The Sexual Assault Severity Scale: A Comprehensive Measure of Assault Severity

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THE SEXUAL ASSAULT SEVERITY SCALE:
A COMPREHENSIVE MEASURE OF ASSAULT SEVERITY

by

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ABSTRACT

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Many studies in the sexual assault literature have found a significant relationship between sexual assault severity and psychological distress, specifically PTSD and suicidality. However, in the current literature, there is an inconsistent and incomplete definition of the construct of assault severity. The present study aims to create a comprehensive self-report questionnaire, called the Sexual Assault Severity Scale (SASS) that includes assault characteristics, such as victim-offender relationship, substance use, and peritraumatic responses, and cognitive variables, such as posttraumatic schema disruptions and coping self-efficacy in the conceptualization of assault severity. Two models evaluating the relationship between assault severity and post assault distress were compared, one using the SASS to measure assault severity and the other using the Sexual Experiences Scale-Long Form Victimization (SES-LFV; Koss et al., 2007). The results of the psychometric analysis suggest that the SASS is a reliable and valid measure of assault severity. This study also found evidence supporting the use of a direct assessment of perceived severity, rather than a hierarchical ranking of victimization severity, when measuring the construct of sexual assault severity.
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CHAPTER I
INTRODUCTION

Researchers have attempted to develop a measurable construct of assault severity that will correlate with the level of psychological distress experienced after an assault (Koss & Oros, 1982). The most common conceptualization of assault severity is described in terms of victimization severity (i.e., completed vs. attempted assaults) and assault tactics (i.e., verbal coercion vs. physical force). In other words, it has been defined as a dimensional construct that is based on the intrusiveness of the sexual behavior and the forcefulness of the tactic used by the perpetrator (Koss & Oros 1982; Koss & Gidycz, 1985; Koss et al., 2007). Therefore, a completed rape in which the perpetrator used physical force is considered the most severe type of assault. Some studies have included other variables, such as perceived life threat and physical injury, in the conceptualization of assault severity (Koss, Figueredo, & Prince, 2002; Ullman, Townsend, Filipas, & Starzynski, 2007). Studies using these conceptualizations have found a positive relationship between assault severity and PTSD, as well as suicidality (Frazier et al., 2009; Ullman & Filipas, 2001; Ullman, Townsend, Filipa, & Starzynski, 2007; Ullman & Najdowski, 2009). Specifically, it has been found that assault experiences that were perceived as life threatening, were more violent, and were completed, were related with higher levels of PTSD (Frazier et al., 2009, Ullman & Filipas, 2001; Ullman, Townsend et al., 2007).

There are other assault characteristics, such as victim-offender relationship (i.e., known vs. stranger assailants), substance use, and peritraumatic responses (i.e., fear, perceived life treat) that could also be included in the conceptualization of assault.
severity. Victim-offender relationship and substance use have been related to victimization severity and physical injury (Abbey, Clinton, McAuslan, Zawacki, & Buck, 2002; Abbey, Clinton-Sherrod, McAuslan, Zawacki, & Buck, 2003; Brecklin & Ullman, 2010; Ullman & Najdowski, 2010). For example, intimate partner assailants have been found to engage in complete vaginal intercourse and use more forceful assault tactics that lead to more severe physical injuries (Logan, Cole, & Capillo, 2007; Stermac, Del Bove, Brazeau, & Bainbridge, 2006; Stermac, Du Mont, & Dunn, 1998; Ullman, Filipas, Townsend, & Starzynski, 2006). Peritraumatic responses, specifically fear and perceived life threat, have been found to predict PTSD symptom severity (Amstadter & Vernon, 2008; Feinstein, Humphreys, Bovin, Marx, & Resick, 2011).

Other variables, such as posttraumatic schema disruption and coping self-efficacy can also relate to the construct of assault severity. Posttraumatic schema disruption can impact the victim’s perception of the severity of the assault. According to the information-processing model, when a traumatic event disrupts a preexisting schema, the victim may respond by creating maladaptive or exaggerated changes to the schema. A woman who was assaulted by someone she considers safe or in a location she considers safe would experience a disruption to her preexisting safety schema and may create maladaptive schemas, such as no one can be trusted, as a result. Research has shown that this cognitive overgeneralization is commonly found among victims of sexual assault and is related to greater depression and PTSD symptoms (Littleton & Grills-Taquechel, 2011).

Coping self-efficacy, or the belief in one’s ability to cope with the traumatic experience, has been found to mediate the relationship between traumatic event and
psychological distress for victims of traumatic events, such as natural disasters (Benight & Bandura, 2004; Benight, Cieslak, Molton, & Johnson, 2008; Cieslak, Benight, & Lehman, 2008). Little research has been conducted examining the role of coping self-efficacy in the development of PTSD symptoms for adult victims of sexual assault. It would be expected, based on Bandura’s social cognitive theory, that coping self-efficacy would be a component of assault severity. According to Bandura (1997), low self-efficacy can lead to thoughts that the situation is unmanageable, which can result in feelings of fear. A victim of sexual assault who does not believe in her ability to cope with the assault may think that there is nothing she can do in the assaultive situation and can begin to fear for her life.

The present study investigated how various assault characteristics and cognitive appraisals relate to a proposed latent construct of assault severity, and how assault severity predicts psychological distress. To facilitate the goals of the study the Sexual Assault Severity Scale (SASS) was developed and examined. The SASS is a new assault severity measure that is intended to address shortcomings found in existing instruments. The following section reviews the literature on the roles of victimization severity, victim-offender relationship, substance use, peritraumatic responses, posttraumatic schema disruption, and coping self-efficacy. Many of these assault characteristics have been studied individually, or in small combinations, but no study has examined them all simultaneously as contributors to the latent construct of assault severity. After reviewing the likely contributors to assault severity, there will be a discussion of the strengths and weaknesses of the Sexual Experiences Survey (SES; Koss & Oros, 1982), a commonly used measure of assault severity.
Victimization Severity

In the literature, victimization severity, or sexual assault outcome severity, is commonly defined using a hierarchy that focuses on the intrusiveness of the sexual contact and the degree of force used to coerce the victim. This hierarchy is based on the scoring structure that is found in the SES, which initially included four categories: nonvictim, sexually coerced, sexually abused, and sexually assaulted (Koss & Gidycz, 1985; Koss & Oros, 1982). The nonvictim category describes women who do not report experiencing unwanted sexual behaviors. The sexually coerced category describes women who were verbally coerced or threatened into consenting to unwanted sexual acts. The sexually abused category describes women who were physically forced to engage in unwanted sexual acts such as kissing, petting, and oral or anal intercourse. The final category, sexually assaulted, describes women who were physically forced to engage in vaginal intercourse (Koss & Gidycz, 1985; Koss & Oros, 1982). The hierarchy was later revised to include five categories: nonvictim, sexual contact, sexual coercion, attempted rape, and completed rape (Koss, Gidycz, & Wisniewski, 1987). Women in the sexual contact category reported that they had experienced unwanted sexual behavior, such as fondling or kissing, as the result of verbally coercive tactics, threats of harm, or physical force. The sexual coercion category included women who experienced sexual intercourse after being verbally pressured or as the result of the misuse of authority. Women who were classified in the attempted rape category reported that someone had attempted to engage in sexual intercourse, vaginal, oral, or anal, through the use of physical force or threat of physical harm. Finally, the completed rape category included women who experienced completed sexual intercourse, vaginal, oral, or anal, through the use of
physical force or threat of physical harm. There is no research, however, examining the validity of this hierarchy.

Overall, research has found that the more intrusive forms of victimization (i.e., completed rapes using physical force) predict greater PTSD symptoms and suicidality (Bolstatd & Zinbarg, 1997; Eadie, Runtz, & Spencer-Rodgers, 2008; Gidycz, Coble, Latham, & Layman, 1993; Ullman, 2004; Ullman, Townsend et al., 2007; Ullman & Najdowski, 2009). Therefore, it would be expected that assault intrusiveness will be an important component of assault severity.

Victim-Offender Relationship

Victim-offender relationship is usually conceptualized as varying degrees of familiarity to the assailant that includes, strangers, acquaintances, and intimate partners, such as spouses, boyfriends, and relatives. Victim-offender relationship has largely been studied with regard to examining patterns between relationship and other assault characteristics such as, 1) location of assault, 2) tactics used during the assault, 3) severity of victimization, and 4) severity of victim injuries. With regard to the location of the assault, assaults by husbands/boyfriends were most often committed in the victim’s home (Logan et al., 2007; Stermac et al., 2006; Stermac et al., 1998). The assailant’s home was the common location for assaults by acquaintances (Logan et al., 2007; Stermac et al., 2006; Stermac et al., 1998) although they also occurred in a public place like a bar (Logan et al., 2007). Assaults by strangers most often occurred in a vehicle or outdoors (Logan et al., 2007; Stermac et al., 2006; Stermac et al., 1998). With regard to tactics used during the assault, spouses and boyfriends used the highest number of coercion methods. They were also found to use the more severe forms, such as physical
violence, confinement, restraint, and the use of a weapon. Strangers were also found to use severe tactics similar those used by spouses and boyfriends (Feinstein et al., 2011; Stermac et al., 2006; Stermac et al., 1998). With regard to severity of victimization, vaginal intercourse is the most common form of victimization for intimate partners and acquaintances (Stermac et al., 1998; Ullman, Filipas, Townsend, & Starznski, 2006). Stermac et al. (1998) found that stranger assailants were less likely to commit vaginal assault and were more likely to force fellatio upon victims.

With regard to the severity of victim injuries, studies tend to assess tenderness, pain, soft tissue injuries such as bruises or contusions, lacerations, and fractures in various body areas, such as head/neck/face, throat/mouth, legs, arms, chest, vagina, and the perineal and anal regions. These studies have found that victims of stranger and intimate partner assaults often have bruises and/or lacerations in the head/neck/face, arms, and perineal/anal areas (Stermac et al., 2006; Stermac et al., 1998). Logan et al. (2007) found no significant differences across groups with regard to genital injuries. When examining nongenital injuries, studies have found that, compared to acquaintance assailants, intimate partner and stranger assailants are related to more severe victim injuries, with injuries from intimate partners being greater than those sustained from strangers (Feinstein et al., 2011; Logan et al., 2007; Stermac et al., 2006; Stermac et al., 1998).

Studies have examined the relationship between victim-offender relationship and the development of PTSD. Specifically, Ullman and colleagues (2006) found that victims of assaults in which the offender was a stranger or relative appear to be at greater risk of developing PTSD symptoms. The authors suggest that this finding is likely because of the
greater amount of violence and perceived life threat associated with these types of assaults. The study also found that victimization severity was related to greater PTSD symptoms for victims of acquaintance or intimate partner assailants. According to Ullman and colleagues, it is likely that a significant victim-relationship effect was not found for victims of stranger assaults because there is less variability in the level of intrusiveness for these types of assaults (i.e., all highly intrusive). Another possible explanation for this finding could be related to the type of sexual act in which stranger assailants commonly force victims to engage. As stated above, stranger assailants are more likely to force the victim to engage in oral sex rather than commit a vaginal assault. It is possible that forced oral sex may be perceived as less traumatic than a vaginal assault.

One area in the literature that needs to be further explored is the relationship between the degree of violence and victim-offender relationship. Although there is a higher frequency of violence in stranger and intimate partner assaults, there has been little research evaluating group differences across types of offenders for the degree of violence seen in the assault. Ullman and Siegel (1993) found a significant interaction between offender use of force and victim-offender relationship for rape outcome. Specifically they found that the use of force was more likely to lead to completed intercourse for assaults by strangers. This finding was also true for known assailants; however, the effect was significantly less than for stranger assailants. Ullman and Siegel (1993) did not find a significant interaction between offender use of force and victim-offender relationship for psychological distress. Further research examining the potential interaction effect between victim-offender relationship and degree of violence on PTSD symptoms is
needed. Such an analysis would help clarify if closeness of the relationship uniquely contributes to the development of PTSD symptoms or if degree of violence is the only significant contributor.

Overall, it appears that intimate partner and stranger assailants engage in similar assault tactics that generally involve physical force or restraint, which commonly results in soft tissue injuries to the head and face, legs, arms, and perineal and anal regions. Research has also shown that victims who are assaulted by strangers and intimate partner assailants are at greater risk for developing PTSD symptoms (Feinstein et al., 2011; Ullman et al., 2006). Due to the amount of violence, injury, and perceived life threat related to intimate partner and stranger assaults, it would be expected that victim-offender relationship will contribute to assault severity.

Substance Use

The use of alcohol prior to or during a sexual assault is a common assault characteristic, particularly in college populations (Clum, Nishith, & Calhoun, 2002; Krebs, Lindquist, Warner, Fisher, & Martin, 2009; Lawyer, Resnick, Bakanic, Burkett, & Kilpatrick, 2010). Alcohol use at the time of a sexual assault has been found to be most common when the assailant is an acquaintance (Cleveland, Koss, & Lyons, 1999; Littleton, Grills-Taquechel, & Axsom, 2009; Logan et al., 2007; Stermac et al., 2006; Stermac et al., 1998). Specifically, Logan et al. (2007) found that 80% of women assaulted by an acquaintance reported alcohol use at the time of the assault. There have been a few studies examining the role of drug use. Drug use is often assessed in combination with alcohol use (Brecklin & Ullman, 2010; Busch-Armendariz, DiNitto, Bell, & Bohman, 2010)
When examining the role of substance use on assault characteristics, studies often examine the substance use of the perpetrator and/or the substance use of the victim at the time of the assault (Abbey, Beshears, Clinton-Sherrod, & McAuslan, 2004; Abbey et al., 2002; Abbey et al., 2003; Brecklin & Ullman, 2010; Busch-Armendariz et al., 2010; Littleton et al., 2009; Parkhill, Abbey, & Jacques-Tiura, 2009; Thompson & Kingree, 2006; Ullman & Najdowski, 2010). With regard to perpetrator substance use, studies have found that perpetrator alcohol and/or drug consumption is positively related to perpetrator aggressiveness and victim injury (Abbey et al., 2003; Brecklin & Ullman, 2010; Busch-Armendariz et al., 2010; Parkhill et al., 2009; Thompson & Kingree, 2006; Ullman & Najdowski, 2010). Victims of assaults in which only the perpetrator was drinking also endorsed greater levels of perceived life threat (Ullman & Najdowski, 2010). With regard to victim alcohol consumption, the number of drinks consumed by the victims has been found to be positively related to victimization severity (Abbey et al., 2002; Abbey et al., 2003). Specifically, completed rapes were more likely to occur when the victim was intoxicated. Studies have also found that victims experienced the most violence when they were the least intoxicated (Abbey et al., 2002; Brecklin & Ullman, 2010). It is thought that the more alcohol victims drink, the less they are likely to resist the assault. Therefore, less force is required by the assailant to complete the assault (Abbey et al., 2002; Brecklin & Ullman, 2010).

Studies that examine the relationship between substance related assaults and psychological distress, found that assaults in which the offender and/or the victim were drinking were more likely to be reported as being more serious (Abbey et al., 2004; Ullman & Najdowski, 2010). Victims also reported more depressive symptoms and
problematic drinking behaviors post assault (Ullman & Najadowski, 2010). Assaults in which the victims were impaired or incapacitated reported more self-blame (Littleton et al., 2009; Ullman & Najdowski, 2010). Because substance use has been found to be related to other assault characteristics, such as greater victimization severity and victim injuries, and to psychological distress, it is expected that victim and perpetrator substance use will be important components of assault severity.

Peritraumatic Distress Reactions

An important variable in the conceptualization of assault severity is the subjective experience the victim has during the assault. The subjective experience is generally defined in the terms of the peritraumatic responses, such as fear, helplessness, or horror, that are part of Criterion A2 for the diagnostic criteria of PTSD in the DSM-IV-TR (American Psychiatric Association [DSM-IV-TR], 2000; Amstadter & Vernon, 2008; Creamer, McFarlane, & Burgess, 2005; Feinstein et al., 2011). Other studies include other emotional responses such as anger, guilt, or humiliation (Amstadter & Verson, 2008; Kaysen, Morris, Rizvi, & Resick, 2005). Compared to other traumas, such as physical attack, combat, life threatening accidents, or natural disasters, rates of peritraumatic responses tend to be highest in victims of sexual assaults (Amstadter & Vernon, 2008; Creamer et al., 2005; Kaysen et al., 2005). Creamer and colleagues (2005) found that 97% of those who were a victim of rape met Criterion A2. Many of these peritraumatic responses continue posttrauma and have been found to significantly predict PTSD symptom severity (Amstadter & Vernon, 2008; Feinstein et al., 2011).

One specific peritraumatic response that has been researched individually is perceived life threat. Perceived life threat is conceptualized as the degree to which the
victim feels that her life is in danger. Generally, it is conceptualized in terms of verbal threat to life or injuries sustained during the assault. Studies have found that victims who experienced verbal life threat and/or physical injury during the sexual assault were more likely to experience PTSD symptoms (Nixon, Resick, & Griffin, 2004; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993; Ullman & Filipas, 2001; Ullman, Filipas et al., 2007).

Peritraumatic fear responses have been found to be related to other assault characteristics, such as victim-offender relationship (Feinstein et al., 2011). Feinstein and colleagues (2011) found that victim-offender relationship moderated the relationship between peritraumatic fear and PTSD symptom severity for intimate partner assaults. The authors argued that this finding could be related to a violation of the victim’s safety schemas. Specifically, the assailant being someone that the victim believed she could trust and feel safe with can lead to strong feelings of betrayal and distress. These conflicting findings speak to the importance of the victim’s subjective experience, particularly related to the violation of schema disruption.

Overall, it appears that peritraumatic responses, particularly fear and perceived life threat, are commonly reported by victims of sexual assault and have been found to be related to more severe PTSD symptoms. Therefore, it is expected that peritraumatic responses would be another assault characteristic that contributes to the measurement of assault severity.

Schema Disruption

When examining the role of cognitive schemas on the development of psychological distress, many studies follow the information-processing model that states
that when preexisting schemas are threatened by a traumatic experience, the victim can respond in one of three ways: 1) assimilating the experience into the preexisting schema, 2) alter the preexisting schema to accommodate the traumatic experience, or 3) develop maladaptive or extreme changes in their schemas, also known as overaccommodation (Foa, Ehlers, Clark, Tolin, & Orsillo, 1999; Littleton & Grills-Taquechel, 2011, Resick & Schnicke, 1992; Wright, Collinsworth, & Fitzgerald, 2010). Overaccommodation has been found to be most common for victims of sexual assault (Littleton & Grills-Taquechel, 2011). Victims who overaccommodate report the highest levels of depression and PTSD symptoms, when compared to victims who assimilate or accommodate, and tend to utilize avoidance coping strategies (Littleton & Grills-Taquechel, 2011).

It has also been found that victims of sexual assault report the greatest amount of schema disruption compared to no trauma and nonsexual trauma groups (Wright et al., 2010). This difference in the amount of schema disruptions was considered significant compared to the no trauma group, but not when compared to the nonsexual trauma group. Wright and colleagues (2010) suggest that this finding could be related to the small sample size in the study. When looking at the relationship between schemas and psychological distress, cognitive schemas have also been found to partially mediate the relationship between trauma experience and PTSD symptoms for sexual trauma victims (Wright et al., 2010).

One particular schema type that could be disrupted as a result of a sexual assault would be schemas related to perceived safety. There has yet to be a study examining the disruption of safety schemas and how the disruption could relate to the development of PTSD symptoms for victims of adult sexual assault. However, Wenninger and Ehlers
(1998) found that dysfunctional cognitions related to safety, trust, esteem, intimacy, self, and others were significantly related to post trauma symptoms for adults who have a history of childhood sexual abuse.

Cascardi, Riggs, Hearst-Ikeda, and Foa (1996) examined how perceived safety related to post assault symptoms for adult victims of sexual assault. Perceived safety was measured in terms of victim ratings of perceived likelihood that an assault would occur in a certain location or by a certain person. Therefore, environments or people are categorized as either safe or dangerous. Safe environments would be locations in which the victim did not feel that an assault would likely occur (i.e., victim’s home, friend’s home, another familiar location). Dangerous environments would be locations in which the victim felt an assault was likely to occur (i.e., alley, parking lot, street, unfamiliar location). With regard to people, a person would be categorized as safe if the victim did not believe the specific person was likely to assault them (i.e., acquaintances, friends, boyfriends). A person would be categorized as dangerous if the victim believed that the person was likely to assault them (i.e., male stranger, ex-husbands, ex-lovers).

Cascardi et al. (1996) found that assaults in safe environments led to more severe post-trauma symptoms compared to assaults in dangerous environments. With regard to perception of safety related to the assailant, assaults by people who were considered dangerous were found to lead to more severe post-trauma symptoms. This finding is consistent with what was found in Ullman et al. (2006). The study also found an interaction effect between location and assailant. Assaults occurring in a safe location by a dangerous assailant were related to more severe PTSD symptoms than assaults in dangerous locations by a safe assailant. One possible explanation for this finding,
according to Cascardi et al. (1996), is that the presence of a dangerous individual in a safe location violates safety schemas to a stronger degree. The authors also suggested that the familiarity with the assailant could contribute to this finding. Specifically, they argued that the less knowledge a woman has about the assailant prior to the assault the greater the likelihood that she will overgeneralize her fear of the assailant to others who share similar characteristics. These broad overgeneralizations will likely lead to more severe PTSD symptoms.

It can be argued that specific assault characteristics, such as victimization severity, victim-offender relationship, and location of assault, would contribute to a violation of safety schemas, which could lead to the development of PTSD symptoms. For example, a victim of sexual assault who had preexisting beliefs that she would be safe because she stays in safe locations and associates with safe people would experience a violation of this preexisting schema if she was physically forced to have vaginal intercourse by an acquaintance in her own house. Wright and colleagues (2010) suggest that a schema violation of this nature would likely result in the victim experiencing intrusive thoughts of being in danger, hypervigilance toward her surroundings, and fear of future victimizations. Because of the high prevalence of overaccommodation among victims of sexual assault and the positive relationship between schema disruption and PTSD symptoms, it is expected that a violation of the victim’s safety schema would contribute to assault severity.

Coping Self-Efficacy

Coping self-efficacy is typically defined as a person’s self-belief in his or her ability to cope with posttraumatic stress demands (Cieslak et al., 2008). The
conceptualization of coping self-efficacy is greatly influenced by Bandura’s social cognitive theory. Bandura (1997) discussed the relationship between self-efficacy, coping efficacy and aversive events. He argued that in aversive situations, the degree of fear experienced depends on how confident a person is in her ability to cope with that event. If someone does not have much belief in her coping ability, she will perceive the aversive situation as unmanageable, which leads to higher levels of anticipatory and performance fear. Someone who does have high levels of coping efficacy will experience little, if any, fear.

Coping self-efficacy has been studied with other trauma populations (e.g. natural disasters) and has consistently been found to be a significant mediator of psychological distress, such as PTSD and depression symptoms (Benight & Bandura, 2004; Benight et al., 2008; Cieslak et al., 2008). Little research has been done examining the role of coping self-efficacy in the development of PTSD symptoms for adult victims of sexual assault. Kushner, Riggs, Foa, and Miller (1993) examined the roles of sexual assault severity and coping self-efficacy on the development of PTSD and found that both variables significantly predicted PTSD symptoms. When controlling for assault severity, coping self-efficacy was still found to predict PTSD (Kushner et al., 1993).

Although more research examining coping self-efficacy in victims of adult sexual assault is necessary, it can be argued that coping self-efficacy likely contributes to the construct of assault severity. If a woman has low coping self-efficacy and experiences forced vaginal intercourse, she is likely to perceive the situation as unmanageable and experience intense fear and possible perceived life threat. As a result, she may develop
maladaptive coping strategies and develop symptoms of PTSD. Therefore, it is expected that low coping self-efficacy will be an important component of assault severity.

Measurement of Sexual Assault Severity: The Sexual Experiences Survey (SES)

The most widely used measure of sexual assault severity is the Sexual Experiences Survey (SES; Koss & Oros, 1982) As stated above, the SES categorizes women’s unwanted sexual experiences into four groups: sexual contact, sexual coercion, attempted rape, and completed rape. In this hierarchy, sexual contact is considered the least severe type of victimization while completed rape is considered the most severe. If the woman has experienced more than one sexual assault, she is asked to report on the assault that she considers the most significant or severe. In addition to assessing victimization severity, the SES also measures the various tactics used by the assailant. Specifically, it assess tactics such as verbal pressure/continual arguments, misuse of authority, threat of physical force, use of alcohol or drugs, and use of physical force (Koss & Gidycz, 1985; Koss et al., 1987; Koss & Oros, 1982).

Koss et al. (2007) outlined several strengths to the SES. First, the SES provided clear definitions of rape and attempted rape that were found to be consistent with legal statutes (Gylys & McNamara, 1996). Items are worded using specific behavioral descriptions for unwanted sexual acts and the tactics used by the assailant. Koss et al. (2007) argued that by providing behavioral descriptions of the sexual acts rather than labeling them as an assault or rape the measure would capture incidents that met the definition of sexual assault but that would not be labeled as such by the victim. For example, the woman would endorse the item stating that she engaged in sexual intercourse “after I had been drinking alcohol and was conscious but too intoxicated (drunk)
to give consent or stop what was happening” (Koss et al., 2006, p. 2), but may not label that incident as an assault when asked in an interview because the act was committed by her spouse. Therefore, by using behavioral descriptions, there can be more accurate measurements of incidence. Another strength of the SES, according to Koss et al. (2007) is the ordinal scoring system. The ordinal level scoring system allows respondents to be placed into mutually exclusive categories which facilitates the reporting of prevalence rates. It is with this ordinal level scoring that victimization severity is scored. Women placed in the nonvictim category are given a score of 0. Women in the sexual contact category are given a score of 1. The sexual coercion category is given a score of 2. Women placed in the attempted rape category are given a score of 3, and women in the completed rape category are given a score of 4. The last strength of the SES, according to Koss et al. (2007) is brevity. The measure consists of 10 questions that require the respondent to answer yes or no.

Although there are several strengths of the SES, Koss et al. (2007) also outlined many weaknesses. First, researchers have taken issue with the items that include alcohol as an assault tactic (Gylys & McNamra, 1996; Kolivas & Gross, 2007). According to these studies, the items are ambiguous regarding the intended use of alcohol in the assault and therefore do not map on to the legal definition of a sexual assault. Many state laws specify that the alcohol or substance must be used with the intention of preventing resistance or for the purpose of impairing the victim’s judgment or control. Because the item does not specify the intended use of alcohol, it cannot be considered a valid representation of a criminal sexual offense (Gylys & McNamra, 1996; Kolivas & Gross, 2007). Another weakness of the SES is the use of the term intercourse. According to
Koss et al. (2007), *intercourse* no longer has a universal meaning and therefore can lead to confusion as to what specific sexual act is being asked. Koss et al. (2007) also takes issue with the use of the phrase *when you didn’t want to*. According to the authors, this phrase does not indicate the intended construct of nonconsent clearly. Finally, Koss et al. (2007) argued that the SES poorly differentiated between unwanted sexual contact and attempted rape. This argument is consistent with a finding in a validation study by Testa, VanZile-Tamsen, Livingston, and Koss (2004), in which victims of sexual assault completed the SES and provided a description of the assault. The descriptions were then given to coders who were asked to pick the item on the SES that best describes the incident. The study found poor agreement between victims and coders on incidents of unwanted sexual contact and attempted rape.

All of these weaknesses discussed have led researchers to modify the SES for individual research purposes (Koss et al., 2007). As a result, very few studies use the same version of the SES and consistent measurement of the reliability and validity of the SES has become difficult. Koss et al. (2007) revised the SES in order to address many of these weaknesses and inconsistencies. This resulted in the development of four versions of the SES, long and short form perpetration versions (SES-LFP and SES-SFP) and long and short form victimization versions (SES-LFV and SES-SFV). The SES-LFP and SES-SFP are used to gather self-report data about sexual assaults from the perspective of the perpetrator. Therefore, the subjects are asked questions about various sex acts they have engaged in without consent from their partner as well as various tactics they used during the sex act. The SES-LFV and SES-SFV are used to gather information about sexual assaults from the perspective of the victim. According to Koss et al. (2007) the difference
between the long form and short form versions of the SES is that the long form versions include noncontact misdemeanor sex crimes and more items with behaviorally specific descriptions of unwanted sex acts that involved the use of alcohol or drugs.

Another weakness of the SES would be that the measure does not include any items assessing victim-offender relationship, perceived life threat, or degree of physical injury. As stated above, these assault characteristics have been related to assault severity and psychological distress in the literature. The absence of these variables from an assault severity measure leads to an incomplete measurement of the construct. Koss et al. (2007) acknowledges that all relevant dimensions of assault severity are not included in the SES, however, they argue that this was a sacrifice made in order to maintain brevity of the measure. Therefore, these variables were left off of the revised versions of the SES.

Summary

Review of the empirical literature demonstrates that the assault characteristics, such as victimization severity, victim-offender relationship, peritraumatic responses, physical injury, and substance use, as well as cognitive variables such as coping self-efficacy and safety schemas are related to the construct of assault severity. However, there has yet to be a study that includes all of these characteristics in the measurement of assault severity. Most studies define assault severity in terms of severity of victimization outcome following the scoring system provided in the SES, although there is little research validating the hierarchy used in scoring the measure. Other studies define assault severity using victims’ ratings of perceived life threat, assessing the number and severity of the victims’ injuries, or ratings of perpetrator’s aggressiveness. Incomplete and inconsistent conceptualizations of assault severity in research designs can lead to
inconsistencies in the research findings, thus preventing progress in discerning the relationships between assault severity factors and resulting psychological distress. For example, assault severity may be found to have a nonsignificant relationship with PTSD in one study because it was defined by the invasiveness of the sexual contact but could be found to have a significant relationship with PTSD in another study where it was defined by the invasiveness of the sexual contact and the degree of physical injury. Because of the incomplete and inconsistent operational definition of the construct of assault severity, it is difficult to conclude whether or not assault severity has a significant relationship with PTSD.

Present Study

The present study had two aims: 1) to create and explore the validity of a comprehensive self-report questionnaire, called the Sexual Assault Severity Scale (SASS), which measures the latent construct of assault severity, and 2) to investigate the multivariate structure of the latent variable assault severity in terms of victimization severity, victim-offender relationship, physical injury, substance use at the time of the assault, peritraumatic responses, peritraumatic and posttraumatic schema disruption, and coping self-efficacy. The development of the SASS measure will help facilitate consistency in the measurement of this construct, which can assist in gaining a clearer understanding of the nature of assault severity, and how assault severity relates to severity of victim distress. Assault severity was conceptualized as a latent construct that is defined by eight variables: victimization severity, perceived severity, victim-offender relationship, physical injury, victim and offender substance use, coercion methods, and peritraumatic and posttraumatic schema disruptions. It was expected that each of these
assault characteristics would be positively related to the latent construct. Peritraumatic
distress responses and coping self-efficacy, although important components of assault
severity, are not directly measured in the SASS. Brunet and colleagues (2001) created a
13-item self-report measure called the Peritraumatic Distress Inventory (PDI) and Cieslak
and colleagues (2008) created a 42-item self-report measure called the Sexual Assault
Coping Self Efficacy scale (SACSE). Rather than incorporating these items into the
SASS, the PDI and SACSE were given concurrently with the SASS.

The conceptualization of assault severity that is used in the SASS differs from the
conceptualization used in the SES-LFV in that it expands the definition of assault
severity beyond the constructs of victimization severity and degree of force used to
coerce the victim. The SASS also takes a different approach to the measurement of
substance use. In the SES-LFV, substance use is assessed as a method of coercion. In
other words, the measure evaluates the various ways in which specific substances were
used as a way of incapacitating the victim. Therefore, only the victim’s use of a substance
is assessed. While the SASS also includes items assessing the use of a substance as a
method of coercion, the measure also includes items that examine both the perpetrator’s
and victim’s use of a substance at the time of the assault. Currently, the SASS has 74
items. The measure is longer than it will ultimately be because it is uncertain which
construct components will be most useful in measuring assault severity as a latent
variable that predicts post-assault psychological disturbance.

In the present study, the psychometric properties of the Sexual Assault Severity
Scale (SASS) were examined. Criterion validity was assessed by comparing item
responses from the victimization severity, perceived severity, and peritraumatic and
posttraumatic schema disruption variables from the SASS to the corresponding SES-LFV scales and the Posttraumatic Cognitions Inventory (PTCI). Because there are no criterion measures for the assessment of victim-offender relationship, effectiveness of coercion methods, or substance use for this population, criterion validity cannot be assessed for those variables.

The study also evaluated the relationships among each of the SASS subscales, as well as with the peritraumatic responses measured by the PDI. It was expected that 1) victimization severity would be positively correlated with closeness of relationship between victim and offender, perceived severity, physical injury, substance use, peritraumatic distress responses, and peritraumatic and posttraumatic schema disruption, 2) closeness of victim-offender relationship would be positively related with physical injury, peritraumatic distress responses, and peritraumatic and posttraumatic schema disruption, 3) physical injury would be positively related to perceived severity, offender substance-use, peritraumatic distress responses, and peritraumatic and posttraumatic schema disruptions, 4) methods of coercion (verbal coercion, threatened physical force, and physical force) would be positively related to perceived severity, victimization severity, closeness of victim-offender relationship, peritraumatic distress responses, and peritraumatic and posttraumatic schema disruptions, and 5) coping self-efficacy would be negatively related with victimization severity, perceived severity, physical injury, coercion methods, peritraumatic and posttraumatic schema disruptions, and peritraumatic distress reactions. In addition, each assault variable, as well as peritraumatic distress responses and coping-self efficacy, was assessed as a potential predictor of symptoms of PTSD, depression, and anxiety. It was expected that victimization severity, victim-
offender relationship, physical injury, methods of coercion, substance use, peritraumatic distress responses, and peritraumatic and posttraumatic schema disruptions would all positively predict post trauma symptoms. With regard to coping self-efficacy, it was expected that lower levels of coping self-efficacy would predict greater post trauma symptoms. It is also possible that coping self-efficacy may serve as a partial mediator between victimization severity and post trauma symptoms as well as a mediator between victim-offender relationship and post trauma symptoms.

The study evaluated the relationship between assault severity and post assault symptoms of PTSD, depression, and anxiety. Based on the literature, it was expected that levels of closeness of the offender, offender intoxication, assault intrusiveness, methods of physical force and physical injury would best predict post-assault distress variables.

Finally, the study compared different measurement models of assault severity. Measurement models for assault severity using the SASS, or the SES-LFV, and the PDI were tested. Models evaluating the relationship between assault severity and post assault distress were also compared, one set using the SASS to measure assault severity and the other using the SES-LFV. It was expected that the model using the SASS would result in better fit statistics because the measure includes other important variables such as victim-offender relationship and physical injury.
CHAPTER II

METHOD

Sample

The participants in this study were female undergraduate students from a southeastern university (N=465). From this sample, 334 women endorsed items indicating that they were a victim of a sexual assault. This sample of sexual assault victims were used in the analyses. The ages ranged from 18-49 years (M = 20.8). The majority of the sample was Caucasian (54.0%), followed by African American (44.2%), Hispanic (1.5) and Asian American (3%). At the time of the study, 82.7% were single, 9.6% were engaged, 6.3% were married, and 1.5% were divorced. With regard to sexual orientation, 93.4% identified as heterosexual, 2.4% as lesbian, 2.4% as bisexual, .9% as other, and .9% reported that they would rather not answer. The sample was recruited using SONA, the university program used to allow students to sign up to participate in research experiments. Participants were given extra credit in a course for participating and entered into a raffle to win a $10 gift card to Target, if they desired.

Measures

Self-report questionnaires were administered electronically to measure sexual assault characteristics, peritraumatic responses, post assault psychological distress, and coping self-efficacy.

Assault Characteristics

The Sexual Assault Severity Scale (SASS, see Appendix A) is a 74-item self-report measure that assesses several constructs related to the latent construct of assault severity, including victimization severity, methods of coercion, victim-offender
relationship, physical injury, perceived assault severity, substance use at the time of the assault, and peritraumatic and posttraumatic schema disruptions. Participants were instructed to respond to the items regarding any unwanted sexual experience that has occurred since the age of 18. If more than one unwanted sexual experience has occurred, the participant is asked to report on the experience that was most distressing for her. The items on the SASS include categorical items that are used to give descriptive information for specific assault characteristics that cannot be scored and measured on a continuum. Examples include items asking for the gender of the offender, the location of the assault, the types of coercive methods utilized during the assault, the type of physical injuries received, and the types of substances used at the time of the assault. These categorical items were not used in the measurement of the assault variables that were examined as defining variables of assault severity. The SASS also includes Likert scale items to provide a continuous method for measuring the assault variables. These continuous measurement items were used in the statistical analyses of the latent construct of assault severity.

The first nine items of the SASS assessed victimization severity. These items required the participant to report how many times she has experienced various unwanted sexual acts, including unwanted sexual touching (“Someone touched, kissed, or rubbed against the private parts of your body (i.e., breasts, crotch, butt), but did not attempt sexual intercourse”), attempted sexual assault (“Someone tried to perform oral sex on you,” “Someone tried to make you perform oral sex on them,” “Someone tried to have vaginal sex with you, either with his penis or by inserting fingers or objects,” “Someone tried to have anal sex with you, either with his penis or by inserting fingers or objects.”),
and completed sexual assault (“Someone performed oral sex on you,” “Someone made you perform oral sex on them,” “Someone had vaginal sex with you, either with his penis or by inserting fingers or objects,” “Someone had anal sex with you, either with his penis or by inserting fingers or objects.”).

A mutually exclusive ordinal ranking order was developed based on mean perceived severity and emotional harm ratings for each unwanted sexual act. Based on these mean scores, the types of sexual acts were weighted in the following order: sexual touching = 1, attempted oral sex = 2, attempted vaginal sex = 3, attempted anal sex = 4, offender attempted to make victim perform oral sex = 5, completed oral sex = 6, victim made to perform oral sex = 7, completed vaginal sex = 8, and completed anal sex = 9.

Items on the SASS also assessed various coercive tactics used during the assault (i.e., verbal coercion, threat of physical force, and physical force), the participant’s report on the effectiveness of these tactics, how much the participant believed the threats made by the assailant, and the degree of fear related to the threat of or actual use of physical force. Effectiveness of each tactic, the degree the participant believed the threats, and the degree of fear experienced were assessed using an 11-point Likert scale ranging from 0 (not at all) to 10 (extremely). Verbal coercion was measured by use of a composite score from the three items assessing the effectiveness of each verbally coercive method used. Threatened force was composed of a composite score from the Likert scale items assessing the effectiveness of the threat, how much the victim believed the threat, and how much fear the victim felt related to the treat. Finally, physical force consisted of a composite score from the Likert scale items assessing the effectiveness of the method of force and the degree of fear the victim felt related to the method of force used.
Items assessing victim-offender relationship required the participant to report the type of relationship she had with the offender (i.e., stranger, someone I just met, acquaintance, close friend/confidant, someone I’ve had previous sexual relations with, and significant other/spouse), how close of a relationship she had with the offender(s) prior to the assault, and how safe she felt with the offender(s) prior to the assault. The degree of closeness and safety to the offender(s) were assessed using an 11-point Likert scale ranging from 0 (not at all close/safe) to 10 (I trusted them with my secrets; extremely safe). The scores from the two items assessing closeness and safety with the offender(s) were combined to measure the variable victim-offender relationship. If there were multiple offenders involved in the assault, there were additional Likert scale items that allowed the participant to report ratings on how close and how safe she felt with up to 4 additional offenders. Due to the infrequency of more than one offender, the items that assessed the ratings for additional offenders were not used in the measurement of victim-offender relationship.

There are two items on the SASS that examine perceived assault severity. Both items used an 11-point Likert scales ranging from 0 to 10. One item asks the participant to rate how severe the sexual experience was (0 = not at all severe, 10 = extremely severe). The other item asks the participant to rate the amount of emotional harm they have dealt with as a result of the sexual experience (0 = none, 10 = extreme harm). These two items were combined into a composite score to represent perceived severity. In addition to perceived assault severity, there is one item on the SASS assessing physical injury. This item used an 11-point Likert scale and asked participants to rate the severity of their physical injuries from 0 (not at all severe) to 10 (extremely severe).
Items examining substance use assess the use of alcohol, marijuana, sedatives, hallucinogens and stimulant drugs. Participants were asked to report on their amount of alcohol use and level of intoxication. Participants were also asked to estimate the amount of alcohol use and the level of intoxication for the offender. To assess level of intoxication, participants were asked to rate how intoxicated or high they or the offender were at the time of the assault using a 7-point Likert scale ranging from 1 (not at all drunk/high) to 7 (black out drunk/extremely high). Victim substance use and offender substance use were defined by adding together the scores from the Likert scale items asking about level of intoxication for alcohol or level of intoxication for illicit substance use. This section also includes items inquiring about the use of substances as a coercive technique. Participants were asked if the offender insisted that they use the substance or if the offender may have introduced the substance without their knowledge (i.e., tainted her drink). These categorical items were not included in the measurement of victim substance use.

The SASS also assesses for trauma related schemas, both at the time of the assault and since the assault. Schemas were assessed at both time points to examine if 1) there were differences between the schema ratings at the peri-assault and post-assault time points and 2) assessing disruptions in peri-assault schemas would add any information to either the measurement of assault severity or the prediction of post-assault distress. These items include thoughts about safety (i.e., “I did not expect this person(s) to ever harm me,” “I will never feel safe again.”), self (i.e., “I feel broken or damaged”), self-blame (i.e., “This sexual experience happened because I am too trusting of others,”), and the world (i.e., “I will not be able to trust anyone again,” “The world is a dangerous place”).
These items ask the participant to rate the degree to which she agrees with various thoughts or beliefs using an 11-point Likert scale ranging from 0 (strongly disagree) to 10 (strongly agree).

The Sexual Experiences Survey (SES; Koss & Oros, 1982) was originally developed in the early 1980s and used to identify victims of sexual assault. Over the years, researchers have created several variations of the SES to try to compensate for dated items. To control for the vast number of different versions, Koss et al. (2007) updated the SES and developed four versions: SES Long Form Perpetration (SES-LFP), SES Long Form Victimization (SES-LFV), SES Short Form Perpetration (SES-SFP), and the SES Short Form Victimization (SES-SFV). The SES-LFV examines unwanted kissing and fondling, oral-genital contact, penetration by person or objects, methods of force (alcohol/drugs or physical force), and methods of coercion (continual arguments or pressure or misuse of authority). It is a 21-item measure that requires the participant to report how often a certain sexual experience happened within the past 12 months and since the age of 14. The first 10 items describe specific sexual harassing, voyeuristic, and exhibitionistic behaviors. The next 8 items describe specific sexual assaultive behaviors, followed by 13 various coercive tactics. The last 4 items ask the individual to report current age, gender, the gender of the offender, and if the victim has been raped prior to the current incident. There are no psychometric data currently on the SES-LFV due to the lack of research using this version (Koss et al, 2007). In the present study, the SES-LFV was found to obtain scores that have an internal consistency of $\alpha = .97$. The original SES has been found to obtain scores that have an internal consistency of $\alpha = .74$ and a mean item agreement of 93% between two administrations that were one week apart. Testa and
colleagues (2004) conducted a study in which victims of sexual assault completed the
SES and provided a description of the assault. The descriptions were then given to coders
who were asked to pick the item on the SES that best describes the incident. Cohen’s
Kappa was calculated to measure inter-rater reliability. High agreement was found for
rape (Kappa = .76-.81) or coercion categories (Kappa = .86-.93). Agreement was lower
for sexual contact (Kappa = .32-.52) and attempted rape categories (Kappa = .22-.64).

Peritraumatic Distress Reactions

The Peritraumatic Distress Inventory (PDI; Brunet et al., 2001) is a 13-item self-
report measure used to measure peritraumatic responses, such as fear, guilt, and
perceived life threat, that occurred during a traumatic event. The participant is asked to
report the extent to which they experienced each response using a 5-point Likert scale
ranging from 0 (not at all) to 4 (extremely true). The PDI has been found to obtain scores
that have an internal consistency ranging from α= .75 -.80 and a test-retest reliability
ranging from .74 to .77 (Brunet et al., 2001; Bui et al., 2010). Convergent validity was
assessed with correlations between the PDI, Impact of Events Scale-Revised, the
Peritraumatic Dissociative Experiences Questionnaire, and the Civilian Mississippi Scale.
The PDI was found to be moderately correlated with intrusion (r = .47), avoidance (r =
.47), and hyperarousal (r = .42) subscales of the Impact of Event Scale-Revised, the
Peritraumatic Dissociative Experiences Questionnaire (r = .59), and the Civilian
Mississippi Scale (r = .46) (Brunet et al., 2001).

Coping Self-Efficacy

The Sexual Abuse Coping Self-Efficacy Scale (SASCE; Cieslak et al., 2008) is a
42-item self-report questionnaire used to measure perceptions of efficacy with specific
behavioral, cognitive, and emotional demands related to surviving sexual abuse such as, “Have intimate relationships,” “Stop images of the abuse from coming into mind,” and “cope with feelings of anxiety.” The participant is asked to rank their current perceived capability to successfully deal with these demands using a 7-point scale ranging from 1 (not at all capable) to 7 (totally capable). Coping self-efficacy is measured by summing the scores on each item to create a total score. This scale provided scores with an internal consistency of $\alpha = .96$ (Cieslak et al., 2008). There is very little psychometric data on this scale because it is a relatively new measure and has not been used in much research.

*Posttraumatic Schemas*

The Posttraumatic Cognitions Inventory (PTCI; Foa et al., 1999) measures posttraumatic cognitions which represent the following beliefs: general negative view of self (i.e., “I am inadequate”), perceived permanent change (i.e., “I will never be able to form close, loving relationships again”), alienation from self and others (i.e., “I am different from other people”), hopelessness (i.e., “I have no future”), negative interpretation of symptoms (i.e., “Other people with the same experience would be O.K. by now”), self-trust (i.e., “I can’t trust that I will do the right thing”), self-blame (i.e., “It happened to me because of the way I acted”), trust in others (i.e., “Other people are not what they seem”, and unsafe world (i.e., “The world is a dangerous place”). Participants are asked to rate how much they agree with each item using a 7-point Likert scale ranging from 1 (totally disagree) to 7 (totally agree). A principal components factor analysis revealed a 3 component structure: 1) Negative Cognitions About Self, 2) Negative Cognitions About the World, and 3) Self-Blame for the trauma. The PTCI as a whole, as well as each subscale, were found to provide scores with strong internal consistency, with
Cronbach’s alphas ranging from .86 to .97. Test-retest reliabilities were also considered strong ranging from $r = .74$ to .89 after 1 week and $r = .80$ to .85 after 3 weeks. With regard to convergent validity, subscales of the PTCI were highly correlated with subscales from the World Assumptions Scale (WAS; Janoff-Bulman, 1989, 1992) and the Personal Beliefs and Reactions Scale (PBRS; Resick, Schnicke, & Markway, 1991). The Negative Cognitions About Self scale showed high correlations with the Self scale of the PBRS ($r = .85$) and with the Self-Worth scale of the WAS ($r = .60$). The Negative Cognitions About the World scale showed high correlations with the PBRS scales Others ($r = .64$) and Safety ($r = .65$) but unexpectedly did not correlate highly with the relevant WAS scales. The Self-Blame scale correlated only moderately with the PBRS Self-Blame scale ($r = .50$). The PTCI total score correlated highly with the Self ($r = .74$) and Others ($r = .72$) subscales from the PBRS.

**Post-Assault Symptom Measures**

The Depression Anxiety Stress Scale (DASS; Lovibond & Lovibond, 1995) is a self-report measure that is used to measure depression, anxiety, and stress. It is a 42-item, 4-point scale (0 = *Did not apply to me at all*, 3 = *Applied to me very much, or most of the time*) measure that requires the participant to report how much each statement applied to them in the past week. The 42 items divide into three subscales: depression (DASS-D), anxiety (DASS-A), and stress (DASS-S). Examples of items include, “I could see nothing to be hopeful about,” “I felt I was close to panic,” and “I found myself getting agitated.” A factor analysis revealed a 3-factor model that accounts for 60% of the variance. Convergent validity was assessed with correlations between each subscale of the DASS and three other measures of depression and anxiety (BDI, BAI, and STAI-T).
The DASS-D correlated strongest with the BDI ($r = .77$) and moderately with the STAI-T ($r = .65$), and BAI ($r = .42$). The DASS-A correlated strongest with the BAI ($r = .84$) and moderately with the BDI ($r = .57$) and the STAI-T ($r = .44$). The DASS-S correlated strongest with the BAI ($r = .64$) and BDI ($r = .62$) and moderately with the STAI-T ($r = .59$). Each subscale obtains scores with internal consistencies ranging from $\alpha = .92-.97$ (Antony, Bieling, Cox, Enns, & Swinson, 1998).

The PTSD Disorder Checklist Civilian Version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993) is a self-report measure is used to assess 17 symptoms of PTSD according to criteria found in the DSM-III-R. The symptoms consist of behaviors that are related to intrusive recollection, active avoidance, and hyper-arousal. It is a 17 item, 5-point Likert scale measure in which the participant rates how bothered they have been by each symptom in the past month (1 = *Not at all* and 5 = *Extremely*). The civilian version of the PCL applies to any general traumatic event, not just military-related trauma. The PCL has been found to obtain scores that have an internal consistency ranging from $\alpha = .96-.97$ and a test-retest reliability of .96. Convergent validity is demonstrated by high correlations with the Impact of Events scale ($r = .90$) and the PK scale of the MMPI-2 ($r = .77$) (Weathers et al., 1993). A strong correlation between the PCL and Clinician-Administered PTSD Scale (CAPS; $r = .92$) was also found. (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996).

**Procedures**

Participants who signed up for the study were directed to the website Psychsurveys in order to complete a set of questionnaires that measure sexual assault characteristics and post assault psychological distress. At the website the participants
were presented with an informed consent form that briefly explained the study, emphasized that their responses are confidential, explained that participation is voluntary, and gave contact numbers of local counseling services and hotlines that could be contacted if they became upset as a result of the study. All participants completed the SASS, SES-LFV, DASS, and PCL-C. Participants who endorsed experiencing an unwanted sexual act on either the SASS and/or the SES-LFV would complete the PDI, PTCI, and SACSE. The presentation order of the DASS and PCL-C was randomized so that some participants would complete the DASS and PCL-C at the beginning of the survey and some completed them at the end. The administration order of these two scales was randomized to minimize a potential priming effect from completing the SASS and SES-LFV that could lead to possible inflated scores. At the end of the survey, participants were also presented with a page thanking them for their participation in the study and informing them that the winner of the $10 Target gift card would be contacted via email once the study is completed. Before exiting the survey, the participants would again be given the contact information for local counseling services.

Statistical Analysis

Mean scores and standard deviations were calculated for each measure. Prevalence rates of specific assault characteristics were also calculated. The psychometric properties of the SASS were assessed. Means and standard deviations for each item used in the measurement of the assault variables were calculated. Item-total correlations were also calculated to assess how well each item correlated with the remaining items on the SASS. Cronbach’s alpha was computed for the whole scale, as well as each variable that is measured by the SASS (i.e., victimization severity, perceived severity, victim-offender
relationship, verbal coercion, threatened physical force, physical force, victim and offender substance use, peritraumatic and posttraumatic schema disruption) to assess the internal consistency of the items. With regard to validity of the SASS, criterion validity was assessed by conducting correlations between victimization severity, perceived severity, and the SES-LFV, as well as correlations between the peritraumatic and posttraumatic schema disruption variables and the PTCI. A principal components exploratory analysis and parallel analysis were conducted with the peritraumatic and posttraumatic schema disruption items to assess component structure.

The study also sought out to explore the structure of the latent construct of assault severity, as well as the relationship between assault severity and post-assault distress. Kruskal-Wallis analyses of variance were conducted to examine possible significant differences in rated perceived assault severity based on different assault variables, such as victimization severity, victim-offender relationship, methods of coercion, and location of the assault. A nonparametric test, like Kruskal-Wallis, was used because it does not assume a normal distribution of the data. Bivariate correlations were conducted in order to examine the relationship among each of the assault variables measured by the SASS, peritraumatic distress responses, coping self-efficacy, and post-assault distress symptoms as measured by the DASS and PCL-C. Regression analyses were also conducted to assess if the variables used to define the construct of assault severity (i.e., victimization severity, perceived severity, victim-offender relationship, physical injury, coercion methods, victim and offender substance use, peritraumatic and posttraumatic schema disruptions, peritraumatic distress reactions, and coping self-efficacy) serve as predictors of post assault symptoms.
A confirmatory factor analysis was conducted using Mplus 6 (Muthén & Muthén, 1998-2010) to assess the validity of the measurement model of the latent construct of assault severity, as defined by the variables measured by the SASS. A measurement model of assault severity that used SES-LFV was also assessed and the goodness of fit statistics were compared to the measurement model that used the SASS. Lastly, structural equation models were conducted using Mplus 6 to evaluate the relationship between assault severity and post assault distress. Separate models were compared, one using the SASS to measure assault severity and the other using the SES-LFV.


CHAPTER III

RESULTS

Prevalence of Assault Characteristics

Prevalence rates of specific assault characteristics were calculated. The most common reported sexual act was sexual touching (24.9%), followed by attempts to make the victim perform oral sex (11.4%), vaginal sex (11.1%), victim being made to perform oral sex (9.6%), anal sex (8.7%), attempted anal sex (6.9%), attempted vaginal sex (6.3%), attempts to perform oral sex on the victim (4.8%), and performing oral sex on the victim (4.2%). The largest percentage of offenders were classified as a significant other or spouse (31.1%), followed by a previous sexual partner (23.7%), close friend/confidant (21.9%), acquaintance (16.2%), someone I just met (11.7%), and stranger (9.6%). Table 1 shows which sexual acts were committed by the various types of offender.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Stranger (n)</th>
<th>Just Met (n)</th>
<th>Acquaintance (n)</th>
<th>Close Friend (n)</th>
<th>Previous Sex Partner (n)</th>
<th>Sig. Other (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual touching</td>
<td>13</td>
<td>10</td>
<td>13</td>
<td>17</td>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>Attempted to perform oral sex on victim</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Attempted to make victim perform oral sex</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Attempted sexual vaginal sex</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Table 1 (continued).

<table>
<thead>
<tr>
<th></th>
<th>Stranger (n)</th>
<th>Just Met (n)</th>
<th>Acquaintance (n)</th>
<th>Close Friend (n)</th>
<th>Previous Sex Partner (n)</th>
<th>Sig. Other (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attempted anal sex</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Performed oral sex on victim</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Victim made to perform oral sex</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>7</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Completed vaginal sex</td>
<td>2</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Completed anal sex</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

Note: The table represents the frequency of each unwanted sexual act based on relationship with the offender.

Sexual touching was the most common sexual act across all offender types.

Attempts to force the victim to perform oral sex, making the victim perform oral sex, and anal sex were mostly committed by previous sexual partners and significant others/spouses. Vaginal sex was mostly committed by significant others/spouses. Almost all of the offenders were male (97.6%). With regard to age at the time of the assault, 46.5% were < 18 years old, 45.5% were ≥ 18 years old, and 8.0% reported their age as “N/A.” The N/A category was comprised of women who endorsed experiencing sexual touching, but did not consider this experience a sexual assault. With regard to length of time since the assault, 8.1% reported the assault occurring < 1 week ago, 6.0% occurred within the last month, 22.5 % occurred in the last year, 22.4% occurred in the last 2 years, and 41.2% occurred > 2 years ago. When examining the locations of the assaults, the
most common location was the offender’s home (48.1%), followed by the victim’s home (23.0%), in an outside public place (10.7%), and in an inside public place (7.8). The option of “other” was endorsed by 10.4% of participants. Participants who chose “other” commonly reported the assault occurring in a relative or friend’s house, hotel, or car.

When examining substance use by the victim, 33.9% of participants endorsed drinking alcohol (18% of victims had 1-4 drinks, 9.6% had 5-6 drinks, and 6.3% had 7+ drinks), and 7.8% endorsed using illicit substances. Of those that endorsed illicit substance use, 5.4% used marijuana, 1.8% used prescription pain medication, 0.3% used crack/cocaine, 0.3% used methamphetamine, 0% ecstasy, 0.3% used LSD, and 1.8% used mushrooms. With regard to substance use by the offender, 37.3% were reported to be drinking alcohol (20% of offenders had 1-4 drinks, 11% had 5-6 drinks, and 6.3% were reported to have 7+ drinks) and 12.8% used illicit substances. Of those who were reported to have used illicit substances, 10.4% used marijuana, 2.7% used prescription pain medication, 0.9% used crack/cocaine, 0.3% methamphetamine, 0.6% ecstasy, 0.9% used LSD, and 1.5% used mushrooms.

With regard to physical injuries, the most common type of injury was soreness (18.5%), followed by bruising (9.3%), swelling (6.6%), shallow cuts (3.6%), and deep cuts/lacerations (0.9%). 96.7% of participants did not seek out medical treatment following the assault.

Descriptive Statistics

The descriptive statistics of the assault and post assault variables included in the study can be found in Table 2. The alphas for the SES-LFV (assault severity, past 12 months: $\alpha = .97$; assault severity, since age 14: $\alpha = .97$), PDI ($\alpha = .95$), PTCI (negative
cognitions about self: \( \alpha = .97 \); negative cognitions about world: \( \alpha = .93 \); self-blame: \( \alpha = .81 \), SACSE (\( \alpha = .99 \)), DASS (depression: \( \alpha = .94 \); anxiety: \( \alpha = .92 \); stress: \( \alpha = .93 \)), and PCL-C (posttraumatic stress: \( \alpha = .95 \); intrusive recollection: \( \alpha = .91 \); avoidant numbing \( \alpha = .89 \); hyper arousal: \( \alpha = .89 \)) indicated that the data from these subscales were reliable.

Table 2

Descriptive Statistics of Post-Assault Variables and Psychological Distress (\( N=334 \))

<table>
<thead>
<tr>
<th></th>
<th>( M )</th>
<th>( SD )</th>
<th>\textit{Min}</th>
<th>\textit{Max}</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression (DASS)</td>
<td>5.74</td>
<td>7.80</td>
<td>.00</td>
<td>37.00</td>
<td>.94</td>
</tr>
<tr>
<td>Anxiety (DASS)</td>
<td>5.36</td>
<td>6.85</td>
<td>.00</td>
<td>29.00</td>
<td>.92</td>
</tr>
<tr>
<td>Stress (DASS)</td>
<td>8.77</td>
<td>8.32</td>
<td>.00</td>
<td>37.00</td>
<td>.93</td>
</tr>
<tr>
<td>Intrusive Recollection (PCL-C)</td>
<td>8.94</td>
<td>4.59</td>
<td>5.00</td>
<td>25.00</td>
<td>.91</td>
</tr>
<tr>
<td>Avoidant Numbing (PCL-C)</td>
<td>12.16</td>
<td>5.91</td>
<td>7.00</td>
<td>35.00</td>
<td>.89</td>
</tr>
<tr>
<td>Hyper Arousal (PCL-C)</td>
<td>9.75</td>
<td>5.02</td>
<td>5.00</td>
<td>25.00</td>
<td>.89</td>
</tr>
<tr>
<td>Assault Severity, Past 12 months (SES-LFV)</td>
<td>3.15</td>
<td>2.25</td>
<td>.00</td>
<td>9.00</td>
<td>.97</td>
</tr>
<tr>
<td>Assault Severity, Since 14 (SES-LFV)</td>
<td>3.79</td>
<td>2.37</td>
<td>.00</td>
<td>9.00</td>
<td>.97</td>
</tr>
<tr>
<td>Peritraumatic Distress (PDI)</td>
<td>12.60</td>
<td>13.80</td>
<td>.00</td>
<td>52.00</td>
<td>.95</td>
</tr>
<tr>
<td>Negative Cognitions About Self (PTCI)</td>
<td>1.95</td>
<td>1.16</td>
<td>1.00</td>
<td>6.00</td>
<td>.97</td>
</tr>
<tr>
<td>Negative Cognitions About World (PTCI)</td>
<td>3.59</td>
<td>1.70</td>
<td>1.00</td>
<td>7.00</td>
<td>.93</td>
</tr>
<tr>
<td>Self-Blame (PTCI)</td>
<td>2.47</td>
<td>1.38</td>
<td>1.00</td>
<td>7.00</td>
<td>.81</td>
</tr>
<tr>
<td>Coping Self-Efficacy (SACSE)</td>
<td>230.46</td>
<td>70.55</td>
<td>43.00</td>
<td>301.00</td>
<td>.99</td>
</tr>
</tbody>
</table>

Note. DASS = Depression Anxiety and Stress Scale, PCL-C = PTSD Disorder Checklist Civilian Version, SES-LFV = Sexual Experiences Survey Long Form Victimization, PDI = Peritraumatic Distress Inventory, PTCI = Posttraumatic Cognitions Inventory, SACSE = Sexual Abuse Coping Self-Efficacy Scale.
Scale Development

*Item Analysis*

Item-scale correlations were conducted and can be found in Table 3. Items with item-total correlations of $r < .3$ are considered poorly discriminating items (Nunnally & Bernstein, 1994). With corrected item-total correlations ranging from .02 to .19, the items used to assess victim-offender relationship (*How close of a relationship did you have with the person you had the sexual experience with; How safe did you feel with the person prior to the sexual experience*), verbal coercion (*How effective was their method of persuasion; If the person threatened to end the relationship, how much did you believe the threat; If the person threatened to spread rumors about you, how much did you believe the threat*), victim substance use (*Please rate your degree of intoxication at the time of the sexual experience; Please rate how high you were at the time of the sexual experience*) and offender substance use (*Please rate the person’s level of intoxication at the time of the sexual experience; Please rate how high the person was at the time of the sexual experience*) were found to poorly correlate with the remaining items on the SASS. Therefore, these items appear to be inconsistent in their measurement of assault severity and were eliminated from further analysis. When these 10 items were eliminated the Cronbach’s alpha for the SASS increased to .94.
Table 3

*Item Analysis of the SASS (N = 296)*

<table>
<thead>
<tr>
<th>Item Description</th>
<th>M</th>
<th>SD</th>
<th>Corrected Item-Total Correlation</th>
<th>α if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>How close of a relationship did you have with the person you had the sexual experience with?</td>
<td>5.66</td>
<td>3.56</td>
<td>.04</td>
<td>.93</td>
</tr>
<tr>
<td>How safe did you feel with the person prior to the sexual experience?</td>
<td>6.46</td>
<td>3.24</td>
<td>.02</td>
<td>.93</td>
</tr>
<tr>
<td>How severe were your physical injuries?</td>
<td>.66</td>
<td>1.77</td>
<td>.48</td>
<td>.92</td>
</tr>
<tr>
<td>How severe would you rate the sexual experience?</td>
<td>2.41</td>
<td>2.73</td>
<td>.52</td>
<td>.92</td>
</tr>
<tr>
<td>How much emotional harm do you believe you have dealt with as a result of the sexual experience?</td>
<td>3.02</td>
<td>3.15</td>
<td>.58</td>
<td>.92</td>
</tr>
<tr>
<td>How effective was their method of persuasion?</td>
<td>1.74</td>
<td>2.71</td>
<td>.15</td>
<td>.93</td>
</tr>
<tr>
<td>If the person threatened to end the relationship, how much did you believe the threat?</td>
<td>.47</td>
<td>1.70</td>
<td>.14</td>
<td>.92</td>
</tr>
<tr>
<td>If the person threatened to spread rumors about you, how much did you believe the threat?</td>
<td>.2</td>
<td>1.17</td>
<td>.19</td>
<td>.92</td>
</tr>
<tr>
<td>How much did you believe the threat?</td>
<td>.76</td>
<td>2.38</td>
<td>.40</td>
<td>.92</td>
</tr>
<tr>
<td>How afraid were you when the threat was made?</td>
<td>.74</td>
<td>2.32</td>
<td>.39</td>
<td>.92</td>
</tr>
<tr>
<td>How effective was the threat?</td>
<td>.71</td>
<td>2.33</td>
<td>.39</td>
<td>.92</td>
</tr>
<tr>
<td>How afraid were you when the person did one or more of these acts of physical force?</td>
<td>1.14</td>
<td>2.82</td>
<td>.41</td>
<td>.92</td>
</tr>
<tr>
<td>How effective was this act of physical force?</td>
<td>1.24</td>
<td>2.97</td>
<td>.42</td>
<td>.92</td>
</tr>
<tr>
<td>Please rate your degree of intoxication at the time of the sexual experience.</td>
<td>1.91</td>
<td>3.12</td>
<td>.13</td>
<td>.93</td>
</tr>
<tr>
<td>Please rate the person’s level of intoxication at the time of the sexual experience.</td>
<td>1.82</td>
<td>2.77</td>
<td>.03</td>
<td>.93</td>
</tr>
<tr>
<td>Please rate how high you were at the time of the sexual experience.</td>
<td>.42</td>
<td>1.67</td>
<td>.18</td>
<td>.92</td>
</tr>
<tr>
<td>Please rate how high the person was at the time of the sexual experience.</td>
<td>.59</td>
<td>1.86</td>
<td>.09</td>
<td>.93</td>
</tr>
</tbody>
</table>
Table 3 (continued).

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Peritrauma</th>
<th>Posttrauma</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>I did not expect this person to ever harm me</td>
<td>7.12</td>
<td>3.12</td>
</tr>
<tr>
<td>I did not expect something like this to happen in the location I was in</td>
<td>5.80</td>
<td>3.45</td>
</tr>
<tr>
<td>This sexual experience happened because of something I said or did</td>
<td>3.05</td>
<td>3.26</td>
</tr>
<tr>
<td>I &quot;led on&quot; the person I had the sexual experience with</td>
<td>3.38</td>
<td>3.37</td>
</tr>
<tr>
<td>This sexual experience happened because I am too trusting of others</td>
<td>4.21</td>
<td>3.43</td>
</tr>
<tr>
<td>This sexual experience happened because I am a weak person.</td>
<td>2.61</td>
<td>3.18</td>
</tr>
<tr>
<td>I will not be able to trust anyone again.</td>
<td>2.55</td>
<td>3.00</td>
</tr>
<tr>
<td>People are not who they appear to be.</td>
<td>5.08</td>
<td>3.49</td>
</tr>
<tr>
<td>I will never feel safe again.</td>
<td>1.99</td>
<td>2.74</td>
</tr>
<tr>
<td>The world is a dangerous place</td>
<td>5.18</td>
<td>3.45</td>
</tr>
</tbody>
</table>
Table 3 (continued).

<table>
<thead>
<tr>
<th></th>
<th>Peritrauma</th>
<th></th>
<th>Posttrauma</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>Corrected Item-Tot</td>
<td>$\alpha$</td>
</tr>
<tr>
<td>I feel like no matter what I do, bad things happen to me.</td>
<td>2.43</td>
<td>2.90</td>
<td>.67</td>
<td>.92</td>
</tr>
<tr>
<td>I feel broken or damaged.</td>
<td>2.64</td>
<td>3.21</td>
<td>.74</td>
<td>.92</td>
</tr>
<tr>
<td>I will not be the same person after this.</td>
<td>2.68</td>
<td>3.31</td>
<td>.72</td>
<td>.92</td>
</tr>
</tbody>
</table>

Note. SASS = Sexual Assault Severity Scale

**Factor Analysis of Trauma-related Cognitions**

A Principle Components analysis was conducted using the 13 items that measure peritraumatic schema disruption on the SASS. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .87, indicating that, with the population sampled, the results of the analysis can be considered reliable and be interpreted with confidence. A Promax rotation was used in order to achieve the optimum fit of the components to the data. A parallel analysis was also conducted to determine the number of components to retain. Eigenvalues from the research data were compared to eigenvalues from randomly generated data sets that share the same dimensionality of the research data set. If the eigenvalue from the research data was larger than the eigenvalue from the random data at the 95th percentile, then that component was retained. The results of the parallel analysis suggested a three-component solution which accounted for 68.2% of the variance in the
data. The three components that were retained appear to measure similar constructs that are measured on the PTCI: Negative Cognitions about Self, Self-Blame, and Safety Schemas. The component pattern matrix for the items measuring peritraumatic schema disruption can be seen in Table 4. A factor loading of at least .30 was considered as a meaningful contribution to a factor. Items 52, 55, 50, 56, 54 and 49 comprised the first component, which was labeled Self-Defective. These items described thoughts representing beliefs that the person is defective or has been permanently changed as a result of the assault. For example, “I will never feel safe again,” “I feel broken or damaged” and “I will not be the same person after this.”

Table 4

Factor Loadings for the Three Components of the Peritraumatic Schema Disruption Variable of the SASS

<table>
<thead>
<tr>
<th>Item</th>
<th>Item Content</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>I will never feel safe again.</td>
<td>.91</td>
<td>.03</td>
<td>-.14</td>
</tr>
<tr>
<td>55</td>
<td>I feel broken or damaged.</td>
<td>.91</td>
<td>-.02</td>
<td>-.03</td>
</tr>
<tr>
<td>50</td>
<td>I will not be able to trust anyone again.</td>
<td>.90</td>
<td>-.05</td>
<td>-.06</td>
</tr>
<tr>
<td>56</td>
<td>I will not be the same person after this.</td>
<td>.88</td>
<td>-.09</td>
<td>-.04</td>
</tr>
<tr>
<td>54</td>
<td>I feel like not matter what I do, bad things happen to me.</td>
<td>.77</td>
<td>.15</td>
<td>-.01</td>
</tr>
<tr>
<td>49</td>
<td>This sexual experience happened because I am a weak person.</td>
<td>.61</td>
<td>.33</td>
<td>-.02</td>
</tr>
<tr>
<td>47</td>
<td>I “led on” the person I had the sexual experience with.</td>
<td>-.10</td>
<td>.91</td>
<td>.10</td>
</tr>
<tr>
<td>46</td>
<td>This sexual experience happened because of something I said or did</td>
<td>.08</td>
<td>.86</td>
<td>-.02</td>
</tr>
<tr>
<td>48</td>
<td>This sexual experience happened because I am too trusting of others</td>
<td>.27</td>
<td>.45</td>
<td>.28</td>
</tr>
<tr>
<td>44</td>
<td>I did not expect this person to ever harm me</td>
<td>-.33</td>
<td>.10</td>
<td>.85</td>
</tr>
<tr>
<td>45</td>
<td>I did not expect something like this to happen in the location I was in</td>
<td>-.04</td>
<td>.07</td>
<td>.81</td>
</tr>
<tr>
<td>53</td>
<td>The world is a dangerous place</td>
<td>.35</td>
<td>-.16</td>
<td>.57</td>
</tr>
<tr>
<td>51</td>
<td>People are not who they appear to be</td>
<td>.49</td>
<td>-.19</td>
<td>.51</td>
</tr>
</tbody>
</table>

*Note.* One = Negative Cognitions about Self, Two = Self Blame, Three = Safety Schemas
The Self-Defective component had a Cronbach’s Alpha of .91 and accounted for 44.0% of the variance.

The second component, Self-Blame, describes a belief that the assault was the result of something the victim did. This component was comprised of items 46-48, which were, “This sexual experience happened because of something I said or did,” “I ‘led on’ the person I had the sexual experience with,” and “This sexual experience happened because I am too trusting of others.” Self-Blame had a Cronbach’s Alpha of .74 and accounted for 12.7% of the variance. The third component described thoughts related to safety beliefs about the world and was therefore called Unsafe World. For example, “I did not expect this person to ever harm me” and “The world is a dangerous place.” This component was comprised of items 44, 45, 51, and 53. The Unsafe World component had a Cronbach’s Alpha of .73 and accounted for 11.4% of the variance.

A Principle Components analysis was also conducted using the 13 items that measured posttraumatic schema disruption on the SASS. These items are identical to the items measuring peritraumatic schema disruption, but focus on the time period immediately after the assault to present day. The component pattern matrix for the items measuring posttraumatic schema disruption can be seen in Table 5. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .86, indicating that, with the population sampled, the results of the analysis can be considered reliable and be interpreted with confidence. A Promax rotation was also used in order to achieve the optimum fit of the components to the data. A parallel analysis was also conducted to determine the number of components to retain. Similar to the peritraumatic schema disruption items, the results of the factor analysis suggested a three-component solution which accounted for 71.1%
of the variance in the data. The three components were also called Self-Defective, Self-Blame, and Unsafe World.

Table 5

*Factor Loadings for the Three Components of the Posttraumatic Schema Disruption Variable of the SASS*

<table>
<thead>
<tr>
<th>Item</th>
<th>Item Content</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>I will never feel safe again.</td>
<td>.94</td>
<td>-.06</td>
<td>-.09</td>
</tr>
<tr>
<td>73</td>
<td>I feel broken or damaged.</td>
<td>.93</td>
<td>.00</td>
<td>-.08</td>
</tr>
<tr>
<td>68</td>
<td>I will not be able to trust anyone again.</td>
<td>.91</td>
<td>-.12</td>
<td>-.03</td>
</tr>
<tr>
<td>72</td>
<td>I feel like not matter what I do, bad things happen to me.</td>
<td>.85</td>
<td>.05</td>
<td>-.04</td>
</tr>
<tr>
<td>74</td>
<td>I will not be the same person after this.</td>
<td>.79</td>
<td>.02</td>
<td>-.01</td>
</tr>
<tr>
<td>67</td>
<td>This sexual experience happened because I am a weak person.</td>
<td>.66</td>
<td>.32</td>
<td>-.09</td>
</tr>
<tr>
<td>65</td>
<td>I “led on” the person I had the sexual experience with.</td>
<td>-.07</td>
<td>.93</td>
<td>.04</td>
</tr>
<tr>
<td>64</td>
<td>This sexual experience happened because of something I said or did</td>
<td>.04</td>
<td>.91</td>
<td>-.01</td>
</tr>
<tr>
<td>66</td>
<td>This sexual experience happened because I am too trusting of others</td>
<td>.44</td>
<td>.41</td>
<td>.18</td>
</tr>
<tr>
<td>63</td>
<td>I did not expect something like this to happen in the location I was in</td>
<td>-.10</td>
<td>.07</td>
<td>.86</td>
</tr>
<tr>
<td>62</td>
<td>I did not expect this person to ever harm me</td>
<td>-.28</td>
<td>.10</td>
<td>.85</td>
</tr>
<tr>
<td>71</td>
<td>The world is a dangerous place</td>
<td>.38</td>
<td>-.16</td>
<td>.58</td>
</tr>
<tr>
<td>69</td>
<td>People are not who they appear to be</td>
<td>.45</td>
<td>-.14</td>
<td>.56</td>
</tr>
</tbody>
</table>

*Note.* One = Negative Cognitions about Self, Two = Self Blame, Three = Safety Schema

Self-Defective had a Cronbach’s Alpha of .91 and accounted for 45.5% of the variance. Self-Blame had a Cronbach’s Alpha of .88 and accounted for 12.0% of the variance. Unsafe World had a Cronbach’s Alpha of .76 and accounted for 13.6% of the variance. The factor loadings were very similar to the loadings found for the peritraumatic schema disruption items, with the exception of one item. The item, “This sexual experience happened because I am too trusting of others” loaded slightly better on
the Self-Defective component, with a loading of .44, compared to a loading of .41 on the Self-Blame component. The closeness in loadings suggests that it is difficult to differentiate the item content between the two components. The difficulty likely occurs because both components focus on the victim’s thoughts about self. The item content, however, appears to be assessing how much the victim attributes the assault to a perceived character flaw. Therefore, the item was placed on the Self-Blame component.

Three items loaded on more than one component for both peritraumatic and posttraumatic schema disruptions. The items, “The world is a dangerous place,” and “People are not who they appear to be” loaded onto the Self-Defective component. Although these items do not describe self-defective beliefs they are similar to other items on the Self-Defective component that describe beliefs about safety and trust, such as “I will never feel safe again,” or “I will not be able to trust anyone again.” The similarity in safety and trust themes likely contribute to the crossloadings. Lastly, the item, “This sexual experience happened because I am a weak person” also loaded on the Self-Blame component. It is not unexpected that this item loaded on both Self-Defective and Self-Blame components, as the content of the item is describing a perceived character flaw that contributed to the assault. However, it appears that, in this sample, the item aligns more with the Self-Defective component with loadings of .61 on the peritraumatic schema disruption variable and .66 on the posttraumatic schema disruption variable.

Reliability

Descriptive statistics for the variables measured by the SASS can be found in Table 6.
Reliability analyses were conducted for each of the variables in order to examine the internal consistency of the measure. The alphas for victimization severity ($\alpha = .87$), victim-offender relationship ($\alpha = .89$), perceived assault severity ($\alpha = .85$), threatened physical force ($\alpha = .96$), and physical force ($\alpha = .98$) were all above .80, indicating good internal consistency. The reliability coefficients for verbal coercion ($\alpha = .57$) and threatened physical force ($\alpha = .96$) were lower but still acceptable. The reliability coefficients for posttraumatic stress related to self-defective and unsafe world were also high, with values of .92 and .79, respectively.

Reliability analyses were conducted for each of the variables in order to examine the internal consistency of the measure. The alphas for victimization severity ($\alpha = .87$), victim-offender relationship ($\alpha = .89$), perceived assault severity ($\alpha = .85$), threatened physical force ($\alpha = .96$), and physical force ($\alpha = .98$) were all above .80, indicating good internal consistency. The reliability coefficients for verbal coercion ($\alpha = .57$) and threatened physical force ($\alpha = .96$) were lower but still acceptable. The reliability coefficients for posttraumatic stress related to self-defective and unsafe world were also high, with values of .92 and .79, respectively.
physical force ($\alpha = .96$), physical force ($\alpha = .98$), peritraumatic self-defective ($\alpha = .91$), self-blame ($\alpha = .74$), and unsafe world ($\alpha = .73$), and posttraumatic self-defective ($\alpha = .92$), self-blame ($\alpha = .79$), and unsafe world ($\alpha = .76$) indicated that the data from these variables were reliable. The low alphas on verbal coercion ($\alpha = .57$), victim substance use ($\alpha = .37$), and offender substance use ($\alpha = .35$) suggested that these variables were not internally consistent. Reliability analysis was also conducted to examine the internal consistency of the measure a whole. Items from each subscale were used in the analysis for a total of 43 items. Due to missing data, 46 cases were deleted listwise, resulting in an $N=288$. Cronbach’s alpha for the SASS ($\alpha = .92$) indicated that the data from the measure were reliable.

Validity Analysis

Criterion validity was assessed by conducting correlations between the victimization severity, perceived severity, peritraumatic and posttraumatic schema disruption variables of the SASS and the SES-LVF and PTCI. Victimization severity was found to have a significant relationship with the SES-LVF items that measured assault severity of assaults that occurred in the past 12 months ($r = .26; p < .01$), as well as items that measured assault severity of assaults that occurred since the age of 14 ($r = .25; p < .01$). The significant relationship between these two variables is small, suggesting that victimization severity and the SES-LVF are related but likely not measuring identical constructs. Perceived severity was also found to have a significant, but small relationship with the SES-LVF on items that measured assault severity of assaults that occurred since the age of 14 ($r = .24; p < .01$). There was not a significant relationship between perceived severity and items on the SES-LVF that measured assault severity of assaults
that occurred in the past 12 months. The small correlations between the SASS variables and the SES-LFV may indicate that the SASS variables are not a valid measure of assault severity, if the SES-LFV is the valid criterion for that construct. In contrast, these findings may suggest that using a scoring system based on a set hierarchical pattern of assault characteristics as an indicator of victimization severity may not be the most effective method of measuring assault severity. Victimization severity, as measured by the SASS and the subscales on the SES-LFV both rank attempted sexual acts to be more severe than sexual touching and completed sexual acts to be more severe than attempted acts; however, the measurement of victimization severity on the SASS demonstrated that, within each category, there is variety in the rated severity and emotional harm experienced by the victim. Therefore, grouping these sexual acts into ranked categories of touching, attempted rape and rape may oversimplify the construct of assault severity. Assessing the victim’s subjective perceived severity of the assault, as a continuous variable, would likely provide a more direct and generalizable measure of the construct.

Peritraumatic and posttraumatic schema disruptions (i.e., Self-Defective, Self-Blame, and Unsafe World) were also found to have a significant relationship with the Negative Cognitions about Self, Negative Cognitions about the World, and Self-blame subscales of the PTCI. Correlations between peritraumatic self-defective, self-blame, and unsafe world and the subscales making up the PTCI ranged from $r = .16$ to $.53$ ($p < .01$). Correlations between posttraumatic self-defective, self-blame, and unsafe world and the subscales making up the PTCI ranged from $r = .14$ to $.60$ ($p < .05$).
Assault Severity and Post-Assault Distress

Assault Characteristics and Perceived Severity

To assess the potential hierarchical structure of the severity of the sexual acts that make up the victimization severity subscale, mean scores for the items measuring perceived severity were compared based on type of intrusive sexual act (see Table 7).

Table 7

Means Scores of Perceived Assault Severity Based on Types of Victimization

<table>
<thead>
<tr>
<th>Type of Victimization</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual touching</td>
<td>83</td>
<td>3.40</td>
<td>4.78</td>
</tr>
<tr>
<td>Attempted to perform oral sex on victim</td>
<td>16</td>
<td>3.44</td>
<td>4.46</td>
</tr>
<tr>
<td>Attempted to make victim perform oral sex</td>
<td>38</td>
<td>5.37</td>
<td>5.33</td>
</tr>
<tr>
<td>Attempted vaginal sex</td>
<td>21</td>
<td>3.62</td>
<td>4.67</td>
</tr>
<tr>
<td>Attempted anal sex</td>
<td>23</td>
<td>3.70</td>
<td>4.15</td>
</tr>
<tr>
<td>Performed oral sex on victim</td>
<td>14</td>
<td>5.50</td>
<td>5.42</td>
</tr>
<tr>
<td>Victim made to perform oral sex</td>
<td>32</td>
<td>7.75</td>
<td>5.21</td>
</tr>
<tr>
<td>Completed vaginal sex</td>
<td>37</td>
<td>7.97</td>
<td>5.96</td>
</tr>
<tr>
<td>Completed anal sex</td>
<td>29</td>
<td>9.62</td>
<td>5.38</td>
</tr>
</tbody>
</table>

Note. The variation in sample size is due to the variation in the number of women who reported each type of unwanted sexual act.

Means scores indicated a general structure of sexual touching being rated with the lowest score, followed by attempted sexual acts. Completed sexual acts were rated with
the highest mean severity scores. Within the types of attempted acts, the sexual acts were
rated from attempted oral sex (lowest mean), followed by attempted vaginal sex,
attempted anal sex, and attempting to make victim perform oral sex (highest mean). With
regard to completed sexual acts, attempted oral sex was rated with the lowest mean
severity score, followed by the victim being made to perform oral sex, vaginal sex, and
anal sex (highest mean severity score). This hierarchal structure appears to follow what
would be expected, with less intrusive acts being rated with lower mean severity scores
than more intrusive acts. However, it was surprising to find that attempts to make the
victim perform oral sex were rated higher than attempted vaginal or anal sex. Kruskel-
Wallis analysis of variance was computed to determine if there were statistically
significant differences among mean scores based on the type of relationship with the
offender. The results of the Kruskel-Wallis test indicated that the differences in mean
scores among the groups were statistically significant $\chi^2 (8, 293) = 53.30, p < .001$ with
an effect size of $\eta^2 = .18$. Therefore, 18% of the variability of means scores is accounted
for by victimization severity. Follow-up tests were conducted to evaluate pairwise
differences among the groups, controlling for Type I error across tests by using a
Bonferroni adjustment. Significant mean differences between sexual touching and
vaginal sex ($\chi^2 (1, 120) = 18.92, p < .001; \eta^2 = .16$), forcing the victim to perform oral
sex ($\chi^2 (1, 115) = 20.84, p < .001; \eta^2 = .18$), and anal sex ($\chi^2 (1, 112) = 25.14, p < .001;
\eta^2 = .22$) were found. Significant mean differences between anal sex and the offender
attempting to perform oral sex ($\chi^2 (1, 45) = 11.87, p = .001; \eta^2 = .26$), attempted vaginal
sex ($\chi^2 (1, 50) = 12.31, p < .001; \eta^2 = .25$), and attempted anal sex ($\chi^2 (1, 52) = 12.0, p <$
.001; $\eta^2 = .24$) were also found. There was no significant difference in means between attempts to make the victim perform oral sex and attempted vaginal or anal sex.

Perceived severity ratings based on victim-offender relationship were assessed. Victim-offender relationship (see Table 8) was rated in the following manner: stranger (lowest mean), significant other/spouse, someone I’ve had previous sexual relations with, an acquaintance, someone I just met, and a close friend/confidant (highest mean).

Table 8

*Means Scores of Perceived Assault Severity Based on Victim-Offender Relationship*

<table>
<thead>
<tr>
<th>Victim-Offender Relationship</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stranger</td>
<td>32</td>
<td>4.62</td>
<td>5.81</td>
</tr>
<tr>
<td>Someone I just met</td>
<td>39</td>
<td>6.23</td>
<td>5.59</td>
</tr>
<tr>
<td>An acquaintance</td>
<td>54</td>
<td>5.61</td>
<td>5.24</td>
</tr>
<tr>
<td>Close friend/confidant</td>
<td>73</td>
<td>7.33</td>
<td>5.57</td>
</tr>
<tr>
<td>Previous sexual partner</td>
<td>79</td>
<td>5.23</td>
<td>4.72</td>
</tr>
<tr>
<td>A significant other or spouse</td>
<td>104</td>
<td>5.16</td>
<td>5.54</td>
</tr>
</tbody>
</table>

*Note.* The variation in sample size is due to the variation in prevalence of type of offender.

Therefore, women in this sample rated assaults in which the offender was someone with whom they had not had previous sexual relations with, with higher mean severity scores. It also appears that, women rated assaults in which the offender was someone they have had previous sexual relations with, with lower mean severity scores than all categories,
except stranger. This finding was not expected, as the literature generally finds that victims of assaults where the offenders are a significant other/spouse or a stranger present with greater reported distress (Feinstein et al., 2011; Ullman et al., 2006). The results of a Kruskel-Wallis test indicated that the differences in mean scores among the groups were statistically significant $\chi^2 (5, 245) = 11.71, p = .04$ with an effect size of $\eta^2 = .05$.

Therefore, 5% of the variability of means scores is accounted for by victim-offender relationship. Follow-up pairwise comparisons using a Bonferroni adjustment did not find any significant mean differences between the types of victim-offender relationships. The difference in mean scores between a close friend and a significant other/spouse were close to significance with a $p$-value of .005. However, because there were 15 pairwise comparisons made, a $p$-value of <.003 was needed for the pairwise comparison to be considered significant.

Ratings of perceived closeness and safety based on relationship type were also examined (see Table 9).

Table 9

<table>
<thead>
<tr>
<th></th>
<th>Perceived Closeness</th>
<th>Perceived Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>$M$</td>
</tr>
<tr>
<td>Stranger</td>
<td>32</td>
<td>1.34</td>
</tr>
<tr>
<td>Someone I just met</td>
<td>39</td>
<td>1.69</td>
</tr>
<tr>
<td>An acquaintance</td>
<td>54</td>
<td>3.56</td>
</tr>
</tbody>
</table>
Table 9 (continued).

<table>
<thead>
<tr>
<th></th>
<th>Perceived Closeness</th>
<th>Perceived Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>Close friend/confidant</td>
<td>73</td>
<td>6.49</td>
</tr>
<tr>
<td>Previous sexual partner</td>
<td>79</td>
<td>7.00</td>
</tr>
<tr>
<td>Significant other or spouse</td>
<td>104</td>
<td>8.08</td>
</tr>
</tbody>
</table>

Note: The variation in sample size is due to the variation in prevalence of type of offender.

Strangers were found to have the lowest ratings of closeness and safety and significant other or spouse was rated highest. Kruskal-Wallis analysis of variance indicated that the differences in mean closeness scores among the groups were statistically significant $\chi^2 (5, 267) = 124.83, p < .001$ with an effect size of $\eta^2 = .47$. Therefore, 47% of the variability of means scores is accounted for by victim-offender relationship. Follow-up pairwise comparisons using a Bonferroni adjustment found significant mean differences between all groups, with the exception of previous sexual partner and significant other/spouse or close friend/confidant. The pairwise comparison between someone I just met and stranger was also not significant. The significant pairwise comparisons had $\eta^2$ ranging from .11 to .56. With regard to perceived safety, Kruskel-Wallis analysis of variance indicated that the differences in mean scores among the groups were statistically significant $\chi^2 (5, 267) = 78.09, p < .001$ with an effect size of
\( \eta^2 = .29 \). Therefore, 29% of the variability of means scores is accounted for by victim-offender relationship. Follow-up pairwise comparisons using a Bonferroni adjustment found significant mean differences between all groups, with the exception of previous sexual partner and significant other, close friend and significant other or previous sexual partner, and someone I just met and acquaintance or stranger. The significant pairwise comparisons had \( \eta^2 \) ranging from .16 to .36. The comparison of means by relationship type suggests a linear relationship between degree of closeness of a relationship and perceived safety.

Perceived severity ratings based on methods of coercion were also assessed. The various methods of coercion were placed in mutually exclusive categories. Threatened to slap, punch or kick, beat, use a weapon or kill, as well as slapped the victim were not found to have occurred independently of other methods of coercion. Therefore, comparisons of means for these methods were not calculated (see Table 10).

Table 10

*Rated Perceived Assault Severity, Effectiveness of Method, and Perceived Fear Based on Methods of Coercion*

<table>
<thead>
<tr>
<th>Method of Coercion</th>
<th>Perceived Severity</th>
<th>Effectiveness</th>
<th>Fear</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n )</td>
<td>( M )</td>
<td>( SD )</td>
</tr>
<tr>
<td>Tried to convince me</td>
<td>106</td>
<td>4.90</td>
<td>4.61</td>
</tr>
<tr>
<td>Threatened to end our relationship</td>
<td>17</td>
<td>4.06</td>
<td>4.68</td>
</tr>
</tbody>
</table>
Table 10 (continued).

<table>
<thead>
<tr>
<th>Method</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threatened to spread rumors about me</td>
<td>3</td>
<td>4.33</td>
<td>3.79</td>
<td>5.33</td>
<td>4.73</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Threatened to hold me down or restrain me</td>
<td>3</td>
<td>4.00</td>
<td>1.58</td>
<td>2.33</td>
<td>1.16</td>
<td>6.33</td>
<td>2.52</td>
</tr>
<tr>
<td>Threatened to choke me</td>
<td>3</td>
<td>12.33</td>
<td>7.10</td>
<td>4.33</td>
<td>5.13</td>
<td>5.33</td>
<td>5.03</td>
</tr>
<tr>
<td>Held me down or restrained me</td>
<td>39</td>
<td>8.59</td>
<td>4.86</td>
<td>6.54</td>
<td>2.66</td>
<td>5.90</td>
<td>2.79</td>
</tr>
<tr>
<td>Punched or kicked me</td>
<td>1</td>
<td>20.00</td>
<td>--</td>
<td>9.00</td>
<td>--</td>
<td>9.00</td>
<td>--</td>
</tr>
<tr>
<td>Beat me</td>
<td>5</td>
<td>14.00</td>
<td>3.85</td>
<td>8.17</td>
<td>1.72</td>
<td>8.60</td>
<td>1.67</td>
</tr>
<tr>
<td>Choked me</td>
<td>9</td>
<td>14.67</td>
<td>5.27</td>
<td>9.44</td>
<td>.88</td>
<td>9.33</td>
<td>1.32</td>
</tr>
<tr>
<td>Used a weapon</td>
<td>2</td>
<td>16.00</td>
<td>6.93</td>
<td>9.50</td>
<td>.71</td>
<td>8.33</td>
<td>2.08</td>
</tr>
</tbody>
</table>

*Note:* The variation in sample size is due to the variation in the number of women who reported each type of coercive method.

The various methods were rated in the following manner: threatened to hold me down or restrain me (lowest mean score), threatened to end our relationship, threatened to spread rumors about me, tried to convince me, held me down or restrained me, threatened to choke me, beat me, choked me, used a weapon, and punched or kicked me (highest mean score). These findings suggest that women in the sample generally found assaults in which the offender utilized physical force to be more severe than assaults where offenders used verbal coercion or threatened physical force. Kruskel-Wallis analysis of
variance indicated that the differences in mean scores among the groups were statistically significant $\chi^2 (10, 207) = 55.83, p < .001$ with an effect size of $\eta^2 = .27$. Therefore, 27% of the variability of means scores is accounted for by method of coercion. Follow-up pairwise comparisons using a Bonferroni adjustment found significant mean differences between trying to convince the victim and restraining her ($\chi^2 (1, 1859) = 18.77, p < .001; \eta^2 = .12$). Significant mean differences were also found between trying to convince the victim and beating her ($\chi^2 (1, 121) = 12.55, p < .001; \eta^2 = .10$) and trying to convince the victim and choking her ($\chi^2 (1, 124) = 16.85, p < .001; \eta^2 = .14$). A pairwise comparison between threatening to end the relationship and restraining the victim was also significant ($\chi^2 (1, 61) = 12.20, p < .001; \eta^2 = .20$), as well as threatening to end the relationship and choking the victim ($\chi^2 (1, 26) = 12.36, p < .001; \eta^2 = .49$).

Lastly, perceived severity rankings based on location of the assault were examined. Assaults that occurred inside of a public setting were rated the least severe. Locations that were classified as other (i.e., relative or friend’s homes) were rated the most severe, followed by victim’s home, outside in a public setting, and the offender’s home (see Table 11). This finding is consistent with what would be expected based on the previously discussed Cascardi et al. (1996) study in which locations that were rated as safe were related with greater post-assault distress when compared to dangerous locations. The results of the Kruskel-Wallis test indicated that the differences in mean scores among the groups were statistically significant $\chi^2 (4, 334) = 13.35, p = .01$ with an effect size of $\eta^2 = .04$. Therefore, 4% of the variability of means scores is accounted for by location of the assault. Significant mean differences between inside a public setting and outside of a public setting ($\chi^2 (1, 62) = 8.59, p = .003; \eta^2 = .14$), the offender’s home
(χ² (1, 186) = 12.77, p < .001; η² = .07), the victim’s home (χ² (1, 103) = 9.13, p = .003; η² = .09), and other location (χ² (1, 61) = 8.34, p = .004; η² = .14), were found.

Table 11

Means Scores of Perceived Assault Severity Based on Location of Assault

<table>
<thead>
<tr>
<th>Location</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>In public, outside</td>
<td>36</td>
<td>5.53</td>
<td>4.98</td>
</tr>
<tr>
<td>In public, inside</td>
<td>26</td>
<td>2.15</td>
<td>3.25</td>
</tr>
<tr>
<td>Offender’s home</td>
<td>160</td>
<td>5.47</td>
<td>5.11</td>
</tr>
<tr>
<td>Victim’s home</td>
<td>77</td>
<td>5.87</td>
<td>5.83</td>
</tr>
<tr>
<td>Other location</td>
<td>35</td>
<td>6.80</td>
<td>6.57</td>
</tr>
</tbody>
</table>

Note. The variation in sample size is due to the variation in prevalence of location of the assault.

Correlations

Bivariate correlations were conducted to examine the relationship among each of the variables measured by the SASS, as well as with the peritraumatic distress responses measured by the PDI and coping-self efficacy measured by the SACSE. The correlation matrix for all variables in the study can be found in Table 12. As hypothesized, 1) victimization severity was found to be positively related with physical injury, perceived severity, threatened force, physical force, peritrauma and posttrauma self-schemas (i.e., self-defective and self-blame), and peritrauma distress reactions, 2) physical injury was
## Table 12

### Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Depression</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Anxiety</td>
<td>.77**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Stress</td>
<td>.79**</td>
<td>.81**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Intrusive recollection</td>
<td>.51**</td>
<td>.56**</td>
<td>.55**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
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found to have a positive relationship with perceived severity, peritraumatic and posttraumatic self-defective and unsafe world schemas, and peritraumatic distress reactions, and 3) threatened force and physical force were found to be positively related with perceived severity, peritraumatic and posttraumatic self-defective and unsafe world schemas, and peritraumatic distress reactions. There were also significant relationships among the two methods of coercion, suggesting that there may be an escalation in the utilization of coercive methods. Threatened force and physical force were also found to have a positive relationship with physical injury, further suggesting a hierarchical progression in coercion tactics.

Finally, coping self-efficacy was negatively related with victimization severity, perceived severity, and peritraumatic and posttraumatic self-defective and self-blame schemas, as hypothesized. It was unexpected to find nonsignificant relationships between coping self-efficacy other assault variables, like physical injury, coercion methods, or peritraumatic distress reactions, as these variables are thought to indicate greater assault severity.

Correlational analyses between assault severity (as measured by each of the subscales of the SASS, the PDI, and SACSE) and post assault symptoms of PTSD (i.e., intrusive recollection, avoidant numbing, and hyperarousal), depression, anxiety, and stress were also conducted. As expected, perceived severity, threatened force, peritraumatic self-defective schemas, posttraumatic self-defective and self-blame schemas, and peritraumatic distress reactions were positively related to all variables of post assault distress. Also as expected, coping self-efficacy had a negative relationship with all variables of post assault distress. Victimization severity was found to be related
with all variables of post assault distress, with the exception of hyperarousal. Peritraumatic self-blame and posttraumatic unsafe world schemas were both found to be significantly related to all post assault variables, except anxiety. Peritraumatic unsafe world schemas were related with stress and all symptoms of PTSD. Lastly, physical injury was related with intrusive recollections and avoidant numbing. It was unexpected to find a lack of significant relationships between physical force and depression, stress, or PTSD symptoms.

**Regression Analysis**

Regression analyses were conducted to assess if the variables making up the construct of assault severity (i.e., victimization severity, physical injury, threatened force, physical force, peritraumatic distress responses, peritraumatic and posttraumatic schemas, and coping self-efficacy) serve as predictors of post assault symptoms of distress. For each model, only variables with significant correlations with the specific post assault symptom were examined as possible predictors. With regard to depression, the model included victimization severity, perceived severity, threatened force, peritraumatic self-defective and self-blame schemas, posttraumatic self-defective, self-blame, and unsafe world schemas, peritraumatic distress reactions, and coping self-efficacy as predictors. This model was found to be significant ($R^2 = .17, F(10, 315)=6.66, p< .001$). In this model, posttraumatic self-defective schemas ($\beta = .29, p< .01$), and peritraumatic distress reactions ($\beta = .16, p< .05$) were found to be significant predictors of depression. The model examining victimization severity, perceived severity, threatened force, physical force, peritraumatic self-defective schemas, posttraumatic self-defective and self-blame schemas, peritraumatic distress reactions, and coping self-efficacy as predictors of
anxiety was found to be significant ($R^2 = .15$, $F(9, 312)=6.13$, $p< .001$). In this model posttraumatic self-defective schemas ($\beta = .29$, $p< .01$) and peritraumatic distress reactions ($\beta = .17$, $p< .05$) were the only significant predictors. With regard to stress, the model examining victimization severity, perceived severity, threatened force, peritraumatic and posttraumatic self-defective, self-blame, and unsafe world schemas, peritraumatic distress reactions, and coping self-efficacy as predictors was found to be significant ($R^2 = .15$, $F(11, 314)=5.07$, $p< .001$). In this model, peritraumatic unsafe world schemas ($\beta = -.26$, $p< .01$), posttraumatic unsafe world schemas ($\beta = .27$, $p< .01$) and peritraumatic distress reactions ($\beta = .20$, $p< .01$) were the only significant predictors of stress.

Regression models were also run for PTSD symptomatology. With regard to intrusive recollections, the model examining victimization severity, perceived severity, physical injury, threatened force, peritraumatic and posttraumatic self-defective, self-blame, and unsafe world schemas, peritraumatic distress reactions, and coping self-efficacy as predictors was found to be significant ($R^2 = .21$, $F(12, 301)=6.75$, $p< .001$). In this model, perceived severity ($\beta = .17$, $p< .05$), peritraumatic unsafe world schemas ($\beta = -.20$, $p< .05$) and posttraumatic self-defective schemas ($\beta = .44$, $p< .001$) were found to be significant predictors. The model examining victimization severity, perceived severity, physical injury, threatened force, peritraumatic and posttraumatic self-defective, self-blame, and unsafe world schemas, peritraumatic distress reactions, and coping self-efficacy as predictors of avoidant numbing was found to be significant ($R^2 = .22$, $F(12, 301)=7.07$, $p< .001$). In this model peritraumatic unsafe world schemas ($\beta = -.22$, $p< .05$) and posttraumatic self-defective schemas ($\beta = .33$, $p< .01$) were the only significant predictors. Lastly, the model examining perceived severity, threatened force,
peritraumatic and posttraumatic self-defective, self-blame, and unsafe world schemas, peritraumatic distress reactions, and coping self-efficacy as predictors of hyperarousal was found to be significant ($R^2 = .14, F(10, 315)=5.28, p< .001$). In this model, posttraumatic self-defective schema disruptions ($\beta = .33, p< .01$) was the only significant predictor. The lack of significance for the peritraumatic self-defective and self-blame schemas, as well as the weaker significance of the peritraumatic unsafe world schema, suggests that peritraumatic schema disruptions do not contribute enough unique variance to the prediction of post-assault distress. Therefore, it does not appear that the inclusion of peritraumatic schema disruptions provides additional information that is not already accounted for in the measurement of posttraumatic schema disruptions.

**Structural Equation Modeling**

Confirmatory factory analyses were conducted using Mplus (Muthén & Muthén, 1998-2010) to assess the validity of the measurement models for assault severity, as measured by the SASS or the SES-LFV, and the model of psychological distress. In the SASS model, assault severity is a latent construct that is defined by the variables measured by the SASS: victimization severity, perceived severity, physical injury, and peritraumatic and posttraumatic schemas. In addition to these variables, peritraumatic distress reactions and coping self-efficacy was also included. All of the measured variables were expected to have a positive relationship with the latent variable, assault severity (see Figure 1). The hypothesized assault severity measurement model resulted in a poor fit ($CFI = .61, TLI= .54, RMSEA = .16$).
Figure 1. Hypothesized measurement model of assault severity, as measured by the SASS.
An alternative model was tested in which the victimization severity, posttraumatic schemas, and coping self-efficacy variables were removed from the model (see Figure 2).

*Figure 2. Alternative measurement model of assault severity, as measured by the SASS and PDI.*

Victimization severity was removed from the model because the ordinal rankings used to score victimization severity were based on the ratings of perceived severity. Because the perceived severity scores were used in the creation of the victimization severity hierarchy, the inclusion of victimization severity would be redundant. Also,
basing the victimization severity hierarchy on scores reported in this sample may lead the
hierarchy to be idiosyncratic to the sample. In other words, the hierarchy may not
generalize to other samples, particularly non-college samples. These limitations of
victimization severity suggest that perceived severity may be a more valid measure of the
severity of unwanted sexual acts. The posttraumatic schemas were removed because
these cognitions occur post assault; therefore, it is likely that they are not a direct measure
of assault severity. Lastly, coping self-efficacy was originally conceptualized as an
inherent trait a victim possesses that would influence her perception of fear during the
sexual assault; however, most research evaluating the role of coping self-efficacy has
found it to be a mediator between an aversive event and psychological distress (Benight
& Bandura, 2004; Benight et al., 2008; Cieslak et al., 2008). Benight and Bandura (2004)
argue that a meditational role of coping self-efficacy likely occurs because traumas are
rarely isolated incidents with no repercussions. Traumatic events often leave the victims
dealing with continued stressors that resulted from the event, such as, rebuilding a home
after a natural disaster. In the case of a victim of sexual assault, the victim may deal with
prolonged stress related to strained relationships or physical injury. Therefore, a belief in
your ability to cope extends beyond the moment of the traumatic event and appears to
play an integral role in the process of recovery. Coping self-efficacy was removed from
the measurement model in order to test its potential mediating role in the structural
model. This alternative model also resulted in a poor fit (CFI = .72, TLI= .61, RMSEA =
.18). A final measurement model was tested in which peritraumatic schema variables
were removed, as they did not strongly correlate with the other assault variables and
likely do not contribute to the measurement of assault severity (see Figure 3). This model
resulted in an adequate fit ($CFI = .98$, $TLI = .97$, RMSEA = .07).

A measurement model of assault severity, using the SES-LFV, PTCI, and PDI was also assessed (see Figure 4). This model resulted in a poor fit ($CFI = .86$, $TLI = .76$, RMSEA = .28). Therefore, an alternative model was tested in which the PTCI subscales were removed (see Figure 5). These variables were removed because they measure post-trauma cognitions. The alternative model resulted in a strong fit ($CFI = 1.00$, $TLI = 1.00$, RMSEA = .00).

Figure 3. Final measurement model of assault severity, as measured by the SASS and PDI.
Figure 4. Measurement model of assault severity, as measured by the SES-LFV, PTCI, and PDI.

Figure 5. Measurement model of assault severity, as measured by the SES-LFV, PTCI, and PDI.
For the psychological distress model, psychological distress is conceptualized as a two-factor structure comprising a general distress component and a posttraumatic stress component (see Figure 6).

**Figure 6.** Measurement model of psychological distress, as measured by the DASS and PCL-C.

General distress is a latent construct defined by depression, anxiety and stress. Posttraumatic stress is also a latent construct defined by intrusive recollections, avoidant numbing, and hyperarousal. The hypothesized two-factor psychological distress model resulted in an adequate fit ($CFI = .99$, $TLI = .98$, $RMSEA = .09$). General distress was found to be significantly related to depression ($\beta = .87$, $p < .001$), anxiety ($\beta = .90$, $p < .001$), and stress ($\beta = .91$, $p < .001$). Posttraumatic stress was found to be significantly
related to intrusive recollections ($\beta = .82, p < .001$), avoidant numbing ($\beta = .93, p < .001$), and hyperarousal ($\beta = .85, p < .001$). General distress and posttraumatic stress were also found to be significantly related ($\beta = .80, p < .001$).

Structural equation modeling was used to compare two sets of models that evaluate the relationship between assault severity and post assault distress, one using the SASS to measure assault severity and the other using the SES-LFV. In the SASS model, assault severity was defined by the perceived severity, physical injury, threatened force, and physical force subscales of the SASS, as well as peritraumatic distress reactions (see Figure 7). The hypothesized SASS model resulted in an adequate fit ($CFI = .91, TLI= .89, RMSEA = .08$). Assault severity was found to be significantly related with trauma cognitions ($\beta = .47, p < .001$), general distress ($\beta = .50, p < .001$), and PTSD ($\beta = .51, p < .001$). Trauma cognitions was also found to have a positive relationship with coping self-efficacy ($\beta = .23, p < .001$). There was not a significant relationship to general distress and PTSD with either trauma cognitions or coping self-efficacy in this model.

An alternative model was tested in which physical force was removed from the latent variable of assault severity, as it no longer had a significant relationship with assault severity (see Figure 8). This model did not have as strong of a fit as the previous model, but still resulted in an adequate fit ($CFI = .91, TLI= .89, RMSEA = .09$). There were no significant changes in path indices. A final structural model was tested in which physical force was removed from the latent variable of assault severity and the PTCI subscales were used to measure trauma cognitions, rather than the posttraumatic self-defective, self-blame, and unsafe world subscales (see Figure 9).
Figure 7. Structural model for the relationship between assault severity (as measured by SASS and PDI), trauma cognitions, coping self-efficacy, and psychological distress.
Figure 8. Alternative structural model for the relationship between assault severity (as measured by SASS and PDI), trauma cognitions, coping self-efficacy, and psychological distress.
Figure 9. Final structural model for the relationship between assault severity (as measured by SASS and PDI), trauma cognitions, coping self-efficacy, and psychological distress.
This model was used to test if the relationship between trauma cognitions and psychological distress would improve with the substitution of the PTCI subscales. It was also hypothesized that the direction of the relationship between trauma cognitions and coping self-efficacy would change to a negative direction. This model resulted in an adequate fit ($CFI = .95$, $TLI = .93$, $RMSEA = .08$) and stronger relationship between assault severity and trauma cognitions ($\beta = .73, p < .001$), general distress ($\beta = .59, p < .001$), and PTSD ($\beta = .65, p < .001$). Trauma cognitions and coping self-efficacy still maintained a positive relationship with each other ($\beta = .18, p < .001$) and neither variable was found to be significantly related with general distress or PTSD.

In the SES-LFV model, assault severity was defined by the SES-LFV, as well as peritraumatic distress reactions (see Figure 10). The SES-LFV model resulted in a less than adequate fit ($CFI = .92$, $TLI = .89$, $RMSEA = .10$) in which assault severity was found to be significantly related to trauma cognitions ($\beta = .57, p < .001$), general distress ($\beta = .32, p < .001$), and PTSD ($\beta = .33, p < .001$). Trauma cognitions was found to have a positive relationship with general distress ($\beta = .25, p < .01$) and PTSD ($\beta = .29, p < .001$) and a negative relationship with coping self-efficacy ($\beta = -.45, p < .001$). Coping self-efficacy did not have a significant relationship with general distress or PTSD.
Figure 10. Structural model for the relationship between assault severity (as measured by SES-LFV and PDI), trauma cognitions, coping self-efficacy, and psychological distress.
A comparison of the final SASS and SES model fit statistics can be found in Table 13.

Table 13

*Model fit statistics for the proposed and comparison psychological distress models*

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<tr>
<th></th>
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<th>TLI</th>
<th>CFI</th>
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<td>-.04</td>
<td>-.03</td>
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</table>

Notes. a = Proposed model. Assault severity as defined by Perceived Severity, Physical Injury, Threatened Force, Physical Force, and PDI. Trauma Cognitions as defined by Posttraumatic Self-Defective, Posttraumatic Self-Blame, and Posttraumatic Unsafe World; b = Comparison model. Assault severity as defined by SES-LFV and PDI; c = Comparison model minus proposed model; d = Proposed model. Assault severity as defined by Perceived Severity, Physical Injury, Threatened Force, and PDI. Trauma Cognitions as defined by Posttraumatic Self-Defective, Posttraumatic Self-Blame, and Posttraumatic Unsafe World; e = Proposed Model. Assault severity as defined by Perceived Severity, Physical Injury, Threatened Force, and PDI. Trauma Cognitions as defined by Negative Cognitions about Self, Negative Cognitions about World, and Self-Blame.
CHAPTER IV

DISCUSSION

Psychometric Properties of the SASS

One aim of the study was to develop a comprehensive measure of sexual assault severity called the SASS. The results of the psychometric analysis suggest that the SASS is a reliable and valid measure of assault severity. Reliability analyses of the measure as a whole and each measured variable resulted in moderate to strong Cronbach alphas ranging from .73 to .98, with the exception of the verbal coercion, victim substance use, and offender substance use. Item analysis of the SASS suggested that the items used to measure verbal coercion, victim substance use and offender substance use, as well as the items assessing victim-offender relationship, poorly correlated with the remaining items of the SASS. Therefore, these 10 items were eliminated from the scale and victim-offender relationship, verbal coercion, victim substance use and offender substance use were excluded from the remaining analyses. Revision and further examination of the eliminated items is recommended to distinguish if poor fit with the rest of the scale is related to issues with the number and content of the items, such as an insufficient number of items and problems with item wording, or if these constructs do not contribute to the measurement of assault severity. It is also possible that other factors contributed to the poor fit. For example, there was a low prevalence of victim and offender drug use in this sample. Therefore, it is likely that the small sample size for those items contributed to the low correlation with the rest of the measure.

With regard to validity, significant correlations between the peritraumatic and posttraumatic schema disruption variables measured by the SASS and the PTCI suggest
that these variables are a valid measure of trauma related cognitions. The exploratory factor analysis of the items assessing peritraumatic and posttraumatic schema disruption also supported the validity of these variables, as the analysis resulted in a three-component factor structure that matches the three-component structure of the PTCI. There was a difference in the loadings of one item between the peritraumatic and posttraumatic schema disruption variables. The item “This sexual experience happened because I am too trusting of others” loaded on the peritraumatic self-blame component, but loaded on both the posttraumatic self-blame and posttraumatic self-defective components. The item content appears to be assessing how much the victim attributes the assault to a perceived character flaw. Therefore, the item was placed on the Self-Blame component on both peritraumatic and posttraumatic schema disruption variables.

Although victimization severity and perceived severity had a significant relationship with the SES-LFV, the correlations were small, suggesting that the SASS scales may not be valid measures of assault severity. It is also possible, however, that these findings provide further evidence against a hierarchical measurement of assault severity. The scoring hierarchy utilized in the SES-LFV is based on the assumption that more physically intrusive sexual acts are more severe. However, the scoring system used to score victimization severity on the SASS demonstrated that there is variance in victims’ ratings of perceived severity among the unwanted sexual acts. For example, being forced to perform oral sex was rated as being more severe than completed vaginal sex. This finding highlights that the intrusiveness of a sexual act is a subjective construct that likely varies by victim and could impact the perceived severity of the assault. In other words, a woman may view forced oral sex as being more intrusive than completed
vaginal sex and could therefore be more likely to define that act as a sexual assault because she perceived it as a more severe act. Grouping unwanted sexual acts into general categories of attempted and completed will likely oversimplify the assessment of intrusiveness and weaken the measurement of assault severity. Assessment of the victim’s perceived experience, such as Likert scale items asking about perceived severity and emotional harm, would eliminate sample idiosyncrasies and likely provide a direct and accurate measure of what the victim defines as traumatic. Therefore, perceived severity may be a more valid indicator of assault severity.

Assault Characteristics and Perceived Severity

Comparisons of mean scores on ratings of perceived severity based on types of victimization, victim-offender relationship, and methods of coercion provided detailed data on how these variables relate to the victim’s perceived severity of the assault and emotional harm as a result of the assault. When examining types of victimization, the distribution of mean scores indicated that less intrusive acts (i.e., sexual touching, attempted sexual acts) were rated with lower mean severity scores than more intrusive acts (i.e., completed sexual acts). This finding provides supportive evidence for the ordinal ranking system used in the SES-LFV.

With regard to mean perceived severity and emotional harm scores based on the relationship to the offender, results indicated that assaults in which the offender was someone with whom the victim had not had previous sexual relations with, were perceived as most severe. Results also indicated assaults committed by a previous or current sexual partner were rated with lower mean severity scores than all other relationship categories, except stranger. The differences in mean scores among the types
of relationships were found to be statistically significant. These findings suggest that the degree of closeness of the relationship and previous sexual history with the offender may influence the victim’s safety schema. It is likely that assaults committed by a close friend were rated with a higher perceived severity score because the victim perceived the relationship as trusting and nonsexual and did not expect an unwanted sexual advance from that individual.

It was unexpected to find that assaults committed by a stranger and a significant other/spouse were perceived as least severe, as these relationship categories have typically been associated with greater distress (Feinstein et al., 2011; Ullman et al., 2006). These findings may be related to the population that was surveyed in the study. Within a college population, strangers are often encountered at social events, such as parties or bars. Therefore, it is likely that college females do not hold the same safety schemas about strangers as the general population of females. For example, while out at a party or a bar a female may feel safe to dance with a stranger. During the course of dancing, however, the stranger may engage in sexual touching. Although this is assultive behavior, the female may not feel as if she is in significant danger. Upon closer examination of the data, it appears that stranger assaults primarily consisted of sexual touching. Therefore, it is likely that stranger assaults were perceived as least severe because of the low prevalence of more intrusive unwanted sexual behaviors.

With regard to assaults committed by a significant other/spouse, it is possible that college age women perceived these assaults as less severe because of the level of investment in the relationship. Research has found that college women are more likely to stay in sexually coercive situations (Faulkner, Kolts, & Hicks, 2008) and consent to
unwanted sexual behavior if the offender is a significant other (Impett & Peplau, 2002). It is possible that college women may overlook or excuse sexually coercive or unwanted sexual behavior by significant others because they want to maintain the relationship. Impett and Peplau (2002) found that college women commonly consented to unwanted sexual behavior for the following reasons: 1) to satisfy a partner’s needs, 2) to promote intimacy in the relationship, 3) to avoid rejecting a partner, 4) to avoid tension in the relationship, 5) to keep her partner from losing interest, and 6) she felt obligated to do so. Therefore, women who consent to unwanted sexual behavior from their significant other may not perceive the behavior as dangerous or assaultive. The current study did not ask participants to specify if the unwanted sexual behavior occurred with or without their consent, so it is unclear how many of the women consented to unwanted sexual acts from their significant others.

When examining mean perceived severity scores based on the methods of coercion, results indicated that women in the sample generally found assaults in which the offender utilized physical force to be more severe than assaults where offenders used verbal coercion or threatened physical force. This finding was expected, as it is consistent with the literature.

**Assault Severity Variables**

Bivariate correlations confirmed many of the hypothesized relationships among the assault variables measured by the SASS. As expected, victimization severity, physical injury, perceived severity, threatened force, physical force, peritraumatic distress reactions, and peritrauma and posttrauma self-schemas (i.e., self-defective and self-blame) were all significantly related with each other. Therefore, assaults that involve
more intrusive sexual behaviors are likely to also involve threatened and/or physical force that may lead to physical injuries and a perception of greater assault severity, which in turn can result in greater distress during the assaults and greater disruption in schemas about self. This finding provides further evidence that variables, such as perceived severity, physical injury, coercive methods, and peritraumatic distress reactions are also related to a latent construct of assault severity. The finding also highlights the association between assault severity and trauma-related cognitions that occur during and after the assault.

Bivariate correlations also confirmed many of hypothesized relationships between the assault variables measured by the SASS and symptoms of measured psychological distress. As expected, perceived severity, threatened force, peritraumatic self-defective schemas, posttraumatic self-defective and self-blame schemas, and peritraumatic distress reactions were all found to be positively related to all variables of psychological distress and coping self-efficacy was found to have a negative relationship. Victimization severity was related with all variables of psychological distress, with the exception of hyperarousal. Physical injury was related with intrusive recollections and avoidant numbing. These findings suggest that more intrusive sexual and physical acts are more likely to result in symptoms related to intrusive recollection and avoidance, whereas the victim’s subjective experience of the assault (i.e., perceived severity, peritraumatic and posttraumatic self-schemas, and peritraumatic distress reactions) is more likely to result in symptoms of hyperarousal. This is not unexpected, as symptoms of hyperarousal, such as hyper-vigilance and an exaggerated startle response, are related to an overgeneralization of perceived danger onto non-dangerous stimuli. Physical force was
related with anxiety but did not have a significant relationship with depression, stress, or symptoms of PTSD. The lack of relationship with PTSD symptoms, particularly intrusive recollections, was unexpected given the strong relationship between physical force and physical injury. It is possible that physical force does not provide any unique variance that is not already accounted for by physical injury.

Assault Variables Predicting Psychological Distress

Regression analysis confirmed that the SASS assault severity variables, peritraumatic distress reactions, peritraumatic and posttraumatic schemas, and coping self-efficacy work together to significantly predict post assault psychological distress. Upon closer examination, it was found that perceived severity, peritraumatic unsafe world schemas, posttraumatic self-defective schemas, and peritraumatic distress reactions were the only variables in the models to contribute unique variance. Of note, posttraumatic self-defective schemas was the only variable to be a significant predictor across all models. It should also be noted that the predictive significance of peritraumatic unsafe world schemas was weak. The significant contribution of these variables suggests that the victim’s subjective experience of the assault is the most important predictor of post assault psychological distress. These findings also suggest that the addition of peritraumatic schema disruptions does not contribute any unique variance in the prediction of post-assault distress that is not better accounted for posttraumatic schema disruptions.

Structural Models

Structural equation modeling was used to compare two sets of models that evaluate the relationship between assault severity and post assault distress, one using the
SASS to measure assault severity and the other using the SES-LFV. Comparison of the models suggested that, while the SASS model resulted in better fit statistics, the SES-LFV model was more consistent with the literature base. In the SES-LFV model, assault severity was significantly related to trauma cognitions, suggesting that greater assault severity leads to negative schemas about self and the world. Both assault severity and trauma cognitions were found to have significant relationships with general distress and PTSD. These associations indicate that trauma cognitions partially mediate the relationship between assault severity and psychological distress. Coping self-efficacy had a negative relationship with trauma cognitions, suggesting that negative schemas about self and others are associated with a lessening in one’s belief in her ability to cope with the assault. Therefore, if one believes that she is damaged and can no longer feel safe in her environment, she will not have a strong belief that she can cope with or overcome the consequences of the sexual assault. Coping self-efficacy was not found to have a significant relationship with general distress and PTSD. This finding suggests that coping self-efficacy does not contribute unique variance that is not better accounted for by trauma cognitions.

In contrast, assault severity was the only variable in the SASS model with a significant relationship with general distress and PTSD. This finding suggests that the variables used to measure assault severity in the SASS model contributed the most variance in the prediction of psychological distress. The model also found a positive relationship between trauma cognitions and coping self-efficacy. This finding was unexpected as Cieslak and colleagues (2008) assessed the relationship between coping self-efficacy and trauma cognitions, as measured by the PTCI, and found coping self-
efficacy to be negatively associated with cognitions about self and world. It appears that perceived severity may have contributed a significant amount of variance in the SASS model, which may have impacted the relationships between trauma cognitions, coping self-efficacy, and psychological distress. In rating the severity of a past assault, an individual may be influenced by post assault cognitions, thereby capturing variance in the perceived severity variable that might otherwise reside in posttraumatic cognition variables. The strong impact of perceived severity is not unexpected given the significant correlations with peritraumatic distress reactions, posttraumatic schemas and coping self-efficacy. Perceived severity was also found to be a significant predictor of psychological distress in the regression analyses.

The strong impact of perceived severity is also evident when comparing the measurement of assault severity between SASS and SES-LFV models. The two subscales of the SES-LFV had smaller correlations with trauma cognitions and the psychological distress variables when compared to perceived severity and did not have a significant relationship with coping self-efficacy. Therefore, it is likely that trauma cognitions contributed more variance in the model that used the SES-LFV than in the model that used the SASS. The stronger performance of perceived severity, when compared to the subscales of the SES-LFV, also provides further support for a continuous measure of the victim’s subjective experience of assault severity, rather than a hierarchical ranking.

An alternative SASS model was tested, using the PTCI rather than posttraumatic self-defective, self-blame, and unsafe world schemas, to see if the inclusion of the PTCI subscales would increase the relationship between trauma cognitions and change the direction of the relationship between trauma cognitions and coping self-efficacy.
Although this model resulted in a slight improvement in fit statistics, there was no change in the relationship between trauma cognitions and coping self-efficacy. Trauma cognitions also maintained a nonsignificant relationship with psychological distress. As in the previous model, it is possible that the retroactive reporting of perceived severity may have been influenced by posttraumatic schemas. There may be some shared variance between perceived severity and traumatic cognitions that impacted the relationship between trauma cognitions and psychological distress.

When compared to the initial SASS model, this final model resulted in stronger associations between assault severity and psychological distress. The association between assault severity and trauma cognitions also increased. These findings suggest that the PTCI is a stronger measure of posttraumatic schemas than the SASS posttraumatic schema subscales. When compared to the SES-LFV model, the relationships between assault severity and psychological distress, as well as the relationship between assault severity and trauma cognitions, were stronger, suggesting that the variables from the SASS provide a better measurement of assault severity.

Study Strengths

A strength of the study was a comparison of methods of measuring assault severity, the ordinal ranking system used on both the SES-LFV and SASS and a Likert rating of perceived severity on the SASS. The comparison of these methods demonstrated the vulnerability of the ordinal ranking system. An ordinal ranking structure of severity was either based on an assumption that more intrusive sexual acts are more severe or based on the mean perceived severity and emotional harm scores for each unwanted sexual act. The ordinal ranking system on the SASS did provide supporting evidence for
the assumption that completed sexual acts are perceived as more severe than sexual touching or attempted sexual acts. However, the SASS ordinal ranking system also demonstrated that there is variation in victims’ ratings of perceived severity among the specific unwanted sexual acts. This finding suggests that grouping sexual acts into general categories of attempted and completed will likely weaken the measurement of assault severity. Additionally, although the scoring procedure used on the SASS allowed the ordinal ranking of scores to represent the severity hierarchy that was reported by the participants in this sample, this method of scoring limited the generalizability of the results to other samples and did not appear to provide any unique information that is not already accounted for by directly assessing perceived severity. Therefore, there appears to be more utility in using a measure of perceived severity, rather than creating a hierarchy for victimization severity.

A comparison of the ordinal ranking system of the SES-LFV and the Likert rating system on the SASS also suggested that a Likert system would be a better measure of severity. The two severity subscales of the SES-LFV had smaller correlations with trauma cognitions and the psychological distress variables when compared to the perceived severity scale on the SASS. The results of the structural models also provided evidence supporting the use of a Likert rating system that assesses the victim’s perceived severity of the assault. The relationships between assault severity and psychological distress were stronger in models that used variables from the SASS, suggesting that the variable of perceived severity provides a better measurement of assault severity than an ordinal ranking system.
Another strength of the study was the comprehensive examination of assault variables. The thorough assessment of these variables aided in furthering knowledge on the contributions of each variable to the measurement of assault severity and their potential roles of predicting post-assault distress. For example, more intrusive sexual and physical acts are more likely to result in symptoms related to intrusive recollection and avoidance, whereas the victim’s subjective experience of the assault is more likely to result in symptoms of hyperarousal. With this knowledge, future research can test to see if these findings generalize to broader samples.

A final strength of the study was the direct comparison of the SASS with the SES-LFV. Although the SES-LFV is a variation of the original SES measure, the main components of the measure were the same. A direct comparison with a measure that is widely used in the literature base allows for conclusions regarding concurrent validity of the SASS and validity of the results from analyses using the SASS to be made with confidence.

Study Limitations

Although the model using the SASS to define assault severity was found to be a better measure of assault severity, when compared to the model using the SES-LFV, there are still many shortcomings of the measure that need to be addressed. First, the poor reliability of the items measuring verbal coercion, victim substance use, offender substance use, and victim-offender relationship did not allow for the inclusion of these variables in the measurement of assault severity. Therefore, the impact of these constructs on assault severity could not be examined. Continued efforts to edit and add items should be made and examined in future research.
The SASS also did not include questions that could add further clarity to some of the constructs. For example, the SASS asks about the location of the assault, but did not include any follow up questions regarding the victim’s thoughts about the locations. An examination of mean perceived severity scores based on type of location indicated assaults that occurred in more private settings were rated as more severe; however, it is unclear why private settings are related to higher severity ratings. A question assessing the victim’s perceived safety in that location may provide further information regarding disruption of safety schemas. Another needed addition to the SASS would be an item assessing other possible attempts at verbal coercion, such as guilting the victim or expressing dissatisfaction with the victim. These items could include, “It would make me happy,” “You have done it before,” or “If you don’t, it means you don’t love me.” An item assessing how much the victim believed the offender’s attempts at verbal coercion should also be included. The SASS includes questions that assess how much the victim believes the other coercive methods (threatened force and physical force), therefore, there should also be a similar item for verbal coercion.

A final limitation of the study is the use of a college sample. Because the study only surveyed female undergraduates, the results in the study may not generalize to a broader female population. For example, there would potentially be a difference in the 1) age at the time of the offense, 2) prevalence in the type of sexual assault, 3) relationship with the offender, and 4) location of the assault if a broader sample was surveyed. There may also be longer periods of time since the assault occurred, which could impact the presentation of psychological distress. Therefore, future research that surveys a broader
range of females is needed in order to obtain data that better represent the general female population.

Treatment Implications

The results of the study illustrate the importance of the victim’s subjective experience in the perception of assault severity and the development of psychological distress following a sexual assault. Of all of the assault variables examined in the study, peritraumatic distress reactions, peritraumatic and posttraumatic schema disruptions were consistently found to have a significant relationship with symptoms of PTSD. This finding provides supportive evidence for why empirically supported treatments for PTSD, particularly Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE), are effective. CPT was developed to treat symptoms of posttraumatic stress disorder in victims of sexual assault (Resick & Schnicke, 1992). This treatment is focused on identifying and challenging maladaptive thoughts and beliefs called “stuck points” that are developed after a trauma. Stuck points either confirm or contradict previously held beliefs about the self or the world (Resick & Schnicke, 1992). For example, if the victim believed that she is a weak person before the trauma, she may develop stuck points related to self-blame. If the victim had previously held beliefs that her environment is a safe place because she surrounds herself with those with whom she feels safe, she may develop stuck points related to distrusting others or seeing the world as a dangerous place. The items used on the peritraumatic and posttraumatic schema disruption subscales of the SASS (This sexual experience happened because I am too trusting of others; This sexual experience happened because I am a weak person) as well as the items of the PDI (I felt ashamed of my emotional reactions) can be conceptualized as stuck points that are
commonly targeted in CPT. If the victim is able to endorse these items on the SASS and PDI, it will aid the clinician in identifying potential stuck points to target during treatment.

Another empirically supported treatment, Prolonged Exposure (PE), also focuses on challenging distorted beliefs that are developed following a traumatic event. PE describes the development of PTSD symptoms using the emotional processing theory. Specifically, it follows the concept that the fear that was elicited during the traumatic event no longer serves an adaptive function because the fear has overgeneralized to harmless stimuli. The victim will then avoid the harmless stimuli in order to avoid the expected feelings of fear. This avoidance negatively reinforced the erroneous perception of danger. Common distorted beliefs that are targeted in PE are 1) harmless stimuli are dangerous, 2) feelings of fear will not end unless she escapes the aversive situation, and 3) feelings of fear will cause her to lose control. Items on the SASS (*People are not who they appear to be; I will never feel safe again*) and PDI (*I had the feeling I was about to lose control of my emotions*) are consistent with these distorted beliefs. PE utilizes two types of exposure exercises, in vivo and imaginal exposure, to help the victim challenge these distorted beliefs. In vivo exposure involves identifying safe situations that the victim typically avoids and requiring the victim to stay in each situation for at least 45 minutes or until her rated distress level decreases by half. By having the victim stay in the aversive situation, she realizes that the situation is not as dangerous as she originally perceived. She will also learn that her feelings of fear will naturally decrease as she stays in the situations and that she will not lose control by staying in the situation. Imaginal exposure requires the victim to recount the traumatic event to the clinician during the
session. It is expected that through repeated retellings, the victim will make the
distinction between remembering the trauma and being re-traumatized. Therefore, she
will experience less fear the more times she recounts the event (Foa, Hembree, &
Rothbaum, 2007).

Identifying the types of schema disruptions and maladaptive cognitions the victim
experiences as a result of the trauma could help a clinician decide between these two
empirically supported treatments. Although CPT and PE have both been found to have
effective outcomes in reducing symptoms of PTSD and depression (Bradley, Greene,
Russ, Dutra, & Westen, 2005; Mendes et al., 2008; Resick, Monson, & Rizvi, S.L.,
2008), there is some evidence that CPT is more effective at decreasing feelings of
hopelessness and trauma-related guilt (Gallegher & Resick, 2012; Nishith, Nixon, &
Resick, 2005; Resick, Nishith, Weaver, Astin, & Feuer, 2002). Therefore, if the victim
reports on the SASS and PDI that she is predominantly experiencing negative cognitions
about herself and feelings of guilt related to self-blame, she may be a better candidate for
CPT. Likewise, if the victim is reporting more distress related to distorted beliefs about
others and the world, PE may be a better fit. Further research comparing the two
treatments is needed, however, before definitive conclusions can be made.
Please answer the following questions regarding any unwanted sexual behavior you have experience since the age of 18.

**How many times, since the age of 18, have any of the following sexual behaviors happened to you without your permission or consent?**

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Once</th>
<th>Twice</th>
<th>Three times or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Someone touched, kissed, or rubbed against the private parts of your body (i.e., breasts, crotch, butt), but did not attempt sexual intercourse</td>
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<tr>
<td>2. Someone TRIED to perform oral sex on you</td>
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<tr>
<td>3. Someone TRIED to make you perform oral sex on them</td>
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<tr>
<td>4. Someone TRIED to have vaginal sex with you (either with his penis or by inserting fingers or objects)</td>
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<tr>
<td>5. Someone TRIED to have anal sex with you (either with his penis or by inserting fingers or objects)</td>
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<tr>
<td>6. Someone performed oral sex on you</td>
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<td>7. Someone made you perform oral sex on them</td>
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<td>8. Someone had vaginal sex with you (either with his penis or by inserting fingers or objects)</td>
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<tr>
<td>9. Someone had anal sex with you (either with his penis or by inserting fingers or objects)</td>
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</table>
Assault Characteristics

If you have experienced any of the previous unwanted sexual acts, please answer the following questions. If you have experienced more than one unwanted sexual act, use the experience that was most distressing for you to answer the questions.

10. How old were you when the sexual experience occurred? __________

11. How much time has passed since the sexual experience occurred?

   1 = < 1 week
   2 = 1-4 weeks
   3 = 1-2 months
   4 = 3-6 months
   5 = 7-11 months
   6 = 1-2 years
   7 = More than 2 years

12. How many people were involved in the sexual experience (excluding you)?

   1
   2
   3
   4
   5+

13. Was the person(s) you had the sexual experience with male or female? If there were multiple people and some were male and some female, then mark “Both”

   1 = Male
   2 = Female
   3 = Both

14. The sexual experience occurred:

   1 = in public, outside (i.e., parking lot, alley, park)
   2 = in public, inside (i.e., bar, public bathroom)
   3 = at the person’s house/apartment/dorm
   4 = at my house/apartment/dorm
   5 = Other: ____________________

Victim Offender Relationship:
15. The person(s) who I had the sexual experience with was: (If more than one person, circle all that apply)

- a = stranger
- b = someone I just met
- c = an acquaintance
- d = close friend/confidant (but I’ve never had sexual relations with him/her before)
- e = someone that I’ve had previous sexual relations with (i.e., acquaintance, close friend, ex)
- f = a significant other or spouse

16. How close of a relationship did you have with the person you had the sexual experience with?

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<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>I trusted them with my secrets</td>
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If there was more than one person involved, please rate how close of a relationship you had with the person when the sexual experience happened. Circle N/A if there was no second, third, fourth, or fifth person involved.

<table>
<thead>
<tr>
<th>Second person</th>
<th>N/A</th>
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<td>Not at all</td>
<td>I trusted them with my secrets</td>
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<th>Third person</th>
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<tr>
<td></td>
<td></td>
<td>Not at all</td>
<td>I trusted them with my secrets</td>
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<th>Fourth person</th>
<th>N/A</th>
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<td></td>
<td></td>
<td>Not at all</td>
<td>I trusted them with my secrets</td>
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<th>Fifth person</th>
<th>N/A</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Not at all</td>
<td>I trusted them with my secrets</td>
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17. How safe did you feel with the person prior to the sexual experience?

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<tr>
<td></td>
<td>Not at all</td>
<td>Extremely Safe</td>
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<td></td>
<td></td>
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<tr>
<td>Safe</td>
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</tbody>
</table>

If there was more than one person involved, please rate how safe you felt with each person prior to the sexual experience. Circle N/A if there was no second, third, fourth, or fifth person involved.
18. Approximately how many people were present during the sexual experience (but did not participate)?

No one else present (0)
1
2
3
4
5+

Perceived Assault Severity

19. How severe would you rate the sexual experience?

0 1 2 3 4 5 6 7 8 9 10
Not at all severe Extremely Severe

20. How much emotional harm do you believe you have dealt with as a result of the sexual experience?

0 1 2 3 4 5 6 7 8 9 10
None Extreme Harm
21. The person(s) who I had the sexual experience with did which of the following to persuade me to do the sexual act:

a. Tried to convince me
b. Threatened to end our relationship
c. Threatened to spread rumors about me
d. None of the above

22. How effective was this method of persuasion? If none of the methods were used, circle N/A:

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all effective Extremely effective

23. If the person threatened to end the relationship, how much did you believe the threat? If the person did not make these threats, circle N/A:

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all happen I knew it would happen

24. If the person threatened to spread rumors about you, how much did you believe the threat? If no threats were made, circle N/A:

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all happen I knew it would happen

25. The person who I had this sexual experience THREATENED to do which of the following if I did not do the sexual act.

a. Hold me down or restrain me
d. beat me
g. kill me
b. Slap me
e. choke me
h. none of the above
c. Punch or kick me
f. use a weapon
26. How much did you believe the threat? If the person did not make these threats, circle N/A.

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all I knew it would happen

27. How afraid were you when the threat was made? If the person did not make any of these threats, circle N/A.

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all Extremely afraid

28. How effective was the threat? If the person did not make any of these threats, circle N/A.

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all Extremely effective

29. The person who I had the sexual experience with did which of the following when I did not do the sexual act. Please check all that apply

a. held me down or restrained me  d. beat me  g. none of the above
b. slapped me  e. choked me
c. punched or kicked me  f. used a weapon

30. How afraid were you when the person did one or more of these acts of physical force? If the person did not do any of these acts, circle N/A.

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all Extremely afraid
31. How effective was this act of physical force? If the person did not do any of these acts, circle N/A.

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all effective Extremely effective

32. What type of physical injuries did you have as a result of this act of physical force?

a. bruising  d. small/shallow cuts
b. soreness  e. deep cuts/lacerations
c. swelling

33. I received medical treatment (i.e., went to the doctor or hospital) for injuries I received during the sexual experience.

0 = No  1 = Yes

34. How severe were your physical injuries? If you did not have physical injuries, circle N/A.

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all severe Extremely severe

Substance Use

Please answer the following questions regarding substance use at the time of the sexual experience.

35. At the time of the sexual experience, I was drinking alcohol

0 = No  1 = Yes

36. How many drinks did you have?

0 (N/A)
1-2
3-4
5-6
7+
37. Please rate your degree of intoxication at the time of the sexual experience. If you did not drink alcohol, circle N/A.

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all drunk Black out drunk

38. Did the person(s) you had the sexual experience with insist that you drink alcohol?

0 = No 1 = Yes

39. To your knowledge, did the person(s) you had the sexual experience with put any drugs or substances in your drink?

0 = No 1 = Yes

40. To your knowledge, did the person(s) you had the sexual experience with drink alcohol before or during your sexual encounter?

0 = No 1 = Yes

41. Approximately, how many drinks did the person(s) have? If you are unsure, please take your best guess.

None
1-2
3-4
5-6
7+

42. Please rate the person(s) level of intoxication at the time of the sexual experience. If the person(s) was not drinking, circle N/A

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all drunk Black out drunk

43. At the time of the sexual experience, were you using illicit substances (i.e., marijuana, ecstasy, oxycontin, crack, cocaine, meth)?

0 = No 1 = Yes
44. What drug(s) did you use?

a. marijuana  
d. methamphetamine  
g. mushrooms  
b. prescription pain meds/ 
  sedatives (i.e., oxycontin)  
e. ecstasy  
h. none  
c. crack/cocaine  
f. LSD

45. Please rate how high you were at the time of the sexual experience. If you did not use any drugs, circle N/A.

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all high  Extremely high

46. Did the person(s) you had the sexual experience with insist that you use illicit substances?

0 = No  
1 = Yes

47. To your knowledge, what drug(s) did the person(s) use?

a. marijuana  
d. methamphetamine  
g. mushrooms  
b. prescription pain meds/ 
  sedatives (i.e., oxycontin)  
e. ecstasy  
h. none  
c. crack/cocaine  
f. LSD

48. Please rate how high the person(s) was at the time of the sexual experience. If the person(s) did not use drugs, mark N/A.

N/A

0 1 2 3 4 5 6 7 8 9 10
Not at all high  Extremely high
Peritraumatic Schemas

Please answer the following questions regarding some of the thoughts or beliefs you may have had DURING the sexual experience or IMMEDIATELY AFTER.

<table>
<thead>
<tr>
<th>Timeframe: DURING OR IMMEDIATELY AFTER</th>
<th>0</th>
<th>1</th>
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<tbody>
<tr>
<td>49. I did not expect this person(s) to ever harm me.</td>
<td>0</td>
<td>1</td>
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<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
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<tr>
<td>50. I did not expect something like this to happen in the location I was in.</td>
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<td></td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
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<td>51. This sexual experience happened because of something I said or did.</td>
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<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
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<td>52. I “led on” the person I had the sexual experience with.</td>
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<td>Strongly Disagree</td>
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<tr>
<td>53. This sexual experience happened because I am too trusting of others.</td>
<td>0</td>
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<td>Strongly Disagree</td>
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<tr>
<td>54. This sexual experience happened because I am a weak person.</td>
<td>0</td>
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<tr>
<td>55. I will not be able to trust anyone again.</td>
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<tr>
<td>56. People are not who they appear to be.</td>
<td>0</td>
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<tr>
<td>57. I will never feel safe again.</td>
<td>0</td>
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<td>Strongly Disagree</td>
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<tr>
<td>58. The world is a dangerous place.</td>
<td>0</td>
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<td>Strongly Disagree</td>
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<tr>
<td>59. I feel like no matter what I do, bad things happen to me.</td>
<td>0</td>
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<td></td>
<td>Strongly Disagree</td>
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<td>Question</td>
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<td>Disappearance Level</td>
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<tr>
<td>60. I feel broken or damaged.</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
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<tr>
<td>61. I will not be the same person after this.</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
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</tbody>
</table>

Posttraumatic Schemas

Please answer the following questions regarding some of the thoughts or beliefs you may have had SINCE the sexual experience. This would include the time IMMEDIATELY following the sexual experience to TODAY.

<table>
<thead>
<tr>
<th>Question</th>
<th>Agreement Level</th>
<th>Disappearance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>62. I did not expect this person(s) to ever harm me.</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>63. I did not expect something like this to happen in the location I was in.</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>64. This sexual experience happened because of something I said or did.</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>65. I “led on” the person I had the sexual experience with.</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>66. This sexual experience happened because I am too trusting of others.</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>67. This sexual experience happened because I am a weak person.</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>68. I will not be able to trust anyone again.</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>69. People are not who they appear to be.</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
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</tr>
<tr>
<td>70. I will never feel safe again.</td>
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<td>1</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td></td>
</tr>
<tr>
<td>71. The world is a dangerous place.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td></td>
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<tr>
<td>72. I feel like no matter what I do, bad things happen to me.</td>
<td>0</td>
<td>1</td>
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<tr>
<td></td>
<td>Strongly Disagree</td>
<td></td>
</tr>
<tr>
<td>73. I feel broken or damaged.</td>
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<td>1</td>
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<tr>
<td></td>
<td>Strongly Disagree</td>
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</tr>
<tr>
<td>74. I will not be the same person after this.</td>
<td>0</td>
<td>1</td>
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<tr>
<td></td>
<td>Strongly Disagree</td>
<td></td>
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</tbody>
</table>
APPENDIX B

INSTITUTIONAL REVIEW BOARD NOTICE OF COMMITTEE ACTION

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 12071901
PROJECT TITLE: The Sexual Assault Severity Scale: A Comprehensive Measure of Assault Severity
PROJECT TYPE: Dissertation
RESEARCHER/S: Karyn Stahl
COLLEGE/DIVISION: College of Education & Psychology
DEPARTMENT: Clinical Psychology
FUNDING AGENCY: NIA
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF PROJECT APPROVAL: 07/24/2012 to 07/23/2013

Lawrence A. Hosman, Ph.D.
Institutional Review Board Chair
REFERENCES


the annual meeting of the Association for Advancement of Behavior Therapy, New York.


Ullman, S.E., & Najdowski, C.J. (2010). Understanding alcohol-related sexual assaults:


