and reviews have noted that the adverse effects of sexual aggression may be greater for service members than for civilian victims.\textsuperscript{4,5,23,49,50}

Many possible explanations for this finding have been offered, including the fact that military victims may be forced to continue working with their perpetrator or that they may feel a greater sense of betrayal after an assault by a fellow service member. However, studies to date have not evaluated the relative importance of military-specific factors that may account for stronger adverse consequences associated with sexual trauma for military personnel versus civilians.

**Identifying Critical Risk and Protective Factors**

There has been a great deal of speculation about why rates of sexual trauma may be higher within the military than in civilian populations,\textsuperscript{11,12,14} even though research evidence has not consistently supported this claim. A number of possible explanatory factors have been suggested previously. Generally, these include both risk factors for sexual aggression that may be overrepresented in military samples and unique aspects of military lifestyle, culture, structure, and policy that may heighten risk. Potential explanatory factors include:

- Demographics (e.g., preponderance of young, single, male, and lower-ranking personnel).
- Recruiting and self-selection (e.g., high prevalence of premilitary sexual trauma, volunteering for service to escape difficult life circumstances).
- Military lifestyle (e.g., combat deployment, high mobility, heavy drinking, and coed barracks where sexual activity is common).
- Military culture (e.g., hostile attitudes toward women, rape myth acceptance, hypermasculinity, and an organizational climate condoning sexual aggression).
- Military structure and policy (e.g., prevention and response policies that make reporting and prosecution difficult; gender typing of military occupations; top-down hierarchical structure).

Some of these factors have been established as significant risks factors for victimization and/or perpetration of sexual aggression in the military (e.g., younger age, excessive alcohol use, and rape supportive attitudes).\textsuperscript{19-21,51,52} However, many hypothesized risk factors have been studied and validated only in the civilian literature and are simply known or presumed to be more prevalent in the military. For example, rigid masculine norms—sometimes called hypermasculinity (e.g., calloused attitudes toward women and sex, view that aggression is manly, or belief that danger is exciting)—\textsuperscript{53}—have been identified as a significant risk factor for the perpetration of sexual aggression in civilian populations.\textsuperscript{54} These types of norms may be more inherent in military than in civilian culture.\textsuperscript{12,14} Although this hypothesis makes intuitive sense, the scant research evaluating the impact of hypermasculinity on any type of interpersonal aggression by military personnel has been inconclusive,\textsuperscript{21,55-58} suggesting that other predictors may be more important. Furthermore, it is not clear that the individual-focused conceptualization of hypermasculinity that has emerged as a significant predictor of sexual assault in civilian studies is a good characterization of hypermasculinity as it may manifest in military culture.\textsuperscript{56}

Another issue is that almost no work has been done either to distinguish the risk factors for sexual harassment versus sexual assault among service members or to establish
commonalities among them. However, this is critical in determining the nature of the association between these two types of sexual violence. There is clear evidence that sexual harassment itself is a critical risk factor for sexual assault in military populations. Not only is it unlikely that a victim will experience sexual assault without a history of sexual harassment, \(^44\) but commonly the same perpetrator will have harassed victims before assaulting them.\(^{38,33,51,59}\) Furthermore, based on the only military data available (a longitudinal study of junior enlisted U.S. Navy personnel) it appears extremely uncommon for perpetrators of military sexual aggression to have committed a sexual assault without a history of perpetrating harassment as well.\(^{21}\)

Because of the high overlap between sexual harassment and assault for both victims and perpetrators, some have concluded that both may be manifestations of a single continuum of sexual aggression.\(^{44,60}\) If this is the case, then essentially there should be complete overlap in the risk and protective factors for both. In our own research, we have found that important risk factors for sexual assault perpetration (e.g., impersonal sex, hostility to women, alcohol use, and history of delinquency)\(^{61}\) are equally predictive of sexual harassment and assault perpetration among junior enlisted sailors.\(^{21}\) However, we are not aware of other studies confirming this hypothesis in civilian or military populations.

**Developing Effective Prevention and Response Programs**

A better understanding of military-specific risk and protective factors would greatly assist in developing tailored interventions for service members. To date, however, the DoD has relied primarily on evidence-based civilian programs to inform their prevention efforts. Most recently, a bystander intervention model has been widely adopted in prevention programs across all of the services and aggressively implemented through required trainings.\(^3,62\) The goal of military bystander intervention education is to teach all personnel about the problem of sexual violence in the military, and to encourage everyone to become part of the solution. Service members are taught to recognize warning signs of a potential sexual assault incident and they are provided with strategies that can be used to prevent or respond to the incident.\(^3\) Gender hostility and sexual harassment are explicitly identified as possible precursors that may escalate into sexual assault without intervention. At a macro level, the bystander approach has the potential to produce population-level change in military cultural norms and attitudes toward sexual aggression.\(^62\) Another advantage is that it can be implemented in a positive way, without either confronting participants as possible perpetrators or labeling them as potential victims.

Given the military’s emphasis on group cohesion and loyalty, the bystander approach seems to be a good cultural fit for the military. Unfortunately, very little work has been done to evaluate how effectively evidence-based civilian programs like the bystander intervention have been translated and implemented within the DoD. The services are required to identify metrics and track benchmarks of the success of their efforts. In support of this, important internal surveillance is systematically conducted, tracking service-specific sexual victimization rates, polling the attitudes and needs of SAPR program constituents, and, in some instances, attempting to correlate programmatic changes with reporting patterns.\(^63-66\) However, well-controlled studies are necessary to document the effectiveness of specific prevention strategies and to identify the critical elements that make them successful. Ideally, such studies would include control groups (i.e., participants who do not take part in the intervention), track outcomes over time, and assess behavioral as well as attitudinal changes. Unfortunately, studies of this type are scarce.\(^20,62,67,68\)

Currently, most of the services have separate response policies and procedures for sexual harassment and assault. Incidents of harassment are handled through Military Equal Opportunity programs whereas sexual assault cases fall under the purview of SAPR. The exception is the Army, where programs for both types of MST are integrated under the umbrella of the Sexual Harassment/Assault Response and Prevention program. Air Force SAPR leaders recently reviewed the Army’s program, evaluating whether to adopt a similar strategy. However, in the absence of systematic program evaluation, there is little objective basis for determining which strategy is better. At the grassroots level, some personnel are uncomfortable with the sense that an integrated approach lumps more “minor” sexual harassment infractions with more “serious” acts of sexual assault.\(^69\) Despite such misgivings, there is clearly a much greater level of continuity between sexual harassment and assault in the military than there is in most civilian communities, where the boundaries separating work and private life are much clearer. Given the strong associations between sexual harassment and assault in the military context for both victims and perpetrators, increased integration in some areas would likely be efficient.

**FUTURE RECOMMENDATIONS**

Throughout this review, we have highlighted parallels and overlaps between sexual harassment and assault with respect to their definitions, risk factors, and effects on victims. Further, we have noted that these two types of sexual violence are highly associated, and that sexual harassment often precedes sexual assault for both victims and perpetrators. However, the military community still needs to become better informed in many respects to effectively combat this problem. In this section, we outline some important future research priorities.

**Improving Estimates of Sexual Harassment and Assault Prevalence in the Military**

First, going forward it will be important to better understand how our research methods impact estimates of prevalence.
In this regard, it is helpful that the most recent DoD surveillance effort, the 2014 RAND Military Workplace Study, compared two assessment approaches. Some respondents completed the standard WGRS measures, whereas others received newly developed measures more closely aligned with DoD legal definitions of sexual harassment and assault. Encouragingly, the results were remarkably similar across these two distinct assessment strategies. More studies should evaluate the validity of their measures in this way. Although it would be a mistake to prematurely select a preferred operationalization and foreclose other options, a better understanding of the impact of different measures on prevalence estimates and some level of standardization within the military context would significantly advance research. It would particularly improve our ability to do comparative research across groups within the military and between military and civilian populations, and it would stabilize epidemiological surveillance over time. Ultimately, optimal assessment is a necessary foundation for all research endeavors in this topic area.

**Further Delineating the Effects of Sexual Trauma**

Moving forward, it will be important to build on what we already know about the impact of sexual aggression on military victims by exploring factors that mediate or moderate its effects. One important aspect of this is the severity of the victimization. Both sexual harassment and assault experiences can involve very severe levels of trauma, and research studies need to take this into account in understanding outcomes. Unfortunately, just as we need to improve our assessment of the prevalence of military sexual aggression, we currently do not know the best way to operationalize its severity; it may ultimately depend on a variety of factors such as the nature of the act, the tactics used, whether substance use was involved, and the relationship between the victim and the perpetrator.

Subgroup differences in the experience of military sexual aggression are another critical area for future research. For instance, we need more information regarding the MST experiences of racial/ethnic and sexual orientation minority group members in the military, who may be more likely to experience the cumulative effects of harassment as a result of their minority status as well. Male victims are another subgroup of service members that has not received enough attention. Although some work has been done to understand their sexual victimization experiences, much more is needed. Finally, differences in the response and support systems available for military victims of sexual harassment versus sexual assault may influence long-term outcomes, and this should be a focus of study. Recent attempts to survey military victims of sexual assault victims about their experiences with the SAPR system are a step in the right direction and should continue; parallel efforts with service members who experience sexual harassment also would be useful.

**Verifying Military-Specific Risk Factors**

A comprehensive understanding of risk factors for sexual violence that are overrepresented in military populations, as well as unique, military-specific risk factors for sexual violence, is essential in developing effective prevention programs. To date, few studies have examined risk factors for sexual violence in active duty populations, and almost all of these have focused on predictors of victimization rather than perpetration. Although understanding factors that increase the risk of being victimized is important, it is arguably even more important to understand factors that increase the likelihood of perpetration. This is an area in urgent need of further study. Whether from the victim or perpetrator perspective, though, future efforts should focus on identifying modifiable risk factors as targets for intervention.

With regard to the interrelationship between sexual harassment and sexual assault in the military, there are three important goals that need to be addressed in future research: (1) explicate the dynamics of sexual harassment as a precursor to sexual assault, (2) document commonalities across risk factors for both sexual harassment and assault, and (3) identify any factors that may differentially heighten the risk for either type of sexual aggression. First, although we know that sexual harassment tends to precede sexual assault for both victims and perpetrators, we have very little understanding of this trajectory. There is a pressing need for research on pathways of escalation and ways to interrupt them. Research should examine this issue from the perspective of both victims and perpetrators. However, since extremely little work has been done from the perspective of perpetrators, this is a priority. We need to know how perpetrators progress from harassing and “grooming” behaviors to rape. Comparing trajectories of sexual violence marked by escalation versus cessation and identifying modifiable factors associated with these patterns will provide key information for prevention program development.

Next, the risk factors for sexual harassment and assault rarely have been compared in the research literature. In studies of civilians, this is partially because these two types of sexual violence typically occur in different contexts, making it difficult to assess them together. Primarily separate lines of research for harassment and assault have resulted in important differences in the typical risk factor models that have been studied for each type of sexual violence. Research on sexual harassment has emphasized contextual factors within workplace environments, whereas studies of sexual assault have focused more on the individual characteristics of victims and perpetrators. Given the particularly high level of overlap between sexual harassment and assault within the military, researchers studying active duty populations have a unique opportunity to examine contextual and individual risk factors together to understand their relative contributions and to develop more comprehensive predictive models. For sexual assault in particular, additional attention to environmental risk factors has important advantages. Individual characteristics
may be difficult to change through SAPR policy or prevention efforts. Moreover, focusing on individual risk factors tends to result in population screening approaches, which raise serious ethical and practical challenges. Considering aspects of the military cultural and physical environment that significantly influence sexual violence may reveal contextual factors that are more readily modifiable and hence more amenable to intervention.

Finally, even though sexual harassment and assault perpetration may have more common than unique predictors in the military context, there may be nuances in how specific risk and protective factors impact the incidence of these two types of sexual violence. For instance, personnel may have more difficulty recognizing sexual harassment as inappropriate because it is frequently more ambiguous than sexual assault. Where there is more ambiguity, it may be reasonable to hypothesize that perpetrators will tend to ignore institutional deterrents (i.e., contextual protective factors) and pay more attention to personal motivations and attitudes (i.e., individual risk factors) in making the choice to become sexually aggressive.

**Improving Prevention and Response**

It would be particularly helpful to systematically explore alternative ways for the services to coordinate or integrate sexual harassment and assault prevention and response programs. As discussed above, differences in the way these problems are managed likely impact victims’ experiences and may influence their long-term adjustment outcomes. Also, anecdotal evidence suggests that the distinction between sexual harassment and assault is confusing to some victims, and they may not know which reporting system to use. For these reasons, further integration of programs may be beneficial. Ultimately, however, the answer to whether sexual harassment and assault should be treated as manifestations of a single dimension or as distinct problems is a complex one, and the answer will certainly vary across contexts (e.g., prevention, victim support, legal response, and medical care).

Finally, the military needs to evaluate the success of its prevention and response efforts more consistently and systematically, in a way that illuminates the most important components for success. For example, in assessing the bystander intervention, we not only need to know how willing service members are to intervene when they recognize a potential problem with sexual aggression, but what factors may inhibit that recognition in the first place. Furthermore, even the most willing individual may not act depending upon immediate situational factors. Studies that present personnel with hypothetical but realistic high-risk scenarios and examine their response, for instance, may help to clarify how well personnel can use what they learn through trainings in real-life situations. Understanding these dynamics is critical in developing the next generation of program materials.

**CONCLUSION**

The military community will always need to remain alert in the battle to eliminate sexual harassment and assault from its ranks. Furthermore, given the extent of the problem in civilian communities throughout the United States, the DoD must set its aspirations higher than parity in this fight; the military community must be at the forefront. In many ways, fundamental characteristics of the military environment present a double-edged sword for SAPR. For instance, the hierarchical structure may increase risk for victimization based on abuse of authority; at the same time, however, this hierarchy gives military leaders the ability to change policy and practice to improve SAPR programs much more dramatically and quickly than would be possible in most civilian environments. Also, the high value placed on cohesion throughout the force may lead to protectionism and make it difficult for victims to come forward; on the other hand, group loyalty may make prevention efforts more successful when leveraged through the bystander intervention program. In the military, the relationship between sexual harassment and assault is particularly complex, presenting dilemmas in structuring prevention and response programs. However, because of this, the VA and the DoD have a unique opportunity to study these problems in parallel, and to develop a comprehensive strategy to address the continuum of harm resulting from both. Given the current momentum across the military in addressing the problems of sexual harassment and assault, we are hopeful that SAPR programs will continue to progress to the point that military research, prevention, and response are the standard to emulate.

**ACKNOWLEDGMENTS**

Report no. 15-02 was supported by the Tri-Service Nursing Research Program, under Work Unit no. N1411.

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