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Sexual Revictimization among Iraq and Afghanistan War era Veterans

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Abstract

Research in both civilian and military populations has demonstrated that females who experience childhood sexual abuse (CSA) are more likely to experience sexual assault in adulthood than females who did not experience CSA. Among veteran samples, however, little research has examined previous sexual assault as a risk factor of military sexual assault and post-military sexual assault, and very little research has examined revictimization in male veterans. The purpose of this study was to examine risk of sexual revictimization in a sample of veterans who served during the wars in Iraq and Afghanistan. A sample of 3,106 veterans (80.4% male) completed a measure of lifetime exposure to traumatic events, including sexual abuse and sexual assault. Logistic regression analyses were used to examine previous sexual abuse/assault as predictors of later sexual assault; analyses were conducted separately for males and females. In general, previous sexual abuse/assault was associated with later sexual assault in both male and female veterans. These findings have important assessment and treatment implications for clinicians working with veterans.

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Contributors

Amie R. Schry conceptualized the research question for this study, ran the statistical analyses, and wrote the majority of the initial draft of the manuscript.

Jean C. Beckham consulted on the conceptualization of the research question and helped in the writing of the manuscript.

The VA Mid-Atlantic Mental Illness Research, Education and Clinical Center (MIRECC) Registry Workgroup was responsible for the design and conduct of the study in which the data presented in this manuscript were collected.

Patrick S. Calhoun consulted on the conceptualization of the research question and the statistical analyses and helped in the writing of the manuscript.

Conflict of Interest

The authors have no conflicts of interest to declare. The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs or the United States government. Since the authors are employees of the United States government and contributed to this work as part of their official duties, the work is not subject to U.S. copyright.

Keywords

revictimization; sexual assault; veterans; OEF/OIF; Iraq; Afghanistan; military sexual trauma

1. Introduction

Sexual revictimization was originally defined as experiencing both sexual abuse in childhood (child sexual abuse; CSA) and sexual assault in adulthood (Messman-Moore and Long, 2003). More recent studies have defined revictimization more broadly as sexual assault among individuals who have previously experienced sexual abuse or sexual assault in their lifetime (Gidycz et al., 2007; Katz et al., 2010; Littleton and Ullman, 2013; Testa et al., 2010).

There is strong support in civilian literature that previous sexual victimization increases risk of later victimization. Approximately one- to two-thirds of females who experience CSA later experience revictimization (Arata, 2002; Classen et al., 2005). Reviews suggest female survivors of CSA are two to 11 times more likely to experience a sexual assault in adulthood than women who did not experience CSA (Arata, 2002; Classen et al., 2005; Messman-Moore and Long, 2003). More recent research is consistent with previous findings. In a prospective study of undergraduate females, women with a history of sexual victimization prior to college were significantly more likely to experience sexual assault during their freshman year (45%) than women who did not endorse a history of sexual victimization prior to college (19%; Katz et al., 2010). Another prospective study of women who had experienced sexual victimization after the age of 14 found that 45% of participants experienced an additional sexual assault during a one year observation period (Ullman et al., 2009). While most studies of revictimization have focused on female samples, male survivors of CSA are also at increased risk of adult sexual assault, as college men who experienced CSA were 2.5 times more likely to report adult sexual assault than those who did not experience CSA (36.8% vs. 14.7%, respectively; Aosved et al., 2011).

While less work has examined sexual revictimization in military and veteran samples, the extant literature suggests that female veterans who have experienced adult sexual assault have high rates of other interpersonal traumas, including CSA, physical abuse, emotional abuse, intimate partner violence, and sexual harassment (Campbell et al., 2008; Kelly et al., 2011). Examining sexual revictimization among military and veteran samples may be particularly important because of the high prevalence of sexual assault observed in help-seeking veterans. One study has documented that 39% of female veterans seen for medical or mental health at a VA hospital reported experiencing sexual assault at least twice in their lives (Suris et al., 2007).

Though few studies have examined revictimization across the lifespan in veteran samples, the few existing studies that have report findings consistent with those in civilian samples. A study of both male and female veterans found that 6% of males and 38% of females reported at least one incident of sexual abuse or assault in their lifetime; 52% of males and 65% of females who reported lifetime sexual abuse or assault experienced revictimization in either childhood or adulthood (Zinzow et al., 2008). In a sample of female naval recruits, more

than half (55.4%) of survivors of CSA reported experiencing rape in adulthood, compared to one-fifth (20.2%) of women who did not experience CSA (Merrill et al., 1999). To date, few studies have examined revictimization across the lifespan among veterans. In another sample of female veterans, CSA did not predict later sexual assault (i.e., premilitary sexual assault, military sexual assault (MSA), and postmilitary sexual assault (Himmelfarb et al., 2006). However, women who experienced premilitary sexual assault were 3.52 times more likely to experience postmilitary sexual assault than those who did not experience premilitary sexual assault, and MSA increased the odds of postmilitary sexual assault by 1.99 times (Himmelfarb et al., 2006).

1.1. Current Study

The present study examined sexual revictimization across the lifespan in a sample of veterans, reservists, and military personnel who served during the Iraq and Afghanistan wars (i.e., Operation Iraqi Freedom [OIF], Operation Enduring Freedom [OEF], and Operation New Dawn [OND]). We sought to build upon previous research on revictimization in military personnel by focusing on sexual trauma, by examining sexual trauma from different times in the individuals' lives (i.e., childhood, adolescence, premilitary adulthood, military adulthood, and postmilitary adulthood), and by including both male and female participants. We hypothesized that sexual victimization at earlier time points would predict sexual victimization at later time points.

2. Method

2.1. Participants and Procedure

The Study of Post-Deployment Mental Health is an ongoing multi-site study conducted by the VA Mid-Atlantic Mental Illness Research, Education, and Clinical Center (VISN 6 MIRECC). The data collection sites include four VA medical centers located in North Carolina and Virginia. Recruitment methods included flyers, VA clinic referrals, and invitational letters. All participants served in the military after September 11, 2001. A total of 3,119 OEF/OIF/OND U.S. military veterans, active duty personnel, and reserve forces members had completed the study when these analyses were conducted. Twelve participants were excluded due to missing data on variables of interest (i.e., missing response to one or more items assessing child sexual abuse, adolescent sexual assault, and adult sexual assault) and one participant was excluded due to missing gender, resulting in a final sample of 3,106 participants. Only participants who reported having been discharged from the military were included in the analysis examining post-military sexual assault ($n = 2,938$; 2,366 males and 572 females). Demographic information for the sample is presented in Table 1. All study procedures were approved by the institutional review board at each data collection site, and all participants provided informed consent prior to initiating participation in the study. Participants were administered a structured diagnostic interview and a battery of self-report questionnaires, including the questionnaires described below; most completed all measures in a single study visit (for additional information on study recruitment and methods, see Brancu et al., 2014; Crawford et al., 2013; Green et al., 2014).

2.2. Measures

2.2.1. Demographic information—All participants completed a demographic information questionnaire that included items about personal demographics (e.g., age, gender, race, marital status) and military history (e.g., branches of service, service dates, having a service-connected condition).

2.2.2. Traumatic Life Events Questionnaire (TLEQ; (Kubany et al., 2000))—The TLEQ is a 23-item self-report questionnaire that assesses experiences related to 22 types of events that may be traumatic (e.g., warzone exposure, natural disasters, sexual assault, physical abuse, motor vehicle accidents). Participants were asked to report the number of times they have experienced each event from never to more than five times. As in previous studies with veterans (Clancy et al., 2006; Dedert et al., 2009), for each item that participants endorsed as occurring at least once, they were also asked whether it occurred before, during, or after the military. Previous research has found that data from the TLEQ is reliable over time and demonstrates content validity (Kubany et al., 2000). Use of exhaustive lists, such as the TLEQ, to assess trauma history has been recommended based on findings that the TLEQ resulted in participants reporting nine times more traumatic events than the trauma probe on a structured clinical interview (Peirce et al., 2009).

For the present analyses, only responses from five items were examined. Participants' responses to these items were used to create several dichotomous variables. *Child sexual abuse* was defined as sexual contact with an individual at least five years older than the participant when the participant was younger than 13 and/or non-consensual sexual contact by an individual close to the participants' age when the participant was younger than 13. *Adolescent sexual assault* was defined as non-consensual sexual contact by another individual that occurred between the participants' 13th and 18th birthdays. Non-consensual sexual contact by another individual occurring after the participants' 18th birthday was considered *adult sexual assault*. In order to look at the risk of revictimization further, adult sexual assault was divided into three categories based on time of occurrence: *pre-military adult sexual assault*, *MSA*, and *post-military sexual assault*. Finally, the item assessing exposure to a warzone was used to control for the effects of combat on risk of post-military sexual assault.

2.3. Data Analyses

Data analyses were conducted in SPSS, Version 21. All analyses were conducted separately for males and females. In order to examine the effects of prior sexual trauma on risk of later sexual trauma across the lifespan, separate logistic regressions were run to examine likelihood of adolescent sexual assault, adult sexual assault, pre-military adult sexual assault, MSA, and post-military sexual assault. For each logistic regression, sexual abuse/assault at each previous time-point was included as a predictor (e.g., when pre-military sexual assault was the outcome, child sexual abuse and adolescent sexual assault were entered as predictors). Potentially relevant demographic and military covariates (e.g., race, age at enlistment) were entered into the models. Due to the small number of male participants who endorsed pre-military adult sexual assault and post-military sexual assault, the confidence interval for the odds ratio of the effect of pre-military sexual assault could not be computed.

because of an inability to compute the standard error of the estimate. For this reason, a single dichotomous variable was computed in which all forms of pre-military sexual abuse and sexual assault were included (i.e., child sexual abuse, adolescent sexual assault, and pre-military adult sexual assault); this variable was used only in the analyses examining post-military sexual assault.

3. Results

Results of the logistic regressions examining whether past sexual abuse/assault increased risk of later sexual assault in females and males are presented in Tables 2 and 3, respectively. Both female and male participants who reported experiencing child sexual abuse were more likely to report adolescent sexual assault than participants who did not report experiencing child sexual abuse. Both child sexual abuse and adolescent sexual assault were associated with increased odds of endorsing any adult sexual assault among both males and females. Female and male participants who reported experiencing adolescent sexual assault were more likely to endorse pre-military adult sexual assault; child sexual abuse did not predict pre-military sexual assault among females or males. Both female and male participants with a history of child sexual abuse were more likely to experience MSA; pre-military adult sexual assault did not predict MSA in females or males. Adolescent sexual assault increased the odds of MSA in males, but this effect was not significant in females. Among male participants, any sexual abuse or sexual assault prior to the military (i.e., child sexual abuse, adolescent sexual assault, or pre-military adult sexual assault) and MSA both increased the likelihood of post-military sexual assault. While the effects for females were in the same direction, neither effect was statistically significant.

4. Discussion

The purpose of this study was to examine sexual revictimization in both female and male OEF/OIF/OND veterans. Rates of sexual assault in this sample were high and generally consistent with previous studies in military and veteran samples. In the current study, 34.2% of females endorsed at least one incident of CSA, and previous studies have reported rates ranging from 27 to 49% (Himmelfarb et al., 2006; Merrill et al., 1999; Schultz et al., 2006; Suris et al., 2007; Zinzow et al., 2008). While few studies have collected data on CSA in male veterans, the rate of CSA among males in this sample (11.9%) was more than twice the rate that was found in a previous study (5%; Zinzow et al., 2008). While the rate of MSA among females in this sample (13.5%) is lower than estimates of military sexual trauma among national VA samples (e.g., 15.1% to 19.5%; Kimerling et al., 2007; Kimerling et al., 2010), it should be noted that those studies included sexual harassment in their definition of military sexual trauma, and sexual harassment was not included in the current study's definition of MSA. Two percent of males in the current study endorsed MSA, which is higher than rates of military sexual trauma reported in previous studies (e.g., 0.7 to 1.2%; Kimerling et al., 2007; Kimerling et al., 2010). We expected that survivors of a sexual assault at an earlier time in life would be more likely to experience sexual assault at a later time. In general, the results of the study are consistent with this hypothesis and previous studies (see (Arata, 2002) for a review).

Among female and male OEF/OIF/OND veterans, survivors of CSA were over seven times ($OR = 7.42$ for females and 8.34 for males) more likely to experience adolescent sexual assault than those who did not experience CSA. This finding is consistent with results of studies in civilian population that have found that CSA is related to increased risk of sexual assault in adulthood (e.g., Arata, 2002; Roodman and Clum, 2001). Additionally, this finding is consistent with a previous study of CSA and adolescent and adult sexual assault among female naval recruits, in which CSA was associated a 4.7 fold increase in the odds of experiencing sexual assault between age 14 and entry into the military (Merrill et al., 1999).

Both CSA and adolescent sexual assault were significantly associated with any adult sexual assault for both female and male OEF/OIF veterans. The effect size was larger for adolescent sexual assault. Furthermore, when the odds of endorsing pre-military adult sexual assault were examined, the effect of adolescent sexual assault was significant for both males and females. While previous research with college students has found that both CSA and adolescent sexual assault predicted sexual assault in adulthood, these studies also found that CSA had a stronger direct effect on adolescent sexual assault than adult sexual assault (e.g., Gidycz et al., 1996; Gidycz et al., 1995). The present findings are consistent with hypotheses that survivors of CSA may be at increased risk of adolescent sexual assault which in turn increases risk of adult sexual assault (Arata, 2002).

Likelihood of reporting MSA was predicted by CSA in both males and females ($ORs = 3.08$ and 2.25 , respectively) but not by pre-military sexual assault. It is possible that pre-military sexual assault was not associated with MSA because only 6.2% of females and 0.8% of males reported being survivors of pre-military adult sexual assault, which limited power to detect an effect. Given that the majority of military personnel joined the military either during high school or soon thereafter (i.e., 52% join before age 20; 88% join by age 24; Rostker et al., 2014), for many individuals, there is only a small window of time to experience sexual assault after their 18th birthday and prior to entering the military. The mean age at entry to the military in this sample was 20.76 years ($SD = 4.41$). On average, therefore, the assessment period for pre-military adult sexual assault was less than three years. Adolescent sexual assault was a significant predictor of MSA among males ($OR = 8.67$), but not among females.

Among males, any sexual abuse or assault prior to the military ($OR = 6.00$) and MSA ($OR = 5.31$) were both associated with increased odds of experiencing sexual assault after separating from the military. Among females, these effects were smaller in magnitude and were not statistically significant. Because females comprise less than one-fifth of the study sample, power to detect effects was lower in analyses for female participants; given the magnitude of the effect size, it is possible that low power resulted in a Type II error in this case and that both pre-military sexual trauma and MSA play a role in risk of post-military sexual assault among both males and females. Furthermore, power was limited for these analyses due to the small number of participants who endorsed post-military sexual assault. Although most participants were veterans (rather than active duty) at the time of the study, many had not been separated from active duty for very long ($M = 3.55$ years, $SD = 3.05$), providing only a relatively short timeframe for the assessment of post-military sexual assault.

These results have important clinical implications for clinicians who work with OEF/OIF/OND veterans. First, the findings that survivors of sexual assault at one time point are more likely to have experienced sexual assault at a future time point indicate that it is important to assess experiences of sexual assault across the lifespan, particularly among participants for whom an initial sexual assault incident is identified. It may be important to assess for all instances of sexual assault in order to ensure identification of patients' index (or most severe) trauma. Second, this finding suggests that clinicians and researchers should consider evaluating whether inclusion of risk reduction strategies as a treatment target can reduce the risk of further victimization among patients who have experienced any previous occurrence of sexual victimization. This consideration may be particularly relevant to clinicians who work with male veterans who experienced previous sexual assault, as both pre-military sexual assault and MSA were associated with increased risk of post-military sexual assault among males.

Research among civilians has examined several possible mechanisms through which sexual assault may increase risk of revictimization, including personality variables, risk detection, resistance strategies, sexual behaviors, substance use, and psychological symptoms (see Arata, 2002; Messman-Moore and Long, 2003, for reviews). Furthermore, models of revictimization have been proposed, including an ecological framework that considers several levels of risk factors (i.e., developmental history, microsystem, exosystem, and macrosystem; Messman-Moore and Long, 2003) and a Read-React-Respond model of revictimization (Noll and Grych, 2011). These models incorporate multiple risk factors that increase risk through various pathways. It is important that future research with veterans examine different mechanisms through which risk might be increased in order to inform risk reduction programming and treatment efforts.

These findings must be interpreted in light of the specific limitations of this study. All data were collected via self-report questionnaires. Additionally, because these data were collected as part of a study on post-deployment mental health, many participants had not been out of the military very long (less than 3 years) which provided only a limited timeframe for the assessment of post-military sexual assault. Furthermore, this study used a convenience sample, so the prevalence of sexual assault in this sample may not be generalizable to the larger OEF/OIF/OND veteran population.

Despite these limitations, this study significantly extends civilian research on sexual revictimization to veterans. Of particular importance, as there is a dearth of research on sexual revictimization among male veterans, this study included male veterans. Consistent with civilian literature (e.g., Arata, 2002), earlier sexual assault predicted later sexual assault among both male and female OEF/OIF/OND veterans. Future research to identify the mechanisms that account for this relationship in veterans is needed. Clinicians who treat veterans should consider these findings both during assessment and in treatment planning.

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Table 1

Demographic Information for Sample

Characteristic	Total Sample (N = 3,106)		Females (n = 609)		Males (n = 2,497)	
	M	(SD)	M	(SD)	M	(SD)
Age at Time of Assessment ^a	37.31	(10.24)	36.84	(10.03)	37.43	(10.30)
Age at Enlistment ^b	20.76	(4.41)	21.59	(4.96)	20.56	(4.24)
Length of Service ^c	12.72	(9.11)	11.31	(8.44)	13.06	(9.24)
Time since Active Duty ^d	3.55	(3.05)	4.09	(3.16)	3.42	(3.01)
Ethnicity	n	(%)	n	(%)	n	(%)
Hispanic/Latino(a)	164	(5.3)	22	(3.6)	142	(5.7)
Not Hispanic/Latino(a)	2889	(93.0)	575	(94.4)	2314	(92.7)
Missing	53	(1.7)	12	(2.0)	41	(1.6)
Race ^e						
White	1515	(48.8)	207	(34.0)	1308	(52.4)
Black or African American	1500	(48.3)	385	(63.2)	1115	(44.7)
American Indian or Alaskan Native	63	(2.0)	13	(2.1)	50	(2.0)
Asian	41	(1.3)	8	(1.3)	33	(1.3)
Native Hawaiian or Pacific Islander	14	(0.5)	2	(0.3)	12	(0.5)
Missing	33	(1.1)	12	(2.0)	21	(0.8)
Marital Status						
Married	1522	(49.0)	169	(27.8)	1353	(54.2)
Remarried	146	(4.7)	18	(3.0)	128	(5.1)
Widowed	9	(0.3)	7	(1.1)	2	(0.1)
Separated	216	(7.0)	38	(6.2)	178	(7.1)
Divorced	524	(16.9)	167	(27.4)	357	(14.3)
Never Married	685	(22.1)	208	(34.2)	477	(19.1)

Characteristic	Total Sample (N = 3,106)		Females (n = 609)		Males (n = 2,497)	
	M	(SD)	M	(SD)	M	(SD)
Missing	4	(0.1)	2	(0.3)	2	(0.1)
Employment status						
Employed Full Time	1,567	(50.5)	282	(46.3)	1,285	(51.5)
Employed Part Time	336	(10.8)	87	(14.3)	249	(10.0)
Unemployed	1,194	(38.4)	238	(39.1)	956	(38.3)
Missing	9	(0.3)	2	(0.3)	7	(0.3)
Military Branch						
Air Force	144	(4.6)	37	(6.1)	107	(4.3)
Army	943	(30.4)	208	(34.2)	735	(29.4)
Coast Guard	6	(0.2)	0	(0.0)	6	(0.2)
Marines	266	(8.6)	11	(1.8)	255	(10.2)
Navy	393	(12.7)	87	(14.3)	306	(12.3)
Reserves	141	(4.5)	50	(8.2)	91	(3.6)
National Guard	138	(4.4)	49	(8.0)	189	(7.6)
Multiple Branches	931	(30.0)	157	(25.8)	774	(31.0)
Missing	44	(1.4)	10	(1.6)	34	(1.4)
VA Service-Connected						
Condition/Disability						
Yes	1,777	(57.2)	365	(59.9)	1,412	(56.5)
No	1,308	(42.1)	237	(38.9)	1,071	(42.9)
Missing	21	(0.7)	7	(1.1)	14	(0.6)
Warzone Exposure	2,549	(82.1)	410	(67.3)	2,139	(85.7)
Child Sexual Abuse	504	(16.2)	208	(34.2)	296	(11.9)
Adolescent Sexual Assault	182	(5.9)	108	(17.7)	74	(3.0)
Any Adult Sexual Assault	206	(6.6)	126	(20.7)	80	(3.2)
Pre-Mil Sexual Assault	59	(1.9)	38	(6.2)	21	(0.8)

Characteristic	Total Sample (N = 3,106)		Females (n = 609)		Males (n = 2,497)	
	M	(SD)	M	(SD)	M	(SD)
Military Sexual Assault	133	(4.3)	82	(13.5)	51	(2.0)
Post-Mil Sexual Assault ^f	25	(0.9)	14	(2.4)	11	(0.5)

Note: Pre-Mil Sexual Assault = pre-military adult sexual assault; Post-mil = post-military.

^a Age at assessment was missing for 33 participants (7 females and 26 males).

^b Age at enlistment was missing for 40 participants (8 females and 32 males).

^c Length of service was missing for 1 participant (1 male).

^d Computed using information from veterans only. Time since active duty was missing for 69 participants (15 females and 54 males).

^e Participants could select multiple racial categories.

^f Veteran status was required for the analyses on post-military sexual assault.

Table 2Results of logistic regressions for revictimization for female participants ($n = 609$).

Dependent Variable	Predictor	OR	Wald Statistic	95% CI for OR
Adol SA	Race	0.98	0.01	0.61 to 1.57
	CSA	7.42	70.97***	4.65 to 11.82
Pre-mil SA	Race	0.62	1.88	0.32 to 1.23
	Age at Enlistment	1.08	8.48**	1.03 to 1.14
	CSA	0.64	1.17	0.29 to 1.43
	Adol SA	3.74	10.50**	1.68 to 8.30
MSA	Race	0.49	7.67**	0.30 to 0.81
	Age at Enlistment	0.89	8.86**	0.83 to 0.96
	Rank	0.39	2.09	0.11 to 1.39
	Duration of Service	1.01	0.62	0.98 to 1.04
	CSA	2.25	9.17**	1.33 to 3.81
	Adol SA	1.73	3.23 [†]	0.95 to 3.14
	Pre-mil SA	0.60	0.64	0.17 to 2.11
Post-mil SA ^a	Race	0.58	0.96	0.20 to 1.71
	Time since active duty	0.91	0.92	0.74 to 1.11
	Any pre-mil SA	2.97	3.21 [†]	0.90 to 9.80
	MSA	2.81	3.12 [†]	0.89 to 8.81
Any Adult SA	Race	0.57	7.33**	0.38 to 0.86
	CSA	1.72	5.88**	1.11 to 2.67
	Adol SA	2.24	10.10**	1.36 to 3.69

Notes: OR = odds ratio; CSA = child sexual abuse; Adol SA = adolescent sexual assault; Adult SA = adult sexual assault; Pre-mil SA = pre-military adult sexual assault; MSA = military sexual assault; Post-mil SA = post-military sexual assault; Any pre-mil SA = CSA, Adol SA, or Pre-mil SA; Race coding: 0 = White, 1 = Non-White; Rank coding: 0 = Enlisted, 1 = Officer/Warrant Officer.

[†] $p < 0.10$,

* $p < 0.05$,

** $p < 0.01$,

*** $p < 0.001$.

^a $n = 572$

Table 3Results of logistic regressions for revictimization for male participants ($n = 2,497$).

Dependent Variable	Predictor	OR	Wald Statistic	95% CI for OR
Adol SA	Race	1.12	0.21	0.70 to 1.79
	CSA	8.34	76.99 ***	5.19 to 13.39
Pre-mil SA	Race	2.02	2.20	0.80 to 5.10
	Age at Enlistment	1.08	4.14 *	1.00 to 1.16
	CSA	2.47	3.03 †	0.89 to 6.81
	Adol SA	12.62	21.88 ***	4.36 to 36.49
MSA	Race	0.64	2.22	0.35 to 1.15
	Age at Enlistment	0.88	4.66 *	0.78 to 0.99
	Rank	0.26	1.66	0.03 to 2.01
	Duration of Service	1.00	0.09	0.96 to 1.03
	CSA	3.08	11.71 **	1.62 to 5.86
	Adol SA	8.67	31.06 ***	4.06 to 18.54
	Pre-mil SA	0.74	0.07	0.08 to 6.60
Post-mil SA ^a	Race	1.29	0.17	0.39 to 4.28
	Time since active duty	1.07	0.66	0.92 to 1.24
	Any pre-mil SA	6.00	7.89 **	1.72 to 20.96
	MSA	5.31	3.87 *	1.01 to 28.08
Any Adult SA	Race	0.88	0.30	0.55 to 1.40
	CSA	3.18	19.12 ***	1.89 to 5.34
	Adol SA	9.33	49.80 ***	5.02 to 17.34

Notes: OR = odds ratio; CSA = child sexual abuse; Adol SA = adolescent sexual assault; Adult SA = adult sexual assault; Pre-mil SA = pre-military adult sexual assault; MSA = military sexual assault; Post-mil SA = post-military sexual assault; Any pre-mil SA = CSA, Adol SA, or Pre-mil SA; Race coding: 0 = White, 1 = Non-White; Rank coding: 0 = Enlisted, 1 = Officer/Warrant Officer.

† $p < 0.10$,

* $p < 0.05$,

** $p < 0.01$,

*** $p < 0.001$.

^a $n = 2,366$