

THE ROLE OF COGNITIONS ABOUT SEXUALITY IN THE ADULT SEXUAL ASSAULT
OF CHILD SEXUAL ABUSE SURVIVORS

by

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(Under the Direction of JOAN JACKSON)

ABSTRACT

The majority of research on the impact of childhood sexual abuse (CSA) on sexuality has focused on sexual behavior, with few studies examining the impact of CSA experiences on sexual self-perception and cognitions about sexuality. The current study examined differences in cognitions about sexuality, as assessed by the sexual self-schema factors, between CSA victims and nonvictims and explored how these differences may contribute to risk for adult sexual assault experiences. Participants were 1150 predominantly white, heterosexual women who completed paper and pencil, self-report assessment measures pertaining to the constructs of interest. CSA victims and nonvictims differed on each sexual self-schema factor with CSA victims reporting higher openness and immoral-irresponsible cognitions about sexuality but less embarrassed and passionate-romantic cognitions. However, these cognitions about sexuality did not mediate the relationships between CSA and adult sexual assault or between CSA and risky sexual behaviors as hypothesized. Post-hoc analyses found several instances where cognitions about sexuality did moderate the relationships between CSA and adult sexual assault as well as between CSA and risky sexual behaviors. Implications of these findings and directions for future research are discussed.

INDEX WORDS: child sexual abuse, revictimization, adult sexual assault, sexual self-schema

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Chapter 1

Introduction

Child sexual abuse (CSA) is a prevalent problem that has been associated with a wide array of psychological, behavioral, emotional, interpersonal, and sexual consequences (Browne & Finkelhor, 1986). The body of literature that has accumulated to document these possible outcomes is a testament to the seriousness of this problem. The current generation of research in this field is geared toward explaining why and under what circumstances these particular outcomes emerge in an effort to create effective intervention and prevention programs.

The experience of CSA has been found to interfere with the development of one's sexuality and sexual functioning (Cole & Putnam, 1992; Noll, Trickett, & Putnam, 2003; Polusny & Follette, 1995). However, while differences between CSA victims and nonvictims in sexual behavior have received empirical attention, little consideration has been directed toward the psychological processes that may underlie differences in sexuality observed in CSA victims versus nonvictims. These differences in cognitive sexuality have been hypothesized to contribute to the adult revictimization of CSA victims, and consequently, pinpointing the psychological mechanisms that may be involved is an important area of investigation (Messman-Moore & Long, 2003). This paper will provide a review of the CSA literature, focusing on its long-term effects on sexuality, particularly

sexual behavior patterns. The present study will then investigate the impact of child sexual abuse on the cognitive components of sexuality, using Cyranowski and Andersen's (1998) sexual self-schema construct, and the potential role these sexual self-schemas may play in the relationship between CSA and adult revictimization.

Description of Child Sexual Abuse

The definition of CSA used in the present study encompasses any kind of exploitive sexual contact or noncontact sexual behavior that occurred before the victim was 14 years of age. This definition is adapted from Russell's (1986) criteria. The sexual activity may be intrafamilial or extrafamilial, that is the perpetrator may be a family member or someone outside of the family. Although information regarding the age difference between the victim and perpetrator was elicited, age difference restrictions were not imposed in order for the event to be considered abusive. Prior research has found that most perpetrators were 10 or more years older than their victims, and abuse in childhood by an individual three years or less older than the victim is rare (Finkelhor et al., 1990).

Definitions of CSA must also address the types of sexual acts involved. Some researchers use a narrow definition of abuse that encompasses all types of contact abuse and other times only attempted or completed intercourse as CSA activities in an attempt to examine a "more severely abused" population (Jehu, 1988; Russell, 1986). Contact behaviors generally include penile-vaginal intercourse, oral sex, anal sex, and rubbing of genitals against the victim's body (Wyatt & Peters, 1986). A more inclusive definition of CSA includes these "most severe acts" in addition to other sexual activities. These other sexual activities encompass fondling as well as noncontact behaviors such as exposure of

genitals and solicitation for sexual acts (Fromuth, 1986; Wyatt & Newcomb, 1990). The current study included both contact and noncontact behaviors; however, exploratory analyses used an index of severity of abuse to determine the potential differential impact of different types of abuse activities on cognitions about sexuality as well as adult revictimization and risky sexual behaviors.

In a retrospective study using college undergraduates, Fromuth (1986) found that 50% of the CSA victims were fondled, while intercourse occurred much less frequently. Although fondling does appear to be the most frequent sexual act in abuse experiences (Russell, 1986), Finkelhor and colleagues (1990) found that 49% of the women in their national sample reported an attempted or completed intercourse. In a community sample of abused children, the average number of sexual acts to which a child was exposed was 3.5 (Conte & Schuerman, 1987).

A wide range of estimates of the prevalence of CSA have emerged in the literature. The disparity in these numbers is due in part to the use of the different definitions of CSA described above as well as to the variety of ages used to separate CSA from adolescent and adult sexual abuse (Leonard & Follette, 2002). Using an inclusive definition of CSA, 21-32% of women retrospectively reported such experiences occurring before they were 18 years of age (Vogeltanz, Wilsnack, Harris, Wilsnack, Wonderlich, & Kristjanson, 1998). Using a less inclusive definition with the same sample resulted in CSA prevalence rates ranging from 15 to 26% (Vogeltanz et al., 1998). These particular prevalence rates were generated from face to face interviews conducted by trained female interviewers with a nationally representative sample of women ages 21 or older (Vogeltanz et al., 1998). In another random probability sample drawn from individuals throughout the United States,

17% of the women interviewed endorsed having been sexually touched prior to puberty (Laumann, Gagnon, Michael, & Michaels, 1994). Therefore, it seems that in community samples, when definitions of CSA include only contact behaviors, prevalence rates seem to be approximately 20 % of the population.

Similar prevalence rates have been found in samples of college women. For example, 22% of Fromuth's (1986) college sample endorsed CSA experiences; these experiences had to have occurred before the women were 16 years of age and encompassed both noncontact and contact behaviors. Russell (1986) considered unwanted sexual contact or attempted sexual contact by a family member as CSA until the victim was 18, however the same sexual contact by a nonfamily member was only considered CSA until the victim was 14. In these restrictions, 48 percent of women in this community sample reported at least one CSA experience before they reached age 14, while 54 percent reported at least one such experience before they reached 18 years of age (Russell, 1986). Research examining the stability of prevalence rates of CSA has been conducted with results suggesting that the prevalence of CSA among females has remained stable over time (Wyatt et al., 1999).

While there is some inconsistency in the most common age of onset of CSA, children seem to be most frequently victimized before puberty. Trickett and Putnam (1993) report that the most frequent age of the child at the onset of the abuse is from 7-8 years, and Finkelhor and colleagues (1990) found the median age of abuse onset for girls was 9.6 years. Wyatt (1985) reported differences in the age of abuse onset between White and Afro-American females, as the White girls were abused more often between 6 and 8 years of age while the Afro-American girls experienced more abuse between 9 and 12 years of age.

Approximately 40 percent of female CSA victims in a nationally representative sample reported intrafamilial abuse, and 11.3 percent endorsed having both intrafamilial and extrafamilial abuse occurrences (Vogeltanz, et al., 1999). In another national sample, most CSA perpetrators of girls were male; ninety-three percent of female victims were abused by at least one male, and nine percent were abused by at least one female (Briere & Elliott, 2003). The vast majority of victims knew their perpetrators as only 11 or 12% of female victims were abused by strangers (Fromuth, 1986; Russell, 1986). In their community sample of abused children, Conte and Schuerman (1987) found that 29% were abused by a natural parent or stepparent, 30% by a family acquaintance, 23% by another relative, 7% by a babysitter, 4% by a stranger, and .5% by a parent's partner. Gold (1986) found the percentage of perpetrators that are family members, acquaintances, and strangers to be 36%, 51%, and 12%, respectively. Among women abused by family members, fathers were the most frequent perpetrators in Jackson and colleague's sample of college women who had experienced intrafamilial abuse (Jackson, Calhoun, Amick, Maddever, & Habif, 1990). However, higher rates of abuse have been reported between nonbiological fathers (i.e., stepfathers and father substitutes) and female children than between biological fathers and children (Russell, 1986; Gordon & Creighton, 1988). In addition, Russell (1986) found that the severity of the abuse was greater when the perpetrator was a stepfather.

Around 60% of CSA experiences reported by a college sample involved one event; however, experiences that occur multiple times tend to continue for an extended period of time (Fromuth, 1986). Trickett and Putnam (1993) reported that the mean duration of CSA is around 2 years; however, Jackson and colleagues (1990) found that for 32% of their sample of incest victims, the abuse had continued for 6 to 10 years. These discrepancies in duration

of abuse may be the result of the diversity of abuse experiences. It seems that some clarity may be achieved by examining duration in the context of the perpetrator. Abuse by a stranger is more likely to occur only once, while experiences involving multiple assaults are more likely to be perpetrated by family members (Kinzl, Traweger, & Biebel, 1995).

Another important component of abuse experiences is the use of force or psychological coercion. Even if explicit threats are not used, some form of coercion is usually present in CSA events. In their nationally representative sample, 19 percent of abuse incidents involved physical force (Finkelhor, et al., 1990) as compared to 25 percent in Wyatt's (1985) sample. Around 10% of experiences involved explicit psychological coercion (Wyatt, 1985).

Description of Revictimization

A variety of definitions of revictimization are currently in use (Messman-Moore & Long, 2003). For the purpose of this study, revictimization refers to the experience of CSA, defined as any kind of exploitive sexual contact or attempted sexual contact that occurred before the victim was 14 years of age, and then, a subsequent unwanted adult sexual experience that occurred since age 14. As with CSA, definitions of adult sexual assault must also address the types of sexual acts involved. The current study included a broad range of unwanted sexual activities in the definition of adult sexual assault, including forced sex play, attempted rape, and completed rape. The age 14 was chosen to separate CSA from adolescent and adult sexual abuse due to the developmental context of this age. Cole and Putnam (1992) describe adolescence as a time when individuals are attempting to absorb emerging sexual identities and are exploring opposite-sex peer relationships. Consequently, sexual abuse that occurs during or after adolescence involves a sexually mature individual.

In addition, adolescent individuals are beginning to explore new social contexts as parental supervision is lessened and more time is spent with peers, including emerging opposite-sex relationships. As these new relationships become increasingly important, the boundaries of adolescents' physical worlds also begin expanding. This broadening of relationships and personal independence may explain the increase in sexual victimization by non-family members during adolescence, particularly victimization in dating relationships. Vicary and colleagues (1995) found 23% of adolescent rural girls reported sexual abuse by a boyfriend or date partner (Vicary, Klingman, & Harkness, 1995). Similarly, Humphrey and White (2000) found that the likelihood of experiencing sexual assault increases steadily between the ages of 14 and 18, and nearly half (49.5%) of their college sample reported sexual victimization during adolescence. The National Crime Victimization Survey (2000) reports that women between the ages of 12 to 17 are two to three times more likely to experience an unwanted sexual experience than adult women. Most incidents of incest which may be best characterized as CSA experiences begin before the victim reaches adolescence (Cole & Putnam, 1992). Any incidents of incest that began after the victim turned 14 will be excluded from analyses of the current study as these relationships are rare and may reflect different mechanisms of impact than the extrafamilial victimization which is more common at this age.

Adolescent unwanted sexual experiences will encompass nonconsensual sexual acts occurring at or after age 14 ranging from sex play activities such as fondling, kissing, or petting to penile-vaginal as well as oral and anal penetration (Abbey, Ross, McDuffie, & McAuslan, 1996a). Attempted intercourse will also be classified as an unwanted sexual experience. The term "unwanted sexual experiences" will be used instead of sexual assault

or rape as women who have experienced events which meet the legal definition of rape may not label them as such (Koss, 1985).

Estimates of the prevalence of revictimization range from 15 to 79 percent of CSA survivors (Roodman & Clum, 2001). Other estimates of revictimization indicate the higher end of the above prevalence rate is most valid. For example, sixty-five percent of women abused by incest and sixty-one percent of women abused by someone outside of their families were victims of rape or attempted rape after age fourteen (Russell, 1986). Thirty-five percent of women with no CSA history reported adult victimization (Russell, 1986), so approximately twice as many CSA survivors are victimized as adults than women without this CSA history (Gidycz, Coble, Latham, & Layman, 1993; Mayall & Gold, 1995; Russell, 1986; Tjaden & Thoennes, 2000; Wyatt, Guthrie, & Notgrass, 1992).

Possible Outcomes of Child Sexual Abuse

CSA is a significant risk factor for a range of emotional, psychological, interpersonal, somatic, social, and sexual problems (Browne & Finkelhor, 1986). Some survivors experience many of these negative outcomes, while others are not as seriously impacted. Women who have CSA experiences are at a heightened risk for sexual revictimization in adulthood compared to nonabused women (Gidycz, et al., 1993; Mayall & Gold, 1995; Roodman & Clum, 2001; Russell, 1986; Tjaden & Thoennes, 2000; Wyatt, Guthrie, & Notgrass, 1992). Because revictimization and the sexual behaviors that are postulated to contribute to it are the focus of this paper, they will be discussed in detail in a separate section below.

In one of their general population studies of the mental health sequelae of self-reported CSA, Saunders and colleagues (1992) found that CSA was associated with a broad

range of Axis I disorders including depression, obsessive compulsive disorder, phobias, panic disorder, posttraumatic stress disorder, and sexual disorders (Saunders, Villepontoux, Lipovsky, Kilpatrick, & Veronen, 1992). Of these many pathologies, depression is the most common difficulty reported by CSA victims (Browne & Finkelhor, 1986). Another correlate of CSA was suicidal behavior including suicidal ideation and attempts (Saunders et al., 1992; Tyler, 2002). In addition, in a more recent study of psychological sequelae, CSA was associated with anxious arousal, depression, anger-irritability, intrusive experiences, defensive avoidance, dissociation, sexual concerns, dysfunctional sexual behavior, impaired self-reference, and tension reduction behavior. Each of these domains was assessed by an individual scale of the Trauma Symptom Inventory (Briere & Elliott, 2003).

Additional long-term effects of CSA are a greater risk for developing borderline personality disorder (Polunsky & Follette, 1995), substance abuse problems (Wilsnack, Vogeltanz, Klassen, & Harris, 1997), somatic complaints (Briere & Runtz, 1990), memory disturbances (Polusny & Follette, 1995), poor self-esteem (Browne & Finkelhor, 1986), behavior problems such as running away, hyperactivity, illegal acts, and regression/immaturity (Kendall-Tackett, Williams, & Finkelhor, 1993), and feelings of shame and guilt (Kessler & Bieschke, 1999). The evidence for the relationship between eating disorders and CSA was reportedly mixed in a review by Polunsky and Follette (1995).

Despite the array of psychological and behavioral problems which have been associated with CSA, it should be noted that some survivors report positive outcomes that emerge from their abuse experiences. When a community sample of 154 CSA victims were questioned about the impact of their abuse experiences, approximately half of the women reported some perceived benefit (McMillen, Zuravin, & Rideout, 1995). McMillen and

colleagues (1995) organized the perceived benefits into four domains: self-protection, increased knowledge of CSA, protecting children from abuse, and having a stronger personality. Perceived benefits of adult sexual assault in a community sample included increased empathy, greater appreciation of life, and better relationships. These positive changes occurred as soon as two weeks after the assault and increased over the post-assault year (Frazier, Conlon, & Glaser, 2001). This adversarial growth literature is growing and important to acknowledge as it speaks to the tremendous resilience of these sexual abuse survivors.

Risk of Revictimization

The heightened risk of women with a CSA history for sexual revictimization in adulthood is well documented (Gidycz, et al., 1993; Mayall & Gold, 1995; Roodman & Clum, 2001; Russell, 1986; Tjaden & Thoennes, 2000; Wyatt, Guthrie, & Notgrass, 1992). Although most of the studies that have established this relationship have been retrospective in design, it is important to note that the above study by Gidycz and colleagues (1993) was prospective. In this study, women with a sexual victimization history were twice as likely to experience a sexual assault during a 9-week period than women without prior victimization experiences. CSA was both directly and indirectly associated with adult sexual assault through its strong relationship with adolescent sexual assault, which was then significantly predictive of adult sexual assault (Gidycz et al., 1993). Gidycz and colleagues (1995) continued to reassess these women every three months for nine months. They found that the risk of being victimized in one time period increased with greater severity of victimization in the preceding time period. In addition to a heightened risk for sexual assault, CSA victims appear to also be at increased risk for adult physical assault (Polunsky & Follette, 1995), a

finding that has prompted researchers to broaden the definition of revictimization to encompass nonsexual victimization experiences (Messman-Moore, Long, & Siegfried, 2000; Messman-Moore & Long, 2000).

This “vicious cycle of revictimization” has lead researchers to recognize the need to identify the specific variables that put CSA victims at risk for adult victimization (Mandoki & Burkhardt, 1989). This area of research is tremendously important, for as these risk factors are pinpointed, prevention and intervention programs can be created to target these variables. Currently, the following psychological sequelae of CSA have been recognized as potential explanatory variables for the relationship between CSA and adult revictimization: posttraumatic symptomatology, alcohol and drug use, poor risk recognition, sexual behavior, and interpersonal difficulties (Messman-Moore & Long, 2003). The variables that will be the primary focus of this study are sexual behavior and substance misuse, however, some of the other CSA sequelae will be discussed as they relate to these areas of primary focus.

Sexual Behaviors

CSA, in comparison to physical and psychological abuse, has been uniquely associated with maladaptive sexual behavior and dysfunctional sexual concerns (Briere & Runtz, 1990; Briere & Elliott, 2003). Although physical and emotional abuse in childhood also appears to put women at a greater risk for adult sexual victimization (Roodman & Clum, 2001), CSA appears to be most strongly associated with adult sexual victimization (Merrill et al., 1999). Prior research has supported two pathways through which CSA may impact survivors’ sexuality, either increasing or decreasing victim’s interest in sexuality and engagement in sexual behavior.

The first pathway is that some CSA survivors may have a heightened interest in sexual activity (Mayall & Gold, 1995). Even as children, CSA victims sometimes exhibit sexual behavior disturbances such as open masturbation, excessive sexual curiosity, and frequent exposure of the genitals (Browne & Finkelhor, 1986). Two differences in the sexual behavior of adult women with and without a CSA history that have received much empirical support are age at first consensual intercourse and number of sexual partners. Women who had experienced attempted or completed intercourse as children were younger at first consensual intercourse (Miller, Monson, & Norton, 1995; Noll, Trickett, & Putnam, 2003; Siegel & Williams, 2003) and had engaged in intercourse with a greater number of partners (Fergusson, Horwood, & Lynskey, 1997; Himelein, Vogel, & Wachowiak, 1994; Koss & Dinero, 1989; Laumann, et al., 1994; Mayall & Gold, 1995; Siegel & Williams, 2003; Tsai, Feldman-Summers, & Edgar, 1979). The differences in the number of consensual sexual partners between women with a CSA history versus women without a CSA history have been found to be quite striking. Laumann and colleagues (1994) found that 21% of CSA victims in their national sample had more than 10 previous consensual sexual partners whereas only 7% of nonvictims reported having 10 or more partners (Laumann et al., 1994).

This heightened engagement in sexual behavior extends into other areas as well. In a college sample, more women with a CSA history reported having had sex outside of their abuse experiences as well as a greater frequency of engaging in sexual behavior than nonvictims (Alexander & Lupfer, 1987). CSA victims have also been found to engage in higher rates of sexual behaviors considered unacceptable by societal standards (Walser & Kerns, 1996), to be more likely to engage in HIV-risk behaviors (Elze, Auslander, McMillen, Edmond, & Thompson, 2001), and to be less likely to use contraception (Mason,

Zimmerman, & Evans, 1998). In their investigation of the impact of a variety of child abuse experiences on adult sexuality, Meston and colleagues (1999) found that CSA was positively related to the experience of a variety of sexual thoughts and behaviors in college women. CSA experiences were positively correlated with range of sexual fantasies experienced, frequency of intercourse and masturbation, and the likelihood of engaging in unrestricted sexual fantasies and behaviors (Meston, Heiman, & Trapnell, 1999). The unrestricted sexual fantasies and behaviors assessed in this study included number of lifetime consensual sexual partners, number of one-time only sexual relationships, number of partners with whom the participant had engaged in any kind of sexual foreplay, having more than one sexual relationship occurring at the same time, and willingness to engage in a sexual affair despite being involved in a committed relationship (Meston, Heiman, & Trapnell, 1999).

Psychological factors may account for these sexual behavior differences found between CSA victims and nonvictims. Some researchers have posited that for CSA victims who exhibit a heightened interest in sexual behavior, sex may function as a primary method of achieving intimacy and affection (Noll, Trickett, & Putnam, 2003). When a trusted individual abuses a child, the child may learn that such boundary violations are a normal part of close relationships. Arata (2000) postulated that increased sexual behavior may be an effect of self-blame; if a CSA victim is experiencing guilt and shame due to blaming herself for her abuse history, she may see herself as only being worthy of a relationship if sex is offered (Arata, 2000).

A different explanation for this amplified participation in sexual activity offered by Alexander (1992) is that women with CSA history may use compulsive sexuality to experience short-lived intimacy without the anxiety of an emotional bond. Sexual behavior

may essentially be used as a form of avoidant coping for the fear and concern of being hurt again by a trusted other (Alexander, 1992). Finally, sexual activity may be used as a strategy for coping with the psychological distress that has been consistently linked to CSA. Tension-reducing activities including sexual behaviors, sexual arousal, and positive sexual attention are frequently effective in temporarily reducing negative affect by providing a pleasurable or distress-incompatible experience. Consequently, when used in this manner, sexual behavior would be negatively reinforced, perpetuating the higher level of sexual activity (Briere & Elliot, 1994).

The elevated number of consensual sexual partners reported by some women with a CSA history likely contributes to revictimization in adulthood. This relationship makes sense from a simple probabilistic standpoint. Having more sexual partners increases a woman's risk of contact with a sexually aggressive male (Koss & Dinero, 1989). Examinations of CSA victims who have been revictimized versus those who have not been revictimized have found significant differences between the two groups. Revictimized CSA victims reported more dating and sexual partners than women with only a CSA history (Mandoki & Burkhart, 1989), having multiple sexual partners during the same time period (Wyatt, Notgrass, & Gordon, 1995), as well as more brief sexual relationships (Brientenbecker, 2001; Wyatt, Notgrass, & Gordon, 1995). In Fergusson, Horwood, and Lynskey's (1997) longitudinal study of CSA victims, CSA history was related to having multiple sexual partners, unprotected intercourse, and having experienced a rape or attempted rape by age 18. Having a rape or attempted rape in the past year was associated with reporting more sex partners (Buddie & Testa, 2005). This increased adult consensual sexual experience was found to mediate the relationship between CSA and adult revictimization

(Mayall & Gold, 1995), indicating the importance of this variable in explaining the strong relationship between CSA and adult sexual assault.

Although the differences in sexual behavior between CSA victims and nonvictims that involve increased sexual activity are well-documented and dramatic, as stated above, there seem to be two pathways that can describe the impact of CSA on survivor's sexuality. The second pathway is that some CSA victims may attempt to avoid sexual issues and behaviors (Briere & Runtz, 1987). Women with a CSA history have been found to experience sexual dysfunction and dysphoria at heightened rates as well as reported that psychological distress has interfered with their sexuality (Becker, Skinner, Abel, Axelrod, & Cichon, 1984; Jackson, et al., 1990; Jehu, 1988; Sarwer & Durlak, 1996; Westerlund, 1992). Victimized women endorsed more negative sexual symptoms, few positive responses to sexual invitations, a recurrent lack of interest in sexual activity, and less satisfaction with current sexual relationships; they also reported being less sexually responsive and experiencing sex as less pleasurable than women without a CSA history (Gold, 1986; Laumann et al., 1994).

Such sexual aversion and avoidance may develop as unpleasant memories and emotions associated with traumatic sexualization become associated with subsequent sexual arousal. There may be a specific aversion to sexual thoughts, feelings, and situations reminiscent of the abusive experience (Noll, Trickett, & Putnam, 2003). From this perspective, when a CSA victim enters a romantic relationship, she may begin to experience symptoms of PTSD, including flashbacks and intrusive thoughts during intimacy and sexual interactions. Thus, the effects of past experiences can reemerge as adolescent women

progress through normal phases of sexual and social development, and consequently, these CSA survivors may attempt to avoid developing romantic relationships.

As Finkelhor and Browne (1986) discuss in their traumagenic dynamics model, when a child is sexually abused, her first experiences with sexual behaviors are forced and traumatic. She learns about sexuality in a highly dysfunctional and inappropriate manner (Finkelhor & Browne, 1986), whereas in normal sexual development, a woman engages in sexual behaviors as she desires to do so. Sexual abuse experiences may contribute to a perception within survivors that they are powerless regarding their sexuality and consequently undermine a woman's sense of control, teaching her that it is futile to express her own sexual desires, needs, and limits (Bartoi & Kinder, 1998). As a result, avoiding these seemingly uncontrollable situations may be a viable method of coping with the anxiety they elicit.

This avoidance of sexual situations to prevent the reexperiencing of painful thoughts, feelings, and memories associated with abuse is likely effective in providing immediate relief from overwhelming affective states. However, examinations of avoidance coping strategies to deal with CSA experiences have found that they are maladaptive and contribute to poorer individual functioning (Leitenberg, Greenwald, & Cado, 1992). Although not immediately apparent as it may seem that avoiding intimate relationships and sexual behavior may protect women against future victimization, this second pathway and its avoidance strategies may also contribute to the heightened risk of adult revictimization of CSA survivors. If a CSA survivor is focusing her awareness and attention on avoiding the experience of painful thoughts, feelings, or memories about her abuse, and/or then engaging in behaviors to minimize or eliminate unpleasant thoughts or feelings, she may not be attending to cues

alerting her to potentially dangerous situations (Leonard & Follette, 2002). Consequently, she may leave a risky sexual situation later than other women (Messman-Moore & Long, 2003). Use of alcohol and other substances may be one of the methods used to avoiding negative feelings and abuse-specific memories. The role of substance use in revictimization will be discussed below.

The impact of CSA on sexual behavior and attitudes toward sexuality may be determined by abuse characteristics as found by Noll and colleagues (2003). In their study of 77 CSA survivors and 89 nonabused controls, they found differences in the sexual behavior of these women according to abuse status but also certain abuse characteristics. Women who reported abuse experiences by a single perpetrator who was not the biological father that involved little physical violence and was of short duration displayed the highest levels of sexual preoccupation. These women may be more likely to endorse the first pathway characterized by heightened interest in sexual activity. However, the women in the sample who were abused by their biological fathers in the absence of physical coercion for long durations endorsed more sexual aversion than other abused and comparison women (Noll, Trickett, & Putnam, 2003). One possible explanation of this finding is that for women abused by their fathers, figures upon whom they were reliant for protection, the feeling of betrayal associated with the abuse may be especially salient. The girl may generalize the feelings associated with the abuse experience to all or most men, resulting in sexual avoidance (Noll, Trickett, & Putnam, 2003).

There is also evidence that these pathways may be developmentally motivated. Many reports that CSA survivors show an increase in sexual behavior came from studies involving samples of college students (Alexander & Lupfer, 1987; Fromuth, 1986, Meston, Heiman, &

Trapnell, 1999; Bartoi & Kinder, 1998), whereas many studies documenting that victims have an increased likelihood of experiencing sexual avoidance and dysfunctions came from clinical samples (Becker et al., 1984; Jehu, 1988; Sarwer & Durlak, 1996; Westerlund, 1992). CSA survivors in the clinical samples are usually older than the women in studies examining college women. A pattern emerges in which some CSA victims engage in high levels of sexual behaviors with many partners while in their dating years; however, when they become involved in more serious, committed, loving relationships as they grow older, they experience difficulties with sexual desire and arousal. An alternative conceptualization of the different trajectories is that while these pathways seem to be comprised of very different behaviors, they are functionally the same. Both sexual behavior patterns result in an alteration or avoidance of unwanted private experiences, including sensations, cognitions, and emotions (Polunsky & Follette, 1995). Given that this sample will be primarily comprised of young and relatively high functioning women, the hypothesized outcomes in the present study will focus on the pathway toward an increase in sexual behavior and interest.

Substance Misuse

It has been demonstrated that substance use increases women's likelihood of sexual assault (Abbey, et al., 1996a, 1996b). A survey conducted by Rhynard, Krebs, and Glover (1997) showed a considerable relationship between reported involvement of alcohol or other drugs and sexual assault, with overall percentages of substances used in alleged rapes being as high as 53.7%. According to a report from the Commission on Substance Abuse at Colleges and Universities, alcohol was involved in 9 out of 10 campus rapes (CASA, 1994). Abbey and her colleagues (1996a) found that it was more common for both perpetrators and the women to drink at the time of the assault (28%), than it was for the man (16%) or the

woman (2%) to drink alone. Similarly, Ullman and Brecklin (2000) reported that 100% of the incidents in which the victim was drinking involved perpetrator drinking.

A substantial body of research using clinical and community samples has shown that there is an elevated risk of substance abuse among female CSA survivors (Neumann, Housekamp, Pollock, & Briere, 1996; Wilsnack, et al., 1997; Wilsnack, Wilsnack, Kristjanson, 2004). There is some question as to the direction of this relationship; that is, does this increased substance misuse precede the sexual trauma, putting these women at risk. Or does the sexual trauma increase the substance use amongst CSA victims. Nearly all of the women in treatment for alcohol misuse (92%) who were sexually victimized in childhood reported that the abuse preceded a pattern of heavy drinking (Miller & Downs, 1995). It is not likely that these women had developed an alcohol abuse problem as children, so this research supports the notion that the unwanted sexual experiences precede problem drinking. Several researchers have addressed the function of alcohol as an experiential avoidance technique (Briere & Runtz, 1987) and have found that the use of substances may be reinforced as it may help CSA victims temporarily forget the abuse experience, numb distressing feelings associated with the abuse history, and avoid abuse-specific memories and emotional responses (Briere & Runtz, 1993; Leonard & Follette, 2002; Messman-Moore & Long, 2003).

Despite the etiology of alcohol misuse, alcohol usage seems to be a risk factor for experiencing subsequent adolescent and adult sexual assault (Abbey et al., 1996a, 1996b; Abbey, Zawacki, & Buck, 2005). Researchers have found that frequent or heavy drinking, as well as drinking on dates, are risk factors for unwanted sexual experiences (Brener et al., 1999; Buddie & Testa, 2005; Synovitz & Byrne, 1998; Ullman, Karabatsos, & Koss, 1999).

However, while alcohol misuse in general was a significant predictor of adult victimization amongst CSA victims, Siegel and Williams (2003) found that alcohol use in sexual situations did not predict subsequent victimization (Siegel & Williams, 2003). Himelein (1995) investigated the sequential relationship of unwanted sexual experiences and drinking in a longitudinal study of college women. Women were surveyed at the beginning of their first year of college, and again 32 months later. Drinking on dates as estimated upon arrival at college correlated with sexual victimization both before and during college. When pre-college sexual victimization (which was found to be a risk factor) and sexually conservative beliefs (which was found to be a protective factor) were statistically controlled, drinking on dates no longer predicted college sexual victimization. Thus, drinking on dates appears to be an antecedent and a consequence of unwanted sexual experiences, but pre-college sexual trauma experiences were a stronger predictor of adult sexual assault (Himelein, 1995).

Abbey and her colleagues (1996) proposed a model outlining the ways alcohol may contribute to unwanted sexual experiences (Abbey et al., 1996b). Many men endorse stereotypes that women who drink are sexually available, promiscuous, or fair targets for sexual force. As alcohol disrupts physical and cognitive processes, it increases misperceptions of a woman's sexual interest as well as the expectation that males will behave aggressively. A woman who is drinking while a man misperceives her friendliness as sexual interest in him may be less likely to be able to recognize and rectify the misperception. Also, women who drink heavily may be less able to physically fight a sexually coercive man if and when they encounter one (Abbey et al., 1996b). As CSA survivors are more likely than women without a CSA history to have substance use problems, this misuse of substances may put them at increased risk for revictimization in adolescence and adulthood.

As noted briefly above, it is important to consider the victims' as well as the perpetrators' use of alcohol. Abbey and colleagues (1996a) and Brietenbecker (2001) found that alcohol and/or drug use by the victim or the perpetrator was associated with increased risk for sexual revictimization. When CSA victims are abusing alcohol and other drugs, this substance abuse may increase their contact with men who also misuse substances. As perpetrator use of alcohol has also been found to be a significant predictor of sexual assault, such relationships may expose women to situations where additional victimization is more likely (Grauerholz, 2000). In addition, sexual assaults which involve alcohol use may be more violent; Kaufman and Asdigian (1997) found support for the idea that men behave more aggressively when a woman has been drinking. Alcohol and drug abuse may contribute to increased risk of revictimization through several pathways.

Finally, several researchers have found that alcohol use does not have significant effects on revictimization, and consequently the above findings should be interpreted with caution and need further examination (for a review, see Moncrieff & Farmer, 1998), particularly among CSA victims. For example, Mayall and Gold (1995) tested the potential mediational effect of alcohol in the relationship between CSA and revictimization. This mediational model was not supported, indicating that other factors such as cognitions about sexuality may be important to consider.

Factors Influencing Adjustment of CSA Survivors

A variety of factors have been studied in attempts to explain the diversity of outcomes, described above, observed in CSA victims. The abuse characteristics, cumulative trauma histories, and family environments of the victims have been identified as moderators between CSA experiences and outcomes.

Abuse Characteristics

All CSA experiences are different; researchers have identified certain abuse characteristics that aid in explaining the wide range of outcomes reported by adult survivors. Age at time of assessment, duration, severity/penetration, frequency, use of force, use of psychological coercion, age of onset, the identity of the perpetrator, and the number of perpetrators are among the abuse characteristics that have been shown to impact various outcomes and help explain the lack of uniformity in the long-term impact of CSA experiences (see Kendall-Tackett, Williams, & Finkelhor, 1993 for a review).

The survivor's age at the time of assessment seems to impact what consequences are reported and therefore receive attention. Children who were older at time of assessment appeared to be more symptomatic than those who were younger (Kendall-Tackett, Williams, & Finkelhor, 1993). Survivors who experienced a greater number of abuse incidents reported more dysfunctional psychological symptomatology (Briere & Elliott, 2003). The severity of the abuse, that is, contact or noncontact, has been linked to increased symptomatology with vaginal, oral, or anal penetration being associated with the most negative outcomes (Arata, 2000; Fergusson, Horwood, & Lynskey, 1997; Kendall-Tackett, Williams, & Finkelhor, 1993)

Intrafamilial abuse has been found to have more severe impacts than extrafamilial abuse (Melchert, 2000). In a sample of college women who were CSA victims, the women who had been abused by a family member reported significantly more problems than women who had experienced extrafamilial abuse. Specifically, the intrafamilial abuse victims reported more difficulties with depression, anxiety, and a poor sense of self (Roche, Runtz, & Hunter, 1999). Although Kendall-Tackett and colleagues (1993) concluded that the data

regarding the impact of the identity of the perpetrator and the number of perpetrators were inconclusive, women abused by a close family member are less likely to disclose the abuse to anyone (Wyatt & Newcomb, 1990). This failure to disclose the abuse experience may explain why intrafamilial abuse victims tend to exhibit more psychological distress than extrafamilial abuse victims. Prompt disclosure of CSA events to an adult appeared to protect children from some of the negative symptoms often associated with severe abuse (Kogan, 2005). This level of distress associated with abuse is higher when the victim perceives her relationship with the perpetrator as otherwise positive (Conte & Schuerman, 1987).

In their study of factors that lead to an increased impact of abuse, Conte and Schuerman (1987) consider many abuse characteristics concerning the use of force and explicit psychological coercion. They found that physical restraint of the victim during abuse, the victim's receipt of some kind of reward for the abuse, victim's effort to escape, resist, or avoid abuse, and passive submission by the victim to the abuse were all associated with more psychological problems. Kendall-Tackett and colleagues (1993) and Arata (2000) also concluded that the use of force was related to increased negative symptoms.

The impact of the age of the victim at the time of the abuse has also been found to significantly influence the impact of abuse; however, the results of these studies have found many inconsistencies (Kendall-Tackett, Williams, & Finkelhor, 1993). CSA at an older age has been found to predict more psychiatric problems (Briere and Elliot, 2003) while Conte and Schuerman (1987) found that younger age at time of abuse is associated with greater symptomatology. It may be that this relationship is not direct but altered by other abuse characteristics. For example, victims who are older at the time of their last abuse by someone close to the victim, or short duration, and without psychological coercion predicted

higher immediate negative responses such as anger and disgust to abuse (Wyatt & Newcomb, 1990). The age of the victim provides useful information about her developmental level at the time of abuse which may have important implications for how she cognitively processes the trauma and its subsequent impact.

Cumulative Trauma

Often times, the trauma of CSA does not occur in isolation; individuals who experience one type of trauma are more likely to have experienced other types (Saunders, 2003). For example, sexually abused children are at heightened risk for childhood physical and emotional abuse (Briere & Elliott, 2003; Gladstone, et al., 2004). The assessment of CSA survivors' complete trauma history is crucial as multiple traumas have been found to have a cumulative impact that differs from the impact of the individual traumatic events.

Particularly relevant to the current study, women with both and sexual and physical abuse histories were more likely to report adult sexual assault (Collins, 1998; Cloitre, Tarduff, Marzuk, Leon, & Portera, 1996).

A complex trauma history may also have an indirect influence on outcome through coping strategies utilized to deal with distress. Women with multiple abuse experiences were more likely to use disengagement coping strategies to deal with later stressors (Draucker, 1989). Sexually assaulted young women with a history of child sexual abuse used more disengagement methods of coping to deal with the adult sexual assault than women without this history (Gibson & Leitenberg, 2001). In addition, there was an increased reliance on disengagement forms of coping as a function of more extensive child abuse histories (Leitenberg, Gibson, & Novy, 2004).

Family Environment: Attachment style

Researchers have posited that CSA experiences impact important childhood developmental tasks, interfering with intrapersonal processes such as self-integration and negatively impacting interpersonal processes including self-other relatedness (Cole & Putnam, 1992; Harter, Alexander, & Niemeyer, 1988). Attachment theory has been applied to the study of CSA in an attempt to better understand the impact of the abuse on these processes. It is estimated that 70 to 100 percent of maltreated children exhibit an insecure attachment; conversely, around 30 percent of children in the general population have an insecure attachment style (Cicchetti, 1987).

CSA specifically has been associated with an insecure or disorganized attachment of the victimized child with at least one primary caregiver (Alexander, 1992; Styron & Janoff-Bulman, 1997). Women who had experienced CSA had less secure and more fearful attachment styles than nonvictims (Roche, et al., 1999). The impact of abuse on adult attachment style appears to be influenced by whether the abuse was intrafamilial or extrafamilial. Intrafamilial abuse has been shown to be significantly correlated with a preoccupied attachment style, and extrafamilial abuse has been significantly linked with both preoccupied and fearful attachment styles (Fossel, 1995). However, Roche and colleagues (1999) found that CSA victims abused by a family member were more fearful than women who reported extrafamilial abuse; the extrafamilial abuse victims were more dismissing than the intrafamilial abuse victims (Roche, et al., 1999). Although these findings are consistent in that CSA victims had less secure attachment styles than nonvictims in both studies, the nature of the more insecure attachment needs additional research.

To understand the implications of the elevated rates of insecure attachment styles endorsed by CSA survivors, a brief review of attachment theory is needed. Attachment

theory as conceptualized by Bowlby (1973, 1980, 1982) posits that during infancy and childhood, one develops internal representations of both the self and others. These internal representations were also referred to as “working models,” psychological structures that provide blueprints for interactions with attachment figures on both conscious and unconscious levels (Collins & Read, 1994). Bowlby believed these working models were shaped during early experiences with the primary attachment figures. In the context of these early caregiving experiences, the child learns about both his or her own role in relationships, and about the role of others. For example, children learn whether or not they are capable of getting others’ attention, and whether or not others are trustworthy, accessible, and caring. They learn how to behave in interpersonal interactions, what should be expected and anticipated, and how to interpret the meaning of events with attachment figures.

A fundamental assumption of attachment theory is that attachment figures provide the function of helping individuals regulate feelings of distress in the face of a threat by serving as a secure base (Bowlby, 1969, 1973, 1979; Sroufe & Waters, 1977). Thus, when infants experience distress in response to a threat, they seek proximity to their caregiver. Caregivers who are sensitive and responsive help infants regulate their feelings of distress, enabling them to experience an emotional sense of well-being or security (Sroufe & Waters, 1977). In an optimally functioning childhood attachment relationship or securely attached relationship, on the basis of repeated interactions with the caregiver, the child feels confident this attachment figure will be available and responsive if support and comfort are needed. Consequently, the child is open to exploring his or her environment. This openness assists the child in building a personal sense of autonomy and competence as well as a sense of closeness with others (Wei, Shaffer, Young, & Zakalik, 2005; Sroufe & Waters, 1977). As

most CSA experiences are perpetrated by someone who the child knows and is often dependent upon (Fromuth, 1986; Russell, 1986), it follows that CSA may comprehensively impact how the child learns to relate to other people (Roche et al., 1999). For children learning about their role and the roles of others in relationships within the context of an abusive environment, the child is likely to receive messages that she can not control her environment in significant ways as well as can not depend upon important others to provide emotional comfort and support.

The ideas of childhood attachment have been extended to adult romantic relationships, some of which embody many of the same features as the parent-child attachment relationship (Hazan & Shaver, 1987; Mikulincer & Shaver, 2003). This literature provides a useful framework for understanding the long-term impact of CSA on interpersonal relationships. Romantic love can be conceptualized as a process of becoming attached just as child and caregiver become attached (Hazan & Shaver, 1987). Adults' general orientations toward romantic relationships, or their attachment styles, are also thought to reflect underlying mental representations, or internal working models, that include expectations and beliefs about the worthiness of self in the eyes of significant others and about the availability and responsiveness of attachment figures (Bowlby, 1973). Like children, adults seek proximity to attachment figures, their partners, to whom they are attached in times of stress and threat. There continues to be a need for the attachment figure to be accessible and responsive to emotional needs as adults turn to an attachment figure (e.g., their romantic partner) in an attempt to regain an emotional sense of security (Simpson & Rholes, 1994). When the attachment figure is present and available, a feeling of comfort and security is promoted. Conversely, anxiety is felt upon separation.

The ways one's working models of attachment impact adult romantic relationships has been a central area of interest in the adult attachment literature. Adults classified as securely attached reported more positive beliefs about love and more satisfying experiences with relationships. They reported comfort regarding closeness to others which included enjoying sexual behavior within the context of a relationship. Overall, the insecurely attached adults had a history of shorter romantic relationships and reported more self-doubt. Specifically, the individuals with insecure-avoidant attachment styles were less invested in relationships and reported more one-night stands. Insecure-anxious individuals reported being less trusting and endorsed the use of maladaptive conflict resolution skills (Hazan & Shaver, 1987).

As one's attachment style relates to ideas of approach and avoidance of others, socially, physically, and romantically, this construct's role in cognitions about sexuality may be an important variable to consider. The attachment system evolved to promote physical proximity and increase feelings of security. In adult romantic relationships, sexual intimacy is an integral part of physical contact (Markman, Stanley, & Blumberg, 2001). However, little research has explored how attachment styles and strategies may impact cognitive sexuality as well as sexual desires and behaviors and subsequently, relationship functioning (Stephan & Bachman, 1999; Hazan & Zeifman, 1994). Limited research suggests individuals' attachment orientations impact their sexual desires and behaviors with both secure and anxious attachment being associated with more a disinterest in sexual intimacy without co-occurring emotional intimacy (Stephan & Bachman, 1999). In addition, Brennan and Shaver (1995) found that avoidantly attached individuals endorsed more casual sexual encounters which may be a product of avoiding prolonged intimacy and dependency. More

research is needed that addresses the possible unique function of sexual intimacy in forming and maintaining attachment bonds in adult relationships as well as how childhood trauma experiences may impact this process.

For an individual who has experienced CSA, close relationships may evoke intense emotional responses of fear, mistrust, and other emotion schemes learned in past abusive relationship that may have nevertheless been attachment relationships. CSA victims may have extreme fears of vulnerability and of putting themselves in a situation or relationship where they may feel dependent upon other people, emotionally or otherwise. This avoidance would be likely to cause difficulties with intimacy, both emotionally and sexually. In sum, sexual self-views do not operate in a “sexual vacuum,” but rather, relate to broader patterns of romantic or emotional connectedness captured by the attachment construct.

Theoretical Model: The Self-Schema Model

Many models have been created to account for the extensive and often conflicting findings on the effects of child sexual abuse. The self-schema model was integral in the construction of the present study.

The self-concept is a multifaceted, dynamic structure composed of self-views or self-schemas relevant to particular domains (Markus & Wurf, 1987). Self-schemas are “cognitive generalizations about the self, derived from past experiences, that organize and guide the processing of self-related information contained in the individual’s social experience” (Markus, 1977, p.64). These self-schemas guide the processing of self-relevant information aiding in tasks such as the 1) retrieval of domain relevant behavioral evidence; 2) prediction of future domain relevant behaviors; 3) maintenance of consistency in domain-relevant self

judgments; and 4) processing of domain-relevant information about the self (Cyranowski & Andersen, 2000, p.522).

The self-schema that organizes and guides the processing of information regarding sexual experiences and issues is the sexual self-schema. Andersen and Cyranowski (1994) define sexual self-schemas as generalized cognitive views about oneself as a sexual person. Past experiences are hypothesized to contribute to these schemas which are integral in shaping current and future sexual experiences. These sexual self views would be expected to impact one's sexual behaviors as well as interpersonal processes. In their study of these sexual self-schemas, Andersen and Cyranowski (1994) tested a bipolar model of sexual self-schema groups and found that women's sexual schemas contain both positive and negative themes. Women with primarily positive sexual schemas viewed themselves as open to sexual experiences as well as passionate and romantic. However, women with predominantly negative schemas viewed their sexualities with more embarrassment and conservatism (Andersen & Cyranowski, 1994).

Women's sexual self-schemas related to their past and anticipated future sexual behaviors in expected ways. As compared to the negative schema group, women in the positive schema group reported significantly more lifetime sexual experiences, more previous sexual partners, and a greater frequency of current sexual activities. The positive schema women also estimated having more sexual partners in the future. As expected, when the participants were retested two months later, schema scores predicted differences in sexual activities between the positive and negative schema groups. These cognitions also impacted the emotions the women associated with sexuality. The women in the positive schema group endorsed experiencing positive emotions, such as love and desire, more frequently than the

negative schema women. Finally, unlike the negative schema group, the positive schema group labeled sexual arousal as a positive emotion (Andersen & Cyranowski, 1994).

The empirical evidence regarding the impact of CSA on adult sexual functioning reviewed above supports the idea that childhood abusive sexual experiences would impact a woman's sexual self-schema. Consequentially, sexual self-schemas may provide a useful tool to aid in the explanation of some of the long-term effects of CSA, such as the impact on sexual behavior and interpersonal relatedness. There has been little empirical investigation of sexual self-schemas to conceptualize the effects of CSA on adult sexuality; and as will be discussed below, the evidence supporting this idea is currently mixed (Andersen & Cyranowski, 1994; Davies, 1998).

Rationale and Hypotheses

The significantly higher rate of adult sexual assault in populations of women who experienced CSA has led researchers to investigate why these women are at such an increased risk. Messman-Moore and Long (2003) have pointed out that the CSA field would benefit from the identification of the psychological processes altered by abuse, such as the cognitive aspects, and to investigate the idea that these are the mechanisms that impact the CSA sequelae discussed above, one's sexual behaviors and substance use. Such effects of CSA may be accentuated in women who are revictimized as adults and may actually serve as risk factors for revictimization. This study will explore the potential contribution of cognitions about sexuality, previously shown to be altered by CSA, to vulnerability for adult sexual assault, as well as engagement in risky sexual behaviors including number of consensual sexual partners and substance use.

Cognitions about Sexuality

To examine sexuality comprehensively, researchers need to address the behavioral, physiological, attitudinal, and cognitive components (Andersen & Cyranowski, 1994). While the sexual behavior of CSA victims has received a moderate amount of attention, cognitive representations of sexuality and the potential impact of traumatic sexual experiences on these cognitions have been largely ignored. Further investigations into the impact of CSA on a victim's sexual self-concept are needed to determine how CSA impacts cognitions about sexuality as well as the role these cognitions may play in the development of sexual difficulties (Gold, 1986) and problematic sexual behaviors (Briere & Runtz, 1990). As sexuality may have multiple personal and private qualities, the cognitive view of this area may be particularly informative. In addition, a better understanding of cognitions about

sexuality may aid in pinpointing the origin and function of the differences observed between CSA survivors and nonvictims, and between revictimized CSA survivors and nonrevictimized survivors.

The limited existing research focusing on the cognitive aspects of sexuality in CSA survivors has shown that CSA experiences impact how women think about sexuality. In a clinical sample of abused and nonabused women, the abused women reported experiencing more guilt regarding sexual feeling and behaviors (Walser & Kerns, 1996). In addition, Maltz and Holman (1987) found that CSA victims viewed sex as something that is bad, a method of controlling others and being controlled themselves. Women with abuse experiences reported more negative attitudes about sex (Orr & Downs, 1985) and also reported more permissive attitudes about participation in sexual behavior (Miller, Monson, & Norton, 1995). Women who were victimized as children were more likely to label themselves as promiscuous than were their peers who reported engaging in similar rates of sexual behavior (Fromuth, 1986). Finally, women with a history of CSA perceived their sexuality as involving less friendliness and more hostility than individuals without a CSA history when they considered their perceptions of their sexuality at worst (Schloredt & Heiman, 2003).

Such sexual self-perceptions may impact risk for revictimization, as they may be apparent to potential perpetrators and consequently influence the perpetrators' decisions to target these women for sexual coercion. These self-perceptions may make it more difficult for CSA survivors to leave sexually abusive relationships after abuse has occurred or risky situations in general. Such cognitions about sexuality may also contribute to revictimization risk by teaching these women to expect violence in sexual relationships based on their prior

experiences. Banyard and colleagues (2000) describe this process, theorizing that early abuse experiences may change belief systems as well as perceptions of self and others in ways that increase the likelihood of subsequently encountering abuse (Banyard, Arnold, & Smith, 2000).

Negative sexual self-perceptions were found to be more evident in women who were involved in relationships with current physical, psychological, or sexual abuse (Offman & Matheson, 2004). Due to the cross-sectional design, it can not be determined if these negative sexual self-perceptions were the result of the abusive relationship or put the woman at risk for being in an abusive relationship. This relationship remained significant after controlling for general self-esteem and depressive symptoms. Although many of these women had previous abuse experiences, CSA status and the subsequent impact on cognitions about sexuality were not examined (Offman & Matheson, 2004).

One conceptualization of cognitions about sexuality is the sexual self-schema. As described above, sexual self-schemas influence how we perceive, recall, and evaluate ourselves regarding sexual matters. These sexual self-schemas are created through past experiences with sexuality (Andersen & Cyranowski, 1994). A component of one's sexual history that would be expected to impact sexual self-schemas is sexual victimization history. In their investigation into the impact of CSA on sexual self-schemas, Andersen and Cyranowski (1994) did not find significant relationships between CSA status and schema groups. That is, there were no significant differences in the number of victims in the positive and negative schema group. Due to the many significant differences in sexual behaviors and attitudes that have been consistently found between women with a CSA history and women without such a history, this finding is very surprising.

A possible explanation for Andersen and Cyranowski's (1994) lack of significant findings is their method of assessment of victimization history. Only two questions were used to evaluate participant's sexual trauma history. These questions did not follow the typical protocol of CSA assessment as they did not specify an age difference between victim and perpetrator. In addition, they only considered abuse that occurred prior to age 12 or 13, and consequentially, did not account for adolescent abuse at all.

Another potential reason that Andersen and Cyranowski (1994) failed to find that CSA experiences impact sexual self schemas is that their Sexual Self-Schema Scale may lack content validity for CSA survivors. Davies (1998) identified a fourth sexual self-schema factor in an attempt to produce a sexual self-schema scale that may have more content validity for CSA victims. This factor, titled immoral-irresponsible, assessed if women viewed their sexual self as bad, loose, immoral, or irresponsible. The items created to assess this factor were based on the empirical literature described above that reflects qualitative differences between CSA victims and nonvictims in regards to cognitive views of sexuality. Davies (1998) hypothesized that this factor would be associated with CSA status; however, this hypothesis was not supported. Interestingly, the immoral-irresponsible factor was associated with participant report of adult rape (Davies, 1998). Although further investigation into the utility of this factor is needed, it may prove to provide important information pertaining to risk of revictimization. This immoral-irresponsible factor may also provide more insight into the impact of shame and self-blame regarding abuse experiences on CSA victims' sexuality. Kessler and Bieschke (1999) and Arata (2000) found that shame and self-blame in CSA victims are significant predictors of adult revictimization.

Consequentially, further research is needed to determine the utility of this factor in improving the content validity of the Sexual Self Schema Scale for CSA survivors.

An additional explanation for Anderson and Cyranowski's (1994) insignificant findings is their method of constructing the positive and negative sexual self-schemas. Davis (1998) found significant differences between CSA victims and nonvictims in that the women with a CSA history scored significantly higher on the openness to sexuality factor and lower on the sexual conservatism and embarrassment factor. However, although they more strongly endorsed one of the positive sexual self schema factors, the CSA victims did not score higher on the romantic-passionate factor which also contributes to the positive sexual self-schema. Therefore, when focusing only on the combination of scores which are used to produce the positive and negative sexual self-schemas, the significant differences between the groups on the individual factors are not revealed. In addition, the open-direct and embarrassed-conservative factors seem to measure one's willingness to engage in sexual behavior while the passionate-romantic and immoral-irresponsible factors seem to measure positively and negatively valenced views of the self as a sexual being. Consequently, it is important to assess the impact of CSA on each of these continuums.

Cyranowski and Andersen (1998) have also introduced the bivariate model of sexual self-schemas. The bivariate model of sexual self-schemas continues to identify women who score at the extreme ends of the bipolar continuum as possessing either positive or negative sexual self-schemas. In addition, two other schema topologies are identified, aschematic and co-schematic groups. Aschematic schemas are best described as neutral in that they do not reflect strong positive or negative views of sexuality, but rather the absence of a well-defined framework for handling sexual situations and feelings. Women with aschematic sexual self-

schemas would not pursue sexual situations, but unlike the negative schema group, they would not avoid such situations or associate high level of negative affect with sexuality. The co-schematic group endorses both positive and negative views of sexuality; these conflicting ideas seemed to activate both anxiety and arousal in regards to sexual activities, which is postulated to lead to a pattern of sexual approach-avoidance responses. Whereas both the aschematic and co-schematic groups reported moderate levels of prior sexual experiences, this level of sexual activity seemed to reflect very different cognitive processes.

In summary, certain sexual self-schemas may be more likely to develop in women with a CSA history versus women without a CSA history. In addition, these sexual self-schemas may generate behaviors and emotions that may put the CSA survivors at risk for adult revictimization. For example, a woman may have a heightened interest in sexuality and willingness to engage in sexual behavior which her CSA experiences directly impacted, for as prior researchers have suggested, some CSA victims have an earlier disinhibition of adult sexual activity (Miller, Monson, & Norton, 1995; Noll, Trickett, & Putnam, 2003). This increase in sexual behaviors may be especially notable during the college years in which many individuals are not involved in committed, serious relationships but rather are dating and consequentially spending time with many potential partners. The woman's cognitions about sexuality may reflect a high endorsement of openness about sexuality.

Prior research also supports the idea that women with CSA histories may experience sexuality as an act of physical submission through which they are controlled or control others (Maltz & Holman, 1987). Sex may be viewed as a behavior that is not guided by romantic ideas such as love and passion but instead is an immoral activity in which one permissively participates (Miller, Monsoon, & Norton, 1995) and perceives as unfriendly and hostile

(Schloretdt & Heiman, 2003). The salient attitudes and emotions associated with sexual behavior include shame, guilt, and dirtiness (Walser & Kerns, 1996). In addition, sexual arousal may evoke unpleasant memories, emotions, and sensations reminiscent of the abusive experiences, contributing to a perception within survivors that they are powerless regarding their sexuality. This sense of powerlessness may undermine a woman's sense of control, teaching her that it is futile to express her own sexual desires, needs, and limits (Bartoi & Kinder, 1998). She may consequently conceptualize engaging in sexual behaviors as irresponsible as she does not feel able to exert control over these situations. These empirical findings suggest that the cognitions about sexuality of CSA victims may reflect a high endorsement of immoral-irresponsible views regarding sexuality and a low endorsement of passionate-romantic views regarding sexuality. Partial support for this hypothesis was found in a recent study by Meston and Heiman (2006), who found that CSA victims endorsed the passionate-romantic factor significantly less than nonvictims (Meston & Heiman, 2006). The immoral-irresponsible factor was not examined in their study.

Based on the self-schema model and the empirical literature, a set of hypotheses have been developed:

Hypothesis 1: There will be a direct relationship between CSA status and certain aspects of the sexual self-schema. Specifically, the CSA victims will endorse openness to sexuality significantly more than non-victims, as well as endorsing the embarrassed-conservative factor significantly less than non-victims as was previously found by Davies (1998).

Hypothesis 2: It was hypothesized that there will be a relationship between CSA experiences and adult sexual assault experiences. Additionally, two behavioral risk factors

for adult sexual victimization, alcohol misuse and increased number of sexual partners, were also expected to be related to CSA. The relationships between CSA and adult sexual assault experiences, CSA and alcohol use, and CSA and number of sexual partners will be mediated by the woman's openness to sexuality. This hypothesis reflects the pathway of CSA contributing to increased rates of sexual behavior as compared to nonvictims (Fromuth, 1986; Mayall & Gold, 1995; Alexander & Lupfer, 1987). However, as discussed above, CSA experiences have also been found to contribute to an avoidance of sexual behavior in some victims. The first pathway was the hypothesized direction of influence on sexuality for the current study due to the age of the sample. Like the present study, many of the above studies which support the hypothesis that CSA victims will show an increase in sexual behavior utilized samples of college student participants. Davies (1998) postulated that the openness to sexuality sexual self-schema factor may serve as a mediator between CSA and adult victimization, but she lacked the data to test these relationships.

Hypothesis 3: It was hypothesized that there will be a positive correlation between alcohol misuse and adult victimization experiences, such that more alcohol use will be associated with more adolescent/adult victimization experiences. It was hypothesized that there will be a positive correlation between number of sexual partners and adult victimization experiences; that is, a higher number of sexual partners will be associated with more adolescent/adult victimization experiences. These findings would replicate the results of many previous studies (Abbey, Ross, & McDuffie, 1996; Fergusson, Horwood, & Lynskey, 1997; Himelein, Vogel, & Wachowiak, 1994; Koss & Dinero, 1989; Mayall & Gold, 1995; Tsai, Feldman-Summers, & Edgar, 1979).

Hypothesis 4: It was hypothesized that there will be differences in the immoral-irresponsible and passionate-romantic sexual self-schema factors based on trauma history. It was also hypothesized that the participants with CSA histories will report the higher endorsement of the immoral-irresponsible sexual self-schema factor but lower endorsement of the passionate-romantic factor. Previous research has found that CSA victims frequently have negative views surrounding their own sexuality (Fromuth, 1986; Meston & Heiman, 2006; Orr & Downs, 1985; Schloretdt & Heiman, 2003;Walser & Kerns, 1996). However, Davies (1998) found that the immoral-irresponsible sexual self-schema factor was not associated with CSA status but was associated with adult rape status. She also did not find a relationship between sexual victimization experiences and the passionate-romantic factor, whereas Meston and colleagues (2006) did. Further exploration of these relationships is needed.

Hypothesis 5: It was hypothesized that there will be a relationship between CSA experiences and adult sexual assault experiences, alcohol misuse, and number of consensual sexual partners. The relationships between CSA and adult sexual assault experiences, CSA and alcohol use, and CSA and number of sexual partners will be mediated by the immoral-irresponsible factor.

In summary, the CSA literature has only begun to explore the impact of CSA on one's identity as an intimate partner and sexual being, and the underlying psychological mechanisms that may increase a CSA victim's risk of revictimization have been largely overlooked. This study was designed to determine if cognitions about sexuality can account for this increased risk for adult unwanted sexual experiences and/or engagement in risky sexual behaviors. Furthermore, this study examined the impact of abuse characteristics on

these psychological mechanisms, and consequentially, revictimization. In addition, this study adds to the literature regarding the impact of CSA experiences on the development of sexual self-schemas.

Chapter 2

Method

Participants

Participants were 1150 female students recruited from introductory and upper-level psychology classes through the research pool. Participation in the current study partially fulfilled the research requirement of the students, but these students also had the option of doing library research to fulfill the requirement. The mean age for participants was 19.4 years ($SD=1.64$, range = 18-41). Most of the women (96.1%) had never been married. However, 55.4% reported they were currently involved in a romantic relationship. Racial composition of the participants was 74.5% Caucasian, 6.8% African American, 3.7% Asian, and the remaining 11.2% endorsed Native American, Pacific Islander, Hawaiian, or Hispanic racial backgrounds. In regards to religious affiliation, 52.5% of the participants endorsed being Protestant, 14.1% Catholic, and 13.7% nonaffiliated. Of the participants, 97.7% reported being exclusively or mostly heterosexual, and 2.3% reported being mostly or exclusively homosexual.

Students were guaranteed anonymity to maximize their comfort levels in sharing information of the sensitive nature examined in the study. To ensure anonymity, the signed informed consent forms were placed in one box as the completed surveys were placed in a separate box. The completed surveys did not contain student names. Research credit was given from the informed consent forms, as outlined in the informed consent form.

Materials

Life Experiences Questionnaire (LEQ). The LEQ is a self-report instrument containing questions derived from the interview assessments developed by Jackson et al.

(1990) and were previously included in the Past Experiences Questionnaire (Messner et al., 1988). The questions solicit information regarding demographics, family relationships, and abuse history. Detailed information about childhood sexual abuse characteristics including the frequency, duration, and nature of the abuse activities, age of the victim and perpetrator at the time of abuse, relationship between victim and perpetrator, whether the victim disclosed the abuse event to anyone, and finally, emotional reactions to the disclosure experience.

Test-retest reliability for a two-week period was reported by Ray (1993). In her sample of college women, 23 of the 91 participants reported a CSA experience. Pearson product moment correlations were calculated for the items measuring continuous variables and were statistically significant ranging from $r = .83$ to $.93$. For items assessing categorical abuse characteristics, Kappa coefficients were also significant, ranging from $.60$ to $.96$.

In the present study, childhood sexual abuse was defined as endorsement of one or more of the sexual activities described in the LEQ when the victim was less than 14 years old. The LEQ was modified to comprise 15 items that surveyed CSA experiences. A variety of unwanted sexual experiences were addressed, including exposure of genitals, sexual photographs, fondling, kissing, rubbing genitals against the victim, attempted intercourse, and completed vaginal intercourse. Responses to each item were made on a 6-point scale ranging from 0 (never) to 5 (five or more times). Scores were computed as the sum of the responses to the 15 abuse event items, with high scores signifying extensive trauma.

Sexual Experiences Survey (SES; Koss & Gidycz, 1985). This self-report instrument contains 10 items that assess sexual victimization at or after the age of 14. Adult sexual victimization was defined as endorsement of one or more of the sexual activities described in the SES. The SES assesses a variety of adult sexual assault experiences ranging from forced

sex play to attempted and completed intercourse. Participants answered each item reporting the occurrence of a particular activity since age 14 (yes/no). Participants also indicated the number of times the experience had occurred since age 14 on a 5-point scale ranging from 1 (1 occurrence) to 5 (5 or more occurrences) in addition to the number of occurrences specifically during the last year on the same 5-point scale. Finally, the participants indicated if the event had occurred during the past 3 months (yes/no). Scores were computed as the sum of the responses to the 10 abuse event items, with high scores signifying extensive trauma. The SES has shown 1 week test-retest reliability of .93 and internal consistency of .74.

Sexual Self-Schema Scale (SSSS; Andersen & Cyranowski, 1994; Davies, 1998). This instrument was used as a measure of one's perception of the self as a sexual being. It is comprised of 58 trait adjectives. The participants rate each of the adjectives on a seven point Likert scale, ranging from 0 (not at all descriptive of me) to 6 (very descriptive of me). Andersen and Cyranowski (1994) included 26 adjectives to reflect their three sexual self-schema factors: passionate-romantic, open-direct, and embarrassed-conservative. In addition, the current study included the 9 adjectives that form the additional factor identified by Davies (1998), the immoral-irresponsible factor. Therefore, the possible range for each sexual self-schema scale factor is as follows: 0-48 for the open-direct factor, 0-66 for the embarrassed-conservative factor, 0-48 for the passionate-romantic factor, and 0-54 for the immoral-irresponsible factor. The scale also includes 24 filler adjectives (See Appendix A for a copy of the Sexual Self-Schema Scale as well as the breakdown of the factors). As Andersen and Cyranowski (1994) demonstrated in their pilot testing of the scale, this measure is unobtrusive in that participants remain unaware that their cognitions regarding

sexuality are being assessed. The original SSSS has shown 2-week test-retest reliability of .91 and internal consistency of .82. The revised SSSS has similarly demonstrated good reliability with two week test-retest reliabilities of .76 to .82 and internal consistencies from .54 to .83 (Davies, 1998). The scales were correlated in expected ways with lifetime sexual experiences and current sexual desire level but were not correlated with social desirability (Davies, 1998). Each factor in the revised scale explained significant increments of variance in lifetime sexual experiences.

Heterosexual Behavior Scale (HBI; Bentler, 1969). The short form of the HBI for females was administered to assess noncoercive heterosexual experiences. Fifteen sexual behaviors are listed in ascending order, from kissing to vaginal and oral intercourse. Participants are instructed to report the number of partners she had for each of the listed behaviors on a 5-point Likert scale (0, 1-2, 3-5, 6-9, 10 or more). The primary variables of interest in the current study were the number of individuals with whom the participant has engaged in intercourse as well as the variety of consensual sexual activities in which the woman has participated. A total sexual experiences score can be calculated by multiplying the item number (1-15) by the number of partners reported for each item.

Drinking Habits Questionnaire (DHQ; Cahalan, Cisin, & Crossley, 1969). The DHQ is a 13-item self-report instrument that assesses participants' consumption of alcoholic beverages (beer, wine, and liquor) over various specified periods of time. The instrument assesses two major areas of drinking behavior: quantity of alcohol consumed and drinking frequency. Participants can subsequently be classified as abstinent/infrequent, light, moderate, or heavy drinkers based on the volume-variability (VV) index (Cahalan-Cisin, 1968). This index addresses the drinking patterns rather than total alcohol consumed. Binge

drinking frequency (frequency of consuming four or more alcoholic beverages in a row for women) can also be assessed using this instrument. In the current study, drinking patterns were of primary interest, so the participants were classified as abstinent/infrequent, light, moderate, or heavy drinkers based on their volume-variability (VV) index.

Design and Procedure

The study involved a 2-hour group session that was conducted in an auditorium in a university setting. The study was conducted primarily by female researchers with one male researcher assisting with data collection at one session. The participants were recruited through the research pool and were told they would be participating in a study examining beliefs and attitudes about relationships. They were told they were free not to answer questions that made them feel uncomfortable and that they could withdraw from the study at any time without penalty. The researcher began the research sessions with a discussion of the informed consent forms. After obtaining informed consent, guaranteeing anonymity, and emphasizing the voluntary nature of the research participation, the surveys were administered in fixed order. When each participant finished completing the survey packet, she received a written debriefing form and was encouraged to contact the researcher with any questions that arose after survey completion.

Chapter 3

Results

Child and adult sexual victimization experiences

In the total sample of 1150 women, 238 participants (20.7%) were identified as child sexual abuse victims, and 912 (79.3%) were classified as nonvictims. Of the participants identified as CSA victims, 144 (12.5%) of these women reported they had experienced multiple types of abusive activities. The most common CSA activity was exposure of the perpetrator's genitals, and 157 (13.7%) women endorsed this experience. The second most commonly reported CSA experience was genital fondling, reported by 131 (11.4%) participants. Thirty-three women (2.9%) reported having experienced forced vaginal intercourse. See Table 1 for more information regarding CSA experience characteristics for the sample. CSA victims did not differ significantly from nonvictims on race, sexual orientation, marital status, family's religious affiliation, current religious affiliation, and current involvement in a romantic relationship. However, age was found to differ significantly between CSA victims and nonvictims (victims: $M=19.7$ years, nonvictims: $M=19.3$ years), $t(999) = -3.74, p=.001$.

Adult sexual assault experiences were reported by 330 (27.9%) women in the sample, and 320 (27.8%) women endorsed having experienced multiple types of adult sexual assault experiences. In this sample, the most common adulthood unwanted sexual experience was participation in sex play activities due to being overwhelmed by a man's continual arguments and pressure, reported by 248 (21.6%) participants. In addition, 145 (12.6%) participants endorsed having experienced forced sexual intercourse. Participants were labeled as revictimized if they endorsed both a childhood unwanted sexual experience on the LEQ and

Table 1

Child Sexual Abuse Characteristics (n=238)

Description	n ^a
Sexual Act	
Oral, anal, vaginal intercourse	52
Breast and genital fondling	91
Kissing and touching of body	33
Noncontact acts (exposure of genitals, sexual photographs, watch undress)	62
Identity of Perpetrator	
Immediate family (e.g., father, step-father, brother)	54
Distant family (e.g, uncles, cousins)	40
Acquaintances (e.g., neighbors, teachers)	29
Peers (friends, classmates, boyfriends)	106
Strangers	9
Age when abuse began	
3-5	71
6-8	49
9-11	34
12-14	84
Duration ^b	
One incident occurred	90
Less than one month	28
One to six months	24
Six months to one year	21
Between one year and two years	21
Between two years and five years	23
Between five and ten years	12
More than 10 years	19
Number of occurrences of most severe abuse activity	
One time	124
Two times	33
Three times	17
Four times	3
Five or more times	61
Did you disclose abuse to anyone? ^b	
Yes	151
No	87

Note: ^a The most severe abuse characteristic is reported for women who had more than one abuse event.

^b actual coding of the variables used in analyses

an adulthood unwanted sexual experience on the SES. One hundred and fifteen women (10.0%) in the total sample reported both types of experiences.

Differences between CSA victims and nonvictims on sexual self-schema factors.

The first hypothesis of this study was to determine if there is a relationship between CSA experiences and scores on the openness and embarrassed-conservative subscales of the sexual self-schema scale. In addition, the fourth hypothesis of the study was to examine the relationship between CSA experiences and scores on the immoral-irresponsible and passionate-romantic factors of the sexual self-schema scale. Table 2 provides the observed range, sample mean, and standard deviation of the sexual self-schema scale factors. Results of T-tests indicated that CSA victims scored significantly higher on the openness to sexuality factor than did nonvictims (victims: $M=31.24$, nonvictims: $M=28.78$), $t(1003) = 5.11, p=.000$. In addition, CSA victims endorsed the immoral-irresponsible factor significantly more than nonvictims (victims: $M=21.63$, nonvictims: $M=20.47$), $t(1003) = -3.44, p=.001$. CSA victims also scored significantly lower on the embarrassed-conservative (victims: $M=32.63$, nonvictims: $M=34.63$), $t(1003) = 4.12, p<.000$ and passionate-romantic factors (victims: $M=35.86$, nonvictims: $M=36.84$), $t(1003)=2.04, p=.042$).

To investigate the possibility of curvilinear relationships between CSA status and sexual self-schema scale factors, scores were divided into upper, middle, and lower thirds of the distribution and a 2X3 Pearson chi-square analysis was performed relating CSA status to sexual self-schema factor terciles. Results were similar to those of the t-tests; significant differences were found for the openness to sexuality factor [$\chi^2 (2, N=1005) = 16.41, p=.000$], the immoral-irresponsible factor [$\chi^2 (2, N=1005) = 6.43, p=.049$], the embarrassed-

Table 2

Sample Means, Standard Deviations, and Range of Variables Used to Predict Risky Sexual Behaviors (N=1150)

Variable	<u>M</u>	<u>SD</u>	Range
Open-Direct	29.33	6.52	10 to 47
Immoral-Irresponsible	22.03	5.20	9 to 43
Embarrassed-Conservative	34.18	6.48	7 to 53
Passionate-Romantic	36.57	6.42	17 to 48

conservative factor [χ^2 (2, N=1005) =11.41, $p=.003$], but there were not significant differences between victims and nonvictims for the passionate-romantic factor [χ^2 (2, N=1005) =1.94, $p=.389$]. On the openness to sexuality factor, victims were less likely to score in the lower and middle third, but more likely to score in the upper third as compared to nonvictims. For the immoral-irresponsible factor, nonvictims were more likely to score in the lower and middle third, but CSA victims were more likely to score in the upper third. Victims were more likely than nonvictims to score in the lower third of the embarrassed-conservative factor, while nonvictims were more likely to score in the upper third for this factor. Victims and nonvictims were equally likely to score in the middle third on the embarrassed-conservative factor.

Differences between revictimized CSA victims and nonrevictimized CSA victims on sexual self-schema factors.

In addition, T-tests were performed to examine potential differences in revictimized CSA victims (those who endorsed at least one CSA and one adult sexual assault experience) versus nonrevictimized CSA victims (those who endorsed at least one CSA experience but who did not endorse any adult sexual assault experiences) on the sexual self-schema factors. Revictimized CSA victims scored significantly higher on the openness to sexuality factor than did nonrevictimized CSA victims (revictimized: $M=32.741$, CSA only: $M=29.901$), $t(225) = -3.06$, $p=.002$). Next, revictimized CSA victims endorsed the immoral-irresponsible factor significantly more than nonrevictimized CSA victims (revictimized: $M=22.800$, CSA only: $M=20.521$), $t(225) = -3.343$, $p=.001$. Revictimized CSA victims also scored significantly lower on the embarrassed-conservative (revictimized: $M=31.216$, CSA only: $M=33.910$), $t(225) = 2.845$, $p=.005$ and passionate-romantic (revictimized: $M=34.513$, CSA only: $M=36.946$), $t(225)=2.250$, $p=.025$) factors.

Adult sexual assault experiences and risky sexual behaviors

Next, the relationships among risky sexual behaviors and adult sexual assault experiences were examined. A Pearson product-moment correlation was calculated to assess the relationship between adult sexual assault experiences and number of adult consensual sexual partners. A significant correlation was found between these two variables ($r=.415$ $p=.000$). Then, a Pearson product-moment correlation was calculated between adult sexual assault experiences and alcohol usage. Alcohol usage and adult sexual assault experiences were significantly correlated ($r=.217$ $p=.000$).

When CSA victims and nonvictims were compared on these variables using T-tests, significant differences were found in the number of consensual sexual partners (victims: $M=3.544$, nonvictims: $M=2.021$) $t(1001) = -7.276$, $p=.000$ and number of adult sexual assault experiences (victims: $M=1.548$, nonvictims: $M=.384$) $t(966) = -11.536$, $p=.000$. There were not significant differences in the alcohol usage of CSA victims and nonvictims (victims: $M=2.372$, nonvictims: $M=2.398$) $t(968) = .266$, $p=.790$. In addition, T-tests were performed to examine potential differences in revictimized CSA victims versus nonrevictimized CSA victims in risky sexual behaviors. Revictimized CSA victims endorsed having engaged in sexual behavior with more consensual partners (revictimized: $M=4.828$, CSA only: $M=2.367$), $t(223) = -5.327$, $p=.000$, and higher levels of alcohol usage (revictimized: $M=2.820$, CSA only: $M=1.926$), $t(217) = -5.571$, $p=.000$ as compared to CSA victims who had not been revictimized in adulthood.

Potential mediating role of the openness to sexuality and immoral-irresponsible factors.

Statistical analyses testing the potential mediator role of the sexual self-schema factors in the relationship between CSA and adult victimization experiences were conducted using the

guidelines provided by Baron and Kenny (1986). Baron and Kenny (1986) used the following criteria to determine if a variable qualifies as a mediator. First,

variations in levels of the independent variable significantly account for variations in the presumed mediator (i.e., path A). Variations in the mediator significantly account for variations in the dependent variable (i.e., path B), and when paths A and B are controlled, a previously significant relation between the independent and dependent variable is no longer significant (Baron & Kenny, 1986, p.1176).

In order to establish that openness to sexuality mediates the relationship between CSA and adult revictimization, the series of regression equations must show that A) CSA predicts openness to sexuality, B) CSA predicts adult sexual assault experiences, and C) when both CSA and openness to sexuality are used to predict adult sexual assault experiences, the openness to sexuality is a significant predictor, and the relationship between CSA and adult sexual assault experiences is no longer significant. Linear regression analyses were used to test the mediating role of openness to sexuality in the relationship between CSA and adult sexual assault experiences, CSA and number of consensual sexual partners, and CSA and alcohol usage (Baron & Kenny, 1986). These analyses were repeated to test the potential mediating role of the immoral irresponsible factor in each of the above relationships. Table 3 provides the intercorrelations of the relevant variables.

Tests of the hypothesized mediational models did not reveal any supported models. When both openness to sexuality and CSA status were entered into the three regression equations to predict adult sexual assault, number of consensual sexual partners, and alcohol usage, respectively, CSA remained a significant predictor in each equation (See Table 4). In addition, when the immoral-irresponsible factor and CSA were entered into the regression equations to

predict adult sexual assault, number of consensual sexual partners, and alcohol usage, respectively, CSA again continued to be a significant predictor in each equation (See Table 5).

CSA abuse severity and sexual self-schema factors

In order to investigate whether the “severity” of the abuse was related to sexual self-schema factors, Pearson correlations were calculated between the sexual self-schema factor scores and the relationship to the perpetrator, the sexual act engaged in, the age at which the first victimization began, the frequency of the abuse, and the duration of the abuse. Intercorrelations are shown in Table 6. In general, more severe abuse characteristics such as younger age of onset, more intrusive abuse events, more frequent abuse events, longer duration of abuse, and closer relationships to the perpetrator were related to sexual self-schema factors in expected ways with higher openness and immoral-irresponsible scores and lower embarrassed-conservative and romantic-passionate scores.

T-tests were then performed to compare the abuse characteristics and sexual self-schema factor scores of revictimized participants with CSA victims who were not revictimized. Revictimized CSA victims had longer duration of abuse (revictimized: $M=3.565$, CSA only: $M=2.829$), $t(224) = -2.290$, $p=.023$), more intrusive abuse events (revictimized: $M=1.209$, CSA only: $M=1.487$), $t(224) = 2.048$, $p=.042$), and a higher frequency of CSA events than CSA victims who were not revictimized (revictimized: $M=13.652$ events, CSA only: $M=5.577$ events), $t(224) = -4.548$, $p=.000$). The groups did not differ in regards to age of abuse onset (revictimized: $M=8.386$ years, CSA only: $M=8.768$ years), $t(224) = .774$, $p=.440$) or the relationship to the perpetrator (revictimized: $M=2.746$, CSA only: $M=3.000$), $t(224) = 1.405$, $p=.161$).

Table 3

Intercorrelations of Sexual Self-Schema Factors, Risky Sexual Behaviors, and Adult and Childhood Victimization Experiences

Variable	1	2	3	4	5	6	7	8
1. CSA Events	-							
2. Adult Sexual Assault Events (<i>N</i> =1054)	.672***	-						
3. Openness to Sexuality Factor (<i>N</i> =1098)	.277***	.227***	-					
4. Immoral-Irresponsible Factor (<i>N</i> =1098)	.233***	.255***	.302***	-				
5. Embarrassed Factor (<i>N</i> =1098)	-.246***	-.224***	-.152***	.143***	-			
6. Passionate-Romantic Factor (<i>N</i> =1098)	-.306***	-.267***	.013	.026	.270***	-		
7. Alcohol Usage (<i>N</i> =1059)	.128***	.217***	.212***	.295***	-.120***	-.069*	-	
8. Consensual Sex Experiences (<i>N</i> =1096)	.320***	.415***	.234***	.288***	-.260***	-.062*	.378***	-

* $p < .05$. ** $p < .01$. *** $p < .001$

Table 4

Linear Regression Analysis for Adult Sexual Assault: Openness to Sexuality and CSA experiences (N=949)

Predictor	<u>b</u>	Standard Error	<u>t</u>
Openness to Sexuality	.040	.005	1.702
CSA experiences	.661	.004	27.831***

Linear Regression Analysis for Adult Consensual Sexual Experiences: Openness to Sexuality and CSA experiences (N=1093)

Predictor	<u>b</u>	Standard Error	<u>t</u>
Openness to Sexuality	.163	.013	5.529***
CSA experiences	.273	.011	9.261***

Linear Regression Analysis for Alcohol Usage: Openness to Sexuality and CSA experiences (N=949)

Predictor	<u>b</u>	Standard Error	<u>t</u>
Openness to Sexuality	.185	.006	5.936***
CSA experiences	.078	.105	2.489*

* $p < .05$. ** $p < .01$. *** $p < .001$

Table 5

Linear Regression Analysis for Adult Sexual Assault: Immoral-Irresponsible Factor and CSA Experiences (N=949)

Predictor	<u>b</u>	Standard Error	<u>t</u>
Immoral-Irresponsible	.103	.007	4.429***
CSA experiences	.648	.004	27.823***

Linear Regression Analysis for Adult Consensual Sexual Experiences: Immoral-Irresponsible Factor and CSA Experiences (N=1093)

Predictor	<u>b</u>	Standard Error	<u>t</u>
Immoral-Irresponsible	.229	.018	7.960***
CSA experiences	.264	.011	9.205***

Linear Regression Analysis for Alcohol Usage: Immoral-Irresponsible Factor and CSA Experiences (N=998)

Predictor	<u>b</u>	Standard Error	<u>t</u>
Immoral-Irresponsible	.285	.008	9.469***
CSA experiences	.065	.105	2.158*

* $p < .05$. ** $p < .01$. *** $p < .001$

Table 6

Intercorrelations of Child Sexual Abuse Characteristics and Sexual Self-Schema Factors

Variable	1	2	3	4	5	6	7	8	9
1. Age of Onset	-								
2. Abuse Severity^a	.006 (N=239)	-							
3. Abuse Frequency	-.307*** (N=239)	.378*** (N=1098)	-						
4. Abuse Duration	-.271*** (N=239)	.590*** (N=1149)	.808*** (N=1098)	-					
5. Relationship w/Perpetrator^b	.484*** (N=237)	-.034 (N=238)	-.505*** (N=238)	-.490*** (N=238)	-				
6. Openness Factor	-.164** (N=239)	.096*** (N=1150)	.277*** (N=1098)	.210*** (N=1149)	-.278*** (N=238)	-			
7. Immoral-Irresponsible Factor	-.077 (N=239)	.081*** (N=1150)	.233*** (N=1098)	.175*** (N=1149)	-.223*** (N=238)	.302*** (N=1150)	-		
8. Embarrassed Factor	.174*** (N=239)	-.068** (N=1150)	-.246*** (N=1098)	-.166*** (N=1149)	.126 (N=238)	-.152*** (N=1150)	.143*** (N=1150)	-	
9. Passionate-Romantic Factor	.176*** (N=239)	.019 (N=1150)	-.306*** (N=1098)	-.182*** (N=1149)	-.252*** (N=238)	.013 (N=1150)	.026 (N=1150)	.270*** (N=1150)	-

^a Lower numbers indicate more intrusive abuse events.

^b Perpetrator identity was coded as follows: immediate family members=1, distant family members=2, acquaintances=3, peers=4, and strangers=5

* $p < .05$. ** $p < .01$. *** $p < .001$

Potential moderating role of the openness to sexuality and immoral-irresponsible sexual self-schema factors.

Since the hypothesized mediational models were not supported in this study and since it seemed plausible to conceptualize the sexual self-schema factors as moderators instead of mediators, this hypothesis was also tested. Moderator effects were tested in accordance with the recommendations of Baron and Kenney (1986) by regressing the dependent variable (adult sexual assault experiences) on the independent variable (CSA experiences), the proposed moderator (openness to sexuality factor or the immoral-irresponsible factor), and the interaction between the independent variable and the moderator. If the interaction term is significant, a moderating effect is supported. The openness to sexuality sexual self-schema factor was found to be a significant moderator of the relationship between CSA and adult sexual assault, CSA and adult consensual sexual partners, and CSA and alcohol usage (See Table 7). The immoral-irresponsible factor was found to be a significant moderator of the relationships between CSA and adult sexual assault as well as CSA and adult consensual sexual partners, but not the relationship between CSA and alcohol usage (See Table 8). The significant interactions are plotted in Figures 1-5 in accordance with the guidelines set forth by Aiken and West (1991). The regression lines depicted in the Figures 1-5 were plotted using centered predictor variables (i.e., variables in deviation score).

Additive model predicting adult sexual assault experiences among CSA victims

As the overarching goal of this study was to determine if cognitions about sexuality can help to account for the increased risk of adult sexual assault experiences found in CSA victims, the additive value of these cognitions in predicting adult sexual assault, above and beyond the known contributions of risky sexual behaviors and abuse characteristics were tested. A

hierarchical regression analysis was performed. Abuse characteristics and risky sexual behaviors (number of adult consensual sexual partners and alcohol usage) were entered first as control variables in steps 1 and 2, respectively. The sexual self-schema factors were entered in the order of hypothesized significance. That is, openness to sexuality was entered first in step 3, and then, the immoral-irresponsible factor was entered second, in step 4. The nine predictors comprised of abuse characteristics (abuse frequency, duration, abuse severity, age of onset, and relationship to the perpetrator), risky behaviors (number of adult consensual sexual partners and alcohol usage), openness to sexuality, and the immoral-irresponsible factor accounted for 62.8% of the variance in adult sexual assault experiences. Both the openness to sexuality and immoral-irresponsible factors accounted for a significant proportion of the variance above and beyond the variance accounted for the abuse characteristics and risky sexual behaviors (See Table 9).

Table 7

Linear Regression Analysis for Adult Sexual Assault: Openness to Sexuality, CSA, and Moderating Effects of Openness to Sexuality (N=1054)

Predictor	<u>b</u>	Standard Error	<u>t</u>
Openness to Sexuality	.041	.005	1.771***
CSA	.453	.007	11.435
Openness*CSA	.255	.001	6.529***

Linear Regression Analysis for Adult Consensual Sexual Experiences: Openness to Sexuality, CSA, and Moderating Effects of Openness to Sexuality (N=998)

Predictor	<u>b</u>	Standard Error	<u>t</u>
Openness to Sexuality	.168	.013	5.729***
CSA	.119	.020	2.239**
Openness*CSA	.181	.002	3.460***

Linear Regression Analysis for Alcohol Usage: Openness to Sexuality, CSA, and Moderating Effects of Openness to Sexuality (N=949)

Predictor	<u>b</u>	Standard Error	<u>t</u>
Openness to Sexuality	.186	.006	5.098***
CSA	-.025	.009	-.476
Openness*CSA	.127	.001	2.484**

* $p < .05$. ** $p < .01$. *** $p < .001$

Table 8

Linear Regression Analysis for Adult Sexual Assault: Immoral-Irresponsible Factor, CSA, and Moderating Effects of Immoral-Irresponsible Factor (N=949)

Predictor	<u>b</u>	Standard Error	<u>t</u>
Immoral-Irresponsible	.080	.007	3.581***
CSA	.458	.005	15.593***
Immoral-Irresponsible*CSA	.291	.001	9.896***

Linear Regression Analysis for Adult Consensual Sexual Experiences: Immoral-Irresponsible Factor, CSA, and Moderating Effects of Immoral-Irresponsible (N=998)

Predictor	<u>b</u>	Standard Error	<u>t</u>
Immoral-Irresponsible	.222	.018	7.733***
CSA	.176	.015	4.515***
Immoral-Irresponsible *CSA	.129	.002	3.313**

Linear Regression Analysis for Alcohol Usage: Immoral-Irresponsible Factor, CSA, and Moderating Effects of Immoral-Irresponsible Factor (N=949)

Predictor	<u>b</u>	Standard Error	<u>t</u>
Immoral-Irresponsible	.281	.009	9.299***
CSA	.037	.007	.961
Immoral-Irresponsible *CSA	.045	.001	1.170

* $p < .05$. ** $p < .01$. *** $p < .001$

Figure 1. Relationship between CSA and adult sexual assault at three levels of openness to sexuality.

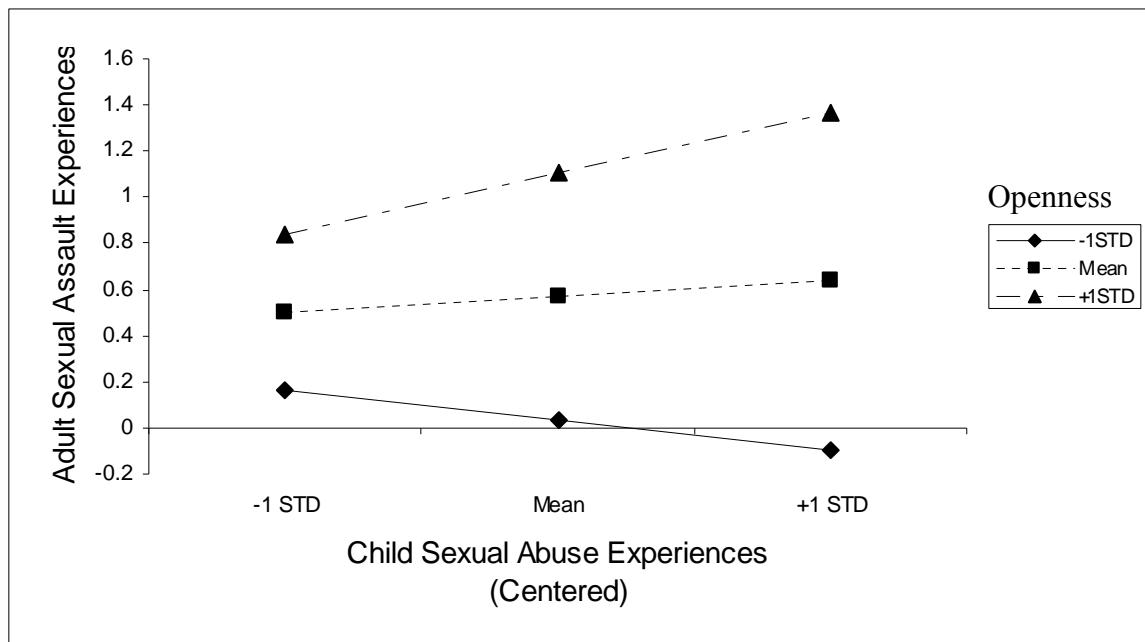


Figure 2. Relationship between CSA and adult consensual sexual partners at three levels of openness to sexuality.

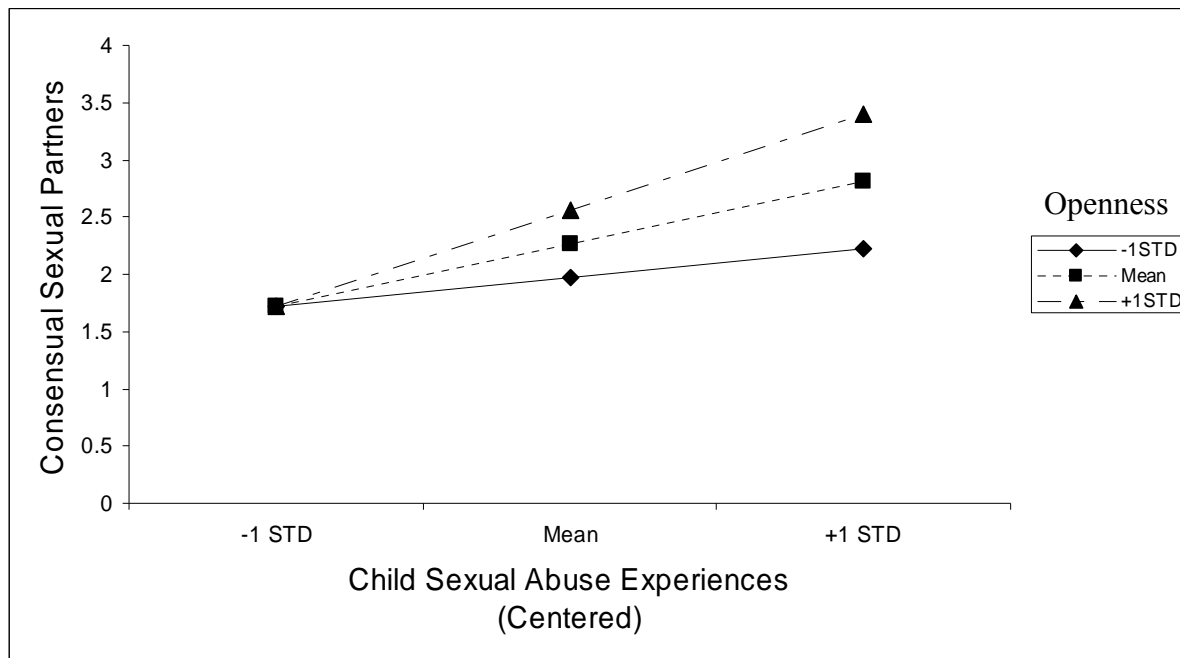


Figure 3. Relationship between CSA and alcohol usage at three levels of openness to sexuality.

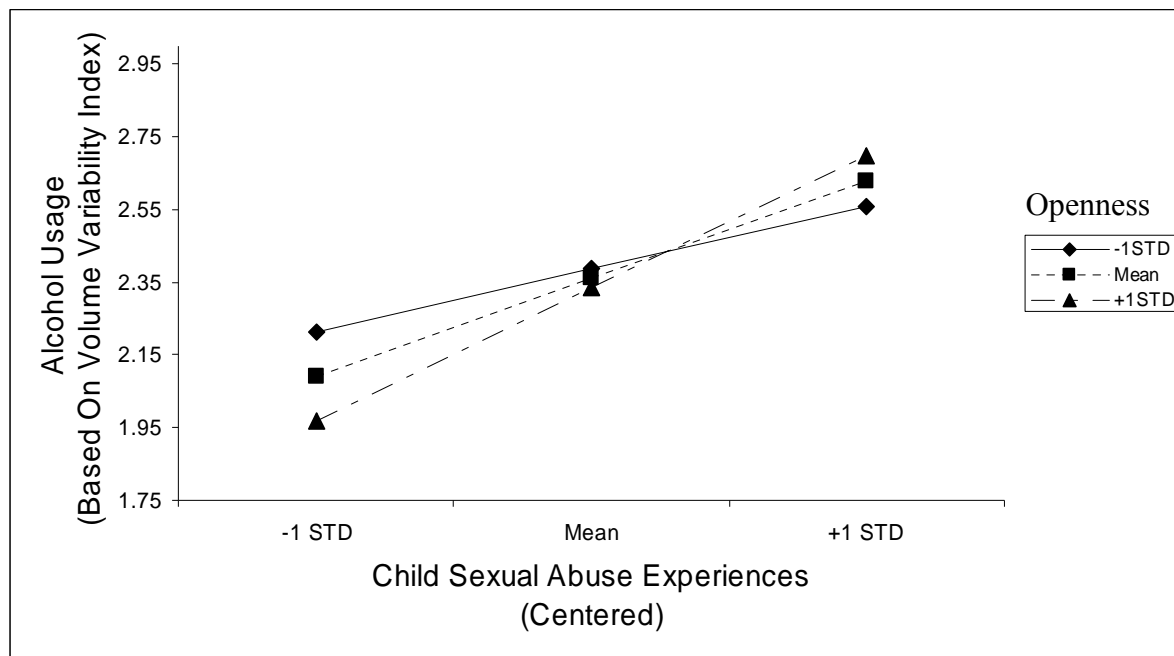


Figure 4. Relationship between CSA and adult sexual assault at three levels of the immoral-irresponsible factor.

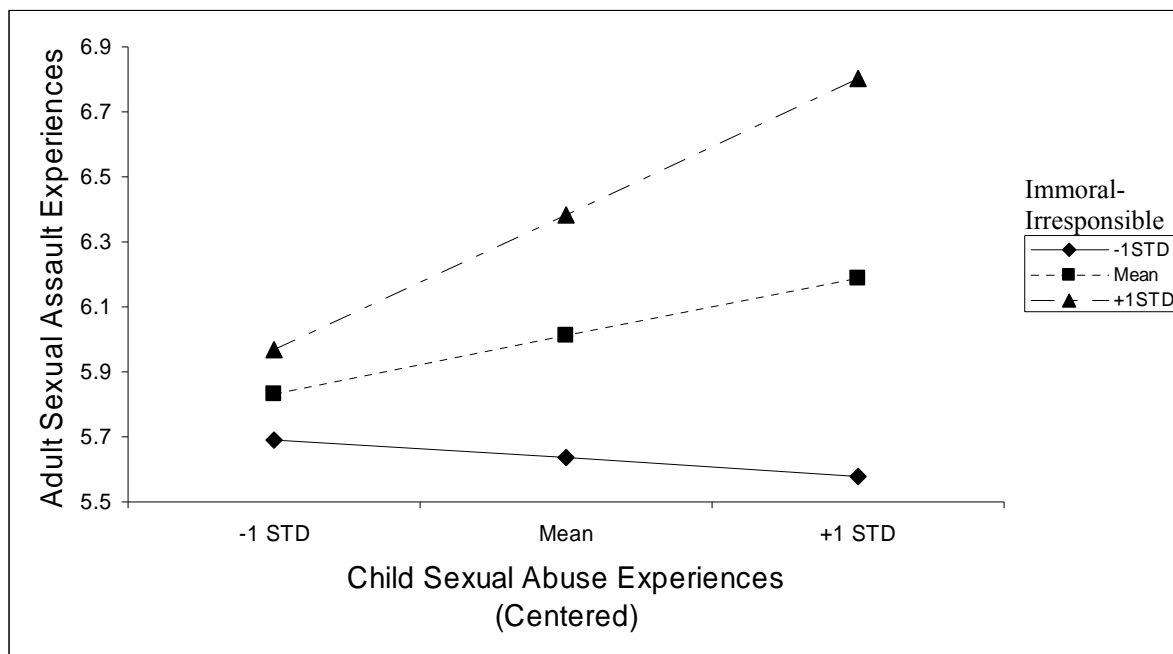


Figure 5. Relationship between CSA and adult consensual sexual partners at three levels of the immoral-irresponsible factor.

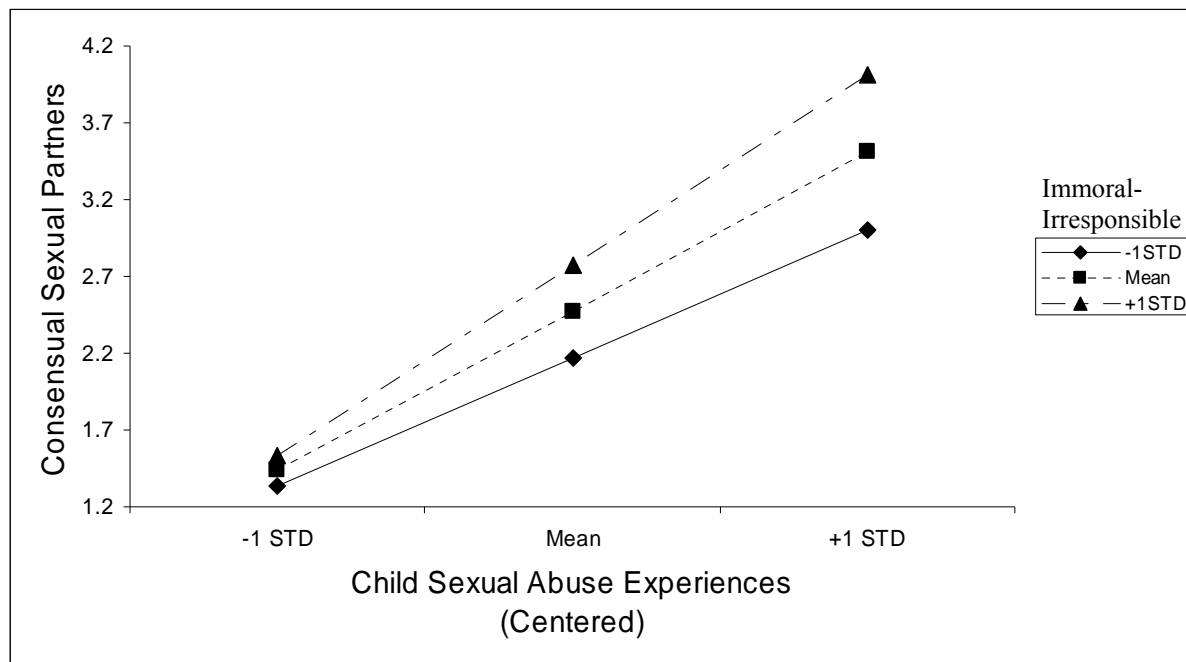


Table 9
 Hierarchical Regression Analysis for Child Sexual Abuse Characteristics, Risky Sexual Behaviors, and Sexual Self-Schema Factors Predicting Adult Sexual Assault Experiences (N=214)

Predictor Variables	β	ΔR^2	R^2_{adj}
Step 1			
CSA Frequency	.791***		
CSA Duration	-.072		
CSA Severity	-.173***		
CSA Age of Onset	.091		
CSA Relationship to Perpetrator	-.053		.553
Step 2			
Adult Consensual Sexual Partners	.234***		
Alcohol Usage	.091*	.006	.613
Step 3			
Openness to Sexuality	-.139***	.007	.620
Step 4			
Immoral-Irresponsible Factor	.120**	.008	.628

* $p < .05$. ** $p < .01$. *** $p < .001$

Chapter 4

Discussion

On the basis of past studies that have suggested that CSA experiences may impact cognitions about sexuality (Davies, 1998; Offman & Matheson, 2004), in addition to studies that have indicated changes in sexual behaviors because of traumatic experiences (Miller, Monson, & Norton, 1995; Noll, Trickett, & Putnam, 2003), it was hypothesized that sexual self-schemas associated with a history of CSA may partially explain the increased risk for adult sexual assault and risky sexual behaviors experienced by populations of CSA victims. While the results of the current study do support the idea that CSA experiences alter cognitions about sexuality in significant ways, these cognitions do not seem to be the mechanisms that explain why CSA victims are at heightened risk for adult sexual assault experiences.

A major finding of the current study is that there were significant differences between CSA victims and nonvictims on each of the sexual self-schema factors. CSA victims endorsed more openness to sexuality indicating CSA victims are more open, direct, revealing, and straightforward about sexuality. However, CSA victims also endorsed the idea that sexuality is immoral, irresponsible, and bad significantly more than nonvictims. Finally, CSA victims endorsed the embarrassed-conservative and passionate-romantic factors significantly less than nonvictims indicating less self-consciousness, caution, love, and passion in thinking about sexuality. Thus, CSA victims appear less inhibited and more likely to approach sexuality than nonvictims, but they also appear to experience a sense that they are bad and dirty when experiencing sexual feelings and engaging in sexual behaviors.

These findings are consistent with the literature showing that CSA victims report more negative attitudes about sex (Orr & Downs, 1985), including experiencing more sex guilt

(Walser & Kerns, 1996), viewing sex as something that is bad, a method of controlling others and being controlled themselves (Maltz & Holman 1987), and labeling themselves as promiscuous even when engaging in similar rates of sexual behavior as their peers (Fromuth, 1986). Other researchers have hypothesized that for CSA victims, sex may be viewed as a behavior that is not guided by romantic ideas such as love and passion but instead is an immoral activity in which one permissively participates (Miller, Monsoon, & Norton, 1995) and perceives as unfriendly and hostile (Schloredt & Heiman, 2003). The salient attitudes and emotions associated with sexual behavior include shame, guilt, and dirtiness (Walser & Kerns, 1996). In light of the finding that CSA victims endorse ideas about sexuality being immoral and irresponsible, it makes sense that these women are less able to view themselves as passionate and romantic. These cognitions are inconsistent with thinking about the sexual self as being immoral and irresponsible. The findings of this study support the idea that CSA experiences seem to impact sexual self-view in a comprehensive manner.

This study further explored the validity of the immoral-irresponsible factor in conceptualizing the cognitions about sexuality experienced by CSA victims. This is only the second study to examine the immoral-irresponsible factor in CSA victims, and the findings of the current study differ from those of Davies (1998). Davies (1998) found that the immoral-irresponsible factor was associated with adult rape status but not with CSA status. The current study included a larger sample of CSA victims (238 victims) than Davies (1998), who had a sample of 86 CSA victims. In addition, although both relationships were significant, adult sexual assault was more strongly correlated with the immoral-irresponsible factor than CSA. As an adult sexual assault event is likely to have occurred more recently than a CSA event, it may be that this more proximal process is more easily detected. More research is needed to more

comprehensively examine the cognitions about sexuality of CSA victims, especially the immoral-irresponsible factor in samples other than college women.

Differences between revictimized CSA victims and nonrevictimized CSA victims on the sexual self-schema factors were also explored. The same pattern of results emerged as when CSA victims and nonvictims were compared, with differences found between the two groups on each sexual self-schema factor in the expected direction. However, it is important to note that even when comparing two groups of victimized women, differences continued to emerge according to trauma history differences (i.e., presence or absence of adult sexual assault experiences in addition to CSA experiences), further supporting the idea that cumulative trauma history has an impact above and beyond individual traumatic experiences.

A history of CSA was associated with higher number of consensual sexual partners, increased alcohol usage, and heightened risk for adult sexual assault experiences. These relationships are well-established in the literature (Fergusson, Horwood, & Lynskey, 1997; Himelein, Vogel, & Wachowiak, 1994; Koss & Dinero, 1989; Mayall & Gold, 1995; Neumann, et al., 1996; Siegel & Williams, 2003; Tsai, Feldman-Summers, & Edgar, 1979; Wilsnack, et al., 1996; Wilsnack, Wilsnack, Kristjanson, 2004), however, it was important to examine them in the present study to proceed with testing the proposed mediational models. Differences between CSA victims and nonvictims in risky sexual behaviors and adult sexual assault experiences were also examined. CSA victims endorsed engaging in sexual behavior with more consensual partners as well as more adult sexual assault experiences when compared to nonvictims. However, the groups did not differ in regards to alcohol usage. This finding may be a result of using a college sample who endorsed overall high levels of alcohol use. Three hundred and thirty seven participants (29.3%) in the total sample were classified as heavy drinkers, while 169

(14.7%) were classified as moderate drinkers. It would be important to examine this sample beyond their college years to see if the CSA victims may be more likely to continue using alcohol at higher quantities and frequencies than their nonvictimized peers. Finally, when revictimized CSA victims were compared to nonrevictimized CSA victims, differences were found in that the revictimized group endorsed higher levels of alcohol usage, more adult consensual sexual experiences, and more adult sexual assault experiences. Therefore, the CSA victims who also have experienced subsequent adult sexual assault experiences are engaging in riskier behaviors than the CSA victims who have not been revictimized in adulthood.

Consistent with previous studies, more severe abuse characteristics were associated with more negative outcomes. Victims' sexual self-schemas were related to CSA characteristics including age of onset, duration, severity, frequency, and relationship with the perpetrator. Although the experience of CSA regardless of the specific abuse characteristics impacts cognitions about sexuality, it seems that the impact on cognitive sexuality is stronger for more severe forms of abuse. In addition, the abuse characteristics of revictimized CSA victims were compared to participants who only endorsed CSA experiences. Revictimized CSA victims reported CSA experiences that were more intrusive, longer in duration, and more frequent.

This study did not find a mediating role for sexual self-schemas in the relationship between CSA and adult sexual assault or between CSA and risky sexual behaviors. There are a number of possible explanations for the lack of support found for the mediational models hypothesized in this study. The most obvious of these is that the incorrect models were specified, and other variables may be mediating these relationships. Another possible reason is that measurement error may have resulted in underestimation of the mediator's effect. Using multiple assessments of each of the sexual self-schema factor constructs would assist in

rectifying this limitation. It is also possible that cognitions about sexuality do function as intervening variables in relationships between CSA and other outcomes such as sexual functioning, but not the outcome of revictimization. As CSA does seem to alter cognitions about sexuality, further study of the impact of these changes is needed.

As there were many significant differences found between CSA victims and nonvictims as well as revictimized CSA victims versus nonrevictimized CSA victims, in regards to sexual self-schemas, it seemed important to continue investigating these cognitions. Due to the lack of support for the original models, some post-hoc analyses were conducted in order to attempt to gain a better understanding of the role of cognitions about sexuality in the adult sexual assault of CSA survivors. First, models were tested for possible moderating effects of the sexual self-schema factors. The openness to sexuality sexual self-schema factor was found to be a significant moderator of the relationship between CSA and adult sexual assault, CSA and number of adult consensual sexual partners, and CSA and alcohol usage. It seems that while CSA is positively related to adult sexual assault, number of consensual sexual partners and alcohol usage, the strength of these relationships increases as level of openness to sexuality increases. In addition, for the relationship between CSA and adult sexual assault, individuals low in openness to sexuality actually experienced fewer adult sexual assault experiences as their number of prior CSA experiences increased. It may be that these women who are low in openness to sexuality are avoiding situations where sexual behaviors may occur, and consequently, experiencing fewer adult sexual assault experiences.

Next, the immoral-irresponsible factor was found to be a significant moderator of the relationships between CSA and adult sexual assault as well as CSA and number of adult consensual sexual partners, but not the relationship between CSA and alcohol usage. Thus, for

individuals high on the immoral-irresponsible factor, the relationship between CSA experiences and adult sexual assault experiences is strengthened. However, for individuals low on the immoral-irresponsible factor, there is a decrease in adult sexual assault experiences as CSA experiences increase. For women who do not think about their sexual selves as immoral, irresponsible, and bad, sexual situations may evoke less anxiety and distress and enable these women to engage in protective behaviors in the event of a risky situation in which they feel threatened. Lastly, whereas there was a positive relationship between CSA and number of adult consensual sexual partners at all levels of immoral-irresponsible factor, the relationship strengthened as levels of the immoral-irresponsible factor increased.

Finally, an additive model was tested using hierarchical regression to determine if openness to sexuality and the immoral-irresponsible factors explain unique variance in adult sexual assault, above and beyond abuse characteristics and risky sexual behaviors. These factors did account for unique variance even when the other variables were controlled for. Due to the stringent control variables entered into the regression equation prior to the sexual self-schema factors, it appears the impact of the openness to sexuality and immoral-irresponsible factors is quite robust. This finding underscores the importance of attending to these specific types of cognitions about sexuality among CSA survivors in a clinical setting.

A major limitation of the current study is its retrospective nature. Due to its correlational design, it is impossible to determine from the current study which variables preceded or followed others, and no causal relationship can be inferred from the results found. Longitudinal data is needed to determine the causal effect of sexual trauma experiences on cognitions about sexuality. In addition, all the constructs were measured using self-report inventories completed only by the participant. Therefore, common method variance and its potential contribution to significant

relationships must be acknowledged. It would be more methodologically sound to obtain information from multiple sources through multiple modalities. The current study used a convenience sample comprised of college women. Therefore, the sample is quite homogenous in its composition, which does not allow for generalizability of findings to a community or clinical sample. Finally, cognitions about sexuality were assessed with only one measure. As mentioned above, when assessing a construct with one measure, measurement error may have resulted in underestimation of the construct's effect, especially in a mediation context. Using multiple assessments of a construct would strengthen the conclusions that can be drawn from the results.

Although models originally hypothesized were not supported, this study does contribute several important empirical findings to the literature. Sexual trauma in childhood seems to impact multiple facets of victims' sexual self-perceptions, and these cognitions provide important information about when CSA victims are at heightened risk for adult sexual assault experiences and engagement in risky sexual behaviors. In addition, the openness to sexuality and immoral-irresponsible factors explained unique variance in adult sexual assault, above and beyond well-established contributors to adult sexual assault. Despite the general assumption of mental health professionals that CSA impacts cognitions about sexuality, very few studies have tested this idea empirically. This is the first study to examine the impact these changes in cognitions about sexuality might have on risk for adult revictimization and engagement in risky sexual behaviors.

Future research geared at incorporating these findings into therapy programs for survivors of CSA is desperately needed. Subsequent revictimization among CSA victims is so prevalent, and these cognitions about sexuality would be modifiable targets for intervention and prevention endeavors. Also, CSA victims who present for treatment suffering from sexual

dysfunctions may be assisted by addressing these cognitions, especially helping the CSA survivors increase their identity as women who are passionate or romantic as opposed to dirty and immoral.

In summary, the primary purposes of this study were to investigate differences between CSA victims and nonvictims in cognitions about sexuality as assessed by the sexual self-schema factors and to determine how these cognitions might impact the risk of adult sexual assault. Perhaps the most important result to highlight from this study is that CSA seems to have a comprehensive effect on the sexual self-view of victims. Victims were more likely to view themselves as more sexually open and less conservative than nonvictims, and victims were more likely to view their sexuality in a negatively valenced manner, associating their sexuality with descriptors such as immoral and dirty as opposed to passionate and loving. Although these cognitions about sexuality did not mediate the relationships between CSA and adult sexual assault and risky sexual behaviors, subsequent analyses established that these cognitions still play important and unique roles in risk for adult revictimization.

References

- Abbey, A., Ross, L.T., McDuffie, D., & McAuslan, P. (1996a). Alcohol and dating risk factors for sexual assault among college women. *Psychology of Women Quarterly*, *20*, 147-169.
- Abbey, A., Ross, L.T., McDuffie, D., & McAuslan, P. (1996b) Alcohol, misperception and sexual assault: How and why are they linked? In D.M. Buss & N. Malamuth (Eds.), *Sex, power, conflict: Evolutionary and feminist perspectives* N.Y.: Oxford University Press, 138-161.
- Abbey, A., Zawacki, T., & Buck, P.O. (2005). The effects of past sexual assault perpetration and alcohol consumption on men's reactions to women's mixed signals. *Journal of Social and Clinical Psychology*, *24*, 129-155.
- Aiken, L.S., & West, S.G. (1991). *Multiple regression: Testing and Interpreting Interactions*. Thousand Oaks, California: Sage Publications.
- Alexander, P.C., & Lupfer, S.L. (1987). Family characteristics and long-term consequences associated with sexual abuse. *Archives of Sexual Behavior*, *16*, 235-245.
- Alexander, P.C. (1992). Application of attachment theory to the study of sexual abuse. *Journal of Consulting and Clinical Psychology*, *60*, 185-195.
- Andersen, B.L., & Cyranowski, J.M. (1994). Women's sexuality: Behaviors, responses, and individual differences. *Journal of Consulting and Clinical Psychology*, *63*, 891-906.
- Arata, C.M. (2000). From child victim to adult victim: A model for predicting sexual revictimization. *Child Maltreatment*, *5*, 28-38.
- Banyard, V.L., Arnold, S., & Smith, J. (2000) Childhood sexual abuse and dating experiences of undergraduate women. *Child Maltreatment*, *5*, 39-48.

- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *31*, 1173-1182.
- Bartholomew, K., & Horowitz, L.M. (1991). Attachment styles among young adults: a test of a four category model. *Journal of Personality and Social Psychology*
- Bartoi, M., & Kinder, B. (1998). Effects of child and adult sexual abuse and dating experiences on adult sexuality. *Journal of Sex and Marital Therapy*, *24*, 75-90.
- Bartoi, M., Kinder, B., & Tomianovic, D. (2000). Interaction effects of emotional status and sexual abuse on adult sexuality. *Journal of Sex and Marital Therapy*, *26*, 1-23.
- Becker, J.V., Skinner, L.J., Abel, G.G., Axelrod, R., & Cichon, J. (1984). Sexual problems of sexual assault survivors. *Women and Health*, *9*, 5-20.
- Bentler, P.M. (1968). Heterosexual Behavior Assessment: II. Females. *Behavior Research & Therapy*, *6*, 27-30.
- Berliner, L., & Conte, J.R., (1990). The process of victimization: The victim's perspective. *Child Abuse & Neglect*, *14*, 29-40.
- Bowlby, J. (1969). *Attachment and loss: Separation, anxiety, and anger*. New York: Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. New York: Basic Books.
- Bowlby, J. (1979). *Attachment and loss: Separation, anxiety, and anger*. New York: Basic Books.
- Bowlby, J. (1982). *Attachment and loss: Vol. 1. Attachment (2nd ed.)*. New York: Basic Books.

- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. London: Tavistock Press.
- Brener, N.D., McMahon, P.M., Warren, C.W., & Douglas, K.A. (1999). Forced sexual intercourse and associated health-risk behaviors among female college students in the United States. *Journal of Consulting Clinical Psychology, 67*, 252-259
- Breitenbecher, K.H. (2001). Sexual revictimization among women: A review of the literature focusing on empirical investigations. *Aggression and Violent Behavior, 6*, 415-432.
- Brennan, K.A., & Shaver, P.R. (1995). Dimensions of adult attachment, affect regulation, and romantic relationship functioning. *Personality and Social Psychology Bulletin, 21*, 267-283.
- Briere, J., & Runtz, M.A. (1987). Post sexual abuse trauma: Data and implications for clinical practice. *Journal of Interpersonal Violence, 2*, 367-379.
- Briere, J. (1988). Controlling for family variables in abuse effects research: A critique of the partialling approach. *Journal of Interpersonal Violence, 3*, 80-89.
- Briere, J., & Runtz, M.A. (1990). Differential adult symptomatology associated with three types of child abuse histories. *Child Abuse & Neglect, 14*, 357-364.
- Briere, J., & Runtz, M. (1993). Childhood sexual abuse: Long-term sequelae and implications for psychological assessment. *Journal of Interpersonal Violence, 8*, 312-330.
- Briere, J., & Elliot, D.M. (1994). Immediate and long-term impacts of child sexual abuse. *The Future of Children, 4*, 54-69.
- Briere, J., & Elliott, D.M. (2003). Prevalence and psychological sequelae of self-reported childhood physical and sexual abuse in a general population sample of men and women. *Child Abuse & Neglect, 27*, 1205-1222.

- Browne, A., & Finkelhor, D. (1986). Impact of child sexual abuse: A review of the research. *Psychological Bulletin, 99*, 66-77.
- Buddie, A.M. & Testa, M. (2005). Rates and predictors of sexual aggression among students and nonstudents. *Journal of Interpersonal Violence, 20*, 713-724
- Cahalan, D. & Cisin, I.H. (1968). American drinking practices: Summary of findings from a national probability sample: II. Measurement of massed versus spaced drinking. *Quarterly Journal of Studies on Alcohol, 29*, 642-656.
- Cahalan, D., Cisin, I.H., & Crossley, H.M. (1969). American drinking practices: A national study of drinking behavior and attitudes. *Monographs of the Rutgers Center of Alcohol Studies, 6*, 260.
- CASA Commission on Substance Abuse at Colleges and Universities. Rethinking Rites of Passage: Substance Abuse on America's Campuses. (1994). New York: Columbia University.
- Cicchetti, D. (1987). Developmental psychopathology in infancy: Illustration from the study of maltreated youngsters. *Journal of Consulting and Clinical Psychology, 55*, 837-845.
- Cloitre, M., Tarduff, K., Marzuk, P.M., Leon, A.C., & Portera, L. (1996). Childhood abuse and subsequent sexual assault among female inpatients. *Journal of Traumatic Stress, 9*(3), 473-482.
- Cloitre, M., Scarvalone, P., & Difede, J. (1997). Posttraumatic stress disorder, self- and interpersonal dysfunction among sexually retraumatized women. *Journal of Traumatic Stress, 10*, 437-452.

- Cloitre, M., Cohen, L.R., & Scarvalone, P. (2002). Understanding revictimization among childhood sexual abuse survivors: An interpersonal schema approach. *Journal of Cognitive Psychotherapy: An International Quarterly*, *16*, 91-112.
- Cole, P.M., & Putnam, F.W. (1992). Effect of incest on self and social functioning: a developmental psychopathology perspective. *Journal of Consulting and Clinical Psychology*, *60*, 174-184.
- Collins, M.E. (1998). Factors influencing sexual victimization and revictimization in a sample of adolescent mothers. *Journal of Interpersonal Violence*, *13*(1), 3-24.
- Collins, N.L., & Read, S.J. (1994). Cognitive representations of attachment: The structure and function of working models. In Bartholomew, K., & Perlman, D. (Eds). *Attachment processes in adulthood*. London, England: Jessica Kingsley Publishers, 53-90.
- Conte, J.R., & Schuerman, J.R. (1987). Factors associated with an increased impact of child sexual abuse. *Child Abuse & Neglect*, *11*, 201-211.
- Cyranowski, J.M., & Andersen, B.L. (1998). Schemas, sexuality, and romantic attachment. *Journal of Personality and Social Psychology*, *74*, 1364-1379.
- Cyranowski, J.M., & Andersen, B.L. (2000). Evidence of self-schematic cognitive processing in women with differing sexual self-views. *Journal of Social and Clinical Psychology*, *19*, 519-543.
- Davies, S. (1998). The relationship between childhood sexual abuse and dimensions of the sexual self-view. Unpublished master's thesis, University of Georgia, Athens.
- Draucker, C.B. (1995). A coping model for adult survivors of childhood sexual abuse. *Journal of Interpersonal Violence*, *10*, 159-175.

- Elze, D.E., Auslander, W., McMillen, C., Edmond, T., & Thompson, R. (2001). Untangling the impact of sexual abuse on HIV risk behaviors among youths in foster care. *AIDS Education and Prevention, 13*, 377-389.
- Fergusson, D.M., Horwood, J., & Lynskey, M.T. (1997). Childhood sexual abuse, adolescent sexual behaviors, and sexual revictimization. *Child Abuse & Neglect, 21*, 789-803.
- Finkelhor, D., & Browne, A. (1985). The traumatic impact of child sexual abuse: A conceptualization. *American Journal of Orthopsychiatry, 55*, 530-541.
- Finkelhor, D., Hotaling, G., Lewis, I.A., & Smith, C. (1990). Sexual abuse in a national survey of adult men and women: Prevalence, characteristics, and risk factors. *Child Abuse and Neglect, 14*, 19-28.
- Fossel, R.V. (1995). Attachment style as a mediator in the relationship between family environment and childhood sexual abuse. Unpublished master's thesis, University of Georgia, Athens.
- Frazier, P., Conlon, A., & Glaser, T. (2001). Positive and negative life changes following sexual assault. *Journal of Consulting and Clinical Psychology, 69*, 1048-1055.
- Fromuth, M.E. (1986). The relationship of childhood sexual abuse with later psychological and sexual adjustment in a sample of college women. *Child Abuse & Neglect, 10*, 5-15.
- Gibson, L.E., & Leitenberg, H. (2001). The impact of child sexual abuse and stigma on methods of coping with sexual assault among undergraduate women. *Child Abuse and Neglect, 25*, 1343-1361.
- Gidycz, C.A., Coble, C.N., Latham, L., & Layman, M.J. (1993). Sexual assault experience in adulthood and prior victimization experiences. *Psychology of Women Quarterly, 17*, 151-168.

- Gidycz, C.A., Hanson, K., & Layman, M.J. (1995). A prospective analysis of the relationships among sexual assault experiences: An extension of previous findings. *Psychology of Women Quarterly, 19*, 5-29.
- Gladstone, G.L., Parker, G.B., Mitchell, P.B., Malhi, G.S., Wilhelm, K., & Austin, M-P. (2004). Implications of childhood trauma for depressed women: An analysis of pathways from childhood sexual abuse to deliberate self-harm and revictimization. *American Journal of Psychiatry, 161*, 1471-1425.
- Gold, E.R. (1986). Long-term effects of sexual victimization in childhood: An attributional approach. *Journal of Consulting and Clinical Psychology, 54*, 471-475.
- Gordon, M., & Creighton, S. (1988). Natal and nonnatal fathers as sexual abusers in the United Kingdom: A comparative analysis. *Journal of Marriage and the Family, 50*, 99-105.
- Grauerholz, L. (2000). An ecological approach to understanding sexual revictimization: Linking personal, interpersonal, and sociocultural factors and processes. *Child Maltreatment, 5*, 5-17.
- Greenwald, E., Leitenberg, H., Cado, S., & Tarran, M. (1990). Childhood sexual abuse: Long term effects on psychological and sexual functioning in a nonclinical and nonstudent sample of adult women. *Child Abuse and Neglect, 14*, 503-513.
- Griffin, D., & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology, 67*, 430-445.
- Harter, S., Alexander, P.C., & Neimeyer, R.A. (1988). Long-term effects of incestuous child abuse in college women: Social adjustment, social cognitions, and family characteristics. *Journal of Consulting and Clinical Psychology, 56*, 5-8.

- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511-524.
- Hazan, C., & Zeifman, D. (1994) Sex and the psychological tether. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships*, (Vol. 5, pp. 151-177). London: Jessica Kingsley.
- Himelein, M.J., Vogel, R.E., & Wachowiak, D.G. (1994). Nonconsensual sexual experiences in precollege women: Prevalence and risk factors. *Journal of Counseling & Development*, 72, 411-415.
- Himelein, M.J. (1995) Risk factors for sexual victimization in dating. *Psychology of Women Quarterly*, 19, 31-48.
- Humphrey, J. & White, J.W. (2000). Women's vulnerability to sexual assault from adolescence to young adulthood. *Journal of Adolescent Health*, 27, 419-424.
- Jackson, J.L., Calhoun, K.S., Amick, A.E., Maddever, H.M., & Habif, V.L. (1990). Young adult women who report childhood intrafamilial sexual abuse: Subsequent adjustment. *Archives of Sexual Behavior*, 19, 211-221.
- Jehu, D. (1988). *Beyond sexual abuse: Therapy with women who were victims in childhood*. Chichester: Wiley.
- Kaufmann, G.K., & Asdigian, N. (1997). When women are under the influence. Does drinking or drug use by women provoke beatings by men? In Marc Galanter (Ed.), *Recent developments in alcoholism: Vol. 13. Alcoholism and Violence* (pp.315-336). New York: Plenum Press.
- Kendall-Tacket, K., Williams, L.M., Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin*, 113, 164-180.

- Kessler, B.L., & Bieschke, K.J. (1999). A retrospective analysis of shame, dissociation, and adult victimization in survivors of childhood sexual abuse. *Journal of Consulting Psychology, 46*, 335-341.
- Kinzl, J.F., Traweger, C., & Biebel, W., (1995). Sexual dysfunction: Relationship to childhood sexual abuse and early family experiences in a nonclinical sample. *Child Abuse & Neglect, 19*, 785-792.
- Kogan, S.M. (2005). The role of disclosing child sexual abuse on adolescent adjustment and revictimization. *Journal of Child Sexual Abuse, 14*, 25-47.
- Koss, M.P., & Gidycz, C.A. (1985). Sexual Experiences Survey: Reliability and validity. *Journal of Consulting and Clinical Psychology, 55*, 162-177.
- Koss, M.P., (1985). The hidden rape victim: Personality, attitudinal, and situational characteristics. *Psychology of Women Quarterly, 9*, 193-212.
- Koss, M.P., & Dinero, T.E. (1989). Discriminant analysis of risk factors for sexual victimization among a national sample of college women. *Journal of Consulting and Clinical Psychology, 57*, 242-250.
- Laumann, E.O., Gagnon, J.H., Michael, R.T., & Michaels, S. (1994). *The social organization of sexuality: Sexual practices in the United States*. Chicago: The University of Chicago Press.
- Leonard, L.M., & Follette, V.M. (2002). Sexual functioning in women reporting a history of child sexual abuse: A review of the empirical literature and clinical implications. *Annual Review of Sex Research, 13*, 346-388.

- Leitenberg, H., Gibson, L.E., & Novy, P.L. (2004). Individual differences among undergraduate women in methods of coping with stressful events: the impact of cumulative childhood stressors and abuse. *Child Abuse & Neglect*, 28, 181-192.
- Leitenberg, H., Greenwald, E., & Cado, S. (1992). A retrospective study of long-term methods of coping with having been sexually abused during childhood. *Child Abuse & Neglect*, 16, 399-407.
- Mallinckrodt, B., McCreary, B.A., & Robertson, A.K. (1995). Co-occurrence of eating disorders and incest: The role of attachment, family environment, and social competence. *Journal of Counseling Psychology*, 42, 178-186.
- Mandoki, C., & Burkhart, B.R. (1989). Sexual victimization: Is there a vicious cycle? *Violence & Victims*, 4, 179-189.
- Maltz, W., & Holman, B. (1987). *Incest and sexuality: A guide to understanding and healing*. Lexington: Heath.
- Markman, H.J., Stanley, S.M., & Blumberg, L. (2001). *Fighting For Your Marriage*. San Francisco, CA: Jossey-Bass.
- Markus, H. (1977). Self-schema and processing information about the self. *Journal of Personality and Social Psychology*, 35, 63-78.
- Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology*, 38, 299-337.
- Mason, W.A., Zimmerman, L., & Evans, W. (1998). Sexual and physical abuse among incarcerated youth: Implications for sexual behavior, contraceptive use, and teenage pregnancy. *Child Abuse and Neglect*, 22, 987-995.

- Mayall, A., & Gold, S.R. (1995). Definitional issues and mediating variables in the sexual revictimization of women sexually abused as children. *Journal of Interpersonal Violence, 10*, 26-42.
- McMillen, C., Zuravin, S., & Rideout, G. (1995). Perceived benefit from child sexual abuse. *Journal of Consulting and Clinical Psychology, 63*, 1037-1043.
- Melchert, T.P. (2000). Clarifying the effects of parental substance abuse, child sexual abuse, and parental caregiving on adult adjustment. *Professional Psychology: Research and Practice, 31*, 64-69.
- Merrill, L.L., Newell, C. E., & Thomsen, C. (1999). Childhood abuse and sexual revictimization in female Navy recruit sample. *Journal of Traumatic Stress, 12*, 211-225.
- Messman-Moore, T.L., Long, P., & Siegfried, N.J. (2000). The revictimization of child sexual abuse survivors: An examination of the adjustment of college women with child sexual abuse, adult sexual assault, and adult physical abuse. *Child Maltreatment, 5*, 18-27.
- Messman-Moore, T.L., & Long, P. (2000). Child sexual abuse and revictimization in the form of adult sexual abuse, adult physical abuse, and adult psychological maltreatment. *Journal of Interpersonal Violence, 15*, 489-502.
- Messman-Moore, T., & Long, P. (2003). The role of childhood sexual abuse sequelae in the sexual revictimization of women. An empirical review and theoretical reformulation. *Clinical Psychology Review, 23*, 537-571.
- Messner, S., Shipp, D., Jackson, J., Edison, J., Townsley, R., Burke, M., Chandler, K., & Long, P. (1988, March). Reliability of adult's reports of childhood sexual abuse. Paper presented at the annual meeting of the Southeastern Psychological Association, New Orleans.

- Meston, C.M., Heiman, J.R., & Trapnell, P.D. (1999). The relation between early abuse and adult sexuality. *The Journal of Sex Research, 36*, 385-395.
- Meston, C.M., Rellini, A. H., & Heiman, J.R. (2006). Women's history of sexual abuse, their sexuality, and sexual self-schemas. *Journal of Consulting and Clinical Psychology, 74*(2), 229-236.
- Mikulincer, M., & Shaver, P.R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. In M.P. Zanna (Ed.). *Advances in experimental social psychology, Vol. 35*. San Diego, CA, US: Elsevier Academic Press.
- Miller, B.C., Monson, T.L., & Norton, M.C. (1995). The effects of forced intercourse on white female adolescents. *Child Abuse & Neglect, 19*, 1289-1303.
- Miller, B.A., & Downs, W.R. (1995). Violent victimization among women with alcohol problems. In M. Galanter (Ed.), *Recent developments in alcoholism, Vol. 12: Women and alcoholism*. New York: Plenum.
- Moncrieff, J., & Farmer, R. (1998). Sexual abuse and the subsequent development of alcohol problems. *Alcohol & Alcoholism, 33*, 592-601.
- Mullen, P.E., Martin, J.L., Anderson, J.C., Romans, S.E., & Herbison, G.P. (1994). The effect of child sexual abuse on social, interpersonal, and sexual function in adult life. *British Journal of Psychiatry, 165*, 35-47.
- Nash, M. R., Zivney, O. A., & Hulsey, T. (1993). Characteristics of sexual abuse associated with greater psychological impairment among children. *Child Abuse & Neglect, 17*(3), 401-408.
- National Victim Center and Crime Victims Research and Treatment Center. Rape in America: A report to the Nation. 2000.

- Neumann, D.A., Housekamp, B.M., Pollock, V.E., & Briere, J. (1996). The long-term sequelae of childhood sexual abuse in women: A meta-analytic review. *Child Maltreatment, 1*, 6-16.
- Noll, J.G., Trickett, P.K., & Putnam, F.W. (2003). A prospective investigation of the impact of childhood sexual abuse on the development of sexuality. *Journal of Consulting and Clinical Psychology, 71*, 575-586.
- Offman, A., & Matheson, K. (2004). The sexual self-perceptions of young women experiencing abuse in dating relationships. *Sex Roles, 51*, 551-560.
- Orr, D.P., & Downs, M.C. (1985). Self-concept of adolescent sexual abuse victims. *Journal of Youth and Adolescence, 14*, 401-410.
- Polunsky, M.A., & Follette, V.M. (1995). Long-term correlates of child sexual abuse: Theory and review of the empirical literature. *Applied and Preventive Psychology, 4*, 143-166.
- Ray, K.C. (1993). Childhood sexual abuse: Direct and buffering effects of family support on women's long-term adjustment. Unpublished doctoral dissertation, University of Georgia, Athens.
- Rhynard, J., Krebs, M., & Glover, J. (1997). Sexual assault in dating relationships. *Journal of School Health, 67*, 89-93.
- Rind, B., & Tromovitch, P., & Bauserman, R. (1998). A meta-analytic review of findings from national samples on psychological correlates of child sexual abuse. *The Journal of Sex Research, 34*, 237-255.
- Roche, D.N., Runtz, M.G., & Hunter, M.A. (1999). Adult attachment: A mediator between child sexual abuse and later psychological adjustment. *Journal of Interpersonal Violence, 14*, 184-207.

- Roodman, A.A., & Clum, G.A. (2001). Revictimization rates and method variance: a meta analysis. *Clinical Psychology Review, 21*, 183-204.
- Russell, D.E.H. (1986). *The secret trauma: Incest in the lives of girls and women*. New York: Basic Books.
- Saunders, B.E., Villepontoux, L.A., Lipovsky, J.A., Kilpatrick, D.G., & Veronen, L.J. (1992). Child sexual abuse as a risk factor for mental disorders among women: A community survey. *Journal of Interpersonal Violence, 7*, 189-204.
- Saunders, B.E. (2003). Understanding children exposed to violence: Toward an integration of overlapping fields. *Journal of Interpersonal Violence, 18*, 356-
- Sarwer, D.B., & Durlak, J.A. (1996). Childhood sexual abuse as a predictor of adult female sexual dysfunction: A study of couples seeking sex therapy. *Child Abuse & Neglect, 20*, 963-972.
- Schloretdt, K.A., & Heiman, J.R. (2003). Perceptions of sexuality as related to sexual functioning and sexual risk in women with different types of childhood abuse histories. *Journal of Traumatic Stress, 16*(3), 275-284.
- Siegel, J., Golding, J., Stein, J., Burnam, A., Sorenson, J. (1990). Reactions to sexual assault: A community study. *Journal of Interpersonal Violence, 5*, 229-246.
- Siegel, J.A., & Williams, L.M. (2003). Risk factors for sexual victimization in women. *Violence Against Women, 9*, 902-930.
- Simpson, J.A., & Rholes, S. (1994) Stress and secure base relationships in adulthood. In K. Bartholomew & D. Perlman (Eds.) *Attachment processes in adulthood*. London, England: Jessica Kingsley Publishers, pp. 181-204.

- Sroufe, L.A., & Waters, E. (1977). Attachment as an organizational construct. *ChildDevelopment, 48*, 1184-1199.
- Stephan, C.W., & Bachman, G.F. (1999). What's sex got to do with it? Attachment, love schemas, and sexuality. *Personal Relationships, 6*, 111-123.
- Styron, T., & Janoff-Bulman, R. (1997). Childhood attachment and abuse: Long-term effects on adult attachment, depression, and conflict resolution. *Child Abuse & Neglect, 21*, 1015-1023.
- Synovitz, L.B., & Byrne, T.J. (1998). Antecedents of sexual victimization: Factors discriminating victims from nonvictims. *Journal of American College Health, 46*, 151-158.
- Tjaden, P., & Thoennes, N. (2000). Prevalence and consequences of male-to-female and female-to-male intimate partner violence as measured by the National Violence Against Women Survey. *Violence Against Women, 6*, 142-161.
- Trickett, P.K., & Putnam, F.W. (1993). Impact of child sexual abuse on females: Toward a developmental, psychobiological integration. *Psychological Science, 4*, 81-87.
- Tsai, M., Feldman-Summers, S., & Edgar, M. (1979). Childhood molestation: Variables related to differential impacts on psychosexual functioning in adult women. *Journal of Abnormal Psychology, 88*, 407-417.
- Tyler, K.A. (2002). Social and emotional outcomes of childhood sexual abuse: A review of recent research. *Aggression and Violent Behavior, 7*, 567-589.
- Ullman, S.E., Karabatsos, G., Koss, M. (1999). Alcohol and sexual assault in a national sample of college women. *Journal of Interpersonal Violence, 14*, 603-625.
- Ullman, S.E. & Brecklin, L.R. (2000). Alcohol and adult sexual assault in a national sample of

- women. *Journal of Substance Abuse*, 11, 405-420.
- Vicary, J.R., Klingman, L.R., & Harkness, W.L. (1995). Risk factors associated with date rape and sexual assault of adolescent girls. *Journal of Adolescence*, 18, 289-306.
- Vogeltanz, N. D., Wilsnack, S. C., Harris, T. R., Wilsnack, R. W., Wonderlich, S. A., & Kristjanson, A. F. (1998). Prevalence and risk factors for childhood sexual abuse in women: National survey findings. *Child Abuse and Neglect*, 23, 579-592.
- Walser, R.D., & Kerns, J.M. (1996). Relationships among childhood sexual abuse, sex guilt, and sexual behavior in adult clinical samples. *Journal of Sex Research*, 33, 321-326.
- Wei, M., Shaffer, P. A., & Young, S.K. (2005). Adult attachment, shame, depression, and loneliness: The mediation role of basic psychological needs satisfaction. *Journal of Counseling Psychology*, 52(4), 591-601.
- Westerlund, E. (1992). *Women's sexuality after childhood incest*. New York: W.W. Norton.
- Whealin, J.M., Davies, S., Shaffer, A.E., Jackson, J.L., & Love, L. (2002). Family context and childhood adjustment associated with intrafamilial unwanted sexual attention. *Journal of Family Violence*, 17, 151-165.
- White, H. R. & Labouvie, E. W. (1989). Towards the assessment of adolescent problem drinking. *Journal of Studies on Alcohol*, 50, 30-37.
- Wilsnack, S. C., Vogeltanz, N. D., Klassen, A.D., & Harris, R. (1997). Childhood sexual abuse and women's substance abuse national survey findings. *Journal of Studies on Alcohol*, 58, 264-271.
- Wilsnack, S.C., Wilsnack, R.W., & Kristjanson, A.F. (2004). Child sexual abuse and alcohol use

- among women: Setting the stage for risking sexual behavior. In Koenig, L.J & Doll, L.S. (Eds.), *From child sexual abuse to adult sexual risk: Trauma, revictimization, and intervention* (pp. 181-200). Washington, DC: American Psychological Association..
- Wyatt, G. E. (1985). The sexual abuse of African American and White American women in childhood. *Child Abuse and Neglect, 9*, 507-519.
- Wyatt, G.E., & Peter, S.D. (1986). Issues in the definition of child sexual abuse in prevalence research. *Child Abuse & Neglect, 10*, 231-240.
- Wyatt, G.E., & Newcomb, M. (1990). Internal and external mediators of women's sexual abuse in childhood. *Journal of Consulting and Clinical Psychology, 58*, 758-767.
- Wyatt, G.E., Guthrie, D., & Notgrass, C.M. (1992). Differential effects of women's child sexual abuse and subsequent sexual revictimization. *Journal of Consulting and Clinical Psychology, 60*, 167-173.
- Wyatt, G.E., Loeb, T.B., Romero, G., Solis, B., & Carmona, J.V. (1999). The prevalence and circumstances of child sexual abuse: Changes across a decade. *Child Abuse and Neglect, 23*, 45-60.

Appendix A

Modified Sexual Self-Schema Scale

Below are a list of 58 adjectives. For each word, consider whether or not the term describes you. Each adjective is to be rated on a scale ranging from 0 = *not at all descriptive of me* to 6 = *very descriptive of me*. Choose a number of each adjective to indicate how accurately the adjective describes you. There are no right or wrong answers. Please be thoughtful and honest.

Question: To what extent does the term _____ describe me?

Rating Scale

Not at all descriptive -----0-----1-----2-----3-----4-----5-----6-----Very
Descriptive

- | | |
|---------------------------|---------------------------|
| 1. generous _____ | 30. casual _____ |
| 2. uninhibited _____ | 31. disagreeable _____ |
| 3. cautious _____ | 32. serious _____ |
| 4. helpful _____ | 33. sensible _____ |
| 5. dirty _____ | 34. embarrassed _____ |
| 6. loving _____ | 35. immoral _____ |
| 7. open-minded _____ | 36. outspoken _____ |
| 8. shallow _____ | 37. level-headed _____ |
| 9. timid _____ | 38. responsible _____ |
| 10. vulnerable _____ | 39. romantic _____ |
| 11. frank _____ | 40. polite _____ |
| 12. clean-cut _____ | 41. sympathetic _____ |
| 13. stimulating _____ | 42. conservative _____ |
| 14. unpleasant _____ | 43. passionate _____ |
| 15. dependent _____ | 44. self-controlled _____ |
| 16. risk-taking _____ | 45. wise _____ |
| 17. experienced _____ | 46. inexperienced _____ |
| 18. short-tempered _____ | 47. stingy _____ |
| 19. irresponsible _____ | 48. superficial _____ |
| 20. direct _____ | 49. naïve _____ |
| 21. logical _____ | 50. warm _____ |
| 22. broad-minded _____ | 51. unromantic _____ |
| 23. loose _____ | 52. good-natured _____ |
| 24. kind _____ | 53. rude _____ |
| 25. arousable _____ | 54. revealing _____ |
| 26. practical _____ | 55. bad _____ |
| 27. self-conscious _____ | 56. bossy _____ |
| 28. dull _____ | 57. feeling _____ |
| 29. straightforward _____ | 58. humorous _____ |

Factors

Open-Direct

Straightforward
 Frank
 Direct
 Broad minded
 Casual
 Open minded
 Outspoken
 Revealing

Immoral-Irresponsible

Irresponsible
 Immoral
 Sensible
 Dependent
 Self-Controlled
 Dirty
 Loose
 Experienced
 Bad

Passionate-Romantic

Romantic
 Unromantic
 Passionate
 Warm
 Sympathetic
 Loving
 Feeling
 Arousable

Embarrassed-Conservative

Timid
 Embarrassed
 Self Conscious
 Cautious
 Stimulating
 Conservative
 Risk-taking
 Uninhibited
 Vulnerable
 Naïve
 Inexperienced