

ABSTRACT

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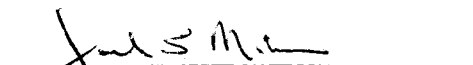
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ABSTRACT

The goals of the present study were to define and provide evidence for three types of sexual distortions—dysfunctional sexuality, sexual avoidance, and sexual ambivalence—and to identify factors associated with sexual distortions. Participants were classified into one of four groups (avoidant, dysfunctional, ambivalent, and comparison) based on their scores on measures of erotophilia and erotophobia. The dysfunctional group, relative to the comparison group, was characterized by more sexual behavior, more unrestricted sexual behavior, greater sexual preoccupation, greater dysfunctional sexual attitudes, and acceptance of casual sex. The avoidant group, relative to the comparison group, was characterized by less sexual behavior and more avoidant attitudes toward sex. The ambivalent group, relative to the comparison group, was characterized by more indiscriminant sexual contact, greater dysfunctional sexual attitudes, and more avoidant attitudes toward sex. The ambivalent group was not significantly different from the comparison group on sexual behaviors.

CSA victims and nonvictims were compared on sexual distortions, as well as sexual attitudes and behaviors, sexual motivations, adult romantic attachment style, and body image. Results indicated that CSA victims, compared to nonvictims, reported more sex partners, greater sexual variety, and greater use of sex for enhancement, but were not different on sexual distortion variables. CSA characteristics were examined as predictors of sexual distortions. CSA duration, but

no other CSA characteristics, significantly predicted dysfunctional sexuality. None of the CSA characteristics examined predicted sexual avoidance or sexual ambivalence.

Finally, a path model in which CSA was expected to predict dysfunctional sexuality, sexual avoidance, and sexual ambivalence via motivations for sexual behavior, adult attachment style, and body image was examined. In the final model, having experienced CSA was related to greater sexual ambivalence directly and indirectly via increased use of sex for enhancement. In addition, having experienced CSA was indirectly related to less sexual avoidance via greater use of sex for enhancement. CSA was not directly or indirectly related to dysfunctional sexuality. Anxious attachment, avoidant attachment, and use of sex for coping did not mediate the relationship between CSA and sexual distortions, but were directly related to sexual distortion variables.

NORTHERN ILLINOIS UNIVERSITY

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A DISSERTATION SUBMITTED TO THE GRADUATE SCHOOL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

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DEPARTMENT OF PSYCHOLOGY

BY JENNIFER M. GUIMOND

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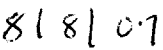
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DEDICATION

To Mike, with love

TABLE OF CONTENTS

	Page
LIST OF TABLES	ix
LIST OF FIGURES	xiii
LIST OF APPENDICES	xiv
Chapter	
1. BACKGROUND	1
2. REVIEW OF RELEVANT LITERATURE	8
Theories of the Impact of CSA on Sexuality	8
Traumagenic Dynamics	8
A Cognitive-Behavioral Model of the Impact of CSA	10
Summary	14
CSA and Sexual Distortions	15
CSA and Dysfunctional Sexuality	15
CSA and Sexual Avoidance	17
Multiple Patterns of Sexual Distortions	20
Factors Affecting Sexual Distortions	27
CSA Characteristics	27
Sexual Motivations	29
Attachment Style	31

Chapter	Page
Attachment and CSA	32
Attachment and Sexuality	33
Body Image	37
CSA and Body Image	38
Body Image and Sexuality	38
3. STATEMENT OF THE PROBLEM	40
Phase 1	40
Hypothesis 1	43
Hypothesis 2	44
Hypothesis 3	45
Phase 2	45
Hypothesis 4	46
Hypothesis 5	48
Hypothesis 6	48
4. METHOD	51
Participants	51
Procedure	53
Materials	54
Demographic Questionnaire	54
Sexual Attitudes	54
Sexual Behavior	55

Chapter	Page
Childhood Sexual Experiences Questionnaire	57
Traumatic Sexualization Survey (TSS)	59
Sexual Ambivalence	64
Sexual Motivations	65
Experiences in Close Relationships—Revised (ECR-R)	66
Body Image	68
Analytic Strategy	68
5. RESULTS	76
Phase 1: Hypotheses 1 to 3	76
Phase 2	98
Hypothesis 4	102
Hypothesis 5	121
Hypothesis 6	124
6. DISCUSSION	133
Phase 1	133
Dysfunctional Sexuality	133
Avoidant Sexuality	135
Sexual Ambivalence	137
Phase 2	138
CSA Victims Versus Nonvictims	138
CSA Characteristics and Sexual Distortions	141

Chapter	Page
Mediators Between CSA and Sexual Distortions	142
Limitations	146
Directions for Future Research	148
REFERENCES	150
APPENDICES	166

LIST OF TABLES

Table	Page
1. Categorization of Undergraduate Women Based on Erotophilia and Erotophobia Scores	42
2. Descriptive Statistics for Erotophilia and Erotophobia Scores by Group.....	43
3. Demographic Characteristics of Participants	52
4. Demographics by Group	70
5. Demographics by CSA Status	74
6. Intercorrelations and Descriptive Statistics for Sexual Behavior and Sexual Attitude Variables (Group Analysis).....	77
7. Percentage of Participants Who Have Engaged in Vaginal and Oral Sex One or More Times by Group	80
8. Follow-up Group x Relationship Status x Ethnicity Results for Sexual Behavior Variables	81
9. Means and Standard Deviations for Sexual Behavior Variables by Group	82
10. Means and Standard Deviations for Sexual Behavior Variables by Relationship Status (Group Analysis)	84
11. Means and Standard Deviations for Sexual Behavior Variables by Ethnicity (Group Analysis)	86
12. Follow-up Univariate ANOVAs for Group Differences on Number of Sex Partners Past Year and Total Number of Sex Partners for Each Relationship Status	87

Table	Page
13. Group x Relationship Status x Ethnicity ANOVA Results for Age of First Consensual Sexual Intercourse	92
14. Means and Standards Deviation for Age of First Consensual Sexual Intercourse in Years by Relationship Status (Group Analyses)	93
15. Percentage of Participants Who Have Engaged in Sex With Strangers and One-Night Stands One or More Times by Group	93
16. Follow-up Group x Relationship Status x Ethnicity ANOVA Results for Sexual Attitude Variables	95
17. Means and Standard Deviations for Sexual Attitude Variables by Group	96
18. Means and Standard Deviations for Sexual Attitude Variables by Relationship Status (Group Analysis)	97
19. Simple Effects Analysis for Sexual Preoccupation by Ethnicity and Relationship Status (Group Analysis)	99
20. Intercorrelations and Descriptive Statistics for Sexual Behavior and Sexual Attitude Variables (CSA Analysis)	100
21. Percentage of Participants Who Have Engaged in Vaginal and Oral Sex One or More Times by CSA Status	102
22. Follow-up CSA Status x Relationship Status x Ethnicity ANOVA Results for Sexual Behavior Variables	104
23. Means and Standard Deviations for Sexual Behavior Variables by CSA Status	105
24. Means and Standard Deviations for Sexual Behavior Variables by Relationship (CSA Analysis)	106

Table	Page
25. Means and Standard Deviations for Sexual Behavior Variables by Ethnicity (CSA Analysis)	108
26. CSA Status x Relationship Status x Ethnicity ANOVA Results for Age of First Consensual Sexual Intercourse (CSA Analysis)	109
27. Means and Standard Deviations for Age of First Consensual Sexual Intercourse by Relationship Status (CSA Analysis)	110
28. Percentage of Participants Who Have Engaged Sex With Strangers and One-Night Stands by CSA Status	110
29. Follow-up CSA Status x Relationship Status x Ethnicity ANOVA Results for Sexual Attitude Variables	112
30. Means and Standard Deviations for Sexual Attitude Variables by CSA Status	113
31. Means and Standard Deviations for Sexual Attitude Variables by Relationship Status (CSA Analysis)	115
32. Means and Standard Deviations for Sexual Attitude Variables by Ethnicity (CSA Analysis)	116
33. Follow-up CSA Status x Relationship Status x Ethnicity ANOVA Results for Adult Romantic Attachment Style	118
34. Means and Standard Deviations for Attachment Variables by CSA Status	119
35. Means and Standard Deviations for Attachment Variables by Relationship Status	119
36. Means and Standard Deviations for Body Image Scores by Ethnicity	120

Table	Page
37. Means and Standard Deviations for Sexual Avoidance, Dysfunctional Sexuality, and Sexual Ambivalence and Intercorrelations with Predictor Variables	122
38. Simultaneous Multiple Regression Analysis Summary for CSA Characteristics Predicting Sexual Avoidance	122
39. Simultaneous Multiple Regression Analysis Summary for CSA Characteristics Predicting Dysfunctional Sexuality	123
40. Simultaneous Multiple Regression Analysis Summary for CSA Characteristics Predicting Sexual Ambivalence	123
41. Intercorrelations and Descriptive Statistics for Variables Used in the Path Model	125
42. Comparison of the Fit of Alternative Path Models of the Relations Among CSA, Sexual Motivations, Adult Romantic Attachment Style, Body Image, and Sexual Distortions	127
43. Factor Loadings for Erotophilia, Erotophobia, and Attitudes Toward Casual Sex Scales of Sexual Attitudes Questionnaire.....	171
44. Correlations Between Sexual Attitudes Questionnaire Factors.....	173
45. Factor Loadings for the Traumatic Sexualization Survey	188
46. Correlations Between Traumatic Sexualization Survey Factors	191

LIST OF FIGURES

Figure	Page
1. Proposed path analytic model: CSA, sexual motives, attachment style and body image as predictors of sexual distortions	50
2. Mean number of sex partners during the past year by group for each relationship status category	88
3. Mean total number of sex partners by group for each relationship status category	90
4. Model 2: CSA, sexual motives, attachment style, and body image as predictors of sexual distortions allowing for covariation.....	128
5. Final Model: CSA, sexual motives, and attachment style as predictors of sexual distortions.....	131

LIST OF APPENDICES

Appendix	Page
A. DEMOGRAPHICS QUESTIONNAIRE	166
B. SEXUAL ATTITUDES QUESTIONNAIRE	168
C. SEXUAL BEHAVIORS QUESTIONNAIRE	174
D. CHILDHOOD SEXUAL EXPERIENCES QUESTIONNAIRES	179
E. TRAUMATIC SEXUALIZATION SURVEY	185
F. SEX MOTIVES QUESTIONNAIRE	192
G. EXPERIENCES IN CLOSE RELATIONSHIPS—REVISED	195
H. DEROGATIS SEXUAL FUNCTIONING INVENTORY BODY IMAGE SUBTEST	198

CHAPTER 1

BACKGROUND

Childhood sexual abuse (CSA) has been defined as physical sexual contact that occurred between a child and someone at least five years older or that involved force or coercion (Browne & Finkelhor, 1986). Studies vary as to the definition of a child, with the age limit ranging from 11 to 17 years (Fergusson & Mullen, 1999). Women are more likely than men to report CSA (Dube et al., 2005; Fergusson & Mullen; Gorey & Leslie, 1997). In community studies prevalence rates for CSA involving physical sexual contact range from 7% to 45% among women (Dube et al.; Fergusson & Mullen). Prevalence rates vary depending on CSA definition, response bias, and measurement bias. Adjusting for these issues, Gorey and Leslie suggested that CSA rates among women range from 12% to 17%.

As a group, CSA victims tend to show psychological impairment compared to nonvictims. As many as three-fourths of sexually abused women report some negative effects from the experience (Rind & Tromovitch, 1997; Russell, 1986; Stein, Golding, Siegel, Burnam, & Sorenson, 1988), and approximately 10-20% report long-term difficulties (Briere & Runtz, 1988; Rind, Tromovitch, & Bauserman, 1998). Specifically, CSA has been associated with increased anxiety, fear, and depressive symptomatology (Beitchman et al., 1992; Briere & Runtz; Browne & Finkelhor, 1986; Fergusson & Mullen, 1999; Green, 1993; Neumann, 1994; Neumann, Houskamp,

Pollock, & Briere, 1996; Polusny & Follette, 1995); anger (Browne & Finkelhor; Neumann); suicidal ideation and behavior (Beitchman et al.; Briere & Runtz; Browne & Finkelhor; Fergusson & Mullen; Green; Polusny & Follette); feelings of isolation and stigma (Briere & Runtz; Browne & Finkelhor; Neumann); poor self-esteem (Browne & Finkelhor; Green; Neumann); and substance use (Beitchman et al.; Briere & Runtz; Fergusson & Mullen; Green; Neumann et al.; Polusny, & Follette; Wilsnack, Vogeltanz, Klassen, & Harris, 1997). In addition, women who experienced CSA often have relational difficulties such as problems with trust and intimacy (Beitchman et al.; Briere & Runtz; Browne & Finkelhor; Green; Neumann et al.; Roesler & McKenzie, 1994). In general, CSA victims are at greater risk for mental health problems and poor adjustment (Browne & Finkelhor; Fergusson & Mullen).

Studies with both clinical and community samples indicate CSA also puts women at greater risk for being diagnosed with a psychological disorder (Fergusson & Mullen, 1999; Polusny & Follette, 1995; Saunders, Villeponteaux, Lipovsky, Kilpatrick, & Veronen, 1992). CSA victims are significantly more likely than the general population to have had a major depressive episode during their life (Beitchman et al., 1992; Fergusson & Mullen; Putnam, 2003; Polusny & Follette; Saunders et al.; Wilsnack et al., 1997) and are more likely to be diagnosed with a personality disorder, especially Borderline Personality Disorder (Briere & Runtz, 1993; Brown & Anderson, 1991; Figueroa, Silk, Huth, & Lohr, 1997). In addition, studies of both clinical and community samples have revealed higher rates of several anxiety disorders in CSA victims, including Posttraumatic Stress Disorder (PTSD),

Agoraphobia, Social Phobia, and Obsessive-Compulsive Disorder, compared to the general population (Fergusson & Mullen; Green, 1993; Polusny & Follette; Saunders et al.).

Finally, CSA appears to affect women's sexuality. Compared to nonvictims, CSA victims have reported greater dissatisfaction with their sex life (Browne & Finkelhor, 1986; Fergusson & Mullen, 1999; Neumann, 1994; Polusny & Follette, 1995; Wyatt, 1991), decreased sex drive (Browne & Finkelhor; Green, 1993; Leonard & Follette, 2002), and greater fear of having sex (Beitchman et al., 1992). CSA victims are more likely than the general population to be diagnosed with a sexual disorder (Saunders et al., 1992), and sexual dysfunction may be one of the most common complaints when these women seek therapy (Jehu, 1989). All of these factors may contribute to decreased interest in sexual behavior and lead to sexual avoidance. Sexual avoidance can be conceptualized as avoidance of sexual activity due to negative thoughts and feelings about sex.¹ Thus, sexual avoidance can have cognitive, affective, and behavioral components.

Paradoxically, CSA also has been associated with frequent sexual behavior (Polusny & Follette, 1995) that may be considered high-risk, including a high number of sex partners (Fergusson & Mullen, 1999; Loeb et al., 2002; Polusny & Follette; Putnam, 2003; Wyatt, 1991) and indiscriminant sexual activity, which may be characterized by engaging in frequent, short-term sexual relationships (Briere &

¹Although low sexual interest is not necessarily dysfunctional, low sexual interest becomes problematic when it arises out of trauma or other negative experience or when the individual identifies it as a problem.

Runtz, 1993; Leonard & Follette, 2002; Wyatt), often with strangers or casual acquaintances (Davis & Petretic-Jackson 2000; Polusny & Follette). Such behavior is indicative of dysfunctional sexuality, a tendency to engage in high-risk sexual behavior or to use sex primarily to meet nonsexual needs.

However, some studies have failed to find relationships between CSA and adult sexuality (e.g., Bartoi & Kinder, 1998; Greenwald, Leitenberg, Cado, & Tarran, 1990; Rainey, Stevens-Simon, & Kaplan, 1995; Widom & Kuhns, 1996), and meta-analyses have found only modest effect sizes (Paolucci, Genuis, & Violato, 2001; Rind et al., 1998). The mixed findings may be a result of the contradictory effects—the tendency of CSA victims toward both sexual avoidance and dysfunctional sexuality (Davis & Petretic-Jackson 2000; Heiman & Heard-Davison, 2004; Leonard & Follette, 2002; Wyatt, 1991). According to Noll, Trickett, and Putnam (2000), the tendencies toward both avoidant and dysfunctional pathways in the same sample cancel out each when averaged together, masking the differences between CSA and comparison groups.

Sexual sequelae of CSA in women is important to study for a number of reasons. Sexual avoidance can cause significant distress and impair relationships (Donnelly, 1993). It can lead to feelings of inadequacy and a decrease in life satisfaction. It may arise in adolescence or adulthood and continue long after the abuse occurred (Davis & Petretic-Jackson 2000; Wyatt, 1991). Dysfunctional sexuality by definition carries a high risk for severe consequences. It can increase a woman's risk for contracting a sexually transmitted disease, such as AIDS

(Cunningham, Stiffman, Dorè, & Earls, 1994; Zierler et al., 1991), and for sexual assault as an adult (Fergusson, Horwood, & Lynskey, 1997; Fergusson & Mullen, 1999; Wyatt, Guthrie, & Notgrass, 1992; Mayall & Gold, 1995; Messman-Moore & Long, 2003; Noll, Horowitz, Bonanno, Trickett, & Putnam, 2003; Van Bruggen, Runtz, & Kadlec, 2006).

Compared to more general correlates of CSA such as depression, low self-esteem, and trust issues, sexual sequelae may have a relatively reliable and unique relationship to sexual abuse. When sexual sequelae are measured, clinical studies almost always show later sexual problems among CSA victims (Browne & Finkelhor, 1986; Green, 1993). Certain patterns of sexual behavior may be likely to appear in victims of CSA but not victims of other types of child abuse (Briere & Runtz, 1990; Meston, Heiman, & Trapnell, 1999). Unlike women who experienced childhood physical abuse or neglect, CSA victims may display consistent patterns of sexual attitudes and behaviors that may serve as a marker for identifying CSA victims. In addition, some studies have found that sexual sequelae seem to be related to CSA beyond family characteristics (Fergusson et al., 1997; Fleming, Mullen, Sibthorpe, & Bammer, 1999; Wind & Silvern, 1992). Unlike other correlates of CSA, sexual sequelae may be a direct effect of CSA that is not related to family dysfunction.

As noted above, CSA seems to be linked to both sexual avoidance and dysfunctional sexuality. Paradoxically, some CSA victims seem to pursue sexual activity whereas others seem to avoid it. Noll, Trickett, and Putnam (2003) refer to these effects as “sexual distortions” because they extend not only to behavior, but also

to affect and cognitions as well. The term also emphasizes that, for some victims, CSA alters sexual development in an unhealthy manner (Downs, 1993).

Although both sexual avoidance and dysfunctional sexuality have been documented, there is little published research that addresses why CSA victims may display these seemingly opposite patterns. Both patterns may be related to the concept of traumatic sexualization (Finkelhor & Browne, 1985). In traumatic sexualization, a child's sexuality is shaped in an interpersonally dysfunctional manner and, as a result, the child develops lasting inappropriate or negative associations with sexual activity and arousal. Thus, Finkelhor and Browne's conceptualization of traumatic sexualization suggests that learning mechanisms may lead sexual distortions.

Sexual avoidance may be related to a conditioned response where sexual stimuli become associated with negative feelings such as pain, shame, guilt, and revulsion (Briere, 1992; Browne & Finkelhor, 1986; Hoier et al., 1992; Maltz & Hoffman, 1987; Russell, 1986; Westerlund, 1992). Under such circumstances, sex is perceived as negative and something to be avoided. Similarly, dysfunctional sexuality also may be related to a learned response. CSA victims may learn that sex is a way to meet their needs for love and affection (Briere, 1989; Browne & Finkelhor; Hoier et al.; Meiselman, 1978; Russell, 1986). They may use sexualized behavior as a primary way to relate to others (Runtz & Briere, 1986) or attempt to gain mastery over the trauma by repeatedly seeking love and affection through sex (Matorin & Lynn, 1998; Meiselman; Westerlund). Consequently, CSA victims may engage in sexual activities with many partners in an attempt to feel loved. High levels of sexual behavior also

may be a way for CSA victims to express anger about being victimized (Meiselman; Westerlund), feel powerful and in control (Briere, 1989; Maltz & Hoffman; Westerlund), avoid intimacy (Briere, 1992; Jehu, 1989; Meiselman), or reduce tension or emotional pain (Briere, 1992; Briere & Elliott, 1994; Polusny & Follette, 1995; Westerlund). When it succeeds in meeting nonsexual needs, sexual behavior is reinforced and the behavior is strengthened.

The present study examined the role of CSA and sexual distortions in young women's sexuality. First, three patterns of sexual distortions were identified and defined: dysfunctional sexuality, sexual avoidance, and sexual ambivalence. Second, factors that contribute to each pattern of sexual distortion were examined. A path model examining CSA, motivations for sexual behavior, adult attachment style, and body image as predictors of dysfunctional sexuality, sexual avoidance, and sexual ambivalence was tested.

The following section reviews research relevant to the study. First, the theoretical basis for sexual distortions is described. Second, the relationship between CSA and sexual distortions is reviewed. Finally, factors influencing the relationship between CSA and sexual distortions are discussed.

CHAPTER 2

REVIEW OF RELEVANT LITERATURE

Theories of the Impact of CSA on Sexuality

In this section, two theories of CSA impact, Finkelhor and Browne's (1985) Traumagenic Dynamics and a cognitive-behavioral model, are examined as they relate to sexual distortions. These theories are most relevant because they address the learning mechanisms that may lead to sexual distortions.

Traumagenic Dynamics

The theory of traumagenic dynamics (Finkelhor & Browne, 1985) suggests the experience of CSA can be understood in terms of four trauma-causing factors related to the abuse and its initial disclosure: traumatic sexualization, betrayal, powerlessness, and stigmatization. Traumatic sexualization refers to a process whereby a CSA victim's sexuality may be shaped in a "developmentally inappropriate and interpersonally dysfunctional manner" (p. 531), resulting in altered sexual feelings and attitudes. Betrayal refers to the child's reaction when they discover that an individual on whom they are dependent or that they trust has caused them harm. Powerlessness refers to a process whereby "the child's will, desires, and sense of efficacy are continually contravened" (p. 532). Stigmatization refers to the negative connotations associated with experiencing CSA that are communicated by others and

incorporated into the child's self-image. For the purposes of this study, only traumatic sexualization is explored in depth because traumatic sexualization is hypothesized to most strongly affect adult sexuality. The dynamics, psychological impact, and behavioral manifestations of traumatic sexualization are discussed.

According to Finkelhor and Browne (1985), several different CSA characteristics can lead to traumatic sexualization. For instance, a child may be rewarded for developmentally inappropriate sexual behavior or may receive attention and affection in exchange for sex. The offender may transmit misconceptions about sexual behavior and sexual morality, or the child's sexual parts may be fetishized. In addition, the child may be conditioned to associate sexual activity with negative emotions and memories. Finkelhor and Browne contend these CSA dynamics determine the impact of the CSA on an individual's sexuality.

Traumatic sexualization can be expressed through a variety of psychological effects. At the very least, it is believed to increase the salience of sexual issues. For instance, young children may take a developmentally inappropriate interest in sexual matters as a result of the sexual stimulation from the abuse and the conditioning of behavior that may occur as well. In addition, CSA may provoke questions and conflicts about the self and interpersonal relations, including questions about sexual identity. As a result of CSA, victims may wonder whether they are homosexual, still sexually desirable to others, or in some way marked by the experience. Traumatic sexualization also may result in confusion about sexual norms and standards. Victims may not understand societal standards regarding sexuality and the progression of

sexualized behavior in romantic relationships. They may view sex as a way to give and receive love and affection, essentially using sex to meet nonsexual needs. Finally, victims may develop negative associations with sex. Sexual feelings or behaviors may become associated with negative emotional reactions, such as revulsion, fear, anger, and powerlessness. These negative emotional reactions may generalize to nonabusive sexual experiences in adulthood. Consequently, some victims develop an aversion to any sexual or intimate activity.

The psychological effects of traumatic sexualization may be manifested through a wide range of behaviors. Victims may show high levels of sexual behavior that can be labeled as dysfunctional, either because of its indiscriminant quality, its potential for self-harm, or its inappropriate use to accomplish nonsexual goals. These dysfunctional behaviors include promiscuity and prostitution. Victims also may display sexual preoccupations and compulsive or precocious sexual behaviors. In addition, some victims may show sexually aggressive behavior or a sexualized relationship with their children. At the other end of the spectrum, some victims develop avoidance of or phobic reactions to sexual intimacy. They may avoid sex or find sex to be unenjoyable due to negative associations or flashbacks. Consequently, they may meet criteria for sexual dysfunction, including dysfunctions of desire, arousal, or orgasm.

A Cognitive-Behavioral Model of the Impact of CSA

Hoier et al. (1992) suggested that responses to CSA could be understood from

a cognitive-behavioral perspective through the antecedent-response-consequence relationship. From a cognitive learning perspective, chronic CSA represents repeated learning trials for the victim and interacts with the severity of trauma to strengthen some responses and decrease other responses through both classical conditioning and instrumental learning. Hoier et al.'s model can be divided into three components: traumatization, learning mechanisms, and maintenance and generalization.

According to Hoier et al. (1992), severity of CSA is related to the intensity, repetitiveness, and uncontrollability of the abuse. If the CSA is perceived by the child as aversive, it can be placed on a continuum of trauma severity based on several factors. These factors include (a) the degree of novelty or bizarreness of the experience; (b) the presence of cues indicating that the child's responses will not alter the aversive experience, which may result in feelings of helplessness; (c) the presence of cues indicating to the child that punishment will be forthcoming; and (d) the actual occurrence of pain or threat to life to the child. The younger the victim, the presence of force or coercion, and the involvement of a caretaker or powerful family figure can all add to the victim's perception that the abuse is uncontrollable. Factors such as the use of force or coercion, penetration, and bizarre acts all serve to increase the intensity and impact of the abuse. Finally, CSA with high frequency, long duration, or involvement of multiple perpetrators—repetitive CSA experiences—strengthens and generalizes the impact of the trauma learning.

According to Hoier et al.'s (1992) model, sequelae of CSA may be seen as a result of both classical conditioning and contingencies of reinforcement and

punishment. In the context of CSA, classical conditioning occurs when pain, injury, overwhelming fear, and helplessness elicit autonomic arousal. Related stimuli, such as sexual activity, particular sensory experiences, strong affect, or characteristics of the abuser, become associated with the feelings experienced during the abuse. These associated stimuli also begin to elicit autonomic arousal. Consequently, when victims are put in sexual situations and cues remind them of the abuse, they may automatically experience distress. The process can be thought of as aversive conditioning.

Instrumental learning occurs when behavior is controlled by contingencies of reinforcement and punishment. In the context of sexual abuse, negative reinforcement occurs for behaviors resulting in successful avoidance of, escape from, or reduction of distress. The victim may learn to decrease distress through a variety of coping mechanisms, such as dissociation, phobic avoidance, or substance abuse. For example, the victim may learn that avoiding sex decreases the likelihood of being reminded of the sexual abuse and is a way to avoid distress. Alternately, the victim may find that sexual activity in some way decreases distress by serving as a tension-reduction tool or an escape from intimacy. Similarly, positive reinforcement occurs when responses to the abuse, such as compliance, become associated with desired outcomes. Consequently, the victim may learn that sex leads to attention, affection, and rewards.

Finally, punishment occurs when other responses to the abuse become associated with aversive consequences. Responses such as resisting or disclosing to someone else may result in injury or withdrawal of love and affection. Consequently,

the victim learns that her responses will not help and will make the situation worse, possibly resulting in feelings of learned helplessness. In the future, the victim may be less likely to protect herself in other situations and may put herself at risk for revictimization.

In the context of multiple episodes of abuse or multiple perpetrators, classically conditioned and learned responses are likely to grow stronger. The conditioned and learned responses may be elicited by stimuli that have common characteristics with the conditioned stimuli. Thus, they may generalize across people and situations. As a result, the victim may react as if she is being sexually abused by her perpetrator when she is engaging in consensual sex with a partner.

The learned or conditioned responses tend to maintain themselves over time because the victim finds them functional. When a sequence of events has become associated with reexperiencing the trauma, any one of the events may evoke the victim's learned or conditioned coping responses. The earlier in the sequence the victim copes by escaping, the less likely the victim is to experience further events in the sequence. As a result, habituation to the stimuli does not occur, and the response maintains its association with the stimuli. Further, pairing of nondistressing cues with the cues that still elicit arousal can lead to formerly nondistressing cues triggering the learned or conditioned responses. Consequently, a victim may avoid sex to avoid distress and never learn to associate sex with more positive experiences. Conversely, a victim may continue to use sex to meet nonsexual needs (such as for love and affection) because he or she is not motivated to find other ways to meet nonsexual

needs

Finally, according to Hoier et al. (1992), as the sequences of antecedent-response-consequences become established, cognitive rules to describe the sequences develop. These rules are referred to as contingency specifying stimuli (CSS) and further facilitate generalization and maintenance of responses. Stimuli associated with the abuse may alter functional relationships among other stimuli and responses and thus change or distort the manner in which external stimuli evoke behavior. Consequently, a victim may acquire rules that are maladaptive, such as “sex is the way to obtain nurturance and attention.” Victims also may develop rules about the behavior of others based on the behavior of the perpetrator, making the victim insensitive to the appropriate behavior of nonabusers.

Summary

Finkelhor and Browne’s (1985) and Hoier et al.’s (1992) theories suggest that learning mechanisms may lead to sexual distortions. However, neither these theories, nor any other theories, address the factors that may lead to different outcomes. That is, no theory addresses why some CSA victims display sexual avoidance whereas other CSA victims display dysfunctional sexuality. The present study sought to address this gap in the literature by testing a model in which the relationship between CSA and sexual distortions is mediated by sexual motivations, adult romantic attachment style, and body image. The following sections address the empirical evidence for relationships between variables in the proposed model.

CSA and Sexual Distortions

CSA and Dysfunctional Sexuality

Dysfunctional sexuality, based on Briere and Runtz's (1990) construct of dysfunctional sexual behavior, refers to a tendency to engage in high-risk sexual behavior and to use sex primarily to meet nonsexual needs. It incorporates attitudes toward sex (i.e., sex is a means to an end) as well as sexual behavior. Multiple studies have reported that female CSA victims, compared to nonvictims, score higher on the Dysfunctional Sexual Behavior subscale of the Trauma Symptom Inventory (TSI; Briere, 1995; Briere, Elliott, Harris, & Cotman, 1995; Merrill, 2001; Runtz & Roche, 1999; but see Roche, Runtz, & Hunter, 1999; Schaaf & McCanne, 1998; Van Bruggen et al., 2006). In addition, other studies have found that CSA victims, compared to nonvictims, score higher on measures of using sex for nonsexual needs (Matorin, 1998; Matorin & Lynn, 1998; Shapiro, 1999; but see Noll et al., 2000) and sexual preoccupation (Noll et al., 2000).

Several studies have examined high-risk sexual behavior in female CSA victims. Sexual behavior is considered high-risk when it places the individual at risk for sexual assault and sexually transmitted diseases. High-risk sexual behaviors include having a high number of sex partners, engaging in sexual activity indiscriminately (i.e., on a first date or with a "one-night stand") or with someone the individual does not know well, and engaging multiple concurrent relationships. As a group, CSA victims, compared to nonvictims, report having more sex partners during

their lifetime in adult (Hillis, Anda, Felitti, & Marchbanks, 2001; Krahe, Scheinberger-Olwig, Waizenhöfer, & Kolpin, 1999; Najman, Dunne, Purdie, Boyle, & Coxeter, 2005; Schloredt & Heiman, 2003; Testa, VanZile-Tamsen, & Livingston, 2005; Wilsnack, Wilsnack, Kristjanson, Vogeltanz-Holm, & Harris, 2004; Wyatt, 1988), college (Johnsen & Harlow, 1996), and adolescent samples (Buzi et al., 2003; Cunningham et al., 1994; Fergusson et al., 1997; Luster & Small, 1997). Even among samples of women at high risk for sexually transmitted diseases, CSA victims report more partners than nonvictims (Champion, Shain, Piper & Perdue 2001; National Institute of Mental Health Multisite HIV Prevention Trial, 2001; Parillo, Freeman, Collier, & Young, 2001; Senn, Carey, Venable, Coury-Doniger, & Urban, 2006; Zierler et al., 1991). A few studies have failed to find a relationship between CSA and number of sex partners (Bartoi & Kinder 1998, Fromuth, 1986; Noll et al., 2003; Noll et al., 2000; Van Bruggen et al., 2006; Wayment & Aronsen, 2002; Widom & Kuhns 1996). Interestingly, Wenninger and Heiman (1998) found that CSA victims, compared to nonvictims, reported more sex partners during their lifetime, but not during the previous year. On average, CSA victims, compared to nonvictims, reported a lower age of first consensual intercourse (Buzi et al.; Fergusson et al.; Hillis et al.; Johnsen & Harlow; Noll et al., 2000; Noll et al., 2003; Steel & Herlitz, 2005; Stock, Bell, Boyer, & Connell, 1997; Testa et al.; Wilsnack et al.; Wyatt, 1988; but see Brown, Cohen, Chen, Smailes, & Johnson, 2004; Krahe et al., 1999), a factor that likely contributes to the higher number of sex partners (Fergusson et al.). Finally, CSA victims, compared to nonvictims, are more likely to engage in indiscriminant

sexual behavior (Meston et al., 1999; Walser & Kern, 1996; Wyatt; Zierler et al.; but see Van Bruggen et al.).

CSA and Sexual Avoidance

Anecdotally, sexual avoidance and similar issues are cited as an effect of CSA, particularly among clinical populations (Davis & Petretic-Jackson 2000; Jehu, 1989; Leonard & Follette, 2002; Maltz & Holman, 1987; Meiselman, 1978; Westerlund, 1992; Wyatt, 1991). However, few studies have examined the specific construct of sexual avoidance in CSA victims. Matorin and Lynn (1998) developed a scale, the Traumatic Sexualization Survey (TSS), to assess elements of traumatic sexualization, including sexual avoidance. The TSS Avoidance and Fear of Sex subscale assesses negative associations with sexuality, aversive feelings toward sex and physical intimacy, and behavioral avoidance of sex. In order to examine the validity of the measure, they compared female CSA victims and nonvictims from an undergraduate sample on the TSS. They found no significant differences on the Avoidance and Fear of Sex subscale. However, the definition of CSA included noncontact activity (i.e., exhibitionism) as well as physical sexual contact. Thus, differences between CSA victims and nonvictims may have been obscured by the inclusion of victims of less severe CSA.

In conducting additional validation of the TSS, Matorin (1998) compared female CSA victims in therapy to nonvictims in therapy and a nonvictim community sample. The CSA group, compared to both nonvictim groups, scored significantly

higher on Avoidance and Fear of Sex. The disparate findings from Matorin (1998) and Matorin and Lynn (1998) may be due to the definition of CSA for Matorin's (1998) study, which required physical sexual contact. However, it also is noteworthy that the samples were drawn from different populations (undergraduate vs. clinical and community), and the incongruent findings may reflect differences among specific groups of CSA victims. For example, women experiencing sexual problems may be more likely to seek treatment.

Using a different measure of sexual avoidance, Bartoi and Kinder (1998) compared female CSA victims and nonvictims in an undergraduate population. No significant differences were found for sexual avoidance. However, the analyses excluded women who "had never had a sexual relationship." It is unclear whether the exclusion referred to any lifetime sexual contact or just consensual sexual relationships. Thus, it is possible that some of the excluded participants were CSA victims who had never had a consensual sexual relationship due to sexual avoidance.

Other concepts related to sexual avoidance include fear of sex, sexual aversion, and negative reactions to sex. These factors are discussed here because they often incorporate sexual avoidance or are manifested as behavioral avoidance of sex. Fear of sex has been documented among female CSA victims in clinical and community samples (Becker, Skinner, Abel, Axelrod, & Cichon, 1984; Becker, Skinner, Abel, & Treacy, 1982; Gorcey, Santiago, & McCall-Perez, 1986; Stein et al., 1988). In addition, female CSA victims, compared to nonvictims, have reported greater sexual aversion (Wenninger & Heiman, 1998) and more negative reactions toward sex

(Charmoli & Athelstan, 1988; Johnson & Harlow, 1996; Meston, Rellini, & Heiman, 2006; Schloretdt & Heiman, 2003; but see Noll et al. 2000; Noll et al., 2003).

According to Schloretdt and Heiman, CSA victims, compared to nonvictims, are more likely to perceive their sexuality as involving less friendliness and more hostility.

Presence and frequency of sexual behavior may be an important component of sexual avoidance. Some studies have found that CSA victims, compared to nonvictims, are more likely to have had consensual sexual intercourse (Alexander & Lupfer, 1987; Chandy, Blum, & Resnick, 1996; Fromuth 1986), whereas others have found no differences (Noll et al., 2003; Runtz & Briere, 1986). Findings have been mixed regarding the relationship between CSA and frequency of sexual behavior in women. Using a clinical sample, Langmade (1983) found that CSA victims, compared to nonvictims, reported less frequent sexual intercourse. In contrast, Alexander and Lupfer (1987) and Meston et al. (1999) found that undergraduate female CSA victims, compared to nonvictims, had higher frequency of sexual intercourse. Others studies have found no differences (Chandy et al.; Fromuth; Mullen, Martin, Anderson, Romans, & Herbison, 1996; Rainey et al., 1995). However, sexual frequency has been assessed differently across the cited studies, generally using rating scales (e.g., Langmade: 1 (*never*) to 7 (*usually*); Chandy et al.: 1 (*rarely*) to 4 (*about every day*) or dichotomized (e.g., Rainey et al: <*weekly* or >*weekly*). In addition, some measures of sexual frequency include only participants who are sexually active, potentially leaving out those exhibiting high levels of sexual avoidance. Finally, it is important to note that based on the information provided in

most studies, it is difficult to determine when absence or low frequency of sexual behavior reflects avoidance rather than other factors.

Many studies have reported greater problems with general sexual functioning and a higher frequency of sexual disorders among CSA victims, compared to nonvictims in a variety of populations (Bendixen, Muus, & Schei, 1994; Briere, 1988; Briere et al., 1995; Briere & Runtz, 1988; Briere & Zaidi, 1989; Elliott & Briere, 1992; Ernst, Angst, & Földenyi, 1993; Fleming et al., 1999; Gold, Milan, Mayall, & Johnson, 1994; Higgins & McCabe, 1994; Kinzl, Traweger, & Biebl, 1995; Najman et al., 2005; Roesler & McKenzie, 1994; Runtz & Roche, 1999; Sarwer & Durlak, 1996; Saunders, et al., 1992; Van Bruggen et al., 2006; Zlotnick, et al., 1996). The definitions of sexual problems/disorders in these studies incorporate multiple issues in addition to sexual avoidance and, thus, are too broad for inclusion in this review. Additionally, studies of sexual functioning and sexual disorders, like studies of sexual frequency, are often limited to participants who are sexually active, excluding those who may exhibit sexual avoidance to the degree that they have never engaged in consensual sexual activity.

Multiple Patterns of Sexual Distortions

When CSA victims are examined as a group, there is more evidence for the dysfunctional sexuality pattern than for the sexual avoidance pattern. That is, as a group, CSA victims appear to exhibit more dysfunctional sexuality than sexual avoidance. However, as previously discussed, there is evidence to suggest that a

minority of CSA victims develop sexual avoidance. Thus, it is likely that there are multiple developmental trajectories describing the effects of sexual trauma on later sexuality (Brown et al., 2004). Four studies have investigated multiple patterns of sexual distortions among CSA victims.

Using a national probability sample (N = 1,749), Browning and Laumann (1997) studied adult sexual behavior in women, age 18-59 years, who had experienced CSA, as defined by genital contact prior to puberty (age 12 or 13 years) with someone at least four years older and no younger than 14 years. They examined the effect of CSA on three trichotomized outcome variables: (a) age of first consensual sexual activity (*<16 years, 16-18 years, >18 years*); (b) number of sexual partners in the last five years (*0, 1-3, 4 or more*); and (c) number of sexual partners in the last year (*0, 1, 2 or more*). Multinomial logit analyses were used to determine both linear and quadratic effects. The linear effects, but not the quadratic effects, were significant. According to Browning and Laumann, the findings indicate one primary trajectory toward early sexual activity with many partners and do not support the hypothesis that CSA can also lead to sexual avoidance. This study's strength lies in using a sample representative of the general population. The response rate was nearly 80%. However, there is no way of knowing how nonrespondents differed from respondents. In general, volunteers for sexuality studies, compared to nonvolunteers, report a more positive orientation toward sex (Bogaert, 1996; Strassberg & Lowe, 1999) and more sexual experience (Bogaert; Catania, McDermott, & Pollack, 1986; Strassberg & Lowe; Wiederman, 1999; Wolchik et al., 1985). Thus, CSA victims more prone to

sexual avoidance also may have been less likely to respond to the study. Superficially, the complex statistical analysis meant to identify opposing trajectories appears to be a strength. However, the use of trichotomous rather than continuous variables calls into question the appropriateness of the statistical technique. That is, quadratic effects are better understood within a broad distribution. Categorizing the variables truncates the range of responses and may mask effects. In addition, although the authors controlled for age, race, mother's education, family structure, and age at menses, they fail to control for or take into account marital status. Marital status may have a significant effect on recent number of sex partners, as married individuals are likely to have fewer sex partners. Finally, the age requirement for CSA is lower than many studies. Under Browning and Laumann's definition, only 12% of the sample were considered CSA victims. Thus, some participants who would meet criteria for CSA under another definition were considered nonvictims for this study. It is possible that their CSA definition affected their results.

In Noll et al. (2003), CSA victims were drawn from a longitudinal study of female victims of substantiated CSA referred by protective service agencies ($n=77$). The comparison group ($n=89$) was composed of girls recruited through advertisements and flyers from the same neighborhoods as the CSA victims. The groups were similar in age, ethnic composition, and socioeconomic status. Approximately 8 to 10 years after the initial interviews, participants (age 13-28 years, mean = 20 years) completed measures of current sexual activities and attitudes.

Noll et al. (2003) hypothesized three trajectories of sexual distortions

following sexual abuse. The first trajectory was labeled “sexual preoccupation.” Sexual preoccupation referred to positive attitudes toward sexual material, high frequency of masturbation, and frequent thoughts about sex. CSA victims, compared to nonvictims, reported greater sexual preoccupation. The second trajectory was labeled “sexual aversion.” Sexual aversion referred to low sexual permissiveness (permissive attitudes toward sexual desires and behaviors) combined with high negative attitudes toward sex. The third trajectory was labeled “sexual ambivalence.” Sexual ambivalence referred to high sexual preoccupation combined with simultaneous sexual aversion—having negative attitudes toward sex, but feeling compelled to engage in sexual activity anyway. The possibility of a trajectory characterized by sexual ambivalence highlights the need to examine both sexual behaviors and sexual attitudes.

Noll et al. (2003) did not report group differences for sexual aversion and sexual ambivalence. Rather, they analyzed a longitudinal structural equation model predicting sexual aversion and sexual preoccupation from CSA status (yes or no) and emotional/behavioral functioning at two prior time periods, while controlling for age and marital status. In the model, CSA status directly predicted sexual preoccupation, but not sexual aversion, and there were no significant indirect pathways between CSA status and either sexual distortion variable. Sexual ambivalence was examined using a linear regression model in which age, marital status, and emotional/behavioral functioning at two prior time periods were entered simultaneously. As with sexual aversion, CSA status did not predict sexual ambivalence.

However, differences were found when the CSA group was divided by CSA characteristics into three profile subgroups: (a) multiple perpetrator (MP): girls abused by multiple perpetrators, but not their biological father, for a relatively short duration and involving pronounced physical violence; (b) single perpetrator (SP): girls abused by a single perpetrator, but not their biological father, for a relatively short duration involving little physical violence; and (c) biological father (BF): girls abused by their biological father over a long period of time beginning at a young age involving little physical violence. A MANOVA and follow-up tests indicated that the BF group reported greater sexual ambivalence than all other groups and greater sexual aversion than the nonvictims group and the SP group. In addition, compared to the nonvictim group, the SP group reported greater sexual preoccupation. Thus, a portion of CSA victims, characterized by long-term abuse by a biological father, appeared to exhibit greater sexual avoidance and sexual ambivalence than nonvictims and even other CSA victims, suggesting that these two trajectories were present in the sample.

The strength of this study lies in its prospective design, especially since the participant retention rate was 95%. Although the comparison participants were not matched to CSA victims individually, the group matching and use of participants from similar geographic areas helped minimize differences. The authors also controlled for marital/cohabitation status, as well as age. Although drawing participants from cases confirmed by protective service agencies may provide data about victimization that is less subject to memory effects, it also restricts the sample. That is, all cases involved a family member as the perpetrator and were reported to child protective services; such

cases may tend to be more severe than unreported cases. In addition, victims of reported CSA, compared to victims of unreported CSA, may be more likely to have subsequent therapy. Thus, the results do not necessarily generalize to all CSA victims. Another concern is that all the variables were entered simultaneously for the sexual ambivalence analysis. This analytical strategy negates the longitudinal nature of the data and does not measure whether any of the variables mediate between CSA and sexual ambivalence.

Guimond (2001) investigated the relationship between attitudes toward sex and number of sex partners in a sample of female CSA victims drawn from an undergraduate population (N = 77). CSA was defined as physical sexual contact prior to age 15 with someone at least five years older. Results indicated that sexual avoidance and erotophobia (a negative orientation toward sex) were associated with having only 0 or 1 consensual sex partner during their lifetime, but were not significant predictors of number of sex partners as a continuous variable. In addition, erotophilia (a positive orientation toward sex), a tendency to base self-worth on sexuality, and use of sex for nonsexual needs predicted higher numbers of sex partners. Preoccupation with sex and a general measure of sexual problems were not significantly related to number of sex partners. This study suggests CSA victims can develop positive or negative attitudes toward sex, and these attitudes, as well as motivations for having sex, influence their sexual behavior. The strength of this study lies in its use of multiple measures to assess constructs. For example, measures of both erotophobia and sexual avoidance were used to assess for negative attitudes

toward sex. However, the nature of the sample, consisting of undergraduates with a restricted age range (95% were between 18 and 20 years), limits the generalizability of the sample. In addition, all participants were CSA victims, precluding comparisons with nonvictims. Consequently, this study provides no information regarding whether CSA victims differ from nonvictims on sexual attitudes and behaviors.

Merrill, Guimond, Thomsen, and Milner (2003) investigated number of sex partners in CSA victims using a sample of female Navy recruits ($N = 547$). CSA was defined as physical sexual contact prior to age 14 with someone at least five years older. In their path model, CSA severity predicted both avoidant and self-destructive coping. Avoidant coping predicted fewer sex partners, whereas self-destructive coping predicted both dysfunctional sexual behavior and more sex partners. Merrill et al. provide additional validation for multiple sexual trajectories among CSA victims and suggest strategies for coping with the abuse may be one factor that leads victims toward one path or the other. This study's strength is in using a nonclinical, nonstudent sample and in cross-validating the model. In addition, all participants were single, so marital status was not an issue. However, lack of variability in marital status, combined with a restricted age range ($M = 19.27$ years, $SD = 1.85$), limits the generalizability of the findings. In addition, like Guimond (2001), all participants were CSA victims, precluding comparisons with nonvictims.

Each of the reviewed studies has significant strengths. Browning and Laumann (1997) gathered a relatively large, national probability sample and used complex analyses to assess for multiple pathways. Noll et al. (2003) used a

prospective design and introduced a sexual ambivalence pathway. Guimond (2001) and Merrill et al. (2003) demonstrated the relationship between sexual attitudes and sexual behavior and introduced sexual motivations as relevant factors. However, none of these studies addressed frequency of sexual behavior, which may be a key factor in sexual avoidance. Although number of sex partners is an indicator of dysfunctional sexuality, it can be misleading when studying sexual avoidance. Women may engage in frequent sex, but only have one sex partner. Similarly, women may have had multiple partners in the past, but only have sex infrequently due to avoidance. Therefore, including frequency of sexual behavior may be crucial to understanding sexual avoidance.

Factors Affecting Sexual Distortions

Research on factors that influence sexual distortions is limited. That is, it is unclear why some CSA victims are drawn to sexual activity whereas others avoid it. As described previously, a couple of studies have examined abuse characteristics, sexual motivations, and coping strategies. Other possible factors include adult attachment style and body image.

CSA Characteristics

Studies have examined the relationship between CSA and sexual attitudes and behaviors, with mixed results. Research suggests CSA involving force or threats may be related to sexual avoidance (Matorin, 1998) and negative reactions to sex (Ussher

& Dewberry, 1995), although one study found no relationship (Charmoli & Athelstan, 1988). Guimond (2001) found no relationship between force/threats and number of partners. In contrast, Shapiro (1999) found a positive relationship for Caucasian participants and a negative relationship for African American participants.

Higher CSA frequency and duration have been associated with a higher number of sex partners (Guimond, 2001), indiscriminant sexual behavior, and greater variety and frequency of sexual behavior (Meston et al., 1999), whereas other studies found no relationship with frequency of sexual behavior (Langmade, 1983), number of abuse experiences (Shapiro, 1999), or dysfunctional sexual behavior, as measured by the TSI (Runtz & Roche, 1999). One study also found higher CSA frequency to be related to negative reactions to sex (Charmoli & Athelstan, 1988), while another study reported no relationship with sexual avoidance (Matorin, 1998).

A father-figure as the perpetrator has been associated with a higher number of sex partners, but not with ever having had intercourse or early age of first consensual intercourse (Shapiro, 1999). It also has been found to be related to sexual avoidance (Noll et al., 2003) and negative reactions to sex in one study (Charmoli & Athelstan, 1988), but not another (Ussher & Dewberry, 1995).

CSA involving penetration has been related to number of sex partners (Fergusson et al., 1997; Guimond, 2001; Shapiro, 1999) and early age of first consensual intercourse (Fergusson et al.; Shapiro), but not to ever having intercourse (Shapiro) or dysfunctional sexual behavior (Runtz & Roche, 1999). It also has been related to negative attitudes about sex (Ussher & Dewberry, 1995), but not sexual

avoidance (Matorin, 1998).

Finally, research suggests that higher CSA severity, in general, is associated with more sex partners (Guimond; Merrill et al., 2003; Wyatt, 1991), indiscriminant sexual behavior (Walser & Kern, 1996; Wyatt), earlier age of first consensual intercourse (Wyatt), lower variety of sexual behavior (Browning & Laumann, 1997), dysfunctional sexual behavior (Merrill et al.), and greater number of high-risk sexual behaviors (Cinq-Mars, Wright, Cyr, & McDuff, 2003). Older age of CSA onset was related to negative associations with sex in one study (Ussher & Dewberry) but not in another (Charmoli & Athelstan) or in studies of sexual avoidance (Matorin). In summary, general dysfunctional sexuality and possibly negative associations with sex appear to be linked to measures of CSA severity, frequency/duration of CSA, and CSA involving penetration. Sexual avoidance and negative associations with sex appear to be linked to CSA involving force and possibly a father-figure as the perpetrator.

Sexual Motivations

Cooper, Shapiro, and Powers (1998) developed a measure to assess motivations for sexual behavior. They identified six motives and found different patterns of sexual attitudes and behavior among them using a representative community sample. Use of sex for enhancement reflects a positive and hedonistic orientation toward sex and was related to younger age of first sexual intercourse, higher sexual frequency, more sex partners, high-risk sexual behavior, and less stable

relationships. Use of sex for intimacy reflects a positive orientation toward sex coupled with a general need for intimacy and was related to higher frequency of sexual behavior, but fewer sex partners and less high-risk sexual behavior, probably because participants motivated by intimacy were more likely to be in exclusive relationships. Use of sex to cope with negative affect and for self-affirmation were related to both erotophilia and erotophobia, suggesting an ambivalent orientation toward sex. Coping motives also were positively associated with higher numbers of sex partners, indiscriminant sexual behavior, and less relationship stability, whereas self-affirmation motives were associated with older age at first sexual intercourse, less frequent sex, and fewer partners. Use of sex to gain peer and partner approval were characterized by a negative orientation toward sex, need for social approval, and fear of rejection. Peer approval motives were related to older age at first sexual intercourse, less frequent sex, and fewer partners, whereas partner approval was only related to less high-risk sexual behavior. For the present study, enhancement and coping motives are hypothesized to be most salient.

Two studies have examined the sexual motivations of CSA victims. As discussed previously, Guimond (2001) found that one predictor of number of sex partners was the tendency to use sex to meet nonsexual needs. Specifically, CSA victims who had 7 or more sex partners, compared to those with fewer than 7 sex partners, reporting greater use of sex to meet needs for power, personal value, stress relief, and nurturance. Similarly, Shapiro (1999) found that CSA was related to coping motivations and that coping motivations were related to lower age of first

sexual intercourse and a higher number of sex partners. However, coping motivations did not mediate the relationship between CSA and sexual behaviors.

Attachment Style

Attachment has been conceptualized as the internal working model through which individuals view themselves and others in relationships (Bartholomew, 1990). The attachment formed between a caregiver and infant is hypothesized to influence the individual's expectations in relationships throughout the life span (Bowlby, 1973). As adolescents and adults, individuals form attachments with romantic partners, and their internal working models of relationships influence their attitudes toward and behavior in relationships (Hazan & Shaver, 1987). Hazan and Shaver's model of adult attachment hypothesizes three attachment styles: secure, avoidant, and anxious-ambivalent. Secure individuals are comfortable and secure in close relationships. Avoidant individuals are uncomfortable being close to others and have difficulty with trust. Anxious-ambivalent individuals are fearful of abandonment and sometimes desire a higher level of closeness than their partners are comfortable with. Bartholomew proposed a model of adult attachment with two dimensions representing positive and negative views of self and others, resulting in four categories of attachment style: secure, preoccupied, dismissing, and fearful. As in Hazan and Shaver's model, secure individuals have positive views of themselves and others and are comfortable with intimacy and autonomy. Preoccupied individuals have negative views of themselves, but positive views of others. They tend to be overly dependent

in relationships. Dismissing individuals have positive views of themselves, but negative views of others, and tend to be dismissing of intimacy. Fearful individuals have negative views of both themselves and others and are fearful of intimacy. Thus, preoccupied attachment corresponds to the anxious-ambivalent attachment, and fearful attachment corresponds to avoidant attachment. Dismissing attachment reflects the avoidant attachment style without the fear of rejection (Feeney, 1999).

Attachment and CSA

It has been suggested that adult attachment style may be one factor that mediates the relationship between CSA and adult sexual behavior (Gold, Sinclair, & Balge, 1999). Research has indicated that CSA victims are prone to insecure attachment in adulthood, with fearful attachment being most frequent (Alexander, 1993; Alexander et al., 1998; Lewis, Griffin, Winstead, Morrow, & Schubert, 2003; Stalker & Davies, 1995). When compared with nonvictims, CSA victims report lower levels of secure attachment and higher levels of fearful attachment on four-category measures of attachment (Roche, Runtz, & Hunter, 1999). Using a continuous measure of avoidant and anxious attachment, one study found that CSA victims, compared to nonvictims, reported more anxious attachment (Lewis et al.), whereas another study found that victims of intrafamilial CSA, compared to nonvictims, reported more attachment avoidance (Swanson & Mallinckrodt, 2001). Thus, there is some evidence that CSA is related to all types of insecure attachment in adulthood.

Attachment and Sexuality

Research also suggests that adult attachment is related to sexual attitudes and behavior. Cyranowski and Andersen (1998) examined the relationship between attachment style and sexual self-schemas, which they define as cognitive views about sexual aspects of the self. Self-schemas were assessed through respondent ratings about how well certain trait adjectives described them. The trait adjectives reflected personality and were not overtly sexual. Andersen and Cyranowski (1994) hypothesized four sexual self-schemas: Positive, Negative, Co-Schematic (high on both Positive and Negative), and Aschematic (low on both Positive and Negative). Positive sexual schemas are characterized by liberal and positive attitudes toward sex, while negative sexual schemas are characterized by conservative and sometimes negative attitudes toward sex. Relative to women with negative sexual schemas, women with positive sexual schemas exhibit a wider range of lifetime sexual activities, more sex partners, and more brief sexual encounters. Co-schematic women are characterized by conflicted representations of their sexuality, and aschematic women seem to lack a coherent schematic framework. They report intermediate levels of sex partners, significantly different from both positive and negative schematic women, but a restricted range of activities that is somewhat wider than negative schematic women, but not significantly so. Cyranowski and Andersen's results indicated women in the negative and aschematic groups, compared to the positive and co-schematic groups, scored higher on a measure of avoidant attachment. In addition,

the positive schematic group scored lower than all the other groups on a measure of anxious attachment. Thus, negative sexual schemas were associated with both avoidant and anxious attachment styles, whereas positive sexual schemas were not associated with either attachment style. Thus far, this study is the only one to compare groups divided by sexual characteristics on attachment style.

Several studies have examined associations between sexual attitudes/behaviors and attachment styles or compared attachment style groups on sexual attitudes and behavior. Using a four-category measure of attachment, Jellis (2002) found that both fearful and preoccupied attachment styles were related to more negative attitudes toward sex, whereas secure attachment was related to less negative attitudes toward sex; dismissing attachment was unrelated to attitudes toward sex. A study of male and female adolescents aged 13 to 19 years (Tracy, Shaver, Albino, & Cooper, 2003) suggested that attitudes toward sex may differ based on sexual experience. Tracy et al.'s results indicated that among adolescents who had never engaged in intercourse, erotophobia was highest in the avoidant attachment group, whereas among adolescents who had engaged in intercourse, erotophobia was highest in the anxious attachment group. In another study, erotophilia was correlated with anxious but not avoidant attachment (Bogaert & Sadava, 2002). However, Bogaert and Sadava used erotophilia as a unidimensional construct with erotophilia at one end and erotophobia at the other, whereas Tracy et al. measured erotophobia without erotophilia.

Accepting attitudes toward casual sex, as measured by the Sociosexual Orientation Inventory (SOI; Simpson & Gangestad, 1991), have been shown to be

positively related to fearful and dismissing attachment, negatively related to secure attachment, and unrelated to preoccupied attachment (Simon, 1997). Similarly, SOI scores have been positively correlated with avoidant attachment, but not anxious attachment (Brennan & Shaver, 1995). When attachment groups were compared, SOI scores were significantly higher in the avoidant group, compared to the secure and anxious groups (Brennan & Shaver). Similarly, Feeney, Noller, and Patty (1993) found that individuals with avoidant attachment, compared to those with secure and anxious attachment, reported more accepting attitudes toward casual sex.

Although accepting attitudes toward casual sex seem to be consistently related to avoidant attachment, measures of indiscriminant sexual behavior were less consistent. Cooper, Shaver, and Collins (1998) found that both avoidant and anxious adolescents were more likely than secure adolescents to report sex with a stranger. Hazan, Zeifman, and Middleton (1994; as cited in Feeney, 1999) found that avoidant attachment, but not anxious attachment, was related to engaging in one-night stands, extramarital sex, and sex without love. Simon (1997), however, found no relationship between attachment style and indiscriminant sexual behavior.

Other sexual behaviors also have been associated with attachment, but not consistently across studies. Two studies have found that avoidant adolescents, compared to secure and anxious adolescents, are less likely to have ever had sex (Cooper, Shaver, et al., 1998; Tracey et al, 2003). However, three studies have found different results for frequency of sexual behavior. Tracy et al. reported avoidant adolescents, compared to secure and anxious adolescents, had sex less frequently

during the previous six months. Feeney et al. (1993) reported that both avoidant and ambivalent undergraduates, compared to secure undergraduates, had less frequent sex during a six-week period, although differences were not significant. Bogaert and Sadava (2002) found no association between frequency/variety of sex during the previous year and attachment style among adults aged 20 to 29 years. Importantly, all three studies differed by age group, time period assessed, and attachment measure. Therefore, it is difficult to identify reasons for the different findings. Similar patterns were found for number of sex partners: number of sex partners was positively related to avoidant attachment in two studies (Bogaert & Sadava; Chisholm, 1999), anxious attachment in one study (Bogaert & Sadava), and neither in two studies (Cooper, Shaver, et al., 1998; Feeney, Peterson, Gallois, & Terry, 2000), again with differences based on measurement of attachment, time period, and age group. Finally, one study found avoidant and ambivalent attachment were both related to early age of first consensual sex (Bogaert & Sadava), whereas another study found no relationship (Chisholm).

In summary, avoidant attachment may be related to negative attitudes toward sex, but greater acceptance of casual sex. Individuals with avoidant attachment styles may have less sexual experience, but research suggests that those who are sexually active engage in indiscriminant sex with many partners. Cooper, Shaver, et al. (1998) suggested lower sexual experience among avoidant individuals may be due to a lack of social competence. These individuals may use indiscriminant sex as a way to avoid intimacy with others (Shaver & Hazan, 1988). Such a pattern appears to be consistent

with an ambivalent sexual trajectory. Although individuals with anxious attachment styles also seem prone to negative attitudes toward sex, few conclusions can be drawn regarding their tendencies toward sexual behaviors. As noted previously, differences in measurement of attachment and sexual variables, as well as age groups, make it difficult to determine the source of inconsistent findings. Also important is the lack of differentiation by sex. Most studies examined both males and females and presented the results together. There is some indication that relationships between attachment and sexuality variables differed by sex (Bogaert & Sadava, 2002), but no study examined sex as a moderating variable.

Body Image

Wenninger and Heiman (1998) hypothesized that early sexual trauma may disrupt development of positive body esteem in a way that affects sexuality. Using a community sample, they found that CSA victims, compared to nonvictims, felt less satisfied with their sexual attractiveness. Dissatisfaction with sexual attractiveness, in turn, predicted sexual dysfunction, including sexual aversion and lack of arousal. The relationship between dissatisfaction with sexual attractiveness and sexual dysfunction was stronger in CSA victims than in nonvictims. This is the only study to examine body image and sexuality in a non-eating-disordered population. Other studies have examined body image as it relates to CSA and sexual behavior separately.

CSA and Body Image

Additional studies have found that CSA victims, compared to nonvictims, report greater dissatisfaction with their bodies (Andrews, 1997; Hunter, 1991; Jackson, Calhoun, Amick, Maddever, & Habif, 1990; Weiner & Thompson, 1997). Body shame also has been associated with CSA (Andrews; Tripp & Petrie, 2001). However, several studies have found no relationship between CSA and body image (Kinzl et al., 1994; Meston, 1999; Schaaf & McCanne, 1994; Smolak, Levine, & Sullins, 1990; Zlotnick et al., 1996). All but one of the studies with negative findings used the Body Dissatisfaction scale of Eating Disorder Inventory (EDI). The EDI Body Dissatisfaction scale focuses on size and shape of the body to assess for body image distortion, whereas other measures of body image focus on general perceptions of attractiveness. Thus, CSA may be related to overall body image, but not necessarily weight or size concerns.

Body Image and Sexuality

Several studies have examined the relationship between body image and sexual behaviors. Dissatisfaction with body image has been correlated with a lower frequency of sexual behavior in women in both undergraduate (Faith & Schare, 1993; MacCorquodale & DeLamater, 1979; Trapnell, Meston, & Gorzalka, 1997) and community samples (Ackard, Kearney-Cooke, & Peterson, 2000; MacCorquodale & DeLamater). In addition, Wiederman (2000) found that women who had never

engaged in intercourse reported greater body image self-consciousness than women who had engaged in intercourse. Another study found fewer partners among women with greater body dissatisfaction (MacCorquodale & DeLamater). Faith and Schare speculated that women who maintain negative conceptualizations about their bodies are more prone to sexual avoidance.

Grabe and Cooper (2002), however, reported that a negative body image was related to more sex partners and high-risk sexual behavior in adolescents aged 13 to 19. The difference may be due to the younger age of the sample or perhaps the assessment of body image, which consisted of three questions. Studies that have used the Body Dissatisfaction scale of the EDI have found no relationship between body image and sexual self-schema (Wiederman & Hurst, 1997), number of sex partners, sexual attitudes, or virginity status (Wiederman & Hurst, 1998). As previously mentioned, the negative findings may be due to the nature of the body image measure.

CHAPTER 3

STATEMENT OF THE PROBLEM

The purpose of the present study was to identify sexual distortions associated with CSA in a female undergraduate sample and to explore factors associated with each sexual distortion. Previous research suggests that female CSA victims may evidence both positive and negative orientations toward sex in adulthood. However, research also suggests that, on average, CSA victims, compared to nonvictims, exhibit higher levels of sexual behavior, particularly indiscriminant sexual behavior. Thus, the first phase of the study attempted to define and provide evidence for three sexual distortions: dysfunctional sexuality, sexual avoidance, and sexual ambivalence. Participants were categorized into groups based on erotophilia and erotophobia scores, and groups were compared on sexual behaviors, attitudes toward casual sex, sexual avoidance, sexual preoccupation, and dysfunctional sexuality. The second phase of the study examined CSA, CSA characteristics, sexual motivations, adult romantic attachment style, and body image as predictors of sexual distortions.

Phase 1

To begin the first phase, participants were classified as high, middle, and low on erotophilia and erotophobia. High erotophilia was defined as scoring in the top 33.3% of the sample distribution on the erotophilia measure, and high erotophobia was

defined as scoring in the top 33.3% of the sample distribution on the erotophobia measure. Low erotophilia was defined as scoring in the bottom 33.3% of the sample distribution on the erotophilia measure, and low erotophobia was defined as scoring in the bottom 33.3% of the sample distribution on the erotophobia measure. Participants scoring in the middle 33.4% of the sample distributions on either erotophilia or erotophobia were excluded from Phase 1 analyses.

Participants with high and low erotophilia and erotophobia scores were divided into four groups (see Table 1). For clarity's sake, the groups were named in accordance with their hypothesized characteristics. Participants with high erotophilia and low erotophobia were identified as the dysfunctional group, participants with high erotophobia and low erotophilia were identified as the avoidant group, and participants with high erotophilia and high erotophobia were identified as the ambivalent group. Participants with low erotophilia and low erotophobia constituted the comparison group.

Mean scores on erotophilia and erotophobia measures by group are presented in Table 2. One-way ANOVAs revealed significant differences between groups for both erotophilia $F(3, 391) = 711.13, p < .001$, and erotophobia $F(3, 391) = 525.58, p < .001$. As expected, the dysfunctional and ambivalent groups scored significantly higher on erotophilia than the comparison and avoidant groups, and the mean and median scores were in the upper half of the scale range. The avoidant group scored significantly higher on erotophobia than the ambivalent group and both were significantly higher than the comparison and dysfunctional groups. However, the

Table 1

Categorization of Undergraduate Women Based on Erotophilia and Erotophobia Scores

		Erotophilia	
		LO	HI
Erotophobia	LO	Comparison <i>n</i> = 84	Dysfunctional <i>n</i> = 140
	HI	Avoidant <i>n</i> = 124	Ambivalent <i>n</i> = 46

Table 2

Descriptive Statistics for Erotophilia and Erotophobia Scores by Group

	Comparison (<i>n</i> = 84)	Dysfunctional (<i>n</i> = 140)	Avoidant (<i>n</i> = 124)	Ambivalent (<i>n</i> = 46)
Erotophilia				
<i>M</i>	2.44 _a	5.00 _b	2.33 _a	4.81 _b
<i>Median</i>	2.67	5.00	2.50	4.67
<i>SD</i>	0.62	0.50	0.62	0.41
Range	1.00 – 3.17	4.33 – 6.00	1.00 – 3.17	4.33 – 6.00
Erotophobia				
<i>M</i>	1.06 _a	1.05 _a	3.32 _b	2.91 _c
<i>Median</i>	1.00	1.00	3.25	2.75
<i>SD</i>	0.11	0.10	0.85	0.70
Range	1.00 – 1.25	1.00 – 1.25	2.25 – 6.00	2.25 – 5.25

Note: Means with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

mean and median scores were in the lower half of the scale range. Thus, the avoidant and ambivalent groups could not be considered highly erotophobic.

Following classification, groups were compared on single-item measures of sexual behavior hypothesized to relate to sexual attitudes: age of first consensual sexual intercourse, variety of sexual behaviors (recent and lifetime), frequency of sexual intercourse, total sexual intercourse experiences, number of sex partners during the past year and lifetime total, and frequency of indiscriminant sexual contracts. Additionally, groups were compared on acceptance of casual sex, sexual avoidance, dysfunctional sexuality, and sexual preoccupation. Acceptance of casual sex was measured by the Attitudes Toward Casual Sex scale of the sexual attitudes questionnaire. Sexual avoidance was measured by the Avoidance and Fear of Sex subscale of the Traumatic Sexualization Survey (TSS; Matorin, 1998; Matorin & Lynn, 1998). Dysfunctional sexuality was measured by the Sex-Based Relationships² subscale of the TSS and sexual preoccupation was measured by the Thoughts About Sex subscale of the TSS. In light of the previously reviewed literature, the following hypotheses were offered.

Hypothesis 1

Dysfunctional sexuality has been linked to multiple sex partners (Bogaert & Sadava, 2002; Guimond, 2001), variety of sexual experience (Fisher, Byrne, White, &

² Two TSS subscales, Role of Sex in Relationships and Attraction/Interest in Sexuality, were combined to make the Sex-Based Relationships subscale based on a factor analysis of the TSS using the present data. See Method section for details.

Kelley, 1988), and unrestricted sexual behavior (Wright & Reise, 1997). Therefore, the dysfunctional group was expected to be characterized by high levels of sexual behavior, use of sex for nonsexual needs, accepting attitudes toward casual sex, and an absence of avoidant sexual attitudes. Compared to the comparison and avoidant groups, the dysfunctional group was expected to report:

- higher variety of sexual behaviors, frequency of sexual intercourse, and frequency of indiscriminant sexual contacts, as well as more sex partners and sexual intercourse experiences;
- younger age of first consensual sexual intercourse; and
- greater acceptance of casual sex, sexual preoccupation, dysfunctional sexuality;

In addition, compared to the avoidant group, the dysfunctional group was expected to report less sexual avoidance.

Hypothesis 2

Sexual avoidance has been linked to fewer sex partners (Guimond, 2001) and lower variety of sexual experience (Fisher et al., 1988). Therefore, the avoidant group was expected to be characterized by low levels of sexual behavior and avoidant sexual attitudes. Compared to all other groups, the avoidant group was expected to report lower variety of sexual behavior, lower frequency of intercourse, fewer sexual intercourse experiences, and fewer sex partners. Compared to the comparison and dysfunctional groups, the avoidant group was expected to report greater sexual

avoidance.

Hypothesis 3

Noll et al. (2003) and Guimond (2001) suggested that some CSA victims display characteristics of both dysfunctional sexuality and sexual avoidance, which can be identified as sexual ambivalence. That is, they may have sexually avoidant attitudes, but still engage in high levels of sexual behavior. Therefore, the ambivalent group was expected to be characterized by high-risk sexual behavior, use of sex for nonsexual needs, and avoidant sexual attitudes. Compared to the comparison and avoidant groups, the ambivalent group was expected to report:

- higher variety of sexual behaviors, frequency of sexual intercourse, and frequency of indiscriminant sexual contacts as well as more sex partners and sexual intercourse experiences;
- younger age of first consensual sexual intercourse; and
- greater acceptance of casual sex, sexual preoccupation, dysfunctional sexuality.

Compared to the comparison and dysfunctional groups, the ambivalent group was expected to report greater sexual avoidance.

Phase 2

The first phase of the study was expected to define three patterns of sexual distortions: dysfunctional sexuality, sexual avoidance, and sexual ambivalence. The

second phase of the study was expected to identify factors associated with these sexual distortions. In Phase 2, Sex-Based Relationships was used as an indicator of dysfunctional sexuality, Avoidance and Fear of Sex was used as an indicator of sexual avoidance, and both were combined to create an indicator of sexual ambivalence. These scales were chosen for use in Phase 2 because they incorporate both attitudinal and behavioral components of sexual distortions, whereas the erotophilia and erotophobia scales reflect only attitudes.

First, CSA victims and nonvictims were compared on dysfunctional sexuality, sexual avoidance, sexual ambivalence, sexual behaviors, attitudes toward casual sex, sexual preoccupation, body image, avoidant attachment, anxious attachment, use of sex for coping, and use of sex for enhancement. Second, for participants reporting CSA, CSA characteristics (use of force or threat, duration, presence of penetration, and father-figure as a perpetrator) were examined in relation to dysfunctional sexuality, sexual avoidance, and sexual ambivalence. Third, a path model predicting sexual distortions from CSA, sexual motivations, attachment style, and body image was examined.

Hypothesis 4

Previous research has found that CSA victims, compared to nonvictims, report more dysfunctional sexual behavior (Briere, 1995; Briere et al., 1995; Merrill, 2001; Runtz & Roche, 1999), greater frequency of sexual behavior (Alexander & Lupfer, 1987; Meston et al.; 1999), more indiscriminant sexual contacts (Meston et al., 1999;

Walser & Kern, 1996; Wyatt, 1988; Zierler et al., 1991), more sex partners (Buzi et al., 2003; Cunningham et al., 1994; Fergusson et al., 1997; Hillis et al., 2001; Johnsen & Harlow, 1996; Krahè et al., 1999; Luster & Small, 1997; Schloredt & Heiman, 2003; Wilsnack et al., 2004; Wyatt, 1988), younger age of first consensual intercourse (Buzi et al., 2003; Fergusson et al.; Hillis et al., 2001; Johnsen & Harlow, 1996; Noll et al., 2003; Stock et al., 1997; Wilsnack et al.; Wyatt, 1988), higher scores on the TSS subscales (Matorin, 1998; Matorin & Lynn, 1998), body image dissatisfaction (Andrews, 1997; Hunter, 1991; Jackson et al., 1990; Weiner & Thompson, 1997), insecure attachment (Alexander, 1993; Alexander et al., 1998; Lewis et al., 2003; Roche et al., 1999; Swanson & Mallinckrodt, 2001; Stalker & Davies, 1995), and use of sex for nonsexual reasons (Cooper, Shapiro, et al., 1998; Shapiro, 1999).

Therefore, CSA victims, compared to nonvictims, were expected to report:

- greater dysfunctional sexuality, sexual avoidance, sexual ambivalence, sexual preoccupation, avoidant attachment, anxious attachment, use of sex for coping, use of sex for enhancement, and dissatisfaction with body image;
- higher variety of sexual behaviors, frequency of sexual intercourse, and frequency of indiscriminant sexual contacts, as well as more sexual partners and sexual intercourse experiences;
- younger age of first consensual sexual intercourse; and
- more accepting attitudes toward casual sex.

Hypothesis 5

Dysfunctional sexuality appears to be linked to general CSA severity (Merrill et al., 2003; Walser & Kern, 1996; Wyatt 1991) frequency/duration of CSA (Guimond, 2001; Meston et al., 1999), and CSA involving penetration (Fergusson et al., 1997). Sexual avoidance and negative associations with sex appear to be linked to CSA involving force (Matorin, 1998; Ussher & Dewberry, 1995) and possibly a father-figure as the perpetrator (Noll et al., 2003). Therefore, sexual avoidance was expected to be related to use of force or threat and father-figure as the perpetrator, whereas dysfunctional sexuality was expected to be related to long duration and penetration. Sexual ambivalence was expected to be related to use of force or threat, father-figure as the perpetrator, long duration, and penetration.

Hypothesis 6

Both CSA and sexual behaviors have been linked to body image (Ackard, Kearney-Cooke, & Peterson, 2000; Faith & Schare, 1993; MacCorquodale & DeLamater, 1979; Trapnell, Meston, & Gorzalka, 1997), attachment style (Brennan & Shaver, 1995; Bogaert & Sadava, 2002; Cooper, Shaver, et al., 1998; Cyranowski & Andersen, 1998; Feeney et al., 1993; Jellis, 2002; Tracy et al., 2003; Simon, 1997), and sexual motivations (Guimond, 2001; Shapiro, 1999). It was expected that (a) use of sex for coping and for enhancement would mediate the relationship between CSA and dysfunctional sexuality, (b) use of sex for coping, avoidant attachment, and

anxious attachment would mediate the relationship between CSA and sexual ambivalence, and (c) avoidant attachment and body image would mediate the relationship between CSA and sexual avoidance (see Figure 1).

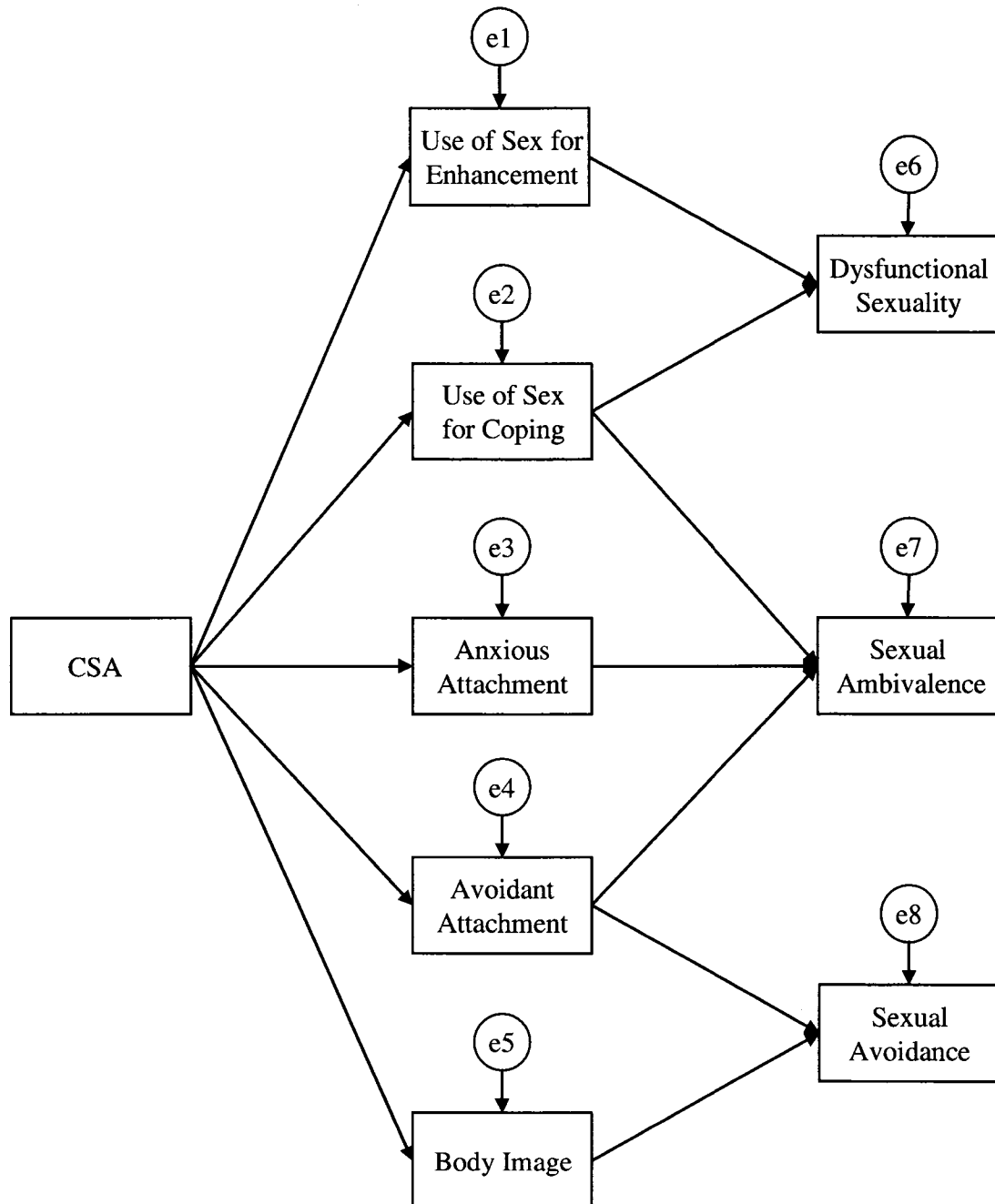


Figure 1. Proposed path analytic model: CSA, sexual motives, attachment style, and body image as predictors of sexual distortions.

CHAPTER 4

METHOD

Participants

In order to determine the total number of participants necessary for the proposed analyses, I conducted an a priori power analysis. For an ANOVA with four groups (Phase 1), a priori power analysis indicated that 45 participants per group were needed to achieve a moderate effect size ($f = .25$) with a power of .80 at the $p < .05$ significance level (Cohen, 1988). For a path analysis, Kline (1998) recommended a ratio of at least 10 subjects for every parameter. Including error variables and allowing indicators from the same scale to intercorrelate, the proposed model contained 33 parameters. Thus, a minimum of 330 participants were required for the path analysis.

Data was collected from 775 female undergraduates enrolled in introductory psychology classes at Northern Illinois University between September 2001 and December 2005. Only participants who were between the age of 18 and 24 years and identify themselves as single were included in the analyses ($N = 732$). The mean age of participants was 19 years and 98% were between 18 and 21 years. Other demographic characteristics are displayed in Table 3.

Table 3

Demographic Characteristics of Participants

Demographic Variable	<u>n</u>	%
Ethnicity		
Caucasian	421	58
African American	176	24
Hispanic American	66	9
Other/Unknown	69	9
Relationship Status		
Single, no romantic partner	193	26
Single, dating	198	27
Single, committed relationship	341	47
Year in School		
Freshman	535	73
Sophomore	132	18
Junior	55	8
Senior	4	1
Not Reported	6	
Sexual Orientation		
Heterosexual or Mostly Heterosexual	705	97
Bisexual	10	1
Homosexual or Mostly Homosexual	5	1
Not Sure	10	1
Not reported	2	

Procedure

Participants were recruited via three methods. During the 2001-2002 and 2002-2003 academic years, 421 participants were recruited through postings on a research board soliciting participants for psychological research. During the 2004-2005 and 2005-2006 academic years, 301 participants were recruited via an electronic bulletin board. Participants recruited through both of these methods received class credit in exchange for their participation. An additional 10 participants were recruited through fliers posted around campus during the Spring 2005 semester. To be eligible, participants recruited through fliers had to have completed an introductory psychology class during 2004 and could not have previously participated in the study. These participants were entered in a raffle for \$200.

Participants were tested individually or in groups ranging from 2 to 35 women in a large classroom. Administration sessions varied in size based on the number of students who signed up for each session. Each participant was given an informed consent form explaining the content and nature of the study and procedures used to ensure confidentiality. After signing the informed consent, participants received a packet of questionnaires presented in random order. Participants were instructed to indicate their responses on scantron forms for most measures, although some open-ended items were answered directly on the questionnaire form. Most participants completed the packet in 1 to 2 hours. An experimenter was available during the entire time to answer any questions.

Materials

Demographic Questionnaire

A demographic questionnaire (see Appendix A) was used to obtain information regarding each participant's age, year in school, ethnicity, relationship status, and family income.

Sexual Attitudes

Sexual attitudes were assessed using a questionnaire compiled by Cooper (Cooper, Shapiro, et al., 1998; see Appendix B). Cooper's sexual attitudes questionnaire is a 22-item self-report measure designed to assess four areas: erotophilia, erotophobia/sexual anxiety, attitudes about casual sex, and attitudes about premarital sex. Items consist of statements about sexual feelings or behaviors, which are rated on a scale from 1 (*strongly disagree*) to 6 (*strongly agree*).

Cooper's sexual attitudes measure is a modified version of Fisher et al.'s (1988) Sexual Opinion Survey (SOS). All erotophilia items were taken from the SOS. Casual sex items were taken from both the SOS and from Simpson and Gangestad's (1991) Sociosexual Orientation Inventory. Some erotophobia items were taken from the SOS, whereas others were developed for this measure. All premarital sex items were developed for this measure. No psychometric data were previously published for Cooper's sexual attitudes measure.

As other psychometric data was not available, I conducted factor analysis and

reliability analysis for each scale of the sexual attitudes questionnaire using the data from the present study. Based on a principal components analysis with oblimin rotation, the factor structure that emerged was consistent with Cooper, Shaver, et al.'s (1998) scales. Factor 1 was labeled Erotophilia (6 items), Factor 2 items was labeled Erotophobia (4 items), Factor 3 was labeled Attitudes toward Casual Sex (5 items), and Factor 4 was labeled Attitudes toward Premarital Sex (3 items; see Appendix B, Table 43). One item from the Cooper's erotophobia scale, "After having sexual thoughts, I feel jittery," loaded equally on two factors, so it was excluded from the calculations. Consistent with Cooper's scoring, three additional items were excluded from scale calculations due to factor loadings of less than .40. All correlations between factors were less than .30 (see Appendix B, Table 44). Cronbach's alpha's were .79 for erotophilia and erotophobia, .65 for Casual Sex, and .82 for Premarital Sex.

Sexual Behavior

The sexual behaviors questionnaire (see Appendix C) was compiled for the present study. It contained four parts (A, B, C, and D). The format of Parts A and B was based on the sexual variety and sexual frequency measures of the Derogatis Sexual Functioning Inventory (Derogatis & Melisaratos, 1979). Items in Parts A, B, and D were taken from Cooper, Shaver, et al. (1998). Items in Part C were generated for the present study. No psychometric data was computed for the sexual behaviors questionnaire.

For Part A, participants were asked to indicate whether they had experienced 13 sexual activities ranging from masturbation and kissing to vaginal, oral, and anal intercourse during the past 60 days or prior to the past 60 days. The number of items endorsed relating to either time period was summed to compute a continuous variable representing sexual variety.

For Part B, participants were asked to indicate the frequency with which they engaged in the following sexual behaviors: masturbation, kissing/petting, oral sex, vaginal intercourse, anal intercourse, intercourse with someone on only one occasion, and intercourse with a stranger. Response options ranged from A (*not at all*) to I (*4 or more times per day*). For the present study, only frequency of oral sex, vaginal intercourse, intercourse with someone on only one occasion, and intercourse with a stranger were examined. To reduce outliers, I combined the response options for these variables. Specifically, for frequency of oral sex and vaginal intercourse, I combined the last three response options (*once per day*, *2-3 times per day*, and *4 or more times per day*) into one category, creating a continuous variable with a scale ranging from 1 to 7, corresponding to response options representing increasing frequency. In addition, intercourse with someone on only one occasion and intercourse with a stranger were rarely endorsed, so I recoded them into dichotomous variables (*yes* or *no*) and analyzed them as categorical rather than continuous variables.

The final section of Part B asked participants to indicate their sexual orientation and the total number of times they have had sexual intercourse (A = *never* to I = *more than 50 times*, analyzed as a continuous variable ranging from 1 to 9).

Part C listed ten possible reasons for not being sexually active and asked respondents to indicate whether each reason applies to them (*yes* or *no*) and which was the primary reason.

Part D asked respondents to write out their age of first consensual sexual intercourse, number of male and female sex partners during the past 12 months and during their lifetime, and how many sex partners they expect to have during the next 5 years. For this section of the questionnaire, intercourse was defined as vaginal, oral, or anal sex. Number of sex partners was computed by summing number of male and female partners. Due to significant positive skew, I transformed total number of sex partners and number of sex partners during the past year using a square root transformation for analysis.

Childhood Sexual Experiences Questionnaire

CSA was defined as physical sexual contact (including fondling; genital touching; masturbating; and attempted or completed vaginal, oral, or anal intercourse) prior to age 15 with someone at least five years older. The definition included both intrafamilial and extrafamilial perpetrators and was based on Finkelhor's (1979) Survey of Childhood Sexual Experiences.

A modified version of Finkelhor's (1979) Survey of Childhood Sexual Experiences was used to assess for CSA (see Appendix D). In the initial version ($n = 421$), participants were asked to indicate whether they had experienced any of 14 sexual experiences prior to age 15 years and, if so, to record age at first occurrence,

relationship of the other person, the other person's age, duration of the experience, and whether force or threats were used. Of participants who completed the initial version of the questionnaire, 153 (37%) reported no experiences of sexual contact, 30 (7%) reported experiences that met study criteria for CSA, and 13 (3%) had missing responses. The remaining 235 (53%) reported sexual contact experiences that did not meet criteria for CSA and frequently reflected sexual experiences with friends or boyfriends. Because the frequency of CSA in the present sample was much lower than found in previous samples from the same university (13%, Thakkar, Gutierrez, Kuczen, & McCanne, 2000; 12%, Schaaf, & McCanne, 1998), the measure was revised.

In the revised version, respondents answer *yes* or *no* to four questions that assess physical sexual contact prior to age 15 with someone at least 5 years older. Respondents who answer *yes* to any of the four questions are asked to find the other person on a list of 12 relationships (e.g., father, male cousin, teacher) and write their age at the time of first occurrence, the perpetrator's age, the duration of the abuse, whether or not there was intercourse involved, and whether or not the perpetrator used or threatened to use force. Of 311 participants completing this version of the questionnaire, 54 (16%) of participants responded *yes* to at least one of the four questions assessing physical sexual contact, but only 29 (9%) participants supplied details that met the present study's criteria for CSA. That is, 22 (7%) participants responded *yes* to one or more of the questions, but reported that they were over age 15 at first occurrence or the other person was less than five years older.

Participants were included in the CSA analyses only if they provided sufficient details regarding CSA experiences to meet the study criteria for CSA on either questionnaire. Participants who reported other sexual contact experiences or inconsistent information were excluded from the analyses. Using these inclusion/exclusion criteria, the CSA group was comprised of 59 respondents (8% of the respondents, 13% of respondents included in the analysis) and the nonvictims group was comprised of 409 respondents. There was no significant difference between the percentages of respondents indicating CSA on the two versions of the CSA questionnaire, $\chi^2 (df = 1) = 3.08, p > .05$.

Traumatic Sexualization Survey (TSS)

The TSS (Matorin, 1998; Matorin & Lynn, 1998; see Appendix E) is a 50-item self-report measure designed to assess sexual attitudes, cognitions, and behavior based on Finkelhor and Browne's (1985) conceptualization of traumatic sexualization. The TSS has four subscales: Avoidance and Fear of Sexual and Physical Intimacy (Avoidance and Fear of Sex; 16 items), Thoughts About Sex (12 items), Role of Sex in Relationships (Role of Sex; 7 items), and Attraction/Interest and Sexuality (Attraction/Interest; 15 items). Items consist of statements about sexual thoughts, feelings, attitudes, and behaviors, which are rated on a 5-point scale ranging from 1 (*never*) to 5 (*almost always*).

For the initial development phase of the TSS, items were rated by five "experts in the field" for face validity and applicability (Matorin & Lynn, 1998). Only items

rated as having adequate face validity and applicability were included in the final version of the TSS. Factor analysis revealed four factors with a total of 38 items (Matorin & Lynn). Factor 1, Avoidance and Fear of Sex, assessed negative associations with sexuality and aversion to sex or intimacy. Factor 2, Thoughts About Sex, assessed preoccupation with sexual issues. Factor 3, Role of Sex, assessed confusion about sexual norms and confusion of sex with love. Factor 4, Attraction/Interest, assessed the degree to which the individual bases her self-worth on her sexuality. According to Matorin and Lynn, correlations among factors ranged from .24 to .46, with Avoidance and Fear of Sex correlating negatively with the other factors. Specific correlations among subscales were not provided.

Initial reliability and validity data were obtained using an undergraduate population (N = 451; Matorin & Lynn, 1998). Internal consistency coefficients (alphas) for the TSS subscales ranged from .80 to .93, and item-total correlations ranged from .54 to .79. Test-retest reliability assessed over a three-week time period yielded correlations ranging from .82 to .89.

Due to the small number of items (3) on Factor 4, Matorin (1998) added 12 items to the Attraction/Interest subscale, increasing the measure to 50 items. Practicing clinicians who specialize in treating sexual abuse were asked to rate the face validity and applicability of all 50 items. All items were rated as having adequate face validity and applicability. The author did not report conducting another factor analysis, but she provided psychometric data for the expanded version of the TSS. Reliability and validity data were obtained using a volunteer community sample (N =

86) recruited through community organizations and mental health practitioners. Internal consistency coefficients (alphas) for the TSS subscales ranged from .88 to .94. Item-total correlations for the expanded version of Attraction/Interest ranged from .44 to .82.

To assess validity, the TSS subscale scores were examined in relation to self-report measures of sex guilt, dysfunctional sexual behavior, sexual experience, sexual attitudes, and sexual drive (Matorin & Lynn, 1998) sexual functioning, and sexual satisfaction (Matorin, 1998). Avoidance and Fear of Sex was significantly correlated with sex guilt ($r = .54$) dysfunctional sexual behavior ($r = -.36$), sexual experience ($r = -.47$), liberal sexual attitudes ($r = -.46$), sexual drive ($r = -.45$), sexual functioning ($r = -.38$), and sexual satisfaction ($r = -.60$). As expected, high scorers on Avoidance and Fear of Sex reported a smaller variety of sexual experiences, less frequent sexual activity, more conservative attitudes about sexual behavior, lower sexual satisfaction, and greater sexual dysfunction.

Thoughts About Sex was significantly correlated with dysfunctional sexual behavior ($r = .46$), sexual attitudes ($r = .37$), sexual drive ($r = .46$), sexual functioning ($r = .34$), sexual self-esteem ($r = -.32$), and sex guilt ($r = -.36$). High scorers on Thoughts About Sex reported less sexual satisfaction but more dysfunctional behavior, more frequent engagement in sexual behaviors, more liberal attitudes about sexual behavior, and fewer problems with sexual functioning.

Role of Sex was significantly correlated with dysfunctional sexual behavior ($r = .59$), sexual experience ($r = .34$), sexual attitudes ($r = .31$), sexual drive ($r = .35$),

and sexual satisfaction ($r = -.27$). High scorers on Role of Sex reported more dysfunctional sexual behaviors, more frequent sexual engagement, more liberal attitudes about sex, and less sexual satisfaction.

The initial version of Attraction/Interest was significantly correlated with dysfunctional sexual behavior ($r = .54$), sexual drive ($r = .36$), sexual attitudes ($r = .32$), and sex guilt ($r = -.34$). High scorers on Attraction/Interest also reported more dysfunctional sexual behaviors, more frequent sexual engagement, and more liberal attitudes about sex. The expanded version of Attraction/Interest was significantly correlated only with sexual satisfaction ($r = -.25$).

In summary, Avoidance and Fear of Sex appeared to be correlated with sexual avoidance and negative associations with sexuality. Thoughts About Sex, Role of Sex, and Attraction/Interest appeared to be correlated with increased levels of sexual behavior, some of which may be considered dysfunctional.

Matorin and Lynn (1998) also examined relationships between each of the TSS subscales and measures of social desirability, posttraumatic stress (PTS), and general symptom distress. None of the four subscales correlated highly with measures of social desirability or PTS, $r_s < .30$, $p_s > .05$. In the undergraduate sample, Thoughts About Sex and general symptom distress were significantly correlated, $r = .34$, $p < .01$. Compared to the undergraduate sample, the volunteer community sample appeared to have higher correlations between general symptom distress and all factors except Thoughts About Sex, $r_s = .35$ to $.47$, $p_s < .001$ (Matorin, 1998). The higher correlations between TSS subscales and general symptom distress may be because

more than half of the participants in the community sample were in therapy and may be more likely to report more symptoms in general than undergraduates.

Matorin (1998) compared CSA victims in therapy with nonvictims in therapy and nonvictims not in therapy. Compared to both nonabused groups, CSA victims scored higher on Avoidance and Fear of Sex, Role of Sex, and Attraction/Interest. Thus, three of the TSS subscales discriminated between clinical samples of CSA victims and nonvictims from both clinical and nonclinical samples.

Finally, Matorin and Lynn (1998) compared TSS subscale scores of women who experienced CSA only, child physical abuse (CPA) only, and no abuse. On Avoidance and Fear of Sex, no groups differed significantly. On Thoughts About Sex, both abuse groups scored significantly higher than the no-abuse comparison group. On Role of Sex and Attraction/Interest, the CSA group scored significantly higher than the no-abuse comparison group. Thus, on three of the four factors, the CSA group could be distinguished from the no-abuse group. However, the CSA group was not different from the CPA group on any factors, suggesting that the TSS may not discriminate between sexually abused women and physically abused women.

As no factor analysis was conducted on the measure since expanding the Attraction/Interest and Sexuality scale, I factor analyzed TSS items using the present data. Principal components analysis with oblimin rotation indicated that the best solution contained three factors. Factors 2 and 3 were identical to Matorin & Lynn's Avoidance and Fear of Sex and Thoughts About Sex. Factor 1 contained 21 items and reflected a combination of Role of Sex in Relationships and Attraction/Interest and

Sexuality (see Appendix E, Table 45). For the present study, this factor was named Sex-Based Relationships and was used to represent dysfunctional sexuality. This variable was hypothesized to perform in the same way as Matorin and Lynn's Role of Sex in Relationships scale. Correlations between factors were all less than .32 (see Appendix E, Table 46). Cronbach's alpha for each factor ranged from .90 to .93.

Sexual Ambivalence

Sexual ambivalence was calculated from the scores for Avoidance and Fear of Sex and Sex-Based Relationships using the following formula (Thomsen, Zanna, & Griffin, 1995):

$$\text{sexual ambivalence} = \frac{A_w + A_s}{2} - |A_w - A_s| \quad (1)$$

where A_s is the higher of the two scores and A_w is the lower of the two scores. The term on the left of the equation represents the combined intensities of the two component scores, whereas the term on the right of the equation represents the similarity of the two component scores. Equation 1 meets the three criteria identified by Breckler (1994) as desirable properties of an ambivalence index:

1. When the larger of the two ratings is held constant, ambivalence should increase as the smaller of the ratings increases, with a maximum being reached when the two ratings are equal....
2. When the smaller of the two ratings is held constant, ambivalence should decrease as the larger rating increases, with the minimum being attained when the larger ratings reaches its maximum. That is, ambivalence should logically decrease as the two ratings indicate greater polarization in one direction....
3. When the two ratings are equal, ambivalence should increase as the two ratings increase. That is, ambivalence should be greater as the intensities of the two opposing but balanced evaluations increased. (p. 352)

Sexual Motivations

The sexual motivations questionnaire (Cooper, Shapiro, et al., 1998; see Appendix F) is a 29-item self-report measure designed to assess motivations for sexual behavior. It has six scales: enhancement or personal pleasure (5 items), intimacy (5 items), coping with negative affect (5 items), self-affirmation (5 items), partner approval (4 items), and peer approval (5 items). Items consist of questions about motivations for having sex, which are rated based on relative frequency of engaging in sex for each reason on a scale ranging from 1 (*never/almost never*) to 5 (*always/almost always*). For the present study, only use of sex for enhancement and use of sex for coping were examined.

To develop the measure, Cooper, Shapiro, et al. (1998) solicited self-generated reasons for having sex from a sample of undergraduate psychology students. Responses were categorized and used to create scale items. Additional items were modeled after measures that assess motivations for sex or other types of behavior. An initial pool of 58 items was administered to an undergraduate sample (N = 476) and factor analyzed to develop the 29-item measure assessing the six motivations for sexual behavior. Correlations between factors ranged from .00 to .64. Use of sex for enhancement and use of sex for coping were positively correlated, $r = .40$, $p < .05$. Confirmatory factor analysis using a community sample (N = 1,666) replicated the 6-factor model. The model proved to be invariant across sex, race, and age group.

Reliability was tested using an undergraduate sample (N = 241) and a

community sample of adolescents and young adults ($N = 1,666$; Cooper, Shapiro, et al., 1998). Correlations between use of sex for enhancement and use of sex for coping ranged from .29 to .40. Internal consistency coefficients (alphas) ranged from .87 to .89 for use of sex for enhancement and .82 to .85 for use of sex for coping. Validity data are available only for the community sample. Use of sex for enhancement was significantly correlated with an unrestricted orientation toward sex ($r = .18$), need for sex ($r = .45$), erotophilia ($r = .41$), sensation seeking ($r = .19$), need for social approval ($r = .06$), social desirability ($r = -.17$), and erotophobia ($r = -.22$), $ps < .05$. Use of sex for coping was significantly correlated with an unrestricted orientation toward sex ($r = .11$), need for sex ($r = .19$), erotophilia ($r = .14$), erotophobia ($r = .16$), neuroticism ($r = .24$), sensation-seeking ($r = .11$), need for social approval ($r = .12$), and social desirability ($r = -.14$), $ps < .05$. Neither scale was correlated with need for intimacy.

Experiences in Close Relationships—Revised (ECR-R)

The ECR-R (Brennan et al., 1998; Fraley et al., 2000; see Appendix G) is a 36-item self-report measure designed to assess romantic attachment in adolescents and adults. It has two scales: Anxiety (18 items) and Avoidance (18 items). Items consist of statements about general experiences in relationships, which are rated based on agreement on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

The ECR (Brennan et al., 1998) was developed by compiling items from existing measures related to romantic attachment. Redundant items were combined, leaving 323 items. Items were completed by undergraduates ($N = 1,086$) and factor

analyzed. The results indicated two higher-order scales. Items with the highest correlations with each factor were selected to make up the two scales that were minimally correlated (18 items on each scale; $r = .11$). Cluster analysis revealed four distinct groups whose pattern of scores on the Anxiety and Avoidance scales were similar to Bartholomew's (1990) four attachment styles. Low Anxiety combined with low Avoidance corresponded to secure attachment, high Anxiety combined with high Avoidance corresponded to fearful attachment, low Anxiety combined with high Avoidance scores corresponded to dismissing attachment, and high Anxiety combined with low Avoidance corresponded to preoccupied attachment. However, the ECR, compared to Bartholomew's measure (Bartholomew & Horowitz, 1991) classified fewer respondents as secure. Brennan et al. suggested that the lower rate of secure classifications occurred because their scale discriminates more precisely between people with different degrees of insecurity. MANOVAs comparing Bartholomew's categories on Anxiety and Avoidance indicated that Anxiety is similar to Bartholomew's self-model dimension and Avoidance is similar to her other-model dimension. Regression analyses indicated that the ECR was better than Bartholomew's measure at predicting preference for touch and postcoital emotions.

Fraley et al. (2000) used item-response theory to redesign the ECR measure. They reanalyzed clusters of items from the initial item pool used by Brennan et al. (1998). Based on discrimination values, they reconstructed the scales to create a revised version of the ECR (ECR-R). The new version maintains the two-factor structure of Anxiety (18 items) and Avoidance (18 items). It contains 13 of the

original 18 Anxiety items and 7 of the original Avoidance items. Previously published reliability and validity data were not available for the ECR-R. In the present study, Cronbach's alpha was .93 for Anxiety and .92 for Avoidance.

Body Image

Body image was assessed using the Body Image Subtest of the DSFI (Derogatis & Melisarato, 1979; see Appendix H). The Body Image Subtest consists of 15 statements about satisfaction with body attributes, 5 of which are gender-keyed. Items are rated using a scale ranging from 1 (*not at all true*) to 5 (*extremely true*).

Derogatis and Melisaratos (1979) reported reliability for the DSFI from a sample (N = 325) that was not described. Internal consistency for the Body Image Subtest was reported as .58, but test-retest reliability was not available for this subscale. In a factor analysis that included participants with and without sexual dysfunctions (N = 380), the Body Image Subtest loaded on the same factor as the Sexual Satisfaction Subtest. In Derogatis and Melisaratos' sample, body image dissatisfaction was significantly higher among women with sexual dysfunctions, compared to women without sexual dysfunctions. Internal consistency for the Body Image Subtest in the present sample was .25.

Analytic Strategy

Prior to analysis, the data were examined for missing data and violations of statistical assumptions. For study variables, number of missing data points ranged

from 0 to 12. Missing data was replaced with the overall sample mean for each variable. As previously mentioned, number of sex partners and frequency of sexual behavior variables were transformed or recoded to account for outliers and skew. For ease of interpretation, means and standard deviations are presented in the original (nontransformed) scale. Analyses revealed heterogeneity of variance among groups for several variables.

For Phase 1 of the study, participants were categorized in avoidant, dysfunctional, ambivalent, and comparison groups. Groups were compared on demographic variables (see Table 4). They differed on ethnicity and relationship status. The dysfunctional and ambivalent groups contained the highest percentages of Caucasians, whereas the comparison group contained the highest percentages of African Americans and Hispanic Americans. Finally, the avoidant group contained the highest percentage of participants classified as other/unknown ethnicity. In addition, the avoidant groups contained the highest percentages of participants with no romantic partner, whereas the comparison and dysfunctional groups contained the highest percentages of participants in committed relationships. Because groups differed on ethnicity and relationship status, these variables were included in group comparison analyses. Groups did not differ significantly on age, $F(3,375) = 1.92, p > .05$, year in school, or sexual orientation.

Hypotheses 1 through 3 were examined using two factorial (Group x Relationship Status x Ethnicity) MANOVAs, one factorial (Group x Relationship Status x Ethnicity) ANOVA, and four Chi-square tests of association. To compensate

Table 4

Demographics by Group

	Comparison (<i>n</i> = 85) %	Dysfunctional (<i>n</i> = 140) %	Avoidant (<i>n</i> = 124) %	Ambivalent (<i>n</i> = 46) %	<i>df</i>	χ^2
Ethnicity					9	46.48***
Caucasian	40	75	49	67		
African American	34	14	23	22		
Hispanic	15	7	7	4		
Other/unknown ethnicity	11	4	21	7		
Relationship status					8	45.62***
No romantic partner	15	13	40	39		
Dating	22	28	26	35		
Committed relationship	62	59	34	26		
Year in school					9	13.97
Freshman	68	70	82	74		
Sophomore	26	18	14	17		
Junior	6	11	4	7		
Senior	0	1	0	2		

(continued on following page)

Table 4 (continued)

	Comparison (<i>n</i> = 85) %	Dysfunctional (<i>n</i> = 140) %	Avoidant (<i>n</i> = 124) %	Ambivalent (<i>n</i> = 46) %	<i>df</i>	χ^2
Sexual orientation						
Heterosexual	96	96	96	96	3	0.06
Other	4	4	4	4		

*** *p* < .001.

for unequal cell sizes and heterogeneity of variance, Pillai's criterion was used for F as recommended by Tabachnick and Fidell (1996). Post hoc comparisons were examined using the Tukey-Kramer procedure for variables with homogeneity of variance and the Games-Howell procedure for variables with heterogeneity of variance, as recommended by Howell (1997). Effect sizes³ for ANOVAs were considered large if $\eta \geq .51$, medium if $\eta \geq .36$, and small if $\eta \geq .14$, as recommended by Leech, Barrett, and Morgan (2005). Effect sizes for Chi-square tests of association were considered large if $\Phi \geq .50$, medium if $\Phi \geq .30$, and small if $\Phi \geq .10$, as by recommended Cohen (1988). The first factorial MANOVA examined continuous sexual behavior variables. The second factorial MANOVA examined the three subscales of the TSS and the Attitudes toward Casual Sex scale. Follow-up factorial univariate ANOVAs and pairwise comparisons using the Games-Howell test were conducted. For age of first consensual sexual intercourse, only participants who had ever been sexually active had valid responses, so the n 's in each group were reduced. In order to maintain adequate power for analysis of the other variables, age of first consensual sexual intercourse was examined in an individual ANOVA. Chi-square tests of association were used to examine group differences for categorical sexual behavior variables.

For Phase 2 of the analyses, participants were categorized based on whether or not they had experienced CSA. As discussed previously, CSA was defined as physical

³ SPSS computes partial η^2 as a measure of effect size (Levine & Hullet, 2002; Pierce, Block, & Aguinis, 2004). For ease of interpretation, partial η is presented and labeled as η .

sexual contact (including fondling; genital touching; masturbating; and attempted or completed vaginal, oral, or anal intercourse) prior to age 15 with someone at least five years older. CSA victims and nonvictims were compared on demographic variables. As with the previous group analysis, participants reporting CSA differed from those who did not report CSA on ethnicity and relationship status, but not on sexual orientation, year in school (see Table 5), or age, $t(405) = .44, p > .05$. The CSA group contained a higher percentage of Hispanic Americans, a lower percentage of Caucasians, and a lower percentage of participants with no romantic partner. Thus, relationship status and ethnicity also were included in the CSA analyses.

Hypothesis 4 also was examined using two factorial (CSA Status x Relationship Status x Ethnicity) MANOVAs and four Chi-Squares. The first factorial MANOVA examined continuous sexual behavior variables. The second factorial MANOVA examined the three subscales of the TSS and the Attitudes toward Casual Sex scale. Follow-up factorial univariate ANOVAs were conducted instead of *t*-tests to control for family-wise error. In addition, Chi-square tests of association were used to examine group differences in categorical sexual behavior variables.

Hypothesis 5 was examined with three simultaneous multiple regressions and one hierarchical multiple regression to predict scores on sexual distortion variables. For each sexual distortion, all CSA characteristics were entered simultaneously.

Hypothesis 6 was examined using a path analytical model in AMOS 6.0 (Arbuckle, 2005). CSA was the only exogenous variable. Enhancement motives, coping motives, anxious attachment, avoidant attachment, and body image were

Table 5

Demographics by CSA Status

	CSA (<i>n</i> = 59) %	No CSA (<i>n</i> = 409) %	<i>df</i>	χ^2
Ethnicity			3	14.80**
Caucasian	42	61		
African American	24	22		
Hispanic	22	8		
Other/unknown ethnicity	12	9		
Relationship status			2	8.68*
No romantic partner	10	28		
Dating	32	25		
Committed relationship	58	47		
Year in school			3	3.67
Freshman	66	74		
Sophomore	25	16		
Junior	9	10		
Senior	0	<1		
Sexual orientation			1	1.00
Heterosexual	95	97		
Other	5	3		

p* < .05. *p* < .01.

partially endogenous variables, and dysfunctional sexuality, sexual avoidance, and sexual ambivalence were fully endogenous variables. Enhancement and coping motives were measured using the Sexual Motivations Questionnaire, avoidant and anxious attachment were measured using the ECR-R, Body image was measured using the Body Image subscale of the DSFI, avoidant sexuality was measured using the Avoidance and Fear of Sex scale of the TSS, dysfunctional sexuality was measured using the Sex-Based Relationships scale of the TSS, and sexual ambivalence was calculated as previously described based on Avoidance and Fear of Sex and Sex-Based Relationships. Variables measured by the same scale were allowed to intercorrelate.

CHAPTER 5

RESULTS

Phase 1: Hypotheses 1 to 3

The purpose of Phase 1 was to define and provide evidence for the constructs of dysfunctional sexuality, sexual avoidance, and sexual ambivalence by comparing sexual behaviors and attitudes of groups classified according to erotophilia and erotophobia scores. Thus, the analyses for Phase 1 included only the subset of participants who were classified as low and/or high on erotophilia and erotophobia ($N = 395$). Hypotheses 1, 2, and 3 predicted sexual behavior and attitude characteristics of the dysfunctional, avoidant, and ambivalent groups, respectively, and are discussed together.

Table 6 displays the correlations between sexual attitude and sexual behavior variables used in the group analyses. Significant correlations were found among all sexual behavior variables, range of $r = .11$ to $.74$, except age of first intercourse and frequency of oral sex. As expected, number of sex partners variables and frequency of vaginal and oral sex variables were highly correlated, as were total intercourse experiences and sexual variety ($r_s > .70$). Age of first intercourse was negatively correlated with other sexual behavior variables; all other correlations among sexual behavior variables were positive. The sexual attitude variables were mildly to moderately intercorrelated, range of $r = -.32$ to $.38$. Avoidant sexual attitudes was

Table 6

Intercorrelations and Descriptive Statistics for Sexual Behavior and Sexual Attitude Variables (Group Analysis)

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Sex partners past year	--	.74***	.24***	.19***	.45***	.45***	-.18**	-.32***	.29***	.42***	.39***
2. Sex partners total		--	.28***	.22***	.44***	.45***	-.40***	-.31***	.28***	.36***	.32***
3. Frequency vaginal sex			--	.71***	.76***	.58***	-.11*	-.49***	.19***	<.01	.09
4. Frequency oral sex				--	.58***	.58***	.06	-.44***	.24***	.07	.13*
5. Total intercourse					--	.70***	-.24***	-.56***	.23***	.06	.21***
6. Sexual variety						--	-.18**	-.53***	.33***	.18***	.28***

(continued on following page)

Table 6 (continued)

Variable	1	2	3	4	5	6	7	8	9	10	11
7. Age of first intercourse							--	.10	-.05	-.12***	-.07
8. Avoidant sexual attitudes								--	-.19***	.05	-.32***
9. Sexual preoccupation									--	.38***	.30***
10. Dysfunctional sexual attitudes										--	.37***
11. Attitudes toward casual sex											--
M	1.46	2.88	3.23	2.87	5.90	8.25	16.41	2.19	2.18	1.44	2.38
SD	1.54	3.39	2.00	1.64	3.37	3.13	1.67	0.84	0.76	0.43	1.04

Note: N = 395 except for correlations between age of first intercourse and other variables, which included only participants who were sexually active (N = 309). *** $p < .001$. ** $p < .01$. * $p < .05$.

negatively correlated with sexual preoccupation and attitudes toward casual sex. Dysfunctional sexual attitudes, sexual preoccupation, and attitudes toward casual sex were all positively intercorrelated with each other. Sexual behavior and sexual attitude variables were also intercorrelated, range of $r = -.56$ to $.39$. Avoidant sexual attitudes correlated negatively with all sexual behavior variables except age of first intercourse. Sexual preoccupation correlated positively with all sexual behavior variables except age of first intercourse. Dysfunctional sexual attitudes correlated positively with number of sex partners and sexual variety and negatively with age of first intercourse. Finally, attitudes toward casual sex correlated positively with all sexual behavior variables except frequency of vaginal sex and age of first intercourse.

To begin testing hypotheses 1 through 3, groups were first compared on percentage of participants who had engaged vaginal and oral sex at least one time. Chi-Square analyses indicated that groups differed on percentage of participants who had engaged in vaginal sex, $\chi^2(3, N = 394) = 87.67, p < .001, \Phi = .47$, and oral sex, $\chi^2(3, N = 394) = 82.86, p < .001, \Phi = .46$. Effect sizes were medium. A smaller percentage of participants in the avoidant group reported a history of engaging in vaginal sex and oral sex compared to the other groups (see Table 7). Group differences across relationship status and ethnicity were not examined due to small expected cell sizes.

A 4(group) by 3(relationship status) by 4(ethnicity) MANOVA was conducted to determine whether there were differences between groups on continuous sexual behavior variables (number of sex partners total and during the past year, frequency of

vaginal and oral sex, and sexual variety) and whether differences varied by ethnicity or relationship status. Multivariate main effects were found for group, $F(18, 1044) = 5.64, p < .001, \eta = .30$, relationship status, $F(12, 694) = 7.72, p < .001, \eta = .34$, and ethnicity, $F(18, 1044) = 2.60, p < .001, \eta = .21$. There was also a significant group by relationship status interaction, $F(36, 2106) = 1.81, p < .01, \eta = .17$.

Table 7

Percentage of Participants Who Have Engaged in Vaginal and Oral Sex One or More Times by Group

	Comparison (<i>n</i> = 84) %	Dysfunctional (<i>n</i> = 140) %	Avoidant (<i>n</i> = 124) %	Ambivalent (<i>n</i> = 46) %
Vaginal sex	90	99	56	85
Oral sex	89	98	56	85

Follow-up univariate ANOVAs by group were significant for all dependent variables (see Table 8). Effect sizes were small for frequency of vaginal sex and frequency of oral sex, $\eta_s = .27$, and medium for the other variables, range of $\eta = .37$ to $.42$. Means and standard deviations for sexual behavior variables by group are displayed in Table 9. Compared to all the other groups, the avoidant group reported fewer total sex partners, fewer sex partners during the past year, lower frequency of vaginal sex, lower frequency of oral sex, fewer total sexual intercourse experiences,

Table 8

Follow-up Group x Relationship Status x Ethnicity Results for Sexual Behavior Variables

Source	df	<i>F</i>					
		Sex partners past year	Sex partners total	Frequency vaginal sex	Frequency oral sex	Total intercourse	Sexual variety
Group (G)	3	19.41***	20.41***	9.38***	9.38***	19.12***	25.38***
Relationship status (R)	2	2.30	4.55*	34.49***	18.72***	25.43***	6.90**
Ethnicity (E)	3	2.06	4.20**	3.88**	2.18	4.90**	0.86
G x R	6	4.13	4.04	1.75	0.93	1.46	0.73
G x E	9	1.39	1.87	0.71	1.37	1.16	1.55
R x E	6	0.96	1.33	0.40	0.75	0.85	1.69
G x R x E	14	0.96	0.98	0.77	0.48	1.51	0.64
Error	351						

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

Table 9

Means and Standard Deviations for Sexual Behavior Variables by Group

	Comparison (<i>n</i> = 85)		Dysfunctional (<i>n</i> = 140)		Avoidant (<i>n</i> = 124)		Ambivalent (<i>n</i> = 46)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Sex partners past year	1.28 _a	0.90	2.08 _b	1.74	0.85 _c	1.24	1.57 _a	1.81
Sex partners total	2.58 _a	2.76	4.26 _b	4.10	1.47 _c	2.11	3.04 _a	3.28
Frequency vaginal sex	3.65 _{abd}	1.92	4.29 _{ab}	1.76	1.90 _c	1.49	2.83 _d	1.88
Frequency Oral sex	2.86 _a	1.60	3.77 _b	1.45	1.89 _c	1.32	2.76 _a	1.55
Total intercourse	6.45 _a	3.02	7.94 _b	2.09	3.35 _c	3.13	5.56 _a	3.28
Sexual variety	8.48 _a	2.06	10.11 _b	1.70	5.90 _c	3.50	8.48 _a	3.04

Note: Means with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

and less sexual variety. Compared to all the other groups, the dysfunctional group reported more total sex partners, more sex partners during the past year, higher frequency of oral sex, more sexual intercourse experiences, and greater sexual variety. The dysfunctional group also reported greater frequency of vaginal sex than the ambivalent group. Thus, the avoidant group reported the lowest levels of sexual

behavior and the dysfunctional group reported the highest levels of sexual behavior. The comparison group and the ambivalent group were not significantly different from each other. These results provide support for Hypotheses 1 and 2. However, they do not support Hypothesis 3, as the ambivalent group was expected to display higher levels of sexual behavior than the comparison group.

Follow-up univariate ANOVAs by relationship status were significant for all dependent variables except number of sex partners during the past year (see Table 8). Effect sizes were medium for frequency of vaginal sex, $\eta = .40$, and sexual intercourse experiences, $\eta = .36$, and small for total partners, frequency of oral sex, and sexual variety, $\eta_s = .16, .31, \text{ and } .19$, respectively. Means and standard deviations for sexual behavior variables by relationship status are displayed in Table 10. Participants with no romantic partner reported the lowest frequency of vaginal and oral sex, fewest sexual intercourse experiences, and lowest sexual variety, followed by participants who were dating, and then participants in a committed relationship. All relationship status groups were significantly different from each other for these variables. In addition, compared to participants who were dating or in a committed relationship, participants with no romantic partner reported fewer total sex partners. Thus, participants who were in a committed relationship tended to report higher levels of sexual behavior than those who were dating, and participants who were dating tended to report higher levels of sexual behavior than those with no romantic partner.

Follow-up univariate ANOVAs by ethnicity were significant for total number of sex partners, frequency of vaginal sex, and sexual intercourse experiences (see

Table 10

Means and Standard Deviations for Sexual Behavior Variables by Relationship Status (Group Analysis)

	No Romantic Partner (<i>n</i> = 99)		Dating (<i>n</i> = 106)		Committed Relationship (<i>n</i> = 190)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Sex partners past year	1.08	1.64	1.89	1.94	1.43	1.12
Sex partners total	1.86 _a	3.28	3.80 _b	4.43	2.90 _b	2.55
Frequency vaginal sex	1.44 _a	0.76	2.94 _b	1.82	4.33 _c	1.80
Frequency oral sex	1.60 _a	0.88	2.71 _b	1.58	3.62 _c	1.55
Total intercourse	3.04 _a	2.86	5.91 _b	3.29	7.39 _c	2.63
Sexual variety	5.97 _a	3.80	8.48 _b	2.78	9.31 _c	2.19

Note: Means with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

Table 8). Effect sizes were small, range of $\eta = .18$ to $.20$. Means and standard deviations for sexual behavior variables by ethnicity are displayed in Table 11. Compared to participants in the other/unknown ethnicity category, African Americans and Caucasians reported more total sex partners, higher frequency of vaginal sex, and more sexual intercourse experiences. Hispanic Americans fell in the middle and were not significantly different from any other ethnicity. Importantly, ethnicity did not interact with group, $F(54, 2106) = 1.24, p > .05, \eta = .18$, indicating that observed groups were consistent across ethnic groups.

Follow-up univariate ANOVAs revealed significant group by relationship status interactions for number of sex partners during the past year and total number of sex partners (see Table 8). Effect sizes were small, $\eta = .26$ and $\eta = .25$, respectively. Follow-up comparisons of group differences on number of sex partners during the past year and total number of sex partners were conducted using simple effects analyses within each relationship status. Analyses were significant for all categories (see Table 12).

Group comparisons for number of sex partners during the past year for each relationship status are displayed in Figure 2. Simple effects analyses revealed that group differences varied depending relationship status. Among participants with no romantic partner and participants who were dating, the dysfunctional group reported significantly more sex partners during the past year compared to the avoidant and comparison groups, $p < .05$. Among participants in a committed relationship, the dysfunctional group reported significantly more sex partners during the past year

Table 11

Means and Standard Deviations for Sexual Behavior Variables by Ethnicity (Group Analysis)

	Caucasian (<i>n</i> = 230)		African American (<i>n</i> = 87)		Hispanic American (<i>n</i> = 34)		Other/Unknown (<i>n</i> = 44)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Sex partners past year	1.56	1.58	1.69	1.54	1.16	0.95	0.76	1.45
Sex partners total	2.91 _a	3.29	3.67 _a	3.71	2.19 _{ab}	2.16	1.69 _b	3.68
Frequency vaginal sex	3.33 _a	1.97	3.51 _a	1.93	3.15 _{ab}	2.06	2.25 _b	1.97
Frequency Oral sex	3.16	1.59	2.57	1.61	2.68	1.65	2.09	1.65
Total intercourse	6.27 _a	3.28	6.26 _a	3.12	5.56 _{ab}	3.48	3.52 _b	3.33
Sexual variety	8.91	2.93	7.94	2.58	8.09	2.71	5.57	3.88

Note: Means with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

Table 12

Follow-up Univariate ANOVAs for Group Differences on Number of Sex Partners Past Year and Total Number of Sex Partners for Each Relationship Status

	n	df	F	η
# of sex partners past year				
No romantic partner	99	3, 95	9.42***	.48
Dating	106	3, 102	12.81***	.52
Committed relationship	190	3, 186	5.14**	.28
Sex partners total				
No romantic partner	99	3, 95	11.87***	.52
Dating	106	3, 102	8.60***	.45
Committed relationship	190	3, 186	6.13**	.30

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

compared to the avoidant group, $p < .05$, but was not significantly different from the comparison group. Notably, the magnitude of the group differences was much smaller for participants in a committed relationship, $\eta = .28$, than for those with no romantic partner, $\eta = .48$ or who were dating, $\eta = .52$. The ambivalent group did not differ significantly from any group for all relationship statuses. In summary, the dysfunctional group reported more sex partners during the past year compared to the comparison group only for participants with no romantic partner or who were dating. Although the dysfunctional group reported significantly more sex partners during the past year compared to the avoidant group regardless of relationship status, the

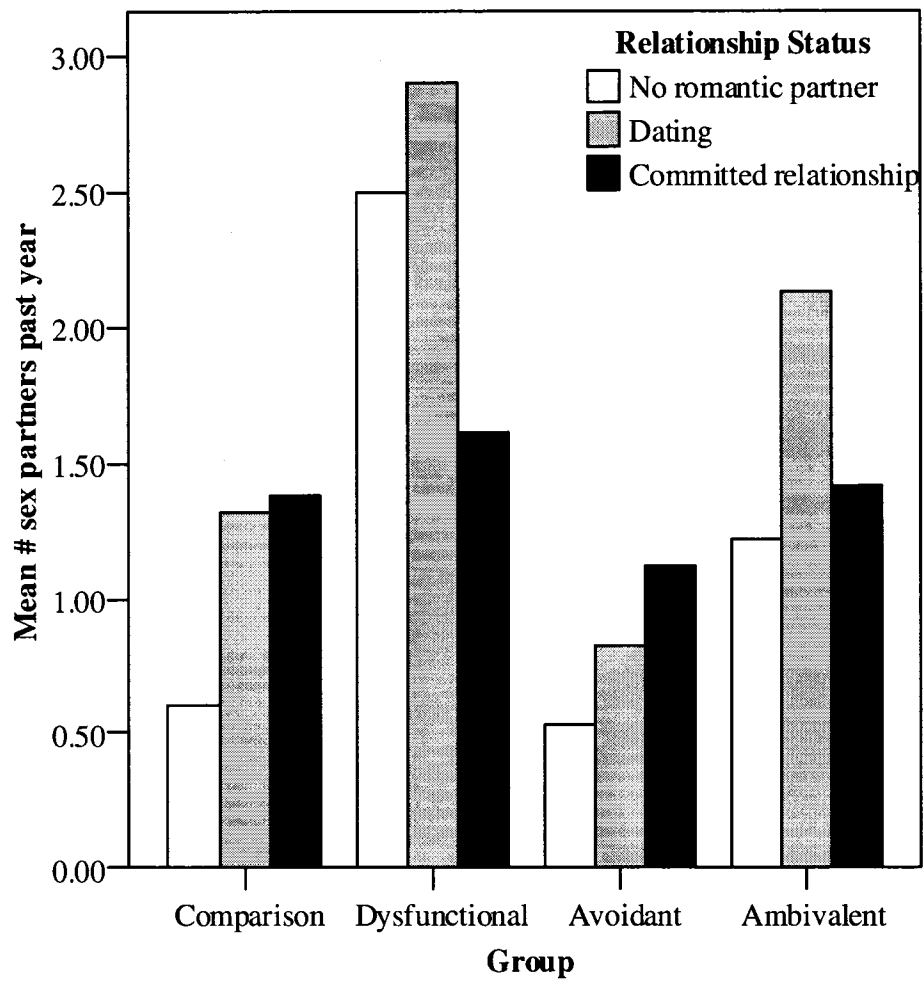


Figure 2. Mean number of sex partners during the past year by group for each relationship status category.

differences were attenuated for participants in committed relationships. Neither the avoidant group nor the ambivalent group was significantly different from the comparison group.

Group comparisons for total number of sex partners for each relationship status are displayed in Figure 3. As with number of sex partners during the past year, simple effects analyses revealed that group differences varied depending relationship status. Among participants with no romantic partner, the dysfunctional group reported significantly more total sex partners compared to the avoidant, ambivalent, and comparison groups, $p < .05$. Among participants who were dating, the dysfunctional group reported significantly more total sex partners compared to the avoidant group, $p < .05$, but not the comparison group, and the avoidant group reported significantly fewer total sex partners compared to the comparison group, $p < .05$. The ambivalent group did not differ significantly from any group for participants who were dating. Among participants in committed relationships, the dysfunctional group reported significantly more total sex partners than only the avoidant group, $p < .05$, with the ambivalent and comparison groups not differing significantly from any group. Again, the magnitude of the effect was much smaller for participants in a committed relationship, $\eta = .30$, compared to those with no romantic partner category, $\eta = .52$ or were dating, $\eta = .45$. In summary, the dysfunctional group reported significantly more total sex partners compared to the ambivalent group only for participants with no romantic partner. The dysfunctional group reported significantly more total sex partners compared to the comparison group only for participants with no romantic

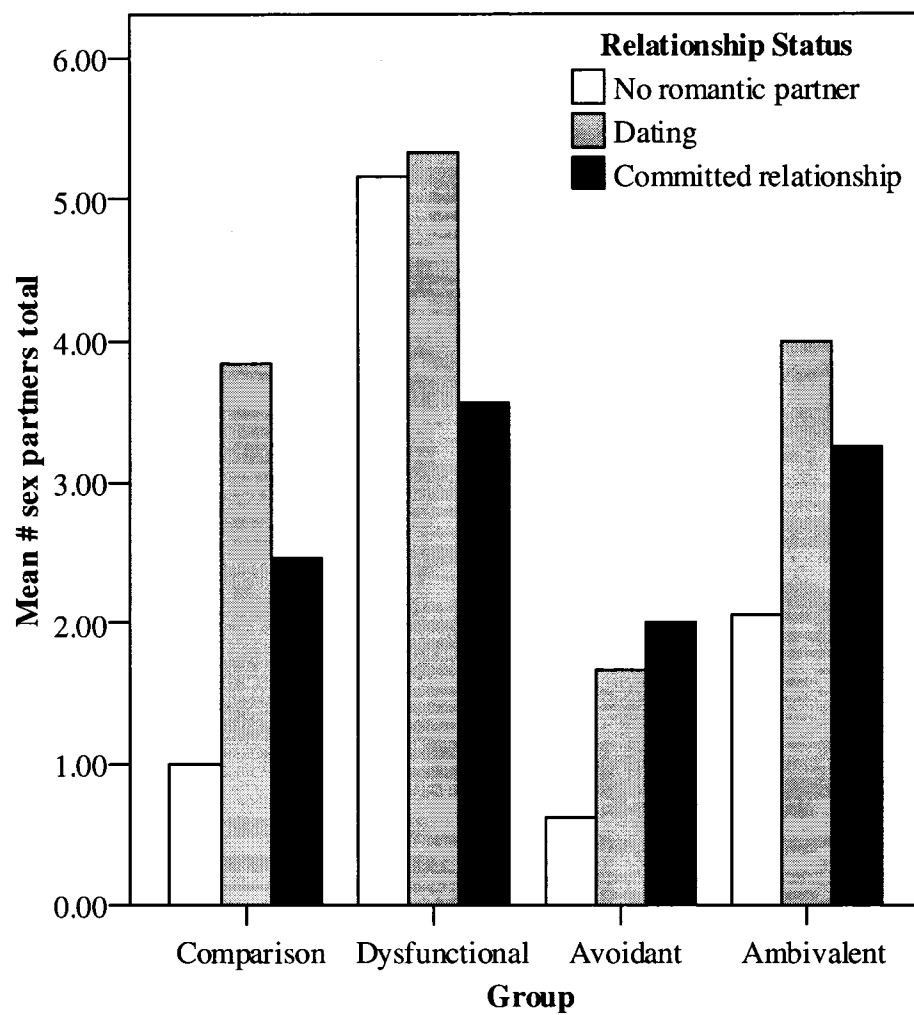


Figure 3. Mean total number of sex partners by group for each relationship status category.

partner. Although the dysfunctional group reported more total sex partners compared to the avoidant group regardless of relationship status, the differences were attenuated for participants in committed relationships. Finally, the avoidant group reported significantly fewer total sex partners only for participants who were dating.

A 4(group) by 3(relationship status) by 4(ethnicity) ANOVA was conducted to determine whether there were differences between groups on age of first consensual sexual intercourse⁴ and whether differences varied by ethnicity or relationship status. Main effects were found for relationship status, but not for group or ethnicity (see Table 13). No interaction effects were significant. Follow-up comparisons for relationship status revealed that participants who were dating reported a significantly younger mean age of first consensual sexual intercourse than participants with no romantic partner (see Table 14). Participants in a committed relationship did not differ significantly from any relationship status category.

Groups were compared on percentage of participants who have had at least one one-night stand and who have engaged in sex with a stranger at least one time. Chi-square tests of association revealed that a greater percentage of participants in the dysfunctional and ambivalent groups, compared to the comparison and avoidant groups, reported engaging in one-night stands, $\chi^2(3, N = 395) = 18.90, p < .001, \Phi = .22$, and sex with strangers, $\chi^2(3, N = 395) = 22.38, p < .001, \Phi = .24$ (see Table 15). Effect sizes were small. Group differences across relationship status and ethnicity were unable to be interpreted due to small expected cell sizes. These results provide

⁴ Only participants who reported being sexually active ($n = 309$) were included in this analysis.

Table 13

Group x Relationship Status x Ethnicity ANOVA Results for Age of First Consensual Sexual Intercourse

Source	<i>df</i>	<i>F</i>	η
Group (G)	3	0.70	.09
Relationship status (R)	2	3.95*	.17
Ethnicity (E)	3	2.24	.15
G x R	6	0.93	.14
G x E	9	1.84	.24
R x E	6	0.97	.15
G x R x E	11	1.66	.25
Error	268		

* $p < .05$

support for Hypotheses 1 and 3.

A 4(group) by 3(relationship status) by 4(ethnicity) MANOVA was conducted to determine whether there were differences between groups on sexual attitude variables and whether differences varied by ethnicity or relationship status. For these analyses, sexual avoidance, sexual preoccupation, and dysfunctional sexual attitudes were measured using the TSS scales (Avoidance and Fear of Sex, Sexual

Table 14

Means and Standard Deviations for Age of First Consensual Sexual Intercourse in Years by Relationship Status (Group Analyses)

	<i>n</i>	<i>M</i>	<i>SD</i>
No romantic partner	47	17.00	1.38
Dating	85	15.96	2.07
Committed relationship	177	16.47	1.47

Note: Means with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

Table 15

Percentage of Participants Who Have Engaged in Sex With Strangers and One-Night Stands One or More Times by Group

	Comparison (<i>n</i> = 85) %	Dysfunctional (<i>n</i> = 140) %	Avoidant (<i>n</i> = 124) %	Ambivalent (<i>n</i> = 46) %
Sex with strangers	4	15	4	24
One-night stands	9	23	7	24

Preoccupation, and Sex-Based Relationships) and attitudes about casual sex were measured using the sexual attitudes questionnaire. Multivariate main effects were found for group, $F(12, 1050) = 15.12, p < .001, \eta = .38$, and relationship status, $F(8, 698) = 3.65, p < .001, \eta = .20$, but not for ethnicity, $F(12, 1050) = 1.62, p > .05, \eta = .13$. There were significant interactions for group by relationship status, $F(24, 1404) = 1.60, p < .05, \eta = .16$, and relationship status by ethnicity, $F(24, 1404) = 1.64, p < .05, \eta = .16$.

Follow-up univariate ANOVAs by group were significant for all dependent variables (see Table 16). Effect sizes ranged from small for dysfunctional sexual attitudes, $\eta = .23$, and attitudes about casual sex, $\eta = .26$, to medium for avoidant sexual attitudes, $\eta = .46$, and sexual preoccupation, $\eta = .48$. Means and standard deviations for sexual attitude variables by group are displayed in Table 17. Compared to all the other groups, the avoidant group reported more avoidant sexual attitudes. In addition, the ambivalent group reported more avoidant sexual attitudes than the comparison and dysfunctional groups. Relative to the comparison and avoidant groups, the dysfunctional and ambivalent groups reported greater sexual preoccupation. Compared to the avoidant group, the ambivalent group reported more dysfunctional sexual attitudes. The comparison group reported lower dysfunctional sexual attitudes than all other groups. Compared to the comparison and avoidant groups, the dysfunctional group reported more accepting attitudes about casual sex. In addition, the ambivalent group reported more accepting attitudes about of casual sex than the avoidant group. Taken together, the results indicated that the avoidant and

Table 16

Follow-up Group x Relationship Status x Ethnicity ANOVA Results for Sexual Attitude Variables

Source	df	<i>F</i>			
		Avoidant sexual attitudes	Sexual Preoccupation	Dysfunctional sexual attitudes	Attitudes about casual sex
Group (G)	3	32.12***	34.28***	6.54***	8.69***
Relationship status (R)	2	2.18	7.38**	4.92**	4.49*
Ethnicity (E)	3	2.30	1.55	0.86	1.37
G x R	6	0.97	1.94	1.03	1.88
G x E	9	1.99	0.75	1.07	0.90
R x E	6	0.36	4.88**	1.20	0.63
G x R x E	14	0.94	2.09	1.13	0.57
Error	351				

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

Table 17

Means and Standard Deviations for Sexual Attitude Variables by Group

	Comparison (<i>n</i> = 85)		Dysfunctional (<i>n</i> = 140)		Avoidant (<i>n</i> = 124)		Ambivalent (<i>n</i> = 46)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Avoidant sexual attitudes ^a	1.87 _a	0.62	1.72 _a	0.49	2.90 _b	0.82	2.27 _c	0.77
Sexual preoccupation ^b	1.71 _a	0.48	2.63 _b	0.61	1.73 _a	0.52	2.85 _b	0.83
Dysfunctional sexual attitudes ^a	1.27 _a	0.29	1.52 _{bc}	0.47	1.40 _b	0.39	1.62 _c	0.45
Attitudes about casual sex ^a	2.24 _{ac}	0.95	2.74 _b	1.15	1.95 _c	0.77	2.70 _{ab}	1.05

^aMeans with different subscripts differ significantly at $p < .05$ by the Tukey-Kramer procedure. ^bMeans with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

ambivalent groups reported the highest levels of sexual avoidance, as predicted. Also as predicted, the dysfunctional and ambivalent groups reported the most sexual preoccupation, dysfunctional sexuality, and accepting attitudes toward casual sex.

Follow-up univariate ANOVAs by relationship status were significant for sexual preoccupation, dysfunctional sexual attitudes, and attitudes about casual sex (see Table 16). Effect sizes were small, range of $\eta = .16-.20$. Means and standard deviations for sexual attitude variables by group are displayed in Table 18. Compared

to participants in a committed relationship, participants who were dating reported greater sexual preoccupation, dysfunctional sexual attitudes, and acceptance of casual sex. Participants with no romantic partner also reported greater dysfunctional sexual attitudes than participants in a committed relationship. Thus, participants who were dating displayed more sexual preoccupation, dysfunctional sexual attitudes, and acceptance of casual sex than participants who were in a committed relationship.

Table 18

Means and Standard Deviations for Sexual Attitude Variables by Relationship Status (Group Analysis)

	No romantic partner (<i>n</i> = 99)		Dating (<i>n</i> = 106)		Committed relationship (<i>n</i> = 190)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Avoidant sexual attitudes	2.59	0.89	2.14	0.83	2.00	0.74
Sexual preoccupation ^a	2.18 _{ab}	0.89	2.30 _a	0.75	2.11 _b	0.68
Dysfunctional sexual attitudes ^b	1.47 _a	0.47	1.62 _a	0.45	1.33 _b	0.35
Attitudes about casual sex ^b	2.42 _{ab}	1.11	2.73 _a	1.17	2.16 _b	0.86

^aMeans with different subscripts differ significantly at $p < .05$ by the Tukey-Kramer procedure. ^bMeans with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

Although the MANOVA indicated a significant interaction effect for group by relationship status, follow-up univariate ANOVAs were not significant for any variable (see Table 16). Univariate ANOVAs did indicate a significant relationship status by ethnicity interaction for sexual preoccupation (See Table 16). Simple effects analyses revealed a significant ANOVA only for participants in the other/unknown ethnicity category (see Table 19). However, pairwise comparisons indicated the differences between groups were not statistically significant.

Phase 2

The purpose of Phase 2 was to examine CSA, CSA characteristics, sexual motivations, adult romantic attachment style, and body image as predictors of sexual distortions, including dysfunctional sexuality, sexual avoidance, and sexual ambivalence. The analyses for Phase 2 included all participants whose responses clearly identified them as CSA victims or nonvictims ($N = 468$). Approximately 13% ($n = 59$) of this sample reported experiences that met the study definition for CSA.

Table 20 displays the correlations between sexual attitude and sexual behavior variables used in the CSA analyses.⁵ Patterns of intercorrelations were similar to those previously described for the group analysis. The only difference was found for age of first intercourse. Unlike in the group sample, age of first intercourse correlated positively with avoidant sexual attitudes and negatively with attitudes

⁵Correlations between sexual behaviors and sexual attitudes are discussed again because the group and CSA status analyses used different subsets of the study sample.

Table 19

Simple Effects Analysis for Sexual Preoccupation by Ethnicity and Relationship Status (Group Analysis)

	n	M	SD	F	η
Caucasian				2.90	.16
No romantic partner	58	2.32	0.81		
Dating	64	2.41	0.74		
Committed relationship	108	2.15	0.66		
African American				1.73	.16
No romantic partner	18	2.44	1.24		
Dating	27	2.06	0.66		
Committed relationship	42	2.15	0.73		
Hispanic American				0.03	.04
No romantic partner	5	1.98	0.54		
Dating	8	2.08	0.59		
Committed relationship	21	2.03	0.80		
Other/unknown				5.10*	.45
No romantic partner	18	1.52	0.33		
Dating	7	2.40	1.20		
Committed relationship	19	1.85	0.56		

* $p < .05$.

Table 20

Intercorrelations and Descriptive Statistics for Sexual Behavior and Sexual Attitude Variables (CSA Analysis)

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Sex partners past year	--	.74***	.27***	.25***	.47***	.49***	-.15**	-.27***	.23***	.34***	.36***
2. Sex partners total		--	.30***	.23***	.46***	.46***	-.32***	-.28***	.19***	.26***	.35***
3. Frequency vaginal sex			--	.70***	.74***	.52***	-.10	-.44***	.21***	.01	.08
4. Frequency oral sex				--	.58***	.52***	-.03	-.40***	.24***	.06	.10*
5. Total intercourse					--	.68***	-.23***	-.50***	.22***	.08	.22***
6. Sexual variety						--	-.18***	-.46***	.28***	.10*	.24***

(continued on following page)

Table 20 (continued)

Variable	1	2	3	4	5	6	7	8	9	10	11
7. Age of first intercourse							--	.13*	-.01	-.09	-.16**
8. Avoidant sexual attitudes								--	-.12***	.08	-.33***
9. Sexual preoccupation									--	.35***	.21***
10. Dysfunctional sexual attitudes										--	.29***
11. Attitudes toward casual sex											--
M	1.35	2.69	3.09	2.74	5.76	8.17	16.55	2.21	2.11	1.43	2.38
SD	1.33	3.09	1.90	1.57	3.30	3.02	1.67	0.79	0.65	0.42	1.01

Note: N = 468 for all variables except for correlations between age of first intercourse and other variables, which included only participants who were sexually active (N = 368). *** $p < .001$. ** $p < .01$. * $p < .05$.

toward casual sex, but was not significantly correlated with dysfunctional sexual attitudes or frequency of vaginal sex.

Hypothesis 4

The purpose of Hypothesis 4 was to examine differences between CSA victims and nonvictims on study variables. CSA victims and nonvictims were first compared on number of participants who have engaged in vaginal and oral sex at least one time. Chi-square analyses revealed that CSA victims were more likely than nonvictims to have ever engaged in vaginal and oral sex (see Table 21). Effect sizes were small, $\Phi = .14$ for vaginal sex and $\Phi = .15$ for oral sex. Differences by relationship status and ethnicity were unable to be interpreted due to small expected cell sizes.

Table 21

Percentage of Participants Who Have Engaged in Vaginal and Oral Sex One or More Times by CSA Status

	No CSA (<i>n</i> = 409) %	CSA (<i>n</i> = 59) %	<i>df</i>	χ^2
Vaginal sex	81	97	1	9.21**
Oral sex	79	97	1	10.14**

** $p < .01$.

A 2(CSA Status) by 3(relationship status) by 4(ethnicity) MANOVA was conducted to determine whether there were differences between CSA victims and nonvictims on continuous sexual behavior variables and whether differences varied by ethnicity or relationship status. Multivariate main effects were found for CSA status, $F(6, 440) = 2.13, p < .05, \eta = .17$, relationship status, $F(12, 882) = 6.61, p < .001, \eta = .29$, and ethnicity, $F(18, 1326) = 1.77, p < .05, \eta = .15$. Importantly, no interaction effects were significant, indicating that effects of CSA were consistent across ethnic groups and relationship status.

Follow-up univariate ANOVAs by CSA status were significant for number of sex partners during the past year, total number of sex partners, and sexual variety (see Table 22). Means and standard deviations for sexual behavior variables by group are displayed in Table 23. Compared to nonvictims, CSA victims reported more sex partners and greater variety of sexual behaviors, as predicted. Effect sizes were small, range of $\eta = .11-.15$. However, CSA victims did not report significantly greater frequency of sexual behavior or sexual intercourse experiences.

Follow-up univariate ANOVAs by relationship status were significant for all dependent variables (see Table 22)⁶. Means and standard deviations for sexual behavior variables by relationship status are displayed in Table 24. Compared to participants who were dating or in a committed relationship, participants with no romantic partner reported fewer total sex partners, fewer sex partners during the past

⁶Group differences by relationship and ethnicity are discussed again because the group and CSA status analyses used different subsets of the study sample.

Table 22

Follow-up CSA Status x Relationship Status x Ethnicity ANOVA Results for Sexual Behavior Variables

Source	df	<i>F</i>					
		Sex partners past year	Sex partners total	Frequency vaginal sex	Frequency oral sex	Total intercourse	Sexual variety
CSA status (C)	1	5.58*	7.78**	3.44	2.70	2.94	10.20**
Relationship status (R)	2	3.87*	3.88*	23.05***	21.74***	13.85***	8.66***
Ethnicity (E)	3	3.83*	2.71*	4.49**	2.27	3.94**	5.32**
C x R	2	1.35	0.02	1.27	0.86	0.43	0.43
C x E	3	1.21	0.99	0.93	0.34	0.43	0.95
R x E	6	0.78	0.68	1.87	1.78	0.61	0.84
C x R x E	5	0.74	0.71	1.55	1.61	0.44	1.04
Error	445						

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

Table 23

Means and Standard Deviations for Sexual Behavior Variables by CSA Status

	No CSA (<i>n</i> = 409)		CSA (<i>n</i> = 59)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Sex partners past year	1.31 _a	1.35	1.64 _b	1.08
Sex partners total	2.49 _a	2.92	4.10 _b	3.83
Frequency vaginal sex	3.02	1.90	3.61	1.78
Frequency oral sex	2.67	1.57	3.19	1.53
Total intercourse	5.62	3.33	6.76	2.88
Sexual variety	7.96 _a	3.11	9.58 _b	1.73

Note: Means with different subscripts differ significantly at $p < .05$ by one-way ANOVA.

year, lower frequency of vaginal and oral sex, fewer sexual intercourse experiences, and less sexual variety. Compared to participants in committed relationships, participants who were dating reported less frequent vaginal and oral sex, less sexual variety, and fewer sexual intercourse experiences. Thus, participants with no romantic partner tended to report lower levels of sexual behavior compared to those who were

Table 24

Means and Standard Deviations for Sexual Behavior Variables by Relationship (CSA Analysis)

	No Romantic Partner (<i>n</i> = 121)		Dating (<i>n</i> = 122)		Committed Relationship (<i>n</i> = 225)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Sex partners past year	0.97 _a	1.36	1.78 _b	1.69	1.32 _b	0.98
Sex partners total	1.79 _a	2.47	3.39 _b	3.66	2.80 _b	2.95
Frequency vaginal sex	1.53 _a	0.96	2.83 _b	1.61	4.07 _c	1.82
Frequency Oral sex	1.61 _a	0.96	2.52 _b	1.42	3.46 _c	7.11
Total intercourse	3.10 _a	2.91	5.91 _b	3.07	7.11 _c	2.72
Sexual variety	6.07 _a	3.74	8.44 _b	2.65	9.15 _c	2.10

Note: Means with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

dating or in a committed relationship, and those in a committed relationship tended to report more frequent sexual activity compared to those who were dating. Effect sizes were small, range of $\eta = .13-.31$.

Follow-up univariate ANOVAs by ethnicity were significant for number of sex partners during the past year, total number of sex partners, frequency of vaginal sex, number of sexual intercourse experiences, and sexual variety (see Table 22). Means and standard deviations for sexual behavior variables by ethnicity are displayed in Table 25. Compared to all other ethnicity categories, participants in the other/unknown ethnicity category reported fewer sex partners during the past year, fewer total number of sex partners, less sexual variety, and fewer sexual intercourse experiences. Caucasians and African Americans reported more frequent vaginal sex than participants in the other/unknown ethnicity category. Effect sizes were small, range of $\eta = .13$ to $.19$. Caucasians, African Americans, and Hispanic Americans did not differ significantly from each other on any sexual behavior variables.

A 2(CSA Status) by 3(relationship status) by 4(ethnicity) ANOVA was conducted to determine whether there were differences between CSA victims and nonvictims on age of first consensual sexual intercourse⁷ and whether differences varied by ethnicity or relationship status. Main effects were found for relationship status, but not for CSA status or ethnicity (see Table 26). No interaction effects were significant. Pairwise comparisons revealed that participants who were dating had a lower age of first consensual sexual intercourse than participants with no romantic

⁷ Only participants who reported being sexually active were included in this analysis.

Table 25

Means and Standard Deviations for Sexual Behavior Variables by Ethnicity (CSA Analysis)

	Caucasian (<i>n</i> = 230)		African American (<i>n</i> = 87)		Hispanic American (<i>n</i> = 34)		Other/Unknown (<i>n</i> = 44)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Sex partners past year	1.47 _a	1.42	1.38 _a	1.12	1.15 _a	0.99	0.73 _b	1.47
Sex partners total	2.74 _a	3.29	3.12 _a	3.56	2.37 _a	2.37	1.66 _b	3.77
Frequency vaginal sex	3.11 _a	1.85	3.60 _a	1.93	3.07	1.88 _{ab}	2.14 _b	1.80
Frequency Oral sex	2.91	1.53	2.65	1.61	2.83	1.59	2.02	1.62
Total intercourse	5.93 _a	3.31	6.40 _a	2.92	6.02 _a	3.17	3.54 _b	3.29
Sexual variety	8.71 _a	2.92	8.16 _a	2.20	8.27 _a	2.32	5.45 _b	4.01

Note: Means with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

Table 26

CSA Status x Relationship Status x Ethnicity ANOVA Results for Age of First Consensual Sexual Intercourse (CSA Analysis)

Source	<i>df</i>	<i>F</i>	η
CSA status (C)	1	0.81	.04
Relationship status (R)	2	3.76	.15
Ethnicity (E)	3	1.32	.10
C x R	2	0.36	.04
C x E	3	0.53	.07
R x E	6	1.69	.17
C x R x E	4	2.12	.15
Error	346		

* $p < .05$

partner (see Table 27). CSA victims and nonvictims were compared on number of participants who had at least one one-night stand and who had engaged in sex with a stranger at least one time. Although a higher percentage of CSA victims, compared to nonvictims, reported engaging in at least one one-night stand and sex with a stranger at least one time, differences were not significant (see Table 28).

A 2(CSA Status) by 3(relationship status) by 4(ethnicity) MANOVA was

Table 27

Means and Standard Deviations for Age of First Consensual Sexual Intercourse by Relationship Status (CSA Analysis)

	n	<i>M</i>	<i>SD</i>
No romantic partner	60	17.05 _a	1.25
Dating	101	16.31 _b	1.59
Committed relationship	207	16.53 _{ab}	1.78

Note: Means with different subscripts differ significantly at $p < .05$ by the Tukey-Kramer procedure.

Table 28

Percentage of Participants Who Have Engaged Sex With Strangers and One-Night Stands by CSA Status

	No CSA (<i>n</i> = 409) %	CSA (<i>n</i> = 59) %	<i>df</i>	χ^2
Sex w/ strangers	15	22	1	2.10
One-night stand	9	17	1	3.83

conducted to determine whether there were differences between CSA victims and nonvictims on avoidant sexuality, dysfunctional sexuality, sexual ambivalence, and sexual motivations and whether differences varied by ethnicity or relationship status. As with the group analyses, sexual avoidance, sexual preoccupation, and dysfunctional sexual attitudes, were measured using the TSS scales (Avoidance and Fear of Sex, Sexual Preoccupation, and Sex-Based Relationships) and attitudes about casual sex was measured using the sexual attitudes questionnaire. Multivariate main effects were found for relationship status, $F(14,880) = 4.60, p < .001, \eta = .26$, and ethnicity, $F(21,1323) = 1.76, p < .05, \eta = .16$, but not for CSA status, $F(7,439) = 1.45, p > .05, \eta = .15$. No interaction effects were significant.

Despite the nonsignificant main effect for CSA status, I examined means and follow-up univariate ANOVAs for exploratory purposes. Follow-up univariate ANOVA's are displayed in Table 29. Means and standard deviations for sexual attitude variables by CSA status are displayed in Table 30. Only sex for enhancement was significant. CSA victims, compared to nonvictims, reported greater use of sex for enhancement. However, no other variable even approached significance. Interestingly, results for avoidant sexual attitudes and sex for coping were not even in the expected direction.

Follow-up univariate ANOVAs by relationship status were significant for sexual avoidance, dysfunctional sexuality, sexual ambivalence, and sex for enhancement (see Table 29). Effect sizes were small, range of $\eta = .16$ to $.22$. Means and standard deviations for sexual attitude variables by relationship status are

Table 29

Follow-up CSA Status x Relationship Status x Ethnicity ANOVA Results for Sexual Attitude Variables

Source	df	<i>F</i>						
		Sexual avoidance	Sexual preoccupation	Dysfunctional sexual attitudes	Attitudes about casual sex	Sexual ambivalence	Sex for enhancement	Sex for coping
CSA status (C)	1	<0.01	0.56	0.13	0.71	0.21	5.44*	0.09
Relationship status (R)	2	7.84***	3.02	11.50***	0.81	6.14**	6.07**	0.60
Ethnicity (E)	3	2.41	3.15*	0.58	3.58*	0.94	3.52*	0.88
C x R	2	1.01	2.31	0.58	0.99	0.40	0.91	0.55
C x E	3	1.10	0.75	1.56	0.74	1.17	1.93	0.10
R x E	6	0.97	0.97	1.38	1.53	0.68	1.01	1.15
C x R x E	5	1.08	0.49	1.33	0.84	0.51	0.92	0.45
Error	445							

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

Table 30

Means and Standard Deviations for Sexual Attitude Variables by CSA Status

	No CSA (<i>n</i> = 409)		CSA (<i>n</i> = 59)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Sexual avoidance	2.21	0.78	2.18	0.72
Sexual Preoccupation	2.09	0.66	2.23	0.63
Dysfunctional sexuality	1.43	0.43	1.44	0.36
Attitudes about casual sex	2.38	1.02	2.38	0.99
Sexual ambivalence	0.92	0.58	1.04	0.42
Sex for enhancement	2.67	1.33	3.14	0.14
Sex for coping	1.39	0.65	1.36	0.49

**p* < .05.

displayed in Table 31. Compared to participants who were dating or in a committed relationship, participants with no romantic partner reported more sexual avoidance and less use of sex for enhancement. Compared to participants in a committed relationship or with no romantic partner, participants who were dating reported more dysfunctional sexuality and sexual ambivalence. Thus, participants with no romantic partner reported greater sexual avoidance and were less likely to engage in sex for the purposes of enhancement than other participants. In addition, participants who were dating were more likely to base relationships on sex and to exhibit ambivalent attitudes toward sex compared to other participants.

Follow-up univariate ANOVAs by ethnicity were significant for sexual preoccupation, acceptance of casual sex, and sex for enhancement (see Table 29). Effect sizes were small, range of $\eta = .15$ to $.16$. Means and standard deviations for sexual attitude variables by ethnicity are displayed in Table 32. Participants in the other/unknown ethnicity category reported less sexual preoccupation than Caucasians and African Americans and less use of sex for enhancement than all other ethnicity categories. Caucasians reported more accepting attitudes about casual sex than Hispanic Americans and participants in the other/unknown ethnicity category. Thus, participants in the other/unknown ethnicity category reported less sexual preoccupation and less use of sex for enhancement than other ethnicity categories. Caucasians reported more accepting attitudes toward casual sex than other ethnicities.

A 2(CSA Status) by 3(relationship status) by 4(ethnicity) MANOVA was conducted to determine whether there were differences between CSA victims and

Table 31

Means and Standard Deviations for Sexual Attitude Variables by Relationship Status (CSA Analysis)

	No romantic partner (<i>n</i> = 121)		Dating (<i>n</i> = 122)		Committed relationship (<i>n</i> = 225)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Avoidant sexual attitudes ^a	2.59 _a	0.80	2.17 _b	0.77	2.02 _b	0.71
Sexual Preoccupation	2.04	0.67	2.12	0.57	2.15	0.69
Dysfunctional sexual attitudes ^b	1.43 _a	0.46	1.61 _b	0.43	1.33 _a	0.35
Attitudes about casual sex	2.45	1.06	2.66	1.10	2.20	0.89
Sexual ambivalence ^b	0.77 _a	0.67	1.11 _b	0.52	0.92 _a	0.50
Sex for enhancement ^b	1.87 _a	1.19	2.88 _b	1.32	3.10 _b	1.16
Sex for coping	1.27	0.55	1.53	0.69	1.38	0.63

^aMeans with different subscripts differ significantly at $p < .05$ by the Tukey-Kramer procedure. ^bMeans with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

Table 32

Means and Standard Deviations for Sexual Attitude Variables by Ethnicity (CSA Analysis)

	Caucasian (<i>n</i> = 273)		African American (<i>n</i> = 106)		Hispanic American (<i>n</i> = 44)		Other/Unknown (<i>n</i> = 45)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Avoidant sexual attitudes	2.16	0.76	2.13	0.77	2.34	0.80	2.59	0.86
Sexual Preoccupation ^a	2.14 _a	0.62	2.19 _a	0.72	2.09	0.70	1.81 _b	0.58
Dysfunctional sexual attitudes	1.45	0.42	1.37	0.37	1.40	0.35	1.50	0.52
Attitudes about casual sex ^b	2.53 _a	1.08	2.26	0.94	2.06 _b	0.78	2.08 _b	0.78
Sexual ambivalence	0.95	0.55	0.94	0.53	0.87	0.53	0.87	0.75
Sex for enhancement ^a	2.77 _a	1.27	2.95 _a	1.39	2.69 _a	1.29	2.00 _b	1.20
Sex for coping	1.40	0.61	1.42	0.68	1.31	0.60	1.32	0.70

^aMeans with different subscripts differ significantly at $p < .05$ by the Tukey-Kramer procedure. ^bMeans with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

nonvictims on adult romantic attachment style and whether differences varied by ethnicity or relationship status. Multivariate main effects were found for relationship status, $F(4, 890) = 16.55, p < .001, \eta = .26$, but not for CSA status, $F(2, 444) = 0.79, p > .05, \eta = .06$, or ethnicity, $F(6, 890) = 1.84, p > .05, \eta = .11$. No interaction effects were significant.

Despite the nonsignificant main effect for CSA status, I examined follow-up univariate ANOVAs for exploratory purposes (see Table 33). Means and standard deviations for attachment variables by CSA status are displayed in Table 34. Univariate ANOVAs were not significant.

Follow-up univariate ANOVAs by relationship status were significant for avoidant, $\eta = .36$, and anxious attachment, $\eta = .21$ (see Table 33). Means and standard deviations for attachment variables by group are displayed in Table 35. All groups differed on avoidant attachment, with participants with no romantic partner scoring highest, followed by participants who were dating, and then participants in committed relationships. Compared to participants in committed relationships, those with no romantic partner or were dating scored higher on anxious attachment.

A 2(CSA Status) by 3(relationship status) by 4(ethnicity) ANOVA was conducted to determine whether there were differences between CSA victims and nonvictims on body image and whether differences varied by ethnicity or relationship status. Main effects were found for ethnicity, $F(3, 445) = 10.86, p < .001, \eta = .26$, but not for CSA status, $F(1, 445) = 0.55, p > .05, \eta = .03$ or relationship status, $F(2, 445) = 1.62, p > .05, \eta = .08$. No interaction effects were significant. Although

Table 33

Follow-up CSA Status x Relationship Status x Ethnicity ANOVA Results for Adult Romantic Attachment Style

Source	<i>df</i>	Avoidant attachment	Anxious attachment
CSA status (C)	1	1.33	0.65
Relationship status (R)	2	33.12***	10.25***
Ethnicity (E)	3	1.11	2.16
C x R	2	0.64	0.59
C x E	3	1.82	0.60
R x E	6	1.34	1.10
C x R x E	5	0.20	2.06
Error	445		

*** $p < .001$.

Table 34

Means and Standard Deviations for Attachment Variables by CSA Status

	No CSA (<i>n</i> = 409)		CSA (<i>n</i> = 59)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Avoidant attachment	50.72	21.43	48.73	18.17
Anxious attachment	56.70	23.33	57.58	23.31

Table 35

Means and Standard Deviations for Attachment Variables by Relationship Status

	No Romantic Partner (<i>n</i> = 121)		Dating (<i>n</i> = 122)		Committed Relationship (<i>n</i> = 225)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Avoidant attachment	65.13 _a	19.71	57.89 _b	18.04	38.56 _c	15.81
Anxious attachment	65.61 _a	22.29	64.07 _a	20.90	48.14 _b	22.00

Note. Means with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

nonsignificant, CSA victims, compared to nonvictims, scored lower on Body Image, $M(SD) = 51.28(8.68)$ vs. $52.82(9.34)$, respectively. Post hoc analysis revealed that African Americans scored significantly higher on body image than all other ethnic groups (see Table 36).

Table 36

Means and Standard Deviations for Body Image Scores by Ethnicity

	n	M	SD
Caucasian	273	50.97 _a	8.53
African American	106	59.64 _b	8.84
Hispanic American	44	49.56 _a	7.73
Other/Unknown	45	49.16 _a	7.76

Note. Means with different subscripts differ significantly at $p < .05$ by the Games-Howell procedure.

In summary, Hypothesis 4 was partially supported. CSA victims, compared to nonvictims, reported having had more sex partners and greater sexual variety and a higher percentage of CSA victims had previously engaged in vaginal and oral sex. However, there were no significant differences on frequency of sexual behaviors, total sexual experiences, sexual attitude variables, or indiscriminant sexual contact.

Hypothesis 5

The purpose of Hypothesis 5 was to examine whether CSA characteristics were associated with sexual avoidance, dysfunctional sexuality, and sexual ambivalence. Three regression analyses were conducted to predict sexual avoidance, dysfunctional sexuality, and sexual ambivalence using the following CSA characteristics: (1) duration of CSA, (2) whether or not penetration occurred, (3) whether or not the perpetrator was a father-figure, and (4) whether or not force or threats were used. The means, standard deviations, and intercorrelations for dependent and predictor variables are displayed in Table 37.

The simultaneous regression predicting sexual avoidance was not significant, $R^2_{adj} = < .01$, $F(4, 49) = 1.03$, $p > .05$. As shown in Table 38, none of the individual predictors were significant.

The simultaneous regression predicting dysfunctional sexuality was marginally significant, $R^2_{adj} = .10$, $F(4, 49) = 2.51$, $p = .05$. As shown in Table 39, duration was a significant predictor and perpetration by a father-figure was marginally significant. The results suggest that longer CSA duration was associated with greater dysfunctional sexuality, whereas CSA perpetration by a father-figure was associated with lower dysfunctional sexuality.

Simultaneous regressions results predicting sexual ambivalence were not significant, $R^2_{adj} = < .01$, $F(4, 49) = 1.04$, $p > .05$. As shown in Table 40, none of the individual predictors was significant.

Table 37

Means and Standard Deviations for Sexual Avoidance, Dysfunctional Sexuality, and Sexual Ambivalence and Intercorrelations with Predictor Variables

Variable	M	SD	1	2	3	4
Sexual avoidance	2.19	0.75	-.06	-.11	-.24*	-.11
Dysfunctional sexuality	1.46	0.36	.16	-.14	-.18	-.14
Sexual ambivalence	1.06	0.41	-.04	-.07	-.01	.21
CSA Characteristics						
1. Duration	202.00	299.00	--	.30*	.33**	.26*
2. Penetration	.17	.38		--	.13	.12
3. Father-figure	.05	.22			--	.03
4. Force	.62	.49				--

Note: N =54. * $p < .05$. ** $p < .01$.

Table 38

Simultaneous Multiple Regression Analysis Summary for CSA Characteristics Predicting Sexual Avoidance

Variable	<i>B</i>	<i>SEB</i>	β
Duration	<.01	<.01	0.08
Penetration	-0.18	.30	-0.09
Father-figure	-0.82	.47	-0.25
Force	-0.17	.22	-0.11

Note: N =54.

Table 39

Simultaneous Multiple Regression Analysis Summary for CSA Characteristics
Predicting Dysfunctional Sexuality

Variable	<i>B</i>	<i>SEB</i>	β
Duration	<.01	<.01	0.37*
Penetration	-0.20	.14	-0.20
Father-figure	-0.43	.21	-0.28 [†]
Force	-0.15	.22	-0.21

Note: N =54. [†]*p* = .10. **p* < .05.

Table 40

Simultaneous Multiple Regression Analysis Summary for CSA Characteristics
Predicting Sexual Ambivalence

Variable	<i>B</i>	<i>SEB</i>	β
Duration	0.00	.00	0.31
Penetration	-0.16	.16	-0.14
Father-figure	-0.15	.26	-0.09
Force	-0.08	.12	-0.10

Note: N =54.

In summary, Hypothesis 5 was not supported. None of the CSA characteristics measured predicted avoidant or ambivalent sexuality in CSA victims. Duration and perpetration by a father-figure were marginally significant predictors of dysfunctional sexuality.

Hypothesis 6

The purpose of Hypothesis 6 was to investigate the processes through which CSA, sexual motivations, romantic attachment style, and body image related to sexual avoidance, dysfunctional sexuality, and sexual ambivalence. The proposed model (see Figure 1) suggests that CSA leads to (1) dysfunctional sexuality via use of sex for enhancement and use of sex for coping; (2) sexual ambivalence via use of sex for coping, anxious attachment style, and avoidant attachment style; and (3) sexual avoidance via avoidant attachment style and poor body image. For these analyses, avoidant sexuality was measured using the Avoidance and Fear of Sex subscale of the TSS, dysfunctional sexuality was measured using the Sex-Based Relationships subscale of the TSS, and sexual ambivalence was calculated using the Avoidance and Fear of Sex and Sex-Based Relationships scores. All path analyses were conducted using the maximum likelihood algorithm in AMOS 6.0 (Arbuckle, 2005), with regression weights for error terms standardized at 1.0.

Table 41 displays descriptive statistics and intercorrelations for variables used in the path model. As a group, participants reported using sex for personal

Table 41

Intercorrelations and Descriptive Statistics for Variables Used in the Path Model

Observed Variable	1	2	3	4	5	6	7	8	9
1. CSA Status	--	.12**	-.02	.01	-.04	-.08	.01	.07	-.01
2. Sex for enhancement		--	.47**	-.06	-.25**	.15**	.16**	.36**	-.47**
3. Sex to cope			--	.20**	.02	.00	.38**	.33**	-.15**
4. Anxious attachment				--	.39**	-.33**	.41**	.17**	.20**
5. Avoidant attachment					--	-.22**	.26**	.05	.27**
6. Body image						--	-.04	.07	-.18**
7. Dysfunctional sexuality							--	.69**	.08
8. Sexual ambivalence								--	-.44**
9. Sexual avoidance									--
M	.13	2.73	1.39	56.71	50.25	52.52	1.43	0.93	2.21
SD	.33	1.31	0.63	23.40	21.21	9.56	0.42	0.56	0.79

Note: N = 468. ** $p < .01$.

enhancement more frequently than for coping, $t(467) = 24.95, p < .001$. They also reported higher levels of anxious attachment than avoidant attachment, $t(467) = 5.67, p < .001$, and greater sexual avoidance than dysfunctional sexuality, $t(467) = 19.60, p < .001$. CSA status was significantly and positively correlated with sex for enhancement, but not with any other study variables. Dysfunctional sexuality was significantly and positively correlated with all sexual motivation and adult romantic attachment style variables. Sexual avoidance was significantly and positively correlated with both adult romantic attachment style variables. Sexual avoidance was also significantly and negatively correlated with both sexual motivation variables and body image, and positively correlated with anxious and avoidant attachment. Sexual ambivalence was significantly and positively correlated with both sexual motivation variables and with anxious attachment. The sexual motivation variables were strongly correlated, as were the adult romantic attachment style variables and the sexual distortion variables.

Fit statistics are presented in Table 42. Because the χ^2 test is very sensitive to sample size, I relied primarily on other fit indices to assess the adequacy of the model. The three indices I report range from 0 to 1, with values greater than .90 being interpreted as reflecting an adequate fit and a value of 1 reflecting optimal fit (Jöreskog & Sörbom, 1993). The full model (Model 1; see Figure 1) provided a poor fit to the data (see Table 42). After examining residuals and modification indices, the model was modified to allow the errors associated with variables from the same measure to covary with each other. That is, errors associated with the sexual

motivations variables were allowed to covary with each other, errors associated with the attachment variables were allowed to covary with each other, and errors associated with sexual distortion variables were allowed to covary with each other. Model 2 (see Figure 4) also provided a poor fit for the data, although it was significantly better than the original model.

Table 42

Comparison of the Fit of Alternative Path Models of the Relations Among CSA, Sexual Motivations, Adult Romantic Attachment Style, Body Image, and Sexual Distortions

Model	χ^2	1-RMSEA	GFI	AGFI	χ^2_{diff}
Model 1: Original	1056.16***	0.70	0.72	0.48	
Model 2: Adjusted A	334.10***	0.82	0.88	0.72	
Model 2 vs. Model 1					722.06***
Model 3: Adjusted B	83.57***	0.91	0.96	0.89	
Model 3 vs. Model 2					250.53***
Model 4: Adjusted C	51.74***	0.93	0.98	0.93	
					--
Model 5: Final Model	13.66	0.98	0.99	0.98	
Model 5 vs. Model 3					69.91***
Model 5 vs. Model 4					38.08***

*** $p < .001$.

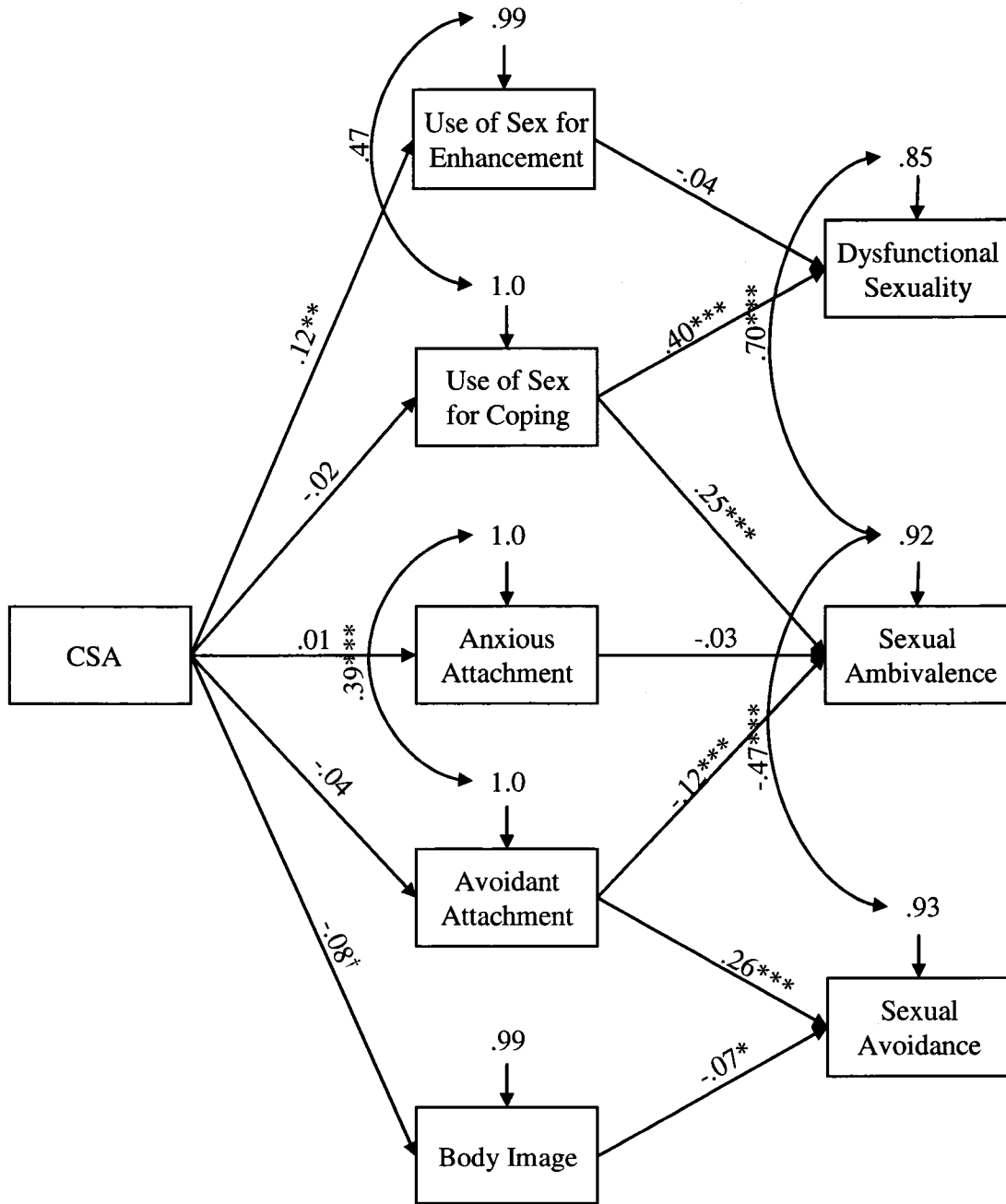


Figure 4. Model 2: CSA, sexual motives, attachment style, and body image as predictors of sexual distortions allowing for covariation. † $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Thus, Hypothesis 6 was not supported by the data. In order to identify other possible associations for further study, I adjusted the model based on residual and modification indices. These analyses were conducted for exploratory purposes only, and findings require replication to be meaningful.

First, I standardized regression weights to 0 for pathways that were not significant at the $p < .10$ level (displayed in Figure 4) and added additional pathways to create Model 3. Specifically, error variances for anxious attachment, avoidant attachment, and sex for enhancement were allowed to covary with the error variance for body image; the error variance for anxious attachment was allowed to covary with the error variance for sex for coping; and the error variance for avoidant attachment was allowed to covary with the error variance for sex for enhancement. These variables were allowed to covary because they were significantly correlated with each other. In addition, pathways were added from CSA to sexual ambivalence, sex for enhancement and sex for coping to sexual avoidance, and avoidant attachment and anxious attachment to dysfunctional sexuality. Model 3 provided a significantly better fit to the data than Model 2, $\chi^2_{diff} = 250.53$, $p < .001$ (see Table 42). However, pathways from avoidant attachment to sexual ambivalence and from sex for coping to sexual avoidance did not approach significance, $\beta < .01$ and $\beta = -.04$, respectively, $ps > .10$. These pathways were standardized to 0, and pathways were added from anxious attachment to sexual avoidance and to sexual ambivalence and from sex for enhancement to sexual ambivalence and to dysfunctional sexuality, based on modification indices, to create Model 4. Model 4 provided a good fit to the data (see

Table 42). Because Models 3 and 4 contained the same degrees of freedom, they could not be compared to determine whether the improvement in fit was significant.

Standardized regression weights indicated that CSA did not predict body image, $\beta = -.08, p > .05$, and body image did not significantly predict sexual avoidance, $\beta = -.06, p > .05$. In the interest of parsimony, body image was deleted from the model. In addition, the pathway from sex for enhancement to dysfunctional sexuality was standardized to 0 again, as it was not significant, $\beta = .05, p > .05$, and pathways were added from anxious attachment to sexual ambivalence and to sexual avoidance, based on modification indices, to create Model 5. Model 5 provided a significantly better fit to the data than Model 3, $\chi^2_{diff} = 69.91, p < .001$, or Model 4, $\chi^2_{diff} = 38.08, p < .001$ (see Table 42).

Path coefficients for Model 5 are displayed in Figure 5. Model 5 indicates that CSA status was significantly related indirectly to sexual avoidance, $\beta = -.05, p < .01$, and to sexual ambivalence, $\beta = .03, p < .01$. Specifically, positive CSA status increased use of sex for enhancement, which led to increased sexual ambivalence and decreased sexual avoidance. CSA status also was directly related to sexual ambivalence, such that positive CSA status increased sexual ambivalence. CSA was not related directly or indirectly to dysfunctional sexuality.

In addition to CSA status and sex for enhancement, increased sexual ambivalence also was predicted by increased use of sex for coping and increased avoidant attachment, accounting for 12% of the variance. Increased sexual avoidance was predicted by increased anxious attachment and increased avoidant attachment, in

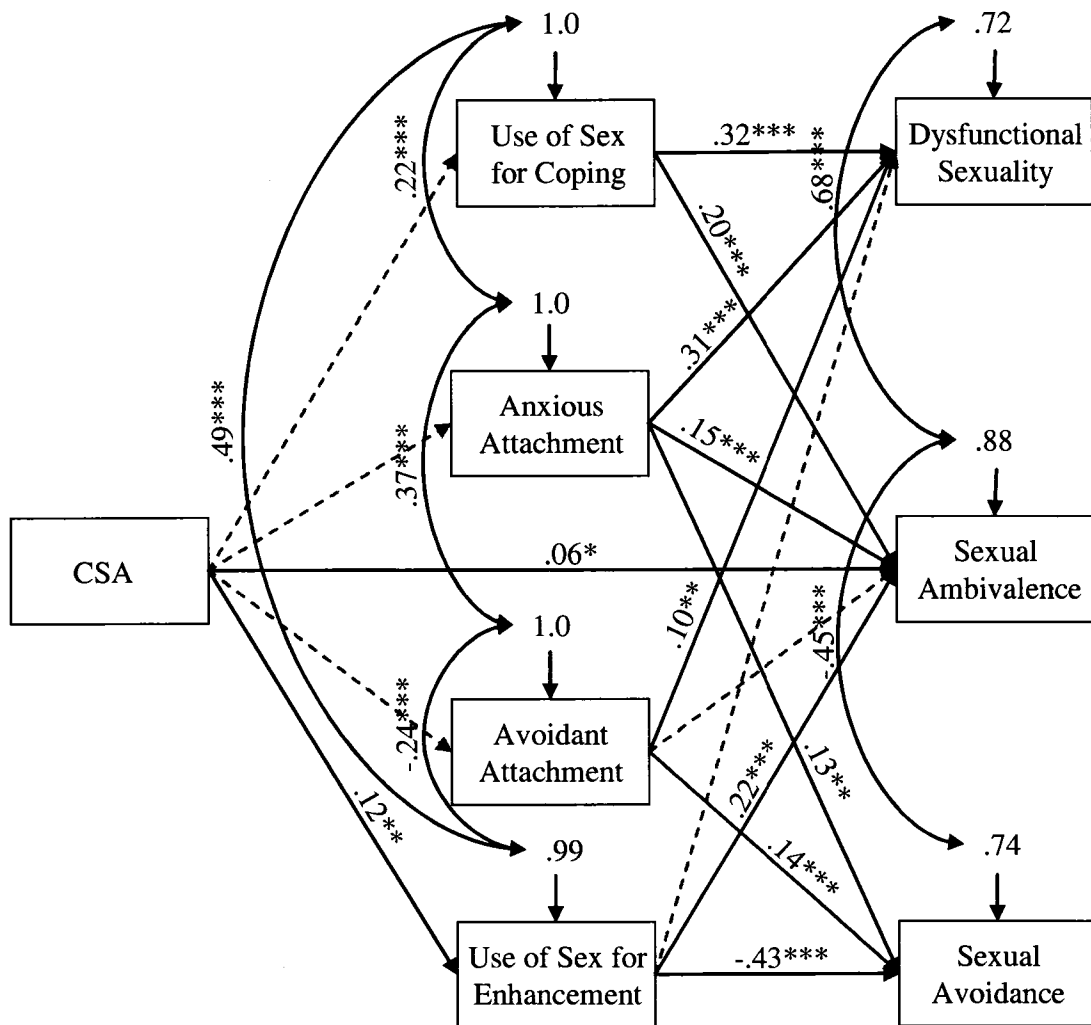


Figure 5. Final Model: CSA, sexual motives, and attachment style as predictors of sexual distortions. Dashed pathways represent originally hypothesized pathways that were not significant and were set at 0 for the final model. * $p < .05$. ** $p < .01$. *** $p < .001$.

addition to CSA status and sex for enhancement, accounting for 26% of the variance. Finally, increased dysfunctional sexuality was predicted by increased use of sex for coping, anxious attachment, and avoidant attachment, accounting for 28% of the variance.

In summary, exploratory analyses indicated that CSA was related to sexual avoidance and sexual ambivalence, but not to dysfunctional sexuality. Use of sex for enhancement, but no other hypothesized variables, mediated the relationships between CSA and sexual avoidance or CSA and sexual ambivalence. However, the magnitude of these effects were small, β s range from $-.05$ to $.06$. The path coefficients in Figure 5 indicate that, compared to CSA, adult romantic attachment styles had a stronger effect on sexual avoidance, β s range from $.13$ to $.14$, and that sex for coping and anxious attachment had stronger effects on sexual ambivalence, β s range from $.15$ to $.20$.

CHAPTER 6

DISCUSSION

Phase 1

The goal of Phase 1 of the present study was to define and provide evidence in support of three types of sexual distortions—dysfunctional sexuality, sexual avoidance, and sexual ambivalence. Groups of participants with hypothesized sexual distortions were created based on scores on measures of erotophilia and erotophobia, and characteristics associated with each group were identified. The comparison group consisted of participants who scored low on both erotophilia and erotophobia.

Dysfunctional Sexuality

Participants with high scores on erotophilia and low scores on erotophobia were identified as the dysfunctional group. Hypothesis 1 predicted that the dysfunctional group would report higher levels of sexual behavior, sexual preoccupation, and, as implied by the name, higher levels of dysfunctional sexual attitudes and behaviors compared with the avoidant and comparison groups. This hypothesis was generally supported. Compared to the avoidant and comparison groups, the dysfunctional group reported greater variety of sexual behaviors, greater frequency of oral sex, and more sexual intercourse experiences. A higher percentage

of participants in the dysfunctional group, compared to the avoidant and comparison groups, reported engaging in a one-night stand or sex with a stranger at least once. In addition, the dysfunctional group reported more accepting attitudes toward casual sex, and greater sexual preoccupation than the avoidant and comparison groups and greater dysfunctional sexual attitudes than the comparison group. The dysfunctional group was not significantly different from the avoidant and comparison groups on age of first consensual sexual intercourse or frequency of vaginal sex.

The findings regarding number of sex partners varied depending on relationship status. Among participants who had no romantic partner or who were dating, the dysfunctional group reported more total sex partners and sex partners during the past year than the avoidant and comparison groups. Among participants who were in a committed relationship, the dysfunctional group reported more total sex partners and sex partners during the past year than the avoidant group, but was not significantly different from the comparison group. Thus, being in a committed relationship decreased the likelihood that women with other characteristics of dysfunctional sexuality would have more sex partners than women without a tendency toward sexual distortion. This suggests that number of sex partners may not be a reliable marker for dysfunctional sexuality for women in committed relationships.

These results provide evidence in support of the construct of dysfunctional sexuality. As hypothesized, dysfunctional sexuality was characterized by (1) higher levels of sexual behavior, including greater sexual variety, high frequency for some sexual behaviors, and more sexual intercourse experiences; (2) greater likelihood to

engage in unrestricted sexual behavior, such as indiscriminant sexual contact and, for women not in committed relationships, sexual contacts with multiple partners; (3) greater sexual preoccupation; and (4) potentially problematic attitudes related to sex, such as confusion of sex with love, use of sex for nonsexual needs, basing self-worth on sexuality, and acceptance of casual sex.

Avoidant Sexuality

Participants with high scores on erotophilia and low scores on erotophobia were identified as the avoidant group. Hypothesis 2 predicted that the avoidant group would report lower levels of sexual behavior compared to all other groups and greater sexually avoidant attitudes compared to the dysfunctional and comparison groups. This hypothesis was generally supported. Compared to all other groups, the avoidant group reported lower variety of sexual behaviors, lower frequency of oral and vaginal sex, and fewer total intercourse experiences. A lower percentage of participants in the avoidant group, compared to all other groups, had ever had sexual intercourse. Finally, the avoidant group reported greater sexually avoidant attitudes compared to all other groups. The avoidant group was not significantly different from the dysfunctional and comparison groups on age of first consensual sexual intercourse.

The findings regarding number of sex partners varied depending on relationship status. The avoidant group reported fewer total sex partners and fewer sex partners during the past year compared to the dysfunctional group regardless of relationship status. However, only one other difference was found. Specifically, the

avoidant group reported fewer total sex partners compared to the comparison group only for participants who were dating. The avoidant group was not significantly different from the comparison group on number of sex partners for participants who had no romantic partner or who were in committed relationships. Consequently, number of sex partners does not appear to be a good marker for sexual avoidance.

Although not hypothesized as part of the construct of sexual avoidance, the avoidant group was noted to have less sexual preoccupation, less accepting attitudes toward casual sex, and lower levels of indiscriminate sexual behavior compared to the dysfunctional and ambivalent groups. These findings are not inconsistent with the construct. Women with avoidant attitudes toward sex may avoid thinking about sex, resulting in low levels of sexual preoccupation. In addition, women who are avoidant of sex in general are not likely to be seeking out casual sex or indiscriminate sexual contacts.

Interestingly, compared to the comparison group, the avoidant group reported greater dysfunctional sexual attitudes, suggesting that sexually avoidant women may hold problematic attitudes related to sex, such as confusion of sex with love, use of sex for nonsexual needs, and basing self-worth on sexuality. These attitudes are considered problematic because they have been linked with high-risk sexual behavior (Matorin, 1998; Matorin & Lynn, 1998). This unexpected finding warrants further investigation.

These results provide validation for the construct of sexual avoidance. As hypothesized, sexual avoidance was characterized by (1) lower levels of sexual

behavior, including lower sexual variety, lower frequency of sexual behaviors, and fewer total sexual experiences; and (2) avoidant attitudes toward sex.

Sexual Ambivalence

Participants with high scores on both erotophilia and erotophobia were identified as the ambivalent group. Hypothesis 3 predicted that the ambivalent group would report levels of sexual behavior, indiscriminant sexual contact, and problematic attitudes toward sex comparable to the dysfunctional group, but also sexually avoidant attitudes comparable to the avoidant group. Support for this hypothesis was mixed.

With regard to sexual variety, frequency of sexual behavior, and total sexual experiences, the ambivalent group was significantly higher than the avoidant group, significantly lower than the dysfunctional group, and not significantly different from the comparison group. Thus, with regard to sexual behavior, the ambivalent group was not distinguishable from the comparison group. However, the ambivalent group did report greater sexual preoccupation and greater dysfunctional sexual attitudes than the comparison and avoidant groups. In addition, a higher percentage of the ambivalent group, compared to the avoidant and comparison groups, reported engaging in a one-night stand or sex with a stranger at least once. Finally, the ambivalent group reported more avoidant sexual attitudes compared to the dysfunctional and comparison groups. The ambivalent group was not different from other groups on age of first consensual sexual intercourse, number of sex partners, or attitudes toward casual sex.

The results indicate that the construct of sexual ambivalence is somewhat different than hypothesized. In particular, sexual behaviors and number of sex partners were not particularly notable aspects of sexual ambivalence. The combination of erotophilic and erotophobic characteristics may have cancelled out each other, such that levels of sexual behavior were no different than for women with no tendency toward sexual distortion. Rather, sexual ambivalence appeared to be characterized by (1) greater likelihood to engage in indiscriminant sexual contact; (2) potentially problematic attitudes related to sex, such as confusion of sex with love, use of sex for nonsexual needs, and basing self-worth on sexuality; and (3) avoidant attitudes toward sex.

Phase 2

The purpose of Phase 2 of the present study was to identify factors associated with sexual distortions. CSA was hypothesized to be related to sexual distortions through multiple mediating factors, including motivations for having sex, adult romantic attachment style, and body image. First, I examined relationships between CSA and sexual behaviors, sexual attitudes, sexual distortions, and hypothesized mediating factors. Next, I examined the relationship between CSA characteristics and sexual distortions. Finally, I examined a path model predicting sexual distortions.

CSA Victims Versus Nonvictims

Hypothesis 4 was designed as a precursor to the testing of the path model. It

predicted differences between CSA victims and nonvictims on sexual distortions—dysfunctional sexuality, sexual avoidance, and sexual ambivalence—as well as the attitudes and behaviors hypothesized to characterize sexual distortions. It also predicted differences between CSA victims and nonvictims on the factors predicted to mediate the relationship between CSA and sexual distortions. As such, CSA victims, compared to nonvictims, were hypothesized to exhibit higher levels of sexual distortions, higher levels of sexual behavior, more indiscriminant sexual behavior, greater sexual preoccupation, greater avoidant and anxious attachment, increased use of sex to cope and for enhancement, and greater dissatisfaction with body image. However, few significant differences were found. CSA victims and nonvictims did not differ significantly on any sexual distortion variable. There were a few significant differences on sexual behavior variables. Specifically, CSA victims, compared to nonvictims, reported more sex partners during the past year, more sex partners during their lifetime, and greater sexual variety. In addition, CSA victims, compared to nonvictims, did report greater use of sex for enhancement. No differences were found for other sexual attitude or mediating variables.

As previously discussed, numerous studies have found that CSA victims report more sex partners than nonvictims (Buzi et al., 2003; Cunningham et al., 1994; Fergusson et al., 1997; Hillis et al., 2001; Johnsen & Harlow, 1996; Krahe et al., 1999; Luster & Small, 1997; Schloretdt & Heiman, 2003; Wilsnack et al., 2004; Wyatt, 1988) and a greater variety of sexual behavior (Johnsen & Harlow). Failure to find differences between CSA victims and nonvictims on dysfunctional sexuality,

indiscriminant sexual behavior, and age of first intercourse are inconsistent with previous studies (Briere, 1995; Briere, et. al., 1995; Buzi et al.; Fergusson et al.; Hillis et al.; Johnsen & Harlow; Matorin, 1998; Matorin & Lynn, 1998; Meston et al., 1999; Merrill, 2001; Noll et al., 2003; Runtz & Roche, 1999; Shapiro, 1999; Stock, et al., 1997; Walser & Kern, 1996; Wilsnack et al.; Wyatt; Zierler et al., 1991). One reason for the discrepant findings may be related to measurement. The current measure of dysfunctional sexuality, the Sex-Based Relationships scale created from the Traumatic Sexualization Survey (Matorin & Lynn), has not been used previously. Perhaps the measure most frequently used, the Dysfunctional Sexual Behavior scale of the Trauma Symptom Inventory (Briere, 1995), is a better measure of the construct. Descriptive statistics also indicated that Sex-Based Relationships had limited variance, which may have decreased the likelihood of finding meaningful differences. In addition, indiscriminant sexual behavior has most frequently been determined using multiple items, sometimes including number of sex partners in the calculation (Meston et al.; Walser & Kern). In the current study, the two items, frequency of one-night-stands and frequency of sex with a stranger, were assessed individually. Each item had such a low range that they were converted to dichotomous items. A multiple-item scale may provide a different result.

Previous findings regarding the relationship between CSA and sexual avoidance have been mixed. Using the present measure, greater sexual avoidance has been found in CSA victims, compared to nonvictims, in a clinical sample (Matorin, 1998) but not an undergraduate sample (Matorin & Lynn, 1998). Similar patterns

have been found using other measures of sexual avoidance (Bartoi & Kinder, 1998; Wenninger & Heiman, 1998). Perhaps sexual avoidance is less common in an undergraduate population than in clinical populations, or the relationship between CSA and sexual avoidance may be more prominent in clinical populations. A third unstudied variable may also account for the difference. Further research is needed to identify factors that may account for the discrepancy in findings.

Although associations between CSA and sexual ambivalence, use of sex for coping, adult romantic attachment style, and body image have been found in previous studies (Andrews, 1997; Guimond, 2001; Hunter, 1991; Jackson et al., 1990; Lewis et al. 2003; Noll et al. 2003; Shapiro, 1999; Swanson & Mallinckrodt, 2001; Weiner & Thompson, 1997), they have not been investigated as extensively as sexual attitudes and behaviors. Further research is needed to clarify these relationships.

CSA Characteristics and Sexual Distortions

Hypothesis 5 predicted that CSA characteristics (duration, penetration, father-figure as a perpetrator, and force) would be associated with variables hypothesized to represent sexual distortion. As with Hypothesis 4, few components of Hypothesis 5 were significant. Although zero-order correlations suggested that having a father-figure as a perpetrator was associated with lower sexual avoidance, multiple regression analyses indicated that none of the CSA characteristics examined significantly predicted sexual avoidance. Similarly, none of the CSA characteristics examined significantly predicted sexual ambivalence. However, CSA duration

significantly predicted dysfunctional sexuality. That is, the longer the duration of CSA, the greater the dysfunctional sexuality. In addition, having a father-figure as a perpetrator was marginally associated with less dysfunctional sexuality. This finding is unexpected, as longer CSA duration was associated with having a father-figure as a perpetrator in zero-order correlations. This suggests that one of the variables in the model acted as a suppressor variable.

Previous findings with regard to CSA characteristics and sexual behavior have been mixed. The current study adds support to a link between duration of CSA and dysfunctional sexuality. As hypothesized by Guimond (2001), prolonged CSA may socialize victims to use sexuality to meet nonsexual needs.

Mediators Between CSA and Sexual Distortions

Hypothesis 6 predicted that CSA would influence sexual distortions via sexual motivations, adult romantic attachment style, and body image. CSA was expected to relate to (1) dysfunctional sexuality via use of sex for enhancement and use of sex for coping; (2) sexual ambivalence via use of sex for coping, anxious attachment, and avoidant attachment; and (3) sexual avoidance via avoidant attachment and body image. Hypothesis 6 was not supported. None of the hypothesized indirect pathways from CSA to dysfunctional sexuality, sexual avoidance, or sexual ambivalence were significant. Use of sex for coping, adult romantic attachment style, and body image did not mediate the relationship between CSA and sexual distortions. Use of sex for enhancement did act as a mediator between CSA and two sexual distortions, but not as

hypothesized.

In the final model, having experienced CSA was related to greater sexual ambivalence directly and indirectly via increased use of sex for enhancement. In addition, having experienced CSA was indirectly related to less sexual avoidance via greater use of sex for enhancement. Thus, CSA increased ambivalent feelings about sex and led to using sex for personal pleasure, which also led to greater ambivalent feelings about sex, but less sexual avoidance. However, the amount of variance accounted for was small, suggesting that other unmeasured variables may have greater predictive power than the variable examined in the present study.

As previously discussed, several studies have found significant relationships between CSA and dysfunctional sexuality (Briere, 1995; Briere et al., 1995; Merrill, 2001; Runtz & Roche, 1999). Findings regarding the relationship between CSA and sexual avoidance have been less consistent (Bartoi & Kinder, 1998; Charmoli & Athelstan, 1988; Johnson & Harlow, 1996; Noll et al., 2003; Matorin, 1998; Matorin & Lynn, 1998; Schloredt & Heiman, 2003; Wenninger & Heiman, 1998). In the present study, sexual ambivalence had a stronger relationship with CSA than either dysfunctional sexuality or sexual avoidance. That is, the combination of dysfunctional sexual behavior and sexually avoidant attitudes appeared to be most prominent among CSA victims in the present sample.

Guimond (2001) suggested that CSA victims may become socialized to use sex to meet nonsexual needs. The present study suggests that having experienced CSA increased the likelihood of having sex for personal pleasure. Logically, having sex for

personal pleasure should be negatively related to sexual avoidance—enjoying sex should lead to increased rather than decreased sexual behavior. However, among CSA victims enjoyment of sex may trigger conflicting feelings if it provokes memories of the sexual abuse. Thus, some CSA victims may experience discomfort with sexual feelings at the same time that they are drawn toward engaging in sexual behavior.

Although not significant as mediators between CSA and sexual distortions, anxious attachment, avoidant attachment, and use of sex for coping were directly related to sexual distortion variables. Several hypothesized pathways were significant: greater use of sex for coping and increased anxious attachment predicted greater sexual ambivalence, increased avoidant attachment predicted greater sexual avoidance, and greater use of sex for coping predicted greater dysfunctional sexuality.

Unexpectedly, increased anxious attachment predicted greater sexual avoidance and greater dysfunctional sexuality, and increased avoidant attachment predicted greater dysfunctional sexuality. The relationship between anxious attachment and dysfunctional sexuality may reflect a tendency for anxiously attached individuals to use sex to meet needs for intimacy and love. The relationship between avoidant attachment and dysfunctional sexuality may reflect a tendency for avoidantly attached individuals to use indiscriminant sexual behavior to avoid intimacy. The relationship between anxious attachment and sexual avoidance is less easy to explain because anxious attachment involves high proximity-seeking behavior, not avoidance. Although anxious attachment has been associated with erotophobia and negative sexual attitudes in some studies (Bogaert & Sadava, 2002; Jellis, 2000), there has been

no consistent relationship between anxious attachment and decreased sexual behaviors. This finding warrants further investigation.

It is unclear why CSA was not related directly or indirectly to dysfunctional sexuality. As previously discussed, the measure may not adequately assess the construct, or it may be that the lack of variance in responses to the measures made differences difficult to detect. Alternatively, the inclusion of the sexual ambivalence variable in the model may have altered the observed relationship between CSA and dysfunctional sexuality; however, that would not explain the failure to find differences between CSA victims and nonvictims.

The lack of relationship between CSA and adult romantic attachment style is inconsistent with previous research (Gold et al., 1999; Lewis et al., 2003; Roche et al., 1999). Like the current study, previous studies comparing CSA victims to nonvictims have used undergraduate samples. However, one study (Swanson & Mallinckrodt, 2001) that found a significant relationship between CSA and avoidant attachment excluded victims of extrafamilial CSA, suggesting that only a subset of CSA victims may evidence greater insecure attachment.

Little previous research regarding the relationship between CSA and sexual motivations exists. One previous study found a relationship between CSA and use of sex for coping among adolescents and young adults who were sexually active (Shapiro, 1999). In the present study, participants who were not sexually active were asked to respond as if they were sexually active. They were included in the model because excluding participants who were not sexually active may have decreased the

likelihood of finding effects related to sexual avoidance. Results may have been different if only sexually active participants had been included in the analyses.

Unlike the present study, previous research has found that CSA victims, compared to nonvictims, report greater dissatisfaction with their bodies (Andrews, 1997; Hunter, 1991; Jackson, Calhoun, Amick, Maddever, & Habif, 1990; Weiner & Thompson, 1997). The present study used a measure of body image that has not been used in previous studies. This measure may capture a different construct than the measure of body dissatisfaction used previously.

Limitations

The present study has several limitations, including the data collection method, sample, and measures. All of the data were self-reported and retrospective. Although the participants were assured of complete confidentiality and identified by number rather than name, social desirability factors may have affected their responses. In addition, recall may have been inaccurate or influenced by present perceptions and experiences.

The sample was limited to undergraduate women, most of whom were age 18 to 20 years. Sexual behavior in college students may differ from that of similarly-aged women who do not attend college, so the results cannot be generalized to other populations. The young age of the participants also is relevant to the amount of sexual activity participants are likely to have experienced. Depending upon when they became sexually active, participants may have had only a fraction of the sexual

experiences they are likely to have during their lives. As such, their patterns of sexual behavior may change with age. For example, women who reported abstaining from sexual behavior during the present study may engage in high-risk sexual behavior once they become sexually active, and women who reported dysfunctional sexual activity may exhibit less indiscriminate sexual behavior and few partners once established in a committed relationship. In addition, the nature of sexual effects of sexual abuse may differ based on age or stage of life. Studies that have found support for sexual avoidance and negative associations with sex (Becker et al., 1984; Becker et al., 1982; Gorcey et al., 1986; Matorin, 1998; Meston et al., 2006; Schloretdt & Heiman, 2003; Stein et al., 1988; Wenninger & Heiman, 1998) have generally used samples with wider age ranges than the present study. Women who are married or older may be more likely to experience sexual functioning problems, or effects of the CSA may resurface at significant life events such as marriage, birth of a child, death of an abuser, or a child turning the same age as when the abuse occurred. Finally, the results cannot be generalized to men.

Some of the measures used in the present study also had some limitations. Some of the measures and subscales had little or no previous psychometric data (e.g., the sexual attitudes questionnaire, ECR-R, Sex-Based Relationships factor of the TSS) and lacked validation. The measure of body image had poor internal consistency, suggesting that it was not a cohesive measure of the construct. As previously described, the measure of CSA did not perform as expected. The directions may have been confusing, or participants may have declined to report CSA experiences.

Participants who were excluded based on inconsistent or unclear responses may differ from those whose responses clearly indicated the presence or absence of CSA. For example, CSA victims who were sexually active during adolescence may have been more likely to provide information on mutual adolescent sexual activity than on CSA experiences. However, the measures used in the present study were similar to those used previously used with the same population. It also is possible that the sample included fewer CSA victims than previous samples from the same university and the results of the study were not influenced by measurement of CSA.

Although path modeling suggests an order of effects that implies causation, it is premature to conclude that CSA and other variables measured causally impact adult sexuality. The present data are correlational in nature, and as such do not afford causal conclusions. We assumed that sexual motivations and adult romantic attachment styles preceded sexual distortions because we expected that these factors are determinants of sexual behavior. However, sexual behavior may reciprocally influence sexual motivations and adult romantic attachment style. Thus, the associations between variables are likely to be more complex and dynamic than the present model implies.

Directions for Future Research

Future studies should further examine the construct of sexual ambivalence and its relationship to CSA, as it had the strongest relationship with CSA of all the sexual distortions. Further research into measurement of sexual ambivalence, validation of the construct, and identification of predictors is warranted. In addition, research into

factors that predict sexual distortions among a more diverse population, including men and a wider age range, is needed. It would be interesting to examine whether predictors of sexual distortions differ depending on CSA status by developing a model predicting sexual distortions and looking at whether the model applies for both CSA victims and nonvictims and across gender. Finally, longitudinal research tracking the development of adult sexuality in men and women sexually abused as children over time would afford less ambiguous conclusions about the causal relationships between CSA and adult sexual behavior.

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APPENDIX A
DEMOGRAPHICS QUESTIONNAIRE

1. What is your relationship status?
 - a. Single, no romantic partner
 - b. Single, dating
 - c. single, committed relationship
 - d. cohabitating
 - e. Married
 - f. Separated
 - g. Divorced
 - h. Widowed
 - i. Other
2. What is your current age?
 - a. 18-20
 - b. 21-24
 - c. 25-29
 - d. 30-34
 - e. 35-39
 - f. 40-50
 - g. 50+
3. What is your ethnic background?
 - a. Caucasian
 - b. African American
 - c. Hispanic American
 - d. Asian-American
 - e. Native American
 - f. Other
4. How many years of education have you completed?
 - a. High-school
 - b. Associate's or other two-year degree
 - c. Bachelor's or other four-year degree
 - d. Master's or equivalent degree
 - e. Doctoral degree
5. Please indicate year in college.
 - a. Not in currently in college
 - b. Freshman
 - c. Sophomore
 - d. Junior
 - e. Senior
 - f. Graduate student
6. What is your best guess of your family's total income last year? (If married or independent, still estimate the income of the family in which you grew up.)
 - a. under \$10,000
 - b. \$10,000 – 14,999
 - c. \$15,000 – 24,999
 - d. \$25,000 – 34,999
 - e. \$35,000 – 49,999
 - f. \$50,000 – 74,999
 - g. \$75,000 or more

APPENDIX B
SEXUAL ATTITUDES QUESTIONNAIRE

The following questions ask about your attitudes and feelings about sex. For each statement, indicate the number which best describes how you personally feel.

Remember -- there are no right or wrong answers. We just want to know what you think.

1	2.....	3	4.....	5	6
Strongly Disagree	Somewhat Disagree	Slightly Disagree	Slightly Agree	Somewhat Agree	Strongly Agree

1. Pornography is obviously dirty and people should NOT try to describe it as anything else.
2. Swimming in the nude with a person of the opposite sex would be exciting.
3. If people thought I was interested in having oral sex, I would be embarrassed.
4. Having sex before marriage is okay if both people want to do it.
5. Having group sex sounds like fun to me.
6. For me, thinking about having sexual intercourse is exciting.
7. The thought of having sex with another person makes me uptight and nervous.
8. Seeing an X-rated movie would be sexually exciting to me.
9. Just the thought of having sex makes me nervous.
10. Watching a nude dancer of the opposite sex would be exciting to me.
11. Almost all X-rated material is disgusting to me.
12. Thinking or talking about sex frightens me.
13. Having sex before marriage is OK if two people love each other.
14. The thought of having unusual sex practices is very exciting.
15. After having sexual thoughts, I feel jittery.
16. I like to daydream about sex.
17. Sex before marriage is morally wrong.
18. The thought of having long-term sexual relations with more than one partner is disgusting to me.
19. Sex without love is OK.
20. I can imagine myself being comfortable and enjoying casual sex with different partners.

21. I have an abnormal fear of sex.
22. I would have to be closely attached to someone -- both emotionally and psychologically -- before I could feel comfortable and fully enjoy sex with him or her.

Table 43

Factor Loadings for Erotophilia, Erotophobia, and Attitudes Toward Casual Sex Scales of Sexual Attitudes Questionnaire

Items	Factors			
	1	2	3	4
I like to daydream about sex.	.78	-.01	-.02	-.11
For me, thinking about having sexual intercourse is exciting.	.72	-.18	.14	.07
Seeing an X-rated movie would be sexually exciting to me.	.71	-.10	-.09	-.02
The thought of having unusual sex practices is very exciting.	.62	.01	-.15	.09
Watching a nude dancer of the opposite sex would be exciting to me.	.57	-.09	.02	.04
Swimming in the nude with a person of the opposite sex would be exciting.	.49	-.15	.12	.29
After having sexual thoughts, I feel jittery.	.47	.46	.01	.01
Just the thought of having sex makes me nervous.	-.10	.81	<.01	.04
The thought of having sex with another person makes me uptight and nervous.	-.08	.74	.05	.04
Thinking or talking about sex frightens me.	-.08	.73	-.10	-.09
I have an abnormal fear of sex.	<.01	.66	-.08	-.08
If people thought I was interested in having oral sex, I would be embarrassed	-.10	.39	.24	-.06

(continued on following page)

Table 43 (continued)

Items	Factors			
	1	2	3	4
Almost all X-rated material is disgusting to me.	-.24	.35	.29	.02
I would have to be closely attached to someone -- both emotionally and psychologically -- before I could feel comfortable and fully enjoy sex with him or her.	.14	.06	.77	.14
I can imagine myself being comfortable and enjoying casual sex with different partners.	.12	.16	-.65	.08
Sex without love is OK.	.08	.04	-.59	.26
The thought of having long-term sexual relations with more than one partner is disgusting to me.	.15	.14	.53	-.10
Having group sex sounds like fun to me.	.35	.17	-.46	-.04
Pornography is obviously dirty and people should NOT try to describe it as anything else.	-.16	.26	.36	-.11
Having sex before marriage is okay if both people want to do it.	.03	.04	-.02	.90
Having sex before marriage OK if two people love each other.	.06	.02	.12	.90
Sex before marriage is morally wrong.	.13	.05	.22	-.74

Note: N = 732. Boldface indicates highest factor loadings and items included in scale calculations.

Table 44

Correlations Between Sexual Attitudes Questionnaire Factors

	Erotophilia	Erotophobia	Casual Sex	Premarital Sex
Erotophilia	--			
Erotophobia	-.14	--		
Casual Sex	-.21	.15	--	
Premarital Sex	.24	-.26	-.21	--

APPENDIX C
SEXUAL BEHAVIORS QUESTIONNAIRE

Part A

Below is a list of sexual experiences that people have. We would like to know which of these behaviors you have experienced. Please indicate those experiences you have personally had by marking "A" if you have had them during the past 60 days, "B" if you have had them, but not during the past 60 days, and "C" if you have never had them.

A = Yes—during the past 60 days

B = Yes—but not during the past 60 days

C = No—Never

1. Have you ever masturbated (touched your body for the purposes of sexual arousal)?
2. Have you ever made out with another person (kissed him or her for a long time)?
3. Have you ever had any sexual contact with another person, more than just kissing or making out? Do not include sex play that you may have had with another child before you were 12 years old.
4. Has anyone ever touched, stroked, or rubbed your breasts?
5. Has anyone ever touched, stroked, or rubbed your vagina?
6. Have you ever touched, stroked, or rubbed a boy's or man's penis?
7. Has anyone ever given you oral sex (another person using their mouth to stimulate your sex organ)?
8. Have you ever given anyone oral sex (used your mouth to stimulate another person's sex organ)?
9. Has a boy or man ever put his penis in your vagina but did not orgasm or come?
10. Have you ever had vaginal sexual intercourse (a man or boy putting his penis in your vagina until he orgasmed or came)?
11. Have you ever had anal sexual intercourse (a man or boy putting his penis in your butt or rectum)?
12. Have you ever had any sexual contact another girl or woman?
13. Have you ever had sexual intercourse with another girl or woman?

Part B

Please indicate the frequency with which you typically engage in certain sexual activities. Unless otherwise specified, sexual intercourse includes vaginal, oral, and anal sex.

A = not at all	F = 4-6 times per week
B = less than once per month	G = once a day
C = 1-2 times per month	H = 2-3 times per day
D = once per week	I = 4 or more times per day
E = 2-3 times per week	

1. Masturbation
2. Kissing and Petting
3. Oral sex
4. Vaginal sexual intercourse
5. Anal sexual intercourse
6. Sexual intercourse with someone on only one occasion (a one-night stand)
7. Sexual intercourse with a stranger or someone you just met

8. About how many times would you say that you have had sexual intercourse IN YOUR LIFE?

A = Never	F = 21-30 times
B = 1-3 times	G = 31-40 times
C = 4-5 times	H = 41-50 times
D = 6-10 times	I = More than 50 times
E = 11-20 times	

9. People are different in their sexual attraction to other people. Which best describes your feelings?
 - a. 100% heterosexual or straight (attracted to members of the opposite sex only)
 - b. Mostly heterosexual or straight
 - c. Bisexual (equally attracted to men and women)
 - d. Mostly homosexual or gay
 - e. 100% homosexual or gay (attracted to members of the same sex only)
 - f. Not sure

Part C

The following items refer to reasons why someone may not be having sexual intercourse. Please mark "A" if the item is a reason why you are NOT currently having intercourse, and mark "B" if the item does not apply to you.

A = Applies to you

B = Does not apply to you

1. no steady partner
2. waiting for the right person
3. waiting for marriage
4. fear of sexually transmitted disease
5. fear of pregnancy
6. tried it but did not like it
7. too painful
8. past sexual trauma such as rape or sexual abuse
9. just not interested right now
10. other
11. not applicable—currently sexually active
12. If you are not currently sexually active what is the primary reason (choose one):
 - a. no steady partner
 - b. waiting for the right person/marriage
 - c. fear of sexually transmitted disease/fear of pregnancy
 - d. tried it but did not like it
 - e. too painful
 - f. past sexual trauma such as rape or sexual abuse
 - g. just not interested right now
 - h. other
 - i. not applicable—currently sexually active

Part D

Please answer the following items. Keep in mind that sexual intercourse includes vaginal, oral, and anal sex. Record your responses on this page.

1. At what age did you first become interested in sexual activity? _____

2. At what age did you first have sexual intercourse? _____

3. With how many **MALE** partners have you had voluntary sexual intercourse?
 - a. during your lifetime? _____
 - b. during the past 12 months? _____

4. With how many **FEMALE** partners have you had voluntary sexual intercourse?
 - a. during your lifetime? _____
 - b. during the past 12 months? _____

5. If there was nothing to inhibit you -- e.g., no threat of getting AIDS, VD or herpes, no fear of unwanted pregnancy, your partners willingly consented with how many different persons (whom you currently know) would you like to have sex?
 - a. male _____
 - b. female _____

6. With how many different partners do you see yourself having sex during the next 5 years?
 - a. male _____
 - b. female _____

APPENDIX D
CHILDHOOD SEXUAL EXPERIENCES QUESTIONNAIRES

Initial Version

It is now generally recognized that many people have sexual experiences as children. Some of these are with friends and playmates, and some are with relatives and family members. Some are very upsetting and painful, and some are not. Some influence people's later lives and sexual experiences, while others are practically forgotten. Despite the importance of these events, little is actually known about these sexual experiences.

We would like you to remember any sexual experiences you have had before the age of 15. By "sexual" we mean a broad range of things, anything from playing doctor to sexual intercourse—actually, anything that might have seemed sexual to you. When we say "before the age of 15," we mean anytime before your 15th birthday. The person could have been a stranger, friend, or family member such as a cousin, uncle, sibling, mother, or father.

In the spaces provided, please indicate (1) whether you had the following experiences, (2) how old you were when it first occurred, (3) the relationship of the person (people) to you, (4) how old the other person was when it first occurred, and (5) for what period of time it occurred (number of days, months, or years) and (6) whether the person forced you or threatened you.

	Yes or No	Your age at first occurrence	Relationship of person to you	Person's age At first Occurrence	Duration (# of months, days, years)	Force or threats (Yes or No)
An invitation or request to do something sexual						
Kissing or hugging in a sexual way						
Other person showing his/her genitals to you						
You showing your genitals to other person						
Other person fondling you in a sexual way (e.g., touched your chest)						
You fondling other person in a sexual way (e.g., touch chest)						
Other person touching your genitals						
You touching the other person's genitals						

Other person masturbating you until orgasm						
You masturbating other person until orgasm						
Attempted vaginal Intercourse						
Attempted oral or anal intercourse						
Completed vaginal intercourse						
Completed oral or anal intercourse						
Other sexual experience (specify)						

Revised Version

The following questions ask about your sexual experiences before your 15th birthday. Circle yes if you have had the experience described. Circle no if you have not had the experience described.

- 1. BEFORE you were 15 years of age, did a male or female FAMILY MEMBER who was 5 OR MORE YEARS OLDER than you ever have oral, anal, or vaginal INTERCOURSE with you (with any amount of penetration), or INSERT a finger or object in your anus or vagina?**

YES

NO

- 2. BEFORE you were 15 years of age, did a male or female FAMILY MEMBER who was 5 OR MORE YEARS OLDER than you ever KISS you in a sexual way, or TOUCH your body in a sexual way, or make you TOUCH their sexual parts but you did not have oral, anal, or vaginal intercourse?**

YES

NO

- 3. BEFORE you were 15 years of age, did a male or female who was NOT A FAMILY MEMBER and was 5 OR MORE YEARS OLDER than you have oral, anal, or vaginal INTERCOURSE with you (with any amount of penetration), or INSERT a finger or object in your anus or vagina?**

YES

NO

- 4. BEFORE you were 15 years of age, did a male or female who was NOT A FAMILY MEMBER and was 5 OR MORE YEARS OLDER than you ever KISS you in a sexual way, or TOUCH your body in a sexual way, or make you TOUCH their sexual parts but you did not have oral, anal, or vaginal intercourse?**

YES

NO

If you answered yes to any of the questions on the previous page, please find the person(s) that did it and fill in the boxes. In the spaces provided, please indicate (1) how old you were when it first occurred, (2) how old the other person was when it first occurred (estimate if unsure), (3) for what period of time it occurred (number of days, months, or years), (4) whether the experience involved intercourse and (5) whether the person forced you or threatened you.

Family Members	Your age at first occurrence	Other Person's Age At first Occurrence	Duration (# of months, days, years)	Intercourse (Yes or No)	Force or threats (Yes or No)
Father					
Mother					
Stepfather					
Stepmother					
Brother					
Sister					
Stepbrother					
Stepsister					
Uncle					
Aunt					
Male Cousin					
Female Cousin					
Grandfather					
Grandmother					
Other Family Member					
NonFamily					
Stranger					
Teacher					
Babysitter					
Boyfriend					
Your Friend or Classmate					
Friend of a Family Member					

Neighbor					
Religious Leader					
Other					

APPENDIX E
TRAUMATIC SEXUALIZATION SURVEY

This section asks about sexual thoughts, feelings, attitudes, and behaviors. Please use the rating scale below to indicate how often each of the following statements is true for you.

A B C D E
 Never Rarely Sometimes Often Almost Always

1. Sexual thoughts preoccupy my mind.
2. I get attention from men because I am sexually attractive.
3. Thoughts of sex interfere with my daily life.
4. I am disgusted by sex.
5. Men are interested in me because I will have sex with them.
6. I think about sex at inappropriate times.
7. I am afraid of acting sexual.
8. I have sex on a first date.
9. I am uncomfortable being sexual.
10. Men base their relationships with me on sex.
11. I enjoy nonphysical relationships more than physical relationships.
12. I have sexual fantasies.
13. I feel like sex is the only reason men date me.
14. I think sex is dirty.
15. I avoid sexual activity.
16. My sexuality is what attracts people to me.
17. Men expect me to have sex with them.
18. I have sex with men I do not know very well.
19. I strongly dislike sexual contact with men.
20. My relationships with the men I date do not involve sexual activity.
21. I daydream about sex.
22. I feel like sex is the only thing that men like about me.
23. I think about sex.
24. If it were not for the way I look, men would not be interested in me.
25. Sexual thoughts enter my head throughout the day and night.

26. Men are more interested in my body than in my personality.
27. I would rather not have physical relationships with men.
28. I need sex to feel good about myself.
29. I have unusual sexual thoughts.
30. Men like being with me the most because I have sex with them.
31. I have trouble keeping sexual thoughts out of my head.
32. When I am studying (or working) I have sexual thoughts.
33. I am afraid of sex.
34. Men would not be interested in me if I would not have sex with them.
35. I avoid rejection by having sex.
36. I prefer nonsexual relationships over sexual relationships.
37. I try hard to avoid physical relationships.
38. I act flirtatiously because that is what men expect from me.
39. I am preoccupied with sexual thoughts.
40. People are interested in me because I act seductively.
41. I can't get my mind off sex.
42. Men treat me like a sex object.
43. I do not want to be physical with men.
44. Men want to be with me because I am seductive.
45. I use sex to avoid loneliness.
46. I avoid physical contact with men.
47. When I start to become acquainted with a man, I hope the relationship doesn't become sexual.
48. My relationships with men are based on sex.
49. I avoid being sexually intimate.
50. Men are more interested in the way I look than in my personality.

Table 45

Factor Loadings for the Traumatic Sexualization Survey

Items	Factors		
	1	2	3
Men are interested in me because I will have sex with them.	.74	-.20	-.07
I feel like sex is the only reason men date me.	.71	.04	-.01
Men like being with me the most because I have sex with them.	.70	-.06	-.09
Men base their relationships with me on sex.	.70	.00	-.01
I avoid rejection by having sex.	.67	.00	-.13
I feel like sex is the only thing that men like about me.	.67	-.01	-.02
I have sex with men I do not know very well.	.64	-.12	-.05
Men expect me to have sex with them.	.63	.11	.05
I use sex to avoid loneliness.	.62	-.12	.06
My relationships with men are based on sex.	.62	-.04	.01
Men would not be interested in me if I would not have sex with them.	.60	.08	-.08
Men treat me like a sex object.	.58	.05	.07
Men want to be with me because I am seductive.	.58	.01	.05
I have sex on a first date.	.56	-.19	-.01
People are interested in me because I act seductively.	.55	-.03	.17

(continued on following page)

Table 45 (continued)

Items	Factors		
	1	2	3
I act flirtatiously because that is what men expect from me.	.54	.13	.01
I need sex to feel good about myself.	.53	-.09	.13
Men are more interested in the way I look than in my personality.	.45	.25	.08
Men are more interested in my body than in my personality.	.45	.19	.15
If it were not for the way I look, men would not be interested in me.	.42	.14	.08
My sexuality is what attracts people to me.	.41	.09	.22
I avoid being sexually intimate.	-.04	.81	.03
I try hard to avoid physical relationships.	-.03	.78	.01
I avoid sexual activity.	-.01	.77	-.06
I do not want to be physical with men.	-.01	.76	.08
I avoid physical contact with men.	-.05	.73	.08
I prefer nonsexual relationships over sexual relationships.	-.19	.73	.00
When I start to become acquainted with a man, I hope the relationship doesn't become sexual.	-.01	.72	.02
I would rather not have physical relationships with men.	-.05	.71	.03
I am uncomfortable being sexual.	.10	.66	-.04

(continued on following page)

Table 45 (continued)

Items	Factors		
	1	2	3
I strongly dislike sexual contact with men.	.04	.66	-.07
I am afraid of sex.	.10	.64	-.07
My relationships with the men I date do not involve sexual activity.	-.21	.64	.02
I think sex is dirty.	.10	.63	-.10
I am afraid of acting sexual.	.14	.63	.01
I am disgusted by sex.	.12	.58	-.14
I enjoy nonphysical relationships more than physical relationships.	-.05	.57	-.03
Sexual thoughts enter my head throughout the day and night.	-.06	-.05	.85
I daydream about sex.	-.09	-.01	.83
When I am studying (or working) I have sexual thoughts.	-.04	.00	.81
I have trouble keeping sexual thoughts out of my head.	.04	.03	.80
I think about sex at inappropriate times.	-.02	.02	.76
I have sexual fantasies.	-.11	-.07	.74
Sexual thoughts preoccupy my mind.	.02	-.08	.73
I think about sex.	-.02	-.13	.73
I am preoccupied with sexual thoughts.	.14	.04	.72

(continued on following page)

Table 45 (continued)

Items	Factors		
	1	2	3
I can't get my mind off sex.	.12	.03	.67
Thoughts of sex interfere with my daily life.	.04	.01	.66
I have unusual sexual thoughts.	.07	.08	.59
I get attention from men because I am sexually attractive.	.17	-.10	.26

Note: N = 742. Boldface indicates highest factor loadings and items included in scale calculations.

Table 46

Correlations Between Traumatic Sexualization Survey Factors

	Sex-Based Relationships	Avoidance & Fear of Sex	Thoughts About Sex
Sex-Based Relationships	--		
Avoidance & Fear of Sex	.06	--	
Thoughts About Sex	.32	-.11	--

APPENDIX F
SEX MOTIVES QUESTIONNAIRE

The next set of questions asks about different reasons why a personal might have sex. For each statement, please indicate the letter which best describes how often you personally have sex for each of the following reasons. Remember – there are no right or wrong answers. We just want to know what you think.

A	B	C	D	E
Never/ Almost Never	Some of the time	Half of the time	Most of the time	Almost Always/ Always

1. How often do you have sex to cope with upset feelings?
2. How often do you have sex to prove to yourself that your partner thinks you're attractive?
3. How often do you have sex to help you deal with disappointment in your life?
4. How often do you have sex to become more intimate with your partner?
5. How often do you have sex because you worry that people will talk about you if you don't have sex?
6. How often do you have sex because it helps you feel better when you're lonely?
7. How often do you have sex to express love for your partner?
8. How often do you have sex out of fear that your partner won't love you anymore if you don't?
9. How often do you have sex because you feel "horny"?
10. How often do you have sex because it helps you feel better when you're feeling low?
11. How often do you have sex because people will think less of you if you don't?
12. How often do you have sex because it feels good?
13. How often do you have sex because you don't want your partner to be angry with you?
14. How often do you have sex just for the excitement of it?
15. How often do you have sex because others will kid you if you don't?
16. How often do you have sex to make an emotional connection with your partner?
17. How often do you have sex just because all your friends are having sex?
18. How often do you have sex just for the thrill of it?

19. How often do you have sex to become closer with your partner?
20. How often do you have sex to help you feel better about yourself?
21. How often do you have sex because it makes you feel like you're a more interesting person?
22. How often do you have sex to feel emotionally close to your partner?
23. How often do you have sex because it makes you feel more self-confident?
24. How often do you have sex to satisfy your sexual needs?
25. How often do you have sex to reassure yourself that you are sexually desirable?
26. How often do you have sex because you worry that your partners won't want to be with you if you don't?
27. How often do you have sex so that others won't put you down about not having sex?
28. How often do you have sex because you're afraid that your partner will leave you if you don't?
29. How often do you have sex to cheer yourself up?

APPENDIX G
EXPERIENCES IN CLOSE RELATIONSHIPS—REVISED

The 36 statements in this section concern how you generally feel in emotionally close romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it using the scale below.

1 2 3 4 5 6 7

Strongly	Somewhat	Slightly	Neither	Slightly	Somewhat	Strongly
Disagree	Disagree	Disagree	Agree nor Disagree	Agree	Agree	Agree

1. I'm afraid that I will lose my partner's love.
2. I often worry that my partner will not want to stay with me.
3. I often worry that my partner doesn't really love me.
4. I worry that romantic partners won't care about me as much as I care about them.
5. I often wish that my partner's feelings for me were as strong as my feelings for him or her.
6. I worry a lot about my relationships.
7. When my partner is out of sight, I worry that he or she might become interested in someone else.
8. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.
9. I rarely worry about my partner leaving me.
10. My romantic partner makes me doubt myself.
11. I do not often worry about being abandoned.
12. I find that my partner(s) don't want to get as close as I would like.
13. Sometimes romantic partners change their feelings about me for no apparent reason.
14. My desire to be very close sometimes scares people away.
15. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.
16. It makes me mad that I don't get the affection and support I need from my partner.
17. I worry that I won't measure up to other people.
18. My partner only seems to notice me when I'm angry.

19. I prefer not to show a partner how I feel deep down.
20. I feel comfortable sharing my private thoughts and feelings with my partner.
21. I find it difficult to allow myself to depend on romantic partners.
22. I am very comfortable being close to romantic partners.
23. I don't feel comfortable opening up to romantic partners.
24. I prefer not to be too close to romantic partners.
25. I get uncomfortable when a romantic partner wants to be very close.
26. I find it relatively easy to get close to my partner.
27. It's not difficult for me to get close to my partner.
28. I usually discuss my problems and concerns with my partner.
29. It helps to turn to my romantic partner in times of need.
30. I tell my partner just about everything.
31. I talk things over with my partner.
32. I am nervous when partners get too close to me.
33. I feel comfortable depending on romantic partners.
34. I find it easy to depend on romantic partners.
35. It's easy for me to be affectionate with my partner.
36. My partner really understands me and my needs.

APPENDIX H

DEROGATIS SEXUAL FUNCTIONING INVENTORY BODY IMAGE SUBTEST

Derogatis Sexual Functioning Inventory Body Image Subtest

Below are some statements concerning how you truly view your body. Please indicate to what degree each of the following statements is true for you.

A	B	C	D	E
Not at all true	Slightly true	Moderately true	Quite true	Extremely true

1. I am less attractive than I would like to be.
2. I am too fat.
3. I enjoy being seen in a bathing suit.
4. I am too thin.
5. I would be embarrassed to be seen nude by a lover.
6. I am too short.
7. There are parts of my body I do not like at all.
8. I am too tall.
9. I have too much body hair.
10. My face is unattractive.
11. I have a shapely and well-proportioned body.
12. I have attractive breasts.
13. Men would find my body attractive.
14. I have attractive legs.
15. I am pleased with the way my vagina looks.