

FACTORS THAT IMPACT DISCLOSURE AND PTSD SEVERITY FOLLOWING  
MILITARY SEXUAL TRAUMA

A thesis presented to the faculty of the Graduate School of Western Carolina University in  
partial fulfillment of the requirements for the degree of Master of Arts in General Psychology

By:

Kiana Monique Pérez-Jiménez

Thesis Chair: Dr. David Solomon

Professor of Psychology

Psychology Department

Committee Members: Dr. David de Jong, Psychology

Dr. Erin Myers, Psychology

April 2020

## ACKNOWLEDGMENTS

Firstly, I would like to thank the faculty within the Western Carolina University Psychology Department for their continued encouragement. My involvement in the WCU Psychology Master's Program has been a wonderful experience that I will remain grateful for. I would like to thank Dr. David Solomon, my thesis chair. As an advisor and mentor, he has provided me with extensive guidance through the extent of this research process. Without his commitment, this thesis project would not have been possible. Thank you also to Dr. David de Jong for his statistical expertise and Dr. Erin Myers for her expertise in gender studies.

Additionally, I am grateful to other faculty members at WCU with whom I have had an opportunity to work on other projects and who have also provided considerable supervision and consultation. I am especially grateful and thankful for Dr. David McCord and Dr. Nathan Roth, who have been exceptional mentors throughout my time at WCU and have supported me throughout this endeavor.

Lastly, I would like to thank my parents Yajaira Jiménez-Cabán and Ferdinand Pérez-Rivera, for their unconditional support, love, and for always motivating me throughout the graduate school process. Additionally, I would like to thank my family in Puerto Rico: Nemesio Jiménez-Vega, Carmen Cabán-Avilés, Carmencita Jiménez-Cabán, Nahyara Isabel Jiménez Cabán, Esbal Jiménez-Cabán, Yadira Malavez, Enaliel Jiménez-Malavez, Consuelo Rivera Soto, Fernand Pérez-Rivera, Milena Nahir Pérez-Roman, and Fernando Pérez-Rivera. Without my village and their support, my journey would have likely been more difficult. I thank my entire family for their support and guidance.

**TABLE OF CONTENTS**

ABSTRACT..... iv

INTRODUCTION ..... 1

    MILITARY SEXUAL TRAUMA.....2

    GENDER DIFFERENCES .....4

    SHAME.....6

    REPORTING AND RESOURCES .....8

    CIVILIAN POPULATIONS.....10

    RAPE MYTHS.....13

THE CURRENT STUDY..... 14

HYPOTHESES..... 14

METHOD ..... 15

    MEASURES .....15

    PROCEDURE.....17

    PARTICIPANTS.....18

RESULTS ..... 18

DISCUSSION..... 21

CONCLUSION..... 24

REFERENCES ..... 27

APPENDIX A..... 32

APPENDIX B..... 33

APPENDIX C..... 34

APPENDIX D..... 36

APPENDIX E..... 37

APPENDIX F..... 42

APPENDIX G..... 45

APPENDIX H..... 48

APPENDIX I ..... 50

APPENDIX J ..... 55

APPENDIX K..... 58

## ABSTRACT

### FACTORS THAT IMPACT DISCLOSURE AND PTSD SEVERITY FOLLOWING MILITARY SEXUAL TRAUMA

Kiana Monique Pérez-Jiménez, M.A.

Director: Dr. David Solomon

The majority of the research on military sexual trauma, has been, was done with sample groups of female veterans, hence there is a current gap in research about men who experience military sexual trauma (O'Brien, Keith, & Shoemaker, 2015). The study analyzed PTSD symptom severity among men and women who experience military sexual trauma (MST). Additionally, PTSD symptom severity was compared between military and civilian populations, alongside with the likelihood of reporting sexual assault in both military and civilian populations.

Disclosure of sexual assault was dependent on the belief of rape myth, levels of shame, and whether the individual was civilian or had prior service in the military or was currently serving in the military. Furthermore, gender and military status were also a predictors of PTSD symptom severity. Results indicated that shame was a contributing factor to increased levels of PTSD symptom severity. There was also a significant difference between military and civilian populations for rape myth acceptances toward men and women, and shame. More research is warranted in the areas of rape myth acceptance, disclosure, and shame in civilian and military populations.

## INTRODUCTION

Currently, a gap exists in the literature concerning men who experience military sexual trauma (MST), given that the majority of the research is done only with female veteran samples (O'Brien, Keith, & Shoemaker, 2015). This study analyzed PTSD symptom severity across gender among military sexual trauma survivors. Additionally, PTSD severity and the likelihood of disclosing were compared between military and civilian populations. This research adds to the current literature on military sexual trauma among men and women to potentially better improve services and treatments provided (Gaher, O'Brien, Smiley, & Hahn, 2014). Service providers and care systems must also provide and address challenges for successful transitions out of the military, including those who have experienced military sexual trauma (Kintzle et al., 2015).

Department of Defense (DoD) statistics showed that in 2011 there were 3,192 sexual assaults reported by active military personnel, but only 489 were referred to a court-martial. Of those cases, 240 went to trial, 39 were allowed to be discharged or resign and 91 had court-martial charges dismissed, 25 of which received non-judicial punishment under the Military Code of Military Justice (UCMJ), which can consist of an Article 15. Depending on the severity of the Article 15, punishments consist of a reduction of pay, restriction to specified areas (ex., cannot leave military installation), or extra duties. Of the cases reported, only 191 perpetrators were convicted. This indicated that military personnel who commit crimes of sexual violence aren't placed at a high priority by officials (e.g., military police, the chain of command; Estabrooks, 2013).

Regarding women, cultural and societal views about rape may influence a victim's perception of their assault and their likelihood of reporting feelings such as guilt, shame, and self-blame (Voller et al., 2015). Common beliefs among male victims are that men can't be

raped, they are not severely impacted by the assault, and they are to blame for letting themselves get raped (Voller et al., 2015). Like women, men also have a disrupted view of themselves and the world after victimization (Voller et al, 2015). Sexual assault in the military environment is one of the most under-reported crimes, especially in the male population; the Department of Defense estimates that 67% of women and 81% of men did not report their military sexual trauma (O'Brien, Keith, & Shoemaker, 2015). In both male and female veterans, the risk of developing PTSD after a sexual assault in the military is similar in magnitude to being impacted by combat trauma (Surís, Link-Malcom, Chard, Ahn, North, 2013).

### **MILITARY SEXUAL TRAUMA**

Military sexual traumas (MST) pose a wide range of problems for those who experience with. This form of sexual violence in the military may cause fear, anxiety, mistrust, intimidation, retribution, and isolation (Hoyt, Reilage, & Williams, 2011). Military sexual trauma survivors may experience prolonged PTSD symptoms because of the potential contact with the perpetrator, the power differential with the perpetrator (i.e., the perpetrator being superior), or being conflicted with reporting the assault, which could potentially impact their military career (Gaher, O'Brien, Smiley, & Hahn, 2014; Holliday, Holder, & Surís, 2018). Juan and colleagues (2017) found that sexual trauma and threatening sexual harassment in the military environment has also been associated with increased risk of poor physical and psychological functioning compared to sexual trauma that occurs outside of the military. Military sexual trauma is a strong predictor of trauma-specific symptoms, such as re-occurring trauma, avoidance, and arousal symptoms. Research from a sample of veterans of Operation Iraqi Freedom and Operation Enduring Freedom reported that individuals who experienced MST were more likely to have at least three comorbid mental health diagnoses (Kintzle et al., 2015). According to Wilson (2018) the exact

prevalence of military sexual trauma is unknown. Wilson (2018) conducted a meta-analysis, showing that 15.7% (3.9% men, 38.4% women) of veterans reported MST when measures included harassment and assault, 13.9% (1.9% men, 23.6% women) reported MST when the measure assessed only assault, and 31.2% (8.9% men, 52.5%) reported MST when only harassment was assessed. Additionally, another factor to consider is the era that the individual served in; MST prevalence rates may have been higher or lower depending on the time period (Surís & Lind, 2008).

The military environment and culture perpetuate increased PTSD symptoms following sexual assault. Military culture teaches soldiers to suppress their emotions so that they can focus on higher tasks, such as being mission ready. Unit cohesion and camaraderie is also an important cultural factor in the military, as fellow soldiers are seen as a second family. Following an assault, unit cohesion may be broken, especially if the perpetrator is in the same unit as the victim. This makes it difficult for the victim to get the support they may need from their unit, which can result in isolation (Kintzle et al., 2015). Turchik and Wilson (2010) report rates of military sexual trauma as being high for several reasons. First, certain sociodemographic groups, such as, being women, younger personnel, ethnic minorities, less educated soldiers, or soldiers of lower socioeconomic status (lower enlisted ranks versus officer), may place military personnel at an increased risk for experiencing MST. Additionally, when accounting for age range, 83% to 87% of victims and 40% to 68% of perpetrators are between the ages of 17 to 24. The military is a male-dominated environment, which is seen as a place that is not inviting or prepared to handle the needs of women. This environment promotes hypermasculinity and rigid sex roles. The definition of hypermasculinity is an extreme form of masculinity based on factors like polarized gender roles, stereotypical gender roles, increased values of control, power, toleration of pain,

completion, and a focus on heterosexuality (Hunter, 2007). Men that have hypermasculine attitudes or values are more likely to have a rape-supportive attitude and commit acts of sexual aggression compared to men that have less extreme masculine values (Turchik & Wilson, 2010).

Authors have suggested that military sexual violence toward women is related to a culture of misogyny and homophobia; this includes inappropriate language such as calling soldiers “pussies” or “sissies”. This teaches soldiers that it is okay to degrade women and sexual minorities (O'Brien, Keith, & Shoemaker, 2015). Sexual assault and harassment are reported to be higher during times of deployment compared to nondeployments. For example, in a sample of Gulf War military personnel, rates of sexual assault were at 7%, rates of physical sexual harassment were at 33%, and rates of verbal sexual harassment were at 66% (Street & Stafford, 2004).

Moreover, the military environment may contribute to poor physical functioning after sexual assault, for example, with victims being continually exposed to their perpetrator. Instances like that are less likely to happen in civilian situations since many establishments require a two-week notice before quitting. Military personnel are obligated by their government contract, meaning they cannot “quit” even when a sexual assault happens. While military personnel may request to transfer to a different unit, contractual rotations may prevent that from happening (Surís, Lind, Kashner, & Borman, 2007). Furthermore, military officials may use personality or adjustment disorder diagnoses to medically discharge and quicken the process of extracting victims of sexual assault (Castro, Kintzle, Schuyler, Lucas, & Warner, 2015).

## **GENDER DIFFERENCES**

Gaher & colleagues (2014), reported that approximately one in five female veterans and one in 100 male veterans have positively endorsed MST to their Veteran Affairs Medical Center

primary care provider, however, underreporting of sexual assault may occur. When comparing men and women, some studies reported that men show higher rates of psychopathology compared to women following sexual assault (Voller et al., 2015). O'Brien and colleagues (2015) reported that the probability of receiving a PTSD diagnosis in men (65%) was higher compared to women (46%). In a sample of male and female Gulf War veterans, sexual harassment was found to have a greater impact on men's mental health compared to women's mental health (O'Brien, Keith, & Shoemaker, 2015).

Female sexual trauma is associated with depression, anxiety, substance abuse, self-harm, PTSD, menstrual problems, chronic pain, pelvic pain, and fatigue (Kintzle et al., 2015; Voller, Polusny, Noorbaloochi, Street, & Grill, 2015). When examining MST, which includes all forms of assault and sexual harassment, 22% and 84% of women reported having these experiences during military service (Kintzle et al., 2015). Additionally, female victims of sexual trauma have often endorsed feelings of discomfort and a desire to keep the assault confidential (O'Brien, Keith, & Shoemaker, 2015). Additionally, it was also found that among OEF and OIF veterans 15% of women and less than 1% of men seeking VA care had reported a history of MST. Female veterans with a history of MST were five to eight times more likely to be diagnosed with PTSD, three times more likely to be diagnosed with depressive disorders, and two times more likely to be diagnosed with alcohol use disorders, compared to female veterans without MST (Maguen et al., 2012).

Men may be more negatively affected by military sexual trauma, and experience difficulty with gender identity, sexuality, anger, suicide risk, and poorer perceived health (Juan, Nunnink, Butler, & Allard, 2017). Male victims may also experience problems with social/interpersonal betrayal and the challenges that occur when traditional masculine identity is

violated for male sexual trauma survivors. In the military, masculine gender ideals such as strength, power, dominance, and rationality, are the ideal characteristics for an elite male soldier (Juan, Nunnink, Butler, & Allard, 2017). Juan and colleagues (2017) found that men who were survivors of MST reported more stress related to emotional expressiveness and intellectual inferiority. Male victims expressed greater difficulty expressing vulnerable emotions such as love, fear, and hurt. These emotions are contradictory to traditional masculine norms. Veteran men who endorsed higher emotional toughness, are more likely to have endorse symptoms of PTSD and depression (Voller et al, 2014). Men often did not report the sexual assault because of the punishments for other violations, decreased chance for promotion, and not being believed (O'Brien, Keith, & Shoemaker, 2015). Male victims of sexual assaults are often seen as failures in their masculine duty for not protecting themselves (Hlavka, 2016). For this purpose, the current research study would look further into gender differences among men and women in civilian and military populations. For instance, shame may be a contributing factor that may exacerbate PTSD symptomology among men MST survivors compared to civilian men.

## **SHAME**

Sexual assault survivors often describe their experiences as humiliating and dehumanizing. In turn, negative emotions may inhibit victims from recovering and reporting to the police (Weiss, 2010). Shame is an emotion linked to a person's self-worth and identity and is often associated with self-condemnation, hopelessness, feelings of disgrace, failure, and inadequacy, and PTSD (Weiss, 2010; Øktedalan, Hagtvvet, Hoffart, Langkaas, & Smucker, 2014). Sexual assault victims may purposely avoid certain situations or events, and suppress negative thoughts, which can lead to poor mental health outcomes and can reinforce PTSD symptomatology (Øktedalan, Hagtvvet, Hoffart, Langkaas, & Smucker, 2014).

Shame is also impacted by how culture defines, encourages, and maintains gender behaviors and sexual practices (Hlavka, 2016). Shame is associated with deviation from expected gender roles. Individuals may experience shame when they do not measure up or perform to the idealized gender role (Weiss, 2010). Often individuals did not report their sexual assault experience because of potentially negative social reactions. Negative social reactions are associated with higher levels of PTSD, self-blame, and avoidance coping (Decou, Cole, Lynch, Wong, & Mathews, 2017). Decou and colleagues (2017) reported that in a sample of female undergraduates, negative social reactions such as treating victims as if they are incompetent and taking control of their decisions led to predictions of higher levels of depression, PTSD and anxiety. Similarly, individuals who experience negative reactions upon disclosure, may experience negative self-evaluations, such as something being "wrong" with them (Decou, Kaplan, Spencer, & Lynch, 2018). Individuals who experience positive social reactions are more likely to cope better and have a better perception of social support over a period of time (Decou et al., 2017). In a sample of undergraduate women, shame mediated the association between physical or sexual assault and PTSD symptoms (La Bash & Papa, 2014). In a study that investigated the female population, women indicated feeling more ashamed about themselves following a sexual assault compared to nonstranger violence (Weiss, 2010). Results from a study by Decou and colleagues (2018) found that trauma-related shame was a mediating factor between the association between sexual assault and the desire to die by suicide. Often individuals blame themselves or anticipate disapproval from others and are likely to want to remain invisible and not expose themselves to others (Weiss, 2010).

Research suggested that the degree of severity in shame experience is positively associated with symptoms clusters for combat veterans (Budden, 2009). Shame motivated

individuals to be more withdrawn and avoid, which may also exacerbate PTSD symptom severity (La Bash & Papa, 2014). If shame is identified during therapy, these thoughts should be addressed because it may impact the therapeutic process and treatment. Additionally, it can make emotional processing more difficult for the client if shame related thoughts from trauma are not addressed early therapy (La Bash & Papa, 2014).

## **REPORTING AND RESOURCES**

Reporting sexual assault in both civilian and military populations may be a challenging experience for victims. Victims can be influenced by shame, leadership, social media, or rape myths, which can lead them to not reporting the incident. For example, sexual assault statistics are likely to be lower than what is reported due to underreporting that is accompanied by the shame and stigma of sexual victimization (Hlavka, 2016). Weiss (2010) conducted a study to explore men's shame narratives of sexual violence. Results found that men felt ashamed of being unable to defend themselves, humiliated and embarrassed for being sexually assaulted. This resulted in fear of others finding out, which may lead men to be unwilling to risk exposure or emasculation by reporting it to authorities.

Wolitzky-Taylor and colleagues (2011) found that the sample of female undergraduates were more likely to report their sexual assault experience compared to other female undergraduate samples. Even with these current findings, sexual assault is still underreported in many college samples. Women who did report are more likely to receive medical attention and have access to other services. Other findings indicated that women who experience serious injuries are more likely to report compared to those who don't have serious injuries (Wolitzky-Taylor, Resnick, Amstadter, McCauley, Ruggiero, & Kilpatrick, 2011). When military personnel want to report they are often not believed or encouraged to keep silent, along with having their

reports ignored or being blamed for the experience. This type of reaction can lead to a negative impact on the victim's post-trauma adjustment (Street & Stafford, 2004)

Reporting sexual assault and receiving proper help in the military can be difficult for some service members (Holland, Rabelo, & Cortina, 2016). Resources are available for service members to report sexual assault, such as the Sexual Assault Response Coordinators (SARC), which is the response care team for sexual assault victims. Other options such as seeking help from the chaplain, combat stress office, or nonmedical counseling are also available for active-duty soldiers. Even though all of these resources are available for service members, MST survivors still do not receive proper care. Specifically, many do not disclose their sexual assault history, are likely to delay treatment, or never seek treatment at all (Burns et al., 2014; Holland, Rabelo, & Cortina, 2016)). Additionally, harassment is handled through Military Equal Opportunity programs. After coordinating with SARC, victims are typically sent to the Sexual Assault Prevention Response (Stander & Thomsen, 2016). Even though these resources are available for victims, some individuals may be revictimized because of the hierarchical structure of the military based on the abuse of authority. However, the hierarchy is also able to improve and change policy to improve SAPR programs much faster compared to civilian environments (Stander & Thomsen, 2016).

Logan and colleagues (2004, 2005) created a theoretical model explaining why victims may refuse or not seek help from health or mental health services. The model was initially created for civilian survivors of sexual assault but can also be applied to other populations. The categories include availability (lack of resources for sexual assault in a community), affordability (lacking health insurance), accessibility (how available resources are), and acceptability (shame, guilt for what has happened). Accessibility and acceptability are two factors that can impede

military members from seeking services. These factors are associated with the stigma especially in a military environment and logistical problems, such as when it is a good time to make an appointment or long waits. Moreover, these barriers can prolong treatment-seeking for veterans, PTSD, anxiety, or depression, may worsen as time continues to pass.

Regardless of whether the individual comes from a civilian or military background men are less likely to report a sexual assault because, as mentioned before, it can compromise their masculine self-identity. As with their female counterparts, men are more likely to experience greater shame, embarrassment and not wanting family or friends to know about the sexual assault. This barrier is more prevalent among men compared to women (Holland, Rabello, & Cortina, 2016). Moreover, when victims of sexual assault file against their perpetrator, the investigation may be delayed due to potential threats toward the victim (e.g. they deserve the punishment more than the perpetrator). If the victim decides to withdraw their case, it may likely give a perception that they may not be believed (Hoyt, Klosterman Rielage, & Williams, 2011).

### **CIVILIAN POPULATIONS**

In civilian populations, sexual assault history is associated with lifetime rates of PTSD in 65% of men and 45.9% of women; these rates are higher compared those who report combat experience (Street & Stafford, 2004). The National Violence Against Women Survey reports that adult women experience some kind of sexual assault throughout their lifetime. The National College Women Sexual Victimization Survey report that college women experience 27.7 rapes per 1000 female students (Stable, Danis, Mauzy, & Gallagher, 2006). The lifetime prevalence of sexual assault for men is 3% to 10%, similar to statistics reported by the military. One study examining rape prevalence in different areas indicated that 19% of rape victims are from the community, compared to the common belief that most assaults for men happen in the prison

setting (Stable, Danis, Mauzy, & Gallagher, 2006). In a college sample of 650 women, they reported that 42% had been a victim of sexual coercion but only 28% sought help. Among the individuals that sought help, 75% of them confided in a friend instead of going to a professional. Furthermore, the victim's relationship with the offender can impact whether they are likely to report the incident or not (Stable, Danis, Mauzy, & Gallagher, 2006).

Moreover, it is important to consider the fear of sexual assault experienced by victims and non-victims, both in civilian and military populations. Factors such as sexualized or violent language, the practice of objectification, hypermasculinity, and power hierarchy, are all contributors to sexual violence. Factors such as these indicate that military populations often tolerate sexual violence. Research also suggests that nonvictims have exhibited constrained behavior, such as limiting themselves from going out at night or fearing going out by themselves because of the ambiguity of what might happen to them (Holland, Rabelo, & Cortina, 2016).

For example, veteran women with a past history of sexual abuse before the military are more likely to report poorer physical, psychiatric, and quality of life functioning compared to a veteran without a history of sexual abuse (Surís, Lind, Kashner, & Borman, 2007). In a study conducted by Surís and colleagues (2007), of the 270 women, 33% reported a history of MST, 39% reported a history of being sexually assaulted when they were civilians, and 27% reported a history of childhood sexual trauma (CSA). Additionally, 10% of the sample reported both MST and civilian sexual trauma and 7% reported civilian sexual trauma and childhood sexual trauma. Results of the study indicated that women that experience MST compared to women that experience civilian sexual trauma, have higher scores in interpersonal sensitivity and paranoia. Overall, women that experienced MST had higher reports of poorer quality of life, poor interpersonal relationships, and physical pain.

Similar in both military and civilian environments, victims may be questioned about their sexual history (e.g. being promiscuous), how they are dressed at the time of the incident, their behavior before the assault, by medical teams. Negative experience with medical or legal professionals can have detrimental effects on survivors' well-being. Survivors describe the response of the aftermath of the sexual assault as more painful than the actual experience. (Castro, Kintzle, Schuyler, Lucas, & Warner, 2015). Officials (e.g. military, police) may discourage reporting based on what they have disclosed causing victims to be more distressed. These types of secondary victimizations can often lead to an increase in PTSD, physical health distress and sexual health risk (Campbell & Raja, 2005). There is limited research with military sexual assault survivors who experience secondary victimization. Secondary victimization is more likely to happen more with veteran women compared to civilian female victims seeking help from a civilian social system (Campbell & Raja, 2005). Campbell and Raja's (2005) study reported that secondary victimization was more common among military personnel compared to other civilian professionals. In the military sample, 59% of the military assault incidents were disclosed to military legal officials but 70% of victims stated that they were discouraged from reporting the assault. Officials also told victims that the case was not as serious enough to pursue formal prosecution. With responses like these, victims will likely be reluctant to seek for more help. These experiences are similar to those women who reported sexual assault out of the military. They often felt guiltier or more likely to blame themselves when reporting the incident to a police officer. This occurred more in the civilian sample compared to the military sample.

## **RAPE MYTHS**

Rape Myth is defined as a false belief used to shift the blame away from the perpetrator(s) and towards the victim (Suarez & Gadalla, 2010). Suarez and Gadalla (2010) conducted a meta-analysis of 37 studies to investigate if there were any similarities among rape myth beliefs and acceptances among men and women. Results indicated that men were more likely to endorse high rape myth acceptance compared to women. The study also found that rape myth acceptance was associated with hostile attitudes and behaviors towards women. Additionally, there was a strong association between gender and rape myth acceptance, which supported their hypothesis that gender inequality maintains rape myths in general. There is limited research on rape myth acceptance among military populations. Davies and colleagues (2012) stated that men are more likely to endorse higher levels of rape myth acceptance compared to women. The results of their study indicated that men also displayed more hostile sexism and were less likely to believe that gender should be transcended. Furthermore, men were more likely to blame male rape victims and considered sexual assault to be less severe compared to women. Carroll and colleagues (2016) compared military academies, fraternities, and sororities, on their levels of rape myth acceptance. Results indicated that men in military academies and fraternities are more likely to blame women if they were sexually assaulted, especially, for example, if women were wearing provocative clothing or drinking, they were virtually asking for it. Military academies and fraternities place a high value on masculine qualities (e.g., power, toughness, dominance, and aggression) and are also more likely to devalue feminine qualities or behaviors. Moreover, research suggests that fraternities and military academies are more likely to support rape-supportive attitudes (Carroll, Rosenstein, Foubert, Clark, & Korenman, 2016).

## **THE CURRENT STUDY**

Previous research has highlighted physical and mental health disparities in military and civilian populations, particularly in PTSD following on sexual trauma. However, there is less research regarding male victims of sexual assault. Additionally, rape myths shape what individuals in society tolerate from men and women who commit sexual assault. Suarez and Gadalla (2010) found in their meta-analysis that there are limitations in regard to theoretical support of the construct of rape myths and the use of how rape myths are used to explain sexual assault. Thus, the current study investigated the impact that military sexual trauma has on men and women and compared PTSD severity with civilian men and women. Furthermore, shame was investigated to see if it contributes to PTSD severity between MST and civilian survivors. Disclosures to authority figures was examined to see if there is a difference between military and civilian populations.

## **HYPOTHESES**

- a. Men who experience military sexual trauma are more likely to have higher PTSD symptom severity compared to women.
- b. Individuals in the military population who experience sexual assault are more likely to have higher levels of PTSD severity compared to individuals in the civilian population.
- c. Individuals in the military are less likely to report sexual assault (e.g., to police, chain of command, or military police) especially if the belief of rape myths or shame is high, compared to those in the civilian populations.
- d. Holding each other constant, rape myths and shame will predict both disclosure and PTSD.

- e. Rape myth acceptance and shame would differ significantly among civilians and military populations.

## **METHOD**

### **MEASURES**

**Demographics.** The demographics included a variety of questions that asked about the individual's overall background (ethnicity, gender identity, sexual orientation, education, income, etc.). Questions on military background were included. Military background questions include what branch the individual has served, their current status (active, reserve, national guard, or retired), if they are currently serving, highest rank achieved (currently or in the past) and length of service. Additionally, questions about whether they are currently seeking counseling or if they have ever sought out counseling were also asked (See Appendix E)

**Sexual Experience Survey-Short form Victimization (SES-SFV).** The SES-LFV was used to measure sexual experiences that may have been unwanted. It includes 20 items. Sexual experiences were measured by the number of times they have occurred, how many times it happened in the past 12 months. Some examples of questions are: *Someone fondled, kissed, or ran up against the private areas of my body (lips, breast, chest, crotch, or butt) or removed some of my clothes without my consent, but did not attempt sexual penetration* and *A man put his penis into my vagina, butt, or someone inserted fingers or objects without my consent* (Koss, Abbey, Campbell, Cook, Norris, Testa, Ullman, West, & White, 2006). A study by Anderson, Delahanty, and Cahill (2016) found that there was high reliability between whether a person did or did not report sexual assault, but little test-retest reliability for the type of assault reported. Thus, this survey was used to place participants into dichotomous groups based on whether or not they experienced sexual assault (See Appendix F).

**The PTSD Checklist for DSM-5 (PCL-5).** The PCL-5 was used to measure PTSD symptom severity. It includes 20 items on a 5-point Likert scale (0 = not at all, 1 = a little bit, 2 = moderately, 3 = quite a bit, and 4 = extremely). The PCL-5 measures the responses individuals have towards stressful situations or environments within the past month. The items reflect DSM-5 symptom clusters of re-experiencing, avoidance, negative alterations in cognitions and mood, and hyperarousal. For this study, the PCL-5 was altered slightly to ask participants to report symptoms related to their unwanted sexual experience specifically. The PCL-5 Trauma screener was placed after the initial PCL-5. This allowed us to control for other traumatic experiences that individuals may have gone through. Some examples of questions are: *Repeated, disturbing, and unwanted memories of the stressful experience*, *Repeated, disturbing dreams of a stressful experience*, and *Feeling very upset when something reminded you of the stressful experience* ( $\alpha = .91$ ; Weathers, Litz, Keana, Palmieri, Marx, & Schnurr, 2013; See Appendix G & H).

**Illinois Rape Myth Acceptance Scale.** This measure was used to indicate the levels of rape myth acceptance. It includes 45 items. The items are rated on a 7-point Likert scale (1 = not at all agree, 7 = very much agree). The scale is separated into 8 subscales, *She asked for it (SA)*, *It wasn't really rape (NR)*, *He didn't mean to (MT)*, *She wanted it (WI)*, *Rape is a trivial event (TE)*, *Rape is a deviant event (DE)*, *Filler item (FI)*. Some examples of the items are: *If a woman is raped while she is drunk, she is at least somewhat responsible for letting things get out of control, most rapists are not caught by the police*, and *If a woman doesn't physically fight back, you can't really say that it was rape* ( $\alpha = .93$ ; Payne, Lonsway, & Fitzgerald, 1999; Lonsway, 1999; See Appendix I).

**Male Rape Myth Acceptance Scale.** This measure was used to indicate the levels of male rape myth acceptances. It includes 22 items. The items are rated on a 6-point Likert scale (1 =

strongly disagree, 6 = strongly agree). Some examples of items are: *Women who rape men are sexually frustrated individuals*, *The extent of a man's resistance should be a major factor in determining whether he was raped*, and *I would have a hard time believing a man who told me that he was raped by a woman* ( $\alpha = .95$ ; Walfield, 2018; See Appendix J).

**Abuse related shame scale.** The Abuse related shame scale was used to measure levels of shame after experiencing sexual assault. It includes 8 items. The items are rated on a 3-point Likert scale (0 = not true, 1 = somewhat true, 2 = very true). Some examples of the items are: *When I think about what happened, I feel like covering my body*, *What happened makes me feel dirty*, and *When I think about what happened, I feel disgusted with myself* ( $\alpha = .86$ ; Fiering & Taska, 2005; See Appendix I).

## **PROCEDURE**

Data was collected by distributing surveys to online platforms (e.g., Facebook, Reddit, Military Times forum, Quora forums). The target population was active duty, reserve, and retired veterans, as well as a civilian group for comparison. One survey was distributed through these platforms. Display logic was used. Some questions only applied to individuals that had endorsed military service history. For example, a participant who endorsed military service history as well as sexual assault history was also asked if the assault(s) occurred during military service, outside of military service, or both in and out of military. Lastly, within the survey, there was a forced-choice question that was used to remove careless responders based on the suggestion by Meade and Craig (2012).

## **PARTICIPANTS**

A total of 467 participants were recruited through social media and Reddit platforms. Out of the 467, a total of 137 were retained to conduct the analyses. Specifically, 283 participants were deleted due to not reaching the end of the survey. Forty-one individuals were deleted due to not completing the PCL-5 and the abuse-related shame scale. Five individuals were deleted for not meeting the age criterion of 18. Lastly, 1 person was deleted for not completing the MRMA scale in its entirety. The total of military individuals was  $n = 39$  and the total of civilians was  $n = 98$ . The total sample consisted of 21.2% of men ( $n = 29$ ) and 78.8% of women ( $n = 108$ ). The age range of the sample was from 18 to 63 (Demographic information, Appendix A, table 1.)

## **RESULTS**

Winsorization was specifically used on scales measuring rape myth acceptances for men and women to account for outliers before running the statistical analyses. After Winsorizing four scores in the rape myth acceptance scale towards women and one score in the rape myth acceptance scale towards men, results did not change.

Hypothesis A stated that men who experience military sexual trauma are more likely to have higher PTSD symptom severity compared to women. An independent sample t-test was conducted to test this hypothesis. There was no significant difference between men ( $M = 12.90$ ,  $SD = 16.58$ ) and women ( $M = 26.35$ ,  $SD = 22.02$ ),  $t(22) = -1.627$ ,  $p = .118$ . The hypothesis was not supported.

Hypothesis B stated that individuals in the military population who experienced sexual assault are more likely to have higher levels of PTSD symptom severity compared to individuals in the civilian population. An independent sample t-test was used to examine the relationship

between the variables. There was a significant difference between military ( $M = 20.75$ ,  $SD = 20.68$ ) and civilians ( $M = 39.25$ ,  $SD = 25.46$ ),  $t(74) = 3.114$ ,  $p = .003$ , with civilians reporting higher levels of PTSD symptom severity compared to those in the military. The hypothesis was not supported.

Hypothesis C stated that individuals in the military are less likely to report sexual assault especially if the belief of rape myths or shame is high, compared to those in civilian populations. A three-part moderation model was used to examine the relationship between the variables. Rape myth acceptances toward women did not act as a moderator when it came to disclosing sexual assault,  $b = .0001$ , 95% [-.0029, .0030],  $t = .048$ ,  $p = .962$ , resulting in an insignificant finding. Similarly, rape myth acceptances toward men did not act as a moderator when it came to disclosing sexual assault,  $b = .0031$ , 95% [-.0037, .0000],  $t = .901$ ,  $p = .369$ , resulting in an insignificant finding. Finally, shame did not act as a moderator when it came to disclosing sexual assault,  $b = -.0116$ , 95% [-.0308, .0075],  $t = -1.200$ ,  $p = .232$ , resulting in an insignificant finding. Overall, none of the hypothesized variables accounted for any differences between civilian and military populations in regard to disclosing sexual assault to an official (See Appendix B, figure 1).

Hypothesis D stated that rape myth acceptance and shame would predict both disclosure and PTSD symptom severity. To account for the intercorrelation between shame and rape myth acceptance, a standard multiple regression was used to examine the relationship between these variables. The overall disclosure model with all three variables was overall insignificant,  $R^2 = .112$ ,  $F(3, 108) = .454$ ,  $p = .715$ . Shame was not a significant predictor when accounting for the likelihood to disclose sexual assault,  $B = -.004$ ,  $\beta = -.098$ ,  $t(108) = -1.003$ ,  $p = .318$ . Rape myth acceptances towards women was not significant,  $B = .000$ ,  $\beta = .059$ ,  $t(108) = .323$ ,  $p =$

.747. Rape myth acceptances towards men was not significant,  $B = -.001002$ ,  $\beta = -.103$ ,  $t(108) = -.575$ ,  $p = .567$ .

The overall PTSD model with all three variables was significant,  $R^2 = .651$ ,  $F(3, 62) = 15.163$ ,  $p < .001$ . Contrary to the previous finding, shame was a significant predictor for PTSD symptom severity,  $B = 3.017$ ,  $\beta = .640$ ,  $t(62) = 6.612$ ,  $p < .001$ . However, rape myth acceptances towards men was not a significant predictor, indicating it did not predict changes in PTSD symptom severity,  $B = -.672$ ,  $\beta = -.285$ ,  $t(62) = -1.543$ ,  $p = .128$ . Rape myth acceptance towards women was not significant, indicating it did not predict changes PTSD symptom severity,  $B = .190$ ,  $\beta = .194$ ,  $t(62) = 1.045$ ,  $p = .300$ . The hypothesis was partially supported with higher levels of shame accounting for higher levels of PTSD symptom severity (See Appendix C, table 2 & 3 for regression table; See Appendix D, table 4 for correlation matrices).

Hypothesis E stated rape myth acceptances and shame would differ significantly among civilian and military populations. An independent sample t-test was used to examine the relationship between the variables. Levene's test indicated unequal variances, resulting in degrees of freedom to be adjusted. There was a significant difference between military ( $M = 50.80$ ,  $SD = 14.82$ ) and civilians ( $M = 42.66$ ,  $SD = 18.86$ ),  $t(43.60) = -3.048$ ,  $p = .004$ , with those in the military having higher rates of rape myth acceptances toward men. There was a significant difference between rape myth acceptance toward women, ( $M = 111.03$ ,  $SD = 26.86$ ) and civilians ( $M = 97.41$ ,  $SD = 26.86$ ),  $t(120) = -2.500$ ,  $p < .05$ , with those in the military having higher levels of rape myth acceptances towards women. There was a significant difference between military ( $M = 5.90$ ,  $SD = 5.13$ ) and civilians ( $M = 10.40$ ,  $SD = 4.49$ ),  $t(133) = 5.055$ ,  $p < .001$ , with civilians having higher levels of shame compared to those in the military. Overall,

the hypothesis was supported, indicating there are significant differences between military and civilian populations in regard to rape myth acceptance and shame.

## **DISCUSSION**

It was predicted that men who experience military sexual trauma would have higher levels of PTSD symptom severity compared to women who experienced military sexual trauma, which resulted in an insignificant finding, perhaps due to a significantly small sample size of 39 military individuals. The current literature states that men are likely to have higher levels of psychopathology compared to women after experiencing military sexual trauma; if by having a larger sample size, there could have been an increased chance to corroborate previous findings (Voller et al., 2015).

The second finding suggests military status is a significant factor when predicting levels of PTSD symptom severity, with civilians in this sample reporting greater PTSD symptom severity. When taking cultural aspects into consideration military individuals were expected to have higher levels of PTSD symptom severity. Perhaps being in the military may have served as a protective factor for PTSD. Those in the military are trained to push back their vulnerabilities, not be emotionally expressive, and put the missions first before themselves. Some civilians may not have those kinds of values instilled in them, which could lead to exacerbated PTSD symptom severity.

For the third finding, the prediction that rape myths towards men and women and shame would account for both disclosure and PTSD, was unsupported by the data. The scales used to measure rape myth acceptances toward men and women were highly correlated. Even though the scales are targeting to different genders, they still ask similar questions. Overall rape myth acceptances did not account for disclosing sexual assault or indications of high PTSD symptom

severity. Shame not did account for high PTSD symptom severity but not for disclosing sexual assault to an official. This finding is consistent with previous research suggesting that shame after an assault exacerbates PTSD symptomatology (LaBash & Papa, 2014). Furthermore, shame is defined by societal structures (DeCou et al., 2017). Depending on the individual, their cultural background, and their environment, these factors conjoined may cause the individual to further ruminate on the sexual trauma they have experienced and further exacerbate their PTSD symptomatology. Further research is warranted in areas of rape myth acceptances toward men and women to further investigate how these beliefs impact the possibility of disclosure and PTSD severity.

For the fourth finding it was predicted that rape myth acceptances and shame would predict both disclosure and PTSD. Rape myth acceptances did not predict any significant finding in neither PTSD nor disclosure outcomes. Shame predicted higher outcomes of PTSD but not disclosure outcomes. One way to look at how shame came impact a person's PTSD severity, is due to the idea that after a sexual assault, people may ruminate on the event. The individual may evaluate themselves for what they may have done wrong or blame themselves what has occurred resulting in increased feelings of shame which can then increase PTSD severity. Additionally, even though there were no significant findings that shame or rape myth acceptances, it can be inferred that these factors could influence disclosure outcomes. Beliefs can fall under, "She/he was drunk, so they deserved it", "Men don't get raped" or "Men getting raped by women isn't that serious", or " She was flirting with me so she was asking for it", these beliefs systems may prevent someone from disclosing because they may blame themselves or others with those same beliefs may influence them into not reporting. This inference could also be applied to how shame

influences disclosures. More research is warranted regarding rape myth acceptances and how beliefs may influence someone from disclosing sexual assault.

The fifth hypothesis predicted that rape myth acceptances and shame would differ significantly among civilian and military populations. There were significant differences between military and civilian populations, with military individuals having higher rape myth acceptances towards men and women. This finding is consistent with the current literature even though there is limited research in the area. Current research has investigated rape myth acceptances in institutions like fraternities and military academies. These findings suggest that these institutions and organizations that value hypermasculine ideals and denounce femininity and are more likely to believe that if a woman is sexually assaulted, she more than likely deserved (Carrol et al., 2016). When considering military culture, these ideals of hypermasculinity and toxic masculinity are likely to have a great influence on how sexual assault is viewed with their female counterparts and even their male counterpart. Other research suggests when men are the victims of sexual assault, oftentimes it can be looked at as less severe compared to women (Davies & Rogers, 2012). This idea could likely be found in both military and civilian populations. There is an abundance of research on how sexual assault impacts women and the implications on how that impacts their psychopathology, but more research needs to be done with male counterparts in both military and civilian populations to know more about psychopathologic outcomes.

Previously, the literature stated that shame is likely to cause individuals who've experienced sexual assault to be more withdrawn and choose to isolate (LaBash & Papa, 2014). In the military individuals who may have experienced sexual assault have more difficulties withdrawing from their environment and their peers especially if they live on the military base.

Those in the civilian population, depending on where and under what circumstances the assault happened, they are likely to have the ability to withdraw and be more avoidant compared to those in the military. Currently, there is no specific research in the literature that points out to comparing shame outcomes in different populations and who is likely to be more susceptible to greater shame outcomes.

A major limitation of the study was the sample size. Due to a small sample size, which resulted from a lack of power, it is difficult to generalize this information to military or civilian populations. For example, after conducting a post hoc power analysis for the first hypothesis, it was concluded that there was a 7% chance of obtaining a significant finding with a sample size of 24 and a medium effect size. Further demonstrating that by obtaining a larger sample size the likelihood of finding a significant result may increase. The sample was collected through social media, mainly Facebook and Reddit platforms. After looking at the sample size and separating the civilian and military sample, it can be concluded that collecting a sample size of civilians is more attainable than collecting a sample size of military individuals. When collecting data from military forums, there was some backlash, such as comments stating that "Our branch doesn't do that", regarding sexual assault. An alternate solution if this study were to be done again, would be directly contacting military outreach on Western Carolina University's campus or local veteran organizations. But due to the nature of the location of the university, it could also be potentially difficult to collect a large veteran population.

There were several limitations to the survey. A question regarding what branch the individual belonged to was asked to separate military individuals from civilian individuals. In future research, a question regarding if the individual is a civilian with no military experience should be included, to separate each group easily. Individuals who did not report service in the

Army, Marines, Air Force, Navy or Coast Guard were coded as civilians. Lastly, the study did not account for gender identity. To separate the sample by male and female the question, “What was the sex you were assigned at birth” was used. In the future, gender identity should be addressed and accounted for.

### **CONCLUSION**

This study investigated gender differences between men and women who have experienced military sexual trauma and PTSD severity. Along with exploring gender differences, it further investigated PTSD differences between military and civilian individuals who have experienced sexual trauma, disclosure outcomes between military and civilian individuals, how rape myth acceptances toward men and women and shame impacted disclosure outcomes and PTSD severity, and lastly, how rape myth acceptance toward men and women and shame differed between military and civilian populations.

Even though the sample size was relatively small, this research highlighted some important concerns pertaining to military population, such as how military culture influences disclosures and impacts sexual assault survivor’s well-being. Future research should further investigate how sexual assault toward men is viewed in hypermasculine organizations and institutions like the military. More research is warranted in areas regarding rape myth acceptance in both military and civilian populations and how these beliefs may impact factors such as disclosure outcomes, shame outcomes, and PTSD outcomes. Rape myth acceptances are likely to have a strong cultural component especially in the military due to its hypermasculine culture, further research on culture and rape myth acceptance should be explored in the future, specifically with a military sample. While this research did not make the expected contributions to the literature, it has opened an area in need of expansion. Further research in these areas can

contribute to how sexual assault survivors in both military and civilian populations can receive proper treatment and address barriers towards treatment.

## REFERENCES

- Anderson, R. E., Cahill, S. P., & Delahanty, D. L. (2016). The psychometric properties of the sexual experiences survey–short form victimization (SES-SFV) and characteristics of sexual victimization experiences in college men. *Psychology of Men & Masculinity*.
- Bash, H. L., & Papa, A. (2014). Shame and PTSD symptoms. *Psychological Trauma: Theory, Research, Practice, and Policy*, 6(2), 159-166.
- Budden, A. (2009). The role of shame in posttraumatic stress disorder: A proposal for a socio-emotional model for *DSM-5*. *Social Science & Medicine*, 69, 1032-1039.
- 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, 345-349.
- 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, 97-106.
- Carroll, M.H., Rosenstein, J.E., Foubert, J.D., Clark, M.D., & Korenman, L.M. (2016). Rape Myth Acceptance: A comparison of military service academy and civilian fraternity and sorority. *Military Psychology*.
- Castro, C.A., Kintzle, S., Schuyler, A.C., Lucas, C.L., & Warner, C.H. (2015). Sexual assault in the military. *Curr Psychiatry Rep*, 17:54.
- Davies, M., Gilston, J., & Rogers, P. (2012). Examining the relationship between male rape myth acceptance, female rape myth acceptance, victim blame, homophobia, gender roles, and ambivalent sexism. *Journal of Interpersonal Violence*, 27(14), 2807-2823.

- Decou, C., Kaplan, S.P. Spencer, J., & Lynch, S.M. (2018). Trauma-related shame, sexual assault severity, thwarted belongingness, and perceived burdensomeness among female undergraduate survivors of sexual assault. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*.
- Decou, C. R., Cole, T. T., Lynch, S. M., Wong, M. M., & Matthews, K. C. (2017). Assault-related shame mediates the association between negative social reactions to disclosure of sexual assault and psychological distress. *Psychological Trauma: Theory, Research, Practice, and Policy*, 9(2), 166-172.
- Estabrooks, E. (2013). The U.S. military culture: Why current and recommended policies aren't enough.
- Feiring, C. & Taska, L. (2005). The persistence of shame following sexual abuse: A longitudinal look at risk and recovery. *Child maltreatment*. 10. 337-49.
- Gaher, R.M., O'Brien, C., Smiley, P., & Hahn, A.M. (2014). Alexithymia, coping styles and traumatic stress symptoms in a sample of veterans who experienced military sexual trauma. *Stress and Health*, 32(1), 55-62.
- Hayes, A. F. (2017). Introduction to mediation, moderation, and conditional process analysis (2nd ed.). New York, NY: Guilford Press.
- Hlavka, H. R. (2016). Speaking of stigma and the silence of shame: Young men and sexual victimization. *Men and Masculinities* (Advance Online Publication), 20, 1–24.
- Holland, K. J., Rabelo, V. C., & Cortina, L. M. (2016). Collateral damage: Military sexual trauma and help-seeking barriers. *Psychology of Violence*, 6(2), 253-261.

- Holliday, R., Holder, N., & Surís, A. (2018). Reductions in self-blame cognitions predict PTSD improvements with cognitive processing therapy for military sexual trauma-related PTSD. *Psychiatry Research, 263*, 181-184.
- Hoyt, T., Rielage, J. K., & Williams, L. F. (2011). Military sexual trauma in men: A review of reported rates. *Journal of Trauma and Dissociation, 12*(3), 244-260.
- Juan, M.J., Nunnink, S.E., Butler, E.O., & Allard, C.D., (2017). Gender role stress mediates depression among veteran men with military sexual trauma, *Psychology of Men and Masculinity, 18*(3), 243-250.
- Kintzle, S., Schuyler, A.C., Ray-Letourneau, D., Ozuna, S.M., Munch, C., Xintarianos, E.,...Castro, C.A. (2015). Sexual trauma in the military: Exploring PTSD and mental health care utilization in female veterans. *Psychological Services, 12*(4), 394-401.
- Koss, M.P. Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., Ullman, S., West, C., & White, J. (2006). The Sexual Experiences Short Form Victimization (SES-SFV).
- Logan, T.K., Evans, K., Stevenson, E., & Jordan, C.E. (2005). Barriers to services for rural and urban survivors of rape. *Journal of Interpersonal Violence, 20*, 591-616.
- Logan, T.K., Stevenson, E., Evans, L., & Leukefled, 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*, 37-62.
- Lonsway, K., (1999). Illinois Rape Myth Acceptance Scale [Database record]. Retrieved from PsycTESTs.
- Maguen, S., Cohen, B., Ren, L., Bosch, J., Kimerling, R., & Seal, K. (2012). Gender differences in military sexual trauma and mental health diagnoses among Iraq and Afghanistan veterans with posttraumatic stress disorder. *Women's Health Issues, 22*(1), 61-66.

- Meade, A.W., & Craig, S.B. (2012). Identifying careless responses in survey data. *Psychological methods, 17* 3, 437-455.
- Müller, J., Beauducel, A., Raschka, J., & Maercker, A. (2000). Disclosure of trauma questionnaire.
- O'Brien, C., Gaher, R.M., Pope, C., & Smiley, P. (2008). Difficulty identifying feelings predicts the persistence of trauma symptoms in a sample of veterans who experienced military sexual trauma. *Journal of Nervous and Mental Disease, 196*, 252-255.
- O'Brien, C., Keith, J., & Shoemaker, L. (2015). Don't tell: Military culture and male rape. *Psychological Services, 12*(4), 357-365.
- Øktedalen, T., Hagtvet, K.A., Hoffart, A., Langkaas, T. F., & Smucker, M., (2014). The trauma related shame inventory: Measuring trauma-related shame among patients with PTSD. *Journal of Psychopathology and Behavioral Assessment, 36*(4), 600-615.
- Payne, D., Lonsway, K., & Fitzgerald, L. (1999). Rape myth acceptance: Exploration of its structure and its measurement using the Illinois Rape Myth Acceptance Scale. *Journal of Research in Personality, 33*, 27-68.
- Sable, M. R., Danis, F., Mauzy, D. L., & Gallagher, S. K. (2006). Barriers to reporting sexual assault for women and men: Perspectives of college students. *Journal of American College Health, 55*(3), 157-162.
- Stander, V. A., & Thomsen, C. J. (2016). Sexual harassment and assault in the U.S. military: A review of policy and research trends. *Military Medicine, 181*(1S), 20-27.
- Street A. & Stafford, J. (2004). Military sexual trauma: Issues in caring for veterans. In National Center for Post-Traumatic Stress Disorder & Walter Reed Army Medical Center, *Iraq War clinician guide* (2<sup>nd</sup> ed.).

- Suarez, E. & Gadalla, T.M. (2010). Stop blaming the victim: A meta-analysis on rape myths. *Journal of Interpersonal Violence, 25*(11), 2010-2035.
- Surís, A., Lind, L., Kashner, T. M., & Borman, P. D. (2007). Mental health, quality of life, and health functioning in women veterans. *Journal of Interpersonal Violence, 22*(2), 179-197.
- Voller, E., Polusny, M.A., Noorbaloochi, S., Street, A., Grill, J., & Murdoch. (2015). Self-efficacy, male rape myth acceptance, and devaluation of emotions in sexual trauma sequelae: Findings from a sample of male veterans. *Psychological Services, 12*(4), 420-427.
- Walfield, S.M. (2018). “Men cannot be raped”: Correlates of male rape myth acceptance. *Journal of Interpersonal Violence.*
- Weathers, F.W., Litz, B.T., Keane, T.M., Palmieri, P.A., Marx, B.P., & Schnurr, P.P. (2013). The PTSD Checklist for *DSM-5* (PCL-5).
- Weiss, K. G. (2010). Too ashamed to report: Deconstructing the shame of sexual victimization. *Feminist Criminology, 5*(3), 286–310.
- Wilson, L. C. (2018). The Prevalence of Military Sexual Trauma: A Meta-Analysis. *Trauma, Violence, & Abuse, 19*(5), 584–597.
- Wolitzky-Taylor, K. B., Resnick, H. S., Amstadter, A. B., Mccauley, J. L., Ruggiero, K. J., & Kilpatrick, D. G. (2011). Reporting rape in a national sample of college women. *Journal of American College Health, 59*(7), 582-587.

**APPENDIX A**

**Table 1.**

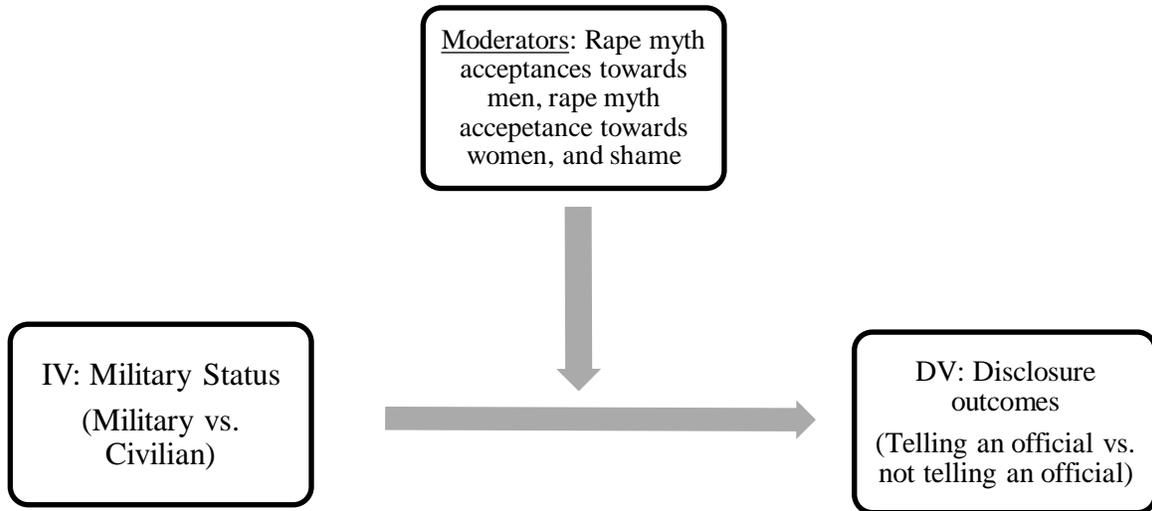
*Demographic information*

	<i>N</i> = 137	
	<i>n</i>	%
Military	39	28.5
Navy	26	19
Army	8	5.8
Airforce	2	1.5
Marines	2	1.5
Military active status		
Active duty	34	24.8
Retired	4	2.9
Reserves	1	.7
Civilians	98	71.5
Gender		
Female	108	78.8
Male	29	21.2
Attended counseling or therapy in the past 6 months		
Yes	50	36.5
No	87	63.5
Have you ever attended therapy		
Yes	99	72.3
No	38	27.7

## Appendix B

**Figure 1.**

*Moderation model 1*



APPENDIX C

Table 2.

*Standard multiple regression*

	<i>b</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Step 1					
Constant	16.25	11.19		1.452	.152
Rape myth acceptance toward men	-.672	.436	-.285	-1.543	.128
Rape myth acceptance toward women	.190	.181	.194	1.045	.300
Shame	3.017	.456	.640	6.612	<.001

*Notes:* PTSD is the dependent variable

Table 3.

*Standard multiple regression*

	<i>b</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Step 1					
Constant	.158	.107		1.485	.141
Rape myth acceptance toward men	-.002	.004	-.103	-.575	.567
Rape myth acceptance toward women	.000	.001	.059	.323	.747
Shame	-.004	.004	-.098	-1.003	.318

*Notes:* Disclosure is the dependent variable

**APPENDIX D**

Table 4

*Correlations matrices for regression analyses*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5.
1. Disclosure	.08	.25	-				
2. PTSD	33.41	25.43	.07	-			
3. Rape myth acceptance toward men	44.85	11.41	-.06	-.17	-		
4. Rape myth acceptance toward women	101.43	28.04	-.03	-.11	.85**	-	
5. Shame	9.10	5.10	-.10	.64**	-.11	-.19*	-

*Notes:* \*  $p < .05$ , \*\*  $p < .01$

**APPENDIX E**  
Demographic Information Sheet

Please complete the following information about yourself:

Age (required to answer):

Ethnicity (choose all that apply):

- Black or African American
- Hispanic, Latinx, or Spanish origin
- White
- Asian
- American Indian or Indigenous or Alaska Native
- Middle Eastern or North African
- Native Hawaiian or Other Pacific Islander
- Open Option: \_\_\_\_\_

Please indicate your highest attained level of education obtained:

- Less than a High School Diploma
- High School Diploma or GED equivalent
- Associates Degree or Certification (Technical College)
- Bachelor's degree
- Master's or Other Professional Degree
- Doctorate degree

What was your personal income in the past year?

- 10,000 or less
- 10,000-20,000
- 20,000-35,000
- 35,000-60,000
- 60,000- 90,000
- 90,000- 200,000
- Over 200,000

What is your current religious affiliation (check all that apply):

- Catholic
- Jewish
- Protestant (e.g., Baptist, Methodist, Lutheran, etc.)
- Hindu
- Buddhist
- Muslim
- Mormon
- Jehovah Witness
- Scientologist
- Agnostic
- Atheist/Non-theist/Secular/Humanist
- Spiritual but no formal religion
- Open Option: \_\_\_\_\_

What was the sex you were assigned at birth (sometimes referred to “biological sex” or “sex you were born with”)

\_\_\_\_\_ Male

\_\_\_\_\_ Female

\_\_\_\_\_ Intersex

What is your gender identity/with which of these do you identify? (Select all that apply)

\_\_\_\_\_ Man

\_\_\_\_\_ Woman

\_\_\_\_\_ Trans/Transgender

\_\_\_\_\_ Gender Queer

\_\_\_\_\_ Gender Non-Conforming

\_\_\_\_\_ Gender Fluid

\_\_\_\_\_ Gender Non-Binary

\_\_\_\_\_ Gender Expansive

\_\_\_\_\_ Open Option: \_\_\_\_\_

How would you identify your sexual orientation? With which one of these do you identify?

(Select all that apply)

\_\_\_\_\_ Straight / Heterosexual

\_\_\_\_\_ Lesbian

\_\_\_\_\_ Gay

Bisexual

Pansexual

Asexual

Queer

Questioning

Open Option: \_\_\_\_\_

Have you ever served in any of these military branches (select all that apply?)

Army

Air Force

Marines

Navy

Coast Guard

Select one that applies to you:

Active Duty

Reserves

National Guard

Retired

Are you still currently serving in the military?

Yes

No

What is or was your highest rank achieved in military service?

Enlisted

Warrant Officer

\_\_\_\_ Officer

How long was your military service (required to answer):

Open option: \_\_\_\_

Are you currently attending counseling or therapy or have you attended counseling in the past 6 months?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

Have you ever attended therapy or counseling?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

**APPENDIX F**

Sexual Experience Survey-Short form Victimization

The following questions concern sexual experiences that you may have had that were unwanted. The items ask about consent. “Without consent” means the person did something without you saying they could or without you wanting them to. We know that these are personal questions, so we do not ask your name or other identifying information. Your information is completely confidential. We hope that this helps you to feel comfortable answering each question honestly. Please select how many times any of these things happened to you after the age of 18.

Did one of these things happen to you when you were:	18 years or older
1. Someone fondled, kissed, or rubbed up against the private areas of your body (lips, chest, crotch or butt) or removed some of your clothes without my consent ( <i>but did not attempt sexual penetration</i> )	0 1 2 3 4 5 +
2. Someone had oral sex with you or made you have oral sex with them without your consent	0 1 2 3 4 5 +
3. Someone inserted their penis, fingers or objects into your private parts without your consent	0 1 2 3 4 5 +
4. Even though it didn't happen, someone TRIED to have oral sex with you or make you have oral sex with them without your consent	0 1 2 3 4 5 +
5. Even though it didn't happen, someone TRIED to insert their penis, fingers or objects into your private parts without your consent	0 1 2 3 4 5 +

For any of the above, has anyone ever done one of these things to you by:

a. Telling lies, threatening to end the relationship, threatening to spread rumors about you, making promises I knew were untrue, or continually verbally pressuring you after you said you didn't want to.

- Yes
- No

b. Showing displeasure, criticizing your sexuality or attractiveness, getting angry but not using physical force, after you said you didn't want to.

- Yes
- No

c. Taking advantage of you when you were too drunk or out of it to stop what was happening.

- Yes
- No

d. Threatening to physically harm you or someone close to you.

- Yes
- No

e. Using force, for example holding you down with their body weight, pinning my arms, or having a weapon.

- Yes
- No

What was the sex or gender of the person or persons who did these things to you? Were they (mark all the apply):

- The same gender as you
- A different gender than you
- N/A – I have not experienced any of these

If you experienced any of these, who did them to you? (Mark all that apply)

- A stranger
- A parent
- Another relative

A friend

An acquaintance (person you know, but not well)

A romantic partner (e.g., boyfriend, girlfriend, partner, spouse, etc)

Other: \_\_\_\_\_

**Pop up questions:**

Did this happen to you:

- While serving in the military
- Outside of serving in military
- Both

Did you report this to an official?

- Yes (e.g., police officer, chain of command, military police)
- No

Did you seek help from a medical professor?

- Yes
- No

**APPENDIX G**  
PSTD Checklist for DSM-5

Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience. Keeping your unwanted sexual experience reported on the previous page in mind, please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

0 = Not at all, 1 = A little bit, 2 = Moderately, 3 = Quite a bit, 4 = Extremely

In the past month, how much were you bothered by:

1. Repeated, disturbing dreams of the stressful experience?

0            1            2            3            4

2. Repeated, disturbing dreams of the stressful experience?

0            1            2            3            4

3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?

0            1            2            3            4

4. Feeling very upset when something reminded you of the stressful experience?

0            1            2            3            4

5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?

0            1            2            3            4

6. Avoiding memories, thoughts, or feelings related to the stressful experience?

0            1            2            3            4

7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?

0            1            2            3            4

8. Trouble remembering important parts of the stressful experience?

0            1            2            3            4

9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?

0            1            2            3            4

10. Blaming yourself or someone else for the stressful experience or what happened after it?

0            1            2            3            4

11. Having strong negative feelings such as fear, horror, anger, guilty, or shame?

0            1            2            3            4

12. Loss of interest in activities that you used to enjoy?

0            1            2            3            4

13. Feeling distant or cut off from other people?

0            1            2            3            4

14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?

0            1            2            3            4

15. Irritable behavior, angry outbursts, or acting aggressively?

0            1            2            3            4

16. Taking too many risks or doing things that could cause you harm?

0            1            2            3            4

17. Being “super alert” or watchful or on guard?

0            1            2            3            4

18. Feeling jumpy or easily startled?

0            1            2            3            4

19. Having difficulty concentrating?

0            1            2            3            4

20. Trouble falling or staying asleep?

0            1            2            3            4





## APPENDIX I

### Illinois Rape Myth Acceptance Scale

Instructions: Below is a list of rape myths. Please answer to the best of your ability. The rating scale consists of a 7-point Likert scale with being 1 = not at all agree and 7 = very much agree.

1. If a woman is raped while she is drunk, she is at least somewhat responsible for letting things get out of control.

1                    2                    3                    4                    5                    6                    7

2. Although most women wouldn't admit it, they generally find being physically forced into sex a real "turn on".

1                    2                    3                    4                    5                    6                    7

3. When men rape, it is because of their strong desire for sex.

1                    2                    3                    4                    5                    6                    7

4. If a woman is willing to "make out" with a guy, then it's no big deal if he goes a little further and has sex.

1                    2                    3                    4                    5                    6                    7

5. Women who are caught having an illicit affair sometimes claim that it was rape.

1                    2                    3                    4                    5                    6                    7

6. Newspapers should not release the name of a rape victim to the public.

1                    2                    3                    4                    5                    6                    7

7. Many so-called rape victims are actually women who had sex and "changed their minds" afterwards.

1                    2                    3                    4                    5                    6                    7

8. Many women secretly desire to be raped.

1                    2                    3                    4                    5                    6                    7

9. Rape mainly occurs on the “bad” side of town.

1                    2                    3                    4                    5                    6                    7

10. Usually, it is only women who do things like hang out in bars and sleep around that are raped.

1                    2                    3                    4                    5                    6                    7

11. Most rapists are not caught by the police.

1                    2                    3                    4                    5                    6                    7

12. If a woman doesn’t physically fight back, you can’t really say that it was rape.

1                    2                    3                    4                    5                    6                    7

13. Men from nice middle-class homes almost never rape.

1                    2                    3                    4                    5                    6                    7

14. Rape isn’t as big a problem as some feminists would like people to think.

1                    2                    3                    4                    5                    6                    7

15. When women go around wearing low-cut tops or short skirts, they’re just asking for trouble.

1                    2                    3                    4                    5                    6                    7

16. Rape accusations are often used a way of getting back at men.

1                    2                    3                    4                    5                    6                    7

17. A rape probably didn’t happen if the woman has no bruises or marks.

1                    2                    3                    4                    5                    6                    7

18. Many women find being force to have sex very arousing.

1                    2                    3                    4                    5                    6                    7

19. If a woman goes home with a man she doesn't know, it is her own fault if she is raped.

1                    2                    3                    4                    5                    6                    7

20. Rapists are usually sexually frustrated individuals.

1                    2                    3                    4                    5                    6                    7

21. All women should have access to self-defense classes.

1                    2                    3                    4                    5                    6                    7

22. It is usually only women who dress suggestively that are raped.

1                    2                    3                    4                    5                    6                    7

23. Some women prefer to have sex forced on them so they don't have to feel guilty about it.

1                    2                    3                    4                    5                    6                    7

24. If the rapist doesn't have a weapon, you really can't call it rape.

1                    2                    3                    4                    5                    6                    7

25. When a woman is a sexual tease, eventually she is going to get into trouble.

1                    2                    3                    4                    5                    6                    7

26. Being raped isn't as bad as being mugged or beaten.

1                    2                    3                    4                    5                    6                    7

27. Rape is unlikely to happen in the woman's own familiar neighborhood.

1                    2                    3                    4                    5                    6                    7

28. In reality, women are almost never raped by their boyfriends.

1                    2                    3                    4                    5                    6                    7

29. Women tend to exaggerate how much rape affects them.

1                    2                    3                    4                    5                    6                    7

30. When a man is very sexually aroused, he may not even realize that the women is resisting.

1                    2                    3                    4                    5                    6                    7

31. A lot of women lead a man on and then they cry rape.

1                    2                    3                    4                    5                    6                    7

32. It is preferable that a female police officer conduct the questioning when a women reports a rape.

1                    2                    3                    4                    5                    6                    7

33. A lot of times, women who claim they were raped just have emotional problems.

1                    2                    3                    4                    5                    6                    7

34. If a woman doesn't physically resist sex- even when protesting verbally-it really can't be consisted rape.

1                    2                    3                    4                    5                    6                    7

35. Rape almost never happens in the woman's own home.

1                    2                    3                    4                    5                    6                    7

36. A woman who "teases" men deserves anything that might happen.

1                    2                    3                    4                    5                    6                    7

37. When women are raped, it's often because the way they said "no" was ambiguous.

1                    2                    3                    4                    5                    6                    7

38. If a woman isn't a virgin, then it shouldn't be a big deal if her date forces her to have sex.

1                    2                    3                    4                    5                    6                    7

39. Men don't usually intent to force sex on a woman, but sometimes they get too sexually carried away.

1                    2                    3                    4                    5                    6                    7

40. This society should devote more effort to preventing rape.

1                    2                    3                    4                    5                    6                    7

41. A woman who dress in skimpy clothes should not be surprised if a man tries to force her to have sex.

1                    2                    3                    4                    5                    6                    7

42. Rape happens when a man's sex drive gets out of control.

1                    2                    3                    4                    5                    6                    7

43. A women who goes to the home or apartment of a man on the first date is implying that she want to have sex.

1                    2                    3                    4                    5                    6                    7

44. Many women actually enjoy sex after the guy uses a little force.

1                    2                    3                    4                    5                    6                    7

45. If a woman claims to have been raped but has no bruises or scrapes, she probably shouldn't be taken too seriously.

1                    2                    3                    4                    5                    6                    7

46. Please answer 4 for this option.

1                    2                    3                    4                    5                    6                    7

## APPENDIX J

### Male Rape Myth Acceptance

Instructions: Below is a list of male rape myths. Please answer to the best of your ability. The rating scale consists of a 6-point Likert scale with being 1 = strongly disagree and 6 = strongly agree.

1. Women who rape men are sexually frustrated individuals

1                    2                    3                    4                    5                    6

2. The extent of a man's resistance should be a major factor in determining whether he was raped.

1                    2                    3                    4                    5                    6

3. I would have a hard time believing a man who told me that he was raped by a woman.

1                    2                    3                    4                    5                    6

4. Male rape is usually committed by homosexuals.

1                    2                    3                    4                    5                    6

5. A man can enjoy sex even if it is being forced upon him.

1                    2                    3                    4                    5                    6

6. Most men would not enjoy being raped by a woman.

1                    2                    3                    4                    5                    6

7. Most men who are raped by a woman are very upset by the incident.

1                    2                    3                    4                    5                    6

8. Most men who are raped by a woman are somewhat to blame for not escaping or fighting off the woman.

1                    2                    3                    4                    5                    6

9. Many men claim rape if they have consented to homosexual relations but have changed their minds afterward.

1                    2                    3                    4                    5                    6

10. Any healthy man can successfully resist a rapist if he really wants to.

1                    2                    3                    4                    5                    6

11. If a man obtained an erection while being raped, it probably means that he started to enjoy it.

1                    2                    3                    4                    5                    6

12. It is a terrible experience for a man to be raped by a woman.

1                    2                    3                    4                    5                    6

13. Most men who are raped by a woman are somewhat to blame for not being more careful.

1                    2                    3                    4                    5                    6

14. If a man engages in necking and petting and he lets things get out of hand, it is his own fault if his partner forces sex on him.

1                    2                    3                    4                    5                    6

15. No self-respecting man would admit to being raped.

1                    2                    3                    4                    5                    6

16. If a man told me that he had been raped by another man, I would suspect that he is homosexual.

1                    2                    3                    4                    5                    6

17. Men who parade around nude in a locker room are asking for trouble.

1                    2                    3                    4                    5                    6

18. A man who has been raped has lost his manhood.

1                    2                    3                    4                    5                    6

19. Male rape is more serious when the victim is heterosexual than when the victim is homosexual.

1                    2                    3                    4                    5                    6

20. Most men who have been raped have a history of promiscuity.

1                    2                    3                    4                    5                    6

21. Most men who are raped by a man are somewhat to blame for not escaping or fighting off the man.

1                    2                    3                    4                    5                    6

22. A man who allows himself to be raped by another man is probably homosexual.

1                    2                    3                    4                    5                    6

