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# Barriers to Disclosure of Sexual Victimization Experiences Among Men

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**BARRIERS TO DISCLOSURE OF  
SEXUAL VICTIMIZATION EXPERIENCES AMONG MEN**

by  
Timothy J. Geier

A Dissertation Submitted in  
Partial Fulfillment of the  
Requirements for the Degree of

Doctor of Philosophy  
in Psychology

at  
The University of Wisconsin-Milwaukee

August 2017

## **ABSTRACT**

### **BARRIERS TO DISCLOSURE OF SEXUAL VICTIMIZATION EXPERIENCES AMONG MEN**

by

Timothy J. Geier

University of Wisconsin – Milwaukee, 2017  
Under the Supervision of Professor Shawn P. Cahill, Ph.D.

Efforts to better understand sexual victimization experiences among male populations have been chiefly absent (Spataro, Moss, & Wells, 2001; Stermac, Sheridan, Davidson, & Dunn, 1996). Research indicates that approximately 1 in 71 men in the United States (i.e., 1.6 million men) have been raped in their lifetime, and nearly 1 in 5 men (i.e., 25 million men) have experienced sexual victimization other than rape in their lifetime (Black, Basile, Breiding, Smith, Walters, Merrick, Chen, & Stevens, 2011). It is suggested these estimates do not fully portray the actual prevalence given hesitancy of male victims to report the crime (Bullock & Beckson, 2011; Tjaden & Thoennes, 2006). Despite the elevated occurrence and deleterious impact of sexual violence, it remains one of the most underreported crimes in the U.S., particularly among male populations (Finkelhor, Hotaling, Lewis, & Smith, 1990; Sable, Danis, Mauzy, & Gallagher, 2006). Studies demonstrate disclosure of these experiences to be associated with mental and physical health gains as well as legal and political benefits (Ahrens, Campbell, Ternier-Thames, Wasco, & Sefl, 2007; Uchino, 2004). The current study descriptively details the rates, demographic characteristics, emotional impact, as well as disclosure rates and details of sexual victimization experiences among men. The study also quantitatively examines whether sexual victimization details, emotion regulation strategies, male rape myth acceptance, conformity to

masculine norms, attitudes toward gay men, attitudes toward women, stigma levels, and symptoms of PTSD significantly relate to disclosure behaviors of men experiencing sexual victimization.

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**LITERATURE REVIEW:**  
**Sexual Victimization of Males**

For an unsettling amount of time, sexual violence against women had been largely overlooked on societal, legal, and public health levels. Though this form of violence continues to foster a substantially deleterious impact, mounting public attention has yielded an ever-expanding body of literature in an effort to better inform intervention policies. Understandably, studies on sexual violence have focused primarily on women, as this specific population encompasses the majority of victimization experience (Tjaden & Thoennes, 2006).

Unfortunately, the attention sexual violence received as a woman's issue has acted to further the isolation experienced by the male victims of sexual violence (Mezey & King, 1989). Efforts to better understand this phenomenon among male populations have been chiefly absent (Spataro et al., 2001; Stermac et al., 1996). In line with this underdeveloped focus, sexual violence against men is one of the least discussed crimes in society (Groth & Burgess, 1980; Isely, 1998). The American Medical Association described male sexual violence as a "silent, violent epidemic" (American Medical Association, 1995). Until 2012, the Federal Bureau of Investigation considered "forcible rape" to be "the carnal knowledge of a female forcibly and against her will" (US Department of Justice, 2012); for 80 years, numerous law enforcement agencies utilized this female-only description when submitting standardized data to inform federal policies.

Relatively recent efforts, though limited, have begun to focus on the sexual victimization of males. Despite general opinion, males encompass a generous amount of sexual violence victims (Basile, Chen, Black, & Saltzman, 2007). According to the U.S. Department of Justice, one in every eight rape victims in 2002 was male (US Department of Justice, 2002). Large population studies suggest that between 3-7% of men indicate experiencing a sexual assault during adulthood, compared to between 13.5-22% of women (Coxell et al., 1999; Elliott et al.,

2004; Sorenson et al., 1987). More recently, the U.S. Centers for Disease Control reported men and women had a similar prevalence of past year nonconsensual sex, with approximately 1.270 million women and 1.267 million men detailing such experiences (Stemple & Meyer, 2014). Disturbingly, it is suggested the abovementioned data do not fully portray the actual prevalence of sexual violence against men, given the lack of societal concern and well-established hesitancy of male victims to report the crime (Bullock & Beckson, 2011; Lab, Feigenbaum, & De Silva, 2000; Tjaden & Thoennes, 2006).

The abovementioned figures are even more startling among college and sexual minority male populations. For example, within an undergraduate sample, researchers found that approximately 16% of the males in an undergraduate sample had been coerced or forced to have sex at some point in their adulthood (compared to 22% of females in this study); the majority of these victims were coerced via psychological tactics, though approximately 25% of cases involved physical force (Struckman-Johnson, 1988). Simon and Harris (1993) replicated this finding, noting that one in six college men in their sample indicated at least one instance of being victims of sexual assault.

Beyond men in college, research studies suggest gay/bisexual men are at greater risk for sexual victimization in both childhood (Austin, Roberts, Corliss, & Molnar, 2008; Balsam, Rothblum, & Beauchaine, 2005; Groth & Burgess, 1980) and adulthood (Balsam et al., 2005; Duncan, 1990) when compared to heterosexual counterparts. One study suggested that men who have engaged in consensual sexual behavior with other men are approximately six times more likely to have experienced sexual violence compared to men who have not (Coxell et al., 1999). Some evidence even suggests sexual minority men encounter sexual violence at similar rates to heterosexual women (Walters, Chen, & Breiding, 2013). In a systematic review of 75 studies

examining the prevalence of LGBT sexual violence in the United States, researchers found a median rate of lifetime sexual victimization to be approximately 23% (with a range of 4.1% to 59.2%) among gay or bisexual men (Rothman, Exner, & Baughman, 2011). Despite this literature highlighting sexual minority men's increased risk of experiencing sexual violence, the foundation of data is presently not robust enough to derive sound conclusions, and consequently more investigations are necessary to ascertain the prevalence rates and needs of sexual minority men experiencing sexual victimization (Burrowes & Horvath, 2013).

There are several proposed reasons for this disparity related to sexual orientation. Although some research efforts have suggested that sexual abuse may play a causal role in sexual minority identification (Gartner, 1999; Marvasti & Dripchak, 2004; Roberts, Glymour, & Koenen, 2012), this reasoning has been shown to be problematic at best. Specifically, the prevalence rates of sexual minority individuals do not align with the prevalence rates seen within the literature regarding sexual violence. The prevalence of sexual minorities in the US population is estimated at approximately 3.4% (Gates & Newport, 2012), whereas 19.9% of the population has experienced sexual abuse in childhood (Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, Koss, & Marks, 1998). In the event sexual abuse resulted in an individual becoming a sexual minority, there would be a greater portion of the U.S. population identifying as a sexual minority given the elevated rates of sexual abuse. It has also been noted that the abovementioned studies suggesting a causal link between sexual abuse and sexual minority identification are cross-sectional in nature and subsequently are unable to create an argument for causality. Further, if sexual abuse necessarily results in sexual orientation, all sexual minority individuals in the samples should have had experienced sexual abuse; this was not the case.

In contrast to the studies suggesting sexual abuse causes sexual minority orientation, Andersen and Blosnich (2013) proposed that gender nonconforming behaviors may best explain the elevated rates of abuse experienced by sexual minority individuals. To note, although these behaviors do not always indicate sexuality, they are associated with adulthood sexual orientation (Levitt & Bridges, 2007; Rosario, Schrimshaw, Hunter, & Levy-Warren, 2009). In line with the researchers proposal, investigations have noted the use of increased violence and abuse by both peers and adults to restrict gender nonconforming behaviors and other potential expressions of sexual minority status both inside and outside the home (D'Augelli, Grossman, & Starks, 2006; Lehavot & Simoni, 2012). This can be seen in adulthood as well; in a survey of 268 LGBT persons, 6% reported being sexually assaulted because of their sexual orientation, gender identity, or gender presentation (Green, 2012).

Beyond the abovementioned prevalence differences between men and women as well as various subpopulations, researchers have worked to compare characteristics of victimization experiences across sex. Specifically, research suggests that sexual victimization is more likely to occur in younger individuals, and the age at victimization does not significantly differ by sex (Bullock & Beckson, 2011). Further, several studies observed that, when compared to their female counterparts, men were more likely to endorse being sexually victimized by multiple perpetrators as well as having weapons and restraints used on them during the attack (Frazier, 1993; Kimerling, Rellini, Kelly, Judson, & Learman, 2002; Lacey & Roberts, 1991).

### **Impact of Sexual Victimization**

Like the personal impact on females experiencing sexual violence, evidence suggests that male victimization fosters long-term destructive consequences. Male survivors of sexual violence have detailed the event to be life threatening, humiliating, and de-humanizing (Garnets,

Herek, & Levy, 1990; Goyer & Eddleman, 1984; Myers, 1989). These experiences can then go on to breed elevated risk for depressed mood, lowered self-esteem, suicidal ideation, anxiety, sexual dysfunction, and relationship complications (Struckman-Johnson & Struckman-Johnson, 1992; Walker, Archer, & Davies, 2005a). For example, in a study exploring health outcomes and risk behaviors among a large sample of men (N=59,551), researchers found that men who had experienced attempted or completed sexual assault (n=2,750) were more likely to report mental illness, poor life satisfaction, activity limitations, as well as markedly lower emotional and social support systems when compared to their non-victimized counterparts (Choudhary, Coben, & Bossarte, 2009).

Beyond the impact on emotional and social functioning, sexual victimization of males has also shown to be associated with adverse physical health outcomes. For example, a large scale study assessing the relationship of non-consensual sex with physical health (e.g., chronic disease and health behaviors) found that individuals who had experienced sexual violence were significantly more likely to have elevated cholesterol, heart disease, stroke, immune system deficits, as well as alcohol and nicotine use when compared to individuals who had not been victimized (Smith & Breiding, 2011). Of note, these deleterious physical health characteristics did not differ significantly across participant sex. This study further adds to a rather robust literature underlining the poor health outcomes and behaviors in relation to sexual violence histories (e.g., Creamer, Burgess, & McFarlane, 2001; Hart-Johnson & Green, 2012; Sorenson & Siegel, 1992; Stein & Barrett-Connor, 2000).

Though there is much overlap in the adjustment reactions of victims across the sexes, a small literature details potential sex differences. Specifically, some research indicates that men are more likely to endorse higher levels of anger, hostility, and depression as well as engage in

denial and minimization to cope with their experience (Du Mont & White, 2007; Frazier, 1993; Kaufman, Divasto, Jackson, Voorhees, & Christy, 1980). Further, in a study assessing victims at a rape treatment center, researchers noted that the men in the study were more likely than women to endorse current psychiatric symptoms, meet threshold for a psychiatric disorder, and present with a history of psychiatric hospitalization (Kimerling et al., 2002).

Research has hypothesized that this elevated stress response among men in reaction to sexual victimization is a result of rigid societal sex-role expectations among men, such as demonstrating resiliency, strength, dominance, and exclusively heterosexual sexual acts (Briere, 1996). Subsequently, it is thought that violation of these traditional expectations act to subvert a man's sexual identity and self-concept (Myers, 1989; Stukas-Davis, 1990). Lending support to this theory, researchers assessed sex differences in symptomatology in the general population among 941 participants, and they indicated that assaulted men reported greater symptomatology than assaulted women on 8 out of the 10 scales of the Trauma Symptoms Inventory, with particular distress in the self and sexual domains (Elliott et al., 2004). Further, men were more likely to employ externalizing behaviors (e.g., self-injurious behavior, irritable behavior, and suicide threats) and disordered sexual behavior in an effort to avoid distressing emotional states related to the victimization experience.

### **Disclosure**

Given the substantial impact this form of sexual victimization has on public health and the dearth of knowledge surrounding it, accumulating information that advances understanding and minimizes the impact of sexual violence among men is paramount. One noteworthy construct that has surfaced in the literature is the function of disclosure following sexual violence. Specifically, studies have demonstrated disclosure to be associated with both mental

and physical health gains as well as important legal and political benefits. Generally, a large amount of empirical findings underline the advantageous effects of social support on both physical and mental health outcomes (Uchino, 2004). Specifically regarding victims of sexual violence, receipt of social support is linked with reduction in PTSD and mood symptoms as well as with adaptive life changes and positive growth (Borja, Callahan, & Long, 2006; Filipas & Ullman, 2001; Schumm, Briggs-Phillips, & Hobfoll, 2006). Further, within the context of mental health benefits, studies suggest that the act of disclosure is associated with increased likelihood of terminating any ongoing victimization experiences; decreased hypervigilance surrounding the often secretive nature of victimization, other symptoms of PTSD and depression; and enhanced meaning-making efforts following the event (Borja et al., 2006; Filipas & Ullman, 2001; Kelly & McKillop, 1996; Park & Blumberg, 2002; Pennebaker & O'Heeron, 1984; Schumm et al., 2006; Vogel & Wester, 2003).

Researchers have also focused on how the type of support system reactions following disclosure can influence whether the disclosure is beneficial or damaging to the survivor. For example, in a study assessing sexual assault victims, Borja and colleagues found that positive social support after the assault was related to subjective positive life changes, whereas negative social support after the assault was associated with elevated posttraumatic stress symptomology (Borja et al., 2006). This finding was paralleled in a study by Campbell and colleagues, where the researchers identified a significant association between negative reactions from formal help agencies (e.g., mental health professionals) and elevated PTSD symptom presentation (Campbell et al., 1999).

Informing support system members about the sexually violent event can initiate the process of connecting the victim to appropriate mental health and medical care (Ahrens et al.,

2007; Ullman, 1999; Ullman, Foynes, & Tang, 2010). In general, adaptive intervention from formal providers can considerably minimize distress and destructive interpersonal interactions among rape survivors (Campbell, 2006). In regard to receipt of mental health services, professional psychological service utilization has been shown to reduce psychological distress and overall symptom presentation (Campbell et al., 1999). Additionally, disclosure has been shown to help improve physical health outcomes following sexual violence experiences. Specifically, researchers have linked disclosure with fewer doctor visits related to illness (Greenberg, Stone, & Wortman, 1996; Pennebaker & Beall, 1986), enhanced immune functioning (Petrie, Booth, Pennebaker, Davison, & Thomas, 1995), as well as decreased blood pressure (Pennebaker, Hughes, & O'Heeron, 1987).

Beyond the potential mental and physical benefits underlying disclosure acts, these behaviors serve both important legal and political functions. As with it being one of the first steps toward connecting victims to sources of support, medical care, and mental health services, disclosure can also often facilitate formal reporting (Ahrens et al., 2007; Ullman, 1999; Ullman et al., 2010). Formally reporting sexual violence (i.e., to authorities) can result in the identification of the perpetrator as well as allow for proper prosecution under the law (Paine & Hansen, 2002). On a behavioral level, this legal pursuit can ultimately serve to establish a conditioned association between the violent behavior and punishment in the eyes of the victim, the perpetrator, and the general public (Allen, 2007); this association thereby has been suggested to aid in reducing the prevalence of sexual violence (Kilpatrick, Edmunds, & Seymour, 1992). Additionally, these formal disclosures serve to provide the crime estimates that ultimately affect policy decisions and interventions surrounding sexual victimization (Allen, 2007; Skogan, 1976).

## **Disclosure Behavior among Men**

Despite the elevated occurrence and deleterious impact of sexual violence, it remains one of the most underreported crimes in the U.S. (Sable et al., 2006). According to research assessing disclosure behaviors among women, approximately two thirds of victims disclose the assault to at least one other person, which is most often a family member or peer (Ahrens et al., 2007; Fisher, Daigle, Cullen, & Turner, 2003; Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007; Rennison, 2002; Wolitzky-Taylor et al., 2010). Unfortunately, reports to formal agencies are suggested to be low, often ranging between 5% and 33% (Fisher, Cullen, & Turner, 2000; Kilpatrick et al., 2007; Rennison, 2002; Wolitzky-Taylor et al., 2010). Despite the relatively low disclosure rate to formal organizations, the rate of disclosure to informal support systems is promising, given that this is often the mechanism by which victims are connected with mental and physical health services (Ahrens et al., 2007; Ullman, 1999; Ullman et al., 2010).

Limited disclosure acts appear even more evident among men experiencing sexual violence. Specifically, regarding sex differences in disclosure, in a national survey assessing disclosure behaviors among men, the prevalence of male victims failing to disclose abuse experiences was significantly higher than that of female victims (i.e., 44% v. 33%; Finkelhor et al., 1990). Mirroring this observation in a college sample, researchers assessing disclosure and service use on a college campus after unwanted sexual experiences found that male victims of unwanted sexual contact were significantly less likely to have told anyone compared to their female counterparts (i.e., 44% v. 79%; W. Walsh, Banyard, Moynihan, Ward, & Cohn, 2010).

Generally, empirical observations suggest many men do not detail their sexual violence histories to others (Bullock & Beckson, 2011; Hillman, O'Mara, Taylor-Robinson, & Harris, 1990; King & Woollett, 1997; Tjaden & Thoennes, 2006). Male victims frequently keep silent

(Brochman, 1991; Davies, 2000; Scarce, 2001) and are subsequently deprived of necessary mental and physical health interventions (Hillman et al., 1990). According to a nationally representative survey, less than 25% of men who had been sexually victimized obtained mental health treatment as a result of their most recent sexual assault (Tjaden & Thoennes, 2006). In line with this observation, King and colleagues (1997) assessed men obtaining services at an organization catering to male victims of sexual assault, and the researchers identified that approximately 77% of the men did not disclose the details of or seek any assistance directly following the violent incident. Further, even if a man seeks medical assistance immediately following the event, he typically does not detail the sexual nature of the assault and seldom informs the law enforcement agencies of the incident (Isely & Gehrenbeck-Shim, 1997; Walker, Archer, & Davies, 2005b).

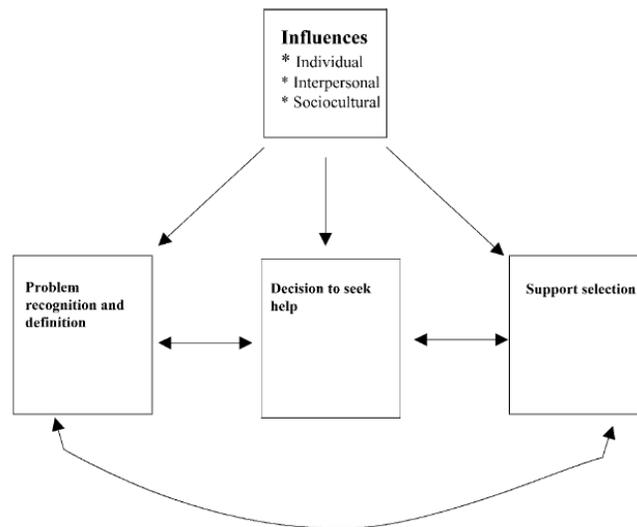
Adding to these findings, research suggests that of the men who do seek some form of mental health service (e.g., counseling), the majority typically delay this behavior until many years after the assault initially occurred (Walker et al., 2005b). For example, in the King and colleagues study abovementioned, the men who eventually did pursue mental health intervention delayed treatment seeking behaviors an average of 16.5 years after the assault. Further, one study assessing the use of physical and mental health services given sexual assault history detailed that the female gender was a significant predictor for utilization of mental health treatments, even after adjusting for numerous demographic covariates (Golding, Stein, Siegel, Burnam, & Sorenson, 1988). In general, research has demonstrated that men are largely reluctant to disclose their experiences to support systems and authorities as well as seek treatment services (Felson & Paré, 2005; W. Walsh et al., 2010).

## **Barriers to Disclosure**

Given the potential advantages associated with disclosure behaviors, efforts have been made to identify barriers to said acts. In general, a barrier is defined as a factor that thwarts disclosure, reporting, or help-seeking behaviors as well as minimizes the likelihood for the victim to inform another person about the victimization or obtain formal services in its wake (Walsh et al., 2010). To provide a structural framework for these investigatory efforts on barriers, researchers have adopted a theoretical model developed by Liang and colleagues (See Figure 1) that details help-seeking behaviors among individuals experiencing intimate partner violence (Liang, Goodman, Tummala-Narra, & Weintraub, 2005; W. Walsh et al., 2010). This model, adapted via the wider help-seeking literature, identifies the following stages of pursuing support: a) problem recognition and definition, b) decision to seek help; and c) support selection.

Across each of these stages, it is proposed that various ecological influences guide behavior; specifically, the model posits that barriers to disclosure include social and cognitive factors at the individual and interpersonal levels as well as factors on a wider sociocultural level (Liang et al., 2005; Logan, Evans, Stevenson, & Jordan, 2005). Individual factors relate to the victims' understanding of themselves and the assaultive experience, such as feelings of self-blame or stigma surrounding the event (Starzynski, Ullman, Filipas, & Townsend, 2005). Interpersonal factors are related to immediate relationships as well as strategies implemented by the perpetrator to thwart disclosure, for example threats of further violence that the perpetrator would act out in the face of disclosure (Fisher et al., 2003; Singer, 1988). Socio-cultural factors refer to the wide range of structural or institutional barriers in society, where services are structured in such a way that can dissuade individuals from utilizing them (e.g., the criminal justice system assigning blame to the victim rather than to the perpetrator; Belknap, 2014).

Figure 1. Theoretical Model of Help-Seeking Behaviors



As indicated above, efforts have been made to identify barriers to disclosure of sexual victimization experiences; however, as women account for the majority of assaultive experiences, assessment efforts regarding disclosure barriers have largely targeted female populations. Further, although the Liang model provides a structural framework for help-seeking behaviors following sexual victimization, the development of and subsequent studies implementing the model are largely limited to heterosexual female samples; little is known regarding barriers in other populations, such as men or sexual minorities. The literature assessing help-seeking behaviors among women map onto the ecological influences detailed above, with studies suggesting the psychological impact of the trauma, rape severity, fear of perpetrator retribution, and fear of disbelief act to thwart disclosure behaviors (e.g., Patterson, Greeson, & Campbell, 2009). Despite the general dearth of knowledge regarding male barriers, several investigations have pointed to barriers specific to men across several of Liang's social and cognitive factors.

Specifically, several studies point to the role of internalized gender norms and the subsequent endorsement of rape myths and stereotypes of sexual assault in the disclosure process. Individuals are socially groomed to embody specific ideals that ultimately impact self-concept as well as interactions with others. Specifically, women are typically socialized to be submissive, eager to please, and sexually-innocent, whereas men are encouraged to be dominant, strong, and sexually-driven; these ideals are then internalized by each gender and subsequently viewed as the “norm” (Dudte, 2008; Klomsten, Marsh, & Skaalvik, 2005). Research suggests individuals adhering to these conventional beliefs often accept rape myths as valid (Chapleau, Oswald, & Russell, 2007; Costin & Schwarz, 1987; Newcombe, Van Den Eynde, Hafner, & Jolly, 2008).

One factor that acts to form beliefs about gender and sexuality in the United States is religion (Tranby & Zulkoswki, 2012). Investigations studying the relationship between gender attitudes and religion have noted an association between conservative religious affiliation and conservative gender attitudes, whereas non-religion has been linked with more egalitarian gender attitudes (Burn & Busso, 2005; Moore & Vanneman, 2003). In line with these observations, other studies have found that a more conservative religious identity is also associated with disapproval of same-sex marriage (Perry, 2015) as well as negative views of sexual minorities in general (Sherkat, De Vries, & Creek, 2010; Sherkat, Powell-Williams, Maddox, & De Vries, 2011). Together, the abovementioned studies suggest that more conservative religious affiliation is associated with more conventional beliefs about gender and adherence gender role norms, such as a masculine, heterosexual identity in men.

In one study exploring sex differences in factors that influence likelihood of disclosure, researchers found that men were less likely to report when the crime threatened their masculine

identity, whereas women were less likely to report if the act did not reflect stereotypical rape scenarios (Pino & Meier, 1999). Men in the sample were more likely to disclose the crime if the experience caused bodily harm or injury, with investigators suggesting the disclosure act in these cases would not result in questioning the victim's sexual orientation or level of courage.

Consistent with these findings, other studies indicate that men compared to women are more likely to blame male victims than female victims for the experience, pointing to the adoption of these conventional beliefs, such as a man should be able to effectively ward off victimization experiences (Davies & McCartney, 2003; Ford, Liwag-McLamb, & Foley, 1998). These barriers are mirrored in a gender study on disclosure of childhood sexual victimization, where the men sampled reported hesitation disclosing due to fear of being viewed of as gay/bisexual and the belief that males are rarely victims, whereas women sampled reported hesitation disclosing due to the expectation of being blamed or not being taken credibly (Alaggia, 2005). As these studies note, the limited sample size for male victims necessitates the results be cautiously interpreted as preliminary.

Further paralleling these suggested barrier differences, Sable and colleagues assessed perceived barriers to disclosure among 215 college students (Sable et al., 2006). Results indicated men perceived threat to personal dignity as a greater barrier to reporting a hypothetical sexual victimization compared to women in the sample; these threats included fear of confidentiality loss, shame, guilt, and being perceived as gay/bisexual. Women ranked lack of resources as well as fear and protection of the perpetrator as greater barriers to reporting compared to men in the sample; these threats included fear of retaliation and not wanting the perpetrator to be prosecuted. An important limitation noted by the investigators underlines that the study did not ascertain the barriers from victims themselves nor did it assess assault history.

In line with these findings, certain details of the assaultive experience may act to further threaten masculine identity and subsequent help-seeking behaviors. Specifically, men may be less likely to label their experience as assaultive if they physiologically responded in a way that suggests enjoyment of the experience, such as obtaining an erection or ejaculating (Bullock & Beckson, 2011; Groth & Burgess, 1980). Research suggests that getting the victim to ejaculate is a strategy implemented by some perpetrators to thwart the victim from disclosing the act or acts (Groth & Burgess, 1980). Further reflecting the role of normative masculinity in disclosure behaviors is the impact of perpetrator gender. In a study investigating the effects of male and female perpetrators on heterosexual male victims, researchers found that all victims assaulted by male perpetrators reacted negatively to the experience, whereas only 20% of victims assaulted by female perpetrators reacted negatively to the experience (Struckman-Johnson & Struckman-Johnson, 1994). The investigators posit the men denying negative reactions after a sexual assault by a female may not accurately reflect the assault's impact; rather, it may reflect the socialization that encourages men to seek and enjoy sexual activity with women, where an assaultive experience by a woman is framed as a benign sexual experience rather than an insidious violation.

These normative expectations regarding masculinity not only act to discourage men from seeking help but they also thwart thorough professional screenings for such experiences. In a review exploring reasons for the limited number of men being seen by mental health professionals for sexual victimization reactions, researchers noted that mental health professionals did not assess patient histories of sexual violence; the researchers suggest that this is a result of professionals adhering to the myths that few men experience sexual violence and of the few that do experience, it has little damaging consequences (Holmes, Offen, & Waller,

1997). These findings were mirrored in a study on mental health professionals' attitudes toward and assessment practices of male sexual victimization history (Lab et al., 2000). These researchers found that: a) the majority of professionals in the study rarely assessed sexual victimization in male patients; b) when trauma history was evaluated, it was typically assessed through unsystematic means; c) the professionals' knowledge about sexual victimization experiences in men (e.g., prevalence rates) was inconsistent; and d) the majority of staff noted were not being adequately trained in assessment of sexual victimization in men.

Beyond these barriers, the psychological impact of sexual violence may also act to thwart help-seeking behaviors among men. As noted above, men may be less likely to label their experience as a violation, minimizing their emotional reactions and subsequently their disclosure behaviors (Struckman-Johnson & Struckman-Johnson, 1994). Conversely, individuals experiencing sexual violence may go on to develop negative beliefs about themselves, others, or the world in general; positive interactions with others in the absence of further trauma often works to diminish these posttraumatic reactions (Foa & Cahill, 2001; Moser, Hajcak, Simons, & Foa, 2007). Research indicates that coping strategies implemented by individuals experiencing sexual violence strongly influence mental health and recovery from the assault (Gibson & Leitenberg, 2001; Littleton, Horsley, John, & Nelson, 2007). Specifically, cognitive and behavioral avoidance behaviors have been shown to thwart help-seeking behaviors and subsequent recovery, prohibiting individuals from experiencing opportunities that may serve to diminish the conditioned fear response (Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992). While advances have been achieved in better understanding the psychological effects of men experiencing sexual violence, reports are largely speculative due to the frequent use of small clinical samples with inadequate sampling methodology (Vearnals & Campbell, 2001).

Like the limited investigations examining the disclosure barriers among men, efforts to identify unique barriers among sexual minority individuals has largely been deficient (Waldner-Haugrud, 1999). Nevertheless, several studies point to unique factors potentially thwarting disclosure of sexual victimization experiences within these populations. Specifically, concern of negative sexual stereotypes discouraged sexual minorities from reporting their sexual victimization experiences (Harvey, Mitchell, Keeble, McNaughton Nicholls, & Rahim, 2014). For example, sexual minority men experiencing sexual victimization are often seen by others as more liable and their assault considered less severe than their heterosexual counterparts (Davies, 2000; Ford et al., 1998; Mitchell, Hirschman, & Nagayama Hall, 1999; Wakelin & Long, 2003). In line with this, police officers may perceive sexual minority men as not credible (Rumney, 2009), and subsequently sexual minority men often hide or lie about their sexual orientation when reporting sexual victimization to the police in an effort to increase the likelihood of being believed (Wakelin & Long, 2003). Accumulating additional data that advance understanding of disclosure barriers among sexual minority populations is necessary to better inform intervention efforts.

In addition to these barriers specific to sexual minority persons identified in the literature, little is known how the interaction between sexual orientation and internalized gender norms might impact disclosure. Specifically, studies have demonstrated that sexual minority persons are more likely to assume a more cross-gender role, where gay men and lesbian women have been shown to be more likely to have traits associated with the opposite sex (Lippa, 2000; Lippa, 2002).

## **THE STUDY:**

### **Aims**

The current study had two primary aims. The first aim of the study was to descriptively detail the prevalence rates, demographic characteristics, emotional impact, as well as disclosure rates and disclosure details of sexual victimization experiences among men. The second aim of the study was to quantitatively examine whether or not sexual victimization details (e.g., relationship to the perpetrator), emotion regulation strategies, male rape myth acceptance, conformity to masculine norms, attitudes toward gay men, attitudes toward women, stigma levels, and symptoms of PTSD significantly relate to disclosure behaviors of men experiencing sexual victimization. The following hypotheses were tested:

Hypothesis 1: Based on prior research assessing prevalence rates of sexual victimization experiences among men, it was estimated that 25% of the study sample would endorse having experienced sexual victimization in his lifetime (Anderson, Cahill, & Delahanty, 2016). Additionally, it was hypothesized that the disclosure rates for said trauma experiences would be approximately 40%-60% (Finkelhor et al., 1990; Tjaden & Thoennes, 2006; W. Walsh et al., 2010). Further, participants identifying as a sexual minority would have elevated rates of sexual victimization compared to their heterosexual counterparts (Balsam et al., 2005). Finally, it was predicted the emotional impact of sexual victimization experiences, specifically stigma and symptoms of PTSD= would be similar to the impact in female populations (Rind, Tromovitch, & Bauserman, 1998). These reactions were anticipated to be more deleterious when the individual had been sexually assaulted by a male perpetrator compared to a female perpetrator (Struckman-Johnson & Struckman-Johnson, 1994).

Hypothesis 2: It was hypothesized that the help-seeking behavior of individuals identifying sexual victimization experiences would be associated with the victimization details (e.g., relationship to the perpetrator), emotion regulation strategies, male rape myth acceptance, conformity to masculine norms, and attitudes toward gay men. More specifically:

Sub-Hypothesis 2.1: It was predicted that the following variables would be associated with less likelihood of help-seeking behavior among men experiencing sexual victimization: greater male rape myth acceptance, greater conformity to masculine norms, negative attitudes toward gay men, negative attitudes toward women, a female perpetrator, if the perpetrator was known to the individual, greater religious affiliation, and greater use of suppression to regulate emotions.

Sub-Hypothesis 2.2: It was predicted that the following variables would be associated with greater likelihood of help-seeking behavior among men experiencing sexual victimization: higher levels of distress following the trauma and more severe categorization of sexual victimization.

The study also has two exploratory aims. The first exploratory aim is to compare heterosexual and sexual minority men across the abovementioned factors and determine the presence or absence of an interactive effect, particularly regarding gender norms. The second exploratory aim was to compare sexual minority men's responses to the Short Internalized Homonegativity Scale (SIHS) and the Modern Homonegativity Scale – Gay (MHS-G) to determine if the SIHS is a potentially valid measure of internalized homonegativity among sexual minority men.

## Methods

### Sample

Each of the two primary aims was achieved through two separate samples. Specifically, one sample consisted of 364 male students enrolled in psychology courses at the University of Wisconsin – Milwaukee. The second sample consisted of 483 men from three online communities (i.e., general research, sexual victimization support, and sexual minority men) who received an opportunity to obtain a \$25 gift card. The two exploratory aims were achieved by combining the 364 male students with the 483 men from an online community-based sample, for a total sample of 847 men. All participants were required to be 18 years older. We restricted the sample to men because the primary interest of the study is in the assessment of sexual victimization experiences among men as well as subsequent barriers to disclosure; men are historically under-represented in research on sexual victimization, but extant research suggests that men constitute a particularly high-risk group for non-disclosure of sexual victimization, with research estimating that male disclosure behaviors are significantly lower than among their female counterparts (Walsh, DiLillo, & Scalora, 2010).

The three different sources for the Online Community-Based sample differed in age  $F(2,462) = 12.56, p < 0.0001$ , with the sexual minority source being significantly older compared to the general research and sexual victimization sources ( $p < 0.05$ ). Specifically, the mean age for general research source was 28.0 years old ( $SD = 12.8$ ), 29.45 years old ( $SD = 12.3$ ) for the sexual victimization source, and 34.86 years old ( $SD = 14.5$ ) for the sexual minority source. The sexual minority source was also more likely to indicate they were liberal compared to both the general research and sexual victimization sources ( $p < 0.05$ ). Specifically, 42.5% ( $n = 88$ ) of the participants from the sexual minority source indicated that they were liberal, 25.7% ( $n = 28$ ) of the

participants from the sexual victimization source indicated they were liberal, and 22.6% (n=31) of the participants from the general research source indicated they were liberal. The sexual minority source was also significantly more likely to endorse having a college degree or greater compared to general research source ( $p < 0.05$ ). In particular, 39.6% (n=55) of the general research source had at least a college degree, 44.5% (n=49) of the sexual victimization source had at least a college degree, and 56.8% (n=121) of the sexual minority source had at least a college degree.

A reflection of sampling methodology, 100% (n=96) of the sexual victimization source noted sexual victimization. Regarding the other two sources, 18.3% (n=13) of the men in the general research source noted sexual victimization and 71.8% (n=112) of the sexual minority source noted sexual victimization. Given this sampling methodology, the sexual victimization source had significantly higher rates of sexual victimization compared to the general research and the sexual minority sources ( $p < 0.05$ ).

Given the sampling methodology, the sources also significantly differed in identifying as sexual minority ( $\chi^2 = 272.03$ ,  $p < 0.0001$ ). Approximately 18.7% (n=26) of the general research source identified as a sexual minority, 33.6% (n=37) of the sexual victimization source identified as a sexual minority, and 100% (n=213) of the sexual minority source identified as a sexual minority. An artifact of sampling, participants from the sexual minority source were more likely to identify as a sexual minority compared to the sexual victimization and general research sources ( $p < 0.05$ ). Of particular note, however, those from the sexual victimization source were more likely to identify as a sexual minority compared to the general research source ( $p < 0.05$ ).

In regard to how the total Online Community-Based Sample compared to the University Sample, race/ethnicity ( $\chi^2 = 22.36$ ,  $p = 0.001$ ), education level ( $\chi^2 = 81.8$ ,  $p < 0.0001$ ), sexual minority

orientation ( $\chi^2=161.6$ ,  $p<0.0001$ ), relationship status ( $\chi^2=12.14$ ,  $p=0.002$ ), social environment of area growing up ( $\chi^2=11.58$ ,  $p=0.02$ ), religious affiliation ( $\chi^2=11.74$ ,  $p=0.008$ ), and rate of sexual assault ( $\chi^2=41.52$ ,  $p<0.0001$ ) significantly differed between the University Sample and the Online Community-Based Sample. Specifically, the Online Community-Based Sample was more likely to have at least a college degree (as the University Sample was currently working on their degree at time of participation), identify as being in a relationship, identify as a sexual minority (as the Online Community-Based Sample sampling specifically recruited sexual minority men), indicate a sexual victimization experience (as the Online Community-Based Sample sampling specifically recruited men experiencing sexual victimization), be raised in a more conservative area and family, and identify as less religious ( $p<0.05$ ). The University Sample had a significantly greater frequency of Asian American participants ( $p<0.05$ ).

Additionally, the mean age ( $t=-10.96$ ,  $df=828$ ,  $p<0.001$ ) and mean time to disclosure ( $t=-2.51$ ,  $df=144$ ,  $p=0.002$ ) differed by sample. Specifically, the mean age for the University Sample was younger (23 years old,  $SD= 6.2$ ) compared to the Online Community-Based Sample (31.5 years old,  $SD= 13.8$ ). Further, the mean time to disclosure was shorter for the University Sample (3.8 years,  $SD= 5.9$ ) compared to the Online Community-Based Sample (7.6 years,  $SD= 13.8$ ), understandably so given the Online Community-Based Sample's older age.

### Recruitment Strategies

Given the rates of traumatic sexual experiences and disclosure behaviors among men, a number of strategies for recruitment were utilized to achieve the study's aims.

*University Sample.* Male students enrolled in psychology courses at the University of Wisconsin – Milwaukee were targeted. Specifically, the Sona Experiment Management System for online research was utilized to inform potential participants about the study as well as

connect interested individuals to the Qualtrics survey. To enhance participation, recruitment emails were sent to men enrolled in psychology courses via Sona and recruitment posters were uploaded to D2L courses pages with the instructor's permission.

*Online Community-Based Sample.* Advertisements for the study were posted to websites for male survivors of sexual victimization (i.e., <https://1in6.org>, <http://www.pandys.org>). As individuals who visit these sites may differ from those who do not, advertisements for the study were also posted to websites that detail general research opportunities not specific to sexual victimization (i.e., [www.reddit.com](http://www.reddit.com), <http://psych.hanover.edu/research/exponnet.html>). Further, in an effort to assess the relationship between sexual orientation and factors impacting disclosure behaviors) sexual minority men were purposefully targeted via online forums and nationwide groups (i.e., <http://gayresearch.com>, <http://www.csgsnyu.org/listserv-mailing-list/>). As participants obtained via this sampling methodology were not be eligible for extra credit, they were entered into a drawing for a \$25 gift card as an incentive to complete the survey.

A limitation of this type of community-based sampling is that an individual's likelihood of inclusion in the sample is proportionate to their degree of involvement in said community (e.g., engagement in online support networks). In an effort to address this concern, the procedure of snowball sampling was implemented. This sampling methodology asks participants, referred to as "seeds," to inform others in their social network of the study; in the present study's case, participants would send the Qualtrics survey link to potential participants in their social network. If these potential participants are eligible and decide to participate, they too are asked to nominate other potential participants from among their social network. In capitalizing on these social networks, researchers are more likely to sample individuals less involved in a given community (Morgan, 2008).

## Measures

Several standardized self-report measures were administered. Copies of all the relevant measures may be found in noted appendices. Below are descriptions of each measure.

*Demographic Information Form (Appendix A).* Background information was collected on participant age, race/ethnicity, sexual orientation, education status, relationship status, political beliefs, social atmosphere growing up, family atmosphere growing up, and religious/spiritual orientation.

*Sexual Experiences Survey – Short Form Victimization (SES-SFV; Appendix B).* The SES-SFV, a shortened version of the SES, assessed participants' unwanted sexual experiences occurring after age 14 (Koss et al., 2007). Possible victimization experiences include unwanted sex play, unwanted oral, vaginal, and anal sex, degree of force, and use of alcohol/drugs to coerce sexual experiences. Participants answer based on how frequently each experience happened during the past 12 months and since age 14 (never, once, twice, three or more times). This instrument has demonstrated good validity (Koss et al., 2007).

*Childhood Trauma Questionnaire – Short Form (CTQ-SF; Appendix C).* To identify experiences of sexual abuse prior to age 14, participants completed the CTQ-SF (Bernstein et al., 2003). This retrospective self-report measure is comprised of 28 items assessing the following five areas of childhood maltreatment via five subscales: physical abuse, emotional abuse, sexual abuse, physical neglect, and emotional neglect. Items are rated via 5-point Likert scale (i.e., 1 = “never true” to 5 = “very often true”). For the current study's aims of identifying sexual victimization experiences, only the sexual abuse subscale was utilized; this methodology is in line with other research studies (DiLillo et al., 2006; K. Walsh, DiLillo, & Scalora, 2011). Individuals must obtain a raw score of at least 6 on the CTQ item responses to be classified as

sexually abused (Bernstein & Fink, 1998). The mean internal consistency estimates for the sexual abuse subscale is .92 across eight different samples (e.g., adolescent psychiatric inpatients, college undergraduates), and test-retest reliabilities have been reported as .81 for sexual abuse subscale over a 1.6-5.6 month follow-up period (Bernstein & Fink, 1998).

*Sexual Assault Details Questionnaire (SADQ; Appendix D).* In the event a participant indicated a history of sexual victimization experience, he completed questions regarding the assault details. Specifically, these details included both the nature of the assault (e.g., did the participant achieve orgasm) as well as perpetrator details (e.g., level of acquaintance).

*Help-Seeking Behavior Questionnaire (HSBQ; Appendix D).* As there is no standardized assessment tool to measure disclosure behaviors in sexually victimized individuals, participants were asked direct questions, which is traditionally how these behaviors are measured (e.g., Day & Livingstone, 2003; Ogletree, 1993; Ullman & Filipas, 2001). For the purposes of the current study's aims, an adapted version of these help-seeking behavior questionnaires was utilized.

*Stigma Scale (SS; Appendix E).* The SS is a 9-item self-report measure assessed the degree of stigma victims feel as a result of sexual assault (Gibson & Leitenberg, 2001). Participants were asked to rank their degree of stigma on a 5-point Likert scale (1 = "not at all" to 5 = "very much"). The total score was generated by summing responses to all items; higher scores indicated greater experience of shame related to the sexual assault. The SS has an internal consistency alpha of .93 (Gibson & Leitenberg, 2001).

*PTSD Checklist for DSM-5 (PCL-5; Appendix F).* The PCL-5 is a 20-item self-report measure that assessed the 20 DSM-5 symptoms of PTSD (Weathers et al., 2013). Each response was rated on a scale of 0-4, with 0 indicating no experience of a PTSD symptom related to the responder's specific traumatic event and 4 indicating the severest experience of that symptom. A

total symptom severity score (range: 0-80) was obtained by summing the scores of all items. A provisional PTSD diagnosis can be made by treating each item rated as 2 or higher as a symptom endorsed, then following the DSM-5 diagnostic rule which requires at least: 1 B item (items 1-5), 1 C item (items 6-7), 2 D items (items 8-14), and 2 E items (items 15-20). A past version of the PCL for DSM-IV is positively correlated with the Clinician Administered PTSD Scale ( $r=0.93$ ), and it has shown excellent test-retest reliability ( $r=0.80$ ) and internal consistency ( $\alpha=0.86$ ) for total PCL scores (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996; Norris & Hamblen, 2004).

*Male Rape Myths Scale (MRMS; Appendix G).* The MRMS is a 12-item scale assessing level of agreement with misconceptions about men as victims of sexual violence (Struckman-Johnson & Struckman-Johnson, 1992). Six items refer to men victimized by another man (e.g., “it is impossible for a man to rape a man”), and six items refer to women as perpetrators (e.g., “it is impossible for a man to be raped by a woman”). Participants were asked to indicate level of agreement via a 6-point Likert scale (i.e., 1 = strongly disagree, 6 = strongly agree). The total score was generated by summing all item responses; higher scores indicate more endorsement of male rape myths. Although psychometric properties were not determined by the developers, Chapleau, Oswald, and Russell (2008) determined the MRMS correlated with the Illinois Rape Myth Acceptance Scale ( $r = .58$ ), and men completing the MRMS demonstrated more support of male rape myths than women.

*The Modern Homonegativity Scale – Gay (MHS-G; Appendix H).* The MHS-G is a 12-item scale assessing attitudes toward gay/bisexual men (Morrison & Morrison, 2002). Participants were asked to indicate level of agreement with items via a 5-point Likert scale (i.e., 1 = “strongly agree” to 5 = “strongly disagree”). The MHS-G score was determined by summing

all 12 items together; higher scores indicate greater levels of prejudice toward gay/bisexual men. The MHS-G has been shown to be psychometrically robust, displaying good construct validity and reliability (Morrison & Morrison, 2002; Morrison, Morrison, & Franklin, 2009).

*Conformity to Masculine Norms Inventory (CMNI-22; Appendix I).* The CMNI-22 is a 22-item scale assessing behavioral, affective, and cognitive conformity with societal masculinities (Mahalik et al., 2003). Scores from the original CMNI have been shown to positively correlate with measures of social dominance, aggression, and negative attitudes toward help-seeking (Mahalik et al., 2003). For the CMNI-22, participants were asked to indicate level of agreement with items via a 4-point Likert scale (i.e., 1 = “strongly disagree” to 4 = “strongly agree”). The total score was generated by summing all 22 items; higher scores indicate greater levels of conformity. The CMNI-22 utilizes the two highest loading items for each of the 11 factors from the original CMNI, and it demonstrates strong concurrent validity ( $r = .92$ ) with the original CMNI as well as good internal consistency (Burns & Mahalik, 2008; Rochlen, McKelley, Suizzo, & Scaringi, 2008).

*Attitudes toward Woman Scale (AWS).* The AWS is a 15-item questionnaire designed to measure the participant’s attitudes toward women and feminism (Spence & Hahn, 1997). The participants rate each item using a 4-point Likert scale (i.e., 1 = “agree strongly” to 4 = “disagree strongly”). The total score was generated by summing all 15 items, with some items reverse scored; higher scores indicate greater levels of egalitarian/feminist attitudes. The AWS has a Cronbach alpha “in the mid-.80s” and demonstrated strong convergent validity with the original 55 item AWS (Spence & Hahn, 1997).

*The Short Internalized Homonegativity Scale (SIHS; Appendix J).* The SIHS is a 12-item scale assessing levels of internalized homophobia (Currie, Cunningham, & Findlay, 2004).

Sexual minority participants were asked to indicate level of agreement with items via a 7-point Likert scale (i.e., 1 = “strongly disagree” to 7 = “strongly agree”). The SIHS score was determined by summing all 12 items and then calculating an average, with a final SIHS score ranging from 1 to 7; higher scores indicate higher levels of internalized homonegativity. Psychometric study supports a single higher order construct of IH, though is comprised of three lower-order factors: Public Identification as Gay, Sexual Comfort with Gay Men, and Social Comfort with Gay Men. Cronbach alpha for the total SIHS scale was determined to be .78; the lower order factors demonstrated Cronbach alphas of .77, .68, and .72, respectively (Currie et al., 2004).

*Emotion Regulation Questionnaire (ERQ; Appendix K).* The ERQ is a 10-item self-report measure assessing dispositional use of reappraisal and expressive suppression in regard to emotion regulation (Gross & John, 2003). Participants were asked to indicate level of agreement with items via a 7-point Likert scale (i.e., 1 = “strongly disagree” to 7 = “strongly agree”). Scores for reappraisal and suppression subscales were generated by summing specific subscale items; higher scores for a particular subscale indicate greater levels of endorsement of that regulation type. Elevated suppression has been shown to be negatively related to obtaining support (Srivastava, Tamir, McGonigal, John, & Gross, 2009). The ERQ has demonstrated high internal consistency as well as test-retest reliability (Gross & John, 2003).

### Procedure

The current study employed the online survey software Qualtrics; this survey tool provides data confidentiality and has physical and environmental controls in place to protect data. Further, this modality was utilized in an effort to optimize participation. Online methodology allows researchers to reach a large and diverse sample (Markham, 2004) and is

particularly appropriate for populations that are generally difficult to access (Bowen, 2005; Mangan & Reips, 2007). Further, studies suggest that participants are more apt to engage in web-based surveys given its confidential nature (Hewson, Yule, Laurent, & Vogel, 2003). This confidential nature has also been shown to produce higher disclosure rates of sensitive information; for example, participants are more likely to endorse same-sex attractions and behaviors via computer compared to in-person assessment (Villarroel et al., 2006). In sum, this methodology is able to cast a wider net, obtain a more diverse sample, and enhance disclosure of sensitive information.

Men interested in participating were first presented with the informed consent document (see Appendix L for University Sample; Appendix M for Online Community-Based Sample), where the nature of the study as well as the risks and benefits involved were detailed. Particularly, they were informed that the protocol involved assessment of unwanted sexual experiences, and that they had the right to discontinue the study without penalty at any time. Individuals were encouraged to complete the survey to the best of their ability. A phone number for a 24/7 crisis hotline was displayed at the top of each Qualtrics page.

Upon obtaining informed consent, each individual completed the demographics questionnaire to ensure eligibility criteria were met (i.e., male, 18 years or older). After this was complete, the participant completed the SES-SFV and CTQ-SF to identify history of sexual victimization. If the participant endorsed a history of sexual victimization, he completed the SADQ, HSBQ, PCL-5, and SS to assess the nature of the experience as well as resulting reactions. If the participant indicated multiple sexual victimization experiences, he was asked to select the experience that continued to be the single most distressing event experienced and respond to the measure items with that index trauma in mind (Ruggiero, Del Ben, Scotti, &

Rabalais, 2003). Participants denying a history of sexual victimization did not complete these measures.

All participants then completed the MRMS, CMNI-22, MHS-G, and ERQ. Participants identifying as a sexual minority also completed the SIHS to ascertain levels of internalized homonegativity. Following these procedures, all participants were provided with a debriefing statement detailing contact information for sexual assault and counseling services in the event one felt he would benefit from such resources. Additionally, participants were provided a survey link to disseminate the study to interested parties.

## **Results**

### University Sample

#### ***Demographics. University Sample. Preliminary Descriptive Analyses.***

Data were subjected to preliminary descriptive analyses to ascertain the demographic characteristics of the sample. Among the 364 male student participants, the mean age of the sample was 23 years old (SD= 6.2). The majority of the participants were enrolled as undergraduates, with 18.4% of the sample enrolled in graduate school. Further, among the university sample, 84.0% participants identified as heterosexual, 8.0% identified as gay, 6.3% as bisexual, and 1.7% as other when asked to identify their sexual orientation. In regard to relationship status, 59.2% of the men indicated that they were single at the time of completing the survey.

Socially, the participants were asked to characterize their political beliefs. Overall, approximately 58% of the sample characterized themselves as “liberal” or “somewhat liberal,” and 42% characterized themselves as “conservative” or “somewhat conservative.” Further, participants indicated their social atmosphere both in their area and in their family while growing

up. The majority of participants (41.3%) rated the social atmosphere in the area they grew up in as “conservative” or “somewhat conservative,” which paralleled the family atmosphere in which they grew up, with 40.7% detailing it as “conservative” or “somewhat conservative.” In regard to religious/spiritual orientation, 34.9% of the sample identified as “not at all religious,” 31% identified as “slightly religious,” 27.2% identified as “somewhat religious,” and 6.9% identified as “very religious.”

The sample was largely white (65.7%) with a mix of other races. A total of 9.6% of the sample identified as Hispanic / Latino, with 6.9% of the sample *only* endorsing Hispanic / Latino when asked to select their race and ethnicity. Race and ethnicity characteristics are summarized in Table 1.

Table 1. *Distribution of race, in Total University Sample (n=364)*

Racial / Ethnicity Identity	n	%
White	239	65.7
Asian American	36	9.9
Hispanic / Latino Only	25	6.9
Black	24	6.6
Other	23	6.3
Mixed	17	4.7
Native American / American Indian	0	0

***Rates of Sexual Victimization. University Sample. First Primary Aim.***

In line with the first aim for the study, descriptive analyses were performed to detail the prevalence rates of sexual victimization experiences among men. Based on prior research assessing prevalence rates of sexual victimization experiences among men using the SES-SFV, it was estimated that 25% of the study sample would endorse having experienced sexual victimization in his lifetime (Anderson, Cahill, & Delahanty, 2016). To note, these prior projects did not utilize the CTQ-SF to assess for victimization. Prior to assessment of sexual

victimization experiences, 3.6% (n=13) of the participants dropped out of the study. Of the remaining participants (n=351), 43.9% (n=154) of the participants reported some form of sexual victimization in their lifetime via the SES-SFV and CTQ-SF. Looking at the relationship between the observed frequency and the expected frequency,  $\chi^2 (1, N = 351) = 66.69, p=0.005$ , exceeding the critical value of 7.879. Victimization was assessed in the following three time points: prior to age 14, since 14<sup>th</sup> birthday and stopping one year ago from date of survey, as well as in the past 12 months from date of survey. Through this assessment, 72 participants identified experiences only at one time point, 52 identified experience at two time points, and 17 identified experiences at all three time points.

Based on the SES-SFV, 35.3% (n=124) of participants reported at least one sexual victimization experience since age 14 (including the last 12 months), with 19.4% (n=68) indicating at least one sexual victimization experience within the last 12 months. Approximately 26.3% of the population detailed experience related to sexual contact without consent, 11.2% described an attempted coercive sexual experience, 12.3% noted a completed coercive sexual experience, and 14.0% indicated an attempted rape. Of note, 46 (12.6%) participants behaviorally detailed a sexual experience meeting the definition of rape since age 14 (including the last 12 months), though only 15.2% (n=7) of those participants stated “yes” to “have you ever been raped?” Interestingly, 6 participants denied any behavioral detail of rape yet indicated “yes” to “have you ever been raped?” Further, 3 participants denied any of the SES-SFV behavioral experiences (i.e., in the past 12 months and since age 14) as well as any of the CTQ-SF items, yet they indicated they had been raped. A summarization of specific SES-SFV assault types is detailed in Table 2 below. Using the CTQ-SF, 21.4% (n=75) of participants indicated sexual abuse prior to the age of 14.

Table 2. *Distribution of SES-SFV assault experiences, in Total University Sample (n=351)*

Assault Experience	n	%
Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent <b>in past 12 months</b>	50	14.2
Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent <b>since age 14*</b>	85	24.2
Someone had oral sex with me or made me have oral sex with them without consent <b>in past 12 months</b>	30	8.5
Someone had oral sex with me or made me have oral sex with them without consent <b>since age 14*</b>	48	13.7
A man put his penis into my butt, or someone inserted fingers or objects without my consent <b>in past 12 months</b>	17	4.8
A man put his penis into my butt, or someone inserted fingers or objects without my consent <b>since age 14*</b>	24	6.8
Even though it didn't happen, someone tried to have oral sex with me, or make me have oral sex with them without my consent <b>in past 12 months</b>	28	8
Even though it didn't happen, someone tried to have oral sex with me, or make me have oral sex with them without my consent <b>since age 14*</b>	42	12
Even though it did not happen, a man tried to put his penis into my butt, or someone tried to stick in objects or fingers without my consent <b>in past 12 months</b>	18	5.1
Even though it did not happen, a man tried to put his penis into my butt, or someone tried to stick in objects or fingers without my consent <b>since age 14*</b>	27	7.7
I have been raped in my lifetime	13	3.7

\*"Since age 14" refers to life starting on 14<sup>th</sup> birthday and stopping one year ago from date of survey completion.

### *Descriptive Details of Demographics of Sexual Victimization. University Sample. First*

#### *Primary Aim.*

The demographics of the participants with sexual victimization experiences largely mirrored those of the study's total sample. One notable difference between the total university sample and the subsample of those with sexual victimization experiences relates to sexual orientation. To note, one participant did not disclose their identified sexual orientation. Specifically, although the total university sample predominately identified as heterosexual (i.e., 84% participants), this observation was reversed in the subsample, with 73.2% of those positive

for a sexual victimization experience identifying as a sexual minority. In line with this observation, it was predicted that participants identifying as a sexual minority would have elevated rates of sexual victimization compared to their heterosexual counterparts. The rate of sexual victimization among sexual minority men within the total sample was 74.6%, whereas the rate of sexual victimization among their heterosexual counterparts was 38%. As evident by chi-square analysis, frequency of sexual victimization history significantly differ across the two subsamples ( $\chi^2=25.56, p<0.0001$ ).

In regard to the other demographic variables, older age significantly predicted greater likelihood of assault [ $F(1,350) = 4.54, p=0.03$ ]. In particular, the mean age of those that were assaulted was 23.6 years old (SD=6.6) compared to 22.3 years old (SD= 5.3) for those not assaulted. Beyond this demographic, those that were sexually victimized did not significantly differ compared to their non-victimized counterparts on other demographic factors. Specifically, Hispanic identification ( $\chi^2=1.72, p=0.19$ ), race/ethnicity ( $\chi^2=8.73, p=0.12$ ), education ( $\chi^2=1.14, p=0.29$ ), relationship status ( $\chi^2=1.22, p=0.54$ ), income ( $\chi^2=4.12, p=0.39$ ), political belief ( $\chi^2=0.44, p=0.93$ ), social atmosphere of area growing up ( $\chi^2=5.14, p=0.27$ ), social atmosphere of family growing up ( $\chi^2=4.80, p=0.31$ ), and religious affiliation ( $\chi^2=1.81, p=0.61$ ) did not significantly differ by victimization status.

***Descriptive Details of Sexual Victimization Experiences. University Sample. First Primary Aim.***

The participants were asked to select the experience that continued to be the single most distressing event experienced and respond to the measure items with that index trauma in mind. Of the 154 individuals experiencing sexual victimization, 17 did not select an index trauma and were subsequently screened out of the index trauma assessment sections. Index traumas are

summarized in Table 3. The majority of participants indicated childhood sexual maltreatment as their index trauma (32.1%).

Table 3. *Distribution of Index Traumas, in University Sexual Victimization Sample (n=137)*

Assault Experience	n	%
Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent <b>in past 12 months</b>	16	11.7
Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent <b>since age 14</b>	32	23.4
Someone had oral sex with me or made me have oral sex with them without consent <b>in past 12 months</b>	7	5.1
Someone had oral sex with me or made me have oral sex with them without consent <b>since age 14</b>	16	11.7
A man put his penis into my butt, or someone inserted fingers or objects without my consent <b>in past 12 months</b>	2	1.5
A man put his penis into my butt, or someone inserted fingers or objects without my consent <b>since age 14</b>	4	2.9
Even though it didn't happen, someone tried to have oral sex with me, or make me have oral sex with them without my consent <b>in past 12 months</b>	5	3.7
Even though it didn't happen, someone tried to have oral sex with me, or make me have oral sex with them without my consent <b>since age 14</b>	9	6.6
Even though it did not happen, a man tried to put his penis into my butt, or someone tried to stick in objects or fingers without my consent <b>in past 12 months</b>	1	0.7
Even though it did not happen, a man tried to put his penis into my butt, or someone tried to stick in objects or fingers without my consent <b>since age 14</b>	1	0.7
I experienced sexual maltreatment before the age of 14	44	32.1

The majority of the abusive experiences occurred a single time (i.e., 59.4%). The mean age at the index victimization event was 14.1 years old, (SD= 6.2). Approximately 46.5% of participants obtained an erection, and 22.5% subsequently reached orgasm during the event. Only 3.9% of sexual victimization experiences resulted in physical injury. The tactics utilized by the perpetrator(s) during the index trauma are summarized in Table 4. To note, these tactics were asked for individuals with a childhood maltreatment index as well. The majority of participants reported that the perpetrator took advantage when they were too drunk or out of it to stop

(37.6%) as well as telling lies, threatening to end a relationship / spread rumors, verbal pressure, or making promises (33.9%). Approximately 18.3% of participants indicated that the perpetrator utilized force.

Table 4. *Distribution of tactics utilized by the perpetrator(s) during the index trauma, in the University Sexual Victimization Sample (n=109)*

Tactic	n	%
Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises about the future, or continually verbally pressuring after I said I didn't want to.	37	33.9
Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force after I said I didn't want to.	32	29.4
Taking advantage when I was too drunk or out of it to stop what was happening.	41	37.6
Threatening to physically harm me or someone close to me.	7	6.4
Using force, for example, by holding me down with their body weight, pinning my arms, or having a weapon.	20	18.3

The vast majority (87.4%) of the index traumas had only 1 perpetrator. Regarding the sex of the perpetrator(s), 53% were female, 43% were male, and 4% of index events included both sexes. Further, 60.1% of index events had a perpetrator's sex that was in line with the participant's sex of interest based on sexual orientation. Of note, 82.5% of men identifying as a sexual minority had a perpetrator in line with their sex of interest, whereas 51.8% of heterosexual men had a perpetrator in line with their sex of interest.

The perpetrator's relationship to the victim in the total sexual victimization sample as well as by index trauma time point is detailed in Table 5. The majority of participant's noted that the perpetrator was a friend (35.2%), whereas only 8.6% of perpetrators were a stranger. Relatives, friends, and childcare providers were perpetrators largely for childhood index traumas, whereas partners and boyfriends/girlfriends were perpetrators largely for index traumas occurring since 14 and within the past year. Boyfriends/girlfriends and acquaintances increased in frequency as the time point was closer to the survey.

Table 5. *Distribution of perpetrator's relationship to the victim, in University Sexual Victimization Sample (n=128), by index trauma time point*

Relationship to Victim	Total (n=128)		CTQ (n=44)		Since 14 (n=31)		Past Year (n=62)	
	n	%	n	%	n	%	n	%
Parent or guardian	2	1.6	2	4.5	0	0.0	0	0.0
Sibling	5	3.9	4	9.1	0	0.0	1	1.6
Other relative	10	7.8	6	13.6	0	0.0	4	6.5
Friend	45	35.2	11	25.0	14	45.2	20	32.3
Clergy member	2	1.6	0	0.0	1	3.2	1	1.6
Teacher or coach	0	0	0	0.0	0	0.0	0	0.0
Spouse/partner	2	1.6	0	0.0	2	6.5	0	0.0
Boyfriend/girlfriend	21	16.4	4	9.1	4	12.9	13	21.0
Stranger	11	8.6	2	4.5	5	16.1	4	6.5
Acquaintance	32	25	8	18.2	7	22.6	17	27.4
Childcare provider	4	3.1	3	6.8	1	3.2	0	0.0
Co-worker	4	3.1	0	0.0	1	3.2	3	4.8

***Descriptive Details of Emotional Impact of Sexual Victimization. University Sample. First Primary Aim.***

Regarding the emotional impact of the event, the mean PCL-5 score was 12.3 (SD=16.5). Looking at PTSD symptom endorsement, 26% of the sample endorsed re-experiencing symptoms, 26.6% endorsed avoidance behaviors, 21.4% endorsed negative alterations in mood/cognition, and 20.8% endorsed marked alterations in arousal and reactivity in the past month. Among those experiencing sexual victimization, approximately 10.4% of the sample met criteria for a provisional current PTSD diagnosis in relation to their index sexual assault trauma (i.e., at least: 1 re-experiencing item, 1 avoidance item, 2 negative alterations in mood/cognition items, and 2 arousal/reactivity items). These reactions were predicted to be similar to the impact in female populations (Rind, Tromovitch, & Bauserman, 1998); according to the National Women's Study, 13% of women with a history of sexual assault met criteria for current PTSD (Resnick, Kilpatrick, Dansky, Daunders, & Best, 1993). Concerning level of stigma experienced,

the mean SS score was 4.8 (SD= 2.7). In a study assessing level of stigma among undergraduate female students with a history of sexual victimization, the mean SS score 3.3 (SD= 1.3) (Gibson & Leitenberg, 2001), suggesting similar levels of stigma in this current study's male student population.

As predicted, a male perpetrator compared to a female perpetrator predicted greater levels of trauma reactions [ $F(1,122) = 8.78, p=0.004$ ] and stigma [ $F(1,123) = 14.2, p=0.0002$ ]. For trauma reactions, the mean PCL-5 score was 17.1 (SD= 19.5) when a male perpetrator was involved, compared to a mean PCL-5 score of 8.5 (SD= 12.3) when a male perpetrator was not involved. Regarding stigma, the mean SS score was 5.7 (SD= 2.8) when a male perpetrator was involved, compared to a mean SS score of 4 (SD= 2.3) when a male perpetrator was not involved. The participant's particular identified index trauma did not significantly predict trauma-related distress [ $F(1,127) = 0.29, p=0.59$ ] nor the level of stigma [ $F(1,127) = 0.05, p=0.83$ ].

Of note, when the sex of the perpetrator did not match the participant's sex of interest based on sexual orientation, it significantly predicted greater levels of both stigma [ $F(1,155) = 7.53, p=0.007$ ] and trauma reactions [ $F(1,127) = 7.0, p=0.009$ ]. Specifically, the mean SS score was 4.4 (SD= 2.5) when the sex matched interest, compared a mean SS score of 5.7 (SD= 3.1) when the sex did not match interest. Regarding trauma reactions, the mean PCL-5 score was 9.6 (SD= 13.7) when the sex matched interest, compared a mean PCL-5 score of 17.6 (SD= 20.2) when the sex did not match interest.

***Descriptive Details of Disclosure Behaviors and Experiences. University Sample. First Primary Aim Outcomes.***

It was hypothesized that the disclosure rates for index trauma experiences would be approximately 40%-60%. Among the 154 individuals endorsing sexual victimization, 16.2% (n=25) did not respond to the SADQ items. Among the remaining 129 individuals endorsing sexual victimization, 48.1% (n=62) reported they had told someone about the index trauma.

Of the 62 individuals that disclosed, the mean age at disclosure was 18 years old (SD= 4.1). The mean time between the index event and said disclosure (i.e., time to disclosure) was 3.6 years (SD= 5.9). Participants reported that the majority of the first people to whom they disclosed believed them (93.4%), provided emotional support (78.7%), and attempted to protect them (57.4%). Approximately 37.7% of individuals were encouraged to seek treatment. The majority of participants (58.3%) rated the level of helpfulness that the person provided as either “somewhat helpful” or “very helpful.” The person to whom the participant first disclosed was predominately a friend (55.7%); the characteristics of the individuals to whom the participant first disclosed along with the mean level of helpfulness (scale of 1-5, with 1 being “very helpful” to 5 being “very unhelpful”) are summarized in Table 6.

Table 6. *Distribution of person to which participant first disclosed with mean level of helpfulness, in University Disclosure Sample (n=61)*

Relationship to Victim	n	%	Helpfulness*	
			Mean	SD
Parent / Guardian	9	14.8	1.8	1.4
Sibling	2	3.3	1.5	0.7
Relative	1	1.6	4	-
Friend (less than 18)	18	29.5	2.1	0.9
Friend (adult)	16	26.2	2.3	1.3
Clergy	0	0	-	-
Teacher or Coach	0	0	-	-
Law enforcement	0	0	-	-
Medical	0	0	-	-
Mental Health	4	6.6	1.8	1.0
Spouse/Partner	2	3.3	2.5	0.7
Boyfriend/Girlfriend	9	14.8	3	0.7
Children	0	0.0	-	-
Other	0	0.0	-	-

\* On a scale of 1-5, with 1 being “very helpful” to 5 being “very unhelpful.”

The mean number of individuals to whom the participant disclosed was 4.3 (SD= 2.8). The person(s) to whom the participant additionally disclosed the assault event was largely either a friend or boyfriend/girlfriend. The distribution of the additional individuals to whom the participant disclosed is summarized in Table 7. To note, participants were able to indicate multiple relationships and only answered this prompt in the event they disclosed the experience to an additional person. As in the case of the first person to which the participant disclosed, the vast majority of participants told a friend and/or boyfriend/girlfriend.

Table 7. *Distribution of person(s) to which participant also disclosed, in the University Disclosure Sample (n=52)*

Relationship to Victim	n	%
Parent / Guardian	6	10
Sibling	12	20
Relative	3	5
Friend (less than 18)	17	28.3
Friend (adult)	29	48.3
Clergy	2	3.3
Teacher or Coach	1	1.7
Law enforcement	1	1.7
Medical	1	1.7
Mental Health	7	11.7
Spouse/Partner	5	8.3
Boyfriend/Girlfriend	19	31.7
Children	0	0
Other	0	0

***Predictors of Disclosure. University Sample. Second Primary Aim.***

In line with the second aim of the study, the relationships between disclosure status (i.e., disclosed v. not disclosed) and the following measures were analyzed: male rape myth acceptance (MRMS), conformity to masculine norms (CMNI), attitudes toward gay men (MHS), attitudes toward women (ATWS), emotion regulation strategies (ERQ-Suppression), trauma reactions (PCL-5), and stigma levels (SS). Demographics and sexual victimization details were also analyzed. Binary logistic regression was used with disclosure treated as the dependent variable so as to predict the disclosure status category of the participant. The score on each measure as well as victimization details and demographics were treated as the independent variables. Each independent variable was run in a unique regression. The outcomes for the measures are detailed in Table 8.

Table 8. *Measure predictors of disclosure status, in the University Sexual Victimization Sample*

Measure	Disclosed		Non-Disclosed		B	Wald	p	OR (95% CI)
	Mean	SD	Mean	SD				
MRMS	20.5	8.7	24.95	11.8	-0.04	5.4	<b>0.02</b>	0.96 (0.93-0.99)
CMNI	51.3	6.7	55.6	6.7	-0.10	10.37	<b>0.001</b>	0.91 (0.85-0.96)
MHS	27.7	9	31.5	8.6	-0.05	5.5	<b>0.02</b>	0.95 (0.91-0.99)
ATWS <sup>1</sup>	34.1	7.4	30.4	7.8	0.07	7.13	<b>0.008</b>	1.07 (1.02-0.12)
ERQ-Suppression <sup>2</sup>	18.0	7.4	17.1	8.1	0.13	11.67	<b>0.001</b>	1.14 (1.06-1.22)
PCL-5	9.4	12.4	15.5	19.4	-0.02	3.95	<b>0.047</b>	0.98 (0.95-0.99)
SS	4.4	2.4	5.3	2.9	-0.13	3.36	0.067	0.88 (0.77-1.01)

<sup>1</sup> Lower scores indicate more negative attitudes toward women.

<sup>2</sup> Lower scores indicate more suppression

It was hypothesized that greater male rape myth acceptance, greater conformity to masculine norms, holding more negative attitudes toward gay men, holding more negative attitudes toward women, and greater use of suppression to regulate emotions would predict less likelihood of disclosure among men experiencing sexual victimization. As evident in Table 8, these measures significantly predicted less disclosure rates.

It was also predicted that greater levels of trauma-related distress and greater levels of stigma would result in greater likelihood of disclosure. Although the PCL-5 significantly predicted disclosure behavior, higher levels of distress actually predicted *less* likelihood of disclosure. Further, although stigma did not significantly predict disclosure status, the levels were *less* in participants that disclosed compared to those that did not disclose.

Regarding details related to the index trauma, obtaining an erection during the event significantly predicted disclosure status ( $\chi^2=7.0, p=0.01$ ). Specifically, participants that did not obtain an erection were significantly less likely to disclose, with a disclosure rate of 37.7%, compared to those that did obtain an erection, with a disclosure rate of 61.0%.

It was specifically hypothesized that the likelihood of disclosure would be less if the perpetrator was known to the individual. Of those participants with an unknown perpetrator,

27.3% disclosed the assault. Among those with a known perpetrator, 50.9% disclosed the assault. Although these disclosure rates did not significantly differ by relationship to perpetrator ( $\chi^2=2.2$ ,  $p=0.1$ ), the direction was opposite that of the hypothesis. Additionally, it was predicted that disclosure would be less likely with more severe categorization of sexual victimization; however, the severity of the index trauma was not significantly associated with disclosure status ( $\chi^2=3.87$ ,  $p=0.6$ ).

It was also hypothesized that the likelihood of disclosure would be less if the perpetrator was female compared to if the perpetrator was male. Of those participants with a female perpetrator, 48.6% disclosed the assault. Among those without a female perpetrator, 49.1% disclosed the assault. Although this observation was in the same direction as the hypothesis, the difference was not statistically significant ( $\chi^2=.003$ ,  $p=0.96$ ). Further, whether the perpetrator's sex matched the victim's reported sex of interest or not, it did not significantly predict disclosure behavior ( $\chi^2=0.72$ ,  $p=0.40$ ).

Regarding other trauma details, number of times ( $\chi^2=0.5$ ,  $p=0.8$ ), age at trauma ( $\chi^2=0.4$ ,  $p=0.5$ ), number of perpetrators ( $\chi^2=1.0$ ,  $p=0.31$ ), physical injury ( $\chi^2=0.2$ ,  $p=0.7$ ), and obtaining an orgasm ( $\chi^2=2.8$ ,  $p=0.1$ ) were not significantly predictive of disclosure status.

Regarding demographic details, relationship status ( $\chi^2=7.4$ ,  $p=0.03$ ) and income level ( $\chi^2=10.8$ ,  $p=0.03$ ) significantly predicted disclosure status. Regarding relationship status, participants that were single were less likely to disclose, with 38.7% disclosure rate, compared to those that were in a relationship, with 61.1% disclosure rate ( $p=0.04$ ). For income level, those in the \$25,000-\$49,999 category were less likely to disclose, with 26% disclosure rate, compared to those in the \$50,00-\$79,999 category, with 75% disclosure rate, ( $p=0.04$ ).

It was also specifically hypothesized that greater affiliation with religion would be significantly associated with less likelihood of disclosure among men experiencing sexual victimization. On a scale of 1 to 4, with 1 being “not at all religious” to 4 being “very religious,” men that disclosed their sexual assault experience had a mean score of 1.9 (SD= 0.9), compared to a mean score of 2.2 (SD= 1.0) among men that did not disclose. While men that disclosed were less affiliated with religion compared to those that did not disclose, the difference was not statistically significant ( $\chi^2=3.4, p=0.3$ ).

Other demographics were not significant regarding disclosure status, including Hispanic identification ( $\chi^2=2.1, p=0.1$ ), race/ethnicity ( $\chi^2=1.1, p=0.3$ ), education ( $\chi^2=3.1, p=0.1$ ), sexual minority orientation ( $\chi^2=0.2, p=0.7$ ), political beliefs ( $\chi^2=1.3, p=0.7$ ), the social atmosphere of the family growing up ( $\chi^2=3.3, p=0.51$ ), the social atmosphere of the area growing up ( $\chi^2=8.0, p=0.1$ ), and age ( $\chi^2=3.8, p=0.052$ ).

***Associations with Time to Disclosure. University Sample. Second Primary Aim.***

In line with the second aim of the study, the relationships between time to disclosure (i.e., time from assault to disclosure) and the following measures were analyzed: male rape myth acceptance (MRMS), conformity to masculine norms (CMNI), attitudes toward gay men (MHS), attitudes toward women (ATWS), emotion regulation strategies (ERQ-Suppression), trauma reactions (PCL-5), stigma levels (SS). Demographics and sexual victimization details were also analyzed. In an effort to predict time to disclosure, linear regression was used. Time to disclosure was treated as the dependent variable. The score on each measure as well as victimization details and demographics were treated as the independent variables. Each independent variable was run in a unique regression. The outcomes for the measures are detailed in Table 9.

Table 9. Predictors of time to disclosure, in University Sexual Victimization Sample

Measure	$F(df), p$	R Square	B (95% CI)
MRMS	$F(1,55) = 0.76, p=0.39$	0.01	-0.08 (-0.27 – 0.10)
CMNI	$F(1,55) = 5.96, p=0.02$	0.10	-0.27 (-0.50 – 0.05)
MHS	$F(1,55) = 2.32, p=0.13$	0.04	-0.13 (-0.31 – 0.04)
ATWS <sup>1</sup>	$F(1,55) = 5.72, p=0.02$	0.09	0.25 (0.04 – 0.46)
ERQ-Suppression <sup>2</sup>	$F(1,55) = 5.42, p=0.02$	0.09	0.37 (0.05 – 0.68)
PCL-5	$F(1,55) = 0.13, p=0.72$	0.002	0.02 (-0.10 – 0.15)
SS	$F(1,55) = 1.7, p=0.19$	0.03	0.42 (-0.22 – 1.07)

<sup>1</sup> Lower scores indicate more negative attitudes toward women.

<sup>2</sup> Lower scores indicate more suppression

Regarding the measures, conformity to masculine norms, attitudes toward women, and the emotion regulation strategy of suppression significantly predicted time to disclosure. Specifically, time to disclosure decreased 0.27 years for each unit increase in CMNI score, suggesting that greater conformity to masculine norms resulted in a decrease in time to disclosure. Additionally, time to disclosure increased 0.25 years for each unit increase in ATW score, suggesting that less negative attitudes toward women resulted in an increase in time to disclosure. Further, time to disclosure increased 0.37 years for each unit increase in ERQ-Suppression score, suggesting that greater use of suppression strategies resulted in an increase in time to disclosure. Regarding the other measures, male rape myth acceptance, attitudes toward gay men trauma reactions, stigma levels, did not significantly predict time to disclosure.

Regarding details of the index trauma, obtaining an erection [ $F(1,55) = 5.57, p=0.02$ ], older age at index trauma [ $F(1,55) = 56.24, p<0.0001$ ], and the event occurring only once [ $F(1,55) = 13.05, p=0.0007$ ] predicted less time to disclosure. Of those participants that obtained an erection, the mean time to disclosure was 2.29 years (SD= 4.4). Among those that did not obtain an erection, the mean time to disclosure was 5.91 years (SD= 7.2). Participant's time to disclosure decreased by 0.87 years for each year increase in age at index trauma. Whether the perpetrator's sex matched the victim's reported sex of interest significantly predicted time to

disclosure [ $F(1,55) = 10.92, p=0.002$ ]. Specifically, participants were more likely to disclose the event sooner if the perpetrator's sex matched the victim's sex of interest. Of those where the perpetrator's sex matched the victim's sex of interest, mean time to disclosure was 2.40 years ( $SD= 4.6$ ), compared to 7.93 years ( $SD= 7.6$ ) for those where the perpetrator's sex did not match.

Among those participants where the unwanted sexual experience occurred once, the mean time to disclosure was 2.49 years ( $SD= 4.6$ ). Among those participants where the unwanted sexual experience occurred between 2 and 10 times, the mean time to disclosure was 7.45 years ( $SD= 7.7$ ). Only one participant had the unwanted sexual experience occurring more than 10 times, with the time to disclosure being 17 years. In sum, those where the assault occurred once had less time to disclosure compared to those where the event occurred more than once. Given that it is unclear whether time to disclosure is in reference to the first event or the last event, it is difficult to determine whether this difference in delay in disclosure is meaningful.

In relation to the other assault details, number of perpetrators [ $F(1,55) = 0.30, p=0.59$ ], physical injury [ $F(1,55) = 0.03, p=0.86$ ], female perpetrator [ $F(1,55) = 4.0, p=0.055$ ], obtaining an orgasm [ $F(1,55) = 0.12, p=0.73$ ], unknown perpetrator [ $F(1,55) = 1.3, p=0.26$ ], and religious affiliation [ $F(1,55) = 0.002, p=0.97$ ] were not significantly associated with time to disclosure.

Regarding demographic details, sexual minority orientation [ $F(1,55) = 5.56, p=0.02$ ] and older age of participant [ $F(1,55) = 4.86, p=0.03$ ] significantly predicted greater time to disclosure. Specifically, among the participants identifying as sexual minority men, the mean time to disclosure was 6.3 years ( $SD= 7.2$ ). Among those participants identifying as heterosexual, the mean time to disclosure was 2.5 years ( $SD= 4.8$ ). Regarding age, participant's time to disclosure increased by 0.22 years for each year increase in age.

Hispanic identification [ $F(1,55) = 0.94, p=0.34$ ], education [ $F(1,55) = 0.48, p=0.49$ ], income level [ $F(1,55) = 0.16, p=0.69$ ], political beliefs [ $F(1,55) = 1.0, p=0.32$ ], the social atmosphere of the area growing up [ $F(1,55) = 0.22, p=0.64$ ], the social atmosphere of the family growing up [ $F(1,55) = 1.2, p=0.28$ ], religious affiliation [ $F(1,55) = 0.0, p=0.97$ ], race/ethnicity [ $F(1,55) = 0.63, p=0.43$ ], and relationship status [ $F(1,55) = 2.6, p=0.11$ ] were not significantly associated with time to disclosure.

### Online Community-Based Sample

#### ***Demographics. Online Community-Based Sample. Preliminary Descriptive Analyses.***

Data were subjected to preliminary descriptive analyses to ascertain the demographic characteristics of the sample. Among the 465 male participants in the total sample, 30.5% (n=142) were obtained via websites that detail general research opportunities not specific to sexual victimization, 23.7% (n=110) were obtained via websites for male survivors of sexual victimization, and 45.8% (n=213) were obtained through online forums and nationwide groups specific to the LGBT community. The mean age of the total sample was 31.5 years old (SD=13.8). Approximately 48.7% of the participants had at least a college degree. Further, 39.2% participants identified as heterosexual, 38.1% identified as gay, 20.4% as bisexual, and 2.4% as other when asked to identify their sexual orientation. Regarding relationship status, 49.8% of the men indicated that they were single at the time of completing the survey.

Socially, the participants were asked to characterize their political beliefs. Overall, approximately 60.8% of the total sample characterized themselves as “liberal” or “somewhat liberal,” and 39.2% characterized themselves as “conservative” or “somewhat conservative.” This differed from their social atmospheres, with the majority of participants (49.5%) rating the social atmosphere in the area they grew up in as “conservative” or “somewhat conservative,”

which paralleled the family atmosphere in which they grew up with 49.5% detailing it as “conservative” or “somewhat conservative.” Regarding religious/spiritual orientation, 44.6% of the sample identified as “not at all religious,” 23.4% identified as “slightly religious,” 23.0% identified as “somewhat religious,” and 9.0% identified as “very religious.”

The total sample was largely white (75.3%) with a mix of other races. A total of 9.5% of the sample identified as Hispanic / Latino, with 7.4% of the sample *only* endorsing Hispanic / Latino when asked to select their race and ethnicity. Race and ethnicity characteristics are summarized in Table 10.

**Table 10. Distribution of race, in Total Online Community-Based Sample (n=462).**

Racial / Ethnicity Identity	n	%
White	348	75.3
Asian American	13	2.8
Hispanic / Latino Only	34	7.4
Black	23	5.0
Other	20	4.3
Mixed	23	5.0
Native American / American Indian	1	0.2

***Rates of Sexual Victimization. Online Community-Based Sample. First Primary Aim.***

Prior to assessment of sexual victimization experiences, 33.1% (n=160) of the participants dropped out of the study. Of the remaining participants (n=323), 68.4% (n=221) of the participants reported some form of sexual victimization in their lifetime via the SES-SFV and CTQ-SF. Looking at the relationship between the observed frequency and the expected frequency,  $\chi^2 (1, N = 323) = 324.79, p=0.005$ , exceeding the critical value of 7.879.

Victimization was assessed through in following three time points: prior to age 14, since 14<sup>th</sup> birthday and stopping one year ago from date of survey, as well as in the past 12 months from date of survey. Through this assessment, 33 participants identified experiences only at one time

point, compared to 188 identified experience at two time points; no one identified experiences at all three time points.

Among the subsample of individuals identifying a sexual victimization history, 79.2% (n=175) reported at least one sexual victimization experience since age 14, with 37.6% (n=83) indicating at least one sexual victimization experience within the last 12 months. Approximately 29.7% of the subsample detailed experience related to sexual contact without consent, 13.3% described an attempted coercive sexual experience, 13.1% noted a completed coercive sexual experience, and 15.1% indicated an attempted rape. Of note, 84 participants within the subsample detailed a sexual experience meeting the definition of rape since age 14 (including the last 12 months), and 47.6% (n=40) of those participants stated “yes” to “have you ever been raped?” Men in the Online Community-Based sexual victimization subsample were more likely to correctly identify their experience as rape compared to the men in the University Sample sexual victimization subsample ( $t=-3.85$ ,  $df=128$ ,  $p<0.001$ ). As in the University Sample, this suggests confusion related to the overall definition of rape. A summarization of specific SES-SFV assault types is detailed in Table 11 below. Using the CTQ-SF, 63.9% (n=140) of participants indicated sexual abuse prior to the age of 14.

Table 11. *Distribution of SES-SFV assault experiences, in the Online Community-Based Sample (n=323).*

Assault Experience	n	%
Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent <b>in past 12 months</b>	56	17.4
Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent <b>since age 14*</b>	132	24.2
Someone had oral sex with me or made me have oral sex with them without consent <b>in past 12 months</b>	32	9.9
Someone had oral sex with me or made me have oral sex with them without consent <b>since age 14*</b>	79	24.5
A man put his penis into my butt, or someone inserted fingers or objects without my consent <b>in past 12 months</b>	20	6.2
A man put his penis into my butt, or someone inserted fingers or objects without my consent <b>since age 14*</b>	64	19.8
Even though it didn't happen, someone tried to have oral sex with me, or make me have oral sex with them without my consent <b>in past 12 months</b>	35	10.8
Even though it didn't happen, someone tried to have oral sex with me, or make me have oral sex with them without my consent <b>since age 14*</b>	70	21.7
Even though it did not happen, a man tried to put his penis into my butt, or someone tried to stick in objects or fingers without my consent <b>in past 12 months</b>	22	6.8
Even though it did not happen, a man tried to put his penis into my butt, or someone tried to stick in objects or fingers without my consent <b>since age 14*</b>	49	15.2
I have been raped in my lifetime	40	12.4

\*"Since age 14" refers to life starting on 14<sup>th</sup> birthday and stopping one year ago from date of survey completion.

***Descriptive Details of Demographics of Sexual Victimization. Online Community-Based Sample. First Primary Aim.***

Regarding demographics, it was predicted that participants identifying as a sexual minority would have elevated rates of sexual victimization compared to their heterosexual counterparts. As evident by chi-square analysis, those identifying as a sexual minority were more likely to have a sexual victimization experience compared to participants identifying as heterosexual ( $\chi^2=6.29$ ,  $p=0.01$ ). The rate of sexual victimization among sexual minority men

within the sample was 73.7%, whereas the rate of sexual victimization among their heterosexual counterparts was 60.5%.

For other demographics, lower level of education ( $\chi^2=13.17$ ,  $p=0.0003$ ) and older age ( $\chi^2=8.4$ ,  $p=0.004$ ) significantly predicted greater likelihood of sexual assault. Specifically, the rate of sexual victimization among those with at least a college degree was 59.6%, whereas the rate of sexual victimization among their less educated counterparts was 78.3%. Further, the mean age of those that were assaulted was 32.9 years old ( $SD=13.8$ ) compared to 28.1 years old ( $SD=12.9$ ) for those not assaulted. Based on the measures of sexual victimization, the older the participants are, the more years of life they have experienced to have risked exposure to sexual assault.

Other demographic variables were not significant for sexual assault, including Hispanic identification ( $\chi^2=0.002$ ,  $p=0.97$ ), race/ethnicity ( $\chi^2=7.67$ ,  $p=0.26$ ), relationship status ( $\chi^2=0.86$ ,  $p=0.65$ ), income ( $\chi^2=2.60$ ,  $p=0.63$ ), political belief ( $\chi^2=4.28$ ,  $p=0.23$ ), social atmosphere of area growing up ( $\chi^2=4.30$ ,  $p=0.37$ ), social atmosphere of family growing up ( $\chi^2=2.22$ ,  $p=0.70$ ), and religious affiliation ( $\chi^2=3.93$ ,  $p=0.27$ ).

### ***Descriptive Details of Sexual Victimization Experiences. Online Community-Based Sample.***

#### ***First Primary Aim.***

Of the 221 individuals experiencing sexual victimization, 31 did not select an index trauma and were subsequently screened out of the trauma assessment sections. Index traumas are summarized in Table 12. As in the University Sample, the majority of participants indicated childhood sexual maltreatment as their index trauma (33.2%).

Table 12. *Distribution of Index Traumas, in the Online Community-Based Sexual Victimization Sample (n=190).*

Assault Experience	n	%
Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent <b>in past 12 months</b>	11	5.8
Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent <b>since age 14</b>	38	20.0
Someone had oral sex with me or made me have oral sex with them without consent <b>in past 12 months</b>	5	2.6
Someone had oral sex with me or made me have oral sex with them without consent <b>since age 14</b>	12	6.3
A man put his penis into my butt, or someone inserted fingers or objects without my consent <b>in past 12 months</b>	7	3.7
A man put his penis into my butt, or someone inserted fingers or objects without my consent <b>since age 14</b>	28	14.7
Even though it didn't happen, someone tried to have oral sex with me, or make me have oral sex with them without my consent <b>in past 12 months</b>	6	3.2
Even though it didn't happen, someone tried to have oral sex with me, or make me have oral sex with them without my consent <b>since age 14</b>	15	7.9
Even though it did not happen, a man tried to put his penis into my butt, or someone tried to stick in objects or fingers without my consent <b>in past 12 months</b>	2	1.1
Even though it did not happen, a man tried to put his penis into my butt, or someone tried to stick in objects or fingers without my consent <b>since age 14</b>	3	1.6
I experienced sexual maltreatment before the age of 14	63	33.2

As with the University Sample, the majority of the abusive experiences occurred a single time (i.e., 48.5%). The mean age at the index victimization event was 15.9 years old, (SD= 6.8). Approximately 57.7% of participants obtained an erection and 22.4% subsequently reached orgasm during the event. Approximately 14.3% of sexual victimization index experiences resulted in physical injury. The tactics utilized by the perpetrator(s) during the index trauma are summarized in Table 13. The majority of participants reported that the perpetrator took advantage when they were too drunk or out of it to stop (35.2%) as well as telling lies,

threatening to end a relationship / spread rumors, verbal pressure, or making promises (31.8%).

Approximately 8.2% of participants indicated that the perpetrator utilized force.

Table 13. *Distribution of tactics utilized by the perpetrator(s) during the index trauma, in the Online Community-Based Sexual Victimization Sample (n=159).*

Tactic	n	%
Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises about the future, or continually verbally pressuring after I said I didn't want to.	49	31.8
Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force after I said I didn't want to.	36	22.6
Taking advantage when I was too drunk or out of it to stop what was happening.	56	35.2
Threatening to physically harm me or someone close to me.	13	8.2
Using force, for example, by holding me down with their body weight, pinning my arms, or having a weapon.	60	37.7

As with the University Sample, the vast majority (77.1%) of the index traumas had only 1 perpetrator. Regarding the sex of the perpetrator(s), 20.0% were female, 72.9% were male, and 7.1% of index events included both sexes. Further, 66.1% of index events had a perpetrator's sex that was in line with the participant's sex of interest based on sexual orientation. Of note, 82.5% of men identifying as a sexual minority had a perpetrator in line with their sex of interest, whereas 35.9% of heterosexual men had a perpetrator in line with their sex of interest. The perpetrator's relationship to the victim is detailed in Table 14. The majority of participant's noted that the perpetrator was a friend (26.8%), whereas 19% of perpetrators were a stranger. Relatives, friends, and childcare providers were perpetrators largely for childhood index traumas, whereas partners and boyfriends/girlfriends were perpetrators largely for index traumas occurring since 14 and within the past year. Boyfriends/girlfriends and acquaintances increased in frequency as the time point was closer to the survey.

Table 14. *Distribution of perpetrator's relationship to the victim, in the Online Community-Based Sexual Victimization Sample (n=168) by index trauma time point*

Relationship to Victim	Total (n=168)		CTQ (n=63)		Since 14 (n=31)		Past Year (n=96)	
	n	%	n	%	n	%	n	%
Parent or guardian	7	4.2	4	6.3	0	0.0	3	3.1
Sibling	7	4.2	5	7.9	0	0.0	2	2.1
Other relative	20	11.9	15	23.8	1	3.2	4	4.2
Friend	45	26.8	12	19.0	5	16.1	28	29.2
Clergy member	3	1.8	2	3.2	0	0.0	1	1.0
Teacher or coach	5	3	2	3.2	0	0.0	3	3.1
Spouse/partner	3	1.8	0	0.0	1	3.2	2	2.1
Boyfriend/girlfriend	21	12.5	0	0.0	7	22.6	14	14.6
Stranger	32	19	3	4.8	10	32.3	19	19.8
Acquaintance	40	23.8	10	15.9	6	19.4	24	25.0
Childcare provider	7	4.2	5	7.9	0	0.0	2	2.1
Co-worker	0	0	0	0.0	0	0.0	0	0.0

***Descriptive Details of Emotional Impact of Sexual Victimization. Online Community-Based Sample. First Primary Aim.***

Regarding the emotional impact of the event, the mean PCL-5 score was 18.4 (SD=18.2). Looking at PTSD symptom endorsement, 27.6% of the sample endorsed re-experiencing symptoms, 28.1% endorsed avoidance behaviors, 27.2% endorsed negative alterations in mood/cognition, and 24.0% endorsed marked alterations in arousal and reactivity. Among those experiencing sexual victimization, approximately 14.5% of the sample met criteria for a provisional current PTSD diagnosis in relation to their index sexual assault trauma; although this rate is higher compared to the University Sample, the difference is not significant ( $\chi^2=2.34$ ,  $p=0.08$ ). These reactions were predicted to be similar to the impact in female populations (Rind, Tromovitch, & Bauserman, 1998); according to the National Women's Study, 13% of women with a history of sexual assault met criteria for current PTSD (Resnick, Kilpatrick, Dansky, Daunders, & Best, 1993). Concerning level of stigma experienced, the mean SS score was 5.6

(SD= 2.7). In a study assessing level of stigma among undergraduate female students with a history of sexual victimization, the mean SS score 3.3 (SD= 1.3) (Gibson & Leitenberg, 2001). As with the University Sample, levels of stigma in this current study's male Online Community-Based population were similar to Gibson and Leitenberg's female population.

It was hypothesized that a male perpetrator compared to a female perpetrator predicted greater levels of trauma reactions and stigma. For trauma reactions, the effect was not significant [ $F(1,144) = 3.8, p=0.055$ ]; the mean PCL-5 score was 20.1 (SD= 18.7) when a male perpetrator was involved, compared to a mean PCL-5 score of 13.0 (SD= 15.5) when a male perpetrator was not involved. That said, a male perpetrator resulted in greater levels of stigma [ $F(1,123) = 4.49, p=0.04$ ]; the mean SS score was 5.9 (SD= 2.6) when a male perpetrator was involved, compared to a mean SS score of 4.8 (SD= 3.1) when a male perpetrator was not involved. The participant's particular identified index trauma did not significantly predict trauma-related distress [ $F(1,146) = 1.93, p=0.59$ ] nor the level of stigma [ $F(1,155) = 1.08, p=0.30$ ].

As with the University Sample, when the sex of the perpetrator did not match the participant's sex of interest based on sexual orientation, it significantly predicted greater levels of both stigma [ $F(1,155) = 5.7, p=0.02$ ] and trauma reactions [ $F(1,146) = 6.4, p=0.01$ ]. Specifically, the mean SS score was 5.4 (SD= 2.6) when the sex matched interest, compared a mean SS score of 6.6 (SD= 2.9) when the sex did not match interest. Regarding trauma reactions, the mean PCL-5 score was 16.2 (SD= 16.5) when the sex matched interest, compared a mean PCL-5 score of 24.9 (SD= 21.7) when the sex did not match interest.

Comparisons between the Online Community-Based Sample and the University Sample were run regarding the study measures and are summarized in Table 15. Specifically, men in the Online Community-Based Sample endorsed less male rape myths, conformed less to masculine

norms, had less negative attitudes toward women, as well as endorsed more trauma reactions and higher levels of stigma compared to their University Sample counterparts.

Table 15. *Comparison of measures by sample*

Measure	Online Community-Based		University		t, df, <i>p</i>
	Mean	SD	Mean	SD	
MRMS	19.7	8.7	21.5	9.6	t=-2.35, 593, <b><i>p</i>=0.02</b>
CMNI	51.0	7.9	52.9	6.7	t=-2.97, 562, <b><i>p</i>=0.003</b>
MHS	29.6	10.8	30.6	9.7	t=1.16, 574, <i>p</i> =0.25
ATWS <sup>1</sup>	34.8	8.0	32.2	7.4	t=-3.93, 555, <b><i>p</i>&lt;0.001</b>
ERQ-Suppression <sup>2</sup>	15.2	5.6	15.1	5.5	t=-0.34, 568, <i>p</i> =0.74
PCL-5	18.4	18.2	12.3	16.5	t=-2.90, 275, <b><i>p</i>=0.004</b>
SS	5.64	2.7	4.8	2.7	t=-2.53, 284, <b><i>p</i>=0.01</b>

<sup>1</sup> Lower scores indicate more negative attitudes toward women.

<sup>2</sup> Lower scores indicate more suppression

***Descriptive Details of Disclosure Behaviors and Experiences. Online Community-Based***

***Sample. First Primary Aim.***

Among the 221 individuals endorsing sexual victimization, 23.5% (n=52) did not respond to the disclosure assessment items. Among the remaining 169 individuals endorsing sexual victimization, 55.6% (n=94) reported they had told someone about the index trauma. Of the 94 individuals that disclosed, the mean age at disclosure was 22.2 years old (SD= 9.4). The mean time between the index event and said disclosure (i.e., time to disclosure) was 7.6 years (SD= 10.6). Participants reported that the majority of the first people to whom they disclosed believed them (93.4%), provided emotional support (78.7%), and attempted to protect them (57.4%). Approximately 37.7% of individuals were encouraged to seek treatment. The majority of participants (52.8%) rated the level of helpfulness that the person provided as either “somewhat helpful” or “very helpful.” The person to whom the participant first disclosed the assault event was predominately a friend (42.9%); the characteristics of the individuals to whom the

participant first disclosed along with the mean level of helpfulness (scale of 1-5, with 1 being “very helpful” to 5 being “very unhelpful”) are summarized in Table 16.

Table 16. *Distribution of person to which participant first disclosed, in the Online Community-Based Disclosure Sample (n=91).*

Relationship to Victim	n	%	Helpfulness*	
			Mean	SD
Parent / Guardian	9	9.9	2.6	1.3
Sibling	3	3.3	2	1
Relative	0	0	-	-
Friend (less than 18)	12	13.2	2.3	1.5
Friend (adult)	27	29.7	2.4	1.3
Clergy	2	2.2	2	1.4
Teacher or Coach	2	2.2	5	0
Law enforcement	1	1.1	5	-
Medical	3	3.3	2.7	2.1
Mental Health	11	12.1	2.6	1.2
Spouse/Partner	2	2.2	1.5	0.7
Boyfriend/Girlfriend	15	16.5	2.3	1.2
Children	0	0	-	-
Other	4	4.4	2	0.8

\* On a scale of 1-5, with 1 being “very helpful” to 5 being “very unhelpful.”

The mean number of individuals to whom the participant disclosed was 6.3 (SD= 11.3). The person(s) to whom the participant additionally disclosed the assault event was largely either a friend or mental health professional. The distribution of the additional individuals to whom the participant disclosed is summarized in Table 17. As in the case of the first person to which the participant disclosed, the vast majority of participants told a friend and/or boyfriend/girlfriend. That said, 33% of participants in this sample (compared to 1.7% in the University Sample) stated they disclosed the event to a mental health professionals, suggesting a more treatment-seeking population in line with the fact participants were specifically targeted on sexual victimization websites specializing in support services.

Table 17. *Distribution of person(s) to which participant also disclosed, in Disclosure Sample (n=94).*

Relationship to Victim	n	%
Parent / Guardian	16	17.0
Sibling	14	14.9
Relative	6	6.4
Friend (less than 18)	11	11.7
Friend (adult)	38	40.4
Clergy	3	3.2
Teacher or Coach	1	1.1
Law enforcement	6	6.4
Medical	12	12.8
Mental Health	31	33.0
Spouse/Partner	18	19.1
Boyfriend/Girlfriend	17	18.1
Children	4	4.3
Other	6	6.4

***Predictors of Disclosure. Online Community-Based Sample. Second Primary Aim.***

In line with the second aim of the study, the relationships between disclosure status (i.e., yes v. no) and the following measures were analyzed: male rape myth acceptance (MRMS), conformity to masculine norms (CMNI), attitudes toward gay men (MHS), attitudes toward women (ATWS), emotion regulation strategies (ERQ-Suppression), trauma reactions (PCL-5), stigma levels (SS). Demographics and sexual victimization details were also analyzed. Binary logistic regression was used with disclosure treated as the dependent variable so as to predict the disclosure status category of the participant. The score on each measure as well as victimization details and demographics were treated as the independent variables. Each independent variable was run in a unique regression. The outcomes for the measures are detailed in Table 18.

Table 18. *Predictors of disclosure status, in Online Community-Based Sexual Victimization Sample*

Measure	Disclosed		Non-Disclosed		B	Wald	p	OR (95% CI)
	Mean	SD	Mean	SD				
MRMS	16.8	7.0	20.3	9.1	-0.05	5.99	<b>0.01</b>	0.95 (0.91-0.99)
CMNI	50.8	6.8	50.4	9.3	0.00	0.00	0.98	1.00 (0.96-1.05)
MHS	27.4	11.0	30.0	9.8	-0.02	1.96	0.16	0.98 (0.95-1.01)
ATWS <sup>1</sup>	36.3	6.6	33.7	9.1	0.04	3.25	0.07	1.05 (0.99-1.10)
ERQ-Suppression <sup>2</sup>	15.1	5.6	15.1	5.1	-0.01	0.000	0.98	0.99 (0.94-1.07)
PCL-5	23.2	19.6	12.6	14.2	-0.36	2.16	0.14	0.70 (1.02-1.06)
SS	5.9	2.9	5.4	2.5	-0.20	0.28	0.60	0.82 (0.96-1.22)

<sup>1</sup> Lower scores indicate more negative attitudes toward women.

<sup>2</sup> Lower scores indicate more suppression

It was hypothesized that greater male rape myth acceptance, greater conformity to masculine norms, holding more negative attitudes toward gay men, holding more negative attitudes toward women, and greater use of suppression to regulate emotions would predict less likelihood of disclosure among men experiencing sexual victimization. As evident in Table 19, only greater conformity to masculine norms significantly predicted less likelihood of disclosure. This is in contrast with the University Sample, where all abovementioned measures significantly predicted less likelihood of disclosure.

It was also predicted that greater levels of trauma-related distress would be associated with a greater likelihood of disclosure among men experiencing sexual victimization. Greater level of distress as measured by PCL-5 indeed significantly predicted greater likelihood of disclosure. Interestingly, this is in contrast with the University Sample, where higher levels of distress significantly predicted *less* likelihood of disclosure. As with trauma-related distress, it was also thought that greater levels of stigma would be associated with a greater likelihood of disclosure among men experiencing sexual victimization. As with the University Sample, stigma did not significantly predict disclosure status. Though the direction for this sample was in line

with the hypothesis, it contrasts with the University Sample where stigma was *less* in participants that disclosed compared to those that did not disclosure.

As predicted, severity of index trauma significantly predicted disclosure status ( $\chi^2=11.24$ ,  $p=0.047$ ). Specifically, participants with an index trauma where someone attempted to have oral sex with them were less likely to disclose, with a 27.8% disclosure rate, compared to participants with an index trauma of childhood sexual maltreatment, with a 68.5% disclosure rate ( $p=0.04$ ).

Unlike in the University Sample, both not being injured ( $\chi^2=6.9$ ,  $p=0.01$ ) and older age at trauma ( $\chi^2= 5.9$ ,  $p=0.02$ ) significantly predicted less likelihood to disclose. Specifically, those that were injured were more likely to disclose, with a 79.2% disclosure rate, compared to those that were not injured, with a 51.4% disclosure rate. Additionally, those that were older were less likely to disclose, with the mean age at trauma of 14.7 (SD= 7.0) for those that disclosed, compared to a mean age at trauma of 17.3 (6.2) for those that did not disclose.

It was specifically hypothesized that the likelihood of disclosure would be less if the perpetrator was known to the individual. Although disclosure rates were in line with what was predicted, they did not significantly differ by relationship to perpetrator ( $\chi^2=0.01$ ,  $p=0.9$ ). Of those participants with an unknown perpetrator, 54.8% disclosed the assault. Among those with a known perpetrator, 55.8% disclosed the assault.

It was also hypothesized that the likelihood of disclosure would be less if the perpetrator was female compared to if the perpetrator was not female. Although the rates were in the opposite direction of the hypothesis, the difference was not statistically significant ( $\chi^2=.24$ ,  $p=0.62$ ). Of those participants with a female perpetrator, 58.7% disclosed the assault. Among those without a female perpetrator, 54.5% disclosed the assault.

That said, unlike in the University Sample, whether the perpetrator's sex matched the victim's reported sex of interest or not did not significantly predict disclosure behavior ( $\chi^2=4.6$ ,  $p=0.03$ ). Specifically, participants were less likely to disclose the event if the perpetrator's sex matched the victim's sex of interest. Of those where the perpetrator's sex matched the victim's sex of interest, 48.5% of participants disclosed, compared to 71.4% of those where the perpetrator's sex did not match the victim's sex of interest.

Regarding other details related to the index trauma, number of times the trauma occurred ( $\chi^2=5.1$ ,  $p=0.1$ ), number of perpetrators ( $\chi^2=1.1$ ,  $p=0.3$ ), obtaining an erection ( $\chi^2=0.5$ ,  $p=0.5$ ), and obtaining an orgasm ( $\chi^2=2.2$ ,  $p=0.1$ ) were not significantly predictive of disclosure status. To note, obtaining an erection was significantly predictive of disclosing assault in the University Sample.

Unlike in the University Sample, age at time of survey significantly predicted disclosure status ( $\chi^2=6.0$ ,  $p=0.02$ ). Specifically, the older the participant was the greater likelihood they disclosed the assault, where the mean age of those participants that disclosed was 34.1 years old ( $SD= 14.1$ ), and the mean age of those participants that did not disclose was 29.3 years old ( $SD= 11.2$ ). More years of life experienced automatically afford greater potential exposure to the event of disclosing.

It was specifically hypothesized that greater affiliation with religion (i.e., "how religious are you"), would be significantly associated with less likelihood of disclosure among men experiencing sexual victimization. On a scale of 1 to 4, with 1 being "not at all religious" to 4 being "very religious," men that disclosed their sexual assault experience had a mean score of 1.6 ( $SD= 0.6$ ), compared to a mean score of 1.5 ( $SD= 0.6$ ) among men that did not disclose their sexual assault experience. Although men that disclosed were less affiliated with religion

compared to those that disclosed, the difference was not statistically significant ( $\chi^2=1.5, p=0.7$ ). This is analogous to the University Sample.

Regarding other demographic details, income level ( $\chi^2=12.53, p=0.01$ ) significantly predicted disclosure status. Those in less than \$25,000 category were less likely to disclose, with a disclosure rate of 41.5%, compared to the \$25,000-\$49,999 category, with a disclosure rate of 79.4% ( $p=0.01$ ). Other demographic variables did not significantly predict disclosure status, including Hispanic identification ( $\chi^2=0.1, p=0.8$ ), education ( $\chi^2=1.2, p=0.3$ ), sexual minority orientation ( $\chi^2=0.6, p=0.5$ ), relationship status ( $\chi^2=1.6, p=0.5$ ), political beliefs ( $\chi^2=1.8, p=0.6$ ), the social atmosphere of the area growing up ( $\chi^2=7.9, p=0.1$ ), the social atmosphere of the family growing up ( $\chi^2=5.0, p=0.3$ ), and race/ethnicity ( $\chi^2=9.8, p=0.2$ ). To note, being in a relationship was significantly predictive of disclosing assault in the University Sample.

***Predictors of Time to Disclosure. Online Community-Based Sample. Second Primary Aim.***

In line with the second aim of the study, the relationships between time disclosure status (i.e., time from assault to disclosure) and the following measures were analyzed: male rape myth acceptance (MRMS), conformity to masculine norms (CMNI), attitudes toward gay men (MHS), attitudes toward women (ATWS), emotion regulation strategies (ERQ-Suppression), trauma reactions (PCL-5), stigma levels (SS). Demographics and sexual victimization details were also analyzed. In an effort to predict time to disclosure, linear regression was used. Time to disclosure was treated as the dependent variable. The score on each measure as well as victimization details and demographics were treated as the independent variables. Each independent variable was run in a unique regression. Of note, the source of the participant (i.e., general research, sexual victimization, sexual minority) was not significantly associated with time to disclosure [ $F(1,87) = 0.20, p=068$ ]. The outcomes for the measures are detailed in Table 19.

Table 19. Predictors of time to disclosure, in Sexual Victimization Sample

Measure	<i>F</i> (df), <i>p</i>	R Square	B (95% CI)
MRMS	$F(1,79) = 0.01, p=0.91$	<0.001	-0.02 (-0.37 – 0.33)
CMNI	$F(1,71) = 0.01, p=0.94$	<0.001	0.01 (-0.36 – 0.39)
MHS	$F(1,74) = 2.22, p=0.14$	0.03	0.17 (-3.30 – 9.71)
ATWS <sup>1</sup>	$F(1,68) = 2.47, p=0.12$	0.04	-0.30 (-0.69 – 0.08)
ERQ-Suppression <sup>2</sup>	$F(1,71) = 0.19, p=0.67$	0.003	0.10 (-0.62 – 13.71)
PCL-5	$F(1,79) = 25.25, p<0.0001$	0.24	0.28 (-1.79 – 4.75)
SS	$F(1,82) = 11.49, p=0.001$	0.12	1.32 (-4.77 – 5.23)

<sup>1</sup> Lower scores indicate more negative attitudes toward women.

<sup>2</sup> Lower scores indicate more suppression

Regarding the measures, trauma reactions and stigma levels significantly predicted time to disclosure. Specifically, time to disclosure increased by 0.28 years for every unit increase in PCL-5 score, suggesting that greater distress resulted in an increase in time to disclosure. Additionally, time to disclosure increased by 1.32 years for every unit increase in SS score, suggesting that greater stigma resulted in an increase in time to disclosure. These measures were not significant in the University Sample, although conformity to masculine norms, attitudes toward women, and the emotion regulation strategy of suppression were.

Regarding details related to the index trauma, as within the University Sample, age at index trauma [ $F(1,55) = 29.28, p<0.0001$ ] significantly predicted less time to disclosure. Specifically, participant's time to disclosure decreased by 0.87 years for each year increase in age at index trauma. Unlike in the University Sample, obtaining an erection [ $F(1,86) = 4.02, p=0.05$ ] predicted greater time to disclosure. Of those participants that obtained an erection, the mean time to disclosure was 9.62 years (SD= 12.0). Among those that did not obtain an erection, the mean time to disclosure was 5.1 years (SD= 1.3).

Having an unknown perpetrator [ $F(1,87) = 4.26, p=0.04$ ], more than one perpetrator involved in the index trauma [ $F(1,86) = 7.04, p=0.01$ ], and a greater number of times [ $F(1,69) = 7.93, p=0.006$ ] were significantly predictive of a greater time to disclosure. In terms of

relationship to perpetrator, the mean time to disclosure for those with a known perpetrator was 2.8 years (SD= 4.3), whereas the mean time to disclosure for those with an unknown perpetrator was 8.7 years (SD= 11.2). Regarding number of perpetrators, the mean time to disclosure for those with one perpetrator was 5.8 years (SD= 8.0), whereas the mean time to disclosure for those with an unknown perpetrator was 12.2 years (SD= 14.4). Regarding number of times, among those participants where the unwanted sexual experience occurred once, the mean time to disclosure was 2.57 years (SD= 4.2). Among those participants where the unwanted sexual experience occurred between 2 and 10 times, the mean time to disclosure was 7.65 years (SD= 10.2). Among those participants where the unwanted sexual experience occurred more than 10 times, the mean time to disclosure was 8.69 years (SD= 10.1). Time to disclosure was significantly longer for those participants where the number of times was greater than one compared to those where the trauma occurred only once ( $p < 0.05$ ).

Whether the perpetrator's sex matched the victim's reported sex of interest or not significantly predicted time to disclosure [ $F(1,87) = 17.99, p < 0.001$ ]. Specifically, participants were more likely to disclose the event sooner if the perpetrator's sex matched the victim's sex of interest. Of those where the perpetrator's sex matched the victim's sex of interest, mean time to disclosure was 5.03 years (SD= 7.9), compared to 14.96 years (SD= 13.6) for those where the perpetrator's sex did not match. Regarding other details related to the index trauma, physical injury [ $F(1,87) = 1.23, p = 0.27$ ], obtaining an orgasm [ $F(1,86) = 0.22, p = 0.64$ ], and female perpetrator [ $F(1,87) = 0.32, p = 0.57$ ] were not significantly associated with time to disclosure.

As in the University Sample, age of participant was also significantly associated with time to disclosure [ $F(1,87) = 16.10, p = 0.0001$ ]. Particularly, participant's time to disclosure increased by 0.29 years for each unit increase in year of age. Unlike in the University Sample,

race/ethnicity of participant was also significantly associated with time to disclosure [ $F(1,87) = 6.04, p=0.02$ ]. Particularly, the mean time to disclosure for participants identifying as “other” was significantly longer [33.3 years (SD= 18.4)] compared to white participants [6.3 (SD= 9.00)], black participants [16.7 (SD= 19.4)], and Hispanic / Latino only participants [5.7 (SD= 3.7)] at  $p<0.05$ .

The other demographic details did not significantly predict time to disclosure, including Hispanic identification [ $F(1,87) = 0.32, p=0.57$ ], education [ $F(1,87) = 2.10, p=0.15$ ], sexual minority orientation [ $F(1,87) = 0.04, p=0.84$ ], income level [ $F(1,86) = 0.05, p=0.83$ ], political beliefs [ $F(1,85) = 0.03, p=0.87$ ], the social atmosphere of the area growing up [ $F(1,85) = 0.05, p=0.83$ ], the social atmosphere of the family growing up [ $F(1,86) = 1.03, p=0.31$ ], religious affiliation [ $F(1,86) = 3.03, p=0.09$ ], and relationship status [ $F(1,87) = 0.06, p=0.81$ ].

### Exploratory Analyses

#### ***Sexual Orientation Interaction in Associations with Disclosure. Combined Sample. First Exploratory Aim.***

In line with the first exploratory aim, interaction effects between the abovementioned factors and sexual orientation were determined regarding likelihood of disclosure as well as time to disclosure. Specifically, demographics, sexual assault details, as well as scores achieved on the PCL-5, SS, MRMS, CMNI-22, MHS-G, ATW, and ERQ-Suppression were analyzed.

Regarding the measures, there were no significant interaction effects on the PCL-5 [ $F(3,267)=0.05, B=0.001, p=0.8$ ], SS [ $F(3,277)=0.92, B=0.02, p=0.3$ ], MRMS [ $F(3,264)=0.91, B=0.01, p=0.3$ ], CMNI-22 [ $F(3,247)=2.23, B=-0.01, p=0.1$ ], MHS-G [ $F(3,253)=1.45, B=-0.01, p=0.2$ ], ATW [ $F(3,243)=1.89, B=0.01, p=0.2$ ], and ERQ-Suppression [ $F(3,249)=4.01, B=0.02, p=0.056$ ] in relation to disclosure.

In terms of demographic characteristics, there were no significant interaction effects for Hispanic identification [ $F(3,293)=0.23$ ,  $B=0.06$ ,  $p=0.6$ ], race/ethnicity [ $F(3,293)=0.17$ ,  $B=-0.01$ ,  $p=0.7$ ], relationship status [ $F(3,293)=0.35$ ,  $B=0.06$ ,  $p=0.6$ ], political beliefs [ $F(3,2288)=0.01$ ,  $B=0.01$ ,  $p=0.9$ ], social atmosphere of family growing up [ $F(3,292)=0.98$ ,  $B=-0.05$ ,  $p=0.3$ ], religious affiliation [ $F(3,292)=0.03$ ,  $B=-0.01$ ,  $p=0.9$ ], age [ $F(3,293)=0.03$ ,  $B=-0.0009$ ,  $p=0.9$ ] and education [ $F(3,293)=1.60$ ,  $B=-0.2$ ,  $p=0.2$ ].

That said, there was a significant interaction effect for income [ $F(3,289)=5.35$ ,  $B=-0.09$ ,  $p=0.02$ ] as well as social atmosphere of area growing up [ $F(3,289)=4.52$ ,  $B=-0.1$ ,  $p=0.03$ ]. Regarding income, the  $R^2$  for the sexual minority group is 0.02, whereas the  $R^2$  for the heterosexual group is 0.01. The fit line for the sexual minority group is  $y=0.39 + 0.1x$ , whereas the fit line for the heterosexual group is  $y=0.62 + -0.04x$ . Among participants identifying as a sexual minority, as household income level increases, likelihood of disclosure increases as well; however among heterosexual participants, as household income level increases, likelihood of disclosure decreases.

Regarding social atmosphere of area growing up, the  $R^2$  for the sexual minority group is 0.02, whereas the  $R^2$  for the heterosexual group is 0.01. The fit line for the sexual minority group is  $y=0.37 + 0.1x$ , whereas the fit line for the heterosexual group is  $y=0.63 + -0.04x$ . Among participants identifying as a sexual minority, as social atmosphere becomes more liberal, likelihood of disclosure increases; however among heterosexual participants, as the social atmosphere of the area becomes more liberal, likelihood of disclosure decreases.

Regarding other details related to the index trauma, there were no significant interaction effects for number of times [ $F(3,242)=2.87$ ,  $B=-0.2$ ,  $p=0.1$ ], number of perpetrators [ $F(3,287)=2.87$ ,  $B=0.10$ ,  $p=0.8$ ], physical injury [ $F(3,291)=0.02$ ,  $B=-0.03$ ,  $p=0.9$ ], gender of

perpetrator [ $F(3,291)=1.25$ ,  $B=-0.1$ ,  $p=0.3$ ], relationship to perpetrator [ $F(3,293)=0.32$ ,  $B=-0.11$ ,  $p=0.6$ ], index trauma [ $F(3,293)=1.11$ ,  $B=-0.01$ ,  $p=0.3$ ], obtaining an erection [ $F(3,291)=0.13$ ,  $B=-0.04$ ,  $p=0.7$ ], and obtaining an orgasm [ $F(3,291)=0.65$ ,  $B=-0.1$ ,  $p=0.4$ ] were not significantly associated with disclosure status.

That said, there was a significant interaction effect for age at victimization [ $F(3,285)=5.26$ ,  $B=0.02$ ,  $p=0.02$ ]. The  $R^2$  for the sexual minority group is 0.05, whereas the  $R^2$  for the heterosexual group is 0.002. The fit line for the sexual minority group is  $y=0.8 + -0.02x$ , whereas the fit line for the heterosexual group is  $y=0.47 + 0.003x$ . Among participants identifying as a sexual minority, as age at victimization increases, likelihood of disclosure decreases; however, among heterosexual participants, as the age at victimization increases, likelihood of disclosure increases.

### ***Sexual Orientation Interaction in Associations with Time to Disclosure. Combined Sample.***

#### ***First Exploratory Aim.***

In terms of time to disclosure, there were no significant interaction effects. The overall  $F$  statistics along with the interaction terms are summarized in Table 20. Specifically, none of the interaction terms were significant.

Table 20. *F statistics with interaction terms, in Combined Disclosure Sample, n=156*

Measure	Overall F statistic, interaction beta and term
PCL-5	[ $F(3,134) = 12.3, p < 0.0001$ ], $B = -0.05, t = -0.66, p = 0.51$
SS	[ $F(3,137) = 7.04, p = 0.0002$ ], $B = 0.35, t = 0.64, p = 0.52$
MRMS	[ $F(3,134) = 1.12, p = 0.34$ ], $B = -0.22, t = -1.04, p = 0.30$
MHS-G	[ $F(3,129) = 1.19, p = 0.32$ ], $B = -0.17, t = -1.08, p = 0.28$
CMNI-22	[ $F(3,126) = 0.43, p = 0.0002$ ], $B = -0.21, t = -0.83, p = 0.41$
ATW	[ $F(3,123) = 1.75, p = 0.16$ ], $B = 0.42, t = 1.79, p = 0.08$
ERQ-Suppression	[ $F(3,126) = 0.86, p = 0.46$ ], $B = 0.17, t = 0.55, p = 0.58$
Index trauma	[ $F(3,142) = 11.87, p < 0.0001$ ], $B = -0.38, p = 0.30$
Erection	[ $F(3,141) = 0.86, p = 0.46$ ], $B = 0.99, t = 0.32, p = 0.75$
Orgasm	[ $F(3,141) = 0.97, p = 0.41$ ], $B = -3.39, t = -0.92, p = 0.36$
Gender of perp(s)	[ $F(3,142) = 2.20, p = 0.09$ ], $B = 5.20, t = 1.78, p = 0.08$
Perp was stranger	[ $F(3,142) = 1.75, p = 0.16$ ], $B = -0.96, t = -0.20, p = 0.84$
Number of times	[ $F(3,120) = 6.99, p = 0.0002$ ], $B = -1.24, t = -0.68, p = 0.50$
Physically Injured	[ $F(3,142) = 1.57, p = 0.20$ ], $B = 2.39, t = 0.50, p = 0.62$
How many perps	[ $F(3,141) = 4.84, p = 0.0031$ ], $B = -0.94, t = -0.61, p = 0.54$
Age at index trauma	[ $F(3,142) = 18.41, p < 0.0001$ ], $B = 0.06, t = 0.31, p = 0.76$
Religious affiliation	[ $F(3,141) = 2.55, p = 0.06$ ], $B = -2.13, t = -1.42, p = 0.16$
Hispanic	[ $F(3,142) = 0.93, p = 0.43$ ], $B = -4.85, t = -0.96, p = 0.34$
Race / ethnicity	[ $F(3,142) = 2.19, p = 0.09$ ], $B = -0.76, t = -0.95, p = 0.34$
Relationship status	[ $F(3,142) = 1.94, p = 0.13$ ], $B = 3.04, t = 1.16, p = 0.25$
Income	[ $F(3,141) = 1.11, p = 0.35$ ], $B = 1.07, t = 1.01, p = 0.32$
Political beliefs	[ $F(3,140) = 1.29, p = 0.28$ ], $B = 2.17, t = 1.36, p = 0.18$
Social area	[ $F(3,140) = 1.25, p = 0.30$ ], $B = 1.77, t = 1.35, p = 0.18$
Social family	[ $F(3,141) = 2.62, p = 0.054$ ], $B = 2.35, t = 2.00, p = 0.051$
Age	[ $F(3,142) = 10.36, p < 0.0001$ ], $B = 0.08, t = 0.66, p = 0.51$
Education	[ $F(3,142) = 1.92, p = 0.13$ ], $B = 0.70, t = 0.23, p = 0.82$

***Correlation between MHS-G and SIHS. Combined Sample. Second Exploratory Aim.***

In line with the second exploratory aim of the study, a Pearson product-moment correlation coefficient were generated comparing scores on the MHS-G and SIHS among sexual minority men. This will determine if the SIHS is a potentially valid measure of internalized homonegativity among sexual minority men. The two measures were significantly correlated ( $r = 0.47, n = 175, p < 0.0001$ ).

## Discussion

Despite an understandably well-developed body of literature on sexual victimization experiences among women, efforts to better understand sexual victimization experiences among male populations have been chiefly absent (Spataro, Moss, & Wells, 2001; Stermac, Sheridan, Davidson, & Dunn, 1996). Research indicates that approximately 1 in 71 men in the United States (i.e., 1.6 million men) have been raped in their lifetime, and nearly 1 in 5 men (i.e., 25 million men) have experienced sexual victimization other than rape in their lifetime (Black, Basile, Breiding, Smith, Walters, Merrick, Chen, & Stevens, 2011). Alarming, these rates have been suggested to be elevated among university and sexual minority men (Coxell, King, Mezey, & Gordon, 1999; Elliott, Mok, & Briere, 2004; Sorenson, Stein, Siegel, Golding, & Burnam, 1987). Unfortunately, it is believed these estimates do not fully portray the actual prevalence given hesitancy of male victims to report or disclose the crime (Bullock & Beckson, 2011; Lab, Feigenbaum, & De Silva, 2000; Tjaden & Thoennes, 2006). Specifically regarding sex differences in disclosure, in a national survey assessing disclosure behaviors among men, the prevalence of male victims failing to disclose abuse experiences was significantly higher than that of female victims (44% v. 33%; Finkelhor et al., 1990).

These sexual victimization experiences often result in elevated risk for depressed mood, lowered self-esteem, suicidal ideation, anxiety, sexual dysfunction, and relationship complications (Struckman-Johnson & Struckman-Johnson, 1992; Walker, Archer, & Davies, 2005a). While advances have been achieved in better understanding the psychological effects of men experiencing sexual violence, reports are largely speculative due to the frequent use of small clinical samples with inadequate sampling methodology (Vearnals & Campbell, 2001).

A large amount of empirical findings underline the advantageous effects of social support on both physical and mental health outcomes (Uchino, 2004). Studies demonstrate disclosure of these experiences to be associated with mental and physical health gains as well as legal and political benefits (Ahrens, Campbell, Ternier-Thames, Wasco, & Sefl, 2007; Uchino, 2004). Specifically regarding victims of sexual violence, receiving social support is linked with reduction in PTSD and mood symptoms as well as with adaptive life changes and positive growth (Borja, Callahan, & Long, 2006; Filipas & Ullman, 2001; Schumm, Briggs-Phillips, & Hobfoll, 2006). Further, within the context of mental health benefits, studies suggest that the act of disclosure is associated with increased likelihood of terminating any ongoing victimization experiences; decreased hypervigilance surrounding the often secretive nature of victimization, other symptoms of PTSD, and depression; and enhanced meaning-making efforts following the event (Borja et al., 2006; Filipas & Ullman, 2001; Kelly & McKillop, 1996; Park & Blumberg, 2002; Pennebaker & O'Heeron, 1984; Schumm et al., 2006; Vogel & Wester, 2003).

Given the potential advantages associated with disclosure behaviors, efforts have been made to identify barriers to said acts; however, as women account for the majority of assaultive experiences, assessment efforts regarding disclosure barriers have largely targeted female populations. Like the limited investigations examining the disclosure barriers among men, efforts to identify unique barriers among sexual minority individuals have largely been deficient (Waldner-Haugrud, 1999). In light of these gaps within the empirical literature, the current study aims to descriptively detail the rates, demographic characteristics, and emotional impact, as well as disclosure rates and details of sexual victimization experiences among men. The study also aims to quantitatively examine whether sexual victimization details, emotion regulation strategies, male rape myth acceptance, conformity to masculine norms, attitudes toward gay men,

attitudes toward women, stigma levels, and symptoms of PTSD significantly relate to disclosure behaviors of men experiencing sexual victimization. Each of the two primary aims was achieved through two separate samples. Specifically, one sample consisted of university students enrolled in psychology courses (i.e., University Sample), whereas the second sample consisted of men from various online communities (i.e., Online Community-Based Sample).

Of particular note regarding the differences between these two samples, the Online Community-Based Sample was more likely to have at least a college degree, identify as being in a relationship, identify as a sexual minority, indicate a sexual victimization experience, be raised in a more conservative area and family, and identify as less religious. Additionally, men in the University Sample were younger and had a shorter time to disclosure of sexual victimization experiences. Further, in terms of study measure differences, the men in the Online Community-Based Sample had significantly less endorsement of male rape myths, conformity to masculine norms, and negative attitudes toward women. They also had significantly greater levels of stigma and trauma-related distress in reaction to their index trauma. Together with the abovementioned differences, these two populations appear to be rather distinct in nature.

Further, within the Online Community-Based Sample, there were three unique samples. Specifically, there was one sample that specifically targeted male survivors of sexual victimization, another targeting individuals interested in general research opportunities, and the third that targeted sexual minority men via online forums and nationwide groups. These three samples significantly differed on several factors. The sexual minority sample was older, identified as more liberal, and noted higher levels of education compared to the other two groups. Additionally, men in the sexual victimization and sexual minority samples were more

likely to identify as a sexual minority and endorse a history of sexual victimization compared to the general research group.

Regarding the primary aim of this study, it was predicted that approximately 25% of the study sample would endorse having experienced sexual victimization in his lifetime. This estimate was derived from prior projects completed using the SES-SFV. For the University Sample, 43.9% of the participants reported some form of sexual victimization in their lifetime, whereas 68.4% of the participants in the Online Community-Based Sample. These reported rates are elevated compared to what was predicted. There are several possible contributing factors leading to these elevated rates. Specifically, past research has only utilized the SES-SFV which assesses solely for experiences since the age of 14 (Anderson, Cahill, & Delahanty, 2016). In addition to the SES-SFV, this study utilized the CTQ-SF to assess for experiences prior to the age of 14 to yield a lifetime assessment. Through the use of the CTQ-SF, the current study identified 82 additional participants that would not have been identified by the SES-SFV. This specific portion of participants comprised approximately 21.9% of the sexual assault subsample.

In addition to the CTQ-SF being a factor in the elevated rates of the current study, the strategy of explicitly recruiting those with sexual victimization experiences was used in an effort to ensure enough power for statistical analyses. Past studies by this lab relied only on the university male population, compared to the current study which posted advertisements to websites for male survivors of sexual victimization. Further, men identifying their orientation as a sexual minority were also specifically recruited in an effort to make meaningful interaction comparisons. As noted in the literature review, sexual minority male populations have been known to have increased rates of sexual victimization (Balsam et al., 2005). This targeted recruitment strategy not only partially explain the elevated rates compared to other studies, it

may also explain the rate difference between the University Sample and the Online Community-Based Sample. In line with this, the rate of the Online Community-Based Sample's sexual victimization for the general research subsample was 18.3%, 28.2% for the LGBT subsample, and 100% for the sexual victimization subsample.

Additionally, the current study implemented an anonymous online methodology. This approach has been shown particularly helpful in studying populations that are generally difficult to locate or assess (Bowen, 2005; Mangan & Reips, 2007), like men experiencing sexual victimization. Further, studies suggest that participants are more apt to engage in web-based surveys given its confidential nature (Hewson, Yule, Laurent, & Vogel, 2003). This confidential nature has also been shown to produce higher disclosure rates of sensitive information (Villarroel et al., 2006), like victimization history. The confidential nature of the study may have resulted in participants feeling more comfortable in disclosing their sexual victimization experiences, resulting in greater and potentially more accurate rates compared to past studies that have assessed these types of events in person or over the phone.

Despite greater rates than expected, the study highlighted a rather well-known methodological issue in assessing sexual violence. Specifically, of the men that described a sexual experience meeting the definition of rape since age 14, only a portion (i.e., 15.2% in the University Sample and 47.6% in the Online Community-Based Sample) reported affirmative to a prompt specifically asking if they had ever been raped. Sexual violence scholars suggest this underreporting is in part due to the deep stigma and shame often associated with rape. Men particularly may be less likely to label their experience as a violation, minimizing their emotional reactions and subsequently their disclosure behaviors (Struckman-Johnson & Struckman-Johnson, 1994). Further, respondents often do not know the legal definition of rape or define

their experience as such (Belknap, Fisher, & Cullen, 1999). This confusion related to the legal definition of rape can be seen in the present study's responses, where a small number of participants (i.e., 6 in the University Sample and 15 in the Online Community-Based Sample) denied any behavioral detail meeting the definition of rape, yet stated they had been raped.

In contrast to the typological approach, clinical researchers suggest using finer gradations of victimization in hopes to more accurately capture the reaches of sexual violence (Koss & Oros, 1982). The use of behaviorally-specific prompts offer questionnaire clarity, guard against underreporting, and assist in event recollection (DeKeseredy, 1995). Methods in which rape and other forms of sexual violence are assessed extensively affect prevalence rate estimates (Koss, 1996; Koss & Oros, 1982). The present study's data support the idea that the two techniques of typological and behavioral assessment yield significant variation in prevalence. As suggested by this study and numerous others, utilizing a more behaviorally-specific approach in assessing sexual violence aids in advancing a more accurate understanding regarding the magnitude and reach of rape and sexual violence.

Regarding the study's aim of better detailing the demographic characteristics of sexual victimization experiences among men, it was hypothesized that participants identifying as a sexual minority would have elevated rates of sexual victimization compared to their heterosexual counterparts (Balsam et al., 2005). In line with this hypothesis, significantly elevated rates of sexual victimization in the sexual minority subgroups of both the University and Online Community-Based Samples were evident. According the Centers for Disease Control and Prevention's 2010 National Intimate Partner and Sexual Violence Survey, four in 10 gay men (40%), nearly half of bisexual men (47%), and 1 in 5 heterosexual men (21%) have experienced SV other than rape in their lifetime (Walters, Chen, & Breiding, 2013). In a systematic review of

75 studies examining the prevalence of LGBT sexual violence in the United States, researchers found a median rate of lifetime sexual victimization to be approximately 23% (with a range of 4.1% to 59.2%) among gay or bisexual men (Rothman, Exner, & Baughman, 2011). In the current study, the rate of sexual victimization among sexual minority men was 74.6% in the University Sample and 73.7% in the Online Community-Based Sample, compared to 38% and 60.5% among their heterosexual counterparts, respectively. As alluded to above, the elevated rate of sexual violence in the Online Community-Based Sample's heterosexual participants is most likely a result of targeted recruitment strategies. Further shedding light on this discrepancy, the current study utilized all experiences on the SES-SFV as part of the definition of sexual victimization, which is broader in scope and most likely resulted in an increased prevalence rate compared to studies reviewed by Rothman and colleagues.

In addition to sexual minority orientation predicting greater likelihood of sexual victimization, age also significantly predicted assault status. Specifically, the older the age of the participant, the more likely the participant had a victimization experience. This observation was noted in both samples of the study. Although most sexual assaults occur in childhood and young adulthood (e.g., Finkelhor, Hotaling, Lewis, & Smith, 1990), the variable of age in this study most likely reflects opportunity for the experience to occur. For example, the older one is, the more time there has been to have had a particular experience like sexual assault.

The only other identified demographic factor significantly predicting sexual victimization status was education level in the Online Community-Based Sample. Specifically, those participants with higher levels of education experienced less sexual victimization (i.e., 59.6%) compared to their less educated counterparts (i.e., 78.3%). This relationship was not detected in the University Sample given all individuals were enrolled in school at the time of survey with

little variation in education level (i.e., 18.4% in graduate school compared to the rest enrolled as undergraduate students). That said, this significant finding in the Online Community-Based Sample is seemingly discrepant with some research on college experience and sexual assault incidence. Specifically, as indicated in the literature review, it is believed that college populations have increased rates of sexual violence (Simon & Harris, 1993; Coxell et al., 1999). Despite this elevation, male college-aged students are approximately 78% more likely than their non-student counterparts of similar age to experience rape or sexual assault (Department of Justice, 2015). The current study's data seem to reflect this notion that education or academic attainment may serve as a buffer against sexual victimization experiences.

The most frequently described sexual victimization experience and identified index trauma was childhood sexual maltreatment. Specifically, 21.4% of the University Sample and 63.9% of the Online Community-Based Sample noted this form of sexual abuse prior to the age of 14. Mirroring these prevalence rates, 32.1% of men in the University Sample and 33.2% of men in the Online Community-Based Sample identified their index trauma as the childhood sexual maltreatment. These findings suggest that childhood sexual abuse is more common compared to sexual violence in adulthood, reflecting other studies that posit approximately 1 in 6 reported sexual assaults is against a boy, and 1 in 25 reported sexual assaults is against a man (Finkelhor, Hotaling, Lewis, & Smith, 1990). Additionally, a 2000 report by the U.S. Department of Justice noted supported that youths have more elevated rates of sexual victimization when compared to adults. Specifically, the sexual victimization rate for individuals 12 to 17 was approximately 2.3 times higher when compared to adult counterparts (Department of Justice, 2000).

The most common tactic prior to age 14 was telling lies, threatening to spread rumors, making promises about the future, and/or continual verbal pressure (42.9% in the University Sample and 51.1% in the Online Community-Based Sample). Regarding alcohol use as a tactic, the mean age at index trauma for the University Sample was 17 years old and 19.6 years old for the Online Community-Based Sample. Developmentally speaking, this age range has higher levels of binge drinking compared to older samples. Specifically, approximately 21% of high school students and 26% of people aged 18-24 report binge drinking (Centers for Disease Control and Prevention, 2017). According to various studies, approximately 50% of sexual assault victims state they had been consuming alcohol prior to the event, with approximations ranging between 30 and 79 percent depending on the study (Abbey, Ross, & McDuffie, 1994; Crowell & Burgess, 1996).

Regarding the perpetrator demographics, studies have shown that men are most often the perpetrators of rape (Black, Basile, Breiding, Smith, Walters, & Merrick, 2011). One study found that 98% of rapists were men (Sedgwick, 2006). This finding is reflected in the present study's Online Community-Based Sample, with 72.9% of the perpetrators of the index trauma being male. Interestingly, this was not mirrored in the University Sample, where the majority of perpetrators in the sample were women (53%). It should be kept in mind that the results may not be representative of the full rate of male versus female perpetration, as these data only reflect the perpetrator the individual's identified index trauma; therefore, the rates do not represent the sex of the perpetrator for non-index events among those with multiple incidents. Another confounding factor that may be contributing to this difference is the exact construct that is being measured. Particularly, this study assessed beyond just the act of rape to incorporate other forms and degrees of sexual victimization. For example, 60.4% of the index traumas involving sexual

contact without consent had female perpetrators in the University Sample and 50% in the Online Community-Based Sample. This broader assessment strategy may result in capturing experiences involving female perpetrators that would be not detected in only assessing rape.

Another factor that may be contributing to this discrepancy is the role of sexual orientation. Specifically, among those individuals identifying as a sexual minority, approximately 75% of perpetrators were male in the University Sample and 94.7% in the Online Community-Based Sample. Among their heterosexual counterparts, 67% of perpetrators were female in the University Sample and 52.6% in the Online Community-Based Sample. This pattern may indicate some form of romantic or potentially sexual relationship between the individuals. For the current survey, 18% of perpetrators were a spouse/partner or boyfriend/girlfriend in the University Sample and 14.5% in the Online Community-Based Sample. Of those identifying the perpetrator as a friend or acquaintance, 74% of the perpetrators in the University Sample were of the sex to which the participant is attracted. This is mirrored in the Online Community-Based Sample, where 76.5% of the perpetrators were of the sex to which the participant is attracted.

In line with this observation, a study of female university students reported that approximately 35% of attempted acquaintance rapes and 13% of completed acquaintance rapes occurred while on a date, and approximately 42% of female rape survivors were raped by a current or former date, boyfriend/girlfriend, or spouse/partner (Boskey, 2010). Further, acquaintance and more specifically date rape is especially widespread on university campuses, where it frequently occurs within the context of alcohol use (Smith, 2004), which parallels the abovementioned frequent tactic involving substance use.

Beyond the sex of the perpetrator, the perpetrator is frequently known to the victim and is correspondingly rarely a stranger. Specifically, approximately 80% of rape cases involved a perpetrator known to the victim (Miller, Cohen, & Wiersema, 1996). Paralleling this estimate, 91.4% of perpetrators in the University Sample and 81% of perpetrators in the Online Community-Based Sample were known to the participant. Given these prior findings, it was hypothesized that likelihood of disclosure would decrease if the perpetrator was known to the individual; however, in both samples it did not significantly predict disclosure status. Further, according to past research, victims of non-stranger sexual violence are more likely than “stranger rape” victims to delay disclosure to support systems, professionals, law enforcement (Koss & Harvey, 1991). That said, among those that disclosed in the Online Community-Based Sample, those with an unknown perpetrator took longer to disclose. These unexpected findings are in contrast to what is a fairly established phenomenon in the literature. Although this may be in part due to the abovementioned small sample size of individuals noting that the perpetrator was a stranger (i.e., only 17 participants) or impacted by the fact this was only assessed for index trauma and not for all traumas experienced by the participants, further research is warranted into this finding to better understand rationale for its unexpected, yet significant, direction.

Beyond the relationship of the perpetrator to the participant, the vast number of index traumas had only one perpetrator. Specifically, 87.4% of the University Sample and 77.1% of the Online Community-Based Sample had only one perpetrator. These rates are similar to national estimates, where approximately 90% of rapes and sexual assaults have one offender (Planty, Langton, Krebs, Berzofsky, & Smile-McDonald, 2013).

The emotional impact of sexual victimization experiences among men were hypothesized to be similar to the impact in female populations (Rind, Tromovitch, & Bauserman, 1998).

Emotional impact was measured through levels of stigma as well as a provisional current PTSD diagnosis via endorsed PCL-5 trauma reactions. Regarding PTSD diagnosis among men with an identified index trauma of sexual victimization, 10.4% of men experiencing sexual victimization in the University Sample (17.4% for index trauma meeting definition of rape, and 7.4% for other sexual assault) and 14.5% of men experiencing sexual victimization in the Online Community-Based Sample (25.0% for index trauma meeting definition of rape, and 8.0% for other sexual assault) met criteria for a provisional current PTSD diagnosis regarding an identified index sexual victimization trauma. This is similar to estimates in national samples, where approximately 12.4% of women with a history of completed rape and 13% of women with a history of other sexual assault met criteria for current PTSD (Resnick, Kilpatrick, Dansky, Daunders, & Best, 1993). Differences are likely due to sampling of higher risk populations, as opposed to nationally representative data as represented in the Resnick study. Regarding stigma level, the men in the current study endorsed similar rates of stigma when compared to their female counterparts (Gibson & Leitenberg, 2001).

In addition to the general rates of distress, the sex of the perpetrator impacted distress levels. Specifically, it was hypothesized that stigma and trauma reactions would be more deleterious when the perpetrator was male compared to female (Struckman-Johnson & Struckman-Johnson, 1994). As predicted, male perpetrators largely predicted greater trauma and stigma scores compared to female perpetrators in both samples. To note, though the direction was correctly predicted for the PCL-5 in the Online Community-Based Sample, the effect is not statistically significant at  $p=0.055$ . Given that the  $p$ -value is close to significance, this may be a matter of power.

In a study investigating the effects of male and female perpetrators on heterosexual male victims, researchers found that all victims assaulted by male perpetrators reacted negatively to the experience, whereas only 20% of victims assaulted by female perpetrators reacted negatively to the experience (Struckman-Johnson & Struckman-Johnson, 1994). The investigators posit that men denying negative reactions after a sexual assault by a female may not accurately reflect the assault's impact; rather, it may reflect the socialization that encourages men to seek and enjoy sexual activity, where an assaultive experience by a woman is framed as a benign sexual experience rather than an insidious violation. Subsequently, it was predicted that a female perpetrator would predict less likelihood of disclosure in the current study; however, this was not significant in both samples.

Although not within the scope of the Struckman-Johnson study (Struckman-Johnson & Struckman-Johnson, 1994), the same concept may apply to sexual minority men as well, in that a sexual assault by a member of the participant's desired sex may result in a more benign interpretation of the event. In the present study, the sex of the perpetrator within the context of the participant's sexual orientation impacted distress levels. Specifically, the current study found that greater stigma and trauma reactions were present in assault experiences where the perpetrator did not match the desired sex of the participant. Additionally, participants in the Online Community-Based Sample were less likely to disclose the event if the perpetrator's sex matched the victim's sex of interest; however, time to disclosure of the index trauma was significantly longer if the perpetrator did not match the desired sex of the participant. This suggests that men in general are less likely to disclose when the perpetrator that is in line with their desired sex (perhaps due to socialization and subsequent benign interpretation of the event); though, when they decide to disclose the event and it does not fall in line with their desired sex

(e.g., a heterosexual male being sexually assaulted by a male), greater threat to their sexual identity and subsequent stigma may delay their disclosure act. These observations point to the importance of assessing perpetrator gender as it relates to the male victim's sexual orientation when studying the impact of the event as well as subsequent disclosure behaviors.

Regarding disclosure behaviors, it was hypothesized that the disclosure rates for index trauma experiences would be approximately 40%-60% (Finkelhor et al., 1990; Tjaden & Thoennes, 2006; W. Walsh et al., 2010). Both samples had statistically similar rates in line with what was expected, with 48.1% of participants in the University Sample and 55.6% of participants in the Online Community-Based Sample reporting that they had told someone about the index trauma. The mean time to disclosure was 3.6 years in the University Sample and 7.6 years for the Online Community-Based Sample. Although there is no analogous research rates of time to disclosure of experiences to more general support systems, research looking at time from assault to seeking mental health services suggest the majority of those that disclose typically delay this behavior until many years after the assault initially occurred (Walker et al., 2005b). In the abovementioned King and colleagues study (King & Woollett, 1997), the men who eventually did pursue mental health intervention delayed treatment seeking behaviors an average of 16.5 years after the assault. Given that the King study only looked at treatment seeking behaviors as opposed to disclosure or help-seeking behaviors within one's general support system, time to disclosure for that particular study would likely be lower than the cited 16.5 years if measuring disclosure to support systems beyond mental health services.

As evident in the abovementioned means, time to disclosure was significantly greater in the Online Community-Based Sample when compared to the University Sample. This is best explained within the context of the impact of age on time to disclosure. Specifically, both

samples demonstrated that participant's time to disclosure increased for each year increase in age. Given that the Online Community-Based Sample was significantly older than the University Sample, it stands that time to disclosure would be greater in an older sample compared to a younger one. This suggests that it can be expected some of the non-disclosers in the University Sample may eventually become disclosers over time.

For those that disclosed their index trauma, the vast majority disclosed the experience to a friend and/or boyfriend/girlfriend, which is someone that they most likely would trust to respond in an affirmative manner. Consistent with this interpretation, the majority of the people to whom they initially disclosed a) believed them, b) provided emotional support, and c) attempted to protect them. Further, the majority of participants rated the level of helpfulness that the person provided as either "somewhat helpful" or "very helpful." Given that past research indicates that men perceive threat to personal dignity as a barrier to reporting sexual victimization (Sable et al., 2006), it is encouraging that the response was largely perceived as helpful and supportive.

Beyond close support systems, only 1.7% of the University Sample and 12.8% of the Online Community-Based sample disclosed their assault to a medical professional. Professional organizations including the American Medical Association, the American Nurses Association, the World Health Organization, and the American Academy of Pediatrics recommend that medical providers screen female patients for sexual violence experiences (Stevens, 2007). Given that approximately 1 in 71 men experience rape in their lifetime, 1 in 5 men experience sexual victimization in their lifetime (Black, Basile, Breiding, Smith, Walters, Merrick, Chen, & Stevens, 2011), and analogous levels of distress that follow such experiences, it follows that it should be recommended medical providers screen their male patients for sexual violence in

addition to their female patients. For example, although research estimates that 20% to 50% of adult primary care patients experienced sexual trauma in childhood, approximately just one-third of the physicians in the study indicated that they regularly screened for abuse in their female patients, and only approximately 1 in 8 physicians screened their male patients (Weinreb, Savageau, Candib, Reed, Fletcher, Hargraves, 2010).

In line with the second primary aim of the study, it was hypothesized that greater acceptance of male rape myths, greater conformity to masculine norms, and holding more negative attitudes toward women would predict less likelihood of disclosure. As postulated, greater MRMS, CMNI, and ATWS scores largely predicted less likelihood of disclosure. This was true for all measures in the University Sample and for the MRMS in the Online Community-Based Sample; though, the CMNI and ATWS in the Online Community-Based Sample exhibited patterns in the same direction as hypothesized. Several studies point to the role of internalized gender norms and endorsement of rape myths in the disclosure process. Individuals are socially conditioned to embody specific ideals that ultimately impact self-concept as well as interactions with others. Specifically, men are encouraged to be dominant, strong, and sexually-driven; these ideals are then subsequently internalized (Dudte, 2008; Klomsten, Marsh, & Skaalvik, 2005). Research suggests individuals adhering to these conventional beliefs often accept rape myths as valid (Chapleau, Oswald, & Russell, 2007; Costin & Schwarz, 1987; Newcombe, Van Den Eynde, Hafner, & Jolly, 2008). Reflecting this research, greater conformity to masculine norms and holding more negative attitudes toward women in the present study were significantly and positively correlated with acceptance of male rape myths in both samples ( $p < 0.01$ ).

Curiously, although greater conformity to male norms and holding more negative attitudes toward women resulted in less likelihood of disclosure in the University Sample, greater

conformity to male norms and holding more negative attitudes toward women in the same sample significantly predicted less time to disclosure. Adding to this, the Online Community-Based Sample demonstrated, although not significant, patterns in the opposite direction. As any explanation developed for the University sample would be problematic for the Online Community-Based Sample, further research is warranted to determine how these specific variables impact disclosure behaviors in men.

Further, it was hypothesized that holding more negative attitudes toward gay men would predict less likelihood of disclosure. As postulated, greater MHS scores predicted less likelihood of disclosure in the University Sample. Though the MHS scale in the Online Community-Based Sample was not significant, it was in the same direction as hypothesized. Mirroring this finding, Sable and colleagues assessed perceived barriers to disclosure among college students, and results indicated that men perceived threat to personal dignity as a greater barrier to reporting a hypothetical sexual victimization compared to women in the sample (Sable et al., 2006). One of these particular threats to personal dignity included being perceived as gay/bisexual, as this contrasts with the rigid societal sex-role expectations among men, such as exclusively heterosexual sexual acts (Briere, 1996).

It was also posited that greater use of the emotion regulation technique of suppression would predict less likelihood of disclosure. As proposed, high scores on the ERQ-Suppression scale significantly predicted less likelihood of disclosure in the University Sample. Though the ERQ-Suppression scale in the Online Community-Based Sample was not significant, it was in the same direction as hypothesized. Further, greater use of suppression strategies resulted in a significant increase in time to disclosure in the University Sample. This was not significant in the Online Community-Based Sample, though it was in the same direction as hypothesized. As noted

above, men are often raised to display strength as opposed to vulnerability (Dudte, 2008; Klomsten, Marsh, & Skaalvik, 2005). In the current study, the ERQ-Suppression measure was significantly positively correlated with greater conformity to masculine norms ( $p=0.001$ ) in both samples, highlighting the relationship between suppression and the internalization of male gender norms. Research indicates that coping strategies implemented by individuals experiencing sexual violence strongly influence mental health and recovery from the assault (Gibson & Leitenberg, 2001; Littleton, Horsley, John, & Nelson, 2007). Specifically, cognitive and behavioral avoidance behaviors have been shown to thwart help-seeking behaviors (Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992).

It was additionally hypothesized that greater stigma levels and distress following trauma would predict a greater likelihood of disclosure. The stigma scale did not significantly predict disclosure status; however, trauma-related distress did in both samples. That said, lower PCL-5 scores significantly predicted greater likelihood of disclosure in the University Sample, whereas higher PCL-5 scores significantly predicted greater likelihood of disclosure in the Online Community-Based Sample. This difference may be in part due to the varying sources of the subsamples in the total Online Community-Based Sample. Specifically, a portion of the sample was targeted from websites designed for individuals struggling with sexual victimization and seeking support. In line with this, the Online Community-Based Sample had greater frequency of disclosing to mental health professionals, potentially indicating an actively help-seeking population that is in greater distress compared to the University Sample. Supporting this explanation, the Online Community-Based Sample had a significantly higher PCL-5 score when compared to the University Sample.

Regarding the lower scores predicting disclosure behavior in the University Sample, it is possible that after having disclosed the experience, the individual experienced advantageous effects of social support. A large amount of empirical findings underline the beneficial impact of social support on both physical and mental health outcomes (Uchino, 2004). Specifically regarding victims of sexual violence, social support is linked with reduction in PTSD and mood symptoms as well as with adaptive life changes and positive growth (Borja, Callahan, & Long, 2006; Filipas & Ullman, 2001; Schumm, Briggs-Phillips, & Hobfoll, 2006). Additionally, the participants in the University Sample had a significantly shorter time to disclosure compared to the Online Community-Based Sample, which may have resulted in less chronicity and quicker symptom abatement within the University Sample (Badour, Blonigen, Boden, Feldner, & Bonn-Miller, 2012).

Although stigma levels did not significantly predict disclosure status in the Online Community-Based Sample, greater levels of stigma as well as trauma-related distress significantly resulted in an increase in time to disclosure. Neither of these measures in the University Sample were significant in predicting time to disclosure; however, they were in the same direction as predicted, which may be in part due to limited power given the smaller sample size of disclosure in the University Sample. This again reinforces the notion that elevated stigma and trauma-related distress, such as avoidance and shame, act as barriers to delaying men's disclosure behaviors in relation to their victimization experiences.

Greater severity of index trauma predicted disclosure in Online Community-Based Sample. However, this was not seen across all forms of index trauma; specifically, participants with an index trauma where someone attempted to have oral sex with them were less likely to disclose, with a 27.8% disclosure rate, compared to participants with an index trauma of

childhood sexual maltreatment, with a 68.5% disclosure rate. Further, though this observation was not significant in the University Sample, it was in the same direction as that in the Online Community-Based Sample, where participants with an index trauma where someone attempted to have oral sex had a disclosure rate of 46.2%, and participants with an index trauma of childhood sexual maltreatment had a disclosure rate of 50%. While this may suggest that men may be more willing to disclose their victimization experience when it is more severe in nature, it may be the case these men experiencing an attempted oral sex encounter may not identify said experience as meeting the threshold for victimization, whereas childhood sexual abuse may be seen as more of a stereotypical definition of sexual violence and subsequently feel more the need to disclose the event to others.

In the Online Community-Based Sample, those that were injured were more likely to disclose, with a 79.2% disclosure rate, compared to those that were not injured, with a 51.4% disclosure rate. This was not significant in the University Sample, and although the direction was opposite compared to the Online Community-Based Sample, only 5 participants in the University Sample indicated that they were injured during the index trauma. Given this small sample size of injury in the University Sample, this opposite direction and lack of significance may be due to limited power. Past research has found that men are more likely to disclose the crime if the experience caused bodily harm or injury, with investigators suggesting the disclosure act in these cases would not result in questioning the victim's sexual orientation or level of courage (Pino & Meier, 1999). Again, the internalization of gender roles, such as displaying strength, valor, and heterosexuality, impact men's behavior regarding disclosure behaviors following sexual victimization. As mentioned above, threats to this personal dignity may act to keep men from disclosing victimization.

Prior research efforts have suggested that men may be less likely to label their experience as assaultive if they physiologically responded in a way that suggests enjoyment of the experience, such as obtaining an erection or ejaculating (Bullock & Beckson, 2011; Groth & Burgess, 1980). Again, as men are encouraged to seek and enjoy sexual activity, an assaultive experience that leads to physiological arousal may be framed as benign sexual experience rather than traumatizing abuse. In line with this, of those participants in the Online Community-Based Sample that obtained an erection, their mean time to disclosure was longer compared to those participants that did not obtain an erection. That said, the effect was significantly opposite in the University Sample, where erection led to shorter period of delay in disclosure. Further research is warranted to determine how this particular factor impacts disclosure behaviors in men.

In addition to the various index trauma details examined in this study, several demographic characteristics were explored within the context of disclosure behavior. Specifically, it was hypothesized that greater religious affiliation would result in less likelihood to disclose the victimization experience due to the potential stigma around sex within certain religions (Leeming, 2003). The majority of both samples identified as either “not at all religious” or “slightly religious,” with the majority “never” or “on special occasions” attending religious services. In both samples, level of religious affiliation did not significantly predict disclosure or time to disclosure. Given that specific religions were not assessed in this study, it is possible that various religions that individuals adhere to have varying degrees of stigma related to sex, making a null finding likely.

Although sexual minority status did not significantly predict likelihood of disclosure itself, those that identified as a sexual minority were more likely than their heterosexual counterparts to have longer delays in time to disclosure within the University Sample. As prior

research has highlighted, there is particular concern within the LGBT community related to negative sexual stereotypes that may act to discourage members from reporting their sexual victimization experiences (Harvey, Mitchell, Keeble, McNaughton Nicholls, & Rahim, 2014). With this study's data in mind, this concern may not prevent sexual minority men from disclosing but rather prolong their delay process. Adding to this, depending on the stage in the individual's coming out process, they may wait to disclose a sexual victimization experience until they are in a more comfortable space in which to come out.

Beyond these primary aims of the study, there were two exploratory aims. The first exploratory aim of the study compared heterosexual and sexual minority men across the abovementioned factors to determine the presence or absence of an interactive effect regarding disclosure behaviors. None of the interaction effects were significant in relation to time to disclosure; however, age at victimization, income level, and social atmosphere of area growing up had significant interaction effects for disclosure. Specifically, as income increases or social liberalness in the community increases, likelihood of reporting also increases for sexual minority men, whereas likelihood of reporting decreases for heterosexual men. Additionally, as age at victimization increases, likelihood of reporting decreases for sexual minority men, whereas likelihood of reporting increases for heterosexual men. If these exploratory findings are replicated, it would indicate that certain background variables that promote reporting for heterosexual men actually suppress reporting in sexual minority men. At minimum, this would allow us to provide educational information to try and counter these trends, and may require the development of other ways to promote and support sexual minority men in the process of disclosure.

The second exploratory aim of the study compared sexual minority men's responses to a measure of internalized heterosexism and a measure of sexual prejudice or homonegativity. Most research and theory on the concept of homophobia has focused on the experiences of either the sexual majority or the sexual minority. To this end, Herek (2009) proposed a unified theoretical framework with aims to shift scientific dialogue past homophobia to a more refined conceptualization of the assorted phenomena frequently associated with this construct. By integrating sociological literature on stigma and psychological research on prejudice, Herek provides a framework that allows for the description of societal-level sexual stigma and its discrete presentations among majority and minority group members. As further detailed by Herek, sexual minority individuals can exhibit negative attitudes either toward the self because of his or her own minority status (i.e., internalized heterosexism) or toward other sexual minority males because of their minority status (i.e., sexual prejudice or homonegativity). To better work toward better researching this relationship between homonegativity and internalized heterosexism among sexual minority men, the second exploratory aim of the study compared sexual minority men's responses to the SIHS and the MHS-G to determine if the SIHS is a potentially valid measure of internalized homonegativity among sexual minority men. In this study, the two measures were moderately, though significantly, correlated ( $r=0.47$ ,  $n=175$ ,  $p<0.0001$ ), suggesting that these two constructs, although correlated, are likely unique constructs worth further examination.

### ***Limitations of Findings***

Though some of the abovementioned differences both within the Online Community-Based Sample as well as between it and the University sample would be expected (e.g., younger age in University sample as well as greater likelihood of sexual victimization and sexual

minority orientation in the sexual victimization and sexual minority samples), conclusions based on these samples are limited by the manner in which they were sampled. For example, certain populations, such as those with lower incomes and education, have limited access to the use of the internet or generally lack the knowledge in how to access certain resources (Madden & Rainie, 2003). Additionally, some research has demonstrated that offering the opportunity for financial incentive increases the risk of multiple or “bogus” responses (Konstan, Rosser, Ross, Stanton, & Edwards, 2005); however, as the current study made it clear that participation was not necessary to be considered for the opportunity to win a gift card, this risk is likely minimized. In general, self-selection bias is a limitation in online-based survey methodology (Stanton, 1998; Thompson, Surface, Martin, & Sanders, 2003), as there are some individuals with a propensity to participate in an online survey, while others merely disregard it. This sampling bias makes subsequent generalizations from the data limited in nature. That said, given the relatively small base rate of this study’s populations of interest (i.e., sexual minority men and men experiencing sexual violence), use of online sampling was an effective way in which to make larger samples possible (Cude, 2004). Further, despite the very different samples utilized in this study, recruited in quite divergent ways, many of the results were similar.

Additionally, this study utilized a cross-sectional methodological approach. Although this approach is less time-consuming, it is difficult to determine the temporal relationship regarding the assessed variables and the disclosure behaviors. A prospective study that follows individuals would better inform the relationship between the measures assessed and disclosure behaviors. In addition to a cross-sectional approach, this study used a dichotomous definition of disclosure (i.e., disclosed v. not disclosed); disclosure may be better analyzed along a continuum, detailing how much of the experience was disclosed and more generally how it was disclosed (Greenberg

& Stone, 1992). Further, the religiosity variable did not take into account the level of conservativeness, which is more suggestive of adherence to stereotypical gender roles; inclusion of a measure of conservative religiosity would have been better to assess this specific factor. In regard to the exploratory analyses, it is possible that the significant findings were false-positives given the multiple testing. Beyond these limitations of the findings, the participant sample largely under-represented non-white minorities as well as those in middle-age and older populations. This skewed sample, in addition to the abovementioned sampling procedures, limits the generalizability of the findings.

### ***Future Research***

As noted above, additional research would prove beneficial in furthering understanding regarding several findings within the current study. Specifically, the University Sample yielded the result that an erection during the index trauma resulted in shorter delay in disclosure, compared to the fact that the Online Community-Based Sample yield the opposite, where it resulted in longer delay to disclosure. As past research has underlined the importance of physiological response on men's framing of an assault experience, additional research should specifically target this notion of erection during the traumatic event. Further, better understanding how perpetrator's sex may modify any findings would be worthwhile, as that particular variable appears to have an impact on subsequent stigma and distress levels following sexual assault.

Additionally, greater conformity to male norms and holding more negative attitudes toward women resulted in less likelihood of disclosure in the University Sample yet less time to disclosure among those who did disclose. To further this confounding picture, patterns in the Online Community-Based Sample were in the opposite direction. Given that gender role

expectations significantly inform men's experience and behavior following trauma, better understanding how these attitudes that impact said experience and behavior would be beneficial in informing potential interventions and policies related to men and sexual violence.

Though many prior findings suggest likelihood of disclosure decreases if the perpetrator is known to the individual, it did not significantly predict disclosure status in either of the present study's samples. Further, among those that disclosed in the Online Community-Based Sample, those with an unknown perpetrator took longer to disclose. Though this may be in part due to the small sample size of individuals noting that the perpetrator was a stranger or impacted by the fact perpetrator relationship was only assessed for index trauma and not for all traumas experienced by the participants, further research is would help foster better understanding of how this particular variable relates to overall disclosure behaviors following sexual victimization experiences among men.

In addition to utilizing a prospective methodological approach in the study of disclosure, assessing motivations and reasoning for disclosure behaviors would be important in better predicting help-seeking behavior. Factors like the safety of the context (e.g., confidentiality and trust levels), efforts to increase intimacy within a relationship, and altruism (e.g., disclosing to support and provide comfort to an individual experiencing a similar situation) would be helpful in assessing so as to best promote understanding of this decision making process when an individual chooses to disclose or not.

Together, the above-detailed pattern of this study's findings highlight the significant impact gender socialization has on various aspects of sexual victimization among male populations. Generally, individuals are conditioned within society to adopt and embody precise ideals that ultimately impact self-concept as well as interactions with others. Men in particular

are expected to be dominant, resilient, and sexually-driven (Dudte, 2008; Klomsten, Marsh, & Skaalvik, 2005). These conventional attitudes often lead to acceptance of male rape myths (Chapleau, Oswald, & Russell, 2007; Costin & Schwarz, 1987; Newcombe, Van Den Eynde, Hafner, & Jolly, 2008). Reflecting this concept, the current study found that greater conformity to masculine norms, holding more negative attitudes toward women and sexual minority males, as well as greater endorsement of rape myths significantly decrease men's willingness or likelihood to seek support following traumatic sexual victimization. Adding to this hesitancy to seek support, the current study found a significant relationship between the use of the emotion regulation strategy of suppression and the conformity to masculine norms.

This cognitive and behavioral avoidance has been shown to significantly thwart help-seeking behaviors (Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992). As found in this study, elevated stigma and trauma-related distress, such as avoidance and shame, act to further delay men's disclosure and help-seeking behaviors in relation to their victimization experiences. A large amount of empirical findings underline the advantageous effects of social support on both physical and mental health outcomes (Uchino, 2004), which is particularly important given these sexual victimization experiences often result in elevated risk for depressed mood, lowered self-esteem, suicidal ideation, anxiety, sexual dysfunction, and relationship complications (Struckman-Johnson & Struckman-Johnson, 1992; Walker, Archer, & Davies, 2005a).

Past the potential mental benefits underlying disclosure acts, these behaviors serve both important legal and political functions. As with it being one of the first steps toward connecting victims to sources of support, medical care, and mental health services, disclosure can also often facilitate formal reporting (Ahrens et al., 2007; Ullman, 1999; Ullman et al., 2010). Formally reporting sexual violence can result in the identification of the perpetrator as well as allow for

proper persecution under the law (Paine & Hansen, 2002). On a behavioral level, this legal pursuit can ultimately serve to establish a conditioned association between the violent behavior and punishment in the eyes of the victim, the perpetrator, and the general public (Allen, 2007); this association thereby has been suggested to aid in reducing the prevalence of sexual violence (Kilpatrick, Edmunds, & Seymour, 1992). Additionally, these formal disclosures serve to provide the crime estimates that ultimately affect policy decisions and interventions surrounding sexual victimization (Allen, 2007; Skogan, 1976).

Highlighted by this study's exploratory aims, certain background variables that enhance reporting for heterosexual men actually suppress reporting behaviors in sexual minority men, such as decreased liberalness in their area growing up. Although replication and further study is warranted, these findings work toward improving and providing educational information to try and counter these trends, and may eventually yield the development of other methods to promote and support sexual minority men in the process of disclosure related to sexual violence. As with the primary findings of this study, efforts to reduce these barriers to disclosure of sexual victimization experiences in men can have a significant impact on both a personal as well as a societal level.

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## APPENDIX A:

### Demographics

Please enter your age in years.

Please select your gender

- Female
- Male
- Transgender
- Other (please specify) \_\_\_\_\_

Please select your race and/or ethnicity. Choose all which apply to you.

- African American
- Asian American
- Caucasian
- Native American or American Indian
- Hispanic or Latino
- Other \_\_\_\_\_

Please indicate the highest level of education that you have completed.

- Less than high school
- High school graduate
- Some college no degree
- Associate's degree
- Bachelor's degree
- Master's degree
- Professional degree
- Doctoral degree

Please characterize your sexual preference.

- Exclusively heterosexual
- Predominately heterosexual, only incidentally gay/bisexual
- Predominately heterosexual, but more than incidentally gay/bisexual
- Equally heterosexual and gay/bisexual
- Predominately gay/bisexual, but more than incidentally heterosexual
- Predominately gay/bisexual, only incidentally heterosexual
- Exclusively gay/bisexual

Please select your sexual orientation.

- Bisexual
- Heterosexual
- Gay/bisexual or gay
- Other \_\_\_\_\_

Please indicate your relationship status.

- Single
- Monogamous relationship
- Open, non-monogamous relationship

Please indicate your household income.

- Less than \$25,000
- \$25,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 or over

Your political beliefs are best characterized as:

- Conservative
- Somewhat conservative
- Somewhat liberal
- Liberal

In which state do you currently reside?

Which of the following best describes the social atmosphere in the area in which you grew up?

- Conservative
- Somewhat conservative
- In the middle
- Somewhat liberal
- Liberal

Which of the following best describes the social atmosphere in your family growing up?

- Conservative
- Somewhat conservative
- In the middle
- Somewhat liberal
- Liberal

How often do you attend religious services?

- Never
- On special occasions
- Now and then
- Usually

Please indicate how religious you are.

- Not at all religious
- Slightly religious
- Somewhat religious
- Very religious

Are you using your own computer to complete this survey?

- Yes
- No

Are you completing this survey in a private space?

- Yes
- No

**APPENDIX B:**

**Sexual Experiences Survey – Short Form Victimization (SES-SFV)**

The following questions concern sexual experiences that you may have had that were unwanted. We know that these are personal questions, so as a reminder your name and other identifying information will not be connected to your responses. Your information is completely confidential. We hope that this helps you to feel comfortable answering each question honestly. Place a check mark in the box showing the number of times each experience has happened to you. If several experiences occurred on the same occasion--for example, if one night someone told you some lies and had sex with you when you were drunk, you would check both boxes a and c. The past 12 months refers to the past year going back from today. Since age 14 refers to your life starting on your 14th birthday and stopping one year ago from today. You may skip any questions you do not wish to answer or stop participating at any time.

Sexual Experiences	How many times in the past 12 months?	How many times since age 14?
	0 1 2 3+	0 1 2 3+
<b>1. Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent by:</b>		
a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
c. Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
d. Threatening to physically harm me or someone close to me.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>2. Someone had oral sex with me or made me have oral sex with them without my consent by:</b>		
a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
c. Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
d. Threatening to physically harm me or someone close to me.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

<b>3. Someone made me put my penis into their vagina or insert my fingers or objects into their vagina without my consent by:</b>	0	1	2	3+	0	1	2	3+
a Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/>							
b Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/>							
c Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/>							
d Threatening to physically harm me or someone close to me.	<input type="checkbox"/>							
e Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/>							

<b>4. Someone inserted fingers or objects into my butt without my consent by:</b>	0	1	2	3+	0	1	2	3+
a Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/>							
b Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/>							
c Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/>							
d Threatening to physically harm me or someone close to me.	<input type="checkbox"/>							
e Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/>							

<b>5. Even though it didn't happen, someone TRIED to have oral sex with me or tried to make me have oral sex with them without my consent by:</b>	0	1	2	3+	0	1	2	3+
a Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/>							
b Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/>							
c Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/>							
d Threatening to physically harm me or someone close to me.	<input type="checkbox"/>							
e Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/>							

6. Even though it didn't happen, someone TRIED to make me put my penis or tried to make me stick my fingers or objects into their vagina without my consent by:	0 1 2 3+	0 1 2 3+
a Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
b Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
c Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
d Threatening to physically harm me or someone close to me.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
e Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

7. Even though it didn't happen, someone TRIED to stick objects or fingers into my butt without my consent by:	0 1 2 3+	0 1 2 3+
a Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn't want to.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
b Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
c Taking advantage of me when I was too drunk or out of it to stop what was happening.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
d Threatening to physically harm me or someone close to me.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
e Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

## APPENDIX C:

### Childhood Trauma Questionnaire (CTQ), Sexual Abuse Subscale

Listed below are descriptions of several experiences that may happen in childhood. Please read each item and decide how true that item is for your experience. Please be as honest as possible and remember there are no right or wrong answers. Each question refers to any event that you may have experienced **BEFORE THE AGE OF 14.**

	Never true	Rarely true	Sometimes true	Often true	Very often true
Was touched sexually	<input type="radio"/>				
Hurt if didn't do something sexual	<input type="radio"/>				
Made to do sexual things	<input type="radio"/>				
Was molested	<input type="radio"/>				
Was sexually abused	<input type="radio"/>				

## APPENDIX D:

### Sexual Assault Details Questionnaire (SADQ) and Help-Seeking Behaviors Questionnaire

#### (HSBQ)

Please answer the following questions about the worst sexual experience event that you just identified.

How old were you when your worst unwanted sexual experience occurred?

During the worst event did you obtain an erection?

- Yes
- No

During the worst event did you reach orgasm?

- Yes
- No

How many people were involved in doing this to you?

What was the sex of the person(s) who did this to you?

- Female only
- Male only
- Both female and male

What was your relationship to the person(s) who did this to you?

- Parent or guardian
- Sibling
- Relative (e.g., aunt/uncle, grandparent)
- Friend
- Clergy member (e.g., priest, nun)
- Teacher or coach
- Spouse/partner
- Boyfriend/girlfriend
- Stranger
- Acquaintance
- Childcare provider (e.g., babysitter)

About how many times did you have an unwanted sexual experience with the person(s)?

- 1 time
- 2-5 times
- 6-10 times
- 11-20 times
- More than 20 times
- Don't know

Were you physically injured from the unwanted sexual experience?

- Yes
- No

Not including this survey, have you ever told anyone that you had this unwanted sexual experience?

- Yes
- No

How old were you when you first told someone about this unwanted sexual experience?

If you have told one or more people about this incident, whom did you tell? Please check all that apply.

- Parent or guardian
- Sibling
- Relative (e.g., aunt/uncle, grandparent)
- Friend (less than 18 years old)
- Friend (adult)
- Clergy member
- Teacher or coach
- Law enforcement officer or child protection worker
- Medical professional (e.g., nurse, doctor)
- Counselor, therapist or other mental health professional
- Spouse/partner
- Boyfriend/girlfriend
- Own children
- Other (please specify) \_\_\_\_\_

How helpful was the response from the first person that you told?

- Very helpful
- Somewhat helpful
- Mixed: both helpful and unhelpful
- Somewhat unhelpful
- Very unhelpful

Did anyone you told...

	Yes	No
• believe you?	<input type="radio"/>	<input type="radio"/>
• provide emotional support?	<input type="radio"/>	<input type="radio"/>
• try to protect you?	<input type="radio"/>	<input type="radio"/>
• help/encourage you to get mental health treatment	<input type="radio"/>	<input type="radio"/>

In your lifetime, about how many people have you told about your worst unwanted sexual experience?

**APPENDIX E:**

**Stigma Scale (SS)**

Please answer the following questions about the worst sexual experience event that you just identified in the previous screen.

1 = not at all

5 = very much

	1	2	3	4	5
1. How ashamed do you feel about this experience?	<input type="radio"/>				
2. How much do you think others would blame you for what happened?	<input type="radio"/>				
3. How much do you think you are different from other men because of this experience	<input type="radio"/>				
4. How much do you feel tainted ("dirtied") by this experience?	<input type="radio"/>				
5. How concerned are you that other people will think something negative about your sexuality if they found out?	<input type="radio"/>				
6. How concerned are you about what other people would think of you if they found out what happened?	<input type="radio"/>				
7. How embarrassed are you about telling people what happened?	<input type="radio"/>				
8. How concerned are you about people not respecting you as much if they were to find out what happened?	<input type="radio"/>				
9. How concerned are you about how other people would react if they were to find out what happened?	<input type="radio"/>				

## APPENDIX F:

### PTSD Checklist for DSM-5 (PCL-5)

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

<i>In the past month, how much were you bothered by:</i>	<i>Not at all</i>	<i>A little bit</i>	<i>Moderately</i>	<i>Quite a bit</i>	<i>Extremely</i>
1. Repeated, disturbing, and unwanted memories 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 ( <i>as if you were actually back there reliving it</i> )?	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 ( <i>for example, heart pounding, trouble breathing, sweating</i> )?	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 ( <i>for example, people, places, conversations, activities, objects, or situations</i> )?	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 ( <i>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</i> )?	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, guilt, 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 ( <i>for example, being unable to feel happiness or have loving feelings for people close to you</i> )?	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 "superalert" 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 G:

### Male Rape Myths Scale (MRMS)

Read the statements below and indicate the degree to which you agree or disagree with the statement using the scale given to you.

It is impossible for a man to rape a man.

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

Even a big, strong man can be raped by another man.

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

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

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

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

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

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

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

It is impossible for a woman to rape a man.

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

Even a big, strong man can be raped by woman.

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

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

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

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

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

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

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

Most men who are raped by a woman do not need counseling after the incident.

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

## APPENDIX H:

### The Modern Homonegativity Scale – Gay (MHS-G)

For each of the following items, please indicate your opinion. There are no right or wrong answers.

1 = strongly disagree

4 = strongly agree

1. Many gay men use their sexual orientation so that they can obtain special privileges.
2. Gay men seem to focus on the ways in which they differ from heterosexuals, and ignore the ways in which they are the same.
3. Gay men do not have all the rights they need.\*
4. The notion of universities providing students with undergraduate degrees in Gay and Lesbian Studies is ridiculous.
5. Celebrations such as “Gay Pride Day” are ridiculous because they assume that an individual’s sexual orientation should constitute a source of pride.
6. Gay men still need to protest for equal rights.\*
7. Gay men should stop shoving their lifestyle down other people’s throats.
8. If gay men want to be treated like everyone else, then they need to stop making such a fuss about their sexuality/culture.
9. Gay men who are “out of the closet” should be admired for their courage.\*
10. Gay men should stop complaining about the way they are treated in society, and simply get on with their lives.
11. In today’s tough economic times, Canadians’ tax dollars shouldn’t be used to support gay men’s organizations.
12. Gay men have become far too confrontational in their demand for equal rights.

---

Note: \*represents items to be reverse scored. A 5-point Likert-type scale has typically been used with the MHS (1=strongly disagree; 2=disagree; 3=don’t know; 4=agree; 5=strongly agree)

## APPENDIX I:

### Conformity to Masculine Norms Inventory (CMNI-22)

The following page contains a series of statements about how men might think, feel, or behave. The statements are designed to measure attitudes, beliefs, and behaviors associated with both traditional and non-traditional masculine gender roles. Thinking about your own actions, feelings, and beliefs, please indicate how much you personally agree or disagree with each statement. There are no right or wrong responses to the statements. You should give the responses that most accurately describe your personal actions, feelings, and beliefs. It is best if you respond with your first impression when answering.

	Strongly Disagree	Disagree	Agree	Strongly Agree
My work is the most important part of my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I make sure people do as I say	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general I do not like risky situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It would be awful if someone thought I was gay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I love it when men are in charge of women	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to talk about my feelings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would feel good if I had many sexual partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to me that people think I am heterosexual	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that violence is never justified	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to share my feelings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I should be in charge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would hate to be important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sometimes violent action is necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't like giving all my attention to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More often than not, losing does not bother me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I could, I would frequently change sexual partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I never do things to be an important person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I never ask for help	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy taking risks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Men and women should respect each other as equals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Winning isn't everything, it's the only thing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It bothers me when I have to ask for help	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## APPENDIX J:

### The Short Internalized Homonegativity Scale (SIHS)

**DIRECTIONS:** Please read each of the following statements carefully and then indicate if you strongly agree (SA), agree (A), somewhat agree (SWA), neither agree nor disagree (N), somewhat disagree (SWD), disagree (D), or strongly disagree (SD) with that particular statement. Give your first response and don't spend too much time on any one item. Some statements may depict situations that you have not experienced; please imagine yourself in those situations when answering those statements.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree/Disagree	Somewhat Agree	Agree	Strongly Agree
1. I am comfortable about people finding out that I am gay.							
2. It is important to me to control who knows about my homosexuality.							
3. I feel comfortable discussing homosexuality in a public situation.							
4. Even if I could change my sexual orientation I would not.							
5. Most gay men cannot sustain a long-term committed relationship.							
6. Most gay men prefer anonymous sexual encounters.							
7. Gay men tend to flaunt their sexuality inappropriately.							
8. Gay men are generally more promiscuous than straight men.							
9. I often feel intimidated while at gay venues.							
10. Social situations with gay men make me feel uncomfortable.							
11. I feel comfortable in gay bars.							
12. Making an advance to another man is difficult for me.							

**APPENDIX K:**

**Emotion Regulation Questionnaire (ERQ)**

The following are questions about your emotional life, in particular how you control (that is, regulate and manage) your emotions. The questions below involve two distinct aspects of your emotional life. One is your emotional experience, or what you feel like inside. The other is your emotional expression, or how you show your emotions in the way you talk, gesture, or behave. Although some of the following questions may seem similar to one another, they differ in important ways. For each item, please indicate how much you agree or disagree.

1 = strongly disagree

7 = strongly agree

	1	2	3	4	5	6	7
1. When I want to feel more positive emotion (such as joy or amusement), I change what I'm thinking about.	<input type="radio"/>						
2. I keep my emotions to myself.	<input type="radio"/>						
3. When I want to feel less negative emotion (such as sadness or anger), I change what I'm thinking about.	<input type="radio"/>						
4. When I am feeling positive emotions, I am careful not to express them.	<input type="radio"/>						
5. When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm.	<input type="radio"/>						
6. I control my emotions by not expressing them.	<input type="radio"/>						
7. When I want to feel more positive emotion, I change the way I'm thinking about the situation.	<input type="radio"/>						
8. I control my emotions by changing the way I think about the situation I'm in.	<input type="radio"/>						
9. When I am feeling negative emotions, I make sure not to express them.	<input type="radio"/>						
10. When I want to feel less negative emotion, I change the way I'm thinking about the situation.	<input type="radio"/>						

## APPENDIX L:

### Informed Consent Document for University Sample

#### University of Wisconsin – Milwaukee Consent to Participate in Online Research

**Study Title:** Men's Sexual Experiences Survey

**Person Responsible for Research:** Shawn P. Cahill, Ph.D., Associate Professor, Dept. of Psychology, University of Wisconsin – Milwaukee (UWM)

**Study Description:** You are being invited to participate in a research study. The purpose of this research study is to collect information about men's sexual experiences. Approximately 1200 men will participate in this study. If you agree to participate, you will be asked to complete a survey that will take approximately 30-60 minutes to complete. By completing the survey you may earn **one hour in extra credit**. The survey will ask you questions about a variety of sensitive topics including attitudes regarding masculinity, sexuality, and sex, including specific types of experiences like unwanted sexual contact. This is being done to better understand men's experiences and attitudes related to these topics.

**Risks / Benefits:** Risks to participants are considered minimal. You will be asked about your attitudes and behaviors regarding sex and sexual experiences. This may include disclosing information about unwanted sexual experiences. Some people may feel uncomfortable providing personal and sensitive information. If you feel distressed by any of these questions, you may choose not to answer any of the questions and you may discontinue participation at any time without penalty. There is a 24/7 crisis hotline number at the top of each page of the survey. You may also contact the study's Principle Investigator, Dr. Cahill, who has experience in helping people with emotional issues. Information about additional resources will also be provided at the completion of the survey.

Collection of data and survey responses using the internet involves the same risks that a person would encounter in everyday use of the internet, such as breach of confidentiality. While the researchers have taken every reasonable step to protect your confidentiality, there is always the possibility of interception or hacking of the data by third parties that is not under the control of the research team.

There will be no costs for participating. The only direct benefit to you participating in this study is that you may receive extra credit in your psychology course. Whether you will receive extra credit is determined by your instructor and cannot be guaranteed by the Principal Investigator of the study. Additionally, knowledge gained from this type of research may lead to the development of more effective interventions for men experiencing sexual violence and thus be beneficial to men in the future.

**Limits to Confidentiality:** All information collected about you during the course of this survey will be kept confidential. At the end of this survey or upon voluntary withdrawal, you will automatically be redirected to a separate Qualtrics questionnaire where you will only be asked to provide your UWM email address for distribution of extra credit to SONA; the email address will not be linked with your responses to this survey. You will receive full credit even if you discontinue the survey before answering all questions. Further, the Internet Protocol (IP) address of the computer you use will not be collected. Data will be retained on the Qualtrics website server for 2 years and will be deleted after this time. However, data may exist on backups or server logs beyond the timeframe of this research project. Data transferred from the survey site will be saved in an encrypted format for 10 years. Only the Principle Investigator and a small number of research assistants under his supervision will have access to the information. However, the Institutional Review Board at UW-Milwaukee or appropriate federal agencies like the Office for Human Research Protections may review this study's records. All study results will be reported without identifying information so that no one viewing the results will ever be able to match you with your responses.

**Voluntary Participation:** Your participation in this study is voluntary. You may choose to not answer any of the questions or withdraw from this study at any time without penalty. Your decision will not change any present or future relationship with the University of Wisconsin Milwaukee.

**Who do I contact for questions about the study:** For more information about the study or study procedures, contact Shawn P. Cahill, Ph.D. at (414) 229-5099 or at [cahill@uwm.edu](mailto:cahill@uwm.edu) or a research assistant at (414)229-3188 or [fearcenter@yahoo.com](mailto:fearcenter@yahoo.com)

**Who do I contact for questions about my rights or complaints towards my treatment as a research subject?**

Contact the UWM IRB at 414-229-3173 or [irbinfo@uwm.edu](mailto:irbinfo@uwm.edu)

**Research Subject's Consent to Participate in Research:**

By entering this survey, you are indicating that you have read the consent form, you are age 18 or older, you are male, and that you voluntarily agree to participate in this research study. Further, you are indicating that you have not participated in this survey previously.

**Summary:**

- ◆ While the risks of this study are minimal, I may experience discomfort because of the nature of the material.
- ◆ There are several protections in place to maintain the confidentiality of my data.
- ◆ I may choose to not answer survey questions and I can discontinue at any time without penalty.

**PLEASE SAVE A COPY OF THE CONSENT FORM. THIS IS YOUR PROOF OF PARTICIPATION  
TO SAVE OR PRINT THE CONSENT FORM USE THE "FILE" ---> SAVE PAGE AS OR PRINT BUTTON IN THE  
UPPER LEFT OF YOUR WEB BROWSER SCREEN**

Thank you!

## APPENDIX L:

### Informed Consent Document for Online Community-Based Sample

#### University of Wisconsin – Milwaukee Consent to Participate in Online Research

**Study Title:** Men's Sexual Experiences Survey

**Person Responsible for Research:** Shawn P. Cahill, Ph.D., Associate Professor, Dept. of Psychology, University of Wisconsin – Milwaukee (UWM)

**Study Description:** You are being invited to participate in a research study. The purpose of this research study is to collect information about men's sexual experiences. Approximately 1200 men will participate in this study. If you agree to participate, you will be asked to complete a survey that will take approximately 30-60 minutes to complete. The survey will ask you questions about a variety of sensitive topics including attitudes regarding masculinity, sexuality, and sex, including specific types of experiences like unwanted sexual contact. This is being done to better understand men's experiences and attitudes related to these topics.

**Risks / Benefits:** Risks to participants are considered minimal. You will be asked about your attitudes and behaviors regarding sex and sexual experiences. This may include disclosing information about unwanted sexual experiences. Some people may feel uncomfortable providing personal and sensitive information. If you feel distressed by any of these questions, you may choose not to answer any of the questions and you may discontinue participation at any time without penalty. There is a 24/7 crisis hotline number at the top of each page of the survey. You may also contact the study's Principle Investigator, Dr. Cahill, who has experience in helping people with emotional issues. Information about additional resources will also be provided at the completion of the survey.

Collection of data and survey responses using the internet involves the same risks that a person would encounter in everyday use of the internet, such as breach of confidentiality. While the researchers have taken every reasonable step to protect your confidentiality, there is always the possibility of interception or hacking of the data by third parties that is not under the control of the research team.

There will be no costs for participating. By agreeing to participate in the study, you will have the option of entering an online drawing for a chance win one of ten \$25 Amazon gift cards; **chances of winning a gift card is approximately 1 in 60. Participation is not required to enter the drawing; if you wish not to participate but would like a chance to win, please click "No" below and you will automatically be redirected to a separate Qualtrics page where you will be asked to provide an email address where you can be contacted in the event you win an Amazon gift card.** The drawing will occur upon completion of data collection. Additionally, knowledge gained from this research may lead to the development of more effective interventions for men experiencing sexual violence and thus be beneficial to men in the future.

**Limits to Confidentiality:** All information collected about you during the course of this survey will be kept confidential. At the end of this survey or upon voluntary withdrawal, you will automatically be redirected to a separate Qualtrics page where you will be asked to provide an email address where you can be contacted in the event you win an Amazon gift card; the email address will not be linked with your responses to this survey. You will still be eligible to enter the raffle even if you discontinue the survey before answering all questions. Further, the Internet Protocol (IP) address of the computer you use will not be collected. Data will be retained on the Qualtrics website server for 2 years and will be deleted after this time. However, data may exist on backups or server logs beyond the timeframe of this research project. Data transferred from the survey site will be saved in an encrypted format for 10 years. Only the Principle Investigator and a small number of research assistants under his supervision will have access to the information. However, the Institutional Review Board at UW-Milwaukee or appropriate federal agencies like the Office for Human Research Protections may review this study's records. All study results will be reported without identifying information so that no one viewing the results will ever be able to match you with your responses.

**Voluntary Participation:** Your participation in this study is voluntary. You may choose to not answer any of the questions or withdraw from this study at any time without penalty. Your decision will not change any present or future relationship with the University of Wisconsin Milwaukee.

**Who do I contact for questions about the study:** For more information about the study or study procedures, contact Shawn P. Cahill, Ph.D. at (414)229-5099 or at [cahill@uwm.edu](mailto:cahill@uwm.edu) or a research assistant at (414)229-3188 or [fearcenter@yahoo.com](mailto:fearcenter@yahoo.com)

**Who do I contact for questions about my rights or complaints towards my treatment as a research subject?**  
Contact the UWM IRB at 414-229-3173 or [irbinfo@uwm.edu](mailto:irbinfo@uwm.edu)

**Research Subject's Consent to Participate in Research:**

By entering this survey, you are indicating that you have read the consent form, you are age 18 or older, you are male, and that you voluntarily agree to participate in this research study. Further, you are indicating that you have not participated in this survey previously.

**Summary:**

- ◆ While the risks of this study are minimal, I may experience discomfort because of the nature of the material.
- ◆ There are several protections in place to maintain the confidentiality of my data.
- ◆ I may choose to not answer survey questions and I can discontinue at any time without penalty.

**PLEASE SAVE A COPY OF THE CONSENT FORM. THIS IS YOUR PROOF OF PARTICIPATION  
TO SAVE OR PRINT THE CONSENT FORM USE THE "FILE" ---> SAVE PAGE AS OR PRINT BUTTON IN THE  
UPPER LEFT OF YOUR WEB BROWSER SCREEN**

Thank you!

# CURRICULUM VITAE

## TIMOTHY J. GEIER

### EDUCATION

**University of Wisconsin - Milwaukee (UWM)**, Milwaukee, WI 09/2010 – 08/2017  
Clinical Psychology Doctoral Program, APA accredited, Academy of Psychological Clinical Science Member  
Supervisor: Dr. Shawn P. Cahill, Department of Psychology

**Marquette University**, Milwaukee, WI 08/2003 – 05/2007  
Bachelor of Arts Degree in Psychology and Spanish Language/Literature  
Minor in Biology  
*Magna Cum Laude*

### CLINICAL INTERNSHIP

**Hennepin County Medical Center**, Minneapolis, MN 08/2016 – 08/2017  
Psychiatry Department: APA Accredited Predoctoral Internship

### CLINICAL EXPERIENCE

**Health Psychology Practicum**, Medical College of Wisconsin & Froedtert Hospital 06/2014 – 06/2015  
Advanced Student Therapist

**Therapy Supervision Practicum**, UWM Psychology Clinic 09/2014 – 06/2015  
Peer Supervisor

**Community Placement Practicum**, the Clement J. Zablocki VA Medical Center 09/2013 – 05/2014  
Student Therapist

**Assessment Supervision Practicum**, UWM Psychology Clinic 09/2013 – 05/2016  
Peer Supervisor and Teaching Assistant

**Therapy Practicum**, UWM Psychology Clinic 06/2012 – 05/2016  
Student Therapist

**Therapy Practicum**, Traumatic Stress & Anxiety Disorders (TSAD) Clinic 06/2012 – 05/2013  
Student Therapist

**Empirically Supported Interventions Practicum**, UWM Psychology Clinic 02/2012 – 05/2012  
Student Therapist

**Assessment Practicum**, UWM Psychology, TSAD Clinic 07/2011 – 05/2012  
Student Therapist

**Clinical Psychology Practicum**, UWM Psychology Clinic 08/2010 – 06/2011

**Program of Excellence**, UWM Psychology Clinic, TSAD Clinic 08/2010 – 05/2013  
Track: Prolonged Exposure Therapy for Posttraumatic Stress Disorder

**Substance Treatment and Research Services (STARS) Clinic**, New York, NY 06/2007 – 08/2010  
Clinical Research Staff, REM Study

### RESEARCH EXPERIENCE

**Medical College of Wisconsin & Froedtert Hospital**, Milwaukee, WI 04/2015 – 08/2015  
Department of Neurosurgery  
Graduate Research Assistant

**UW-Milwaukee Institutional Review Board**, Milwaukee, WI 10/2012 – 05/2016  
Student Board Member

**The Center for Applied Behavioral Health Research**, Milwaukee, WI 05/2012 – 05/2015  
Graduate Data Analyst Assistant

**UW-Milwaukee Fear, Exposure & Anxiety Research Center**, Milwaukee, WI 08/2010 – 08/2017  
Graduate Researcher, Lab Coordinator

**New York State Psychiatric Institute / Columbia University**, New York, NY 06/2007 – 06/2014  
Research Support Assistant

**Marquette University Independent Study**, Milwaukee, WI 08/2006 – 05/2007  
Research Assistant

### PUBLICATIONS AND PRESENTATIONS

#### ***Peer-Reviewed Journal Publications***

Anderson, R., **Geier T.**, Cahill, S. (2015). Epidemiological associations between posttraumatic stress disorder and incarceration in the National Survey of American Life. *Criminal Behaviour and Mental Health*. [Epub ahead of print].

Skodol A., **Geier T.**, Grant B., Hasin D. (2014). Personality disorders and the persistence of anxiety disorders in a nationally representative sample. *Depression and Anxiety*. 31 (9), 721-728.

Pilowsky D., Keyes K., **Geier T.**, Grant B., Hasin D. (2012). Stressful life events and relapse among formerly alcohol dependent adults. *Social Work in Mental Health*. 11 (2), 184-197.

Fenton M., **Geier T.**, Keyes K., Skodol A., Grant B., Hasin D. (2012). Combined role of childhood maltreatment, family history, and gender in the risk of alcohol dependence. *Psychological Medicine*. 43 (05), 1045-1057.

Fenton M., Keyes, K., **Geier T.**, Greenstein E., Skodol A., Kreuger R., Grant B., Hasin D. (2012). Psychiatric comorbidity and the persistence of drug use disorders in the United States. *Addiction*. 107 (3), 599-609.

Skodol A., Grilo C., Keyes K., **Geier T.**, Grant B., Hasin D. (2011). Relationship of personality disorders to the course of major depressive disorder in a nationally representative sample. *Am J Psychiatry*. 168 (3): 257–264.

- Hasin D., Fenton M., Skodol A., Krueger R., Keyes, K., **Geier T.**, Greenstein E., Blanco C., Grant B. (2011). Relationship of personality disorders and the 3-year course of alcohol, drug, and nicotine use disorders. *Archives of General Psychiatry*. 68 (11):1158-67.
- Hankerson, S., Fenton, M., **Geier, T.**, Keyes, K., Wiessman, M., Hasin, D. (2011). Racial differences in symptoms, comorbidity, and treatment for major depressive disorder among black and white adults. *Journal of the National Medical Association*. 103 (7):576-84.
- Fenton M.C., **Geier T.**, Keyes, M., Skodol A., Grant B., Hasin D. (2011). The relationship between childhood maltreatment, family history, and sex in the risk for alcohol dependence in the United States. *Compr Psychiatr*. 52 (6), e5-e6.
- Keyes K., **Geier T.**, Grant B., Hasin D. (2009). Influence of a drinking quantity and frequency measure on the prevalence and demographic correlates of DSM-IV alcohol dependence. *Alcohol Clin Exp Res*. 33 (5):761-71.

### **Conference Presentations**

- Geier T.** (2011, April). Clinical characteristics of posttraumatic stress disorder among black and white adults in the U.S. population. Association of Graduate Students in Psychology Symposium. University of Wisconsin-Milwaukee. Milwaukee, WI.
- Hasin D., **Geier T.**, Aharonivich E. (2010, May). Marijuana abuse and dependence in the general population. American Psychological Association Convention. San Diego, CA.

### **Abstract Presentations**

- Grout K., **Geier T.**, Omelian, S., Cahill S. (2015, November). Evaluating Attentional Bias in Shame Using a Dot Probe Task. Association of Behavioral and Cognitive Therapies Convention. Chicago, IL.
- Otto-Salaj L., Fuhrmann D., **Geier T.**, Zweben A., Brondino M., Cisler R., Haertlein-Sells C., Stoffel V., Weinhardt L., Kalichman S. (2015, June). Influence of substance use on HIV risk: Testing an amended information-motivation-behavioral skills model in adults with serious mental illness. Research Society on Alcoholism. San Antonio, TX.
- Geier T.**, Anderson, S., Cahill S. (2014, November). Complex trauma: evidence from the Collaborative Psychiatric Epidemiology Surveys. Association of Behavioral and Cognitive Therapies Convention. Philadelphia, PA.
- Geier T.**, Cahill S. (2013, November). The impact of sexual arousal on college men's detection of partner protest in a date rape scenario. Association of Behavioral and Cognitive Therapies Convention. Nashville, TN.
- Geier T.**, Anderson R., Cahill S. (2013, April). Prevalence and consequences of rape against men in the Collaborative Psychiatric Epidemiology Surveys. Midwestern Psychological Association. Chicago, IL.
- Anderson R., **Geier T.**, Cahill S. (2013, April). Initial validity and reliability of the Revised Sexual Experiences Scale in a sample of college men. Midwestern Psychological Association. Chicago, IL.
- Geier T.**, Cahill S. (2013, April). The role of sexual arousal on college men's ability to detect partner protest in a date rape audio vignette. Wisconsin Psychological Association. Middleton, WI.
- Geier T.**, Grout, K. Anderson R., Cahill S. (2012, November). Clinical characteristics of posttraumatic stress disorder among black and white adults in the U.S. population. Association of Behavioral and Cognitive Therapies Convention. National Harbor, MD.
- Geier T.**, Anderson R., Cahill S. (2012, April). Epidemiological associations between PTSD and the experience of incarceration in the National Survey of American Life. Wisconsin Psychological Association Convention. Middleton, WI.
- Geier T.**, Anderson R., Cahill S. (2011, November). Comparison of assessment methodologies on the prevalence rates of sexual victimization in a sample of college women. Association of Behavioral and Cognitive Therapies Convention. Toronto, Canada.

- Geier T.**, Anderson R., Cahill S. (2011, May). Complex trauma: Is there an empirical basis? Midwestern Psychological Association. Chicago, IL.
- Anderson R., **Geier T.**, Cahill S. (2011, May). Epidemiological associations between PTSD and detention in the National Survey of American Life. Midwestern Psychological Association. Chicago, IL.
- Anderson R., **Geier T.**, Cahill S. (2011, March). Associations between PTSD and detention experiences in the National Survey of American Life. Anxiety Disorders Association of America Convention. New Orleans, LA.
- Fenton M., Keyes K., **Geier T.**, Hasin D. (2010, June). Psychiatric comorbidity and the persistence of drug use disorders. The College on Problems of Drug Dependence Convention. New York, NY.
- Aharonovich E., Johnson B., **Geier T.**, Nota J., Hasin D. (2010, June). Technologically-enhanced intervention to reduce NIDU in HIV primary care patients. The College on Problems of Drug Dependence Convention. New York, NY.
- Aharonovich E., Rhindress K., **Geier T.**, Keyes K., Johnston B., Aracena J., Martinez J., Hasin D. (2009, June). Unsafe drinking in HIV primary care patients: predictors and change over time. Research Society on Alcoholism Convention. San Diego, CA.
- Keyes K., **Geier T.**, Grant B., Hasin D. (2008, June). Influence of a drinking quantity and frequency measure on the prevalence and demographic correlates of DSM-IV alcohol use disorders. Research Society on Alcoholism Convention. Washington, DC.