Gender differences in sexual assault and PTSD stigma

Megan Kennedy

University of Northern Iowa

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Gender Differences in Sexual Assault and PTSD Stigma

A Thesis Submitted
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Megan Kennedy
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Date Dr. Elizabeth Lefler, Honors Thesis Advisor, Psychology Department

Date Dr. Jessica Moon, Director, University Honors Program
Abstract

Sexual assault is a significant problem in our society, and is experienced differently by male and female sexual assault victims. Stigma, or blame and negative attitudes toward an individual or group, is frequently experienced by sexual assault victims and reinforced through media, culture, and rape/sexual assault myths. Sexual assault and experiences of stigma influence the mental health problems victims face after assault, including Post-Traumatic Stress Disorder (PTSD). Overall, insufficient research has been conducted on the differing experiences of stigma related to male and female sexual assault victims. In order to separate stigma attributions based on sexual assault status and PTSD, the current study explored both. Specifically, four vignettes were used: a male victim with a diagnosis of PTSD, a male victim who was resilient, a female victim with a diagnosis of PTSD, or a female victim who was resilient. Stigma was assessed using the MISS and MIAS questionnaires. It was hypothesized that male sexual assault victims would elicit more stigma than female characters, and that characters with PTSD would elicit more stigma than characters who are resilient. It was also hypothesized that there would be an interaction effect in which male characters with PTSD would elicit the most stigma. With 214 participants, significant main effects were found with the MISS, lending partial support for the hypotheses that male sexual assault victims elicit more stigma than females, and individuals with PTSD elicit more stigma than those who are resilient following trauma. Implications and future directions are discussed.

Keywords: stigma, trauma, PTSD, gender differences, sexual assault, rape, resilience
Gender Differences in Sexual Assault and PTSD Stigma

Sexual assault is prevalent in our society, and victims often face blame and negative attitudes toward an individual or group, defined here as stigma. Sexual assault and experiences of stigma influence the mental health problems victims face after assault, including Post-Traumatic Stress Disorder (PTSD). Insufficient research has been conducted on the differing experiences of stigma related to male and female sexual assault victims. The purpose of this study is to analyze the varying levels of stigma elicited by male sexual assault victims compared to females, and victims with PTSD compared to those who are resilient. Prevalence and risk factors for sexual assault are discussed, as well as Post-Traumatic Stress Disorder, stigma related to sexual assault, myths about sexual assault, and resilience.

Sexual Assault Prevalence

Sexual assault, here defined as any sexual contact without consent, is a significant problem in our society. Sexual assault includes behaviors such as rape, incest, stranger assault, and intercourse through intentional intoxication. One out of six men and one out of four women experience attempted or completed sexual assault in their lifetime (Davies, 2002). These numbers are underreported, and not indicative of the true scale of this issue, with estimates of only between 19% and 47% of rape (one kind of sexual assault) being reported (Davies, 2002; Carretta & Burgess, 2013). Low levels of reporting extend to bystanders of sexual violence, and when a victim of sexual assault has been assaulted and does not report the incident, individuals may assume that it is not their duty to intervene and that someone else will jump in to help (i.e., the bystander effect). Nicksa (2014), using vignettes, analyzed the likelihood of a bystander to report various crimes (i.e., theft, physical assault, sexual assault) and found that physical assault
was the most likely to be reported, while sexual assault was the least likely to be reported. This gives an indication of the seriousness society assigns each of these crimes. Women were more likely to report sexual assault than men, and strangers were more likely to report the crime than close friends of the victim. Ambiguity decreases the likelihood of an individual reporting a crime, whereas anonymity may increase the likelihood of intervention (Nicksa, 2014). Sexual assault is less likely to be reported by a bystander in relation to other forms of assault, potentially indicating a societal belief that sexual assault is less serious than other crimes.

Sexual assault can happen to anyone regardless of age, sexual orientation, gender, race, situation, or class, but has higher prevalence rates in certain groups. Some of these groups include women, people of color, members of the military, and members of the lesbian, gay, bisexual, and transgender (LGBT*) community (McConkey, Sole, & Holcomb, 2001; Tiet, Leyva, Blau, Turchik, & Rosen, 2015). Sexual assault is slightly more prevalent in the LGBT* community, and these individuals have increased needs for support because of their increased experiences of stigma related to their sexual orientation or gender identity (Davies, Pollard, & Archer, 2006). Gay and bisexual men are also assaulted at much higher rates than straight men (Hines, Armstrong, Reed, & Cameron, 2012). It is important to understand the increased prevalence rates in certain groups, as they may need additional support and resources as well.

In addition to increased prevalence in these groups, sexual assault is a particular concern for college students. Alcohol, freedom from parents, gendered sexual expectations, lack of sex education, and a pervasive party atmosphere increases susceptibility of college students (Muehlenhard, Humphreys, Jozkowski, & Peterson, 2016). Muehlenhard and colleagues (2016) found that college survey participants had varied definitions of consent, and miscommunication
and coercion are prevalent issues in sexual situations, which could contribute to the increased risk for college students. Female college students are particularly at risk, as they are twice as likely to be assaulted in the first two months of college than at any other point in their college career, and at least half of all college women experience some unwanted sexual activity while in college (Hines et al., 2012). One-fifth of female college students are sexually assaulted while in college, indicating that increased prevention efforts and resources should be focused on college student populations.

Male sexual assault results in lower levels of reporting and help-seeking behaviors when compared to female sexual assault. Seeking help after an assault can be difficult, and tends to be lower for male victims of sexual assault, with one study of male participants citing that only 29% of male victims sought out medical or psychological help after being sexually assaulted (Davies, 2002). The decrease in help-seeking for male victims may be indicative of the stigma male victims face post-assault. There is a lack of research on the experiences of male victims, as many individuals believe it is okay for women to coerce men into sex, and that men cannot be sexually assaulted by women (Ralston, 2012). This belief that men are immune from sexual assault puts them in a dangerous situation; not only for believing it will never happen, but by feeling ashamed and believing they are the only men who have had this experience, leading to increased issues for male sexual assault victims. When victimized in college, men face even greater obstacles to help-seeking after an assault. Male victims face significant challenges in seeking help in our society, and many men choose not to report, which can lead to significant behavioral and psychological issues.

**Sexual Assault Risk Factors**
Several risk factors for sexual assault exist, and vary between males and females, as male and female victims tend to have differing experiences related to sexual assault. Risk factors for adult sexual assault include but are not limited to: being a female, being divorced, having prior childhood sexual and physical abuse, low income, and being a younger age (Elliott, Mok, & Briere, 2004). Women are more likely to experience most types of interpersonal violence than men, with men only more likely to experience physical abuse (Elliott et al., 2004). While men are less likely to experience sexual violence, men are more likely to experience behavioral problems after an assault. Experiences of stigma may be one reason that male victims are more likely to experience behavioral problems after the assault, such as suicidality, violence, and substance abuse (Elliott et al., 2004). Research suggests that college men are more likely to be assaulted if they are non-white, a college athlete, or an only child (Hines et al., 2012).

Women are far more likely to seek out medical services or report sexual assault. While female victims are more likely to seek out services, male sexual assault victims experience greater physical injuries and mental illnesses than female victims. While male sexual assault victims experience greater physical injuries, female victims report experiencing more types of sexual assault (Street, Gradus, Stafford, & Kelly, 2007). It is important to understand the differences based on gender that occur in responses to sexual violence, with research supporting the belief that significant gender differences exist.

The experiences of male and female victims differ in many ways, as male victims are more likely to have a disability or anal injuries after the assault, and are more likely to be assaulted by more than one assailant (McLean, 2013). Additionally, men may respond differently than women after sexual assault victimization; they are more likely to experience depression and
hostility post-assault (Ralston, 2012). It generally takes men longer to access counseling services than women, with an average of 16 years to seek services (McLean, 2013). Stigma may be one reason men are unlikely to seek help, even after attacks from multiple perpetrators, as men are only likely to seek services when there has been considerable physical trauma (Elliott et al., 2004). The negative societal responses to male sexual assault leads to a lack of reporting among male victims, as well as a lack of help-seeking behaviors after an assault.

Sexual assault experiences frequently occur while one or both parties are under the influence of alcohol. Hines and colleagues (2012) found that 86% of college men who have been raped were drinking when it happened, and 70% of women were drinking when they were assaulted. One study found that the amount of alcohol use for the victim is predictive, as those who use alcohol heavily experience sexual assault at a higher rate (Hines et al., 2012). Other predictive factors include negative experiences like stalking, intimate partner violence, and domestic violence, with prior victimization increasing the likelihood for later victimization (Hines et al., 2012). Living on campus increases the likelihood of sexual assault, and 90% of the time when sexual assault happens on campus it occurs in a residence hall (Hines et al., 2012). These victim statistics in no way place blame on the victim or imply that their behaviors are to blame for sexual assault, but they are important to consider.

Despite the blame often associated with sexual assault victims, the perpetrator is always at fault. Because there are misconceptions related to cause and motive of sexual assault, it is important to note that sexual assault is typically perpetrated by men and driven by anger and a desire for power and control over another person (Miller, 2013; Chapleau & Oswald, 2010; Gotovac & Towson, 2015). Psychological characteristics linked to self-reported sexual
aggression include impulsivity, dominance, aggression, and desire for social acceptance (Begany & Milburn, 2002). Begany and Milburn (2002) also found that sexual aggression was linked to authoritarianism, a personality characteristic that results in an individual displaying superiority, disrespect, and resentment toward women. Authoritarianism predicts acceptance of sexual assault/rape myths (e.g. “she led him on by drinking,” “her outfit shows she wanted it”), which is a significant problem in our society that in many ways gives individuals excuses to perpetrate these crimes.

Stigma and sexual assault myths can lead individuals to stay silent, with significant consequences. Mackey and colleagues (1992) found that undisclosed sexual assault often meant unresolved trauma and an unreported crime, which was more likely to lead to more persistent and severe symptoms. More than half of sexual assault survivors (56%) also had experienced childhood sexual abuse (Mackey et al., 1992). This is typical, as once someone is assaulted, they are more likely to experience sexual assault again, with male sexual assault victims experiencing an average of 2.88 assaults and female sexual assault victims experiencing an average of 3.44 assaults (Hines et al., 2012).

**Sexual Assault Myths**

The prevalence of sexual assault may indicate the lack of education, pervasive rape/sexual assault myths, gendered expectations, pressure for hyper-masculinity, and low importance society places on these issues. Rape/sexual assault myths are cultural beliefs that include statements/beliefs that victims cause rape through their alcohol use or clothing choices, that men are too strong to be assaulted, that many sexual assault claims are fabricated and falsely reported, and that physiological responses to the assault denote consent. The media can
contribute to these rape myths by covering stories with stereotypes as headlines, using some of these rape myths in their reporting of the crime, and referring to sexual assault as an individual problem rather than a societal problem (McDonald & Charlesworth, 2012). The response of media influences the continuation of rape myths in our society, as sexual assault is misrepresented through stereotypes and referring to sexual assault as an individual issue rather than a societal problem.

Sexual assault/rape myths justify the continuation and normalization of sexual assault and male aggression in our society, and individuals who endorse toxic masculinity, rape myths, and conservative views toward sex are more likely to perpetrate sexual assault (Deitz, Williams, Rife, & Cantrell, 2015; Begany & Milburn, 2002). Rape myth acceptance is somewhat dependent on gender, as males have been found to have higher acceptance of rape myths and a higher likelihood to blame the victim and sympathize with the perpetrator (Clarke & Stermac, 2011). Rape myths lead to stigmatization and barriers to reporting, because men who are victimized may feel no one will believe them or they will be seen as less masculine (Ralston, 2012). Rape/sexual assault myths are detrimental to sexual assault victims, culture, and sexual assault education and services, and may lead to increased prevalence of sexual assault as it shames victims into silence.

**Experiences of Stigma**

One of the social consequences of sexual assault victimization is stigma, which can be defined as the “negative stereotyping and separation from groups who are labeled as different” (Clair, Daniel, & Lamont, 2016, p. 1), and can limit the availability of resources for individuals and groups. Some researchers posit that female victims of sexual assault experience stigma at a
higher rate than male victims, especially if they were dressed provocatively, drinking alcohol at the time, considered less 'respectable,' or did not physically resist their attacker; while male victims are stigmatized for a “lack of masculinity” and appearing “weak” (Menaker & Franklin, 2015). Stigma/blame is prevalent in other types of sexual crimes, with experiences of blame higher for sex trafficking victims and lowest for intimate partner violence (Menaker & Franklin, 2015). Stigma is a significant social consequence of victimization, and experiences of stigma can lead to a lack of help-seeking and decreased likelihood to report sexual assault.

Experiences of stigma frequently result in negative consequences such as decreased social support and withdrawal, and can impact health, life satisfaction, and self-esteem (Deitz et al., 2015). Stigma can take the form of attributions of blame, forced or assumed separation from groups, or stereotyping the individual as ‘bad’ or ‘damaged.’ While sexual assault victimization can lead to stigma, stigma based on other factors (i.e., sexual orientation, race, presence of one or more disabilities or mental illnesses) can lead to an increased risk for sexual assault victimization (Ralston, 2012). If the stigma is internalized, it is harder to change and treat (Mackey et al., 1992). Experiencing stigma from others increases the likelihood of assault and the development of Post-Traumatic Stress Disorder (PTSD), and the reaction of others is one of the most important factors post-assault that predicts development of PTSD (Deitz et al., 2015). Deitz and colleagues (2015) studied 233 sexual assault victims, and found that self-stigma and public stigma were significantly and positively correlated with sexual assault severity, and self-stigma was significantly related to trauma symptoms. Internalizing stigma had a higher impact on severity of assault and trauma symptoms than did public stigma or cultural stereotypes (Deitz et
al., 2015). This has important implications, as decreasing self-stigma could lead to greater post-assault outcomes.

While sexual assault directed toward males is less common, men often face severe consequences, with stigma a key factor in the outcomes they face (Davies, 2002). In general, male perpetrators are blamed more than female perpetrators for sexual assault, and victims are blamed more if the assailant was of a gender the victim would normally be attracted to, as they are believed to have enjoyed the assault. Female victims generally receive more sympathy and less blame than male victims, but there is little research on this particular group of sexual assault victims (Davies et al., 2006; Davies, Austen, & Rogers, 2011). Research indicates that male victims may face increased blame and stigma.

Male victims often face increased experiences of stigma as compared to female victims. Davies et al., (2006) used a vignette design of a male character who had been sexually assaulted to assess stigma within a group of 161 college student participants. This showed the differences in both male and female participants toward male victims of sexual assault. Men tend to be more homophobic than women, and rated gay victims more negatively than heterosexual victims of sexual assault (Gotovac & Towson, 2015). Construction of masculinity differs along class, racial, and sexual orientation lines, and should be analyzed using an intersectional approach accounting for how each of these factors changes one’s experience of sexual assault victimization and stigma (Ralston, 2012). Ralston (2012), using a literature review, analyzed sexual assault issues that male sexual assault victims face. These differences affect one’s acceptance of myths surrounding sexual assault and stigmatization of victims. Male victims are affected differently by sexual assault because of differing beliefs about masculinity and vulnerability, and rape crisis
centers are typically not prepared to work with male victims, which is why continued research is necessary (Ralston, 2012). Male victims may not only face increased experiences of stigma, they also face barriers in seeking resources, as many rape crisis centers are not prepared to work with male victims.

Factors Contributing to Stigma

In understanding experiences of stigma, it is important to determine who is assigning stigma or blame to victims, and for what reasons. The defensive attribution hypothesis states that the more someone identifies with the victim, the more likely they will blame the assailant, but there has been little evidence to support this hypothesis (Kahn et al., 2011). Kahn and colleagues (2011) used vignettes that varied on assailant and victim gender to analyze this hypothesis using a group of 324 college student participants. They found that in sexual assault scenarios, women were more likely to place blame on the assailant and identify with the victim (regardless of gender), whereas men were more likely to identify with the assailant but not more likely to place blame on the victim (Kahn et al., 2011). The finding that women are more likely to identify with the victim, and men are more likely to identify with the assailant, is important for understanding why stigma may differ based on participant gender. Individuals tend to identify more with people they see as similar to them in both personality characteristics and gender, therefore it makes sense that women identified more with female victims as well as victims in general, as women are more likely to identify with passive traits. Men may be more likely to identify with the assailant potentially because they identify with the trait of power more closely than women do. One striking finding in this study was that only 18% of participants reported that the victim was not at fault for the assault, while the rest assigned stigma/blame to the victim (Kahn et al., 2011).
This study supports the notion that stigma and victim blaming are significant, as less than one-fifth of the sample reporting the victim was not at fault for their assault.

Stigma and guilt also led to a lack of reporting of sexual assault (Kahn et al., 2011). Individuals may assign stigma to victims differently based on both the victim and perpetrator gender, as well as previous sexual experience. Men tend to stigmatize and place more blame on victims who have had previous sexual experiences, and therefore assign less blame to the attacker (Davies et al., 2006). Likewise, victims experience less blame for their assault if they have had limited sexual experience (Gotovac & Towson, 2015). Prior sexual experience as well as victim and perpetrator gender may have a significant impact on stigma and blame associated with the victim, as well as reporting of sexual assault.

Male victims face unique challenges such as assumptions of homosexuality, assumed weakness/femininity because of the attack, and blame from family, friends, and even the police, especially when the perpetrator is female (Bullock & Beckson, 2011; Davies, 2002). This can lead to a lack of reporting the crime among male victims, as well as a dearth of services to assist male victims afterward. Physiological responses (i.e., erection, ejaculation) are often used in the court process to defend perpetrators and place blame on the male victim, despite the fact that physiological responses can occur without sexual pleasure (Bullock & Beckson, 2011). Davies (2002), through a review of previous literature, found that perceptions of victims depended on the victim’s sexual orientation as well as the perpetrator’s gender. One study found that when the vignette involved male perpetrators and victims, attributions of blame were higher for gay victims rather than heterosexual victims (Hines et al., 2012). Male and female victims have different experiences of stigma, which may be related to the higher level of focus in the media
and a greater number of services directed toward female victims (Davies, 2002). Attractive victims are viewed as more credible and deserving of sympathy, and typically have less experiences with stigma (Gotovac & Towson, 2015). Men blame normal weight victims with several previous partners more than overweight victims or those with fewer previous partners (Gotovac & Towson, 2015), and stigma affects male and female victims differently.

**Efforts to Reduce Stigma**

Stigma is detrimental to the outcomes a victim of sexual assault faces, and researchers do not currently have a good understanding of the gender differences in stigma or ways to limit stigma in sexual assault victims so they will be more likely to report. Clair and colleagues (2016) sought to determine the conditions that allow for reduction of stigma for individuals and groups. They found that constructing new images of individuals and groups by visible and high status individuals and strengthened by expert knowledge can help reduce stigma of individuals and groups. It will take media and societal outrage and attention to change the experiences of stigma faced by sexual assault victims. It is also important that when individuals do decide to report, they do not face stigmatization in the medical setting. McConkey and colleagues (2001) detail how to treat victims in the medical setting while avoiding biases and stigma. Stigmatization and victim blaming (i.e., “How drunk were you?” “Why didn’t you fight back?”) should be avoided at all costs in the medical setting as this can have an effect on the patient’s experience and decision to report (McConkey et al., 2001). While many studies report female victims experiencing stigma at higher rates, other studies link increased experiences of stigma to men because of the assumption of weakness and femininity of victims in a culture that prizes masculinity, and overall there is a lack of reliable research on this question (Ralston, 2012).
More research is necessary to understand the levels of stigma experienced by male and female victims.

**Post-Traumatic Stress Disorder (PTSD)**

Male and female victims of sexual trauma face a variety of psychological, physical, and social consequences, including PTSD. There is no one typical response to sexual assault victimization, with victims who experience symptoms displaying guilt, shame, helplessness, re-experiencing, anger, heightened sense of arousal, pessimism, distrust, and isolation (Deitz et al., 2015). Victims of sexual assault have higher levels of mental health problems than the general population, and those who have experienced stigmatization generally also have higher levels of depression (Mackey et al., 1992). In terms of psychological consequences, sexual assault victims most frequently face depression, anxiety, and PTSD (Carretta & Burgess, 2013), and adjustment to the sexual assault experience, if it ever happens, takes an average of four years (Mackey et al., 1992). Sexual assault victims face significant mental health issues, including development of PTSD.

PTSD is characterized by the following list of symptoms that must cause clinical impairment and be present for at least one month: experiencing a traumatic event, presence of intrusion symptoms (i.e., memories, flashbacks, dreams of the event), avoidance of stimuli related to the traumatic event, negative changes in mood/thoughts after the traumatic event, and changes in arousal and reactivity (i.e., hypervigilance, sleep disturbances, self-destructive behavior, irritable behavior; American Psychiatric Association, 2013). See Appendix A for the complete list of symptoms. PTSD is a common psychological consequence of sexual assault with between 16% and 60% of victims developing the disorder (Ullman & Peter, 2014). PTSD
diagnoses are often required for individuals to receive the level of services necessary, but unfortunately PTSD diagnosis frequently comes with significant stigma. In combat veterans, labels for individuals with PTSD included “violent,” “dangerous,” and “crazy,” and individuals with PTSD are frequently believed to be responsible for their condition by their peers (Mittal, 2013). Many individuals with PTSD reported avoiding seeking help to prevent stigma of a mental illness label, and had a hard time reintegrating after diagnosis. Caretta and colleagues (2013) found that individuals who experienced forcible rape had a much higher likelihood of developing PTSD than those who experienced other types of rape (i.e., pressured rape). While PTSD is generally believed to hold less stigma than other mental illness labels (e.g., schizophrenia; Ullman, & Peter-Hagene, 2014), stigma is a real problem facing those with PTSD diagnoses.

PTSD is widespread in sexual assault victims (Carretta & Burgess, 2013; APA, 2013), and stigma related to PTSD is a pervasive and detrimental problem in our culture. Increased education, income, and time since assault has taken place are all related to decreased PTSD symptoms (Ullman & Peter, 2014). Conversely, greater life threat and violence during the assault were found to be related to increased PTSD symptoms, but greater life threat was also related to more positive reactions from others, potentially because the victim is assumed to have experienced something deemed traumatic and this may elicit increased support. There are some racial differences in sexual assault, as this study found that black sexual assault victims experienced more positive reactions and less PTSD symptoms than white victims. Both positive and negative reactions to disclosure of assault are common, and influence the victim’s recovery and subsequent PTSD symptoms (which predicts later social reactions). Four-fifths or more of
sexual assault victims tell someone about their experience, and many face both positive and negative reactions. Ullman and Peter (2014) found that negative social reactions soon after the assault is related to increased PTSD symptoms, but this effect weakens over time. They also found that the number of positive reactions decreases over time, potentially because disclosures of the assault happen less frequently as time goes on (Ullman & Peter, 2014). Negative social reactions after an assault is related to increased PTSD symptoms, and PTSD may also be related to other negative consequences such as revictimization.

Research suggests that PTSD may be related to revictimization in sexual assault victims. Ullman and Peter (2014) conducted research to determine whether PTSD symptoms were related to revictimization in sexual assault victims. They found that more severe PTSD symptoms are related to revictimization and more negative reactions and stigma in the future (Ullman & Peter, 2014). Revictimization is unfortunately quite common in sexual assault victims, with two-thirds of sexual assault victims revictimized in a one year period after the prior assault (Ullman & Peter, 2014). Being revictimized is related to increased stigma and PTSD symptoms, with women who have PTSD more likely to experience revictimization. Development of PTSD after assault is not automatic, and resilience is possible, specifically with social support being a primary protective factor against PTSD symptoms (Ullman & Peter, 2014). When sexual assault victims are offered sufficient social support, they may face less PTSD symptoms and lower likelihood for revictimization.

**Resilience after Sexual Assault**

While mental illnesses, particularly PTSD, are common among individuals who have experienced sexual assault, many do not develop a mental illness and are thus considered
resilient. Resilience can be defined as initial distress and disruption, followed by adaptation and eventual return to full functioning (Steenkamp, Dickstein, Salters-Pedneault, Hofmann, & Litz, 2012). This is possible through self-understanding, social support, and working through trauma, as well as pre-existing protective factors. There are various trajectories after a traumatic event that lead to differing levels of functioning. After a sexual assault experience, sexual assault victims may relive the assault, dissociate, and/or develop behavioral problems, but resilience still reigns as the most likely outcome (Burton, 2004). While there is little research on sexual assault resilience, it is likely comparable to many other traumatic events (e.g., terrorist attack, natural disaster), and resilience should present more often than PTSD (Bonanno, 2013). While the development of one or more mental illnesses after a sexual assault is common, it is important to understand what leads to resilience after sexual assault.

Resilience is characterized by adaptation and a return to full functioning after a traumatic event. Collishaw and colleagues (2007) found that resilience occurred in 42.9% of participants who experienced sexual/physical abuse. Various types of abuse resulted in different levels of resilience in their participants. For example, resilience occurred in 53.3% of individuals who experienced abuse in their home (Collishaw et al., 2007). The finding that resilience occurs more often than pathology is important to begin understanding various trajectories of recovery/pathology for sexual assault victims, and preventing negative outcomes. Resilience was found to be highly correlated with adults who had at least one parent rated as ‘caring’. Lastly, peer relationships in adolescence, stability of love relationships, and quality of adult friendships all have strong correlations with resilience (Collishaw et al., 2007). Resilience, and prevalence of resilience after a sexual assault, is important to study as it may lead to increased understanding
surrounding what causes an individual to be resilient as opposed to developing pathology such as PTSD after a sexual assault.

While high levels of resilience is found post-assault in some studies, other studies found lower levels of resilience, which warrants additional research. For example, Steenkamp and colleagues (2012) sought understanding of outcomes after an assault, and in their study they did not observe resilience in their participants, but high distress initially with a slow decrease in symptoms over time. Using a PTSD questionnaire, they found that 78% had probable PTSD one month post-assault with declines at each month mark, and 55% feared death or injury during their assault. This study found that recovery rather than resilience is the modal outcome, but other studies disagree (Bonanno, 2013; Collishaw et al., 2007). Problems with Steenkamp and colleagues' (2012) research that could have led to such low resilience rates include sampling bias, small sample size, and bias toward pathology. If sexual assault trauma is comparable to other trauma (i.e., hurricane, terrorist attack), resilience should be the most likely outcome, as is evidenced in Collishaw’s 2007 study. It is important to understand the differing levels of stigma assigned to individuals based on gender, but also based on mental health outcomes (PTSD or resilience), as societal beliefs influence stigma, which plays a role in the help-seeking, reporting, and mental health diagnoses.

**Current Study**

Despite past empirical studies examining sexual assault, PTSD, and gender differences in stigma, a gap in the research remains in terms of understanding the differing levels of stigma associated with diagnosis, resiliency, and gender. While some studies report that female victims experience stigma at higher rates, many studies link increased experiences of stigma to male
survivors. Overall, there is a lack of reliable research on this question (Ralston, 2012).

Additionally, there is no consensus on whether a diagnosis of PTSD increases or decreases stigma levels. It is important to understand the differing levels of stigma assigned to individuals based on gender as well as mental health outcomes (PTSD vs. resiliency) to better conceptualize the experiences of sexual assault survivors.

Many studies include the gender of the sexual assault victim when analyzing sexual assault stigma, but most focus only on female victims (McConkey et al, 2001; Menaker & Franklin, 2015; Davies & Rogers, 2006; Clarke & Stermac, 2011). Fewer studies focus on male victims (Ralston, 2012; Davies et al., 2006), and it is very rare for studies to compare the stigma between male and female victims (Kahn et al., 2011). This is a gap in literature that limits our ability to understand the stigma experienced by victims based on their gender. The current study seeks to fill this gap in sexual violence literature and determine whether male and female sexual assault victims are stigmatized differently. Moreover, there is no consensus as to whether PTSD diagnosis, a frequent diagnoses after a sexual assault, increases or decreases experiences of stigma (Carretta & Burgess, 2013).

Four vignettes were designed for the current study; each depicting a victim of sexual assault but differing on two levels: gender of the victim (i.e., male or female) and outcome of the trauma (i.e., PTSD or resilience). College student participants viewed one of four vignettes and completed ratings of stigma.

Thus, the current study investigated stigma in four fictitious sexual assault cases. The purpose of this study was to assess attitudes regarding sexual assault in those with and without PTSD across gender. Specifically, stigma was assessed using measures of mental illness attitudes
and beliefs. Dependent variables in this study were the Mental Illness Attitudes Scale (MIAS) and the Mental Illness Stigma Scale (MISS). Participants were randomly assigned into four vignette conditions. Two specific hypotheses were tested in this particular study.

The first hypothesis was that participants would differ significantly on attitudes toward the four characters using the MIAS, with two significant main effects and a significant interaction. Specifically, it was predicted that male characters would elicit more stigma than female characters (i.e., main effect of gender), and that a diagnosis of PTSD would elicit more stigma than resiliency (i.e., main effect of diagnosis). Lastly, it was hypothesized that there would be an interaction between character gender and diagnosis, with male characters with PTSD eliciting the most stigma of the four conditions.

The second hypothesis was that participants would differ significantly on attitude towards the character in the vignette, measured using the MISS. Specifically, it was predicted that male characters would elicit more stigma than female characters (i.e., main effect of gender), diagnosis of PTSD would elicit more stigma than resiliency (i.e., main effect of diagnosis), and male characters with PTSD would elicit the most stigma (i.e., interaction effect).

**Hypothesis 1.** Participants will differ significantly on attitude towards the character in the vignette, measured using the *Mental Illness Attitude Scale (MIAS).* A $2 \times 2$ independent samples ANCOVA will be conducted testing the effects of participant gender and group (male or female; PTSD or resiliency) on attitudes toward the individual in the vignette (Dependent Variable: *MIAS*). See Appendix D.

a. Main Effect: Male characters in the vignette will elicit more stigma than female characters.
b. Main Effect: Characters with PTSD will elicit more stigma than characters who are resilient.

c. Interaction Effect: Male characters with PTSD will elicit more stigma than female characters or resilient male characters.

**Hypothesis 2.** Participants will differ significantly on attitude towards the character in the vignette, measured using the *Mental Illness Stigma Scale (MISS)*. A 2 × 2 independent samples ANCOVA will be conducted testing the effects of participant gender and group (male or female; PTSD or resiliency) on attitudes toward the individual in the vignette (Dependent Variable: *MISS*). See Appendix E.

a. Main Effect: Male characters in the vignette will elicit more stigma than female characters.

b. Main Effect: Characters with PTSD will elicit more stigma than characters who are resilient.

c. Interaction Effect: Male characters with PTSD will elicit more stigma than female characters or resilient male characters.

**Methods**

**Participants**

Participants in this study were college students recruited through Introduction to Psychology courses at a mid-sized midwestern university, who earned research credit for their course. To achieve adequate power and a medium to large effect size, a total sample size of 195 was needed (Faul, Erdfelder, Lang, Buchner, 2007). Data were collected and cleaned, with a total of 214 clean data points after participants with incomplete surveys were discarded. A total of 89
individuals identifying as cisgender males (41.6%) and 118 cisgender females (55.1%) completed the survey. One individual (0.5%) identified as non-binary, one (0.5%) identified as “other,” and five (2.3%) preferred not to answer this particular question. The sample was primarily Caucasian/White (88.8%), with 2.8% African American/Black participants, 0.5% Asian American participants, and 1.9% of participants identifying as Latinx/Hispanic/Native American. In relation to political orientation, 36.9% identified as neutral or having no political affiliation, with 26.2% identifying as somewhat or very liberal, and 28.9% identifying their political affiliation as somewhat or very conservative. As this survey was primarily taken by Introduction to Psychology students, 80.3% of the sample was at or below 20 years old (M=19.5). These demographics are to be expected, as the university population sampled is primarily white and female.

As this survey asked questions about mental illness and PTSD, it was important to understand the participants’ familiarity with mental illness and PTSD diagnosis. The majority of the sample (79.4%) reported they had never been diagnosed with a mental illness. In those who had received a mental illness diagnosis, the majority reported anxiety and/or depression diagnoses. A majority (80.5%) reported knowing someone with a mental illness diagnosis, and 41.1% of the sample reported knowing someone with PTSD.

**Procedure**

Each participant first completed a consent form prior to beginning the online survey. Participants began and completed the survey at their own pace and on an electronic device of their choosing, with an average of 6.34 minutes to complete the survey. Participants were randomly assigned to one of four conditions, each depicting a victim of sexual assault but
differing on two levels: gender of the victim and outcome of the trauma (i.e., PTSD or resilience). Thus, the four conditions were male/PTSD, male/resiliency, female/PTSD and female/resiliency. After reading their randomly assigned vignette (each approximately 50 words in length), participants responded to measures of mental illness attitudes and stigma. When participants had completed the stigma scales, each participant filled out a demographics questionnaire.

**Vignettes**

Participants were randomly assigned to receive one of four vignettes that varied gender of the victim and diagnosis following a sexual assault (See Appendix B). All four vignettes describe a sexual assault scenario at a party by an acquaintance, and then either describe resiliency or PTSD symptomatology. Gender is differentiated by the use of the character’s name (Sarah/John). Each vignette is approximately fifty words in length. Due to the short length of the vignettes, manipulation checks were deemed unnecessary (Brown et al., 2010).

**Measures**

**Mental Illness Attitude Scale.** The *Mental Illness Attitude Scale (MIAS)* is an eleven item questionnaire that uses a Likert scale (1 = *strongly disagree*; 5 = *strongly agree*) and measures beliefs about outcomes and negative stereotypes of individuals with mental illness (Kobau, Dilorio, Chapman, & Delvecchio, 2010). In the adapted scale, “a person with mental illness” was replaced with the name of a character in the given vignette (i.e., Sarah or John). Sample items include: “I believe Sarah is a danger to others” and “I believe John can eventually recover.” See Appendix D. In the current study, Cronbach’s alpha was .69, indicating poor internal consistency.
**Mental Illness Stigma Scale.** The *Mental Illness Stigma Scale (MISS)* is a measure consisting of twenty-eight questions which measure the following factors of attitudes toward individuals with mental illness: recovery, interpersonal anxiety, visibility, relationship disruption, poor hygiene, treatability, and professional efficacy (Day, Edgren, & Eshleman, 2007). The scale uses a seven point Likert-type scale (1 = *strongly disagree*; 7 = *strongly agree*). This scale was adapted for our purposes and uses character names (i.e., Sarah or John). Sample items include: “I do not think that it is possible to have a normal relationship with someone like John,” “I feel anxious and uncomfortable when I am around someone like Sarah,” and “There are no effective treatments for John.” See Appendix E. In the current study, Cronbach’s alpha was .86, a high internal consistency.

**Demographics Questionnaire.** A demographics questionnaire was administered to determine gender, age, race/ethnicity, political orientation, mental illness diagnoses, and association with individuals with mental illness/PTSD. This form was created by the author for the current study. See Appendix C.

**Results**

**Preliminary Analyses**

After the data were collected, the dataset was cleaned and prepared for analysis. Several items were reverse-coded as necessary. Average scores were calculated for each dependent variable. Individuals were excluded if they have previously been diagnosed with PTSD. Participants were also excluded if they failed to complete 20% or more of the survey questions. Descriptive statistics for the two dependent variables are summarized in Appendix F.

**Primary Analyses**
This study utilized a 2 (male or female) × 2 (PTSD or resiliency) design. An ANCOVA was conducted with participant gender as the covariate.

The first hypothesis in this study was that participants would differ significantly on attitudes toward the character using the MIAS, with two main effects and an interaction. It was predicted that male characters would elicit more stigma than female characters (i.e., main effect of gender). Results indicated non-significant findings for this hypothesis ($M_{\text{male}} = 2.30$, $SD_{\text{male}} = .56$, $M_{\text{female}} = 2.18$, $SD_{\text{female}} = .53$), as well as the hypothesis that characters with PTSD would elicit more stigma than resilient characters as measured by the MIAS ($M_{\text{PTSD}} = 2.29$, $SD_{\text{PTSD}} = .52$, $M_{\text{RES}} = 2.19$, $SD_{\text{RES}} = .57$). Lastly, the prediction that male characters with PTSD would elicit the most stigma (i.e., an interaction effect) was not significant.

Significant main effect findings presented for the second hypothesis, which hypothesized that participants would differ significantly on attitudes toward the character using the MISS. Specifically, it was hypothesized that male characters would elicit more stigma than female characters (i.e., main effect of gender). Post hoc comparisons of means showed a significant result indicating that on average, there were more negative attitudes toward male than female vignette characters ($M_{\text{male}} = 3.86$, $SD_{\text{male}} = .62$, $M_{\text{female}} = 3.49$, $SD_{\text{female}} = .62$). This resulted in a significant main effect for gender with a moderate effect size, $F(1, 213) = 19.89$, $p < .001$, partial eta squared $= .09$. The second hypothesized main effect was that characters with PTSD would elicit more stigma than resilient characters. There was a significant main effect for diagnosis with a small effect size, $F(1, 213) = 13.51$, $p < .001$, partial eta squared $= .06$. In general, there were more negative attitudes attributed to characters who developed PTSD rather than resilient characters ($M_{\text{PTSD}} = 3.82$, $SD_{\text{PTSD}} = .65$, $M_{\text{RES}} = 3.52$, $SD_{\text{RES}} = .62$). Lastly, the hypothesis that male
characters with PTSD would elicit the most stigma was not significant (i.e., interaction effect; \( M_{\text{MPTSD}} = 4.06 \)). The interaction between diagnosis and vignette gender was not significant, even when controlling for participant gender, \( F(1, 213) = 1.73, p = .190 \). Both main effect hypotheses for this measure were supported with significant findings.

**Discussion**

The results of this study may indicate that with at least one measure of stigma (i.e., the MISS), male sexual assault victims may experience more stigma than female sexual assault victims, and those with PTSD may be stigmatized at higher rates than those who are resilient. To date, little research has been conducted on the differing experiences of stigma related to male and female sexual assault victims, with inconsistent results. This study sought to fill this gap in the literature to determine the effect that gender and diagnosis may have on the experiences of stigma for a fictional character. Utilizing findings from prior research, it was hypothesized that male characters who had been sexually assaulted would elicit more stigma than female characters (i.e., a main effect of gender), characters with PTSD would elicit more stigma than resilient characters (i.e., a main effect of diagnosis), and male characters with PTSD would elicit the most stigma (i.e, an interaction effect) on both the MISS and MIAS.

The hypotheses in this study were partially supported. Because this study used two separate measures of stigma., there were two hypothesized main effects of gender, two hypothesized main effects of diagnosis, and two interaction effects. With the MISS, one main effect of gender and one main effect of diagnosis were found to be significant. Utilizing the MIAS, none of the results were significant. The insignificant results found on the MIAS may be related to the poor internal consistency of this measure (\( \alpha = .69 \)). This is lower than the internal
consistency of the MISS ($\alpha=.86$), which resulted in significant main effects of gender and diagnosis. Thus, the MISS was more reliable in this study, and therefore results from this DV are potentially more trustworthy than the non-significant results from the MIAS.

While not all of the analyses were significant, the results of this study indicate that in general, male sexual assault victims may experience more stigma than female sexual assault victims, and those with PTSD may be stigmatized at higher rates than those who are resilient (Ralston, 2012). An ANCOVA was utilized in this study, with gender of the participant as the covariate. It is important to note that the effects of this covariate were insignificant, as gender of the participant did not influence the results. Additionally, the interaction between gender and diagnosis of the character was not significant using either measure.

While male characters and characters with PTSD were stigmatized more than female characters and resilient characters, the stigma scores on both measures remained relatively low. This may indicate that the awareness and outreach efforts on college campuses have had an effect on the attitudes of college students regarding victims of sexual assault. The MIAS is an eleven item questionnaire that utilizes an 5 point likert scale (1 = strongly disagree; 5 = strongly agree), with poor internal consistency ($\alpha=.69$). Descriptive statistics of the MIAS are listed in Appendix F. The mean of this scale was 2.26, which falls below the midpoint of the scale. While the male PTSD condition elicited the highest numerical value ($M=2.36$), this number falls on the lower end of the scale, indicating that even though this condition elicited the most stigma, participants indicated low levels of stigma toward all characters. Likewise, the MISS, a twenty-eight item scale with a seven point Likert-type scale (1 = strongly disagree; 7 = strongly agree) with high internal consistency ($\alpha=.86$) indicated the most negative attitudes were
associated with male PTSD characters ($M=4.06$). Descriptive statistics of the MISS are listed in Appendix F. The mean of this scale was 3.68, which is below the midpoint of this scale, indicating that participants overall did not attribute high levels of stigma toward characters in the vignette. These findings could indicate that sexual assault and PTSD do not elicit the level of stigma expected, and this could be because the sample consists primarily of young, undergraduate students who may have more education surrounding these issues than previous generations.

Current and recent undergraduate students may have increased education surrounding violence prevention and victim services, which is vital to the wellbeing of college students (Katz, Heisterkamp, & Fleming, 2011). These initiatives are critical, as about one-fifth of female students are sexually assaulted while in college, with female students twice as likely to be assaulted in the first two months of college than any other point in their college career (Muehlenhard et al., 2016), and at least half of all college women experiencing some unwanted sexual activity (Hines et al., 2012). Based on these statistics alone, participants in this study likely knew someone who has experienced sexual violence or have been assaulted themselves.

These statistics, as well as an increased focus on violence prevention on college campuses, may provide an explanation for the low levels of stigmatization seen in the results. The majority of violence prevention and media coverage covers primarily the issue of sexual violence as a crime committed against women (Katz et. al., 2011). This lends support for the finding in the current study that males with PTSD elicited the most stigma, as individuals are unlikely to think of sexual assault victims as males. Males are generally expected to be masculine and strong, leading individuals to believe that a male who develops PTSD is weak
(Ralston, 2012). These results have implications for students and those working on college campuses, as they highlight the stigma regarding male college victims and college victims who develop PTSD.

**Implications**

Results indicate a significant finding that male victims elicit more stigma than female victims, and victims with PTSD elicit more stigma than resilient victims. These findings have implications for college administrators as they plan prevention and education efforts such as MindShift or Mentors in Violence Prevention for college populations (Vreede, Warner, & Pitter, 2014; Katz et al., 2011). When implemented, education programs can increase knowledge surrounding these issues, and may decrease experiences of stigma for sexual assault victims. These findings also have implications for clinicians as they work with sexual assault survivors. As noted in this study, male victims may have increased difficulty in reporting incidents of sexual violence, as they may fear being stigmatized more than a female victim. Male victims should therefore be offered additional support and resources through Counseling Centers, the Office of the Dean of Students, and other campus offices.

Although the experience of the victim must be kept confidential (Sable, Danis, Mauzy, & Gallagher, 2006), student affairs professionals may be uniquely suited to provide services and referrals that may benefit the student. Resources may include academic accommodations, housing modifications, or counseling services. Likewise, individuals who develop PTSD should be offered additional support and resources, as facing a PTSD diagnosis can be challenging particularly when facing additional stigma and lack of social support (Deitz et al., 2015). While insufficient research related to specific support for PTSD on college campuses exists, research
suggests that cognitive-behavioral therapy is the most effective treatment for individuals with PTSD, and increased access to mental health services is critical for students with PTSD (Kataoka, Langley, Wong, Baweja & Stein, 2012). College personnel should work to ensure adequate counseling and advocacy services on their campus for sexual assault victims.

**Limitations and Future Directions**

The results of the current study should be understood in the context of its limitations. Despite the significant main effect results found by the MISS, the clinical implications may be limited, as this sample cannot be generalized to the larger population and it featured relatively low levels of stigma overall. This may point to the success of current education efforts on college campuses. The sample in this study was restricted to college students at one Midwestern university, and the hypotheses were partially supported. While necessary in studies where utilizing real events are not possible, vignettes are often vague and difficult to generalize to realistic scenarios (Brown et al., 2010). For example, the choice to use “sexually assaulted” rather than “raped” or a more descriptive example of sexual assault may have implications, as a wide range of behaviors are classified under sexual assault. Utilizing a vague scenario allowed for participant biases toward what constitutes as sexual assault, but may limit the generalizability to situations in which an act can be clearly identified as sexual assault. In future research, this could be studied through various conditions in which the experience is more specific (e.g., groped, raped, sexually assaulted). Another limitation of this study is that each scenario took place at a party, making it difficult to differentiate whether stigma was associated with the assigned variables or the act of a college student being at a party. Future research could utilize various settings for the assault to take place.
The generalizability of this sample is limited, as participants were primarily young, white, and female, and participants were self-selected from Introduction to Psychology courses at a Midwestern university. The vignette characters were college students, and these results cannot be generalized to non-college age individuals. Future studies should compare college student samples to samples with a more varied composition. Additionally, small effect sizes were found for the two hypotheses that were supported. While significant, these results indicate small differences in stigma experienced by victims based on diagnosis and gender. Lastly, the characters in the vignettes, based on the names given, are likely assumed to be white. Future studies should analyze those from diverse backgrounds and the impact of race on stigmatization, as stigma may differ for other demographics such as age and race. While this study has several limitations, it fills an important gap in the literature, as it highlights the differences in stigma based on gender and diagnosis of the victim and the relatively small levels of stigma attributed to victims by college student participants.

**Conclusion**

This study lends support for the hypotheses that male sexual assault victims elicit more stigma than female victims (i.e., main effect of gender) and victims with PTSD elicit more stigma than resilient victims (i.e., main effect of diagnosis). The MISS provided significant support for the two main effects. Albeit with a small effect size, the pattern found is that male sexual assault victims are slightly more stigmatized than female sexual assault victims. Likewise, there was slightly more stigma associated with characters with PTSD compared to resiliency. Sexual assault is a prevalent issue on college campuses, and this study provides evidence that
male sexual assault victims may be stigmatized more than female victims, and that victims with PTSD may be stigmatized more than resilient victims.
References


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doi:10.1016/S1359-1789(00)00043-4

doi:10.1016/j.avb.2006.01.002

doi:10.1080/00224545.2010.522617


trafficking, sexual assault, and intimate partner violence. *Journal of Crime and Justice, 38*(3), 395-413. doi:10.1080/0735648x.2014.996321


Appendix A

DSM-5 Post-Traumatic Stress Disorder Symptoms (APA, 2013, p. 271-274)

Criterion A: stressor
The person was exposed to: death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence, as follows: (one required)
1. Direct exposure.
2. Witnessing, in person.
3. Indirectly, by learning that a close relative or close friend was exposed to trauma. If the event involved actual or threatened death, it must have been violent or accidental.
4. Repeated or extreme indirect exposure to aversive details of the event(s), usually in the course of professional duties (e.g., first responders, collecting body parts; professionals repeatedly exposed to details of child abuse). This does not include indirect non-professional exposure through electronic media, television, movies, or pictures.

Criterion B: intrusion symptoms
The traumatic event is persistently re-experienced in the following way(s): (one required)
1. Recurrent, involuntary, and intrusive memories. Note: Children older than six may express this symptom in repetitive play.
2. Traumatic nightmares. Note: Children may have frightening dreams without content related to the trauma(s).
3. Dissociative reactions (e.g., flashbacks) which may occur on a continuum from brief episodes to complete loss of consciousness. Note: Children may reenact the event in play.
4. Intense or prolonged distress after exposure to traumatic reminders.
5. Marked physiologic reactivity after exposure to trauma-related stimuli.

Criterion C: avoidance
Persistent effortful avoidance of distressing trauma-related stimuli after the event: (one required)
1. Trauma-related thoughts or feelings.
2. Trauma-related external reminders (e.g., people, places, conversations, activities, objects, or situations).

Criterion D: negative alterations in cognitions and mood
Negative alterations in cognitions and mood that began or worsened after the traumatic event: (two required)
1. Inability to recall key features of the traumatic event (usually dissociative amnesia; not due to head injury, alcohol, or drugs).
2. Persistent (and often distorted) negative beliefs and expectations about oneself or the world (e.g., “I am bad”; “The world is completely dangerous”).
3. Persistent distorted blame of self or others for causing the traumatic event or for resulting consequences.
4. Persistent negative trauma-related emotions (e.g., fear, horror, anger, guilt, or shame).
5. Markedly diminished interest in (pre-traumatic) significant activities.
6. Feeling alienated from others (e.g., detachment or estrangement).
7. Constricted affect: persistent inability to experience positive emotions.

Criterion E: alterations in arousal and reactivity
Trauma-related alterations in arousal and reactivity that began or worsened after the traumatic event: (two required)
1. Irritable or aggressive behavior
2. Self-destructive or reckless behavior
3. Hypervigilance
4. Exaggerated startle response
5. Problems in concentration
6. Sleep disturbance

Criterion F: duration
Persistence of symptoms (in Criteria B, C, D, and E) for more than one month.

Criterion G: functional significance
Significant symptom-related distress or functional impairment (e.g., social, occupational).

Criterion H: exclusion
Disturbance is not due to medication, substance use, or other illness.
Specify if: With dissociative symptoms.
In addition to meeting criteria for diagnosis, an individual experiences high levels of either of the following in reaction to trauma-related stimuli:
1. Depersonalization: experience of being an outside observer of or detached from oneself (e.g., feeling as if this is not happening to me or one were in a dream).
2. Derealization: experience of unreality, distance, or distortion (e.g., “things are not real”). Specify if: With delayed expression.
Full diagnosis is not met until at least six months after the trauma(s), although onset of symptoms may occur immediately.
Appendix B

Vignettes

Female PTSD Vignette: Sarah is a 20 year old college student. At a party last semester, Sarah was drinking and was sexually assaulted by an acquaintance she had taken a couple classes with. Sarah was recently diagnosed with PTSD, and has symptoms like flashbacks/nightmares, intense distress when reminded of the event, and self-destructive behavior.

Male PTSD Vignette: John is a 20 year old college student. At a party last semester, John was drinking and was sexually assaulted by an acquaintance he had taken a couple classes with. John was recently diagnosed with PTSD, and has symptoms like flashbacks/nightmares, intense distress when reminded of the event, and self-destructive behavior.

Male Resiliency Vignette: John is a 20 year old college student. At a party last semester, John was drinking and was sexually assaulted by an acquaintance he had taken a couple classes with. John was upset, but was able to work through it after talking with some friends. He has been able to continue going to class and work.

Female Resiliency Vignette: Sarah is a 20 year old college student. At a party last semester, Sarah was drinking and was sexually assaulted by an acquaintance she had taken a couple classes with. Sarah was upset, but was able to work through it after talking with some friends. She has been able to continue going to class and work.
Appendix C

Demographics

1. Gender:
   
<table>
<thead>
<tr>
<th>Cisgender Male</th>
<th>Cisgender Female</th>
<th>Transgender Male</th>
<th>Transgender Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-binary</td>
<td>Other</td>
<td>Prefer not to answer</td>
<td></td>
</tr>
</tbody>
</table>

2. Age (in years): __________

3. Race/ethnicity (all that apply):
   
<table>
<thead>
<tr>
<th>African American/Black</th>
<th>Asian American</th>
<th>Caucasian/White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latino/Latina/Hispanic/Native American</td>
<td>Other: ____________________</td>
<td></td>
</tr>
</tbody>
</table>

4. Political orientation:
   
<table>
<thead>
<tr>
<th>Very Liberal</th>
<th>Somewhat Liberal</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somewhat Conservative</td>
<td>Very Conservative</td>
<td></td>
</tr>
</tbody>
</table>

5. Have you ever been diagnosed with a mental illness?
   
   Yes  No  Prefer not to answer

If yes, please respond to questions a and b.

a. Have you ever been diagnosed with Post-Traumatic Stress Disorder?
   
   Yes  No  Prefer not to answer
b. Have you ever been diagnosed with a different mental illness? If so, which one(s)?

Yes: ____________________________  No  Prefer not to answer

6. Do you know anyone with a mental illness? Please select all that apply.

<table>
<thead>
<tr>
<th>Friend</th>
<th>Parent</th>
<th>Grandparent</th>
<th>Son/daughter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aunt/uncle</td>
<td>Cousin</td>
<td>Co-worker</td>
<td>Acquaintance</td>
</tr>
<tr>
<td>Employee</td>
<td>Boss/Employer</td>
<td>Spouse</td>
<td>Other: ____________</td>
</tr>
</tbody>
</table>

I don’t know anyone with a mental illness  Prefer Not to Answer

7. Do you know anyone with Post-Traumatic Stress Disorder? Please select all that apply.

<table>
<thead>
<tr>
<th>Friend</th>
<th>Parent</th>
<th>Grandparent</th>
<th>Son/daughter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aunt/uncle</td>
<td>Cousin</td>
<td>Co-worker</td>
<td>Acquaintance</td>
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<tr>
<td>Employee</td>
<td>Boss/Employer</td>
<td>Spouse</td>
<td>Other: ____________</td>
</tr>
</tbody>
</table>

I don’t know anyone with PTSD  Prefer Not to Answer
Appendix D

Mental Illness Attitude Scale

Please indicate the extent to which you agree or disagree with the following statements using the scale below.

Strongly disagree  1  2  3  4  5  Strongly agree

1. I believe Sarah/John is a danger to others.

2. I believe Sarah/John is unpredictable.

3. I believe Sarah/John is hard to talk with.

4. I believe Sarah/John would improve if given treatment and support.

5. I believe Sarah/John feels the way we all do at times.

6. I believe Sarah/John could pull her/himself together if she or he wanted.

7. I believe Sarah/John can eventually recover.

8. I believe Sarah/John can be as successful at work as others.

9. I believe a Sarah/John has only herself/himself to blame for her/his condition.

10. Treatment can help Sarah/John lead a normal life.

11. People are generally caring and sympathetic to Sarah/John.
Appendix E

Mental Illness Stigma Scale

Directions: Please indicate the extent to which you agree or disagree with the statements listed below using the following scale.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. There are effective medications for Sarah/John that will allow them to return to normal and productive lives. (Treatability)</td>
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<tr>
<td>2. I don’t think that it is possible to have a normal relationship with Sarah/John. (Relationship Disruption)</td>
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<td>3. I would find it difficult to trust Sarah/John. (Relationship Disruption)</td>
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<tr>
<td>4. Sarah/John tends to neglect their appearance. (Hygiene)</td>
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<tr>
<td>5. It would be difficult to have a close meaningful relationship with Sarah/John. (Relationship Disruption)</td>
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<tr>
<td>6. I would feel anxious and uncomfortable when I’m around Sarah/John. (Anxiety)</td>
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<tr>
<td>7. It is easy for me to recognize the symptoms of Sarah/John. (Visibility)</td>
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<tr>
<td><strong>8. There are no effective treatments for Sarah/John. (Treatability; reverse-scored)</strong></td>
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<tr>
<td><strong>9. I probably wouldn’t see Sarah/John’s symptoms unless I was told. (Visibility; reverse-scored)</strong></td>
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<tr>
<td>10. A close relationship with Sarah/John would be like living on an emotional roller Coaster. (Relationship Disruption)</td>
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<tr>
<td><strong>11. There is little that can be done to control the symptoms in Sarah/John. (Treatability; reverse-scored)</strong></td>
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<tr>
<td>12. I think that a personal relationship with Sarah/John would be too demanding. (Relationship Disruption)</td>
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</tr>
<tr>
<td><strong>13. Once someone develops symptoms like Sarah/John, he or she will never be able to fully recover from it. (Recovery; reverse-scored)</strong></td>
<td></td>
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<tr>
<td>14. Sarah/John ignore their hygiene, such as bathing and using deodorant. (Hygiene)</td>
<td></td>
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</tbody>
</table>
15. Experiences of Sarah/John prevent them from having normal relationships with others. (Relationship Disruption)
16. I would tend to feel anxious and nervous when I am around Sarah/John. (Anxiety)
17. When talking with Sarah/John, I worry that I might say something that will upset them. (Anxiety)
18. I can tell Sarah/John apart by the way he or she acts. (Visibility)
19. Sarah/John do not groom themselves properly. (Hygiene)

**20. Sarah/John will remain ill for the rest of their lives. (Recovery; reverse-scored)**

21. I don’t think that I can really relax and be myself when I’m around Sarah/John. (Anxiety)
22. When I am around Sarah/John I worry that he or she might harm me physically. (Anxiety)
23. Psychiatrists and psychologists have the knowledge and skills needed to effectively treat Sarah/John. (Professional Efficacy)
24. I would feel unsure about what to say or do if I were around Sarah/John. (Anxiety)
25. I would feel nervous and uneasy when I’m near Sarah/John. (Anxiety)
26. I can tell Sarah/John apart by the way he or she talks. (Visibility)
27. Sarah/John need to take better care of their grooming (bathe, clean teeth, use deodorant). (Hygiene)
28. Mental health professionals, such as psychiatrists and psychologists, can provide effective treatments for Sarah/John. (Professional Efficacy)
Appendix F

Descriptive Statistics for the MISS and MIAS Scales

<table>
<thead>
<tr>
<th></th>
<th>MISS ((n = 214))</th>
<th>MIAS ((n = 212))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.68</td>
<td>2.26</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.65</td>
<td>0.50</td>
</tr>
<tr>
<td>Maximum</td>
<td>5.93</td>
<td>3.36</td>
</tr>
<tr>
<td>Minimum</td>
<td>2.21</td>
<td>1.09</td>
</tr>
</tbody>
</table>

*Note.* The Mental Illness Stigma Scale (MISS) is a 28 item, 7 point scale, whereas the Mental Illness Attitude Scale (MIAS) is an 11 item, 5 point scale.