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EXAMINING THE VARIABILITY IN THE LONG TERM ADJUSTMENT
OF CHILD SEXUAL ABUSE VICTIMS

By

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Examining the Variability in the Long Term Adjustment of Child Sexual Abuse Victims

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Two meta-analyses (Rind, Tromovitch & Bauserman, 1998; Ulrich, Randolph, & Acheson, 2006) have suggested that the long held belief about the inevitable pervasive negative effects of child sexual abuse does not hold for college populations. The meta-analyses suggest that there is other factors in sexual abuse victims' lives that interact with their abuse experience to produce the sometimes-observed minimal long-term effects on psychological adjustment. This research attempted to examine a potential model for explaining the variability in the long-term effects of child sexual abuse by examining both moderator variables and abuse characteristics within the same population. The study examined three potential moderators, attributional style (including abuse specific attributions), family environment, and social support. Abuse characteristics were also entered in the moderator regression analyses, in order to examine the variance accounted for by each variable on long-term outcome beyond any shared variance between variables. It was hypothesized that there would be a significant difference between subjects reporting a history of sexual abuse and those without a history of sexual abuse on their long term psychological adjustment. This difference would be minimal, but would indicate that those without a history of child sexual abuse score better on a measure of trauma psychopathology. The second hypothesis was that attributional style, family environment, and social support would moderate the long-term outcome of child sexual abuse victims, beyond the variance accounted for by the abuse characteristics. The final hypothesis was that the accumulation of the aforementioned risk factors would result in a worse long-term outcome in college populations. This model attempted to provide an understanding of the relationship between each variable with long term outcome of child sexual abuse, as well as the cumulative effect of all these variables on the relationship of child sexual abuse outcomes. Results suggested that social support satisfaction and the victim's attributions about the cause of the child sexual abuse experience were related to trauma outcomes. In addition, the results provided potential indications for what to target in treatment based upon symptom presentation in child sexual abuse victims.

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INTRODUCTION

Although child sexual abuse (CSA) has gained awareness with the public through numerous child abduction cases and various new reports in daycare abuse cases, the interest in child sexual abuse began before this time. Sigmund Freud, in his early work with childhood sexuality, indicated that child sexual abuse was linked to the psychological problems of some of his female patients as a result of their fathers and brothers sexually propositioning them at a young age (as cited in Finkelhor, 1979b). Although there are disparate views of Freud's contributions to the problem of child sexual abuse, his willingness to explore the issue cannot be ignored (Finkelhor, 1979b).

Besides Freud, other individuals and pivotal movements in our history have shaped the current research and views on child sexual abuse. Finkelhor (1979b) notes the importance of Kinsey in the history of child sexual abuse research. Kinsey's research on child sexuality, the indication that childhood sexual experiences were universal, and the problem of childhood incest not being as common in patients as in the minds of therapists, helped focus public attention on childhood sexual experiences (Finkelhor, 1979b). The public became concerned with child sexual abuse in the 1950s after a well-publicized sex murder, and commissions were soon set up in several states to investigate the problem of sexual victimization. As a result, laws were quickly enacted in several states to address an array of sex crimes involving both adults and children (Finkelhor, 1979b).

In spite of the laws, and after the initial panic, during the 1950s interest in the area of child sexual abuse again diminished. During the 1960s and 1970s conservatives used the issue of child sexual abuse as a reason to oppose the sexual reform movement (i.e.,

contraceptives, sex education, treatment of sex offenders) because they feared it would demoralize the country, while liberals, afraid of the concern rising about child molestation, downplayed the seriousness of child molesting and stated that the problem of child sexual abuse was not a problem of decaying morality (Finkelhor, 1979b). These opposing political agendas brought the issue of child sexual abuse into the public spotlight, but it was still not seen as an important social problem.

Since the 1980s two specific coalitions have helped advocate for the issue of child sexual abuse: the women's movement and the child protection movement (Finkelhor, 1984). While both groups' focus was on gaining awareness for the cause, they targeted different facets of child sexual abuse. The child protection movement focused on the relationship between child sexual abuse and other forms of child maltreatment, while the women's movement focused on the relationship of child sexual abuse, rape, and in general, to the unfair treatment of women in relation to crime. Additionally, the child protection movement focused on incest. The women's movement believed the issue went farther than only intra-familial abuse, and that extra-familial abuse was also of importance (Finkelhor, 1984). Although these two groups focused on different aspects of child sexual abuse, they both helped bring child sexual abuse into the forefront of research and public attention.

As more information has become available regarding child sexual abuse, the views concerning it have changed. One of the earliest beliefs about child sexual abuse is that it is a rare occurrence, that many allegations are false, and that the child may have instigated the behavior (Ondersma et al., 2001). During the mid 1970s, the majority of researchers were proposing that child sexual abuse was harmful, and that children were

victims and not to blame (Ondersma et al.). With this changing view came a wave of criticisms as to the credibility of the abused child. Critics began to question the validity of the abused children's memories of the abuse, and the testimonies and cases of child sexual abuse were questioned (Ondersma et al.). Research continues to be conducted on child sexual abuse to determine what, if any, behavioral and emotional effects it has on its victims.

REVIEW OF CHILD SEXUAL ABUSE RESEARCH

Definition of Child Sexual Abuse

Perhaps the most problematic area for researchers of child sexual abuse is the lack of a common definition. Definitions have ranged from broad to very narrow, and encompass a wide variety of sexual behaviors and acts. Holmes and Slapp (1998) indicated that many studies use different operational definitions of child sexual abuse, including: a five year age difference between victim and perpetrator, use of coercion, negative reactions by victim, authority figures as perpetrator, or use of physical contact or penetration.

Many studies have been conducted that used differing definitions of child sexual abuse. Finkelhor (1979a) defined child sexual abuse as an occurrence when a child is unable to provide fully informed consent, with informed consent including full knowledge of what is being consented to and a complete freedom to say yes or no to the situation. Another study conducted by Risin and Koss (1987) used different criteria for the definition of child sexual abuse. Child sexual abuse was defined using a combination of an age discrepancy and the use of coercion, or the presence of one of these factors. In addition, the perpetrator had to be a caregiver or authority figure, and if the victim believed that they were victim, it was considered child sexual abuse. Rind et al. (1998) reported that the definitions of child sexual abuse in the fifty-nine studies they examined varied from one study to another. Seventy percent of the studies defined child sexual abuse with an age discrepancy (i.e., perpetrator at least five years older, usually with a victim under the age of 12 or 13) regardless of the willingness of the victim, 20% of the studies defined child sexual abuse as an unwanted sexual experience, 73% defined it as

including both contact (i.e., fondling, touching, intercourse) and noncontact (i.e., exhibitionism) sexual experiences, while another 24% of the studies used a definition with contact experiences only. The studies also differed in the necessary age requirements for victim and perpetrator in order to qualify as a case of child sexual abuse (i.e., maximum age of victim being 16 or 17 years old, perpetrator more than 5 years older than victim, or perpetrator being 10 years older than victim).

Other definitions used for child sexual abuse in research include: having at least one sexual encounter with a post-adolescent individual before the victim had reached puberty (Fritz, Stoll, & Wagner, 1981); a sexual behavior that is either forced or coerced on a child, and sexual activity between a child and an older individual that does not have to be coerced or forced (Browne & Finkelhor, 1986); unwanted sexual advances prior to the age of 16 (Mullen, et al., 1994); contact (i.e., fondling, intercourse) or noncontact (i.e., exhibitionism) abuse with the age limitation of a 12 year old victim with a perpetrator at least 5 years older or a victim aged 13-16 with a perpetrator at least 10 years older (Bennett, Hughes, & Luke, 2000). There continues to be inconsistency in defining this phenomenon (see Table 1 for a complete list of the above-mentioned studies and differing definitions of child sexual abuse).

Prevalence and Demographics

Another area of child sexual abuse that has been extensively debated is its prevalence and demographics. In 1984, Finkelhor reported that child sexual abuse was on the rise, with the number of cases reported to the American Humane Association nationwide collection system increasing from 1,975 in 1976 to 22,918 in 1982. However,

Table 1

Differing Definitions of Child Sexual Abuse Across Studies

Researcher(s)	Definition
Finkelhor (1979a)	not being able to provide fully informed consent and not having freedom to say yes or no to abuse; activities involve the genitals and are gratifying to at least one person involved; not limited to intercourse
Fritz, Stoll, & Wagner (1981)	at least 1 sexual encounter with a post adolescent individual before victim reaches puberty; contact abuse (including breast fondling, genital fondling, cunnilingus)
Browne & Finkelhor (1986)	sexual behavior that is forced or coerced on a child or sexual activity between child and adult that is not forced or coerced; broad definition (included both contact and noncontact)
Risin & Koss (1987)	age discrepancy, use of coercion, authority figure or caregiver is the perpetrator; broad definition (included both contact and noncontact); victim identified as being abused
Mullen, Martin, Anderson, Romans, & Herbison (1994)	unwanted sexual advances prior to age 16; broad definition (included both contact and noncontact)
Bennett, Hughes, & Luke (2000)	all sexual activity ranging from exhibitionism to completed sexual intercourse; only sexual experiences occurring prior to age 16; age discrepancy of five years if child is 12 or younger and age discrepancy of 10 years if child is aged 13-15; both intra-familial and extra-familial

studies conducted with the general population suggest that the reported prevalence rates are an underestimate of the actual occurrences (Finkelhor, 1984). Surveys conducted during the late 1970s and early 1980s supported the concept of underreporting of actual sexual abuse cases. A survey of 521 Boston parents found that 6% of males and 15% of females reported an experience of sexual abuse before the age of 16 by a perpetrator at least 5 years older; a 1978 survey of 930 San Francisco women found that before the age of 14, 28% had been victims of unwanted sexual touching, with 12% being victimized by a relative (Finkelhor, 1984).

Prevalence rates further show that there is a gender difference in the prevalence of sexual abuse experiences. Landis (1956) conducted a study in which self-reports from 1800 university students indicated that 30% of men and 35% of women reported an experience of an unwanted sexual approach. Finkelhor (1979b) further found a difference in reported rates of sexual abuse by men and women in his study of 796 students at six New England colleges: 19% of 530 female participants reported a childhood sexual experience, while 8.6% of the 266 male participants reported such an experience. Finkelhor (1984) further noted that retrospective reports of college students suggest a ratio of almost 2 females for every male child sexual abuse victim.

Finkelhor (1984) stated that since many of incidence statistics are based on fully grown individuals they could not be directly applied to the current prevalence of sexual abuse among children. However, there was no reason to assume that the prevalence rate of sexual abuse has fallen since the number of reported cases has greatly increased. Finkelhor (1984) used conservative estimates of the prevalence rates for males and

females of sexual abuse, 10% of females and 2% of males, to predict that about 210,000 new cases of sexual abuse would occur every year (with the estimate based on 60 million children under the age of 18) (Finkelhor, 1984). These statistics support an interpretation of an increase in the prevalence of child sexual abuse cases.

More recent data published by the World Health Organization (WHO; 2002) reports 20% of women and 5 to 10% of males worldwide have reported experiencing child sexual abuse. The WHO also highlights how the definition used for child sexual abuse can greatly affect the prevalence estimates. Studies using narrow definitions of child sexual abuse (e.g., involving pressure or force for males, and rape for females) report prevalence estimates of 1% for males and 0.9% for females. However, when a broad definition was used, the prevalence estimates are 19% for males and 45% for females. Other estimates of the prevalence of child sexual abuse include: 15 to 30% of females and 5 to 15% of males (Lynskey & Fergusson, 1997); 35-50% of females receiving outpatient psychotherapy (Neumann, 1994); 9.7% of cases reported to Child Protective Services were for child sexual abuse (U.S. Department of Health and Human Services, 2004). As can be seen, the prevalence of child sexual abuse ranges depending upon the population, gender, and definition of abuse.

Numerous research studies have examined the mean age of onset for child abuse victims. Briere and Runtz (1988b) found in their study of 278 female undergraduate students that the average victim was 9 years of age at the time of her first abusive experience. Finkelhor (1979b) reported in his study of 796 students (530 females and 266 males) from a college sample that the mean age of onset for victims was 10 years of age for females and 11 years of age for males. There have also been estimates that the most

common ages of abuse are between 8 and 12 years of age (Finkelhor, 1984), while others state that the mean age is 9 to 11 years of age (Barnett et al., 2005). Research findings are usually consistent in that the most common age for a child to first be sexually assaulted is pre-pubescent.

Briere and Runtz (1988b) also reported other demographics associated with child sexual abuse: 41.4% of all victims experienced only a single incident of abuse, 46.4% were abused multiple times over a one year period, and 12.2% were abused for a period longer than one year; parental incest occurred in 12.2% of the abuse cases; 39% of the victims had been abused by more than person; and force was used or threatened in 51.2% of the abuse cases. Finkelhor (1979b) reports similar findings from his research: approximately half of the female victims were abused by family members while the males experiences are primarily with individuals they are acquainted with but not necessarily a relative; 60% of victims report only one abuse experience; if the abuse happened more than once to an individual it typically lasted longer than a week; and approximately 55% of female and male victims report that force was used during their abuse.

A problem with the demographic information provided for sexual abuse victims is that statistics for sexual abuse are difficult to provide with exact certainty. Since the information can only be obtained when victims self disclose that they have experienced sexual abuse, the possibility that not all cases of sexual abuse are being identified is a common problem. Another concern has to do with accurate self-reporting of sexual abuse. All of these statistics are relying on the fact that those who report sexual abuse actually did suffer from sexual abuse.

Current Research on Outcomes of Child Sexual Abuse

The topic of child sexual abuse is a sensitive and personal area for many individuals. The basic notion that child sexual abuse is harmful and correlated with negative long-term consequences has been widely believed by the public, and has been an area of extensive research (see Rind, Tromovitch, and Bauserman (1998) for a review). In 1998, Rind, Tromovitch, and Bauserman conducted a meta-analysis of 59 studies that examined the long-term effect of child sexual abuse on college populations between the years of 1965 and 1995. The purpose of the meta-analysis was to determine if the four basic assumptions of child sexual abuse were supported by the existing research. According to Rind et al. (1998) these four basic assumptions are: (1) child sexual abuse causes harm to the individual, (2) the harm is pervasive for individuals who have a history of child sexual abuse, (3) the harm experienced is likely to be intense, (4) the experience of child sexual abuse is equivalent for both genders.

The results of the Rind et al. meta-analysis shocked the research and lay community. Their results indicated that the magnitude of the association between child sexual abuse and psychological maladjustment is minimal; the effect size was small and equated to less than 1% of the variance in later adjustment being accounted for by the sexual abuse. The researchers concluded that the negative effects that are experienced by victims (within in a college population) are not typically intense or pervasive. In addition, their results showed that the child sexual abuse experience was not equal for males and females; females generally reported more negative effects. Also, family environment was found to have a stronger correlation with later psychological maladjustment, with family environment accounting for approximately 9% of the variance. Rind et al.'s (1998)

results were evidence that the four assumed properties of child sexual abuse are not supported for college populations in the research literature.

Rind et al.'s (1998) research was criticized widely. Two groups of researchers strongly criticized the meta-analysis, Dallam et al. (2001) and Ondersma et al. (2001). These researchers attempted to refute the findings of the meta-analysis by criticizing the methodology utilized in the meta-analysis (i.e., use of the effect size r), the population used, and the interpretation and presentation of the findings. In an attempt to determine the validity of some of the criticisms of Rind et al.'s (1998) work, Ulrich, Randolph, and Acheson (2006) performed a reexamination of the original meta-analysis correcting for the methodological criticism identified by Dallam et al. (2001) and Ondersma et al. (2001). Ulrich et al. (2006) utilized a different effect size measure (i.e., Cohen's d) to examine if the magnitude of the relationship between child sexual abuse and later psychological adjustment would increase, what effect family environment had on later outcome, and what gender differences and self reported effects exist. As a result, Ulrich et al. were able to directly address whether the four assumed properties of child sexual abuse were supported in their reexamination.

The results of the meta-analysis by Ulrich et al. (2006) supported Rind et al.'s results. Child sexual abuse was found to account for 1% of the variance in later psychological adjustment, while family environment accounted for 5.9% of the variance in later psychological adjustment. In addition, the females reported more negative symptoms and attitudes about their abuse experiences than males. These results support the conclusion that the four assumed properties of child sexual abuse were not found in these samples of college populations.

Some individuals attempted to use Rind et al.'s original meta-analysis as support for the notion that child sexual abuse should not be condemned since the long-term harm is minimal. Pedophilia advocacy groups used the research by Rind et al. (1998) as support for their cause (Ondersma et al., 2001). However, these statements were made based on a faulty understanding of the results of Rind et al. (1998). Instead, the results of these meta-analyses suggest that long-term harm is not inevitable for children who experience child sexual abuse. These results provide hope for families, victims, and professionals in the area of child sexual abuse; there is a possibility of a positive prognosis after experiencing the horrific act of child sexual abuse.

These meta-analyses also suggest that there are other factors in the victim's lives, after the abuse experience, that interact with, or moderate, the effect of the abuse experience in the long term. While much research has examined the role that abuse characteristics (i.e., severity of abuse, relationship to offender, disclosure, age of victim), family environment and attributional style has on the short-term outcome of child sexual abuse victims (Kendall-Tackett, Williams, & Finkelhor, 1993; Swanson et al., 2003; Valle and Silovsky, 2002), there has been fewer studies that examined the relationship between these factors and the long-term effect of child sexual abuse. Limited studies have examined the cumulative effect of these factors (i.e., the presence of specific abuse characteristics, family environment, and attributional style) on the long-term outcome of those who experience child sexual abuse. Including both abuse characteristics and moderator variables within the same model allows for an examination of the variance accounted for by each variable beyond the shared variance of all the variables; this gives a more isolated picture of the effect of each variable. Treatment can then be directed at

the most highly correlated variables within the model in order to help increase the likelihood of a positive prognosis, or at least to aid clinicians in determining a prognosis and potential course of treatment for the victim (Ulrich et al., 2006).

Intervening Variables of Child Sexual Abuse Research

There are a variety of factors that may confound the effects of child sexual abuse, and as a result play a part in the short or long-term outcome of the individual. The intervening variables that have been researched and have been determined (or are thought) to be key in the outcome of child sexual abuse are: extra-familial versus intra-familial abuse, severity of abuse, whether the victims disclosed the abuse and how it was handled, and the gender of the individual who experienced the abuse.

Extra-familial versus Intra-familial Abuse

Research in child sexual abuse has always made a distinction between extra-familial abuse and intra-familial abuse (also known as incest). Browne and Finkelhor (1986) stated that there has been agreement in the field that incestuous experiences, with a father or stepfather as the perpetrator, are more detrimental to the victim than other types of intra-familial abuse or extra-familial abuse. Intra-familial abuse, except for the father or stepfather, has not been shown to be more harmful than extra-familial abuse (Browne & Finkelhor). Finkelhor (1979b) reported that in his study of 796 undergraduates that father-daughter incest was reported to be most traumatic. It was also reported that victims who suffered from father or stepfather incestual abuse were more likely to report adult sexual dissatisfaction or dysfunction. Finkelhor (1979b) further reports that in the sample, females reported more instances of intra-familial abuse (43%) as compared to males (17%).

Many researchers have reported a correlation between a female child having a stepfather and an increase in the likelihood of sexual abuse. Finkelhor (1984) reported that a female child who has a stepfather more than doubles her chances of being a victim of sexual abuse. In his study, stepfathers were 5 times more likely to be sexually abusive than natural fathers. Finkelhor (1984) and Fromuth (1984) stated that the existence of a stepfather is one of the strongest risk factors for child sexual abuse. Rind et al. (1998) also found that incest (i.e., intrafamilial abuse) was related to both psychological symptoms and self reported reactions and effects. Kendall-Tackett, Williams, and Finkelhor (1993) also identified that a worse outcome was associated with the perpetrator having a close relationship with the victim (although the definition of close was not provided) in their review of 45 studies examining the short-term effects of child sexual abuse. Many models of the response of child sexual victims recognize the negative impact that intrafamilial abuse has compared with extrafamilial abuse (Barker-Collo & Read, 2003).

Severity of Abuse

Child sexual abuse can be composed of many different acts, ranging from noncontact abuse (i.e., exhibitionism, frotteurism, voyeurism) to contact abuse (i.e., fondling, genital touching, intercourse). Sexual abuse also has another component that is related to later problems for the victim, the use or threat of force. In his 1979b study, Finkelhor found that the use or threat of force accounted for more variance in the negative outcomes of victims than any other variable. Similarly, Fromuth (1986) reported that 50% of victims in her study reported the use or threat of force during their abuse and that this was related to the victim's later maladjustment. Kendall-Tackett et al. (1993)

found that five of the six studies examined concluded that the use of force was related to an increase in child symptoms. There is a general consensus in the literature that the use or threat of force is related to the long-term outcome of victims (Beitchman et al., 1992).

As for the different effects of noncontact versus contact abuse many studies have examined this issue, and as with all research, some conflicting results have occurred. Beitchman et al. (1992) reported that sexual abuse involving penetration (i.e., intercourse or oral-genital contact) is predominantly considered to result in a worse outcome for the victim. However, it is pointed out that there are several studies that show no relationship between the type of sexual activity and long-term outcomes. Beitchman et al. suggest that there is no conclusive evidence as to whether penetration results in more severe outcomes than other forms of sexual abuse. However, Kendall-Tackett et al. (1993) did conclude that oral, anal, or vaginal penetration was related to increased symptomatology in children. Their conclusion was drawn from the fact that 6 out of 10 studies found a significant relationship between penetration and worse outcome.

Although it has been suggested that penetration or intercourse results in a more severe outcome, it has not been found that this is the primary method used during child sexual abuse. Finkelhor (1979b) found that most child sexual abuse consisted of touching and fondling the genitals. Only 5% of women in his sample reported intercourse as being the sexual experience they endured. Similarly, Fromuth (1986) reported that intercourse, as the means of sexual abuse for the victims in her study, was very rare. Harter, Alexander, and Neimeyer (1988) found in their study of 85 female undergraduate students (29 who had abuse histories) that of the 29 abused women, 6 reported being victims of abuse including intercourse, 8 reported abuse with genital fondling, and some

subjects (exact number not reported) stated their abuse consisted of fondling of the breasts, French kissing, or another seductive physical act. As a result of the low occurrence of abuse histories consisting of penetration or intercourse it may be difficult to examine the effects that this form of abuse has on the victim (Beitchman et al., 1992).

Disclosure of Child Sexual Abuse

Previous studies have reported that between 60 and 70% of boys and girls do not tell anyone about their sexual abuse experience (Finkelhor, 1979b). In a review of 11 studies, London, Bruck, Ceci, and Shuman (2005) reported that approximately two-thirds of the individuals who reported a history of child sexual abuse did not disclose their abuse to anyone. Other studies have examined the rate of disclosure specifically within a college population. Arrata (1998) found that only 31% of female undergraduate students reported their sexual abuse at the time of the experience; Tang (2002) found that only 38% of his sample of college students disclosed their abuse. In addition, London et al. (2005) reported that their examination of 11 studies found that overall only 11-18% of individuals who experienced child sexual abuse remember their experience(s) being reported to the authorities. In fact, many individuals report that their first time disclosing their sexual abuse experience was in the research study (Finkelhor, 1979; London et al., 2005).

There have been numerous theories proposed for why individuals who experience child sexual abuse do not disclose. Finkelhor (1979b) details how many children were afraid of being blamed for doing something wrong. One child responded, “it was a mixture of thinking that they wouldn’t believe me and being afraid that they would turn it around and blame it all on me” (p. 67). Unfortunately, Finkelhor (1979b) also points out

that many of these children's fears of how the disclosure will be handled are based in reality. One mother stated that her original response to learning about her daughter's sexual abuse was, "I wasn't going to believe any such thing about my husband" (p. 68). Many of the individuals who do not disclose their abuse also report that having to keep their experience silent and the stigma they felt was worse than the actual sexual abuse experience (Finkelhor, 1979b). Individuals who did disclose their sexual abuse experiences also reported that the reaction of their parents and authorities upon their disclosure caused chaos in their lives, and overrode the actual abuse experience (Finkelhor, 1979b).

As the research by Finkelhor (1979b) and others illustrate, whether or not the child victim is able to disclose their abuse experience(s) and the way in which parents and authorities handle the disclosure does appear to impact the victim. Specifically, children who do disclose their abuse and are received by an individual who responds in a supportive manner that portrayed to the victim that they are believed and not blamed appears to have less of a negative impact on the victim (Finkelhor, 1979b; London, 2005).

Gender

One of the basic assumptions about the effects of child sexual abuse was that it would result in equal harm for both males and females. In 1995, Jumper conducted a meta-analysis of 26 studies examining the relationship between child sexual abuse and later adjustment. While the majority of the samples examined contained female participants only (83%), the authors concluded that male and female sexual abuse victims did not differ in terms of their later psychological adjustment. Similarly, Rind and

Tromovitch (1997) examined data from 7 female and male national probability samples to examine the long-term impact of sexual abuse. The authors found that the effect sizes for both genders in long term outcome was small, and that there was no significant difference between the genders on outcome. Both of these meta-analyses lent support to the notion that sexual abuse is experienced equally for males and females.

However, current research suggests that there is a gender difference in the effect of child sexual abuse; females report more symptoms and negative views about their sexual abuse experiences compared to males (Rind, Tromovitch and Bauserman, 1998; Ulrich, Randolph, and Acheson, 2006). In addition, gender differences have been found in children's disclosure after an occurrence of child sexual abuse. Because of the importance of how disclosure is handled and other characteristics surrounding the abuse experience (see Kendall-Tackett et. al., 1993 for a review) on the impact of child sexual abuse, gender differences in the ability to disclose could also result in differences in the effects of child sexual abuse. Allagia (2005) examined differences in male and female adult perceptions and beliefs about disclosing their childhood sexual abuse. The results of the qualitative interviews suggested that males are often hesitant about disclosure due to fear of being labeled homosexual or a victim. However, females reported being hesitant about disclosing their sexual abuse due to feeling responsible and being fearful of being blamed.

Recently, the long held assumption that child sexual abuse is an equivalent experience for males and females has begun to lose support in scientific research. Because of the possible effect that gender has on the impact of child sexual abuse, examining its relationship with the long-term adjustment of college students is warranted.

THEORETICAL UNDERSTANDING OF THE LONG TERM EFFECTS OF CHILD SEXUAL ABUSE

While characteristics of the abuse have been identified as having a relationship to the outcome of a child sexual experience, fewer studies have examined what variables outside of the abuse situation influence the long-term adjustment of individuals who experience child sexual abuse. A review of the Ecological model of human development (Bronfenbrenner, 1979) provides a framework for understanding what other variables could be related to the long-term development of an individual who experienced child sexual abuse (and all individuals regardless of their abuse history).

Ecological Model of Human Development

In 1979, Urie Bronfenbrenner first proposed the ecological model of human development. This model is an attempt to explain what affects the course of human development; it has also been used to explain how adverse events can effect the development of children and adults (Grauerholz, 2000). In this model, an individual is a part of a series of settings, or ecosystems, that interact with each other and influence the developing child (see diagram 1). At the center of this model is the child. The system that most immediately affects the child is called the microsystem and includes families, religious settings, classrooms, and friends. Typically, interactions occur amongst these different microsystems (e.g., parents talking to teachers, families attending church) and those interactions also influence the developing child. The interaction of these different microsystems is called the mesosystem.

The next system that influences the child is called the exosystem. The exosystem includes the external systems that exist in our society, such as schools, health agencies,

communities, and the mass media. The last system that Bronfenbrenner (1979) proposed affected the child was the macrosystem. The macrosystem includes all other influences including cultural values, politics, economic patterns, and social conditions.

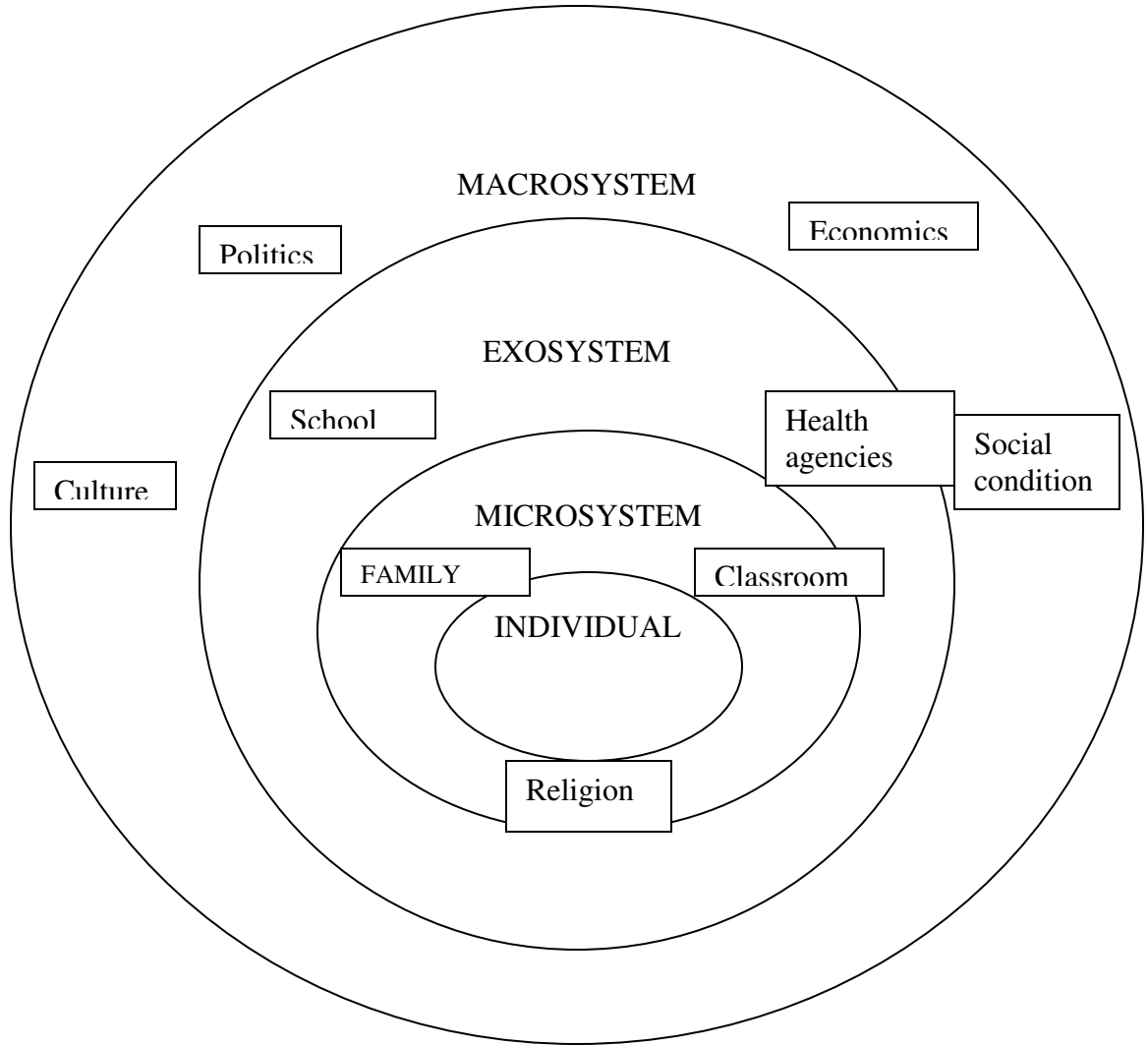
Based on Bronfenbrenner's model, a developing child will be influenced by all of these different domains and it is through these interactions that a child's long-term adjustment is determined. The ecological model has been used to explain a variety of problems in adulthood. For example, Harvey (1996) used the ecological model in an attempt to explain trauma and trauma recovery. She stated that it was the complex interactions of individual, environment, and experiences that explained the variability in resiliency and posttraumatic responses. In order to achieve greater success, trauma interventions and treatments should be aimed at all levels of the individual's ecological system.

Using Bronfenbrenner's ecological model in order to understand the long-term adjustment of child sexual abuse victims provides a framework for understanding what variables in the child's life may interact with the abuse experience to affect their adjustment as adults. Then, just as Harvey (1996) recommended, mental health practitioners can begin to focus interventions on the variables found to aid in child sexual abuse victim's resiliency.

The Cumulative Model

As the ecological model proposes, there are numerous factors in an individual's life that will affect their development. The cumulative model also states that it is the accumulation of these risk factors across a wide range of settings, rather than a single

Diagram 1. Bronfenbrenner's Ecological Model of Development



factor, that is important in determining the risk of adverse outcome. Along the same lines, it would then be the accumulation of these protective factors across a wide range of settings that would be important in determining the likelihood of resiliency. Rutter's (Rutter, Tizard, & Whitmore, 1970) cumulative stress hypothesis states that it is the number of risk factors across a variety of domains, not a single factor, that is important in determining the risk of an adverse result. Rutter et al. found that the presence of a single risk factor did not increase the chances of a later adverse outcome, while the presence of multiple risk factors did increase the chance of an adverse outcome.

Using both Brofenbrenner's (1979) ecological model of development and Rutter's cumulative stress hypothesis (1970), it is proposed that the presence of specific factors within the individual, the individual's family, and the individual's community will affect the child sexual abuse victim's long term adjustment and that the number of risk versus protective factors will be related to the likelihood of an adverse outcome.

REVIEW OF MODERATOR VARIABLES

Using the ecological model, there are numerous potential moderating factors for child sexual abuse. At the individual level, factors such as attributional style (pessimistic vs. optimistic) should be considered. At the next level, the microsystem, factors such as family environment and functioning (e.g., levels of adaptability and cohesion within the family) and social support (e.g., perceived level and satisfaction of familial and friend support) are considered to have an effect on the development of the individual. Within the exosystem, factors such as the existence of treatment interventions and socioeconomic status would also have relevance, while the macrosystem would include the individual's ethnicity. In the current study, only variables at the individual level (i.e., attributional style) and the microsystem (i.e., family environment and functioning and social support) level will be examined due to limited sample size and characteristics. A review of these different factors will provide an understanding of their possible relation to the long-term adjustment of child sexual abuse victims. However, it is important to note that relatively few published studies have examined moderating effects in the long-term adjustment of child sexual abuse victims.

Attributional Style

There has been extensive research examining the role of children's attributional style in relation to their short-term outcomes following sexual abuse. Kolko & Feiring (2002) highlight the two main reasons that research has extensively focused on children's attributions following a sexual abuse experience. First, trauma and abuse are considered to change the child's basic assumptions about the self, others and social relationships. Secondly, children's attributions are accessible and can be modified through treatment.

Celano, Hazzard, Campbell, & Lang (2002) point out that mental health practitioners have been including individual's attributions about their experiences in case formulations and treatment plans for quite some time.

Since the importance of attributions about events has been recognized for quite awhile, a clear definition and conceptualization of attributional style has been developed. Generally, an attribution can be defined as "individual's causal explanations for why events occur." (Kolko & Feiring, 2002, p. 6). However, to assist the use of attributional style as a means of predicting or understanding behavior, dimensions have been defined along which attributional styles differ. One model, the reformulated learned helplessness model (RLHM), states that attributions about events can be classified along three dimensions. The first dimension is internal-external; does the individual attribute the cause of the event as the self or as others or actual circumstances? The second dimension is stable-unstable; does the individual view the situation as constant over time or as changeable? The third and final dimension is whether the attributions are global or specific; does the individual view things the same across situations or as being different according to the situation? (Kolko & Feiring, 2002).

Based on the RFLM model of attributions, individuals who view their sexual abuse experiences as having an internal cause, as being stable over time and as being global across situations will likely have a worse outcome. Valle and Silovsky (2002) summarized the findings from numerous studies examining the relationship between attributional style and depression, Posttraumatic Stress Disorder (PTSD), social and relationship problems, and externalizing behavior problems in individuals who have experienced sexual abuse. In general, strong relationships were found for individuals

who had an internalizing attributional style and higher levels of depression, more internalizing problems, and more problems in adult interpersonal relationships. However, a weak relationship was found for internal attributions and PTSD, although indications are that individuals who make internal attributions about the cause of their sexual abuse report more PTSD symptomatology. Interestingly, it appears that the use of external attributions was found to have a relationship with externalizing behavior problems. Specifically, children who used angry coping styles, including blaming someone, yelling, and getting mad, were found to have higher teacher ratings on scales of depression, anxiety, social problems, and behavior problems (Valle and Silovsky, 2002).

Feiring, Taska, and Chen (2002) examined the attributions of 80 children and 57 adolescents after their sexual abuse experience (within 8 weeks) and then again 1 year later. Specifically, the participants were asked why they believed the abuse occurred, they rated both internal and external attributions about the abuse and about everyday events, completed scales measuring shame about the abuse, and measures examining depression, PTSD, and self-esteem. Feiring et al. (2002) found that those children who had internal attributions about their sexual abuse also had higher levels of symptoms, and in particular PTSD symptoms. These results add to the growing body of evidence that children who have internal and pessimistic attributions about their sexual abuse experience are more likely to have higher levels of symptomatology.

Overall, research appears to support that having a pessimistic attributional style is associated with depression and PTSD (Gladstone & Kaslow, 1995; Joseph, Yule, & William, 1993; Peterson et al., 1995; Sweeney, Anderson, & Bailey, 1986). A pessimistic attributional style is defined as having internal, stable and global attributions for negative

events, while having an external, unstable, and specific attributions for positive events (Valle & Silovsky, 2002). In addition, Feiring et al. (in press: as cited in Valle & Silovsky, 2002) found that attributional style did moderate the relationship between the severity of the sexual abuse and the individual's self-esteem or depression. In addition, the researchers report that changes in attributional style were related to better adjustment over time.

These results highlight the importance for research examining the relationship between attributional style and the long-term effects (i.e., presence of trauma symptomatology; as measured by the Trauma Symptom Inventory) of child sexual abuse. Based on previous research, it is hypothesized that adults with a pessimistic attributional style and a history of child sexual abuse will score worse on a measure of trauma symptoms (e.g., Trauma Symptom Inventory) than adults with a history of child sexual abuse and a more optimistic attributional style or adults with no history of child sexual abuse. In addition, the analysis will include abuse characteristics in order to examine the variance attributed to attributional style beyond its shared variance with the abuse characteristics. No known published studies have examined all of these variables together.

Family environment

The findings by Rind et al. (1998) and Ulrich et al. (2006) highlight the importance that family environment characteristics have on the long-term outcome of child sexual abuse victims. Both of these meta-analyses found that family environment (defined only by measures used to assess the construct) accounted for more of the variance in college students' long-term psychological adjustment than the child sexual

abuse experience itself. Other studies have shown that child sexual abuse victims report lower levels of psychological health within their family compared to those without a history of child sexual (Alexander & Lupfer, 1987; Herman, 1983; Russell, 1986).

Swantson, Plunkett, O'Toole, Shrimpton, Parkinson, & Oates (2003) followed 103 children who presented at the Child Protection Unit at 2 hospitals in Sydney, Australia for a period of nine years. The researchers examined the adjustment of the children over the time period, in addition to examining the relationship of other factors (e.g., family functioning, SES, treatment) in the children's lives to their abuse. In relation to family functioning, Swantson et al. found that those children with a history of child sexual abuse had families that were rated as less well functioning and as having parents that were described as more overprotective. The authors state that 31% of the families of abused children were considered to be functioning extremely poorly, and that it is likely that the family functioning contributed to the children's outcomes.

Kendall-Tackett, Williams, and Finkelhor (1993) performed a well-cited review of 45 studies examining the impact of child sexual abuse. In their review, the authors specifically looked at the impact that family environment and functioning had on the outcome of child sexual abuse victims. Their review highlighted the characteristics of families that appear to be related to quicker recovery and less symptoms in children who experienced child sexual abuse. Specifically, maternal support was related to quicker recovery, with maternal support being defined as believing the child's disclosure and acting in a protective manner. In addition, children who had the least symptoms after their abuse experience also had mothers who were supportive and families who had less strain, less enmeshment, and less expressions of anger.

Although family environment can be defined in many different ways, a common method of examining and conceptualizing family environment is using the Circumplex Model of Marital and Family Systems (Olson, 2006). This model has three key components in understanding family functioning: cohesion, flexibility, and communication. This breaks family functioning down into two parts: family adaptability and family cohesion. Cohesion is an estimate of the emotional bond between family members. Flexibility is defined as, “the quality and expression of leadership and organization, role relationships, and relationships rules and negotiations” (Olson, 2006, p. 3). Communication looks at the amount of positive communication that exists within the family. The communication dimension has an impact on both cohesion and flexibility, in that it allows for alterations of these dimensions (Olson, 2006).

The Circumplex model assumes that healthy family functioning involves balanced levels of cohesion and flexibility, while extreme levels of these dimensions lead to problematic family functioning (Olson, 2006). A measure that has been shown to adequately assess families using the Circumplex model is the FACES-IV (Olson, Gorall, Tiesel, 2004). This measure examines both the balanced (i.e., healthy) and unbalanced (i.e., problematic) dimensions of family functioning. The FACES-IV provides information in terms of six potential family types: balanced, rigid, rigidly cohesive, midrange, flexibly unbalanced, chaotically disengaged and unbalanced. The balanced family type is considered to be the healthiest, while the chaotically disengaged type is the most problematic (Olson, 2006). While the FACES-IV has just recently been published (i.e., 2006), research has examined the FACES-III and suggests that it does adequately assess family functioning, and is capable of differentiating between healthy family

functioning and unhealthy family functioning (e.g., alcoholism, depression) (Place et al., 2005).

While family functioning has been widely researched in the area of child sexual abuse, the majority of this research has focused on its relationship to the short-term outcomes of child sexual abuse victims. Utilizing a college population allows for a review of the relationship between family functioning and the long-term adjustment of child sexual abuse victims. Based on previous research, it hypothesized that adults with a history of child sexual abuse and a family described as having extreme levels of adaptability and cohesion (as measured by the FACES-IV) will score worse on a measure of trauma symptomatology (e.g., TSI) than those adults with a history of child sexual abuse and a family with a balance of adaptability and cohesion (e.g., moderate scores on the FACES-IV) or adults with no history of child sexual abuse. Again, abuse characteristics will be held constant in the regression analysis in order to help isolate the relationship of family environment to trauma symptomatology.

Social Support

Social support has been consistently found to be a protective factor against numerous forms of abuse; lack of social support has been found to be a risk factor for different forms of abuse (Barnett, Miller-Perrin, & Perrin, 2005). Social support is defined as, “the existence or availability of people on whom we can rely, people who let us know that they care about, value, and love us” (Sarason, Levine, Basham, & Sarason, 1993, p. 127). Social support can also be considered to have two core elements: (1) the perception that a sufficient number of other people are there for you in times of need, (2) satisfaction with the support that you have. Individuals who report satisfactory social

support appear to have higher self-esteem and a more optimistic view of life compared to those who report low social support. In addition, individuals with low social support appear to have an external locus of control (i.e., feeling that things are beyond their control), have considerable dissatisfaction with their life, and difficulty persisting through difficult tasks (Sarason et al., 1993).

Tremblay, Hebert, and Piche (1999) examined the mediator role that coping strategies had on children's outcome following a sexual abuse experience. Their results indicated that children who felt supported by their parents had fewer behavioral difficulties and higher feelings of self-worth. Peer support was not found to have an effect on the outcome of the children. Tremblay et al. state that the individual's perception of family support was found to play a "crucial role" in the experience of child sexual abuse.

Spacarelli and Fuchs (1997) examined 48 females who were referred for therapy after disclosing a sexual abuse encounter for risk factors of internalizing and externalizing behavior problems. Their results indicate that children who perceive themselves as having low support from the nonoffending parent have more internalizing problems. The researchers state that social support appears to be a "key one [variable]" (p. 32) in the outcome of child sexual abuse victims. Their research adds to the growing body of evidence that social support (e.g., perceiving that you have social support and being happy with that support) acts a protective factor for those who experience child sexual abuse.

Murthi and Espelage (2005) examined the moderating effect of social support on the long-term outcome of child sexual abuse victims. One hundred and sixteen college

aged women who had histories of child sexual abuse completed questionnaires assessing their sexual abuse experiences and a measure of loss. Specifically, loss was defined along three dimensions, (a) loss of optimism (e.g., loss in ability to dream about future), (b) loss of self (e.g., feeling lost and helpless), and (c) loss of childhood (e.g., growing up too fast). Their results indicate that college students who report a history of child sexual abuse and report a supportive family have fewer losses than child sexual abuse survivors who report less familial support. Perceived social support from friends also had a moderating relationship for college women with histories of child sexual abuse.

Other studies have found a difference in outcome for support from friends compared with support from family. Rosenthal, Feiring, & Taska (2003) examined emotional support and children's adjustment in the year following the disclosure of sexual abuse. Rosenthal et al. found that children had the best outcomes with support from family, while adolescents had the best outcomes with support from friends. It is important to note that children and adolescents who experienced child sexual abuse reported less overall satisfaction with their social support compared to those who did not experience child sexual abuse. Their results also indicate that those with a history of child sexual abuse who reported being satisfied with their emotional support from parents also reported less depressive symptoms and higher self esteem, but did report higher sexual anxiety. Higher satisfaction with emotional support from friends was related to more depressive symptoms, lower self-esteem, and lower sexual anxiety. Rosenthal explain these findings in terms of developmental expectations. Specifically, support from parents is considered to be more stable and consistent after a traumatic event, so those individuals who rely more on friends for emotional support may not be receiving the same levels of

support. The work of Rosenthal et al. (2003) highlight the importance of parent's and caregiver's support in the time following the disclosure of sexual abuse.

Another study that utilized a college aged population, and therefore examined the long-term effects of child sexual abuse, examined the forms of social support that moderated the development of PTSD (Hyman, Gold, & Cott, 2003). One hundred and seventy two adult females with a history of child sexual abuse completed questionnaires assessing their social support and PTSD symptoms. Social support was defined in terms of four categories: (a) appraisal support (e.g., advice in coping with problems) (b) tangible support (e.g., availability of material resources to assist in coping), (c) belonging support (e.g., feeling connected to a group with common interests), (d) self-esteem support (e.g., other's communications that you are valued). The results of Hyman et al.'s work indicate that social support (as defined by the four aforementioned categories) accounted for 11.7% of the variance in PTSD prediction. Specifically, the presence of appraisal support and self-esteem support appear to increase the likelihood of healthy adjustment for child sexual abuse victims by decreasing symptom development.

Based on previous research, it is hypothesized that individuals with a history of child sexual abuse who also report having sufficient and satisfactory social support will have better long-term adjustment (i.e., little or no trauma symptoms; as measured by the TSI). Since relatively few studies have examined the long-term outcomes of child sexual abuse in relation to social support, studies utilizing college age populations can begin to add to the growing understanding of the long-term resilience of child sexual abuse victims. In addition, no published studies have examined the role of social support in the

long-term outcome of child sexual abuse victims, after partialing out the relationship of abuse characteristics and long-term effects of child sexual abuse victims.

PROPOSED EXAMINATION

Purpose of Current Research

As previously noted, to date there has been minimal research published that examines both potential moderators of the long-term effects of child sexual abuse and the effects of abuse characteristics. However, previous research has consistently shown that the abuse characteristics (i.e., relationship of offender to victim, severity of abuse, handling of the disclosure, and gender) have a relationship to the outcome of those who experience child sexual abuse. The current study attempted to address this gap in the research by examining numerous variables (i.e., attributional style, social support, family environment) that could potentially moderate the relationship between child sexual abuse experiences and the presence of trauma psychopathology in college populations. Specifically, this proposed model tested the relationship of the moderator variables after the effects of the abuse characteristics have been partialled out, in addition to examining the cumulative effect that both the moderator variables and abuse characteristics have on the presence of trauma symptoms. The variables that were explored in the current study were: attributional style (as measured by the Attributional Style Questionnaire; ASQ), family environment (as measured by the Family Adaptability and Cohesion Evaluation Scale; FACES-IV) and social support (as measured by the Social Support Questionnaire; SSQ). All abuse characteristics and demographic data were gathered using a modified version of Finkelhor's Sexual Abuse Questionnaire (Finkelhor, 1979b).

In order to measure long-term outcome, which is defined as the presence or absence of trauma symptomatology, the Trauma Symptom Inventory (Briere, 1995) was used in the current study. While multiple outcome measures have been used in child

sexual abuse (see Rind et al., 1998 for a review), research has supported the use of assessing psychopathology as a measure of adjustment (Chaffin, Silovsky, & Vaughn, 2005; Dallam et al., 2001). Chaffin et al. (2005) highlight numerous studies that have shown a relationship between child sexual abuse and psychopathology, specifically anxiety disorders and Posttraumatic Stress Disorder. In addition, trauma research has highlighted the relationship between trauma, including childhood sexual abuse, and the presence of trauma symptomatology (e.g., PTSD, depression, anxiety, anger). The Trauma Symptom Inventory is a self-report inventory designed to measure the presence of both acute and chronic trauma symptoms that result from rape, intimate partner violence, and childhood sexual abuse (including many other forms of trauma). It has been consistently shown to be an appropriate measure for assessing the sequelae of trauma (Briere, 1995)

This study attempted to identify those factors (e.g., abuse characteristics, individual characteristics, environmental characteristics) that can assist in explaining the variability seen in the long-term outcome of child sexual abuse victims. Research is beginning to highlight the resiliency of child sexual abuse victims (Bonanno, 2004, 2005; Ulrich et al., 2006), and identification of the factors in those individuals, who are resilient in the face of child sexual abuse can assist mental health practitioners, children, and families in alleviating the potential detrimental effects of child sexual abuse. Specifically, this study will allow for an examination of the influence of attributional style, social support, and family environment on the presence of trauma symptomatology *beyond* the effects that abuse characteristics have on the individuals' outcome. This will begin to

provide a picture of what variables are most highly correlated with the presence of long-term trauma symptomatology in college students who experienced child sexual abuse.

Hypotheses:

The hypotheses were as follows:

(1) There will be a difference in the presence of long-term trauma symptomatology of college students who have experienced child sexual abuse and those who have not. The difference will be minimal overall, but will indicate that those subjects without a history of child sexual abuse have fewer symptoms of psychopathology (as measured by the Trauma Symptom Inventory [TSI]) than those subjects with a history of child sexual abuse.

(2) For those reporting a history of child sexual abuse, the subjects' scores on measures of long-term psychological adjustment (i.e., presence of trauma symptoms measured by the TSI) will be correlated to the subjects' scores on the examined moderating variables (i.e., attributional style, family environment, social support). This relationship will exist after the abuse variables (i.e., type of abuse, severity of abuse, disclosure, gender, and presence of treatment intervention) have been held constant. Specifically, it is currently hypothesized that a better prognosis (as measured by scores on the TSI) will be related to:

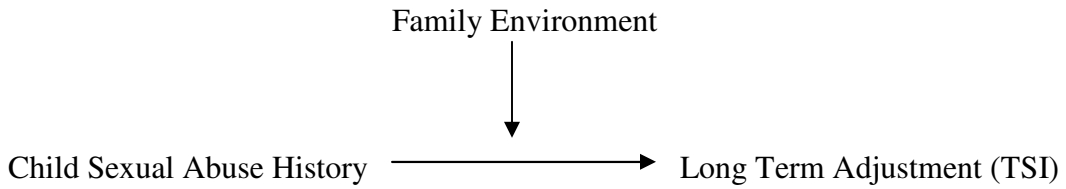
(a) An optimistic attributional style (i.e., attributions weighted more heavily to having an internal, stable, and global view of positive events), as measured by scores on the Attributional Style Questionnaire).

Attributional Style

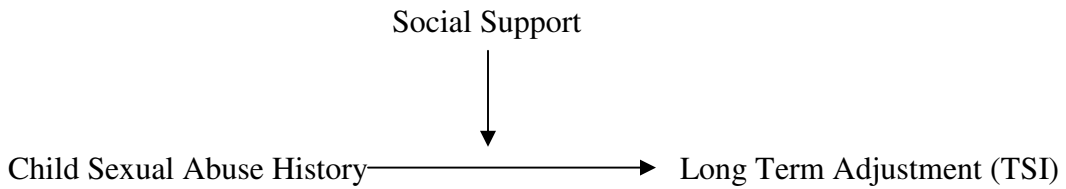


Child sexual abuse history → Long Term Adjustment (TSI)

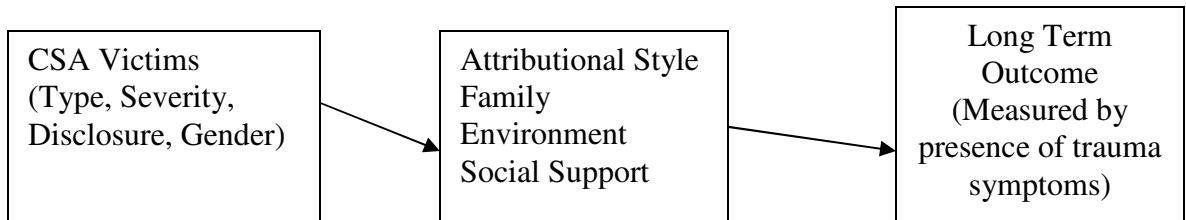
(b) A family of origin characterized by a balance of adaptability and cohesion, as evidenced by moderate scores on the FACES-IV.



(c) Perceived levels of sufficient parental and peer support, as measured by scores on the Social Support Questionnaire.



(3) Child sexual abuse victims who have a higher accumulation of risk factors (i.e., intra-familial abuse, severe form(s) of abuse, unsupportive reaction to disclosure, female gender, pessimistic attributional style, extreme levels of family adaptability and cohesiveness, and lack of perceived social support) will show less resiliency and worse outcomes than child sexual abuse victims with less risk factors (as measured by scores on the TSI).



METHOD

Participants

Undergraduates from the University of Montana volunteered to participate in this study through the Psychology 100 subject pool or by responding to campus posters advertising the study (see Appendix A). Subjects that volunteered to participate in the study via campus posters were entered into a pool to win fifty dollars (five subjects would be randomly chosen to receive fifty dollars); subjects who volunteered through the Psychology 100 subject pool received 2 course credits or were entered into the lottery. Both individuals with a history of sexual abuse and individuals without a history of sexual abuse were recruited. All subjects were treated in accordance with the “Ethical Principles of Psychologists and Code of Conduct” (American Psychological Association, 2002). For a medium effect size with alpha set a .05, a total of 168 participants were needed in order to have enough power to detect statistically significant differences (Cohen, 1988). This includes 84 participants that have histories of child sexual abuse and 84 participants that do not have histories of child sexual abuse. If over sampling was needed to obtain 84 participants who experienced child sexual abuse, 84 participants who did not experience child sexual abuse would be randomly drawn from the set of responses. It is important to note that due to the large number of variables and analyses used in this research, it is difficult to accurately the estimate statistical power needed to detect significant differences.

Measures

Demographic questionnaire (See Appendix C). A modified version of Finkelhor’s Sexual Abuse questionnaire (Finkelhor, 1979b) will be used to gain the

demographic information for this study (i.e., gender, therapeutic interventions), in addition to gaining the information pertaining to the sexual abuse experiences. The definition of sexual abuse used is broad; subjects are asked to report on sexual experiences that they had while growing up. These experiences could range from playing doctor to sexual intercourse (Finkelhor, 1979). In addition, a wide variety of information is gathered using this measure. The survey contains questions pertaining to all childhood sexual experiences with adults and children, incestuous sexual experiences, and coercive sexual experiences at all ages. The survey also gathers information pertaining to the participant's source of information about sex, discipline within the family of origin, and current sexual behavior. However, the original questionnaire has been modified to include only those questions that gather pertinent demographic data (e.g., gender, age, family demographics) and information pertaining to child sexual abuse experiences. Depending upon the participant's sexual abuse history this form could take anywhere from 10 minutes to an hour to complete. Participants could report up to 3 sexual experiences that they had as a child, but only the first reported experience will be used for the current research.

Psychological adjustment. The long-term psychological adjustment (i.e., presence of trauma symptomatology) of college students will be examined using the Trauma Symptom Inventory [TSI] (Briere, 1995). The TSI is a 100 -item self report measure that assesses the psychological effects of traumatic experiences, including rape, intimate partner violence, physical assault, childhood abuse, combat, major accidents, and natural disasters. The TSI has ten clinical scales that are used to test the wide range of psychological impacts of both acute and chronic trauma including, anxious arousal,

depression, anger/irritability, intrusive experiences, defensive avoidance, dissociation, sexual concerns, dysfunctional sexual behavior, impaired self-reference, and tension reduction behavior. The TSI also contains three validity scales, response level, atypical response level, and inconsistent response, that aim to detect respondents who deny the most commonly reported symptoms, respondents who endorse a unlikely amount of symptoms, and respondents who respond in an inconsistent fashion. The measure takes about 20 minutes to complete, with each respondent being asked to report how often each symptom has occurred within the last 6 months on a Likert-scale (0 means never occurred to 3 which means often occurs) (Briere, 1995).

The TSI was normed on a nationwide population that was randomly sampled based on geographical location of registered owners of automobiles and/or individuals with listed telephones. This survey process produced 836 responses that were used in the normative analyses. The mean age of the respondents were 47.3 years, and an equal number of males and females responded. The normative sample provided the following profile of traumatic experiences: child abuse and other forms of assault (men 31 %; women 43.3%), childhood noninterpersonal trauma (e.g., disasters; men 9.5%; women 10%), intimate partner violence (men 34.3%; women 43.6%), and adult noninterpersonal trauma (e.g., disasters; men and women 41%). The TSI is standardized based upon both age and gender, which was indicated by analyses of the normative data (Briere, 1995).

Analyses of both reliability and validity of the TSI within the normative sample have shown acceptable reliability and validity for the ten clinical scales and three validity scales. Reliability coefficients for the clinical scales ranged from .74 to .91, while reliability coefficients for the validity scales were .80, .75, and .51. Follow up studies on

the reliability of the TSI within a university sample, a clinical sample, and Navy recruit sample also showed relatively high reliability. Of particular importance in the current study is the University sample, which consisted of 279 males (99) and female (180) university students with a mean age of 28 years. The reliability of the clinical scales ranged from .69 to .90, with a mean reliability of .84 (Briere, 1995).

The validity of the TSI clinical scales was also examined in the normative sample and the university sample. The TSI's ability to accurately diagnosis the occurrence of PTSD in the respondent was found to be high, with the correct prediction occurring about 91% of the time. The TSI was found to accurately predict Borderline Personality Disorder about 82% of the time. Incremental validity of the TSI was also shown to be acceptable when compared with Brief Symptom Inventory, Impact of Event Scale, and the Symptom Checklist (Briere, 1995). Briere also highlights that the TSI has shown sufficient convergent and discriminant validity when compared with the Personality Assessment Inventory, the Minnesota Multiphasic Personality Inventory-2, Brief Symptom Inventory, and a posttraumatic stress scale.

The data provided by Briere (1995) in reference to the normative data and reliability and validity of the TSI provide support for the use of this measure in research examining the presence of trauma symptomatology of child sexual abuse victims within a college population. Table 2 provides information about each outcome variable that is on the TSI.

Attributional Style. The Attributional Style Questionnaire (ASQ; Peterson et al., 1982) will be used to determine the subjects' thoughts regarding the causes of both negative and positive events. The questionnaire contains 12 hypothetical situations that

Table 2

Description of Outcome Variables as measured by the Trauma Symptom Inventory

Outcome Variable	Description
Anxious Arousal (AA)	Symptoms of anxiety and autonomic hyperarousal, hyperalertness and hypervigilance. Generalized anxiety and panic attacks may occur.
Depression (D)	Symptoms of depression and depressed mood. Frequent feelings of sadness, hopelessness, worthlessness, suicidal thoughts.
Anger/Irritability (AI)	Symptoms of anger and irritability in feelings, thoughts, and behaviors. Possible aggressiveness towards others.
Intrusive Experiences (IE)	Symptoms of posttraumatic reactions, including flashbacks, nightmares, and upsetting memories. These symptoms are usually ego-dystonic.
Defensive Avoidance (DA)	Symptoms of avoidant behavior, aimed at assisting individuals in avoiding negative thoughts or memories and negative emotions. May indicate the use of cognitive and behavioral avoidance in order to manage posttraumatic symptoms.
Dissociation (DIS)	Symptoms of dissociation, including cognitive disengagement, depersonalization, derealization, out of body experiences, and emotional numbing.
Sexual Concerns (SC)	Symptoms of sexual distress and dysfunction, including sexual dissatisfaction, negatives sexual experiences, confusion about sexual issues, sexual problems in relationships, shameful thoughts regarding sexual activities.

Description of Outcome Variables as measured by the Trauma Symptom Inventory

Outcome Variable	Description
Dysfunctional Sexual Behavior (DSB)	Reports of dysfunctional or problematic sexual behavior, including indiscriminate sexual contact, trouble resulting from sexual behavior, using sex as a coping mechanism, sexual attraction to potentially harmful individuals. May indicate sexual risk taking behavior and/or engagement in unsafe sexual practices.
Impaired Self-Reference (ISR)	Symptoms associated with inadequate sense of self and personal identity, including difficulty in discriminating one's needs from those of others, confusion about identity or life goals, internal sense of emptiness, difficulty resisting demands of others, and a need for other's to provide direction.
Tension Reduction Behavior (TRB)	Behaviors that individuals engage in order to modulate, avoid, or soothe negative internal states, including suicidal ideation, aggression, inappropriate sexual behavior, and self-mutilation.

Information taken from *Trauma Symptom Inventory: Professional Manual* (Briere, 1995).

the subject is asked to determine the cause of, and then rate the cause along three dimensions internal-external, global-specific, and stable/unstable. There are two possible outcomes for each event, either positive or negative. Higher scores on this measure indicate that the individual has internal, stable, and global attributions, while lower scores indicate that the individual has external, unstable, and specific attributions. An individual is an optimist if their total score for negative events is low and their global score for positive events is high; an individual is a pessimist if their global score for negative events is high and their global score for positive events is low.

Peterson, Semmel, von Baeyer, Abramson, Metalsky, and Seligman (1982) provided information on the psychometric properties of the Attributional Style Questionnaire. Overall, the internal reliability of the composite scales for good events was .75, while the composite scales for bad events was .72. The mean internal reliability of the internal, stable, and global scales was .54, with a low of .44 and a high of .69. In addition, the authors report that the ASQ has sufficient construct, criterion, and content validity.

Higgins and Hay (2003) used two hundred and eighteen Canadian undergraduates to assess whether the Attributional Style Questionnaire actually measured the types of causes that individuals use to explain events, and in particular, negative events. The authors concluded from their research that the Attributional Style Questionnaire does adequately and appropriately measure the ways that individuals view events in their life. In addition, Corr and Gray (1996) found that the Attributional Style Questionnaire had a replicable internal structure, and that it was correlated with general personality. This

research provides support for the use of the ASQ as measure to assess attributional style within a college student population.

Family Environment and Functioning. The Family Adaptability and Cohesion Evaluation Scales (FACES-IV) (Olsen, Gorall, & Tiesel, 2005) will be used to assess the participants' views of their family of origin's cohesion, flexibility and level of functioning. The FACES-IV provides information about many different facets of family functioning (e.g., cohesion, flexibility, communication), in addition to providing a total family score that provides an estimate of the overall health of the family functioning. The higher the score is above 1, the more healthy the family system and the lower the score below 1, the more unhealthy the family system. Using the Circumplex Model, family health is defined as balanced levels of family cohesion and flexibility. Cohesion is defined as "the emotional bonding that family members have toward one another" (p. 3), and flexibility is defined as "the quality and expression of leadership and organization, role relationships, and relationships rules and negotiations" (p. 3; Olson & Gorall, 2006). The total family score, which is the ratio of the levels of cohesion and adaptability in the family, will be used in the current research as the index of family functioning.

Since the FACES-IV has just recently been published, there are not a large number of published studies that utilized the FACES-IV. However, previous versions of this measure have been widely used in research examining the structure and functioning of families. Rodick, Henggeler, and Hanson (1986) examined the ability of the FACES-III to discriminate between delinquent and nondelinquent families. A total of 58 mother and son pairs (from father absent homes) participated in the study. Delinquent families were families in which the son was a juvenile offender, while the nondelinquent families

had sons who had no history of arrest or psychiatric referrals. The authors found that the FACES-III was able to significantly differentiate between delinquent and nondelinquent families.

Williamson, Borduin, and Howe (1991) utilized the FACES-III in research examining differences between abusive mothers and their abused adolescents and a comparison group who has not been abused. The results show that the abused mothers did not differ significantly from the nonabusive mothers on the scales of adaptability or cohesion. However, the abused adolescents did score significantly lower than the nonabused adolescents on both the adaptability and cohesion scales. Both of these studies illustrate the use of the FACES-III with abused populations and its ability to significantly discriminate between abused and nonabused populations.

Gorall, Tiesel, and Olson (2006) provided development and validation information pertaining to the FACES-IV. The sample used for the normative data for the FACES-IV was an undergraduate population sampled from junior level family systems and diversity university courses. The average age of the sample was 28, while the median was 22. The authors conducted an alpha reliability analysis to determine the internal consistency of the six scales of the FACES-IV. The reliability estimates for the six scales were: (1) disengaged= .87, (2) enmeshed= .77, (3) rigid=.83, (4) chaotic=.85 (5)balanced cohesion=.89, (6)balanced flexibility=.80. The analysis for the validation scales also showed acceptable reliability, with a range of .91 to.93 (Gorall et al., 2006).

Gorall et al. also conducted discriminant analyses to determine the ability of the FACES-IV to discriminate between problematic and healthy families. They reported that the range of correct placement ranged from 55% to 94%, with an average of 78%. It is

also reported that the FACES-IV was found to have acceptable content, criterion, and concurrent validity. Content validity was based on the development of the scales resulting from the review and ratings of family therapists. Criterion validity was illustrated through factor analysis of items. Concurrent validity is supported by the fact that the FACES-IV is found to be correlated with other measures of family functioning (Gorall et al., 2006). Overall, the FACES-IV has been shown to have adequate reliability and validity for use with college populations.

Social Support. The Social Support Questionnaire (SSQ; Sarason, Levine, Basham, & Sarason, 1983) will be used to assess the amount of social support that the subjects received and their satisfaction with that support. The scale includes 27 specific scenarios in which subjects are asked to indicate which individuals would be able to support them in that situation and to rate how satisfied they are with their level of support for that situation. Examples of questions from the SSQ are, “whom can you really count on to listen to you when you need to talk?” and, “whom could you really count on to help you out in a crisis situation, even though they would have to go out of their way to do so?” Two scores are yielded with this measure, a index of the number of individuals in the social support network and the respondent’s satisfaction with that social support.

Sarason et al. (1983) provide information on five studies that utilized the Social Support Questionnaire and provided information on its’ psychometric properties. One study used 602 undergraduate students from the University of Washington. The results illustrated that the SSQ had sufficient reliability, with an alpha coefficient of .97 for internal reliability. In addition, the test-retest reliability was found to be sufficient (.90 for the mean number of social supports and .83 for the satisfaction scores.

Numerous studies have utilized the Social Support Questionnaire. For example, Banyard and Cantor (2004) examined the adjustment of trauma survivors during their first year of college. They were attempting to explain some of the variance in adjustment of college students who have survived a traumatic event. The researchers reported a Cronbach's alpha of .90. The results also showed that satisfaction with social support did significantly account for some of the variance in the adjustment of the trauma survivors. Overall, Banyard and Cantor state that those trauma survivors who perceived themselves as having adequate social support appear to be more resilient. This research also provides support for the use of the SSQ as a measure of social support within a college population that has experienced a trauma.

The questionnaires will be counter-balanced such that every possible ordering of questionnaires will be used. This will aid in decreasing any order effects that may result from the questionnaire packet.

Procedure

Subjects who volunteered to participate in the study were run in groups of eight in the Skaggs Building Room 246 on The University of Montana campus. The subjects each had a private room in which to complete the questionnaire packet. If Skaggs 246 was unable to be reserved, alternative arrangements were made on the University of Montana campus so that one subject could be run at a time. Subjects first signed a consent form (see Appendix B) and received a copy of the consent form (if they wanted) and a referral sheet with the appropriate mental health resources, should the need arise. They were then given the questionnaires and an envelope to place their answers in when completed. This maintained total anonymity for the participants. The total time needed to complete the

questionnaires was about an hour and a half to two hours (depending upon whether the participant reported an experience of child sexual abuse or not). All subjects were given the primary researcher's contact information. In addition, the following questions were asked of every participant, "do you feel distressed in any way after completing the questionnaires," and "do you feel that you are able to leave without needing any psychological consultation regarding your participating in this study?" The primary researcher was there to assist any participant that reported feeling distressed during the study, and Dr. Christine Fiore was available by phone for consultation if needed.

DATA ANALYSIS

Hypothesis I

In order to test hypothesis I, regarding the differences between sexually abused populations and non-abused populations in their long-term adjustment (defined as the presence or absence of trauma symptomatology), a one-way ANOVA was run. A Bonferroni correction was also used to correct for the high number of analyses being conducted. In addition, an effect size was calculated to examine the amount of variance in the long-term outcome that is explained by the child sexual abuse experience. The effect size was computed using ES: A Computer Program for Effect Size Calculation (Shadish, Robinson, & Lu, 1999).

Hypothesis II

A hierarchical multiple regression was utilized to test the moderating effect of the proposed variables (i.e., attributional style, family environment, and social support) on the long-term outcome of college students (i.e., presence of trauma symptoms; scores on the ten TSI clinical scales). In addition, all four abuse characteristics (i.e., type of abuse, severity of abuse, disclosure, and gender) were entered into the regression equation. The proposed moderator variables were considered to be moderators if the participants' scores on the TSI clinical scales change as a function of them (Baron & Kenny, 1986; Jaccard et al., 2006). Separate regressions were run for attributional style, sexual abuse specific attributions, family environment, and social support with the outcome variables (ten clinical scale scores from the TSI), totaling 40 hierarchical multiple regressions. In the first step, the variables that have been previously identified as having a significant relationship with the long-term outcome (i.e., abuse characteristics) were entered. Next,

scores for attributional style, family environment, or social support were entered (see Table 3 for information about the moderator variables and abuse characteristics). These regression analyses allowed for an examination of the proportion of variance that can be attributed to one predictor variable after the variance for other predictor variables are accounted for (i.e., examine the variance explained by attributional style after the abuse characteristics have been accounted for).

Hypothesis III

In order to test the cumulative effect of the proposed variables (i.e., both moderator variables and abuse characteristics) on the long-term adjustment of college students, a direct multiple regression was conducted. All of the identified variables were entered into the regression equation simultaneously in order to examine the amount of variance examined by each individual variable after the shared variance of variables has been taken into consideration. In addition, the amount of variance explained by the entire model was calculated.

Table 3
Description of Predictor Variables Used in Analyses

Predictor Variable	Description
Total Attributional Style	Pessimistic versus Optimistic attributional style; Higher scores indicate optimistic attributional style and lower scores indicate pessimistic attributional style
Total Family Health	Balanced level of family adaptability and cohesion; Scores higher above 1 indicate more healthy family functioning and scores lower than 1 indicate problematic family functioning
Social Support Satisfaction/Number	Reported satisfaction with current social support and the number of individuals considered part of their social support network
Sexual Abuse Specific Attribution	Participants self report on a scale of 1 to 7 measuring whether the cause of their sexual abuse experience was due to them or other people/circumstances
Gender of Victim	Female or male gender of college student
Relationship to offender	Whether the perpetrator was a stranger, a known person but not a friend, or a friend (extrafamilial abuse) or the perpetrator was a family member (intrafamilial abuse)
Disclosure	Whether or not the victim disclosed the sexual abuse experience to anyone and whether the response was supportive (on a scale of 1 to 7)

Description of Predictor Variables Used in Analyses

Predictor Variable	Description
Severity of Abuse	<p>A range of abusive experiences with the following scale (1 being least severe and 7 being most severe):</p> <ol style="list-style-type: none">1. Invitation or request to do something sexual2. Kissing or hugging in a sexual way3. Sexual organs being shown by perpetrator or victim4. Fondling by perpetrator or victim5. Touching of sexual organs by perpetrator or victim6. Intercourse without penetration7. Intercourse with penetration

RESULTS

Participants

A total of 184 participants completed the study, with 110 participants reporting at least one incident of child sexual abuse and 74 participants reporting no history of child sexual abuse. There were 51 males and 133 females. All participants were recruited through the University of Montana Psychology Department Subject Pool and completed the questionnaires in a private room in Skaggs 246. All participants chose to receive 2 research credits for their participation instead of participating in the lottery. As such, no lottery drawing was held. The age range of participants was 18 years of age to 52 years of age, with a mean age of 20 years. A total of nine participants were not used in the analyses due to having an incomplete outcome measure (TSI). In addition, out of the 44 participants who did disclose their child sexual abuse, only 41 of these participants provided information about whether their disclosure was handled supportively; as such, the response to disclosure was not able to be examined in the current study due an insufficient sample size.

Sexual Abuse Experiences

Of those participants who reported a history of sexual abuse, 73% of the experiences were classified as extra-familial abuse, meaning that the perpetrator was a known person but not a family member, or a friend. Fourteen percent of the sexual abuse experiences were classified as intra-familial abuse, meaning that the perpetrator was a family member. No participants reported that the perpetrator of their child sexual abuse was a stranger. The youngest age of victimization reported in the current study was 3 years old, and the oldest age of victimization reported was 18 years. Overall, the mean

age of victimization was 9 and half years old (see Table 5). The severity ratings of the child sexual abuse experience ranged from requests to do something sexual to sexual intercourse with penetration, and participants could report more than one type of experience. Specifically, 28% of the participants reported only one type of sexual experience, while 72% of the participants reported experiencing more than one type of sexual interaction. Three percent reported that they received a request to do something sexual, 8% reported kissing or hugging in a sexual way, 11% reported exposing themselves or having someone expose themselves, 9% reported experiencing sexual fondling, 14% reported experiencing sexual touching, 3% reported experiencing intercourse without penetration, and 11% reported experiencing sexual intercourse with penetration (see Table 4).

Hypothesis I

The results of the one-way ANOVA with a Bonferroni correction are listed in Table 4. On the Trauma Symptom Inventory, four of the ten clinical scale scores of college students who experienced child sexual abuse (n=110) were significantly different from the scores of college students who did not experience child sexual abuse. The significant clinical scale scores were depression, anger/irritability, intrusive experiences, and dysfunctional sexual behavior. The effect sizes are small according to Cohen's guidelines, which indicates that small effect sizes are .2, medium effect sizes are .5 and large effect sizes are .8 and above. Child sexual abuse explained 3% of the variance in depression, 4% of the variance in anger/irritability, 2% of the variance in intrusive

Table 4.

Summary of Sexual Abuse Experiences

Type of Sexual Abuse Experience	N	Frequency	%
Invitation or request to do something sexual	110	52	47
Kissing or hugging in a sexual way	110	52	47
Another person showed you his/her sex organs	110	62	56
You showed your sex organs to another person	110	47	42
Another person fondled you in a sexual way	110	51	46
You fondled another person in a sexual way	110	32	29
Another person touched your sex organs	110	44	40
You touched another person's sex organs	110	37	34
Intercourse, without penetration	110	15	14
Intercourse, with penetration	110	21	19

Table 5.

Age of Victimization for Sexual Abuse Experiences

Age of Victimization	Frequency	Percent
3	3	3
4	4	4
5	8	7
6	14	13
7	9	8
8	12	11
9	6	6
10	11	10
11	10	9
12	9	8
13	1	1
14	5	5
15	4	4
16	5	5
17	5	5
18	2	2

Total N=110.

experiences, and 3% of the variance in dysfunctional sexual behavior. On average, child sexual abuse accounted for 3% of the variance in these trauma outcomes.

Hypothesis II

The results of the hierarchical multiple regressions are listed in Table 5. Due to the large number of analyses, only the significant results are displayed in Table 5. In addition, all hierarchical regression analyses passed tests of collinearity, indicating that the independent variables were not highly correlated amongst themselves. As can be seen, several of the models were found to be significant although none of the individual variables achieved significance according to t-tests. This means that for those models the coefficients associated with the independent variables in the model may be attributable to chance, and interpretations cannot be made confidently.

Moderator Variable: Attributional Style. When looking at the model that includes **attributional style** and the outcome variable **defensive avoidance**, the addition of the attributional style variable did not significantly explain any more of the variance in outcome than the abuse characteristics alone. The model containing abuse characteristics was found to significantly account for 13% of the variance in defensive avoidance ($R^2 = .13$, $p < .01$). In particular, the severity of the abuse and whether or not the abuse was disclosed were the only variables found to reach the significance level, meaning that severity ($\beta = .29$, $p < .05$) and disclosure ($\beta = .23$, $p < .05$) are associated with college students' level of defensive avoidance. Specifically, severity accounted for 6% of the variance in defensive avoidance, and whether or not the individual disclosed their abuse accounted for 5% of the variance. These results indicate that college students who

experienced more severe forms of abuse and those who did not disclose their abuse experienced higher levels of defensive avoidance.

The model examining **attributional style** and the outcome variable **anxious arousal** did significantly explain five percent more variance than the model with abuse characteristics only ($\Delta R^2 = .05$, $p < .05$). In fact, the model with only abuse characteristics was not found to be significantly related to anxious arousal. The model with both abuse characteristics and attributional style explained 14% of the variance in anxious arousal symptoms ($R^2 = .14$, $p < .05$), and the only significant predictor variable was attributional style, which uniquely explained 5% of the variance in the outcome anxious arousal. These results indicate that college students who have a pessimistic attributional style are more likely to report higher levels of anxious arousal.

Moderator Variable: Family Environment. The model including **family environment** and the outcome variable **defensive avoidance** was also found to be significant, although adding family environment to the model with the abuse characteristics did not significantly account for more of the variance in college students' defensive avoidance. The abuse characteristics accounted for 14% of the variance in defensive avoidance ($R^2 = .14$, $p < .01$). Again, severity ($\beta = .25$, $p < .05$) and disclosure ($\beta = .21$, $p < .05$) were the only variables found to be significantly related to defensive avoidance. Severity accounted for 6% of the variance in anxious arousal symptoms, while disclosure accounted for 4% of the variance. The results again indicate that not disclosing the abuse and more severe experiences of child sexual abuse are related to higher levels of defensive avoidance.

Moderator: Sexual Abuse Specific Attributions. Similarly, the model examining the **sexual abuse specific attributions** did not significantly explain any more of the variance in the outcome variable **defensive avoidance** than the abuse characteristics only model, which accounted for 18% of the variance in defensive avoidance ($R^2 = .18$, $p < .01$). Again, severity ($\beta = .25$, $p < .05$) and disclosure ($\beta = .27$, $p < .05$) were found to be significantly related to the presence of defensive avoidance symptoms, indicating that more severe abuse and lack of disclosure of abuse are related to a worse outcome. Severity was found to uniquely account for 6% of the variance in the outcome defensive avoidance, and disclosure was found to uniquely account for 7% of the variance in defensive avoidance.

The model containing **sexual abuse specific attributions** and abuse characteristics was significantly related to the presence of **dysfunctional sexual behavior symptoms**, while the abuse characteristics only model was not significant. The model containing sexual abuse specific attributions and abuse characteristics was found to account for 18% of the variance in dysfunctional sexual behavior outcome ($R^2 = .18$, $p < .05$), and added 11% of explained variance to the abuse characteristics only model ($\Delta R^2 = .11$, $p < .05$). In particular, the college students' belief that the cause of the sexual abuse experience was something related to them (i.e., internal causes) was found to be related to higher levels of dysfunctional sexual behavior symptoms ($\beta = -.30$). The sexual abuse specific attribution was found to account for 7% of the variance in college students' dysfunctional behavior symptoms.

In addition, the **sexual abuse specific attributional model** was significantly related to the **tension reduction behavior** outcome, explaining 18% of the variance in

outcome ($R^2 = .18$, $p < .05$), and adding 13% explained variance to the original model ($\Delta R^2 = .13$, $p < .05$). Specifically, college students' interpretation of the cause of their sexual abuse experience was found to be significantly correlated with tension reduction behavior ($\beta = -.31$, $p < .01$), indicating that internal attributions about the cause of the sexual abuse experience was related to higher symptom levels. These attributions were found to account for 8% of the variance in tension reduction behavior.

Moderator Variable: Social Support. When examining the outcome of **dissociation**, **social support** was found to significantly account for more variance than abuse characteristics alone, which were not found to be significantly related to dissociation. The model with social support accounted for 14% of the variance in dissociative symptoms ($R^2 = .14$, $p < .01$), and added 13% to the variance explained. Specifically, college students' satisfaction with their social support was found to be significantly related to symptoms of dissociation ($\beta = -.28$, $p < .05$), explaining 6% of the variance in dissociative symptoms. These results indicate that lower levels of satisfaction are related to higher levels of dissociative symptoms.

The model examining **social support** did not explain any more of the variance in **defensive avoidance** than the model with solely abuse characteristics, which explained 14% of the variance ($R^2 = .14$, $p < .05$). Consistently, severity ($\beta = .25$, $p < .05$) and disclosure ($\beta = .21$, $p < .05$) were significantly related to presence of defensive avoidance symptoms, still indicating that more severe abuse and no disclosure of the abuse experience are related to a higher amount of defensive avoidance symptoms. When considering the outcome defensive avoidance, severity was found to account for 6% of the variance and disclosure accounted for 4% of the variance.

However, the model containing both **social support** and abuse characteristics was found to be significantly related to **dysfunctional sexual behavior**, with the model accounting for 14% of the variance in outcome ($R^2 = .14$, $p < .05$) and adding 9% of explained variance to the original model ($R^2 = .09$, $p < .05$). However, none of the independent variables reached the significance level, so no interpretations regarding the impact of each variable are feasible.

Another model that was found to be significant was the **social support** model and the outcome variable **impaired self-reference**. The social support model was found to explain 14% of the variance in impaired self-reference ($R^2 = .14$, $p < .05$), and added 10% of explained variance over the abuse characteristics alone ($\Delta R^2 = .10$, $p < .05$). Only participants' satisfaction with their social support was found to be significantly related to impaired self-reference ($\beta = .29$, $p < .01$), and it uniquely accounted for 7% of the variance in outcome, indicating that college students who are less satisfied with their social support report more symptoms of impaired self-reference.

In addition, the model containing abuse characteristics and **social support** was found to be significantly related to the outcome of **anxious arousal**. This model accounts for 15% of the variance in anxious arousal outcome ($R^2 = .15$, $p < .05$), and significantly explained 8% more of the variance in anxious arousal than the abuse characteristics alone. While none of the predictor variables were found to be statistically significant, meaning that no interpretations can be made regarding their relative contribution to the outcome, the model did indicate that higher levels of social support satisfaction are related to lower levels of trauma symptoms (i.e., anxious arousal).

Hypothesis III

The direct multiple regression analyses, examining the abuse characteristics and moderator variables together, resulted in six significant outcomes. The model was significantly related to the following outcomes: anxious arousal, dissociation, dysfunctional sexual behavior, impaired self-reference, sexual concerns, and tension reduction behavior (see Table 6).

The full model explained 35% of the variance in **anxious arousal** ($R^2 = .35$, $p < .01$), with gender ($\beta = -.24$, $p < .05$) and sexual abuse specific attributions about internal or external cause of the abuse ($\beta = -.30$, $p < .01$) being the only significant variables in the analyses, and accounting for 5% and 7% of the variance in anxious arousal, respectively. The results indicated that female gender and an internal attribution about the sexual abuse experience were related to higher levels of anxious arousal.

For the **dissociation** outcome, the full model accounted for 28% of the variance ($R^2 = .28$, $p < .01$), with the sexual abuse specific attribution (internal/external) ($\beta = -.31$, $p < .01$) and social support satisfaction ($\beta = .07$, $p < .05$) being the only significant independent variables. Sexual abuse specific attributions were found to account for 8% of the variance in dissociation, and social support satisfaction accounted for 7% of the variance in dissociative symptoms, indicating that internal sexual abuse attributions and low satisfaction with social support are related to higher levels of dissociative symptoms.

The full model accounted for 33% of the variance in **dysfunctional sexual behavior** outcome ($R^2 = .33$, $p < .01$), with the internal/external sexual abuse specific attribution being the only significant independent variable ($\beta = -.39$, $p < .01$) and accounting for 12% of the variance in dysfunctional sexual behavior. These results

indicate that college students who have internal attributions about their sexual abuse experience have higher levels of dysfunctional sexual behavior.

For the outcome **impaired self-reference**, the full model accounted for 27% of the variance in outcome ($R^2 = .27$, $p < .05$). The only significant independent variable in the model was social support satisfaction ($\beta = -.32$, $p < .05$), and it accounted for 7% of the variance in college students' impaired self-reference, indicating that college students who are less satisfied with their social support report higher levels of impaired self-reference (e.g., confusion about identity, difficulty discriminating one's needs from other's needs).

The full model also predicted 26% of the variance in **sexual concern** outcome, with $R^2 = .26$, $p < .05$. In this model, both social support satisfaction ($\beta = -.30$, $p < .05$) and family environment ($\beta = .32$, $p < .01$) were both significant and accounted for 6% and 8% of the variance in sexual concern outcome, respectively. This indicates that low social support satisfaction and imbalanced levels of cohesion and adaptability in college students' family of origin are related to higher levels of sexual concern.

The last significant full model explained 31% of the variance in **tension reduction behavior** ($R^2 = .31$, $p < .01$). Again, the sexual abuse specific attribution (internal/external) was the only significant independent variable ($\beta = -.36$, $p < .01$), and accounted for 10% of the variance in tension reduction behavior, indicating that college students who believe that the cause of their sexual abuse experience was internal report higher levels of maladaptive tension reduction behavior.

DISCUSSION

Overall, college students who experienced child sexual abuse did differ from their nonabused peers on the outcomes of depression, anger/irritability, intrusive experiences, and dysfunctional sexual behavior. On average, the child sexual abuse accounted for 3% of the variance in the presence of these specific trauma symptoms. Similar to previous findings, including the meta-analyses by Rind et al. (1998) and Ulrich et al. (2006), the effect sizes for child sexual abuse are small, but they are still significant and meaningful. The results indicate that college students who experience child sexual abuse have higher levels of trauma symptoms than their nonabused peers.

Lack of social support was found to be significantly related to anxious arousal (15%), dysfunctional sexual behavior (14%), dissociation (14%), and impaired self-reference (14%), beyond the variance accounted for by the abuse characteristics. In several of these models, it was college student's current level of satisfaction with their social support that was most strongly correlated with their level of trauma symptoms, indicating higher levels of social support satisfaction are related to lower trauma symptoms.

The child sexual abuse victims' attribution about the cause of their sexual abuse experience, specifically internal attributions, was significantly related to dysfunctional sexual behavior (18%) and tension reduction behavior (18%), above the variance accounted for by the abuse characteristics. Finally, attributional style was found to account for significantly more variance than the sexual abuse characteristics for the outcome anxious arousal (14%). Overall, all of these variables accounted for significantly more variance than the child sexual abuse experience alone, indicating that they are more

strongly correlated with level of trauma symptoms in college students than the experience of child sexual abuse alone.

In addition, both severity and disclosure were found to be the only significant variables related to the outcome of defensive avoidance, indicating that more severe abuse and lack of disclosure are related to higher levels of defensive avoidance. Across all analyses, none of the other proposed moderator variables were found to be significantly related to college students' symptoms of defensive avoidance.

The overall model that was tested was found to be significant for six trauma outcomes, anxious arousal (35%), dissociation (28%), dysfunctional sexual behavior (33%), impaired self-reference (27%), sexual concerns (26%), and tension reduction behavior (31%). Again, throughout these models both the victims attribution about the cause of the sexual abuse experience and the victims current level of satisfaction with their social support were found to be most highly correlated with the most trauma outcomes. Noteworthy are the findings that sexual abuse specific attributions were found to account for 18% of the variance in dysfunctional sexual behavior and 18% of the variance in tension reduction behavior, after partialing out any variance explained by all of the other variables. In addition, female gender was found to account for 5% of the variance in higher reports of anxious arousal symptoms. Overall, the proposed cumulative model is able to account for significantly more variance in trauma outcomes than the child sexual abuse experience alone.

Significance of Results

The results of the current study both confirm existing evidence on the long-term outcome of child sexual abuse, and add to our understanding of the variability in

outcome. Similar to previous findings, college students who experienced child sexual abuse reported higher levels of trauma symptoms (i.e., depression, anger/irritability, intrusive experiences, dysfunctional sexual behavior). However, this study illustrated that there are numerous variables beyond the child sexual abuse experience that are significantly related to the long-term outcome for victims. Specifically, social support satisfaction and the victim's attribution about the cause of their abuse experience were significantly related to several trauma outcomes, and very highly related to dysfunctional sexual behavior and tension reduction behavior. For all outcomes, low social support satisfaction and internal attributions about the sexual abuse experience were related to higher levels of symptomatology.

These results indicate that assisting child sexual abuse victims with understanding that the cause of their abuse was not their fault, and potentially decreasing their level of self-blame, may have the potential to decrease the likelihood of these individuals displaying dysfunctional sexual behavior (e.g., indiscriminate sexual contact, sex as a coping mechanism) and maladaptive tension reduction behavior (e.g., aggression, self-mutilation, suicidal ideation) in the future. Results suggest that there is a specific relationship between college students who report internal causes for their sexual abuse experience and later problematic sexual behavior and potential suicidal ideation, self-harm behavior, or other maladaptive tension reduction behaviors.

Numerous studies have shown that self-blame is an often found outcome of childhood and adult sexual assault (Berliner & Elliot, 1996; Quas et al., 2003; Ullman, 2007; Ullman et al, 2007). This research together, with the current results, indicates that there is a need to address children's attributions about their sexual abuse experience, and

that addressing this issue is warranted and may decrease later symptomatology for these victims. Treatments such as cognitive-behavioral therapies may prove to be beneficial in this area, since it can directly address self-blaming cognitions and other internal attributions. A Trauma-Focused Cognitive Behavior Therapy has been developed to treat children who have suffered traumatic events such as sexual abuse, and a web-based learning course is available for this treatment (<http://tfcbt.musc.edu/>).

It is important to note that there could be numerous reasons why victims experience self-blame and guilt following a sexual assault or child sexual abuse experience. Research has highlighted how some individuals may have sought out their abusers because of feelings of isolation or loneliness, and therefore may have a valid reason for their feelings of self-blame and guilt (Ullman, 2007). For example, the findings that tension reduction behaviors, which could be utilized to reduce anxiety symptoms, are related to internal attributions about the cause of the child sexual abuse experience could be a result of the victim's self-blame and guilt about their abuse experience, possibly because they sought out their abuser.

The research concerning the often seen outcome of shame and guilt following a sexual assault or sexual abuse experience (Ullman, 2007) could also provide a possible explanation for why in the current study only 44 of the 110 child sexual abuse victims disclosed their abuse experience. The fact that only 40% of child sexual abuse victims disclosed their abuse following their experience warrants further attention since a lack of disclosure was found to be related to a higher presence of trauma symptoms within the current study. In addition, since social support appears to be a key factor in the outcome

of child sexual abuse experiences, victims need to be able to disclose their abuse experience in order to receive satisfactory social support.

Furthermore, mental health practitioners should begin working with the victim's social support network, focusing on improving the quality of the social support's response to the victim. This suggestion is based both on the findings of the current research and on research in other areas of sexual trauma (i.e., sexual assault) that has shown that the types of responses that victims receive from their social support are related to their level of trauma symptoms. Ullman (1999) has researched how members of victims' social support network respond after sexual assault, and her research suggests that negative social reactions are correlated with victim's reports of higher symptoms. In addition, victims of childhood sexual assault who report having more informal social support (e.g., friends) are three times as likely to seek mental health services after their traumatic experience than victims who do not report having informal social support (Ullman & Brecklin, 2002). Ahrens, Campbell, Ternier-Thames, Wasco, and Sefl (2007) also found that female rape survivors were more likely to disclose their experience to informal support, and that they were most likely received with a positive reaction by this support.

Research has also shown that formal social support (e.g., mental health practitioners) often has negative reactions to sexual assault victims, and that these negative reactions can also be harmful to the victims (Ahrens et al., 2007; Filipas & Ullman, 2001). Another study examined potential models for understanding the presence of PTSD in sexual assault survivors, focusing on the variables of assault severity, social support, avoidance coping, and self-blame. Ullman, Townsend, Filipas, and Starzynski

(2007) found that social support might play a very important part in how survivors respond to sexual assault. Specifically, it is suggested that victim's self-blame could be related to the negative reactions of the victim's social support. This research again indicates the need for educating family members of sexual abuse victims about appropriate ways to respond to the victim.

Overall, research has shown that social support is related to the presence of PTSD symptoms in trauma survivors, and that negative reactions by the victim's social support (both informal and formal) is both a common and a very negative experience for the victim. In order to help victims of child sexual abuse (and other sexual assaults), therapists also need to assist the victim's social support network in better helping the victim recover from their traumatic experience, which, in turn, may increase the victim's satisfaction with their social support. Barnes and Figley (2005) have proposed a collaborative systems model of family therapy that is used to work with families who have experienced trauma that attempts to do this by focusing on both the victim and the family in treatment.

Because the current research is correlational in nature and the directionality of the results cannot be determined, another potential explanation for the strong relationship found between social support and trauma symptom presentation could be that child sexual abuse victims who have high levels of trauma symptoms behave in a manner that decreases their social support. While the presence of trauma symptoms may be affected by the lack of social support in child sexual abuse victims' lives, it is also a possibility that the negative trauma symptoms are hindering the victim from accessing or maintaining adequate social support.

In addition, for some victims it may not be possible to work with their social support network. In these cases, mental health practitioners will have to focus their interventions solely on the victim. Since social support satisfaction does appear to moderate the effect of child sexual abuse victims, mental health practitioners could focus part of their interventions on assisting the victim with finding new and adequate social support. The therapist may need to assist the victim in being more proactive in finding or accessing social support, or potentially in finding ways to cope without a social support network.

None of the moderator variables were significantly related to the outcome of defensive avoidance, indicating that for this specific trauma outcome, only the abuse experience and characteristics of the abuse were found to be significant. In particular, more severe forms of abuse and a victim who did not disclose were significantly related to the presence of more defensive avoidance symptoms. These results have implications for the treatment of sexual abuse victims who present with the characteristic of defensive avoidance. In particular, it appears that targeting family environment, social support, or attributional style may not be related to a change in outcome for these clients. It appears that individuals with child sexual abuse histories who present with defensive avoidance symptoms may be less likely to utilize their family environments or social support networks as coping resources. While severity and disclosure were significantly related to defensive avoidance symptoms, there are other variables likely contributing to the presence of defensive avoidance symptoms in college students who experience child sexual abuse.

When examining all of the variables together (severity of abuse, gender of victim, relationship to offender, whether the victim disclosed, attributional style, family environment, social support, and sexual abuse specific attribution), the model was significant for numerous outcomes, indicating that all of these variables together explain more of the variance in outcome than just the sexual abuse experience. While one cannot intervene on some of the variables (i.e., abuse characteristics), interventions that focus on the moderator variables, such as attributional style, may decrease college student's level of trauma symptoms. However, it seems that overall, social support satisfaction and sexual abuse specific attributions are more highly correlated with trauma outcomes in college students, in addition to the importance of the severity of the abuse and whether the abuse was disclosed for the specific outcome of defensive avoidance.

Of importance, is the finding that the family environment (which defines a healthy family as having balanced levels of cohesion and adaptability) did not significantly explain any more variance in the presence of trauma symptoms than abuse characteristics alone. This is unusual considering the numerous results published that indicate the importance of family environment in the long-term outcome of child sexual abuse victims (Rind et al., 1998; Ulrich et al., 2006). However, it appears that other variables may have accounted for the effect of the family environment within this sample; especially since the abuse characteristics and family environment were not correlated with each other. It may be that the social support provided by the victim's family contributed more to the findings than the family environment alone. This is supported by previous findings that indicate children who receive social support from their families may have better outcomes following child sexual abuse compared to those

children without familial support (Rosenthal et al., 2003) While this does not provide evidence that the family environment is unimportant in the long-term presence of trauma symptomatology, it does suggest that there are other variables that are more highly correlated with the outcome of college students who experience child sexual abuse (i.e., social support) than the levels of cohesion and adaptability in their families of origin.

In addition, the lack of findings regarding family environment could also be affected by the outcome measure used to assess family environment. In the current study the FACES-IV measure was used, which measures family functioning by examining the levels of adaptability and cohesion within the family of origin. However, many previous studies that have examined family environment in relation to child sexual abuse have used the measure, the Family Environment Scale (FES; Rind et al., 1998). The FES measures family members' perceptions of their actual family environment, in addition to measuring their ideal family environment and expected family environment under changes and adverse conditions. The differences in scale measurement could have affected the difference in the current findings regarding family environment compared with previous research.

It is also important to mention the possibility that method variance could have impacted the results of the current study. The FACES-IV measures characteristics of the family of origin, a past experience. The other measures in the current research assessed variables that were in the present, such as participant's current satisfaction with their social support. This difference in measurement (i.e., current functioning versus past functioning) could also be a possible explanation for the lack of findings concerning family environment.

Gender was also found to be significantly related to the presence of anxious arousal symptoms, indicating that female college students who experience child sexual abuse report higher level of generalized anxiety, hyperalertness, and hypervigilance than their male counterparts. This finding is supported by the research of Rind et al. (1998) and Ulrich et al. (2006) that suggested that female college students report more negative reactions following their abuse experience than males. This gender difference in symptom presentation following child sexual abuse warrants more attention. It is possible that current outcome measures are not adequately capturing the symptoms of male sexual abuse victims, and that research may need to expand the conceptualization of the possible effects of child sexual abuse to encompass this population. In addition, there could be reasons that males are not reporting symptoms following their sexual abuse experience, although they may be feeling negatively affected by their experience.

Limitations

While this study does add new information to the research literature on long-term effects of child sexual abuse, there are limitations. Only college-aged populations were utilized, which could lend to the interpretation that only a higher functioning group was sampled. As a result, the generalizability of these results is questioned, and results should not be interpreted as being reflective of other populations (i.e., clinical populations, non college populations). In addition, the only ethnicity represented in this study is Caucasian, due to the limited ethnic diversity in the university population. Therefore, these results should not be interpreted as being reflective of other populations (e.g., African-Americans, Native Americans).

Another potential limitation is that all of the measures were self-report questionnaires. They depend upon the subject's accurate recall and reporting of events and situations (i.e., retrospective recall of child sexual abuse). Because of the fallibility of human memory, some criticize the utilization of retrospective findings. However, there are many benefits to using this research design (Kendall-Tackett & Becker-Blease, 2003). For example, when using prospective studies, a child that is determined to be a victim of sexual abuse is immediately referred to the appropriate authorities, and often to treatment as well. As a result, this population differs from an unidentified child who may more often not receive treatment or intervention. By using retrospective studies, we are able to work with (and hopefully assist) the unidentified population as well.

An important area that was not addressed in the current study that warrants attention is the effect that treatment has on the outcome of child sexual abuse victims. The current findings indicate that there are still other variables that are related to the victims' outcomes, and research now needs to address how many victims receive treatment and whether they benefit significantly from it compared to victims who do not receive treatment.

Future Research Directions

Future research should continue to examine other potential moderating variables that interact with child sexual abuse in the long-term adjustment of victims. As mentioned previously, there are many other variables at different levels of the ecological model that are proposed to have an effect on the development of the individual (e.g., intergenerational abuse, genetics, socioeconomic status). Examinations of variables

within all systems of the victims' lives will further our understanding of the variability in outcome of child sexual abuse.

Research examining the proposed model, and other potential moderating variables, needs to be conducted with a clinical and community sample as well. Because the majority of research in child sexual abuse has focused college populations, it is difficult to generalize findings to the population as a whole. Researchers in the area of child sexual abuse need to begin to expand their sampling population beyond the easily accessible Psychology 100 pool.

Research also needs to examine the utility of addressing variables in treatment that have been identified as having a significant relationship with the presence or absence of trauma symptomatology. The current findings indicate that targeting sexual abuse specific attributions, social support satisfaction, and the victim's social support's reaction may be beneficial in decreasing the long-term presence of trauma symptoms in college students. Process research should now be conducted examining the impact of specifically targeting the aforementioned variables with children who experience sexual abuse. The clinical utility of identifying moderating variables is an area that warrants attention, and it will be especially important in order to be received as an acceptable form of therapy for child sexual abuse victims.

In addition, research needs to focus on why child sexual abuse victims do not disclose their abuse, and what may aid victims in disclosing their abuse. Since disclosure was found to be related to the level of trauma symptoms in child sexual abuse victims, and research has also shown that few victims disclose their abuse, this area warrants more attention. Also, gender differences in the outcomes of child sexual abuse needs further

exploration to determine exactly how males are affected by their abuse experience, and what gender differences imply for treatment and conceptualization of child sexual abuse.

Implications of Current Research

The current research expands on our current knowledge about the long-term effects of child sexual abuse on college populations by highlighting other variables within the victims' lives that are correlated with their trauma outcomes. In fact, these variables were found to account for more variance than the child sexual abuse experience alone, indicating that there are other factors in victims' lives that influence their long-term adjustment. Of particular importance are the individual's satisfaction with their social support and their attribution about the cause of their sexual abuse experience.

In addition, the current research has also provided insight into how treatment can begin to address child sexual abuse victims who present with certain symptomatology. The presence of defensive avoidance symptoms may be indicative of victims who have chosen to cope without disclosure of their experience and support seeking behaviors. It may be especially difficult to engage such individuals in typical psychotherapeutic treatment, as they are not likely to use, nor desire, a therapist as social support. The only two variables in the current research that were found to be significantly related to higher levels of defensive avoidance symptoms were more severe abuse and a victim who did not disclose their abuse experience. While these findings may be especially difficult to address in treatment, seeking to work with defensive avoidance symptoms and the reasons for nondisclosure may be a more essential beginning to any potential change in long term outcomes for those who may ultimately seek treatment. These characteristics

can also help provide a possible prognosis for child sexual abuse victims who suffer more extreme abuse or who do not disclose their abuse.

In order to decrease the likelihood that child sexual abuse victims will experience dysfunctional sexual behavior and maladaptive tension reduction behaviors later in life, this research indicates that mental health practitioners focus at least part of their interventions on addressing the child's attributions about the cause of the sexual abuse experience. As identified in previous research, child victims of sexual abuse may self-blame, and this attribution contributes to worse outcomes. Along these lines, it will be important for therapists to work with children to understand that they have no cause in their abuse experience. It is also essential that the therapist work with the child's family on how they react to the child's abuse experience and how they talk and interact with the child. Children who experience sexual abuse need to be supported and not blamed in order to decrease the likelihood of later negative symptoms.

Overall, this research provides a hopeful prognosis for those who experience child sexual abuse, in that it appears that the abuse experience alone does not have to predict the level of trauma symptomatology in victims' lives. This research also provides evidence for the need to better understand how to be supportive to victims of child sexual abuse. Both formal (e.g., police, therapists) and informal (e.g., friends, family) social supports have the potential to harm victims through the lack of appropriate social support. Negative reactions by those who serve as social support may be more harmful to the victim than the abuse itself. This could also indicate a need to continue educating the public about how to appropriately respond to disclosures of sexual assault, in order to decrease the likelihood of further harm to the victim.

In addition, this research also highlights how a client's symptom presentation should influence the treatment goals and targets. Mental health practitioners need to evaluate the symptom presentation of their clients before deciding which factors are most productive and effective to address in treatment. For example, treating a client with a history of child sexual abuse who presents with defensive avoidant behavior (e.g., avoiding contact with things associated to their trauma, numbing of their feelings) may prove to be difficult to engage and motivate in therapy, due to the tendency for these individuals to not disclose their abuse or seek out or utilize social support. Therapists will have to heavily focus on alliance building and joining with these clients. Also, while focusing on attributions about the sexual abuse experience and social support satisfaction may be helpful for other victims of sexual abuse, victims who present with defensive avoidance symptoms may not be as likely to benefit from these interventions.

In a time of managed care and short term therapy, mental health practitioners are often having to treat child sexual victims in a time frame that does not always allow an in-depth and comprehensive treatment. The model proposed in the current study can inform therapists as to what may be targeted in treatment, based on what is most highly correlated with the presence of long term trauma symptomatology (beyond any effects of abuse characteristics). This research suggests that therapists need to address attributions of child sexual abuse victims to help them understand that the experience was not a result of anything that they did. Furthermore, working with victims to set up strong social support networks and assessing social support satisfaction are important to positive outcomes. Overall, the current results suggest that there are ways to assist child sexual abuse victims in decreasing the likelihood of later negative symptoms. Future research

should continue to elaborate on these findings, and focus on other aspects of child sexual abuse victims' lives and personalities that may be related to the presence of negative outcomes later in life.

Table 6.
Differences between College Students With and Without a History of Child Sexual Abuse on Trauma Symptom Inventory Clinical Scale Scores

Clinical Scale	F	df	Sig.(2-tailed)	Effect Size
Anxious Arousal	2.8	172	.09	
Depression	5.9	172	.02**	.37
Anger/Irritability	7.5	172	.01*	.42
Intrusive Experiences	4.0	172	.05**	.31
Defensive Avoidance	.96	172	.33	
Dissociation	1.5	172	.22	
Sexual Concern	.64	172	.43	
Dysfunctional Sexual Behavior	5.9	172	.02**	.37
Impaired Self Reference	2.6	172	.11	
Tension Reduction Behavior	3.4	172	.07	

**p<.05;*p<.01; Effect sizes are only reported for clinical scale scores that were found to be significant.; N= 172.

Table 7.

Summary of Significant Hierarchical Regression Analyses for Variables Predicting the Long Term Presence of Trauma Symptomatology in College Students Who Experienced Child Sexual Abuse

Variable	B	SE B	β	R	R ²	ΔR^2
Trauma Outcome						
Anxious Arousal						
<i>Moderator Variable: Social Support (N= 91)</i>						
Step 1				.27	.08	.08
Severity	.84	.52	.17	--	--	--
Relationship	3.8	2.5	.16	--	--	--
Gender	-1.9	2.0	-.10	--	--	--
Disclosure	1.1	1.9	.06	--	--	--
Step 2				.39	.15	.08**
Severity	.62	.51	.13	--	--	--
Relationship	2.7	2.4	.12	--	--	--
Gender	-1.6	1.9	-.09	--	--	--
Disclosure	.92	1.9	.05	--	--	--
Social Support #	-.66	.55	-.14	--	--	--
Social Support Sat.	-2.0	1.2	-.20	--	--	--
<i>Moderator Variable: Attributional Style (N=89)</i>						
Step 1				.31	.10	.10
Severity	.90	.52	.18	--	--	--
Relationship	3.6	2.4	.16	--	--	--

Variable	B	SE B	β	R	R ²	ΔR^2
Trauma Outcome						
Gender	-2.9	2.0	-.15	--	--	--
Disclosure	1.9	1.9	.11	--	--	--
Step 2				.38	.14	.05**
Severity	.78	.51	.16	--	--	--
Relationship	3.7	2.4	.16	--	--	--
Gender	-2.9	2.0	-.15	--	--	--
Disclosure	1.8	1.9	.10	--	--	--
Attributional**	.61	.28	.22	--	--	--
Defensive Avoidance						
<i>Moderator Variable: Attributional Style (N=89)</i>						
Step 1				.37	.13	.14*
Severity**	.18	.75	.29	--	--	--
Relationship	-3.9	3.6	-.11	--	--	--
Gender	-2.1	2.9	-.07	--	--	--
Disclosure**	6.2	2.8	.23	--	--	--
Step 2				.38	.14	.00
Severity**	.18	.76	.24	--	--	--
Relationship	-3.9	3.6	-.11	--	--	--
Gender	-.21	2.9	-.07	--	--	--
Disclosure**	6.1	2.8	.22	--	--	--
Attributional Style	.28	.42	.07	--	--	--

Variable	B	SE B	β	R	R ²	ΔR^2
Trauma Outcome						
<i>Moderator Variable: Family Environment (N=91)</i>						
Step 1				.37	.14	.14*
Severity**	1.8	.75	.25	--	--	--
Relationship	-3.9	3.5	-.11	--	--	--
Gender	-1.6	2.8	-.06	--	--	--
Disclosure**	5.7	2.7	.21	--	--	--
Step 2				.38	.14	.01
Severity*	1.9	.74	.25	--	--	--
Relationship	-4.2	3.6	-.12	--	--	--
Gender	-1.5	2.8	-.05	--	--	--
Disclosure**	5.7	2.8	.21	--	--	--
Family Total	.50	.59	.09	--	--	--
<i>Moderator Variable: Sexual Abuse Specific Attribution (N=72)</i>						
Step 1				.43	.18	.18*
Severity**	2.0	.94	.25	--	--	--
Relationship	-4.8	4.0	-.14	--	--	--
Gender	-3.0	3.4	-.10	--	--	--
Disclosure**	8.1	3.3	.27	--	--	--

Variable	B	SE B	β	R	R ²	ΔR^2
Trauma Outcome						
Step 2				.43	.19	.01
Severity	1.9	1.0	.23	--	--	--
Relationship	-4.9	4.0	-.14	--	--	--
Gender	-3.2	3.6	-.11	--	--	--
Disclosure**	7.9	3.4	.27	--	--	--
Sex Abuse Attribution (Global)	.52	.81	.08	--	--	--
Sex Abuse Attribution (Internal/External)	-.19	1.0	-.02	--	--	--
<i>Moderator Variable: Social Support (N=91)</i>						
Step 1				.37	.14	.14**
Severity**	1.8	.75	.25	--	--	--
Relationship	-3.9	3.5	-.11	--	--	--
Gender	-1.6	2.8	-.06	--	--	--
Disclosure**	5.7	2.7	.21	--	--	--
Step 2				.42	.18	.04
Severity**	1.6	.75	.22	--	--	--
Relationship	-5.1	3.6	-.15	--	--	--
Gender	-1.3	2.8	-.05	--	--	--
Disclosure**	5.5	2.7	.20	--	--	--
Social Support Number	-.48	.79	-.07	--	--	--

Variable	B	SE B	β	R	R ²	ΔR^2
Trauma Outcome						
Social Support Satisfaction	-2.6	1.7	-.17	--	--	--
Dissociation						
<i>Moderator: Social Support (N=91)</i>						
Step 1				.13	.02	.02
Severity	.42	.57	.08	--	--	--
Relationship	1.6	2.7	.07	--	--	--
Gender	-.90	2.2	-.05	--	--	--
Disclosure	1.2	2.1	.06	--	--	--
Step 2				.38	.14	.13*
Severity	.13	.55	.02	--	--	--
Relationship	.12	2.6	.00	--	--	--
Gender	-.56	2.1	-.03	--	--	--
Disclosure	.98	2.0	.05	--	--	--
Social Support Number	-.73	.58	-.15	--	--	--
Social Support Satisfaction**	-3.0	1.2	-.28	--	--	--
Dysfunctional Sexual Behavior						
<i>Moderator: Sexual Abuse Specific Attribution (N=72)</i>						
Step 1				.26	.07	.07
Severity	.61	.65	.10	--	--	--
Relationship	3.1	2.8	.13	--	--	--
Gender	-1.1	2.3	-.06	--	--	--

Variable	Trauma Outcome	B	SE B	β	R	R ²	ΔR^2
Disclosure		3.2	2.3	.17	--	--	--
Step 2					.42	.18	.11**
Severity		.56	.65	.10	--	--	--
Relationship		3.1	2.7	.14	--	--	--
Gender		-2.9	2.3	-.15	--	--	--
Disclosure		3.1	2.2	.16	--	--	--
Sex Abuse Attribution (global)		.63	.53	.15	--	--	--
Sex Abuse Attribution** (internal/external)		-1.7	.68	-.30	--	--	--
<i>Moderator Variable: Social Support (N=91)</i>							
Step 1					.23	.05	.05
Severity		.52	.52	.11	--	--	--
Relationship		3.9	2.5	.17	--	--	--
Gender		-.80	2.0	-.04	--	--	--
Disclosure		1.6	1.9	.09	--	--	--
Step 2					.37	.14	.09**
Severity		.26	.51	.05	--	--	--
Relationship		2.8	2.4	.12	--	--	--
Gender		-.39	1.9	-.04	--	--	--
Disclosure		1.4	1.9	.08	--	--	--
Social Support Number		-.94	.54	-.20	--	--	--

Variable	B	SE B	β	R	R ²	ΔR^2
Trauma Outcome						
Social Support Satisfaction	-1.6	1.2	-.16	--	--	--
Impaired Self Reference						
<i>Moderator Variable: Social Support (N=91)</i>						
Step 1				.21	.04	.04
Severity	.83	.57	.16	--	--	--
Relationship	-.47	2.7	-.02	--	--	--
Gender	-.56	2.2	-.03	--	--	--
Disclosure	2.4	2.1	.12	--	--	--
Step 2				.38	.14	.10*
Severity	.61	.56	.12	--	--	--
Relationship	-1.8	2.7	-.07	--	--	--
Gender	-.41	2.1	-.02	--	--	--
Disclosure	2.2	2.0	.11	--	--	--
Social Support Number	-.31	.60	-.06	--	--	--
Social Support Satisfaction*	-3.2	1.3	-.29	--	--	--
Tension Reduction Behavior						
<i>Moderator Variable: Sexual Abuse Specific Attribution (N=72)</i>						
Step 1				.22	.05	.05
Severity	.87	.63	.17	--	--	--

Variable	B	SE B	β	R	R ²	ΔR^2
Trauma Outcome						
Relationship	-.60	2.7	-.03	--	--	--
Gender	-1.5	2.3	-.08	--	--	--
Disclosure	2.3	2.1	.12	--	--	--
Step 2				.43	.18	.13**
Severity	.76	.63	.15	--	--	--
Relationship	-.56	2.6	-.03	--	--	--
Gender	-1.5	2.3	-.08	--	--	--
Disclosure	2.3	2.1	.12	--	--	--
Sex Abuse Attribution (global)	.78	.51	.19	--	--	--
Sex Abuse Attribution* (internal/external)	-1.7	.66	-.31	--	--	--

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

Table 8.
 Summary of Significant Direct Multiple Regression Analyses Predicting Long Term
 Outcome in College Students Who Experienced Child Sexual Abuse

Variable	B	SE B	β	R	R ²	ΔR^2
Trauma Outcome						
Anxious Arousal						
Step 1				.59	.35	.35*
Gender**	-4.8	2.3	-.24	--	--	--
Severity	.79	.65	.15	--	--	--
Disclosure	3.3	2.1	.17	--	--	--
Relationship	.71	2.5	.03	--	--	--
Sex Abuse Attribution* (Internal/External)	-1.7	.68	-.30	--	--	--
Sex Abuse Attribution (global)	.47	.51	.11	--	--	--
Attributional Style	.65	.34	.22	--	--	--
Social Support Number	-.30	.61	-.06	--	--	--
Social Support Satisfaction	-1.8	1.2	-.19	--	--	--
Family Environment	.43	.44	.11	--	--	--
Dissociation						
Step 1				.53	.28	.28**
Gender	-4.7	2.5	-.23	--	--	--
Severity	.52	.70	.09	--	--	--
Disclosure	3.4	2.3	.17	--	--	--

Variable	B	SE B	β	R	R ²	ΔR^2
Trauma Outcome						
Relationship	.90	2.7	.04	--	--	--
Sex Abuse Attribution* (internal/external)	-1.8	.73	-.31	--	--	--
Sex Abuse Attribution (global)	-.26	.55	-.06	--	--	--
Attributional Style	-.30	.37	-.10	--	--	--
Social Support Number	-.42	.66	-.09	--	--	--
Social Support Satisfaction**	.29	.47	.07	--	--	--
Dysfunctional Sexual Behavior						
Step 1				.58	.33	.33*
Gender	-4.1	2.3	-.21	--	--	--
Severity	.69	.64	.13	--	--	--
Disclosure	4.1	2.1	.21	--	--	--
Relationship	1.8	2.5	.08	--	--	--
Sex Abuse Attribution* (internal/external)	-2.2	.67	-.39	--	--	--
Sex Abuse Attribution (global)	.21	.51	.05	--	--	--
Attributional Style	.41	.34	.14	--	--	--
Social Support Number	-.56	.60	-.12	--	--	--
Social Support Satisfaction	-1.3	1.2	-.14	--	--	--

Variable	B	SE B	β	R	R ²	ΔR^2
Trauma Outcome						
Impaired Self Reference						
Step 1				.52	.27	.27**
Gender	-3.9	2.7	-.18	--	--	--
Severity	.55	.75	.09	--	--	--
Disclosure	4.6	2.5	.21	--	--	--
Relationship	-2.1	2.9	-.08	--	--	--
Sex Abuse Attribution (internal/external)	-1.3	.78	-.20	--	--	--
Sex Abuse Attribution (global)	.49	.60	.10	--	--	--
Attributional Style	3.8	.39	.01	--	--	--
Social Support Number	3.5	.70	.01	--	--	--
Social Support Satisfaction**	-3.3	1.4	-.32	--	--	--
Family Environment	.79	.51	.19	--	--	--
Sexual Concern						
Step 1				.51	.26	.26**
Gender	-4.4	2.9	-.18	--	--	--
Severity	9.6	.83	.02	--	--	--
Disclosure	3.8	2.8	.16	--	--	--
Relationship	-3.6	3.2	-.13	--	--	--
Sex Abuse Attribution (internal/external)	-1.6	.87	-.23	--	--	--

Variable	B	SE B	β	R	R ²	ΔR^2
Trauma Outcome						
Sex Abuse Attribution (global)	.53	.66	.10	--	--	--
Attributional Style	-.16	.44	-.05	--	--	--
Social Support Number	.16	.78	.03	--	--	--
Social Support Satisfaction**	-3.4	1.6	-.30	--	--	--
Family Environment*	1.5	.56	.32	--	--	--
Tension Reduction Behavior						
Step 1				.56	.31	.31*
Gender	-2.6	2.2	-.14	--	--	--
Severity	.68	.63	.13	--	--	--
Disclosure	3.1	2.1	.17	--	--	--
Relationship	-2.1	2.5	-.10	--	--	--
Sex Abuse Attribution* (internal/external)	-2.0	.66	-.36	--	--	--
Sex Abuse Attribution (global)	.53	.50	.13	--	--	--
Attributional Style	-2.2	.33	-.01	--	--	--
Social Support Number	-.18	.59	-.04	--	--	--
Social Support Satisfaction	-2.3	1.2	-.26	--	--	--
Family Environment	.58	.43	.16	--	--	--

**p<.05;*p<.01; N=71.

References

- Ahrens, C.E., Campbell, R., Ternier-Thams, N.K., Wasco, S.M., Sefl, T. (2007).
Deciding whom to tell: Expectations and outcomes of rape survivors' first disclosures. *Psychology of Women Quarterly, 31*, 38-49.
- Alexander, R., Feeney, J., Noller, P., & Hohaus, L. (1998, November). *Attachment style and coping resources as predictors of coping strategies in the transition to parenthood*. Paper presented at the annual meeting of the Australian Institute of Family Studies Conference, Melbourne, Australia.
- Alexander, P.C., & Lupfer, S.L. (1987). Family characteristics and long term consequences associated with sexual abuse. *Archives of Sexual Behavior, 16*, 235-245.
- Allagia, R. (2005). Disclosing the trauma of sexual abuse: A gender analysis. *Journal of Loss and Trauma, 10*, 453-470.
- Arata, C. M. (1998). To tell or not to tell: Current functioning of child sexual abuse survivors who disclosed their victimization. *Child Maltreatment, 3*, 63-71.
- Atzaba-Poria, N., Pike, A., Deater-Deckard, K. (2004). Do risk factors for problem behaviour act in a cumulative manner? An examination of ethnic minority and majority children through an ecological perspective. *Journal of Child Psychology and Psychiatry, 45*, 707-718.
- Banyard, V.L., & Cantor, E.N. (2004). Adjustment to college among trauma survivors: An exploratory study of resilience. *Research in Brief, 45*, 207-221.
- Barker-Collo, S., & Read, J. (2003). Models of response to childhood sexual abuse: Their implications for treatment. *Trauma, Violence, & Abuse, 4*, 95-111.

- Barnes, M., & Figley, C.R. (2005). Family therapy: Working with traumatized families. In Lebow, J.L. (Ed). *Handbook of clinical family therapy*. Hoboken, New Jersey: John Wiley & Sons, Inc.
- Barnett, O., Miller-Perrin, C.L., & Perrin, R.D. (2005). *Family violence across the lifespan: An introduction*. (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.
- Bennett, S.E., Hughes, H.M., & Luke, D.A. (2000). Heterogeneity in patterns of child sexual abuse, family functioning, and long-term adjustment. *Journal of Interpersonal Violence*, *15*, 134-157.
- Bonanno, G.A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extreme aversive events? *American Psychologist*, *59*, 20-28.
- Bonanno, G.A. (2005). Resilience in the face of potential trauma. *Current Directions in Psychological Science*, *14*, 135-138.
- Briere, J. (1995). *Trauma symptom inventory: Professional manual*. Lutz, Florida: Psychological Assessment Resources, Inc.
- Briere, J., & Runtz, M. (1989). The Trauma Symptom Checklist (TSC-33): Early data on a new scale. *Journal of Interpersonal Violence*, *4*, 151-163.
- Briggs, F., & Hawkins, M.F. (1996). Low socio-economic status children are disadvantaged in the provision of school-based child protection programmes. *British Journal of Social Work*, *26*, 667-678.

- Brofenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Brohpy, C.J., Norvell, N.K., & Kiluk, D.J. (1988). An examination of the factor structure and convergent and discriminant validity of the SCL-90-R in an outpatient clinic population. *Journal of Personality Assessment*, 52, 334-340.
- Brown, E.J. & Kolko, D.J. (1999). Child victims' attributions about being physically abused: An examination of factors associated with symptom severity. *Journal of Abnormal Child Psychology*, 27, 311-322.
- Browne, A., & Finkelhor, D. (1986). Impact of child sexual abuse: A review of the research. *Psychological Bulletin*, 99, 66-77.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New York: Academic Press.
- Cohen, J.A., Deblinger, E., Mannarino, A.P., & Steer, R.A. (2004). A multisite, randomized controlled trial for children with sexual abuse-related PTSD symptoms. *Journal of American Academy of Child and Adolescent Psychiatry*, 43, 393-402.
- Cohen, J.A., & Mannarino, A.P. (2000). Predictors of treatment outcome in sexually abused children. *Child Abuse & Neglect*, 24, 983-994.
- Cohen, J.A., Mannarino, A.P., & Knudson, K. (2005). Treating sexually abused children: 1 year follow up of a randomized controlled trial. *Child Abuse & Neglect*, 29, 135-145.

- Corr, P.J., & Gray, J.A. (1996). Structure and validity of the Attributional Style Questionnaire: A cross sample comparison. *The Journal of Psychology, 130*, 645-657.
- Dallam, S.J., Gleaves, D.H., Cepeda-Benito, A., Silberg, J.L., Kraemer, H.C., & Spiegel, D. (2001). The effects of child sexual abuse: Comment on Rind, Tromovitch, and Bauserman (1998). *Psychological Bulletin, 2001*, 715-733.
- Deblinger, E., Lippman, J., & Steer, R. (1996). Sexually abused children suffering posttraumatic stress symptoms: Initial treatment outcome findings. *Child Maltreatment, 1*, 310-321.
- Deblinger, E., Steer, R., & Lippman, J. (1999). Two-year follow-up study of cognitive-behavioral therapy for sexually abused children suffering posttraumatic stress symptoms. *Child Abuse & Neglect, 23*, 1371-1378.
- Derogatis, L.R. (1994). *SCL-90-R: Administration, scoring, and procedures manual III*. Minneapolis, MN: National Computer Systems.
- Feiring, C., Taska, L., & Chen, K. (2002). Trying to understand why horrible things happen: Attribution, shame, and symptom development following sexual abuse. *Child Maltreatment, 7*, 26-41.
- Feiring, C., Taska, L., & Lewis, M. (1998). The role of shame and attributional style in children's and adolescent's adaptation to sexual abuse. *Child Maltreatment, 3*, 129-142.
- Filipas, H.H., & Ullman, S.E. (2001). Social reactions to sexual assault victims from various support sources. *Violence and Victims, 16*, 673-692.

- Finkelhor, D. (1979a). What's wrong with sex between adults and children? Ethics and the problem of sexual abuse. *American Journal of Orthopsychiatry*, 49, 692-697.
- Finkelhor, D. (1979b). *Sexually victimized children*. New York: The Free Press.
- Finkelhor, D. (1984). *Child sexual abuse: New theory and research*. New York: The Free Press.
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. (1986). The dynamics of a stressful encounter: Cognitive appraisal, coping and encounter outcomes. *Journal of Personality and Social Psychology*, 50, 992-1003.
- Folkman, S. & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48, 150-170.
- Gladstone, T.R.G., & Kaslow, N.J. (1995). Depression and attributions in children and adolescents: A meta-analytic review. *Journal of Abnormal Child Psychology*, 23, 597-606.
- Gorall, D.M., Tiesel, J., Olson, D.H. (2006). FACES-IV: Development and validation. *Family Process*. (in press).
- Grauerholz, L. (2000). An ecological approach to understanding sexual revictimization: Linking personal, interpersonal, and sociocultural factors and processes. *Child Maltreatment*, 5, 5-17.
- Herman, J. (1983). Recognition and treatment of incestuous families. *International Journal of Family Therapy*, 5, 81-91.

- Herman-Stahl, M.A., Stemmler, M., & Petersen, A.C. (1995). Approach and avoidant coping: Implications for adolescent mental health. *Journal of Youth and Adolescence, 24*, 649-665.
- Higgins, N.C., & Hay, J.L. (2003). Attributional style predicts causes of negative life events on the attributional style questionnaire. *The Journal of Social Psychology, 143*, 253-271.
- Hillson, J.M.C., & Kuiper, N.A. (1994). A stress and coping model of child maltreatment. *Clinical Psychology Review, 14*, 261-285.
- Houshyar, S. (2005). Genetic and environment predictors of resiliency in maltreated children. *Section on Child Maltreatment Newsletter, 10*, 3.
- Jaccard, J., Guilamo-Ramos, V., Johansson, M., & Bouris, A. (2006). Multiple regression analyses in clinical child and adolescent psychology. *Journal of Clinical Child and Adolescent Psychology, 35*, 456-479.
- Johnson, B.K., & Kenkel, M.B. (1991). Stress, coping, and adjustment in female incest victims. *Child Abuse & Neglect, 15*, 293-305.
- Joseph, S., Yule, W., & Williams, R. (1993). Post-traumatic stress: Attributional aspects. *Journal of Traumatic Stress, 6*, 501-513.
- Jumper, S. (1995). A meta-analysis of the relationship of child sexual abuse to adult psychological adjustment. *Child Abuse & Neglect, 19*, 715-728.
- Kelley, S.J. (1990). Parental stress response to sexual abuse and ritualistic abuse of children in day-care centers. *Nursing Research, 39*(1), 25-29.
- Kendell-Tackett, K.A., Williams, L.M., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological*

Bulletin, 113, 164-180.

- King, N. J., Tonge, B. J., Mullen, P., Myerson, N., Heyne, D., Rollings, S., Martin, R., & Ollendick, T. H. (2000). Treating sexually abused children with posttraumatic stress symptoms: A randomized clinical trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39, 1347–1355.
- Kolko, D.J., & Feiring, C. (2002). “Explaining why”: A closer look at attributions in child abuse victims. *Child Maltreatment*, 7, 5-8.
- Lazarus, R., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Publishing Company, Inc.
- Leonard, B.J., Hellerstedt, W.L., & Josten, L.V. (1997). Association of maternal psychological functioning to pathology in child sexual abuse victims. *Issues in Mental Health Nursing*, 18, 587-601.
- London, K., Bruck, M., Ceci, S.J. & Shuman, D.W. (2005). Disclosure of child sexual abuse: What the research tell us about the ways that children tell? *Psychology, Public Policy, and Law*, 11, 194-226.
- Lynskey, M.T., & Fergusson, D.M. (1997). Factors predicting against the development of adjustment difficulties in young adults exposed to childhood sexual abuse. *Child Abuse & Neglect*, 21, 1177-1190.
- Mantzicopoulos, P. (1990). Coping with school failure: Characteristics of students employing successful and unsuccessful coping strategies. *Psychology in the Schools*, 27, 138-143.
- Mannarino, A.P., & Cohen, J.A. (1996a). Abuse-related attributions and perceptions, general attributions, and locus of control in sexually abused girls. *Journal of*

Interpersonal Violence, 11, 162-180.

Mannarino, A.P., & Cohen, J.A. (1996b). A follow-up study of factors that mediate the development of psychological symptomatology in sexually abused girls. *Child Maltreatment, 1*, 246-260.

Murthi, M., & Espelage, D.L. (2005). Childhood sexual abuse, social support, and psychological outcomes: A loss framework. *Child Abuse & Neglect, 29*, 1215-1231.

Neumann, D.A. (1994). Long term correlates of childhood sexual abuse in adult survivors. *New Directions for Mental Health Services, 64*, 29-37.

Oellerich, T. (2002). The case against the routine provision of psychotherapy to children/adolescents labeled "sexually abused." *Sexuality & Culture, 39*, 3-24.

Olson, D.H. & Gorall, D.M. (2006). FACES IV & the Circumplex model. *Family Process*. (in press).

Olson, D. H., Gorall, D. M., & Tiesel, J. W. (2004). *Faces IV package*. Minneapolis, MN: Life Innovations.

Ondersma, S.J., Chaffin, M., Berliner, L., Cordon, I., Goodman, G.S., & Barnett, D. (2001). Sex with children is abuse: Comment on Rind, Tromovitch, and Bauserman (1998). *Psychological Bulletin, 127*, 707-714.

Pervin, L.A., & John, O.P. (2001). *Personality: Theory and research* (8th ed). New York: John Wiley & Sons, Inc.

Peterson, C., Buchanan, G.M., & Seligman, M.E.P. (1995). Explanatory style: History and evolution of the field. In G.M. Buchanan & M.E.P. Seligman (Eds.). *Explanatory style* (pp. 1-19). Hillsdale, NJ: Lawrence Erlbaum.

- Peterson, C., Semmel, A., von Baeyer, C., Abramson, L.Y., Metalsky, G.I., & Seligman, M.E.P. (1982). The attributional style questionnaire. *Cognitive Therapy and Research, 6*, 287-300.
- Place, M., Hulsmeier, J., Brownrigg, A., Soulsby, A. (2005). The family adaptability and cohesion evaluation scale (FACES): An instrument worthy of rehabilitation? *Psychiatric Bulletin, 29*, 215-218.
- Quas, J.A., Goodman, G.S., & Jones, D.P.H. (2003). Predictors of attributions of self-blame and internalizing behavior problems in sexually abused children. *Journal of Child Psychology and Psychiatry, 44*, 723-736.
- Rind, B., & Tromovitch, P. (1997). A meta-analytic review of findings from national samples on psychological correlates of child sexual abuse. *Journal of Sex Research, 34*, 237-255.
- Rind, B., Tromovitch, P., & Bauserman, R. (1998). A meta-analytic examination of assumed properties of child sexual abuse using college samples. *Psychological Bulletin, 124*, 22-53.
- Rodick, J.D., Henggeler, S.W., & Hanson, C.L. (1986). An evaluation of the Family Adaptability and Cohesion Evaluation Scales and the Circumplex models. *Journal of Abnormal Child Psychology, 14*, 77-87.
- Romano, E., & De Luca, R.V. (2001). Male sexual abuse: A review of the effects, abuse characteristics, and links with later psychological functioning. *Aggression and Violence Behavior, 6*, 55-78.

- Rosenthal, S., Feiring, C., & Taska, L. (2003). Emotional support and adjustment over a year's time following sexual abuse discovery. *Child Abuse & Neglect*, 27, 641-661.
- Runyon, M.K., & Kenny, M.C. (2002). Relationship of attributional style, depression, and posttrauma distress among children who suffered physical or sexual abuse. *Child Maltreatment*, 7, 254-264.
- Russell, D.E.H. (1986). *The secret trauma: Incest in the lives of girls and women*. New York: Basic Books.
- Sandler, I.N., Tein, J.Y., & West, S.G. (1994). Coping, stress, and the psychological symptoms of children of divorce: A cross-sectional and longitudinal study. *Child Development*, 65, 1744-1763.
- Sarason, I., Levine, H., Basham, R., & Sarason, B. (1983). Assessing social support: The Social support questionnaire. *Journal of Personality and Social Psychology*, 44, 127-139.
- Shadish, W.R., Robinson, L., & Lu, Congxiao. (1999). ES: A computer program for effect size calculation. [Computer software]. St. Paul, MN: Assessment Systems Corporation.
- Smith, S.G. (1996). Clinical utility of the family adaptability and cohesion evaluation scales-III (FACES-III). Dissertation, Texas tech.
- Steel, J., Sanna, L., Hammond, B., Whipple, J., & Cross, H. (2004). Psychological sequelae of childhood sexual abuse: abuse-related characteristics, coping strategies, and attributional style. *Child Abuse & Neglect*, 28, 785-801.
- Swantson, H.Y., Plunkett, A.M., O'Toole, B.I., Shrimpton, S., Parkinson, P.N., & Oates,

- R.K. (2003). Nine years after child sexual abuse. *Child Abuse & Neglect*, 27, 967-984.
- Sweeney, P.D., Anderson, K., & Bailey, S. (1986). Attributional style in depression: A meta-analytic review. *Journal of Personality and Social Psychology*, 50, 974-991.
- Swett, C., Surrey, J. & Cohen, C. (1990) Sexual and physical abuse histories and psychiatric symptoms among male psychiatric outpatients. *American Journal of Psychiatry*, 147 632-636.
- Tabachnick, B.G., & Fidell, L.S. (2001). *Using multivariate statistics (4th ed)*. Boston: Allyn & Bacon.
- Tang, C. S. (2002). Childhood experience of sexual abuse among Hong Kong Chinese college students. *Child Abuse & Neglect*, 26, 23–37.
- Tremblay, C., Hebert, M., & Piche, C. (1999). Coping strategies and social support as mediators of consequences in child sexual abuse victims. *Child Abuse & Neglect*, 3, 929-945.
- Ullman, S.E. (1999). Social support and recovery from sexual assault: A review. *Aggression and Violent Behavior*, 4, 343-358.
- Ullman, S.E. (2007). Relationship to perpetrator, disclosure, social reactions, and PTSD symptoms in child sexual abuse survivors. *Journal of Child Sexual Abuse*, 16, 19-36.
- Ullman, S.E., & Brecklin, L.R. (2002). Sexual assault history, PTSD, and mental health service seeking in a national sample of women. *Journal of Community Psychology*, 30, 261-279.

- Ullman, S.E., Townsend, S.M., Filipas, H.H., & Starzynski, L.L. (2007). Structural models of the relations of assault severity, social support, avoidance coping, self-blame, and PTSD among sexual assault survivors. *Psychology of Women Quarterly, 31*, 23-37.
- Ulrich, H., Randolph, M., & Acheson, S. (2005-06, Fall/Winter). Child sexual abuse: A reexamination of the meta-analytic examination of child sexual abuse by Rind, Bauserman, and Tromovitch (1998). *Scientific Review of Mental Health Practice, 4*, 1-15.
- U.S. Department of Health and Human Services, Administration on Children, Youth and Families. *Child Maltreatment 2004* (Washington, DC: U.S. Government Printing Office, 2006).
- Valle, L.A., & Silovsky, J.F. (2002). Attributions and adjustment following child sexual and physical abuse. *Child Maltreatment, 7*, 9-25.
- Williamson, J.M. Borduin, C.M. & Howe, B.A. (1991). The ecology of adolescent maltreatment: A multilevel examination of adolescent physical abuse, sexual abuse, and neglect. *Journal of Consulting and Clinical Psychology, 59*, 449-457.
- World Health Organization (WHO). *World report on violence and health*. (WHO, Geneva, 2002): available at www.who.int/violence_injury_prevention/violence/world_report/.

CALL FOR INDIVIDUALS TO PARTICIPATE IN PSYCHOLOGICAL RESEARCH!!!

University of Montana students (age 18 and older) are now being recruited to participate in a study looking at individuals' childhood sexual experiences.

You can sign up for the study outside of Room 246 in Skaggs building. OR contact the researcher at heather.ulrich@umontana.edu.
YOU MUST BE AT LEAST 18 yrs old!!!

Participants will be entered into a lottery, where five will receive a cash prize of \$50.

OR

If you are currently taking Psychology 100, you can receive 2 research credits for your participation.

Appendix B

Subject Information and Consent Form

Principal Investigator:

Heather Ulrich, M.A.
Clinical Psychology Trainee
Department of Psychology
University of Montana
Missoula, MT 59812
(406) 243-2367

Faculty Advisor:

Christine Fiore, Ph.D.
Clinical Psychologist
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Research Assistants:

TBA

Purpose:

The purpose of this study is to investigate the long-term effects of child sexual abuse and to examine what factors enable certain individuals to be resilient in the face of the abuse. This study hopes to identify which factors are most strongly related to a positive outcome in child sexual victims, so that treatment and interventions can begin to target those specific areas.

Procedures:

If you agree to take part in this research study, you will be given a packet of questionnaires to fill out. These questionnaires should take approximately 1 to 2 hours to fill out, depending upon whether you have experienced child sexual abuse. The questionnaires will ask you about the history of your sexual experiences (focusing on those experiences in childhood), questions concerning your current adjustment, your method of coping with stress, your thoughts about the causes of events, your social support, and questions about your family of origin. You will have a private room in which to fill out the questionnaires. All information will remain anonymous. All records from this study will be kept in a locked filing cabinet.

Payment for Participation:

Participants who are currently taking Psychology 100 have the option of receiving 2 research credits for their participation in this study or being entered into the lottery drawing. All participants who are not taking Psychology 100 will be entered into the lottery, where 5 participants will randomly chosen to receive \$50 cash prize.

If you are going to receive research credits, the researcher will stamp your Research Participation Form (that was provided to you by your Psychology 100 instructor) when you turn in your questionnaire packet. If you would like to be entered into the lottery drawing, please fill out the contact information form attached to this consent form.

Risks and Discomforts:

Some people experience increased emotional discomfort when they answer questions concerning potentially difficult aspects of their lives. If you do feel distressed during this period, please let the investigator know how you are feeling. The investigator will immediately contact Dr. Christine Fiore by phone so that you may talk to her about your feelings. All participants will be provided with a list of referrals for psychological services after signing this consent form, along with a copy of the informed consent form.

Benefits:

Besides either research credits for Psychology 100 or monetary benefits, there is no promise that you will receive any other benefits from taking part in the study. Your participation in the study may contribute to a greater understanding of the effects of child sexual abuse, and assist mental health practitioners gain a better understanding of how to successfully help child sexual abuse have a hopeful and positive future.

Confidentiality:

All information that you will provide will be kept strictly confidential. ONLY this informed consent form and the lottery contact information sheet (if you choose to be entered into the lottery drawing) will have your name on it. Your name will not be on any of the questionnaires, although all of your questionnaires will be linked to one another for the purposes of data analysis. Your informed consent and lottery contact information sheet will be stored separately from the data, in a locked filing cabinet, to ensure confidentiality. Once the lottery drawing has been completed, the contact information form will be shredded immediately. Only research staff, including Heather Ulrich, MA, Christine Fiore, PhD, and research assistants will have access to the data collected. In addition, all the questionnaires will be in a sealed envelope in a locked filing cabinet until the time of data entry. If the results of this study are written in a scientific journal or presented at a scientific meeting, your name will NOT be used.

Limits to Confidentiality:

There are conditions under which confidentiality may be breached. If you indicate wanting to harm yourself or someone else, the experimenter will contact you and this informed consent may also be given to a member of the clinical faculty who may contact you. Because of this, we also require that you provide your name and phone number.

Name: _____ Phone: _____

Compensation for Injury:

Although we believe that the risk of taking part in this study is minimal, the following liability statement is required in all University of Montana consent forms:

“In the event that you are injured as a result of this research, you should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the Authority of M.C.A., Title 2, Chapter 9. In the event of a claim for such injury, further information may be obtained from the University’s Claims Representative or University Legal

Council.”

Voluntary Participation/Withdrawal

Your decision to take part in this research study is entirely voluntary. You may refuse to take part in or you may withdraw from the study at any time without penalty or loss of benefits to which you are normally entitled.

Questions:

If you have any questions now or during the study please contact Heather Ulrich, MA at 243-2367 or Christine Fiore, PhD at 243-2081. Also, if you have any questions regarding your rights as a research subject, you may contact the Chair of the IRB through the University of Montana Research Office at 243-6670.

Statement of Consent:

I have read the above description of this research study. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that a member of the research team will answer any future questions I may have. I voluntarily agree to take part in this study, and I understand that I will receive a copy of this consent form. In addition, by signing below I am declaring that I am 18 years of age or older.

Printed Name of Participant

Signature of Participant

Date

Signature of Investigator

Date

LOTTERY DRAWING CONTACT INFORMATION SHEET

Please provide your name and the means in which you would like to be contacted should you win the lottery drawing. This form will be kept separate from the consent form and questionnaire packets in a locked filing cabinet until the time of the drawing. After the drawing is completed, this form will be shredded.

NAME: _____

CONTACT: _____

Appendix C

Modified Version of Finkelhor's Sexual Abuse Questionnaire

Dear Student:

We would like to ask you to participate in this study of childhood sexual experiences by filling out this questionnaire.

Some of the questions here are very personal. Because they are personal, we want to reassure you that all your answers remain completely anonymous. With this in mind, we hope that you will agree to participate and answer the questions in this questionnaire.

To help you decide, we want to say a little more about the questionnaire. The highly personal questions here include questions sexual experiences, as well as questions about your family. Some of the information you will be providing here is probably not information you would want others to know about. If you decide not to participate you may do so very discreetly. All questionnaires will be placed in the packet together, and it will not be known until later that you have completed this questionnaire.

However, we hope that you will agree to complete this question honestly in order to assist research in the area of childhood sexual experiences, in addition to helping others who experience child sexual abuse. Again, all information will remain completely confidential.

Part A

Please circle or write in the appropriate answer.

1. Your sex:
 1. Male
 2. Female
2. Your age at last birthday: _____
3. Marital Status:
 1. Single
 2. Married
 3. Separated or Divorced
 4. Widowed

We would like to gather some information about members of your family.

4. First, about your father:
 - a. Is he:
 1. Living with your mother
 2. Divorced or separated from her
 3. Widowed
 4. Living apart for some other reason
 5. Deceased
 - b. What is(was) his year of birth? (if unsure, put age) _____
 - c. Was there any time before you were 16 when you did not live with him?
 1. Yes, ages _____ to _____
 2. No
 - d. When you last lived with him, how close did you feel to him?
 1. Very close
 2. Close
 3. Somewhat close
 4. Not close
 5. Distant
5. Did you also have a step-father?
 1. Yes
 2. No

*If NO, go to question #6.

- a. Is your stepfather:
 1. Living with your mother

2. Divorced or separated from her
3. Widowed from her
4. Living apart for some other reason
5. Deceased

- b. What is(was) his year of birth (if unsure, put age)? _____
 - c. Was there any time before you were 16 when you did not live with him?
 1. Yes, ages _____ to _____
 2. No
 - d. When you last lived with him, how close did you feel to him?
 1. Very close
 2. Close
 3. Somewhat close
 4. Not close
 5. Distant
6. Now, about your mother:
- a. Is she:
 1. Living with your father
 2. Divorced or separated from him
 3. Widowed
 4. Living apart for some other reason
 5. Deceased
 - b. What is (was) her year of birth (if unsure, put age)? _____
 - c. Was there any time before you were 16 when you did not live with her?
 1. Yes, ages _____ to _____
 2. No
 - d. When you last lived with her, how close did you feel to her?
 1. Very close
 2. Close
 3. Somewhat close
 4. Not close
 5. Distant
7. Did you also have a stepmother?
1. Yes
 2. No

*If no, go to question #8.

- a. Is your stepmother:
 1. Living with your father
 2. Divorced or separated from him
 3. Widowed from him
 4. Living apart for some other reason
 5. Deceased

- b. What is (was) her year of birth (if unsure, put age)? _____
- c. Was there any time before you were 16 when you did not live with her?
 1. Yes, ages _____ to _____
 2. No

- d. When you last lived with her, how close did you feel to her?
 1. Very close
 2. Close
 3. Somewhat close
 4. Not close
 5. Distant

Now, about your brothers. (If you do not have any brothers, go to question #12).

Start with your oldest brother, and work down to your youngest.

- 8a. Oldest brother, is he:
 1. A natural brother
 2. a stepbrother (no parents in common)
 3. A half brother (one parent in common)
 4. An adopted brother

- b. What is his year of birth? _____
- c. Was there any time before the age of 16 when you did not live with him?
 1. Yes, ages _____ to _____
 2. No

- d. When you last lived with him how close did you feel to him?
 1. Very close
 2. Close
 3. Somewhat close
 4. Not close
 5. Distant

9. Next brother (if none, go to question #12):

- a. Is he:
 1. A natural brother

2. a stepbrother (no parents in common)
3. A half brother (one parent in common)
4. An adopted brother

b. What is his year of birth? _____

c. Was there any time before the age of 16 when you did not live with him?

1. Yes, ages ____ to ____
2. No

d. When you last lived with him how close did you feel to him?

1. Very close
2. Close
3. Somewhat close
4. Not close
5. Distant

10. Next brother (if none, go to question #12)

a. Is he:

1. A natural brother
2. a stepbrother (no parents in common)
3. A half brother (one parent in common)
4. An adopted brother

b. What is his year of birth? _____

c. Was there any time before the age of 16 when you did not live with him?

1. Yes, ages ____ to ____
2. No

d. When you last lived with him how close did you feel to him?

1. Very close
2. Close
3. Somewhat close
4. Not close
5. Distant

11. Next brother (if none, go to question #12)

a. Is he:

1. A natural brother
2. a stepbrother (no parents in common)
3. A half brother (one parent in common)
4. An adopted brother

b. What is his year of birth? _____

- c. Was there any time before the age of 16 when you did not live with him?
 - 1. Yes, ages ____ to ____
 - 2. No
- d. When you last lived with him how close did you feel to him?
 - 1. Very close
 - 2. Close
 - 3. Somewhat close
 - 4. Not close
 - 5. Distant

Now about your sisters (if none, go to question #16).
Start with your oldest sister, and work down to the youngest.

12a. Oldest sister, is she:

- 1. A natural sister
 - 2. A stepsister (no parents in common)
 - 3. A halfsister (one parent in common)
 - 4. An adopted sister
- b. What is her year of birth (if unsure, put age)? _____
 - c. Was there any time before you were 16 when you did not live with her?
 - 1. Yes, ages ____ to ____
 - 2. No
 - d. When you last lived with her, how close did you feel toward her?
 - 1. Very close
 - 2. Close
 - 3. Somewhat close
 - 4. Not close
 - 5. Distant

13. Next sister (If none, go to question #16).

- a. Is she:
 - 1. A natural sister
 - 2. A stepsister (no parents in common)
 - 3. A halfsister (one parent in common)
 - 4. An adopted sister
- b. What is her year of birth (if unsure, put age)? _____
- c. Was there any time before you were 16 when you did not live with her?
 - 1. Yes, ages ____ to ____
 - 2. No
- d. When you last lived with her, how close did you feel toward her?

1. Very close
2. Close
3. Somewhat close
4. Not close
5. Distant

14. Next sister (If none, go to question #16)

- a. Is she:
 1. A natural sister
 2. A stepsister (no parents in common)
 3. A halfsister (one parent in common)
 4. An adopted sister
- b. What is her year of birth (if unsure, put age)? _____
- c. Was there any time before you were 16 when you did not live with her?
 1. Yes, ages _____ to _____
 2. No
- d. When you last lived with her, how close did you feel toward her?
 1. Very close
 2. Close
 3. Somewhat close
 4. Not close
 5. Distant

15. Next sister (If none, go to question #16).

- a. Is she:
 1. A natural sister
 2. A stepsister (no parents in common)
 3. A halfsister (one parent in common)
 4. An adopted sister
- b. What is her year of birth (if unsure, put age)? _____
- c. Was there any time before you were 16 when you did not live with her?
 1. Yes, ages _____ to _____
 2. No
- d. When you last lived with her, how close did you feel toward her?
 1. Very close
 2. Close
 3. Somewhat close
 4. Not close
 5. Distant

16. Which of these family members were you living with at age 12? (circle all that are appropriate)

- | | | |
|---------------|----------------------------|----------------------------|
| 1. Father | 5. 1 st brother | 9. 1 st sister |
| 2. Stepfather | 6. 2 rd brother | 10. 2 nd sister |
| 3. Mother | 7. 3 rd brother | 11. 3 rd sister |
| 4. Stepmother | 8. 4 th brother | 12. 4 th sister |

Part B

It is now generally realized that most people have sexual experiences as children and while they are still growing up. Some of these are with friends and playmates, and some with relatives and family members. Some are very upsetting and painful, and some are not. Some influence people's later lives and sexual experiences, and some are practically forgotten.

We would like you to try to remember the sexual experiences you had while growing up. By "sexual," we mean a broad range of things, anything from playing "doctor" to sexual intercourse- in fact, anything that might have seemed "sexual" to you.

17. Did you have any of the following experiences before the age of 12 (6th grade)? (circle any that apply)

- a. An invitation or request to do something sexual
- b. Kissing and hugging in a sexual way
- c. Another person showing his/her sex organs to you
- d. You showing your sex organs to another person
- e. Another person fondling you in a sexual way
- f. You fondling another person in a sexual way.
- g. Another person touching your sex organs.
- h. You touching another person's sex organs.
- i. Intercourse, but without attempting penetration.
- j. Intercourse
- k. Other:

Who started this? 1. You 2. Other person

Did other person threaten or force you? 1. Yes 2. A little 3. No

Did you threaten or force other person? 1. Yes 2. A little 3. No

About how many times did you have a sexual experience with this person? _____

Over how long a time did this go on? (Give number of days, months, years)_____

Which of these would best describe you reaction at the time of the experience?

1. Fear
2. Shock
3. Surprise
4. Interest
5. Pleasure

Who did you tell about this experience, at the time?

1. No one
2. Mother
3. Father
4. Other adult _____
5. Brother/Sister
6. Friend
7. Other _____

If mother, how did she react? (If you did not tell your mother, how do you think she would have reacted?)

Angry 1. Very 2. Mildly 3. A little 4. Not at all

Supportive 1. Very 2. Mildly 3. A little 4. Not at all

If father, how did he react? (If you did not tell your father, how do you think he would have reacted?)

Angry 1. Very 2. Mildly 3. A little 4. Not at all

Supportive 1. Very 2. Mildly 3. A little 4. Not at all

k. Other, please mention:

Who started this? 1. You 2. Other person

Did other person threaten or force you? 1. Yes 2. A little 3. No

Did you threaten or force other person? 1. Yes 2. A little 3. No

About how many times did you have a sexual experience with this person? _____

Over how long a time did this go on? (Give number of days, months, years) _____

Which of these would best describe you reaction at the time of the experience?

1. Fear
2. Shock
3. Surprise
4. Interest
5. Pleasure

Who did you tell about this experience, at the time?

1. No one
2. Mother
3. Father
4. Other adult
5. Brother/Sister
6. Friend

If mother, how did she react? (If you did not tell your mother, how do you think she would have reacted?)

Angry 1. Very 2. Mildly 3. A little 4. Not at all

Supportive 1. Very 2. Mildly 3. A little 4. Not at all

If father, how did he react? (If you did not tell your father, how do you think he would have reacted?)

Angry 1. Very 2. Mildly 3. A little 4. Not at all

Supportive 1. Very 2. Mildly 3. A little 4. Not at all

k. Other, please mention:

Who started this? 1. You 2. Other person

Did other person threaten 1. Yes 2. A little 3. No
or force you?

Did you threaten or force 1. Yes 2. A little 3. No
other person?

About how many times did you have a sexual experience with this person? _____

Over how long a time did this go on? (Give number of days, months,
years)_____

Which of these would best describe you reaction at the time of the experience?

1. Fear
2. Shock
3. Surprise
4. Interest
5. Pleasure

Who did you tell about this experience, at the time?

1. No one
2. Mother
3. Father
4. Other adult
5. Brother/Sister
6. Friend

If mother, how did she react? (If you did not tell your mother, how do you think she would have reacted?)

Angry 1. Very 2. Mildly 3. A little 4. Not at all

Supportive 1. Very 2. Mildly 3. A little 4. Not at all

If father, how did he react? (If you did not tell your father, how do you think he would have reacted?)

Angry 1. Very 2. Mildly 3. A little 4. Not at all

Supportive 1. Very 2. Mildly 3. A little 4. Not at all

In retrospect, would you say this experience was:

1. Positive
2. Mildly positive
3. Neutral
4. Mostly negative
5. Negative

19. Answer the following questions about: THE WORST OR MOST SIGNIFICANT SEXUAL EXPERIENCE THAT YOU HAD AS A CHILD.

a. Write down one major cause for this experience:

b. Is the cause of your childhood sexual experience due to something about you or something about other people or circumstances?

Totally due to other people or circumstances	1	2	3	4	5	6	7	Totally due to me
---	---	---	---	---	---	---	---	----------------------

c. Is the cause something that just affects this one particular situation, or does it also influence other situations?

Influences just this particular situation	1	2	3	4	5	6	7 Influences all situations
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THANK YOU FOR YOUR PARTICIPATION!!!