Violence and Victims

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(Missing) Knowledge About Sexual Assault Resources: Undermining Military Mental Health

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In 2005, the Department of Defense reformed military sexual assault (MSA) prevention and response efforts. However, research suggests that some Service members may not be informed of MSA resources. We examined how lacking such knowledge may undermine psychological well-being (i.e., symptoms of depression and posttraumatic stress) among MSA survivors as well as Service members who feel unsafe from MSA. The data were collected by the DoD in 2010 and sampled active duty Service women and men. Experiencing MSA, feeling unsafe from MSA, and lacking knowledge of MSA resources predicted greater psychiatric symptoms. Service members who felt unsafe from MSA reported greater psychiatric symptoms as a function of lacking knowledge of MSA resources. Findings suggest that education about sexual assault resources may be critical for the protection of mental health—among survivors and nonvictims alike.

Keywords: military personnel; military sexual assault; depression (emotion); posttraumatic stress disorder; health care–seeking behavior; treatment barriers

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Despite the availability of military sexual assault (MSA) resources, many Service members who experience sexual assault are not receiving adequate care (U.S. Government Accountability Office [GAO], 2013). Studies consistently show that rates of sexual assault are higher in the military compared to the civilian population, with 9%–13% of Service women and 1%–2% of Service men enduring some type of MSA per year of military service (Bostock & Daley, 2007; Lipari, Cook, Rock, & Matos, 2008; Street, Stafford, Mahan, & Hendricks, 2008). Sexual assault is one of the most underreported crimes in the United States (Bachman & Taylor, 1994; Kilpatrick, Edmunds, & Seymour, 1992), so it is likely that these figures represent conservative estimates of MSA prevalence. Furthermore, women are significantly more likely than men to suffer MSA (Firestone, Miller, & Harris, 2012; Haskell et al., 2010; Holland, Rabelo, & Cortina, 2014; Maguen, Luxton, Skopp, & Madden, 2012; Martin, Rosen, Durand, Knudson, & Stretch, 2000). However, research also finds that survivors of MSA—regardless of gender—suffer consequences to their mental well-being (Gahm, Lucenko, Retzlaff, & Fukuda, 2007; Harned, Ormerod, Palmieri, Collinsworth, & Reed, 2002; Kimerling, Gima, Smith, Street, & Frayne, 2007; Martin et al., 2000). Both men and women who have suffered MSA

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report elevated symptoms of depression (e.g., Chang, Skinner, & Boehmer, 2001; Chang, Skinner, Zhou, & Kazis, 2003; Kimerling et al., 2010; O'Brien & Sher, 2013) and posttraumatic stress disorder (PTSD; e.g., Kang, Dalager, Mahan, & Ishii, 2005; Surís & Lind, 2008).

Given these findings, it is unsurprising that obtaining help is important for Service members who have recently suffered MSA. The Department of Defense (DoD) has created resources specifically for sexual assault survivors, but many Service members face barriers that make it difficult to access these resources (Burns, Grindlay, Holt, Manski, & Grossman, 2014; Campbell & Raja, 2005; Holland, Rabelo, & Cortina, 2015). Most research on help-seeking behaviors and consequences has focused on *veterans* (e.g., Hamilton, Poza, & Washington, 2011; Kimerling et al., 2010; Turchik et al., 2013; Turchik, Pavao, Hyun, Mark, & Kimerling, 2012). Although these findings are important, more research is needed to understand MSA help-seeking barriers and consequences among *active duty* Service members (Gahm et al., 2007; Holland et al., 2015). Building on this work, this study examines how lacking knowledge about MSA resources may exacerbate harmful psychological outcomes among active duty personnel—in particular, among those who have experienced or feared MSA.

MILITARY RESOURCES FOR SEXUAL ASSAULT

The DoD has instated substantial sexual assault policy reforms. In 2005, the DoD created the Sexual Assault Prevention and Response Office (SAPRO) to oversee operations related to sexual assault policy and resources (DoD, 2010; see also DoD SAPRO, n.d.). The DoD also created two new staff positions to support MSA survivors. According to the DoD Directive 6495.01 (DoD, 2012), a *Sexual Assault Response Coordinator (SARC)* serves as the "single point of contact for coordinating appropriate and responsive care for sexual assault victims" (p. 3). SARCs oversee all sexual assault cases, ensure appropriate care for survivors, advocate for them during any decision-making processes, and assign a Victim Advocate (MyDuty.Mil, n.d.). *Victim Advocates* provide crisis intervention and support for survivors (DoD, 2012) and can assist survivors 24/7 by listening to their needs, providing referrals (e.g., medical care, mental health care, legal advice), and accompanying them to appointments (MyDuty.Mil, n.d.).

The DoD mandates that an SARC and Victim Advocate be present on each base, ship, or installation, whether domestic or at a deployment site (DoD, 2012). Despite the mandated presence of SARCs and Victim Advocates, recent research suggests that many Service members are not receiving adequate care following MSA (U.S. GAO, 2013; Vedder, 2015). In fact, it is rare for survivors to disclose episodes of sexual assault victimization to military officials and/or seek treatment (Burns et al., 2014; Campbell & Raja, 2005; Turchik et al., 2013). Theories of help-seeking (e.g., Liang, Goodman, Tummala-Narra, & Weintraub, 2005) can help account for this phenomenon.

BARRIERS TO HELP-SEEKING FOR SEXUAL ASSAULT SURVIVORS

Researchers have developed theoretical models to account for the help-seeking behaviors of people who have suffered violence. To seek care, survivors must (a) identify their experience as an act of violence, (b) choose to seek support, and (3) decide on a care provider

(Liang et al., 2005). These actions are not linear stages but rather a fluid process (Liang et al., 2005). One reason for the dynamic nature of the help-seeking process is interruptions in the form of barriers that hinder survivors' ability to obtain care after an assault.

Barriers are any impediments to seeking care following a sexual assault, whether related to reporting, mental and physical health care, or legal counsel (Walsh, Banyard, Moynihan, Ward, & Cohn, 2010). The health care use literature offers a multidimensional conceptualization of barriers to care, identifying four factors: availability, affordability, accessibility, and acceptability (Booth & McLaughlin, 2000; Logan, Evans, Stevenson, & Jordan, 2005; Logan, Stevenson, Evans, & Leukefeld, 2004; Penchansky & Thomas, 1981). Researchers have applied this framework to the context of sexual assault to show how various impediments make it difficult for survivors to seek care following an assault, including a lack of local caregivers trained in sexual assault response (availability), misinformation about sexual assault resources (accessibility), lack of disposable income to pay for resources (affordability), and the cloud of social stigma (e.g., shame, secrecy) surrounding sexual assault victimhood (acceptability; Logan et al., 2005; Logan et al., 2004).

As discussed earlier, MSA survivors are able to receive care and support from SARCs and Victim Advocates free of charge. Thus, in the military context, accessibility and acceptability barriers (vs. availability and affordability barriers) may be more common and detrimental impediments to the help-seeking process. Recent research supports this theory (e.g., Burns et al., 2014; Holland et al., 2015; Turchik et al., 2013). For example, Burns and colleagues (2014) conducted a qualitative study of U.S. Service women's perceptions of barriers to reporting and accessing services for MSA. These women discussed various obstacles to seeking help, including lacking knowledge about sexual assault resources. One woman stated,

> I really had no idea who to go to if I even wanted to report certain things. You don't know who the SARCs are, you don't know who the Victim Advocates are, you really don't have an understanding a lot of times of what your options are if you're a victim of assault. (Burns et al., 2014, p. 348)

Similarly, Turchik and colleagues (2013) conducted a study of barriers to obtaining care among male veterans who experienced MSA, finding that participants lacked knowledge about the availability of MSA resources and services. The availability and affordability of SARCs and Victim Advocates matter little if Service members are not properly educated about these supports by the DoD (i.e., making them accessible). Thus, lack of information about support for MSA is a critical barrier. Furthermore, it is a matter of ethical responsibility, institutional integrity, and legal compliance that the DoD ensures adequate education and awareness concerning sexual assault prevention and response. According to DoD Directive 6495.02 (DoD, 2013), military officials are responsible for providing "education and training . . . to prevent and appropriately respond to incidents of sexual assault" (p. 32). Furthermore, the DoD intends for military officials, SARCs, and Victim Advocates to collaborate to educate Service members about MSA resources and prevention tools (DoD, 2013).

The literature reviewed earlier points to the importance of knowledge about sexual assault resources. Most of the research in this area has identified how lacking such knowledge impedes help-seeking for MSA. In this study, we investigated how this (missing) knowledge links with survivors' psychological well-being. Research consistently demonstrates the negative mental health consequences for both female and male MSA survivors (Harned et al., 2002; Kimerling et al., 2007; Martin et al., 2000), including depression and

PTSD (Chang et al., 2001, 2003; Kimerling et al., 2010; O'Brien & Sher, 2013). MSA survivors who want to seek help may endure increased distress if they lack knowledge about sexual assault resources. In addition to experienced sexual assault, Service members' perceptions of safety may play an important role as well—among both victims and nonvictims.

PERCEPTIONS OF SAFETY FROM SEXUAL ASSAULT

According to scholars, rape culture refers to a society or institution in which violence against women is sexualized and normalized (Buchwald, Fletcher, & Roth, 2005; Connell & Wilson, 1974). Rape culture can be understood as a widely shared belief system that is harmful to both sexual assault survivors and nonvictims. Evidence of rape culture in the military includes the valorization of male dominance, desensitization to violence, acceptance of misogynist language (Hunter, 2007), and prevalence of sexual assault (Bostock & Daley, 2007; Lipari et al., 2008; Street et al., 2008). These factors may help explain why many Service members view the military as permissive of sexual assault (Brubaker, 2009; Burns et al., 2014). Rape culture contributes to the high prevalence of MSA, yet may hold detrimental consequences for other military personnel as well. Therefore, we suggest that it is important to consider the role of perceived safety from MSA among both recent MSA survivors and nonvictims.

The indirect consequences of sexual assault have been studied in college contexts. For example, undergraduate women who perceive they are at risk for sexual assault are more likely to report constrained behavior (e.g., avoiding certain areas of campus), negative emotions (e.g., worry), and fear of other crimes (e.g., physical assault; Day, 1994; Fisher & Sloan, 2003; Hilinski, 2009; Lane, Gover, & Dahod, 2009; Wilcox, Jordan, & Pritchard, 2007). In this way, rape becomes a form of gendered social control (Day, 1994), affecting people's—mostly women's—emotions and behaviors. Among Service women, fearing sexual assault is associated with increased feelings of physical vulnerability and desires for protection (Weitz, 2015). Given the presence of sexual violence in the military, it stands that many female Service members and some male Service members may view themselves as potential victims of MSA. In turn, we predict that fear of MSA will threaten their well-being. Moreover, we argue that help-seeking barriers may also play a role in the indirect consequences of sexual assault. Service members who feel unsafe from sexual assault in their workplace may experience increased psychological distress if they are also unsure where to go for help if an assault occurred.

THE PRESENT RESEARCH

In summary, this study used the DoD's 2010 Workplace and Gender Relations Survey of Active Duty Members (WGRA) to examine how barriers to using sexual assault resources (i.e., SARCs and Victim Advocates) may exacerbate symptoms of depression and PTSD among active duty women and men (both MSA survivors and nonvictims). Specifically, we predicted that Service members would report worse mental health outcomes (symptoms of depression and PTSD) if they lacked knowledge of sexual assault staff. In addition, if Service members (a) had experienced a recent MSA or (b) feared MSA, the mental health effects of these experiences and fears would be exacerbated (i.e., recent or feared MSA would interact with knowledge barriers in the prediction of depression and PTSD).

METHOD

Participants and Procedure

This study was a secondary analysis of data collected by the DoD WGRA in 2010. See Defense Manpower Data Center (DMDC, 2010) and Rock, Lipari, Cook, and Hale (2011) for a detailed explanation of survey procedures (including the entire survey). The survey was designed to sample comparable numbers of personnel across Service branch and sex/gender. It was administered on paper and online to roughly 90,391 active duty members, of whom 26,505 (29.32%) provided usable data (DMDC, 2010). There were 10,646 (40.2%) women and 15,859 (59.8%) men. There were 17,288 enlisted personnel (65.2%), 1,895 warrant officers (7.1%), and 7,322 commissioned officers (27.6%). With respect to service branch, 6,963 (26.3%) were Air Force members, 6,703 (25.3%) were Army soldiers, 5,033 (19.0%) were Marines, 5,330 (20.1%) were Navy sailors, and 2,476 (9.3%) were Coast Guard personnel.

Measures

Sexual Assault Survivor Status. Participants reported their experience of any of five types of sexual assault over the past 12 months of their military employment.[1] Specifically, this measure asked, "Have you experienced any of the following intentional sexual contacts that were *against your will or occurred when you did not or could not consent* [emphasis added] where someone . . . ." Behaviors then ranged from unwanted touching to attempted and completed rape, for example, "*Sexually touched you* (e.g., intentional touching of genitalia, breasts, or buttocks) or made you sexually touch them," "*Attempted* to make you have sexual intercourse but was not successful," and "*Made you* perform or receive oral sex, anal sex, or penetration by a finger or object." Service members who reported experiencing any of these five behaviors received a code of 1 (*sexual assault survivor*); all others received a code of 0 (*nonvictim*).

Perceptions of Safety. One item was used to assess how safe participants felt from sexual assault. Participants were asked, "To what extent do/would you feel safe during deployments from being sexually assaulted on your installation/ship?" Response options included 1 = *very unsafe*, 2 = *unsafe*, 3 = *neither safe nor unsafe*, 4 = *safe*, and 5 = *very safe*.

Sexual Assault Response Coordinator Knowledge. Participants were asked, "At my installation/ship, there is a Sexual Assault Response Coordinator (SARC) to help those who experience sexual assault," and responded *yes* = 1, *no* = 2, or *don't know* = 3. We created two dummy codes for SARC knowledge, with *yes* as the reference group (i.e., *SARC no* = 1, *SARC yes* = 0 and *SARC don't know* = 1, *SARC yes* = 0).

Victim Advocate Knowledge. Respondents were asked, "At my installation/ship there is a Sexual Assault Victim Advocate to help those who experience sexual assault." Response options were *yes* = 1, *no* = 2, or *don't know* = 3. Again, we created two dummy codes for Victim Advocate knowledge, with yes as the reference group (i.e., *VA no* = 1, *VA yes* = 0 and *VA don't know* = 1, *VA yes* = 0).

Posttraumatic Stress Disorder Symptoms. The PTSD Checklist (PCL-C; Weathers, Litz, Huska, & Keane, 1994) was used to assess PTSD symptoms. This measure consists of 17 items (e.g., "Having repeated, disturbing dreams of a stressful experience"), and respondents indicated how much they had been bothered by each item in the past month on a scale from 1 = *not at all* to 5 = *extremely*. WGRA analysts summed these items,

and PTSD scores ranged from 17 to 85 ($M = 27.05$, $SD = 12.66$). We are unable to report the reliability of these items because the individual items were not released as part of the publicly available WGRA 2010 dataset.

Depressive Symptoms. The 8-item Patient Health Questionnaire (PHQ-8) Depression scale (Kroenke et al., 2009) was used to assess the severity of participants' depressive symptoms. Personnel indicated how bothered they had been by each item (e.g., "Feeling tired or having little energy" and "Little interest or pleasure in doing things") over the past month. The response options for this measure included 1 = *not at all*, 2 = *several days*, 3 = *more than half the days*, and 4 = nearly every day. WGRA analysts computed a single depressive symptom score for participants by averaging the eight items, with higher scores reflecting worse depressive symptoms (range = 1–4, $M = 1.47$, $SD = .60$). Again, we are unable to report the internal consistency of this measure because the DoD only released the PHQ-8 scale scores (not individual items).

Sex/Gender. Participants indicated their sex/gender by checking 1 = *male* or 2 = *female*. If a participant skipped this item, WGRA analysts used military records to determine and impute sex/gender. We included sex/gender as a control variable in all analyses because prior research generally finds that Service women report greater depression and PTSD than Service men (e.g., Gahm et al., 2007; Maguen et al., 2012; Tolin & Foa, 2006).

Prior Trauma. After completing all measures of mental health, participants were asked if any of the problems they marked in the previous questions were a result of experiencing any of six possible traumas: "Combat or being in a combat zone," "Sexual assault while deployed," "Sexual assault while *not* deployed," "Other traumatic *military* events," "Other traumatic *nonmilitary* events," and "Traumatic events prior to entering military service." Respondents could select *no* = 0 or *yes* = 1. These items were summed so that scores ranged from 0 (*selected none of the six traumas*) to 6 (*selected all six traumas*). There was no time frame included in this measure (e.g., in the past year), and the items were not connected to a specific measure of mental health, so this served as a proxy for prior exposure to a range of traumas, including combat, sexual assault, and events outside of military service. We included this measure of prior trauma linked to symptoms as a control variable in all analyses.

RESULTS

Descriptive Results

Two percent of the sample (4% of women and 0.7% of men; total $n = 542$) reported experiencing some form of MSA within the last year. A significant majority of survivors were women (79%, $n = 430$), $\chi^2(1, N = 26{,}505) = 353.24$, $p < .001$. Survivors reported more symptoms of depression, $M = 2.06$, $SD = 0.85$, $t(1, 537) = 6.71$, $p < .001$, $d = 0.34$, and PTSD, $M = 40.21$, $SD = 17.44$, $t(1, 487) = 6.53$, $p < .001$, $d = 0.36$, than nonvictims, ($M = 1.78$, $SD = 0.78$ and $M = 34.08$, $SD = 16.86$, respectively). Four percent of the sample reported feeling very unsafe (1.1%, $n = 279$) or unsafe (3.3%, $n = 873$) from sexual assault. Women felt significantly less safe than men, $t(26, 288) = 84.37$, $p < .001$, $d = 1.03$ ($M = 3.74$, $SD = 0.93$ and $M = 4.59$, $SD = 0.70$, respectively). Sexual assault survivors also felt less safe than nonvictims, $t(26, 288) = 27.06$, $p < .001$, $d = 1.05$ ($M = 3.22$, $SD = 1.11$ and $M = 4.27$, $SD = 0.88$, respectively). Perceived safety was significantly correlated with PTSD ($r = -.25$, $p < .001$) and depression ($r = -.22$, $p < .001$). See Table 1 for descriptive statistics and correlations among study variables.

TABLE 1. Means, Standard Deviations, and Correlations for Study Variables

Variables	*M* (*SD*)	1	2	3	4	5	6	7	8	9
1. Gender	—	—								
2. Prior trauma	0.70 (1.00)	.09***	—							
3. MSA	—	.12***	.15***	—						
4. Safety	4.25 (0.90)	−.46***	−.19***	−.17***	—					
5. SARC_no	—	−.02*	.01	.03***	−.00	—				
6. SARC_don't know	—	−.04***	.02**	.02***	−.03***	−.09***	—			
7. VA_no	—	−.03***	.01	.03***	−.01	.78***	−.06***	—		
8. VA_don't know	—	−.04***	.02*	.01*	−.03***	−.06***	.77***	−.07***	—	
9. PTSD	27.05 (12.66)	.07***	.45***	.15***	−.23***	.06***	.09***	.06***	.09***	—
10. Depression	1.47 (0.60)	.10***	.37***	.14***	−.22***	.04***	.06***	.05***	.07***	.83***

Note. Gender coded women = 1, men = 0. MSA = military sexual assault: coded MSA in the past year = 1, no MSA in the past year = 0; SARC = sexual assault response coordinator; SARC_no coded no = 1, yes = 0; SARC_don't know coded don't know = 1, yes = 0; VA = Victim Advocate; VA_no coded no = 1, yes = 0; VA_don't know coded don't know = 1, yes = 0; PTSD = posttraumatic stress disorder.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

Analyses

To test our hypotheses, we ran two linear regressions with PTSD or depression symptoms as the dependent variable. We entered our control variables on Step 1 (gender, prior trauma), and we entered experienced MSA, perceived safety, knowledge of SARCs, and knowledge of Victim Advocates on Step 2. Finally, 4 two-way interactions between knowledge and MSA (e.g., *SARC no vs. SARC yes* × *MSA*) and 4 two-way interactions between knowledge and safety (e.g., *VA don't know vs. VA yes* × *safety*) were entered on Step 3. Dichotomous variables, including dummy codes, were coded 0/1, and continuous variables were centered before computing interaction terms. See Table 2 for all regression results.

Posttraumatic Stress Disorder Symptoms. There were several significant main effects for PTSD. People who had experienced a recent MSA reported significantly more PTSD symptoms. Conversely, those who felt safe from sexual assault reported fewer PTSD symptoms. Over and above the effect of prior trauma and MSA experiences, Service members who *did not* know if there was a SARC, *did not* know if there was a Victim Advocate, and/or knew there was *no* Victim Advocate all reported more severe PTSD symptoms (compared to those who did know there was a SARC or Victim Advocate).

There were two significant interactions between Victim Advocate knowledge and perceived safety. Significant interactions were probed using simple slopes (Preacher, Curran, & Bauer, 2015). First, Figure 1 illustrates that PTSD decreases as perceptions of safety increase, but the decline is significantly steeper for those who did not know if there was a Victim Advocate. In other words, those who *did not* know there was a Victim Advocate reported more PTSD when they felt unsafe. Similarly, Figure 2 demonstrates that as safety increases, PTSD decreases, but the decline is significantly steeper for those who knew that there was no Victim Advocate. In other words, those who knew there *was no* Victim Advocate reported more PTSD symptoms when they also felt unsafe from sexual assault.

Depression Symptoms. Experiencing a recent MSA significantly predicted more depression symptoms, and feeling safe from sexual assault predicted fewer depression symptoms. Beyond these effects, Service members who *did not* know if there was a SARC, *did not* know if there was a Victim Advocate, and knew there was *no* Victim Advocate reported more depression symptoms. There was one significant interaction between knowledge of Victim Advocates and perceived safety. Figure 3 illustrates that, compared to those who knew there was a Victim Advocate, Service members who knew there *was no* Victim Advocate reported increased depression as perceptions of safety decreased.

DISCUSSION

MSA can be a destructive aspect of military life. Following sexual assault policies implemented in 2005, the DoD has provided various resources specifically for those who experience MSA. SARCs and Victim Advocates can provide much needed support for survivors (DoD, 2012). According to the DoD, these resources aim "to ensure the safety, dignity and well being of all members of the Armed Forces" (SAPRO, n.d.). Are these policy and resource changes achieving this laudable objective? Do they protect the mental health of military members who have survived MSA or live and work in fear of sexual violence? We addressed these questions in this study, using survey data collected from active duty personnel in 2010 (5 years after the new policy went into place).

TABLE 2. Linear Regressions Predicting Posttraumatic Stress Disorder and Depression Symptoms

	PTSD Symptoms				Depression Symptoms			
Predictors	R^2	F	β	B (SE)	R^2	F	β	B (SE)
Step 1: Control variables	.21	2599.74***			.14	1613.96***		
df		(2, 19984)				(2, 19321)		
Gender			.01	0.22 (0.17)			.06***	0.07 (0.01)
Prior trauma			.45***	5.91 (0.08)			.37***	0.23 (0.00)
Step 2: Main effects	.24	787.52***			.17	483.75***		
df		(8, 19978)				(8, 19315)		
MSA			.06***	4.93 (0.54)			.06***	0.23 (0.03)
Safety			−.15***	−2.07 (0.10)			−.13***	−0.09 (0.01)
SARC_no			.01	0.68 (0.64)			.02	0.05 (0.03)
SARC_don't know			.04***	1.35 (0.32)			.04***	0.07 (0.02)
VA_no			.05***	3.94 (0.74)			.03***	0.12 (0.04)
VA_don't know			.05***	1.93 (0.34)			.03***	0.06 (0.02)
Step 3: Interactions	.24	399.77***			.17	245.77***		
df		(16, 19970)				(16, 19307)		
MSA × SARC_no			−.01	−3.06 (3.33)			−.01	−0.10 (0.18)
MSA × SARC_don't know			.01	2.38 (1.72)			.01	0.04 (0.09)
MSA × VA_no			.00	1.42 (3.78)			−.00	−0.06 (0.20)
MSA × VA_don't know			−.02	−2.92 (1.87)			.01	0.06 (0.09)
Safety × SARC_no			−.01	−0.68 (0.64)			.01	0.02 (0.03)
Safety × SARC_don't know			−.02	−0.48 (0.34)			−.02	−0.03 (0.02)
Safety × VA_no			−.03**	−2.23 (0.77)			−.04***	−0.16 (0.04)
Safety × VA_don't know			−.03***	−1.18 (0.36)			−.02	−0.03 (0.02)

Note. Gender coded women = 1, men = 0. PTSD = posttraumatic stress disorder; MSA = military sexual assault: coded MSA in the past year = 1, no MSA in the past year = 0; SARC = sexual assault response coordinator; SARC_no coded no = 1, yes = 0; SARC_don't know coded don't know = 1, yes = 0; VA = Victim Advocate; VA_no coded no = 1, yes = 0; VA_don't know coded don't know = 1, yes = 0.
**$p \leq .01$. ***$p \leq .001$.

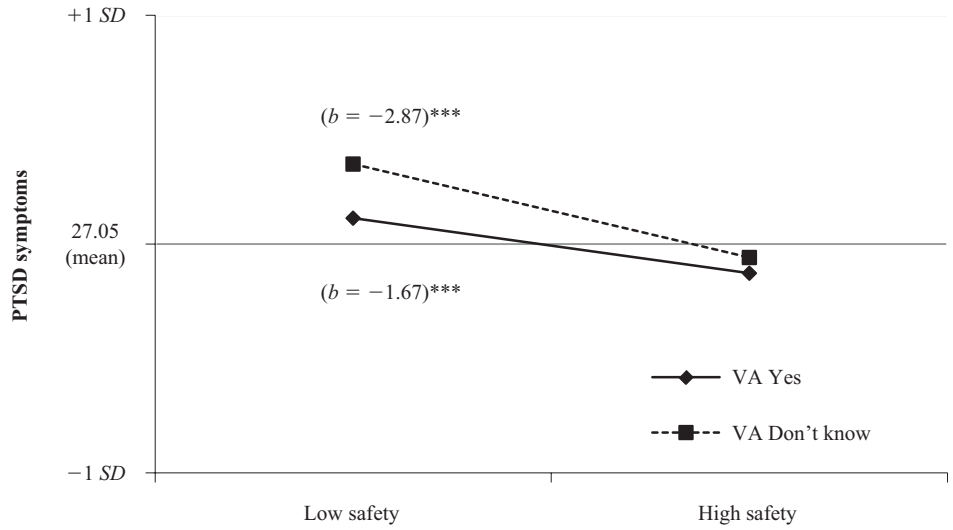

Figure 1. Two-way interaction between knowledge of Victim Advocate (don't know if there is a VA vs. yes there is a VA) and perceptions of safety predicting PTSD symptoms. b = unstandardized regression coefficient (simple slope). Low = 1 *SD* below the mean and High = 1 *SD* above the mean. PTSD = posttraumatic stress disorder; VA = Victim Advocate. *** = $p < .01$.

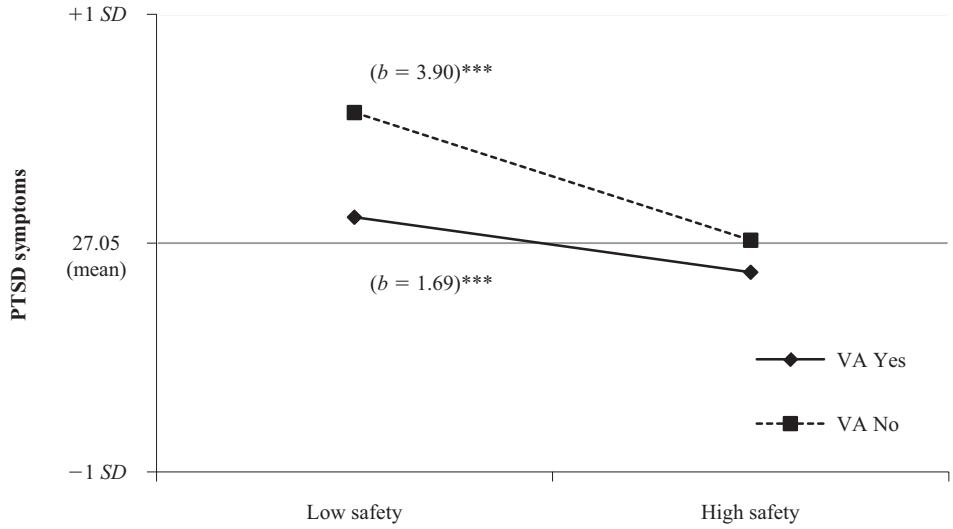

Figure 2. Two-way interaction between knowledge of Victim Advocate (know there is no VA vs. yes there is a VA) and perceptions of safety predicting PTSD symptoms. b = unstandardized regression coefficient (simple slope). Low = 1 *SD* below the mean and High = 1 *SD* above the mean. PTSD = posttraumatic stress disorder; VA = Victim Advocate. *** = $p < .01$.

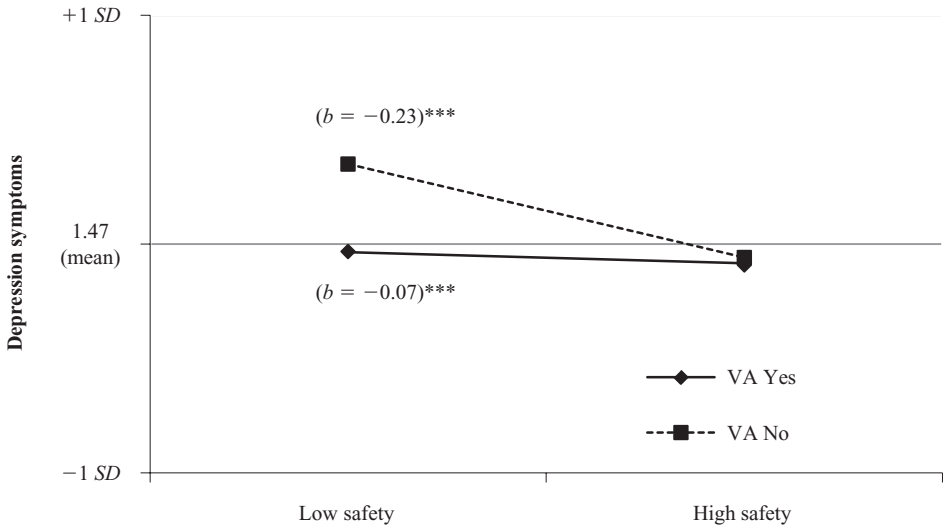

Figure 3. Two-way interaction between knowledge of Victim Advocate (know there is no VA vs. yes there is a VA) and perceptions of safety predicting depression symptoms. b = unstandardized regression coefficient (simple slope). Low = 1 *SD* below the mean and High = 1 *SD* above the mean. VA = Victim Advocate. *** = $p < .01$.

As expected, we found that both those who experienced and feared MSA reported worse mental health. Moreover, our results suggest that lacking knowledge of MSA resources may not only serve as a barrier to obtaining care but also exacerbate negative mental health outcomes for military personnel. Specifically, *not knowing* if there was a SARC or Victim Advocate on their installation/ship was associated with greater symptoms of PTSD and depression. Service members who knew there was *no* Victim Advocate reported greater PTSD and depression as well. It was interesting that knowing there was no SARC was not associated with either outcome. Perhaps this could be due, in part, to the fact that the DoD has increased reporting options for MSA: Service members can now make an unrestricted or restricted report of MSA to various military officials (e.g., supervisor, chaplain, lawyer, SARC). Greater availability of reporting options may help alleviate some mental health problems. In addition, this finding may highlight the importance of Victim Advocates for Service members' mental health. Unlike SARCs, who provide several services, Victim Advocates' primary job is to support MSA survivors (MyDuty.Mil, n.d.). Our results suggest that knowledge barriers around this crucial support—not knowing if there is a Victim Advocate or knowing that this support is not available—may increase distress. Lacking knowledge of resources impedes access to care following an assault (Burns et al., 2014; Turchik et al., 2013), and our findings elucidate potential consequences of experiencing this barrier.

Contrary to our expectations, the interactions between MSA and knowledge barriers were not significant. But our results suggest that perceived safety played an important role in the relationship between Service members' experience of knowledge barriers and mental health outcomes. For example, Service members who felt unsafe from sexual assault, and were unsure about the availability of Victim Advocates, reported more psychological distress. These results demonstrate a complex effect of perceived safety

and barriers on mental health. Taken together, our findings suggest that access to and knowledge of MSA resources are important for all Service members—regardless of MSA history—and particularly for those who feel unsafe from sexual assault. These results mirror a recent study, which found that perceiving logistical and stigma-related barriers to seeking mental health counseling (e.g., long wait times, shame) predicted increased psychological distress among both MSA survivors and nonvictims who felt unsafe from sexual assault (Holland et al., 2015). Our results suggest that (missing) knowledge of MSA is another key barrier to consider among MSA survivors and nonvictims.

Policy/Practice Implications

Despite the availability of SARCs and Victim Advocates, many Service members are not receiving adequate care following MSA (U.S. GAO, 2013). This study highlights how one specific barrier—lacking knowledge of SARCs and Victim Advocates—affects mental health among MSA survivors and nonvictims. According to DoD policy, at least one SARC and Victim Advocate should be stationed at each base/installation/ship, whether in the United States or at a foreign deployment site (DoD, 2012, 2013). Furthermore, the DoD instructs military officials to oversee awareness programs regarding sexual assault response efforts (DoD, 2013). The DoD's implementation of SARC and Victim Advocate staff positions may provide insufficient protection if not paired with widespread, effective education about these resources. Most Service members in our sample were aware of the SARC (79%) and/or Victim Advocate (83%) on their installation/ship—suggesting that some education efforts have been successful. At the same time, a substantial group of the participants lacked knowledge about these resources and our results documented mental health consequences that might arise when Service members lack adequate knowledge about MSA-related resources. We therefore recommend that the DoD and SAPRO monitor awareness and knowledge of sexual assault resources and deliver more consistent and comprehensive education.

Although the study of MSA survivors is essential, military rape culture does not just affect those who experience the trauma personally. Characteristics of rape culture and military life overlap (e.g., acceptance of violence, valorization of dominance), contributing to an organizational culture that fosters sexual violence (Burns et al., 2014; Harned et al., 2002; Hunter, 2007; Murdoch, Polusny, Hodges, & Cowper, 2006; Sadler, Booth, Cook, & Doebbeling, 2003). Such an institutional climate is particularly harmful to female Service members (Firestone et al., 2012), who are more likely than men to suffer MSA (Bostock & Daley, 2007). Indeed, we found that Service women were not only more likely to suffer MSA but also more likely to fear MSA than Service men. This fear is not without consequence. For instance, the *Vermont Guardian* (2006) reported that several female Service members, stationed in Iraq, died from dehydration because they were not drinking water beyond the afternoon to avoid using the latrine after dark—where, reportedly, sexual assault was common.

There are strong historical linkages among masculinity, military culture, war, and rape (e.g., Brownmiller, 1975; Zurbriggen, 2010). Furthermore, these linkages are gendered; boys and men are often socialized to fulfill traditional male/masculine gender roles, which include the acceptance and perpetration of violence (e.g., Hong, 2000; Zurbriggen, 2010). Masculinity scholars (e.g., Hong, 2000; Katz, 1995; Kilmartin & Berkowitz, 2005) emphasize the importance of directly addressing and challenging the social construction of masculinity and manhood in sexual assault prevention programs. For example, the

Mentors in Violence Prevention (MVP) program was developed for male college athletes and focuses on reconstructing the norms that equate men's strength with dominance over women (Katz, 1995). Programs such as MVP—that have been successful in helping men in hypermasculine groups "unlearn" the masculine norms that facilitate sexual violence—may be useful in the military context as well. It will be important for DoD and SAPRO to take steps to alleviate the prevalence and fear of sexual violence.

Limitations and Future Directions

As with all research, there are limitations to this study. Our secondary analysis of cross-sectional, correlational data did not allow us to establish causal relationships between knowledge barriers and psychological well-being. For example, it is possible that Service members who are experiencing greater psychological distress may also be less likely to actively seek out information about the availability of SARCs and Victim Advocates. However, we argue that all military personnel should have this information and not have to actively seek it out on their own. In addition, it would have been beneficial to have a broader measure of help-seeking barriers. For instance, actual (inaccurate) knowledge of sexual assault resources may pose a more challenging barrier than simply being aware that there is a SARC or Victim Advocate available. In addition, it would be important to know whether MSA survivors had spoken to a SARC or Victim Advocate. Participants' usage and perceptions of sexual assault resources were collected in the 2010 WGRA, but this information was not released as part of the publicly available data because of ~~the DoD's~~ concerns about confidentiality (DMDC, 2010).

Another possible limitation was the assessment of MSA. The measure was based on a single item and did not ask about behaviorally specific tactics that constituted "lack of consent" (e.g., physical force, verbal threats, incapacitation), which are important for the assessment of sexual assault (Koss et al., 2007). Therefore, this measure may have underestimated the rates of sexual assault. Moreover, the measure only assessed experiences of MSA over 12 months. Given the high rates of sexual assault over the course of Service members' military careers, it is likely that some of the "nonvictims" in our sample had experienced MSA at some point in the past. Thus, it would have been helpful to know if those nonvictims who felt unsafe from sexual assault had experienced sexual assault during their time in service. Similarly, it could be important to assess experiences of lifetime sexual abuse and other traumas. In addition, it would be interesting to know whether those who felt unsafe had experienced sexual assault prior to military service and/or personally knew someone who was sexually assaulted in their unit. Finally, it would be important to assess how experiencing barriers and feeling unsafe relate to other outcomes in this context (e.g., anxiety, constrained behavior). These questions were not assessed in the 2010 WGRA survey (DMDC, 2010) but are possible avenues for future research.

Future research is also needed to better understand how MSA resources themselves might serve as a barrier to help-seeking and exacerbate survivors' psychological distress. For instance, a recent study by Vedder (2015), examining reporting and help-seeking among female sexual assault survivors in the Navy, found that "first responders" may not have adequate knowledge (e.g., their information about reporting was vague or inaccurate) or may behave in problematic ways (e.g., one Victim Advocate released a woman's confidential report to her entire command). In addition, a survivor in Vedder's study stated that she was hesitant to seek help from a man. Given that the military is male-dominated, it is likely that most SARCs and Victim Advocates are men. Among civilian samples, men are more likely to endorse problematic myths about sexual assault (e.g., a women wearing a

short skirt invites sexual assault; Edwards, Turchik, Dardis, Reynolds, & Gidycz, 2011). Future research might explore survivors' willingness to disclose victimization to SARCs and Victim Advocates depending on their gender, attitudes, and behaviors and how these factors may impact survivor's mental health.

It would be beneficial for future work to examine relational help-seeking barriers in the military as well. Previous research finds that survivors of sexual assault are likely to disclose their trauma to an informal source of support (e.g., friend or peer; Ahrens, Campbell, Ternier-Thames, Wasco, & Sefl, 2007; Orchowski & Gidycz, 2012). However, some of these individuals respond by discouraging the survivor from seeking further assistance, and these negative reactions are associated with increased psychological distress (Campbell, Ahrens, Sefl, Wasco, & Barnes, 2001; Ullman, 1996; Ullman & Peter-Hagene, 2014). Thus, it is crucial that *all* Service members are aware of the existence and importance of (high-quality) support following sexual assault. An interesting next step might employ a social network analysis to examine the flow (and impact) of information about sexual assault among Service members.

CONCLUSION

Our study demonstrated potential mental health repercussions of knowledge barriers for MSA resources. First, experiencing or fearing sexual assault and lacking knowledge of SARCs and Victim Advocates were associated with increased psychological distress. Moreover, Service members who felt unsafe from sexual assault—regardless of past-year MSA—reported greater symptoms of depression and PTSD when they were unsure about the availability of Victim Advocates on their installation/base. Service women may be especially affected by these problems because they were more likely to face and fear MSA compared to men. It is essential for the DoD to not only provide sexual assault resources but also adopt practices and policies that increase Service members' awareness of them. Our results suggest that these practices may be beneficial for the protection of mental health among both assault victims and nonvictims.

NOTE

1. History of sexual assault prior to the past year was not assessed in the WRGA 2010.

REFERENCES

Ahrens, C. E., Campbell, R., Ternier-Thames, K. N., Wasco, S. M., & Sefl, T. (2007). Deciding whom to tell: Expectations and outcomes of rape survivors' first disclosures. *Psychology of Women Quarterly*, *31*(1), 38–49. http://dx.doi.org/10.1111/j.1471-6402.2007.00329.x

Bachman, R., & Taylor, B. H. (1994). The measurement of family violence and rape by the redesigned National Crime Victimization Survey. *Justice Quarterly*, *11*(3), 499–512. http://dx.doi.org/10.1080/07418829400092371

Booth, B. M., & McLaughlin, Y. S. (2000). Barriers to and need for alcohol services for women in rural populations. *Alcoholism: Clinical & Experimental Research*, *24*(8), 1267–1275. http://dx.doi.org/10.1111/j.1530-0277.2000.tb02093.x

Borja, S. E., Callahan, J. L., & Long, P. J. (2006). Positive and negative adjustment and social support of sexual assault survivors. *Journal of Traumatic Stress*, *19*(6), 905–914. http://dx.doi.org/10.1002/jts.20169

Bostock, D. J., & Daley, J. G. (2007). Lifetime and current sexual assault and harassment victimization rates of active-duty United States Air Force women. *Violence Against Women*, *13*(9), 927–944. http://dx.doi.org/10.1177/1077801207305232

Brownmiller, S. (1975). *Against our will: Men, women and rape*. New York, NY: Martin Secker & Warburg.

Brubaker, S. J. (2009). Sexual assault prevalence, reporting and policies: Comparing college and university campuses and military service academies. *Security Journal*, *22*(1), 56–72. http://dx.doi.org/10.1057/sj.2008.10

Buchwald, E., Fletcher, P. R., & Roth, M. (Eds.). (2005). *Transforming a rape culture*. Minneapolis, MN: Milkweed.

Burns, B., Grindlay, K., Holt, K., Manski, R., & Grossman, D. (2014). Military sexual trauma among US servicewomen during deployment: A qualitative study. *American Journal of Public Health*, *104*(2), 345–349.

Campbell, R., Ahrens, C. E., Sefl, T., Wasco, S. M., & Barnes, H. E. (2001). Social reactions to rape victims: Healing and hurtful effects on psychological and physical health outcomes. *Violence and Victims*, *16*(3), 287–302.

Campbell, R., & Raja, S. (2005). The sexual assault and secondary victimization of female veterans: Help-seeking experiences with military and civilian social systems. *Psychology of Women Quarterly*, *29*(1), 97–106. http://dx.doi.org/10.1111/j.1471-6402.2005.00171.x

Chang, B., Skinner, K. M., & Boehmer, U. (2001). Religion and mental health among women veterans with sexual assault experience. *International Journal of Psychiatry in Medicine*, *31*(1), 77–95. http://dx.doi.org/10.2190/0NQA-YAJ9-W0AM-YB3P

Chang, B., Skinner, K. M., Zhou, C., & Kazis, L. E. (2003). The relationship between sexual assault, religiosity, and mental health among male veterans. *International Journal of Psychiatry in Medicine*, *33*(3), 223–239. http://dx.doi/org/10.2190/NM3D-EWYR-4B59-DFM8

Connell, N., & Wilson, C. (Eds.). (1974). *Rape: The first sourcebook for women*. New York, NY: Plume Books.

Day, K. (1994). Conceptualizing women's fear of sexual assault on campus: A review of causes and recommendations for change. *Environment and Behavior*, *26*(6), 742–765. http://dx.doi.org/10.1177/0013916594266002

Defense Manpower Data Center. (2010). *2010 Workplace and gender relations survey of active duty members: Administration, datasets, and codebook* (Report No. 2010-027). Arlington, VA: Author.

Department of Defense. (2010). *Department of Defense annual report on sexual assault in the military*. Retrieved from http://servicewomen.org/SAPRO%20Reports/DoD_Fiscal_Year_2010_Annual_Report_on_Sexual_Assault_in_the_Military.pdf

Department of Defense. (2012). *Sexual assault prevention and response (SAPR) program* (Department of Defense Directive No. 6495.01). Retrieved from http://www.dtic.mil/whs/directives/corres/pdf/649501p.pdf

Department of Defense. (2013). *Sexual assault prevention and response (SAPR) program procedures* (Department of Defense Directive No. 6495.02). Retrieved from http://www.sapr.mil/public/docs/directives/649502p.pdf

Department of Defense Sexual Assault Prevention and Response Office. (n.d.). *Mission and history*. Retrieved from http://www.sapr.mil/

Edwards, K. M., Turchik, J. A., Dardis, C. M., Reynolds, N., & Gidycz, C. A. (2011). Rape myths: History, individual and institutional-level presence, and implications for change. *Sex Roles*, *65*(11–12), 761–773. http://dx.doi.org/10.1007/s11199-011-9943-2

Firestone, J. M., Miller, J. M., & Harris, R. (2012). Implications for criminal justice from the 2002 and 2006 Department of Defense gender relations and sexual harassment surveys. *American Journal of Criminal Justice*, *37*(3), 432–451. http://dx.doi.org/10.1007/s12103-010-9085-z

AQ5

Fisher, B. S., & Sloan, J. J. (2003). Unraveling the fear of victimization among college women: Is the "shadow of sexual assault hypothesis" supported? *Justice Quarterly*, *20*(3), 633–659. http://dx.doi.org/10.1080/07418820300095641

Gahm, G. A., Lucenko, B. A., Retzlaff, P., & Fukuda, S. (2007). Relative impact of adverse events and screened symptoms of posttraumatic stress disorder and depression among active duty soldiers seeking mental health care. *Journal of Clinical Psychology*, *63*(3), 199–211. http://dx.doi.org/10.1002/jclp.20330

Hamilton, A. B., Poza, I., & Washington, D. L. (2011). "Homelessness and trauma go hand-in-hand": Pathways to homelessness among woman veterans. *Women's Health Issues*, *21*(4, Suppl.), S203–S209. http://dx.doi.org/10.1016/j.whi.2011.04.005

Harned, M. S., Ormerod, A. J., Palmieri, P. A., Collinsworth, L. L., & Reed, M. (2002). Sexual assault and other types of sexual harassment by workplace personnel: A comparison of antecedents and consequences. *Journal of Occupational Health Psychology*, *7*(2), 174–188. http://dx.doi.org/10.1037/1076-8998.7.2.174

Haskell, S. G., Gordon, K. S., Mattocks, K., Duggal, M., Erdos, J., Justice, A., & Brandt, C. A. (2010). Gender differences in rates of depression, PTSD, pain, obesity, and military sexual trauma among Connecticut war veterans of Iraq and Afghanistan. *Journal of Women's Health*, *19*(2), 267–271. http://dx.doi.org/10.1089/jwh.2008.1262

AQ5 Heron, E. A., Bryan, C. J., Dougherty, C. A., & Chapman, W. G. (2013). Military mental health: The role of daily hassles while deployed. *Journal of Nervous and Mental Disease*, *201*(12), 1035–1039. http://dx.doi.org/10.1097/NMD.0000000000000058

Hilinski, C. M. (2009). Fear of crime among college students: A test of the shadow of sexual assault hypothesis. *American Journal of Criminal Justice*, *34*(1–2), 84–102. http://dx.doi.org/10.1007/s12103-008-9047-x

Holland, K. J., Rabelo, V. C., & Cortina, L. M. (2014). Sexual assault training in the military: Evaluating efforts to end the "Invisible War." *American Journal of Community Psychology*, *54*(3–4), 289–303. http://dx.doi.org/10.1007/s10464-014-9672-0

Holland, K. J., Rabelo, V. C., & Cortina, L. M. (2015). Collateral damage: Military sexual trauma and help-seeking barriers. *Psychology of Violence*, *6*, 253–261. http://dx.doi.org/10.1037/a0039467

Hong, L. (2000). Toward a transformed approach to prevention: Breaking the link between masculinity and violence. *Journal of American College Health*, *48*(6), 269–279. http://dx.doi.org/10.1080/07448480009596268

Hunter, M. (2007). *Honor betrayed: Sexual abuse in America's military*. Fort Lee, NJ: Barricade Books.

Kang, H., Dalager, M., Mahan, C., & Ishii, E. (2005). The role of sexual assault on the risk of PTSD among Gulf War veterans. *Annals of Epidemiology*, *15*(3), 191–195. http://dx.doi.org/10.1016/j.annepidem.2004.05.009

Katz, J. (1995). Reconstructing masculinity in the locker room: The Mentors in Violence Prevention Project. *Harvard Educational Review*, *65*(2), 163–174. http://dx.doi.org/10.17763/haer.65.2.55533188520136u1

Kilmartin, C., & Berkowitz, A. D. (2005). *Sexual assault in context: Teaching college men about gender*. Mahwah, NJ: Lawrence Erlbaum Associates.

Kilpatrick, D. G., Edmunds, C. N., & Seymour, A. K. (1992). *Rape in America: A report to the nation*. Arlington, VA: National Victim Center.

Kimerling, R., Gima, K., Smith, M. W., Street, A., & Frayne, S. (2007). The Veterans Health Administration and military sexual trauma. *American Journal of Public Health*, *97*(12), 2160–2166. http://dx.doi.org/10.2105/AJPH.2006.092999

Kimerling, R., Street, A. E., Pavao, J., Smith, M. W., Cronkite, R. C., Holmes, T. H., & Frayne, S. M. (2010). Military-related sexual trauma among Veterans Health Administration patients returning from Afghanistan and Iraq. *American Journal of Public Health*, *100*(8), 1409–1412. http://dx.doi.org/10.2105/AJPH.2009.171793

Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., . . . White, J. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly*, *31*, 357–370. http://dx.doi.org/10.1111/j.1471-6402.2007.00385

Kroenke, K., Strine, T. W., Spitzer, R. L., Williams, J. B. W., Berry, J. T., & Mokdad, A. H. (2009). The PHQ-8 as a measure of current depression in the general population. *Journal of Affective Disorders*, *114*(1–3), 163–173. http://dx.doi.org/10.1016/j.jad.2008.06.026

Lane, J., Gover, A. R., & Dahod, S. (2009). Fear of violent crime among men and women on campus: The impact of perceived risk and fear of sexual assault. *Violence and Victims*, *24*(2), 172–192. http://dx.doi.org/10.1891/0886-6708.24.2.172

Liang, B., Goodman, L., Tummala-Narra, P., & Weintraub, S. (2005). A theoretical framework for understanding help-seeking processes among survivors of intimate partner violence. *American Journal of Community Psychology*, *36*(1–2), 71–84. http://dx.doi.org/10.1007/s10464-005-6233-6

Lipari, R. N., Cook, P. J., Rock, L. M., & Matos, K. (2008). *2006 Gender relations survey of active duty members*. Arlington, VA: Department of Defense Manpower Data Center.

Logan, T. K., Evans, L., Stevenson, E., & Jordan, C. E. (2005). Barriers to services for rural and urban survivors of rape. *Journal of Interpersonal Violence*, *20*, 591–616. http://dx.doi.org/10.1177/0886260504272899

Logan, T. K., Stevenson, E., Evans, E., & Leukefeld, C. (2004). Rural and urban women's perceptions of barriers to health, mental health, and criminal justice services: Implications for victim services. *Violence and Victims*, *19*(1), 37–62. http://dx.doi.org/10.1891/vivi.19.1.37.33234

Maguen, S., Luxton, D. D., Skopp, N. A., & Madden, E. (2012). Gender differences in traumatic experiences and mental health in active duty soldiers redeployed from Iraq and Afghanistan. *Journal of Psychiatric Research*, *46*, 311–316. http://dx.doi.org/10.1016/j.jpsychires.2011.11.007

Martin, L., Rosen, L. N., Durand, D. B., Knudson, K. H., & Stretch, R. H. (2000). Psychological and physical health effects of sexual assaults and nonsexual traumas among male and female United States Army soldiers. *Behavioral Medicine*, *26*, 23–33. http://dx.doi.org/10.1080/08964280009595750

Miller, A. K., Canales, E. J., Amacker, A. M., Backstrom, T. L., & Gidycz, C. A. (2011). Stigma-threat motivated nondisclosure of sexual assault and sexual revicitmization: A prospective analysis. *Psychology of Women Quarterly*, *35*(1), 119–128. http://dx.doi.org/10.1177/0361684310384104

Murdoch, M., Polusny, M. A., Hodges, J., & Cowper, D. (2006). The association between in-service sexual harassment and post-traumatic stress disorder among Department of Veterans Affairs disability applicants. *Military Medicine*, *171*(2), 166–173.

MyDuty.Mil. (n.d.). *Responding to reports of sexual assault*. Retrieved from http://myduty.mil/public/docs/responding_to_reports_of_sexual_assault.pdf

O'Brien, B. S., & Sher, L. (2013). Military sexual trauma as a determinant in the development of mental and physical illness in male and female veterans. *International Journal of Adolescent Medicine and Health*, *25*(3), 269–274. htrtp://dx.doi.org/10.1515/ijamh-2013-0061

Orchowski, L. M., & Gidycz, C. A. (2012). To whom do college women confide following sexual assault? A prospective study of predictors of sexual assault disclosure and social reactions. *Violence Against Women*, *18*(3), 264–288. http://dx.doi.org/10.1177/1077801212442917

Penchansky, R., & Thomas, J. W. (1981). The concept of access: Definition and relationship to consumer satisfaction. *Medical Care*, *19*(2), 127–140. http://dx.doi.org/10.1097/00005650-198102000-00001

Preacher, Curran, & Bauer. (2015).

Rock, L. M., Lipari, R. N., Cook, P. J., & Hale, A. D. (2011). *2010 Workplace and gender relations survey of active duty members: Overview report on sexual harassment* (DMDC Report No. 2010). Arlington, VA: Defense Manpower Data Center.

Sadler, A. G., Booth, B. M., Cook, B. L., & Doebbeling, B. N. (2003). Factors associated with women's risk of rape in the military environment. *American Journal of Industrial Medicine*, *43*(3), 262–273. http://dx.doi.org/10.1002/ajim.10202

AQ5

AQ4

Sexual Assault Prevention and Response Office. (n.d.). *About SAPRO*. Retrieved from http://www.sapr.mil/index.php/about

Street, A. E., Stafford, J., Mahan, C. M., & Hendricks, A. (2008). Sexual harassment and assault experienced by reservists during military service: Prevalence and health correlates. *Journal of Rehabilitation Research & Development*, *45*(3), 409–420. http://dx.doi.org/10.1682/JRRD.2007.06.0088

Surís, A., & Lind, L. (2008). Military sexual trauma: A review of prevalence and associated health consequences in veterans. *Trauma, Violence & Abuse*, *9*(4), 250–269. http://dx.doi.org/10.1177/1524838008324419

Tolin, D. F., & Foa, E. B. (2006). Sex differences in trauma and posttraumatic stress disorder: A quantitative review of 25 years of research. *Psychological Bulletin*, *132*(6), 959–992. http://dx.doi.org/10.1037/0033-2909.132.6.959

AQ5 Turchik, J. A., & Edwards, K. M. (2012). Myths about male rape: A literature review. *Psychology of Men & Masculinity*, *13*(2), 211–226. http://dx.doi.org/10.1037/a0023207

Turchik, J. A., McLean, C., Rafie, S., Hoyt, T., Rosen, C. S., & Kimerling, R. (2013). Perceived barriers to care and provider gender preferences among veteran men who have experienced military sexual trauma: A qualitative analysis. *Psychological Services*, *10*(2), 213–222. http://dx.doi.org/10.1037/a0029959

Turchik, J. A., Pavao, J., Hyun, J., Mark, H., & Kimerling, R. (2012). Utilization and intensity of outpatient care related to military sexual trauma for veterans from Afghanistan and Iraq. *Journal of Behavioral Health Services & Research*, *39*(3), 220–233. http://dx.doi.org/10.1007/s11414-012-9272-4

Ullman, S. E. (1996). Social reactions, coping strategies, and self-blame attributions in adjustment to sexual assault. *Psychology of Women Quarterly*, *20*(4), 505–526. http://dx.doi.org/10.1111/j.1471-6402.1996.tb00319.x

Ullman, S. E., & Peter-Hagene, L. (2014). Social reactions to sexual assault disclosure, coping, perceived control, and PTSD symptoms in sexual assault victims. *Journal of Community Psychology*, *42*(4), 495–508. http:/dx.doi.org/10.1002/jcop.21624

U.S. Government Accountability Office. (2013). *DOD has taken steps to meet the health need of deployed servicewomen, but actions are needed to enhance care for sexual assault victims*. Retrieved from http://www.gao.gov/assets/660/651624.pdf

Vedder, R. A. (2015). *U.S. navy women veterans' experience of filing a sexual assault report* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses database. (UMI No. 3667424)

Vermont Guardian. (2006, February 8). *Rape fears lead women soldiers to suicide, death*. Retrieved from http://www.vermontguardian.com/dailies/022006/020806.shtml

Walsh, W. A., Banyard, V. L., Moynihan, M. M., Ward, S., & Cohn, E. S. (2010). Disclosure and service use on a college campus after an unwanted sexual experience. *Journal of Trauma & Dissociation*, *11*(2), 134–151. http://dx.doi.org/10.1080/15299730903502912

Weathers, F. W., Litz, B. T., Huska, J. A., & Keane, T. M. (1994). *The PTSD Checklist—Civilian Version (PCL-C)*. Boston, MA: National Center for PTSD.

Weitz, R. (2015). Vulnerable warriors: Military women, military culture, and fear of rape. *Gender Issues*, *32*, 164–183. http://dx.doi.org/10.1007/s12147-015-9137-2

Wilcox, P., Jordan, C. E., & Pritchard, A. J. (2007). A multidimensional examination of campus safety: Victimization, perceptions of danger, worry about crime, and precautionary behavior among college women in the post-Clery era. *Crime & Delinquency*, *53*(2), 219–254. http://dx.doi.org/10.1177/0097700405283664

Zurbriggen, E. L. (2010). Rape, war, and the socialization of masculinity: Why our refusal to give up war ensures that rape cannot be eradicated. *Psychology of Women Quarterly*, *34*(4), 538–549. http://dx.doi.org/10.1111/j.1471-6402.2010.01603.x

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AQ1: Please supply authors' degree(s), if any.

AQ2: Please confirm if this instance of emotion being set within parentheses is intended; otherwise, please confirm if this should be deleted instead.

AQ3: This keyword is not mentioned in text; please confirm if this should be changed to "help-seeking behaviors" instead, as per text discussion.

AQ4: Preacher, Curran, & Bauer, 2015, citation is not included in the reference list; please supply complete reference information.

AQ5: The following references are not cited in text; please cite where appropriate.

- Borja, Callahan, & Long. (2006).
- Heron, Bryan, Dougherty, Chapman. (2013).
- Miller, Canales, Amacker, Backstrom, & Gidycz. (2011).
- Turchik & Edwards. (2012).

Production Editor's Queries:

PE1: Global. Please confirm this word (i.e., missing) being enclosed within parentheses is acceptable.