

FAMILY AND ENVIRONMENTAL FACTORS ASSOCIATED
WITH SCHOOL RELATED PROBLEMS IN CHILDREN
WHO HAVE BEEN SEXUALLY ABUSED

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CHAPTER I

INTRODUCTION

There is little disagreement that the sexual abuse of children is a wide-spread problem in this country and that the effects are often devastating. The problem was largely ignored until the 1970s, when case reports of sexually abused children began to appear in the literature with greater frequency (Browning & Boatman, 1977; Ferracuti, 1972; Meiselman, 1978). These early studies primarily utilized adult retrospective studies, anecdotal information, and clinical reports. While valuable, this type of research does not allow a clear understanding of the relationship between variables in the child's family and environment and the consequences on children's social, emotional, and cognitive development and functioning. Since 1985, there has been an increase in the number of studies undertaken attempting to better understand the effects of child sexual abuse on the development of social, emotional, and behavioral problems. A trend has developed to accomplish this by studying children who are victims of sexual abuse and to rely less on adult retrospective studies.

The symptoms or effects of child sexual abuse are most frequently categorized under the headings of initial or

long-term effects. The initial after effects develop at the time of the abuse or shortly thereafter (within two years of termination of abuse). The long-term effects and their symptoms are defined as those which develop two years or more post abuse (Brown & Finkelhor, 1986). Initial and long-term consequences are further categorized into affective effects, physical effects, behavioral symptoms, sexual effects, or other effects. The body of research related to symptoms or effects of child abuse rarely includes any mention of specific school-related effects as a topic of study. Yet, it is known that sexually abused children exhibit school-related problems, including problems concentrating on tasks (Shaw & Meier, 1983), underachievement (Yates, 1982), problems with attention and concentration (Johnston, 1979), learning disabilities (Dixen & Jenkins, 1981), lower verbal I.Q. (Basta & Peterson, 1990), and higher rates of truancy (Anderson, Bach, & Griffin, 1981; Peters, 1976). Additionally, children who were sexually abused are more likely to have received some type of remedial education services and more often placed in emotionally disturbed classrooms (Christiansen, 1980). Reyome (1988) demonstrated that there is a tendency for sexually abused children to repeat school grades and to have received special class placement or tutoring. Lusk (1988)

found that the sexually abused children in his study were rated as having significantly more school-related behavior problems, showed poorer attitudes toward school, and were rated by parents as having poor attention and concentration when compared to a control group. A history of sexual abuse was found to be directly negatively related to ratings of classroom social competence and overall academic performance and positively related to school avoidant behavior in a study by Trickett, McBride-Chang, and Putnam (1994). Consequently, there does appear to be a link between child sexual abuse and school-related problems.

An area of interest with both clinicians and researchers in the field of child sexual abuse has been to speculate as to the relationship between abuse characteristics and severity of effects. Characteristics of primary interest have included duration and frequency of abuse, type of sexual activity, use of force and aggression, age at onset of abuse, gender of and relationship to the perpetrator, and parental reaction (Courtois, 1988). Since the severity of the effects of child sexual abuse has not been found to be consistent across victims, researchers have begun to explore the relationships between environmental variables typically associated with child sexual abuse and their outcomes and consequences. It is evident, therefore,

much of the research focuses on the outcomes in the affective, physical, and sexual areas or whether the consequences are associated with initial or long-term effects. An important area yet to be examined is the relationship between such family-environmental variables associated with child sexual abuse and outcomes and consequences regarding school-related problems. Therefore, the primary objective of this research is to investigate the relationship between specific family-environmental variables and the school-related problems in school age children (6-13 years old) who have been victims of sexual abuse.

Statement of the Problem

Do the family-environmental variables which have been found to be related to and predictors of psychological and behavioral problems in sexually abused children, have a significant relationship to educational problems? Is there a significant relationship between the amount of schooling a child has received and school-related problems, i.e., are children who have been victims of sexual abuse more likely to develop school-related problems at specific times during their grade school years? The following null hypotheses and corresponding research questions were studied:

Null Hypothesis One: There is no significant relationship between school-related problems and each of the variables: age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support.

Research Question One: The family-environmental variables age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support are correlated with school-related problems.

Null Hypothesis Two: The amount of schooling a child has completed is not associated with school-related problems.

Research Question Two: School-related problems will differ as a function of grade.

Null Hypothesis Three: There is no significant relationship between school-related problems and a linear combination of age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support for each grade level.

Research Question Three: A significant amount of variance in school-related problems will be accounted for by a linear combination of age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support.

Null Hypothesis Four: The variables age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support will each have no ability to predict school-related problems for each grade level.

Research Question Four: The variables age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support will each significantly predict school-related problems.

Significance of the Study

Although the present research literature in the field of child sexual abuse provides information regarding how abuse affects children's emotional, social, behavioral, and physical development, it has largely ignored the effects on the development of specific school-related problems. While researchers have developed more insights into how specific environmental variables associated with child sexual abuse are related to outcomes and consequences in the areas of emotional, social, physical, sexual and behavioral domains, the present study furthered findings in a number of ways. First, this investigation focused on the relationship between frequently examined family-environmental variables associated with child sexual abuse, (duration, severity, age

at onset, relationship between victim and perpetrator, and maternal support following the disclosure of the abuse) and specific school problems. Second, this investigation specifically focused on elementary school-age children who were victims of sexual abuse. Past studies have often focused on adult victims' retrospective accounts and have neglected to specifically divide the subjects into age ranges. By focusing on a more constricted age range, a clearer picture of how the abuse-variables affect school problems can be assessed. By exploring child oriented symptoms, this research could be more relevant to intervention and treatment issues. Finally, this study proposed to add to the emerging body of literature examining the relationship between family-environmental variables and their relationship to consequences in children who are victims of sexual abuse. This study involved record reviews and did not include face to face contact with subjects.

Basic Limitations

This study is subject to the following limitations:

1. The samples were restricted to the grade range of kindergarten through sixth. Therefore, results cannot be generalized to other grade levels.

2. The samples were restricted to females; therefore, the results cannot be generalized to males.
3. The samples were restricted to subjects who had been referred to county guidance centers for evaluation and/or psychological treatment; therefore, caution should be taken in generalizing beyond mental health and guidance centers.
4. This study involved a record review, thus it was not possible to corroborate information. Information utilized in this study was limited to that available in the clinical charts.

Assumptions

This study is subject to the following assumptions:

No concerns identified in the clinical records regarding a child's academic difficulties indicate an assumption of no educational problems. We assume that differences in school-related problems do exist among elementary school aged females who have been victims of sexual abuse. It is assumed that the measurement of school-related problems utilized in this study is reliable and is a valid measure of the degree of adverse educational impact. Finally, it is assumed that the various school districts in which the subjects lived utilized a reasonably consistent

method to identify and determine the need for educational assistance.

The next chapter reviews the literature on the family-environmental variables frequently associated with negative consequences of sexually abused children in the areas of social-emotional adjustment and the development of school-related problems. The following topics in Chapter two will be explored: incidence and prevalence rates associated with child sexual abuse, dynamics of the sexually abusing family, relationship between abuse variables and outcomes, and research linking school problems to child sexual abuse.

CHAPTER II

REVIEW OF THE LITERATURE

The literature review is divided into four sections. The first section discusses the depth and breadth of child sexual abuse in American society. The next section explores the literature on the socio-emotional impact of child sexual abuse and the dynamics of the sexually abusing family. The third section explores the relationship between family-environmental variables associated with child sexual abuse and their outcomes with regard to the victims. The fourth section explores the literature of the impact of child sexual abuse on the development of specific school related problems.

Incidence and Prevalence of Child Sexual Abuse

A new social awareness about sexual victimization of children had its beginnings in other movements of social concern in the 1960's and 1970's. When protective action through mandated reporting was legislated in many states in the early 1970's, sexual abuse began to be reported more frequently. In 1978-1979 a national incidence study of child abuse was conducted (Finkelhor & Hotaling, 1984) which included all cases known to child protective services,

hospitals, schools, and other agencies. It was estimated that there were 10.7 cases of child sexual abuse a year per 1,000 children as compared to 3.4 cases of physical abuse and 2.2 cases of emotional abuse. There were only 44,700 substantiated cases of sexual exploitation in 1979 according to the National Center for Child Abuse and Neglect (NCCAN). Many researchers feel the actual incidence rate is much higher; however, it will likely never be accurately estimated due to the large numbers of victims who never report their abuse or those reported instances which are never substantiated by law enforcement or child protective agencies. Studies which have attempted to estimate the incidences of child sexual abuse have typically gathered their information from professionals and agencies dealing with child sexual abuse or from direct interviews with the victims and/or their families when the sexual abuse has come to the attention of outside agencies. Finkelhor, Hotaling, Lewis, and Smith (1984) provided a conservative estimate of 150,000 to 200,000 cases of child sexual abuse per year; i.e. cases of caretaker-perpetrated sexual abuse known to professionals represents only 1/4 to 1/3 of the actual cases. In a study conducted by Sarafino (1979) data was collected on both intrafamilial and extrafamilial reported child sexual abuse cases. He estimated a nationwide

incidence rate of 74,725 reported sexual offenses against children in a one-year period. He concluded that there were approximately 336,200 reported and unreported child sexual offenses each year nationwide. In 1978, as part of the National Study of the Incidence and Severity of Child Abuse and Neglect, information was systematically collected on child sexual abuse cases known to professionals in the United States. The study reported 83% of the victims were female and 17% were male with a median age of 12.4 at the time of discovery. Subsequent studies have typically found the ratio of female to male victims to be approximately 4 or 5 to 1 among cases that come to professional attention.

DeJong, Heurvada, and Emmett (1983) found that 23.7% of assailants were relatives, and 29.8% were acquaintances. Mrazek and Mrazek (1981) found that 43% of perpetrators were relatives and 31% were acquaintances. Peters (1976) found that 32% of perpetrators were family members and 59% were acquaintances. Thus, in the early studies, incest accounted for between 24 and 43% of sexual abuse. Russell (1983) conducted a study of a random sample of 930 adult women in San Francisco. She found that 16% of the women reported at least one intrafamilial sexual abuse before the age of 18, and of these, 12% were abused before the age of 14. Thirty-one percent of the sample reported at least one

extrafamilial incident of sexual abuse before the age of 18 and 20% of these were before the age of 14. Finkelhor (1979), in a study which included 796 college students, found that 19.2% of the women and 8.6% of the men indicated that they had been sexually victimized as children.

The National Incidence Studies (NIS-1 completed in 1980 and NIS-2 completed in 1986) were sponsored by the U.S. Department of Health and Human Services under the direction of The National Center on Child Abuse and Neglect. The NIS-2 study concluded that the incidence of countable sexual abuse more than tripled since 1980 and that females were sexually abused almost 4 times as often as males.

Prevalence studies are attempts to estimate the portion of the population that has been sexually abused during the course of their childhood. This is in contrast to the incidence studies which attempt to estimate the number of new cases accrued within a given time period. Due to the recent interests in child sexual abuse research, there has been a dramatic increase in the number of prevalence studies. In 1986, Wyatt and Peters compared and contrasted the four major prevalence studies. The comparison included two studies by Finkelhor (1979, 1984), a study by Russell (1983) and one by Wyatt (1985). The prevalence rates for both contact and noncontact abuse

combined ranged from 15% to 62% of the population studied. The researchers effectively point out that the difference in the prevalence rates are very likely due to the differences in definition of sexual abuse and the sample characteristics. For instance, in Finkelhor's early study, the population included primarily white or Anglo Saxon college undergraduates, while Russell's study included subjects who had an educational level of high school or less with a wider range of ethnic backgrounds. In three of the four studies, the criteria for sexual abuse was defined by the age of the subject, the age of the perpetrator, or by the type of abuse.

Russell's (1983) study is one of the most important retrospective incidence studies to date because it included a random household sample of 930 adult women, had a carefully designed interview schedule, and was conducted by trained female interviewers. The analysis of the data revealed that 38% of the women had at least one unwanted sexual experience involving physical contact with an adult prior to the age of 18. Only 8% of these cases were ever reported to police. The overwhelming majority of perpetrators were known to their victims.

The Finkelhor (1980) study was an adult retrospective study comprising 796 male and female undergraduates.

Finkelhor discovered that 19% of women sampled were sexually abused prior to the age of 17. Finkelhor utilized a broader definition of sexual abuse which included nonphysical contact; i.e., exhibitionism. The lower rate reported by Finkelhor may well have been due to his using college students and including men in his sample.

A later retrospective study in the United Kingdom (Goodwin, McCarty, & DiVastro, 1982) found that of 500 adult women in the general population, 24% had experienced a stressful sexual incident prior to the age of 19. Again this was a nonrepresentative sample and a questionnaire was used rather than a standardized interview.

Both the Russell and Finkelhor studies indicate that sexual abuse was more likely to occur at younger ages and that the perpetrators were, for the most part, known to their victims. In reviewing the research on incidence rates, Alter-Reid, Gibbs, Lachenmeyer, Sigal, and Massoth (1986) concluded that the incidence of childhood sexual abuse of women was approximately 38% and confessed this figure may be an underestimation.

In his review of epidemiological factors in the identification of child sexual abuse, Finkelhor (1993) stated that the prevalence rates in community surveys ranged from 6-62% for females and 3-16% for males with a rough

expectation of at least 1 in 4 girls and 1 in 10 boys will suffer sexual victimization. He concluded that the prevalence of sexual abuse is wide spread and in no subgroup is it clearly absent or rare. Although the actual prevalence of child sexual abuse remains uncertain, many authors, including Feldman, Feldman, Goodman, McGrath, Pless, Corsini, and Bennett (1991); Cupoli and Sewell (1988); Finkelhor, Hotaling, Lewis, and Smith (1990); Wolfe and Wolfe (1988); Wyatt, Peters, and Finkelhor (1986), indicate the number of reports of suspected child sexual abuse has increased particularly among very young children.

In a study by Bergner, Delgado, and Graybill (1994), 411 female college students attending Illinois State University served as subjects. The sample consisted of 84.4% Caucasian, 9.2% African American, and 1.9% Hispanic. Eighteen and a half percent of these women had been raised in a large metropolitan area, 64.3% in a medium size town, and 17.2% in rural areas. Employing essentially the same instrument and criteria as Finkelhor (1979) a sexual abuse prevalence rate of 24.3% was obtained in this study. Of the subjects who met the criteria of being regarded as sexually abused, 86% reported abuse that entailed physical contact. The author's additionally studied the prevalence of "forced sexual experiences" which do not meet the age difference

criteria specified by Finkelhor, but which occur at or before the age of 16 and involve the reported use of threat or force to secure sexual contact. An additional 7.3% of the sample reported subjection to such forced sexual experience; thus, 31.6% of the sample reported being subjected to potentially damaging sexual experiences at a young age.

Wyatt (1985) found that 45% of a Los Angeles household sample of 248 women reported sexual abuse before the age of 18. The American Humane Association nationwide data collection system reported increases in reported child sexual abuse cases from 1,975 in 1976 and 4,327 in 1977 to 22,918 in 1982 (AHA, 1986 since 1988).

In fiscal year 1993 there were 2,511 confirmed sexual abuse incidents in Oklahoma. Sexual abuse was the second most frequently occurring type of abuse and comprised 21% of the total number of confirmed abuse incidents (Oklahoma Commission for Human Services, 1995).

Definitional Issues

Child sexual abuse has been defined as "contacts or interaction between a child and an adult when the child is being used for sexual stimulation of that adult or other persons" by the National Center on Child Abuse (U.S.

Department of Health, Education, and Welfare, 1978). Child sexual abuse is typically described as the sexual exploitation of a child by an adult or a significantly older peer (usually 5 or more years). In spite of the National Center for Child Abuse and Neglect's attempts to more specifically define child sexual abuse, there is still a significant discrepancy in the definitions used by researchers and clinicians. In Wyatt and Peters' (1986) critique of sexual abuse prevalence studies, they reported each researcher had differed in defining the type of behavior which constituted sexual abuse (contact only, contact and non-contact) and in their defining characteristics--primarily discrepancy between the ages of victim and perpetrator and whether or not the studies included any type of unwanted sexual experience.

Another issue is whether studies differentiate between intrafamilial and extrafamilial sexual abuse. Many studies have utilized subjects where sexual abuse has been confirmed by the local and state child protective services agency. Mrazek (1980) noted that the term "sexual abuse" is not universally accepted and is often interchanged with terms like exploitation, misuse, assault, molestation, incest, and child rape.

As Mrazek (1990) points out, any attempt to define sexual abuse of children is fraught with difficulties since all definitions are culture and time bound. She further described the issues which should be taken into account; 1) an explicit description of the sexual abuse occurrence: nature of the sexual act(s), frequency, occurrence of violence or threats; 2) information about the age and development of the victim and perpetrator: age differences, intelligence, mental status; 3) an understanding of the nature of the victim-perpetrator relationship: whether or not they know each other and in what context, the quality of their relationship, their perceptions and feelings regarding what occurred and why; 4) a description of the attitudes and involvements of other family members and the prevailing sexual attitudes within the community.

In conclusion, the research on incidence and prevalence rates of child sexual abuse allow us to conclude that this is a wide spread and frequently occurring problem in our society which affects many children each year. It is unlikely we will ever know the true magnitude of the problem. In fact, Tsai and Wagner (1978) estimated that the "hidden incidence" of sexual abuse is 5 to 10 times that of the reported incidence.

Dynamics of the Sexually Abusing Family

Most researchers have discovered that the majority of child sexual abuse occurs within the family (Courtois, 1988) or within "affinity" systems--relatives, friends, family, neighbors, and day care personal. Calof (1987) has provided a summary of traits most often used by incestuous families to maintain the integrity and homeostasis of the family unit: 1) collective denial and shared secrets; 2) duplicity and deceit between family members; 3) social isolation; 4) parents who manipulate the context of situations and alter reality; 5) role confusion and boundary diffusion; 6) triangulation between the child and the parents; 7) poor tolerance for differences from the accepted family norm; 8) overly moralistic; 9) no touch except for bad touch; 10) inadequate parenting; 11) low humor and high sarcasm; 12) dead, missing, or part-time parents; 13) children are often unwanted and are treated that way; 14) unpredictability and intermittent reinforcement; 15) violence and the threat of violence; 16) no time for recovery and no one to turn to.

From a family systems perspective, the family is often found to have rigid boundaries leaving them socially, psychologically and physically isolated. There is a high degree of mutual interdependence by family members; i.e., enmeshment. Appropriate personal boundaries are often

lacking and rarely enforced. Children are involved in role reversal with parents, typically manifested in the child becoming the caretaker for one or both parents.

The incestuous family often develops a series of messages or rules for members to follow to protect the family including don't feel, be in control at all times, deny what is really happening, don't trust yourself or anyone else, keep the secret, and be ashamed of yourself (Courtois, 1988).

From the family systems perspective, sexual abuse is typically a manifestation of a dysfunctional family system wherein the family functions in such a way that reality is distorted in order to provide stability and homeostasis within the system. Basic emotional and dependency needs of the children are often inadequately met or unmet leaving them ill prepared to deal with the day-to-day stressors of life.

Research studies addressing the outcomes and consequences of child sexual abuse are discussed; specifically, this includes the impact of sexual abuse on socio-emotional development, the development of behavior problems, and the development of school problems.

Socio-Emotional Impact of Child Sexual Abuse

The sexual abuse of children did not become a topic for scientific inquiry until Freud (1896) discovered that many of his patients had been molested or sexually victimized as children. The abuse of children remained a relatively neglected subject until the publication of Kempe's classic paper "Battered Child Syndrome" in 1962. This eventually led to the enactment of child abuse reporting laws.

During the 1970's, publications of sexually abused children began appearing with greater frequency; however, these were primarily case reports and the information was largely anecdotal. Clinicians began to describe a wide variety and signs and symptoms displayed by sexually abused children. However, these studies rarely employed control groups, standardized assessment instruments, and did not discriminate between initial and long-term psychological sequelae.

Until recently the majority of literature describing the impact of child sexual abuse consisted primarily of retrospective adult studies. When Browne and Finkelhor (1986) performed their review of the literature, there were only four studies of children and 23 studies of adults which addressed sexual abuse outcomes. There has been a shift in

focus since 1985 towards child-oriented studies which often evaluate specific child-oriented symptoms.

In the 1980's researchers began using more methodologically rigorous practices to study the incidence of and sequelae associated with child sexual abuse. The first major study examining the impact of child sexual abuse using a standardized instrument was carried out by Gomez-Schwartz et. al (1985). The investigators assessed levels of emotional distress in 156 sexually abused children over a two year period using the Louisville Behavior Checklist. Typical symptoms found in these children included anxiety, fear, depression, destructive behavior, phobic reactions, and deficits in intellectual, physical and social development (Green, 1993).

Reviews of studies on sexual abuse occurring during childhood have almost unanimously concluded that it has harmful effects (Beitchman, Zucker, Hood, DaCosta, & Akman, 1991; Browne & Finkelhor, 1986; Green, 1993; Lusk & Waterman, 1986). Browne and Finkelhor (1986) thoroughly reviewed available empirical studies on the impact of child sexual abuse and identified the following frequently occurring symptoms: initial effects--fear, anxiety, depression, anger, aggression, and sexually inappropriate behavior; long-term effects--depression, self-destructive

behavior, anxiety, feelings of isolation and stigma, poor self esteem, difficulty in trusting others, tendency towards revictimization, substance abuse, and sexual maladjustment.

Beitchman et al. (1991) in their critical evaluation of empirical studies on the short term effects of child sexual abuse, found victims of child sexual abuse were more likely than nonvictims to develop some type of inappropriate sexual behavior. They also found that frequency and duration of sexual abuse is associated with more severe outcome, abuse involving force or penetration is associated with greater trauma, abuse by biological or step-father is associated with greater emotional trauma, and that victims are more likely to come from disturbed families.

In Beitchman et al.'s (1992) review of the literature on the long-term effects of child sexual abuse they concluded that women who report a history of child sexual abuse more commonly show evidence of sexual dysfunction, anxiety and fear, depression, revictimization, and suicidal ideation. When examining the relationships between abuse-specific variables and particular outcomes, the relationship between age of onset of abuse and outcome remains unclear. Long duration of abuse was associated with greater impact; use of force or threat was associated with negative outcomes, abuse involving penetration is associated with

greater long-term harm, and abuse involving a father or stepfather is associated with greater long-term harm.

In a review of 45 studies from the fields of medicine, social work, psychology, and sociology, Kendall-Tackett, Williams, and Finkelhor (1993) concluded that sexually abused children clearly had more symptoms than non-abused children. Overall, the results of the study confirmed that being sexually abused was related to the development of sexualized behaviors, depression, aggression, and withdrawal. Other symptoms that appeared in many studies included anxiety, somatic complaints, and school problems. The authors were able to calculate effect sizes for seven symptoms on which enough information was provided for a comparison of abused and non-abused, non-clinical children. The symptoms were anxiety, sexualized behavior, depression, withdrawal, aggression, internalizing, and externalizing behaviors. The authors concluded that sexual abuse status alone accounted for a very large percentage (15-45%) of the variance for all seven symptoms with sexually abused children manifesting significantly more of all of these symptoms. Of the six studies which included a nonclinical control group, five of the six studies showed sexually abused children to be more symptomatic than the non-sexually abused. Interestingly, when sexually abused

children were compared to clinical controls (3 studies) one study found no difference between the groups and 2 studies found the sexually abused children to be less symptomatic than the nonsexually abused group. The measures which were used to identify school problems were not identified in this review and it is possible they were not sufficient to detect differences between the groups. The ages of the subjects in the study were also not identified. The authors primarily reviewed studies in which the child sexual abuse subjects were typically children with identified behavior and/or emotional problems (children who were seen in clinics, hospitals, etc.).

In the researcher's review of studies which describe the percentage of children displaying symptoms, there were 9 studies which identified school/learning problems with 18% of the subjects having these problems on the average. Unfortunately, the school/learning problems were not clearly identified by the researchers. In examining the breakdown of the nine studies by age group, only 2 studies have been employed for preschool children, one study for school-age children, and two studies with adolescents indicating that there have been very few studies which have specifically addressed school or learning problems with children who have been sexually abused.

Relationship Between Abuse Variables and Outcomes

Evidence from both methodologically rigorous investigations and clinical reports have demonstrated that sexually abused children display more behavioral and psychological problems than non-abused children (Beilke, Friedrich, & Urquiza, 1987; Cohen & Mannarino, 1988). Unfortunately, the findings have tended to be inconsistent, and this is often the result of differences in the sampling and methodological procedures. One of the major issues confronting researchers is attempting to determine the source of psychological and behavioral difficulties that sexually abused children manifest; i.e., what are the specific aspects of sexual abuse that increase the likelihood of an individual's developing more distress. A question that many researchers and clinicians have proposed is whether or not certain abuse-related factors (i.e., relationship to perpetrator, type of abuse, severity of abuse, etc.) are associated with the development of specific symptomology. Groth (1978) suggested that increased trauma was a function of four factors: 1) the closer the relationship between the child and the perpetrator, the greater the potential for trauma; 2) the longer the experience continues, the greater the harm; 3) more trauma

results from elaborate kinds of sexual activity, actual penetration being the most and simple exhibition without physical contact being the least traumatic; and 4) experiences involving aggression are more likely to be more traumatic. Along these same lines, Finkelhor (1979) found there is a significant relationship between the victim's retrospective report of the trauma they had experienced and the use of physical force used in the commission of the physical act. McFarlane (1978) added to the list of factors: 1) if the child participates in and enjoys the experience they are more likely to develop more negative feelings about it; 2) if the parents act severely and emotionally, the child will be more emotionally harmed; and 3) the victim being older or more mature the more traumatic the experience. In a comprehensive review of the research, Browne and Finkelhor (1986) found evidence to support the conclusion that abuse by a father figure and abuse that includes penetration and force relate to greater levels of distress. Duration of abuse and age of onset were found to have no relationship or the opposite relationship to distress in these reviewed studies. In a subsequent review of the literature, Beitchman et al. (1991) concluded that frequency and duration of sexual abuse is associated with more severe outcomes, sexual abuse perpetrated by a

biological father or step father is associated with greater trauma, and victims of child sexual abuse are more likely than non-victims to develop some type of inappropriate sexual behavior.

In their review of 45 recent studies (Kendall-Tackett et. al, 1993) found that the relationship between age of onset and the development of emotional and behavioral problems is not clear. Their review indicated that penetration/severity, frequency, and duration were all related to increased symptoms. Children who had been penetrated, or who were abused more frequently and over a longer period of time tended to develop more symptoms. Symptoms were also increased when the perpetrator had a close relationship with the child, force was used in the sexual abuse, and when there was a lack of maternal support following disclosure.

In a study conducted by Mennen (1993), demographic and environmental data were collected related to the sexual abuse experience of girls 6-18 years old who had been sexually abused. The information was collapsed into the following categories: perpetrator identity, type of abuse, race, amount or type force used, whether the child was removed from the home, duration of the abuse, and age at onset. Each of the subjects in the study were given a

depression inventory, manifest anxiety scale, and a self perception profile to measure their present emotional status. The results of this study supported the contention that sexual abuse in children causes emotional distress. When the child had been penetrated there was a 7.6 times greater likelihood that she would be in a higher distress group for depression, and a 3.6 times more likelihood to be in a higher distress group for self worth. The relationship of the perpetrator to the victim and the race of the child had no ability to predict distress level. The use of force had a different effect on outcome depending on the identity of the perpetrator. The author concluded that when sexual abuse includes penetration the child is at more risk for depression and poor self worth.

In a study to determine which characteristics of sexual abuse were associated with greater psychological impairment among children, Nash, Zivney, and Hulsey (1993) examined the psycho-social histories and projective test responses of 102 sexually abused girls (ages 5-16) to determine if some characteristics of the sexual abuse were associated with more serious impairment. In this study, psychiatric reports and Rorschach test results were examined on a group of randomly selected cases of sexual abuse victims who had been referred to a child guidance clinic.

Five abuse characteristics emerged as significantly related to more severe pathology. The number of perpetrators was the most significant predictor followed by disrupted family environment, the number of incidents (rate of abuse), total number of abuse contacts, and the victims age at onset of abuse. The authors conclude that the likelihood of severe impairment among sexually abused girls may be related to the nature of the abuse experience. Sexual contact that was repeated often, involved multiple perpetrators, began at an early age (before age 7 or 8), and involved periods of intense frequent episodes of more than three or four occurrences per month had a greater association with childhood disturbances as manifested by projective testing. The study suggested that there are indeed, prognostically, important characteristics of sexual abuse that the clinician can use to predict childhood sequelae.

Researchers and clinicians have been attempting to determine which factors contribute to a differential adjustment of both children and adults who have been victims of child sexual molestation. Although a wide variety of psychological and behavioral sequelae have been documented in sexually abused children, there appears to be considerable variability in the severity of the symptoms. In his review of the immediate and long term effects of

child sexual abuse, Green (1993) suggested that the severity of the symptoms would depend upon the following variables: 1) age and developmental level of the child, 2) child's preexisting personality and resiliency, 3) onset, duration, and frequency of the molestation, 4) degree of coercion and physical trauma, 5) closeness between the child and the perpetrator, 6) degree of supportiveness of the family's response to the disclosure, 7) nature of the institutional response to the abuse; i.e., medical, investigatory and legal procedures, and 8) availability and quality of therapeutic intervention.

In an effort to better understand the effects of child sexual abuse Russell (1986) had adult subjects respond to a survey describing the type of abuse they endured and their reactions to it. Russell sought to determine which factors were significantly associated with the victim's reported level of trauma. She entered the following factors into a multiple regression equation: frequency and duration; severity of abuse; use of force; age of the victim, the victim's relationship to the perpetrator, the age disparity between them; whether the perpetrator was a father or other relative; and whether the victim was abused by one or more perpetrators. Data analysis revealed that the severity of the abuse was more highly related to trauma

than whether or not the perpetrator was the father. In fact, severity emerged as the most significant of all nine variables, followed by whether or not the perpetrator was the father or relative, the use of physical force, the age disparity between the victim and perpetrator, and the duration of the abuse. Together, these factors accounted for 31 percent of the variance in the degree of trauma experienced.

Utilizing the following as indicators of mental health; evidence of psychoneurosis, depression, suicidal inclination, psychiatric consultation in the previous year and one's self-concept, Bagley and Ramsay (1986) attempted to determine which aspects of the sexual abuse experience were related to victim's mental health outcome. Their research concluded that the severity of the sexual abuse was the best predictor of later mental health problems. Duration of the abuse and abuse by more than one perpetrator were also found to be significant predictors. The use of force during the abuse and abuse by a father or stepfather bordered on significance.

Efforts have been made to discern those aspects of the abuse experience most consistently associated with short and long term trauma. Variables which consistently have emerged in the literature include: severity of the sexual

acts involved in the abuse; the use of force in gaining the child's compliance; and the relationship of the abuser to the child (Sink, 1988). Making sense out of the factors associated with the abuse which lead to increased trauma remains a more formidable task than isolating the factors themselves as several impact studies document a significant percentage of victims who do not respond in directions which the researchers predict, i.e., display few or no traumatic sequelae.

Herman and Schatzow (1987) found that earlier age of onset and/or violent abuse correlated with the use of repression as a defense mechanism and resulted in more severe symptomology in adulthood. Walsh (1986) found that earlier age at onset was correlated with multiple abuse and that repression was the major defense mechanism used by these victims.

Browne and Finkelhor (1986), in reviewing available empirical studies, concluded that there are no contributing factors that all studies agree on as being consistently associated with a worse prognosis. The trends in the findings indicate that abuse by fathers or stepfathers has a more negative impact than abuse by other perpetrators. Experiences involving genital contact seem to be more serious. Presence of force seems to result in more trauma

for the victim, and when families are unsupportive of the victims the prognosis has also shown to be worse. The authors conclude that the relationship between age of onset and trauma is especially complex.

Child sexual abuse has frequently been found to affect the victim's personality development and every major life sphere, either at the time of the abuse and/or later in life. The severity of after effects is not uniform and varies by individual circumstance. In clinical samples, the after effects are by definition more serious than the population in general and are associated with a wide array of mental health disturbances (Courtois, 1988).

Research Linking School Problems to Child Sexual Abuse

There have been few studies which have directly assessed the impact of child sexual abuse on school related problems. One of the earliest studies which addressed this issue was performed by DeFrancis (1969) who identified 263 sexually abused children and collected data regarding their school achievement. It was determined that 57% of the subjects in the study displayed some type of school problem. These problems included: poor achievement(28%), frequent absences (25%), feelings of non-acceptance by peers (13%) or teachers (6%), and school drop out (8%). Studies conducted

by Anderson, Bach, and Griffith (1981) and Peters (1976) found that sexually abused children tended to have significant problems with school functioning and truancy. In a study comparing physically abused and sexually abused children, Christiansen (1980) found that sexually abused school children more frequently experienced academic problems, and a significant proportion of the sexually abused group he studied had been placed in classes for the emotionally disturbed (5 out of 27). He also concluded that the sexually abused children had the greatest discrepancy between estimated and expected achievement in mathematics, spelling, and reading of the three groups studied. Shaw and Meier (1983) in their study of young sexual abuse victims found significant problems with attention and concentration. In a study by Lindeberg and Distad (1985) it was determined that all of the incest victims in this group had problems with attention and concentration. In an attempt to identify characteristics most typically associated with sexual abuse victims, VanderMey (1984) examined a sample of 163 incest victims and concluded that the most frequently occurring characteristic was emotional disturbance (17.2%) followed by behavioral problems (11.7%) and the third most typical characteristic was school problems (8%). These problems included difficulty adjusting, both academically and

socially, poor attendance or discipline problems. The author also discovered that 3.9% of the sample had learning difficulties.

One study specifically addressed cognitive and school related differences in sexually abused and nonabused children (Lusk, 1988). It was determined that, while the groups did not differ in intelligence, the reportedly abused children were rated as having more school-related behavior problems, showed poor attitudes about school, and were rated as having poor attention and concentration. In a study investigating the school performance of sexually abused and neglected children, Reyome (1988) found that 44% of the sexual abuse group had repeated a grade in school and that approximately 67% had been placed in a special class or was receiving tutoring. It was further discovered that when comparing the sexually abused group to two control groups, the children who had been sexually abused scored significantly lower in math and reading. The author concluded that there was a tendency for sexually abused children to repeat school grades more often than comparison children, and they were more likely to receive some form of remedial educational services. When the sexually abused and neglected children were compared, few statistically significant differences were found in terms of social or

cognitive measures. Notable differences did exist between the groups on most of the factors and subfactors of the Child Behavior Checklist. The neglected groups scored substantially higher than the sexually abused group on the internalizing factor and also on the social withdrawal and self destructive subfactors.

Although the sexually abused children were not found to differ significantly from two comparison groups in grade retention, they did differ significantly in special class placement. The sexually abused children scored significantly lower than the two comparison groups in two out of four classroom subjects (math and spelling).

Studies in which intelligence tests were administered to sexually abused children suggest that these children did not show global deficits in measured intelligence; however, there are indications that the verbal I.Q. scores may be lower than those of control children (Waterman & Lusk, 1993). Basta and Peterson (1990) compared the intelligence scores of three groups of children (16 incest victims, 16 children sexually abused by a pre-school teacher, and 16 non-abused children). He found that the non-abused children had significantly higher verbal I.Q.'s, as measured by the WISC-R, than the other groups. The intrafamilial and extrafamilial groups did not, however, differ from each

other in I.Q. The sexually abused children did not show significant deficits in verbal intelligence. Their scores were merely lower than that of the comparison groups. The relationship of abuse and neglect to academic achievement and discipline problems in school-age children was examined by Eckenroad, Laird, and Doris (1993). The researchers utilized social service and school records as the sources of data and found that maltreated children performed significantly below their non-maltreated peers on standardized tests and were more likely to have repeated a grade. The authors conclude that child abuse and neglect are significant risk factors for poor academic performance, grade retention, and discipline problems. Interestingly the authors in this study differentiated between what they described as "pure" types of maltreatment: neglect, physical abuse, and sexual abuse, and "mixed" types of maltreatment: physical abuse and neglect, and sexual abuse and neglect. They concluded that the children who had been sexually abused without any other type of maltreatment were similar to non-maltreated children in academic achievement and discipline problems. This study suggests that it can be determined that sexually abused children were not also neglected or physically abused. The authors do not provide detailed information about how the sexually abused subjects

were selected for the study. If we are to assume the children were abused by strangers or someone other than parental figures or caretakers, then we could speculate that the closeness of the relationship is a potentially important factor in the development of school and academic problems. If the sexual abuse was perpetrated by someone other than a family member or a caretaker, would the child than be less likely to develop school problems?

In a study aimed at clarifying the impact of sexual abuse on children's psychological well being, Paradise, Rose, Sleeper, and Nathanson (1993) compared 154 children brought to a hospital for assessment of recently disclosed sexual abuse to a control group of 53 demographically similar subjects not known to be sexually abused. Thirty-one percent of the abused children and 11% of the control children were assigned to special education classrooms or to grades 1 to 2 years below those appropriate for their chronological age. The abused children's academic performance was worse than the control children's in reading, science and social studies based on information extracted from school records. The abused children also received a higher proportion of unsatisfactory classroom behavior ratings than did the control children. The authors concluded that behavioral and academic dysfunction were

widespread but not universal among the sexually abused children studied. Several factors which were identified as being predictive to varying degrees of problematic behavior included history of prior abuse or neglect, lower maternal educational attainment, severity of mother's psychiatric problems, and poor family integration. Unfortunately, the author's did not examine potential predictors of school related problems.

Shapiro, Leifer, Martone, and Kassem (1992) examined cognitive functioning and social competence to assess their ability to predict maladjustment in sexually abused girls. Subjects who were sexually abused had been administered the Wechsler Intelligence Scale for Children-Revised (WISC-R) and the Wide Range Achievement Test-Revised (WRAT-R). The subjects' caretakers completed the Child Behavior Checklist (CBCL). A multiple regression analysis was used to predict internalizing scores on the CBCL from variables related to cognition (I.Q., age, and self-blame). These variables each predicted a significant amount of unique variance in the subject's internalizing score, and it was concluded that cognitively high functioning victims tended to show greater emotional distress. Of note is the fact that the authors made no attempt to compare the sexually abused subjects to a

control group, but instead attempted to explain some of the variability in the degree of maladjustment exhibited.

It was determined that a history of sexual abuse does predict academic performance and that abuse is directly negatively related to parent and teacher ratings of classroom social competence, competent learner, and overall academic performance in a study by Trickett, et al. (1994). This study was unique in that it investigated the processes by which sexual abuse may negatively impact school performance by considering the role of possible mediating factors - competencies and behavior problems. The authors stressed that the nature of the sexual abuse experience needs to be considered and dealt with this by utilizing a more uniform definitional criteria. The subjects were girls, ages 6-16, who experienced recently disclosed abuse, perpetrated by a family member, that consisted of genital contact and/or penetration. Academic performance was measured by school records, teachers ratings of classroom behavior and performance, and parental reports of school performance. The authors concluded that sexual abuse has a direct effect on every component of academic performance examined (classroom social competence, competent learner, school avoidant, and overall academic performance) except grades. The lack of a significant difference in grades

might be due to the sexually abused girls being placed in lower level classes, the authors speculate, and that in time, differences in abused and non-abused girls' grades will emerge. The study also indicated that sexual abuse has an effect on cognitive competencies and behavior problems that are, in turn, predictive of academic performance. The authors concluded that there are aspects of sexual abuse, other than those tapped by this study, that are important to fully understand the impact on school performance.

School-related problems in children who have been victims of sexual abuse have been noted by many clinicians and researchers. Unfortunately the nature of the problems are often not clearly specified and typically identified only as learning problems, behavioral problems, academic delays, or achievement problems. There have been few studies which have specifically attempted to examine the relationship between child sexual abuse and clearly identified school problems. As mentioned previously, the studies which have attempted to examine this relationship typically have found that there is a relationship between sexual abuse and a child's attitude about school, having been retained, receiving remedial services, school avoidant behavior, overall academic performance, or placed in some type of special education classroom. The majority of

studies which have examined the relationship between child sexual abuse and classroom problems have employed control groups; typically non-abused peers, clinical controls, or children who have been maltreated in some other manner. While these type of studies provide us with information regarding the differences between sexually abused children and these control groups, the authors of these studies universally lament the array of methodological problems with their studies. The most typical shortcoming described is that many studies did not differentiate between the types of child sexual abuse, thus suggesting that all types of sexual abuse can be equated. According to Mrazek and Mrazek (1981), six variables need to be considered when researching child sexual abuse including: consent of the sexual contact, age and developmental level of the child, degree of relatedness between victim and perpetrator, affective nature of the relationship, age difference between the victim and perpetrator, and length of the relationship. Another methodological consideration described by the authors is that there are no standard definitions of what does and does not constitute sexual abuse, thus findings must be evaluated in terms of the specific definitions being used. When researchers attempt to obtain a suitable control group, it is not always clear on which variables subjects should be

matched: age, race, sex, education, socio-economic status, family functioning, previous history of trauma, present and past family stressors, etc. Another consideration is the validity of the measures being used to assess the degree and level of differences between the group. Most available instruments were not specifically developed to measure abuse or trauma and may not be sensitive to abuse-specific symptoms. Most studies of child sexual abuse also identify significant constraints on the generalizability of the results. Thus, conclusions drawn from any given child abuse study should be limited to careful inferences regarding individuals with similar demographics, social status, and abuse histories (Briere, 1992).

In conclusion, studies which have compared a group of sexually abused children to some other group provide tentative conclusions due to their numerous methodological problems and considerations. Thus, the results may indicate there is a difference between the two groups; however, it is not clear that the differences can be attributed to the sexual abuse factors or to the many other past and present variables which are likely affecting the child.

While these types of studies may help enhance our understanding of the effects and impact of child sexual abuse, specifically with regard to school related problems,

they do not lead to early identification of school problems or the development of appropriate interventions. This study proposes to examine the relationship between specific family-environmental variables which are have been frequently associated with child sexual abuse, to determine their relationship with specific school related problems including grade retention, placement in special education classes, and receiving remedial services.

The purpose of identifying the variables which contribute to a lack of success in school for children who have been victims of sexual abuse is to discover ways to improve the delivery of educational services. Much of the attention by clinicians and researchers has been on affective and behavioral issues and outcomes. Few could argue that failure in school could be linked to and could perpetuate emotional, social, and behavioral problems. Success in school could, likewise, be a positive mediator which decreases the likelihood of a child's developing adverse consequences. Thus, there is need to better understand the relationship between the factors involved in child sexual abuse and negative school-related problems.

CHAPTER III

METHODS

The purpose of the present research was to investigate the relationship between family-environmental variables on school-related problems in children who have been victims of sexual abuse. This chapter discusses the location where the data were collected, the criteria utilized to identify records, subject characteristics, description and development of the instruments used, the procedures that were followed in collecting the data and the method in which the data were analyzed.

Subjects

The data for this investigation were collected from the records of seven child guidance centers located in a southwestern state, which provide services to ten counties, both urban and rural.

Subjects in this study were 108 female school-age children (mean age 10 years, S.D. 1.86) who have been identified as being victims of sexual abuse by either law enforcement agencies or the Oklahoma Department of Human Services (DHS) Child Welfare Unit and had been referred to a child guidance center from 1990-1995.

The children whose records were utilized in this study were referred from a variety of sources. The referrals most frequently (75%) came from the Department of Human Services/Child Welfare Division after determining that the child was a victim of sexual abuse. In the remainder of the cases, the abuse became apparent during the course of providing psychosocial services and was reported to the appropriate authorities. The children who were not referred by the Department of Human Services had been referred by parents, school officials, physicians, or other mental-health agencies for a variety of behavioral, social and emotional concerns.

The guidance centers were all state-funded with a sliding scale fee. Most of the clients were from a lower socioeconomic group. Historically, the guidance center services have been predominantly utilized by Caucasian clients. Additional information regarding the socio-demographic characteristics of the subjects is provided in the next chapter.

The Instrument

The instrument used in this study, the School-Related Problems Scale, was developed by the researcher as a measure of school-related problems. The development of the

instrument was guided by the following research questions:

- 1) The family-environmental variables age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support are correlated with school-related problems;
- 2) School-related problems will differ as a function of grade;
- 3) A significant amount of variance in school-related problems will be accounted for by a linear combination of age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support; and
- 4) The variables age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support will each significantly predict school-related problems previously described in Chapter Two and influenced by the availability of information in the client records.

The instrument was comprised of three sections. The first section consisted of basic demographic information, including the subject's age and grade at intake, ethnicity, socioeconomic status, marital status of biological parents at the time of the abuse, and parents' level of educational attainment. The second section consisted of rating five family-environmental variables (age at onset, relationship to perpetrator, severity, duration, and maternal support) and were utilized as the independent variables in the study. The third section consisted of information regarding the subject's

educational history; specifically whether a subject had been retained, placed in a class for students who have emotional disturbances or learning disabilities, or had received remedial services. This information was used to determine an school-related problems score. The conceptualization for the School-Related Problems Scale was modeled on Peters (1985) who developed an Index of Psychological Difficulty to determine the relationship between the severity of sexual abuse and psychological difficulty in adult women. The procedure for determining the score will be explained in the next section.

The Family-Environmental Variables: The following variables were utilized to assist in the prediction of school-related problems.

Age at onset: A continuous variable measured in months.

Severity of abuse: The definition provided by Russell, 1983, was used to define this variable. 1) very serious: ranging from forced penile/vaginal penetration to attempted fellatio, cunnilingus, anilingus, and anal intercourse;
2) serious: completed and attempted genital fondling, simulated intercourse, digital penetration, forced and unforced; and 3) least serious: ranging from forced kissing

to intentional sexual touching of buttocks, thigh, leg, or other body parts, clothed breast or genitals, kissing, forced and unforced.

Estimated duration of abuse: 1) more than one year; 2) six months to one year; 3) one month to six months; 4) one week to one month; 5) one time only.

Relationship between the child and perpetrator: 1) parent or stepparent; 2) sibling or nonparental family member; 3) friend, neighbor, baby-sitter; 4) stranger; or 5) other.

Maternal support: 1) unsupportive: hostile or abandoning, totally denies the abuse occurred, chooses perpetrator of child at child's expense; 2) ambivalent: vacillates in ability and/or desire to support the child, makes weak statements of belief, wavers in belief of child or is undecided, remains passive and refuses to take sides; 3) supportive: is committed to the child and provides meaningful support, makes clear public statement of belief, actively demonstrates disapproval of perpetrator's abusive behavior (Everson, Hunter, Runyon, Edelson, & Coulter, 1989). This variable was determined by the DHS at the time of intake or by the therapist who had provided services to the child.

The Educational Variable: The criterion variable was a School-Related Problems Scale which identified the level of educational adversity following the identification of sexual abuse. This data was obtained from the child history form in each file which provided information about the child's educational history. This information, which was completed by the parent and/or intake therapist, consisted of three areas of educational concern listed in the child history form.

Retention: Student has been held back at least one academic year.

Categorical placement: Specifically, the child has been placed in a classroom for seriously emotionally children or in a classroom for children with a specific learning disability.

Remedial/additional instruction: The child had received educational services beyond the "typical" classroom instruction. This typically would include children who have been in home-based programs, special day schools, laboratory or resource programs, or modified programs, although the specific service provided was typically not identified.

Based on this information, each student received one of the possible seven scores to identify the indices of one's school-related problems utilizing the school-related

problems ranking: 1) retained more than one academic year and placed in Learning Disabilities or Seriously Emotionally Disturbed classroom; 2) categorical placement in a Learning Disabilities or Seriously Emotionally Disturbed classroom; 3) received tutoring and retained more than one academic year; 4) retained one academic year; 5) received remedial services in two or more areas; 6) received remedial services in one academic area; 7) no educational problems. Subjects received the lowest ranking if more than one outcome occurred. Each subject fell into one of these seven categories and the academic year in which the school-related problems occurred was recorded to ensure that the abusive incident(s) occurred prior to the outcome.

The rankings for the School-Related Problems Scale were determined by the need for additional educational services and interventions. The services and/or interventions required corresponded to an School-Related Problems Scale ranking from 1-7. Based on the information available in the client charts, the researcher conducted an informal survey with educators, administrators, clinicians, children, and parents regarding what they would view as more adverse or negative school-related problems. The feedback from this survey was also utilized in developing the rankings.

Procedure

The primary researcher visited seven child guidance centers, serving a total of ten counties, in various locations throughout Oklahoma. The guidance clinic directors were contacted prior to the visits to discuss the nature of the study and to elicit their support. Directors identified a list of potential subjects whose characteristics fell within the identified parameters for gender, age, and abuse history.

All records which met these basic requirements were utilized. Of the 300 records reviewed, 108 (36%) were found to be complete. The information was transferred to a Data Collection Sheet and each subject was given a subject identification number.

The first 30 records that met the basic criteria for inclusion in the study were reviewed independently by the primary researcher and another clinical staff member. The second reviewer was given copies of the Data Collection Sheet with instructions on how the data was to be recorded. The second reviewer had some minimal experience in providing psychological services to victims of child sexual abuse.

Intercorrelation among the raters' scores indicated a great deal of agreement for each of the variables assessed. The correlations between each pair of judges were greater

than .80 for the independent variables and greater than .90 for each of the three components comprising the dependent variable.

Data Analysis

The purpose of this study is to test four hypotheses which are: 1) there is no significant relationship between school-related problems and each of the variables: age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support; 2) the amount of education a child has completed is not associated with school-related problems; 3) there is no significant relationship between school-related problems and a linear combination of age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support for each grade level; 4) the variables age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support will have no ability to predict school-related problems ranking for each grade level.

The process of analysis included: 1) coding the observations, 2) determining the School-Related Problems Score, 3) creating a database, and 4) performing statistical computations. Statistical analysis was performed on the data to answer the four hypotheses.

The first hypothesis was evaluated by computing bivariate Pearson product-moment correlation coefficients between each of the family-environmental variables and the School-Related Problems ranking.

The second hypothesis was evaluated by calculating bivariate Pearson product-moment correlation between each of the subjects' grade at intake and their School-Related Problems score. Following this, each subjects' grade at intake was collapsed into one of three categories: first-second, third-fourth, and fifth-sixth, and a One-Way Analysis of Variance was used to determine if differences existed between the groups.

The third hypothesis was evaluated with a multiple regression analysis using the family-environmental family variables age at onset, relationship, severity, duration, maternal support as independent variables and School-Related Problems ranking as the dependent variable for each of the grade level groups.

The fourth hypothesis also utilized a multiple regression analysis using each of the family-environmental variables to predict school-related problems ranking in each of the grade level groups.

CHAPTER IV

RESEARCH OUTCOMES AND FINDINGS

The data and statistical analyses presented in this chapter are organized around the four research questions stated in the previous chapters.

Sample Characteristics

Means, standard deviations, frequencies, and percentages for the sociodemographic data for ethnic background, grade, and socioeconomic status are summarized in Table 1. The majority of the sample was white (81%) and resided in homes with an income level of \$25,000 or less (83%). The mothers of the abused children most frequently had completed high school or attained a Graduate Equivalency Degree (GED) (32%). The fathers of the children in the sample also had most frequently attained a high school education (30%). Of note is the high percentage of children in the sample whose parental educational level could not be determined, mothers (20%) and fathers (45%).

Children came from homes where biological parents were divorced at the time of the abuse in approximately one-third of the sample (36%). Biological parents were married in 31% of the sample, had never been married in 20% of the

sample, were separated in 10%, and the marital status of the biological parents was unknown in 3% of the sample.

The age of subjects at intake ranged from 6 to 13 years with the average age at intake being 10 years (S.D. 1.86 years). The average grade placement for subjects at the time of intake was 4.1 (S.D. 1.7 years). At the time of intake, 25% of the sample was in the first or second grade, 28% was in the third or fourth grade, with 47% was in the fifth or sixth grade.

Table 1. Sociodemographic Characteristics of Sexually Abused Children (n = 108)

Characteristic	Frequency	Percent
<u>Ethnicity</u>		
White	87	81%
Black	9	8%
Hispanic	1	1%
Other	11	10%
<u>Grade</u>		
First	9	8%
Second	18	17%
Third	12	11%
Fourth	18	17%
Fifth	21	19%
Sixth	30	28%
<u>Annual Household Income</u>		
\$10,000 or less	31	29%
\$10,000 - \$25,000	58	54%
\$25,000 - \$40,000	10	9%
Other	5	5%
Unknown	4	3%
<u>Maternal Education</u>		
8 years or less	5	5%
Some high school	22	20%
High school graduate or GED	35	32%
Some college	14	13%
College degree	10	10%
Unknown	22	20%
<u>Paternal Education</u>		
8 years or less	5	5%
Some high school	8	7%
High school graduate or GED	32	30%
Some college	14	13%
College degree	00	0%
Unknown	49	45%
<u>Marital Status of Biological Parents at Time of Abuse</u>		
Married	33	31%
Separated	11	10%
Divorced	39	36%
Never Married	22	20%
Unknown	3	3%

The characteristics of the sexual abuse experience are summarized in Table 2. The results were as follows: the mean age at onset of abuse was 7.2 years (S.D. 2 years). The ages at the time of onset ranged from 3 to 12 years. One third of the children in the study were abused by a parent or stepparent. Thirty percent of the children were abused by a sibling or non-parental family member, thirty-one percent were abused by a friend, neighbor, or babysitter, and less than three percent of the sample had been abused by a stranger. In this sample, approximately 64% of the children had been abused by a family member (intrafamilial abuse).

Table 2. Characteristics of the Sexual Abuse Experience

Characteristic	Frequency	Percent
Age at Onset (Mean ± S.D.)	7.2 ± 2	
Relationship of perpetrator to child		
Parent or stepparent	36	33%
Sibling or non-parental family member	33	31%
Friend, neighbor, or babysitter	34	31%
Stranger	3	3%
Other	2	2%
Duration of abuse		
> 1 year	18	17%
6 months - 1 year	16	15%
1 month - 6 months	28	26%
1 week - 1 month	29	27%
One time only	17	16%
Type (severity) of abuse		
Very serious	30	28%
Serious	36	33%
Least serious	42	39%
Maternal support		
Unsupportive	24	22%
Ambivalent	32	30%
Supportive	44	40%
Other (unknown)	8	7%

Approximately 17% of the sample had been abused one time only, 27% had been abused from one week to one month, 26% had been abused for one month to six months, 15% had been abused from six months to one year, and approximately 17% of the sample had been abused for a period of more than one year. Approximately 28% of the sample had suffered very serious abuse, 33% had been seriously abused, and 40% had suffered from less serious forms of abuse.

The mothers of the children who had been abused were found to have been supportive following disclosure of the

abuse in 40% of the sample, ambivalent in 29% of the sample, and unsupportive in 22% of the sample. Maternal support following disclosure could not be determined in 7% of the sample. In most instances, the determination of the level of maternal support was made by the Department of Human Services child welfare workers and documented by the clinician working with the child in the case files. The determination was made by the researcher in the remaining cases (15%) from information available in the records.

The characteristics of the school-related problems subsequent to abuse is summarized in Table 3. The results are as follows: 39% of the sample required no additional services, 11% received tutoring in one area, 11% had received tutoring in more than one area, 21% had been retained one academic year, 5% received tutoring in at least one academic area and were retained one academic year, 5% had been placed into a full-time Seriously Emotionally Disturbed (SED) or Learning Disabled (LD) classroom, and 7% of the sample had been both retained and placed into one of the special education categories.

Table 3. School-Related Problems Subsequent to Abuse
(n = 108)

Characteristic of School-Related Problems	Frequency	Percent
Retained and categorically placed	8	7%
Categorically placed in full-time SED or LD class	5	5%
Received tutoring and retained one year	6	6%
Retained one academic year	23	21%
Received tutoring in > one area	12	11%
Received tutoring in one area	12	11%
No additional services	42	39%

Results

The following section summarizes the results of the four hypotheses that were evaluated.

Null Hypothesis One: There is no significant relationship between school-related problems and each of the variables Age at Onset, Relationship to Perpetrator, Severity of Abuse, Duration, and Maternal Support, ($p < .05$). Bivariate Pearson product-moment correlation coefficients were generated between the School-Related Problems indices and each of the following variables: Age at Onset, Relationship to Perpetrator, Severity, Duration, and Maternal Support to determine the strength and direction

of the relationships. Each of these analyses yielded positive correlations with school-related problems, which would indicate that higher scores on these variables would be associated with higher scores on school-related problems. The correlation matrix among these variables is shown in Table 4. All family-environmental variables were significantly correlated with school-related problems ($p < .01$) with the exception of age at onset, which was significant at the .05 level. The strongest relationship among the variables was between school-related problems and duration ($r = .67$). This indicated that as the duration of the abuse increased, the school-related problems also increased. The amount of shared variability between these variables was moderate, 45%.

The correlation between severity of abuse and school-related problems was .62, indicating that as the abuse increased, the school-related problems also increased in severity. The amount of shared variability (or r^2) between these variables was 38%. The correlation between school-related problems and relationship to the perpetrator ($r = .577$), was significant, and the amount of shared variability was 32%. This correlation indicated that as the subject's relationship to the perpetrator increased, the school-related problems also increased. The correlation between

maternal support and school-related problems was .29 and the amount of shared variability between these two variables was approximately 8%. The correlation between the subject's age at onset of abuse and school-related problems was .22, the amount of shared variability between these variables was approximately 5%.

The correlations between each of the family-environmental variables and school-related problems, although statistically significant, were not as strong as anticipated. Each of the variables were positively correlated with school-related problems (a range in r of .22 to .67). This indicated that as each of the scores on these variables increased, school-related problem also increased. Based upon the results of the correlation matrix, Null Hypothesis One was rejected. The correlations of each of the family-environmental variables with school-related problems did reach statistical significance.

Table 4. Intercorrelations Among All Variables

Variable	2	3	4	5	6
1. Age at Onset	.12	.13	.09	.03	.22*
2. Relationship		.61**	.67**	.50**	.56**
3. Severity			.72**	.42**	.62**
4. Duration				.36**	.67**
5. Maternal Support					.29**
6. School-Related Problems					

*P < .05; **P < .01.

Intercorrelations among the predictor variables were in the medium range (.30-.60) and significant at the $p < .05$ level with the exception of age at onset, which was not significantly related to any of the other predictor variables ($p < .05$).

The strongest relationship among the variables was between severity of abuse and duration ($r = .72$, $p < .01$). This indicated that as the duration of the abuse increased, severity of abuse also increased. The amount of shared variability between these variables was 52%, indicating the variables do overlap to a moderate degree.

Duration and relationship to the perpetrator was significantly related ($r = .67$, $p < .01$) and the amount of shared variability between them was also moderate, 45%. This indicates that as duration increased, relationship to

perpetrator would increase, i.e., the perpetrator would be more familiar to the subject.

The relationship between severity of abuse and relationship to perpetrator was significant ($r = .61$, $p < .01$), indicating that as the severity of abuse increased, the relationship to perpetrator increased. The amount of shared variability between these variables was 37%, suggesting a moderate overlap.

Maternal support was significantly related to each of the other predictor variables, with the exception of age at onset. The amount of shared variability was not substantial, however, and ranged from 13% (duration) to 25% (relationship to perpetrator).

It has been suggested by Finkelhor, (1980) that the intercorrelations among the variables used to predict outcomes in sexual abuse studies can be very high, which brings into question the degree of their independence. This was not the case in this study; in fact, the highest intercorrelations among the predictor variables existed between duration and severity of abuse ($r = .72$). Thus, multicollinearity was not judged to be a factor in this study.

Null Hypothesis Two: The amount of schooling a child has completed is not associated with school-related problems.

A Pearson product-moment correlation coefficient was calculated between subject grade at intake and school-related problems to determine if the number of years of schooling was associated with school-related problems. It was determined that these variables were not significantly related ($r = -.006$, $p = .061$). In order to further test if significant differences existed between grade level and school-related problems, a One-Way Analysis of Variance (unweighted means) was calculated between three grade level groupings - 1 and 2, 3 and 4, 5 and 6. The results of the One-Way ANOVA for the grade level groups are shown in Table 5. There were no significant differences between the groups with $F(2, 105) = 1.083$, $p = .343$.

Table 5. Analysis of Variance Summary Table for the Grade Groups

	Sum of Squares	DF	Mean Square	F	Significance of F
Grade	8.579	2	4.289	1.083	.343
Error	415.563	105	3.957		
Total	424.142	107	8.246		

Based upon the results of the correlation coefficient and the One-Way ANOVA, Null Hypothesis Two was not rejected. The correlation coefficient and One-Way ANOVA both yielded statistically non-significant results; therefore, taken

together, it appeared that school-related problems were unrelated to grade. In other words, school-related problems did not depend on grade.

Based upon the non-significant tests for outcome differences according to grade, students were collapsed across grade level and a regression was conducted with the full sample. This allowed a more powerful prediction equation to be generated. Multiple regression analysis was used to assess null hypothesis three.

Null Hypothesis Three: There is no significant relationship between school-related problems and a linear combination of age at onset, relationship to perpetrator, severity of abuse, duration, and maternal support.

School-related problems was used as the dependent variable in the multiple regression analysis. The independent variables entered into the regression were: Age at Onset, Relationship to Perpetrator, Severity of Abuse, Duration, and Maternal Support. The O.S.U. Statpak Multiple Regression Program was used to analyze the data.

A summary of the multiple regression analysis is presented in Table 6. The overall multiple correlation coefficient between the independent variable set and school-related problems was significant ($F = 22.396$, $p < .01$). In this study, the combination of age at onset, relationship to

perpetrator, severity, duration, and maternal support accounted for 50 percent of the variance in school-related problem ranking ($r = .72, p < .01$). Since a statistically significant regression equation was obtained, the Null Hypothesis was rejected.

Table 6. Multiple Regression Analysis

SOURCE	S.S.	D.F.	M.S.	F
DUE TO REG	221.402	5	44.280	22.396
RESIDUAL	201.672	102	1.977	
TOTAL	423.074	107		

$R^2 = .52$

Null Hypothesis Four: The variables Age at Onset, Relationship to Perpetrator, Severity of Abuse, Duration, and Maternal Support will have no ability to predict School-Related Problems ranking.

This research question examined the ability of each of the family-environmental variables to predict school-related problems outcome following abuse. The School-Related Problems ranking was used as the criterion variable in the multiple regression analysis. Predictor variables entered into a full model regression were: child's age at onset of abuse, relationship to the perpetrator, severity of abuse, duration, and maternal support following disclosure of the abuse.

Table 7 presents the standardized regression coefficients (betas (β)), unstandardized regression coefficients (b-weights), Y-intercept, standard errors, and t-ratios with their exact probabilities, for each predictor in the equation.

Table 7. Regression Analyses Predicting School-Related Problems

Predictor Variable	betas	b-weights	S.E.	t	p-val
Age at Onset	.140	.012	.069	2.025*	.043
Relationship to Perpetrator	.149	.309	.102	1.469	.141
Severity of Abuse	.232	.573	.103	2.242*	.025
Duration	.405	.614	.109	3.730*	.001
Maternal Support	.033	.069	.080	0.419	.999
Y intercept = 4.093					
df = 108					

The standardized regression coefficients (betas) were utilized to determine the strength of the individual predictors. The strongest predictors were duration, severity, and age at onset, holding all other variables constant. The unstandardized regression coefficients (b-weights) were used to generate a prediction equation to determine how much change in the criterion variable (school-

related problem) was associated with a one unit change in each predictor. The prediction equation for the full model was: $Y' = 4.093 + .012 (\text{age}) + .309 (\text{relationship}) + .573 (\text{type}) + .614 (\text{duration}) + .069 (\text{maternal support})$.

The full model was statistically significant, $F = 22.396 (.05; 2.29)$. The squared multiple correlation (R^2) was .50, indicating that 50 percent of the variability in school-related problems was accounted for by the linear combination of the five predictor variables. The predictor variables age at onset, severity of abuse, and duration were statistically significant in the full model.

The standard error was utilized to construct confidence intervals around the predicted score. The larger the standard error of estimate, the more variability in estimating the predicted score. The relationship between any given predictor and the criterion, with the other predictors taken into account, was evaluated by the t test of each regression coefficient.

Based on the results of the full model, a reduced model was run reassessing the three significant variables: age at onset, severity of abuse, and duration. The F value ($F = .05; 3, 104 = 36.548; p < .05$) was significant for the reduced model. These three variables accounted for 49% of the variability in school-related problems, as compared with

50% in the full model. The betas, b-weights, standard errors, and t -ratios, with their exact probabilities for this reduced model are presented in Table 8. The prediction equation for the reduced model was: $Y' = 3.210 + -.012$ (Age) $+ -.646$ (Type) $+ .716$ (Duration).

Table 8. Reduced Model

Variable	betas	b-weights	S.E.	t	p-val
Age	-0.146	-0.012	.07	-2.111	.003
Severity	-0.265	-0.646	.07	-2.648	.001
Duration	0.472	0.716	.09	4.795	.0005

df = 104

The adjusted R^2 for the full model was .50, indicating that 50% of the variability in school-related problems could be accounted for if this equation was used with a different sample. The adjusted R^2 for the reduced model was .49, indicating that approximately 49% of the variability could be accounted for if the equation was used with another sample. Thus, there is very little fluctuation expected in using these prediction equations in applied settings. Since three of the variables were statistically significant predictors, Null Hypothesis Four was rejected.

Summary

Descriptive and demographic information from this study were presented as well as the results from the statistical computations designed to answer the four research questions. Information gathered from the clinical charts of 108 school-age females was utilized to determine the results of this study. Correlations between family-environmental factors and school-related problems outcome were utilized to answer Null Hypothesis One. In this study, school-related problems did correlate significantly with each of the five family-environmental variables.

A Pearson correlation coefficient between grade at intake and school-related problems and a One-Way ANOVA (unweighted means) were utilized to answer Null Hypothesis Two. It was determined that there was no statistically significant relationship between years of schooling and school-related problems, in this study.

A multiple regression analysis was conducted to answer Null Hypothesis Three to determine if a significant relationship existed between school-related problems and a linear combination of the variables age at onset, relationship to perpetrator, duration of the abuse, severity of abuse, and maternal support following disclosure. A statistically significant regression coefficient was

obtained and these variables accounted for approximately 50% of the variance in school-related problems.

The fourth hypothesis sought to determine if the five family-environmental factors could significantly predict school-related problems ranking. Age at onset, severity of abuse, and duration were all found to be statistically significant predictors in this study, using a multiple regression analysis.

These results indicated that gathering data on the child's age at onset of abuse, severity of abuse endured, along with the duration of the abuse, may provide a clinician with information which could assist them to predict which children may potentially be at risk for developing academic problems.

CHAPTER V

DISCUSSION

Determining the outcomes of child sexual abuse has been a challenging task for researchers and clinicians. The findings in the studies have lacked consistency; however, there has been a general consensus that early sexual abuse is frequently associated with emotional, behavioral, and developmental problems.

This was an exploratory study to address school-related problems in children who have been sexually abused and to look further at the relationship between child sexual abuse and school problems. Specifically, a purpose of this study was to determine if family-environmental factors which have frequently been found to have a relationship with emotional and behavioral outcomes in children who have been sexually abused also have a relationship with specific school-related academic problems. This study further sought to determine if these family-environmental variables could be utilized to enhance the ability to predict which school-aged sexual abuse victims are more at risk for developing academic problems. The study also addressed the relationship between years of schooling and school-related problems. The

methodology used in this study was a record review of clinical charts.

The results of this study found that a statistically significant relationship existed between school-related problems and each of the variables age at onset, relationship to perpetrator, severity, duration, and maternal support. Thus Null Hypothesis One was not accepted. Since the correlation between grade at intake and school-related problems was not significant and a One-Way Analysis of Variance did not result in significant differences between grade level groupings, Null Hypothesis Two was not rejected. In this study, the combination of age at onset, relationship to perpetrator, severity, duration, and maternal support accounted for 50% of the variance in school-related problems ranking ($R^2 = .52$). Since a statistically significant regression was obtained, Null Hypothesis Three was rejected. Age at onset, severity of abuse, and duration were each found to be statistically significant predictors of school-related problems in this study, thus, Null Hypothesis Four was not accepted. The results of the study will now be discussed in more detail.

Each of the family-environmental variables was positively correlated with school-related problems. The duration of the abuse was found to have the strongest

relation to school-related problems, followed by severity, relationship, maternal support, and age at onset. The results of this study suggest that school-related problems, age at onset, relationship to perpetrator, severity, duration, and maternal support are interrelated. These results also suggest that these family-environmental variables, which have frequently, albeit not consistently, been found to be associated with behavioral and emotional problems in children who have been sexually abused are also related to school-related problems.

This study found that the amount of schooling a child had completed was not associated with school-related problems. This finding is contrary to what was anticipated in that it was felt that there would be a progressive accumulation effect wherein school-related problems would be compounded over time. This was an especially interesting finding, given that subjects' average age at onset of abuse was 7.1 years, and the average grade a child was attending at intake was 4.1 years. This indicates that, on the average, children likely did not receive any type of professional assistance for two years following the onset of the abuse. One possible explanation for this result is that the measure of school-related problems used in this study was not sufficiently sensitive to detect differences between

grade groupings. Another possible explanation is that differences exist in the way the school systems from which the subjects came identify and assess academic problems. Some school systems may be more advanced in their ability to identify educational problems earlier in the child's academic career. These school systems may also have access to more sophisticated assessment techniques which would identify learning and/or emotional problems and refer these children for appropriate interventions. Another possible assumption is that a great deal of diversity exists in how the school systems identify and assess school-related problems and the type of interventions they provide.

It was an intention of this study to perform separate multiple regression analyses for each of the three grade level groups to determine if the family-environmental variables accounted for a significant amount of variance in school-related problems in each group. The next step would involve comparing the family-environmental variables as predictors of school-related problems across the three groups. Since it was determined that school-related problems was not related to grade, a regression analysis was conducted with the full sample.

In this study, the family-environmental variables age at onset, relationship to perpetrator, severity, duration,

and maternal support combined to account for 50% of the variance in school-related problems. This finding implies that these variables, which have been identified as being associated with and predictors of behavioral and emotional problems in children who have been sexually abused, are also associated with school-related problems. The following section will discuss the findings regarding the relationship between the variables in more detail.

The duration of the abuse was found to have the strongest relationship to school-related problems in this study. This finding is consistent with Kendall-Tackett, et al. (1993), who found a consistent relationship between longer duration and negative outcomes in their review of studies involving child sexual abuse. This finding is also consistent with Russell (1986), who found that duration of abuse was the second best predictor (to severity) of mental health outcome in adult females who had been sexually abused as children. In this study, duration was found to be the best predictor of school-related problems following abuse. Duration of the abuse does then appear to be an important variable to assess, as it may play an important role in predicting later school-related problems. It has been suggested that the number of perpetrators is a more important variable than extended duration (Davenport &

Browne, Nash, 1993). It was a consideration of this study to collect data regarding the number of perpetrators; however, this information was frequently missing or was not felt to be sufficiently reliable. Thus, this variable was not included in the study.

In this study, the severity of the abusive act had a statistically significant relationship to school-related problems. Severity also had a significant relationship to duration of abuse and relationship to the perpetrator. The severity of the abusive act has been consistently found to be linked to more long-term emotional harm (Bagley & Ramsay, 1985; Beitchman, 1992; Davenport & Browne, 1994; Mennen, 1993; and Russell, 1986). The results of this study are consistent with these findings, as it was determined that more severe types of abuse were associated with more school-related problems. Although the relationship between severity and school-related problems was not as strong as was anticipated, it was found to be a significant predictor of school-related problems.

It was concluded that the severity of the abuse is an important variable to assess as it likely has implications for later school-related problems. This study utilized Russell's (1983) three categories for determining the severity of the abuse: very serious, serious, and least

serious. Future studies may wish to expand on this ranking scale, as Davenport, et al. (1994) has done by placing in rank order nine types of abusive acts ranging from actual penetration to sexual invitation. The results of this study were consistent with Russell (1986), who found that the severity of sexual abuse was found to be the single best predictor of the degree of trauma reported by the victim. In this study, severity was found to be the second best predictor of school-related problems. Severity of the abusive act has been found to be a significant predictor of later trauma and long-term emotional harm. The results of this study indicate that it can also be a significant predictor of school-related problems following abuse.

In this study, the child's relationship to the perpetrator had a significant relationship to school-related problems and to each of the other predictor variables. It was not, however, found to be a significant predictor of school-related problems in this study. This result was consistent with Mennen (1993), who found that a child's relationship to the perpetrator did not have the ability to predict later psychological distress.

Studies have frequently suggested that the child's relationship to the perpetrator is an important variable to address to determine its influence on later distress. To

date, no straightforward connection between the closeness of relationship and its effect on the child has been consistently established. Davenport (1994) questioned professionals, non-professionals, and psychiatric patients and concluded, in general, the closer the relationship between the victim and the perpetrator, the more traumatizing the abuse was to the victim. In this study, twelve relationships were rank ordered - eight familial and four non-familial. Thus, the measure of relationship used in this study may not have been sufficiently sensitive to identify the quality or closeness of the relationship between the victim and the perpetrator. The task remains to develop a better measure of closeness or quality of relationship.

Maternal support was significantly related to school-related problems; however, this relationship was not strong. Maternal support was not found to be a significant predictor of school-related problems in this study. It was significantly correlated with each of the other predictor variables with the exception of age at onset.

Studies have indicated that a relationship exists between maternal support and a victim's treatment outcome and that with a more supportive maternal relationship, subjects perceive themselves as being more competent and

exhibit fewer behavior problems (Lovett, 1995). This and other studies indicate that maternal support following the disclosure of child sexual abuse is an important variable in determining a child's emotional well-being. It was difficult to obtain data regarding maternal support in this study, as this was not a variable which was typically identified or measured in the subject's charts. In the majority of cases, the degree of maternal support was determined by the child welfare social worker. In the remaining cases, the clinician working with the child made a determination regarding maternal support; thus, the information obtained regarding this variable was subjective and of questionable reliability. It is likely that the degree of maternal support was determined by mother's statements following disclosure. In a recent study by Lovett (1995), it was concluded that a mother's statement of belief may not be a valid measure of the mother-daughter relationship.

Consideration should be given to the fact that the population utilized in this study is an unrepresentative sample to gather this data on. All subjects were referred for evaluation and therapy and it may be that maternal support is more lacking or perceived as such in this type of population. Maternal support was the only post-abuse

variable included in this study as research indicates that it is likely to be one of the more significant variables in determining long-term outcomes. It is felt that this variable should be more carefully assessed during an intake interview and that it may well be related to later school-related problems in children who have been sexually abused. It was concluded from this study that maternal support has not been considered an important variable to assess and gather systematic information on by clinicians in child guidance centers who work with victims of child sexual abuse.

In this study, age at onset was significantly related to school-related problems; however, its relationship was the weakest of the five predictor variables. The research findings regarding the relationship between age at onset of abuse and later outcomes have been equivocal. In fact, several researchers concluded from their review of studies that the relationship between age at onset and outcome is unclear (Beitchman, et al., 1992; Brown & Finkelhor, 1986; Kendall-Tackett, et al., 1992). Koverola (1989), however, found that a link existed between early onset of abuse, having a more unsupportive mother, and the victim being abused more frequently. This finding was not consistent with the outcome of the present study; in fact, the

relationship between age at onset and the variables maternal support and duration of abuse were not statistically significant. Kendall-Tackett, et al. (1992) felt that age at onset was likely related to other characteristics of the abuse, such as relationship to the perpetrator. However, in this study, the relationship between age at onset and relationship to perpetrator was not statistically significant; in fact, age at onset was not strongly or significantly related to any of the other predictor variables. There have been studies, however, which have found that age at onset of abuse is related to psychological sequelae and trauma (Gomes-Schwartz, 1990; Nash, 1993; Russell, 1986) in subjects with a history of sexual abuse.

The relationship between age at onset of abuse and later outcomes has been inconclusive and at times contradictory in studies which have addressed emotional and behavioral problems of child sexual abuse victims. This study found that the relationship between age at onset of abuse and school-related problems was significant, but not strong. Age at onset of abuse was a significant predictor of school-related problems, however, which is consistent with Nash (1993), who found that age at onset was one of the prognostically important characteristics of sexual abuse that clinicians could use to predict childhood sequelae.

It is difficult to determine the exact age when a child was first abused. Typically, researchers and clinicians must rely on the child's account of when the abuse occurred, and it is not possible to determine the reliability of their recollections. In this study, the clinical records were not always specific regarding the exact age at onset of abuse, thus requiring the clinician to make educated inferences. With the exception of studies that have utilized subjects who have recently been abused for the first time, most researchers and clinicians accept that the exact age at which the child was first abused is not always reliably known. The conclusions from this and other studies do indicate that age at onset of abuse can be a prognostically important characteristic of the abusive incident to obtain and should be a variable which is assessed during an intake interview. This study suggests that age at onset of abuse is a variable which warrants further study and consideration to determine the role it plays in the development of educational problems in children who have been sexually abused.

An examination of the intercorrelation of the variables found each of the variables to be significantly and positively related to the other predictors variables, with the exception of age at onset. Age at onset was not

significantly related to any of the predictor variables. This was a surprising finding, as it has been suggested that the abuse-related variables are often intercorrelated (Briere, 1988; Finkelhor, 1980). This result could be due to the subjectivity involved in obtaining data regarding age at onset. Very often, the children were not seen immediately following onset of abuse and, in fact, on the average, there was a two-year time span between onset of abuse and clinical intake. The strongest relationship was between severity of abuse and duration, indicating that children who were abused in a more severe manner also tended to be abused over a longer period of time. The relationship between variables relationship to perpetrator and duration indicated that children who were abused by someone closer to them also tended to be abused over a longer period of time. The relationship between the variables relationship to perpetrator and severity indicated that children who were abused by someone closer to them also tended to be abused in a more severe manner. Interestingly, the relationship between the variables relationship to perpetrator and maternal support indicated that children who were abused by someone closer to them tended to receive more maternal support. This finding is consistent with the study by Gomes-Schwartz, et al. (1990), who found that the majority

of mothers in their sample did take protective action toward their children. These results suggest that children who have been abused by someone closer to them also tend to be abused in a more severe manner over a longer period of time, and may be more likely to receive maternal support following disclosure of the abuse.

This was an exploratory study designed to assess if specific family-environmental variables which have been frequently utilized to predict behavioral and emotional problems in children who have been victims of sexual abuse, could also be utilized to identify children who may develop school-related problems. The results of this study suggest that school-related problems and the variables relationship to perpetrator, severity, duration, maternal support, and age at onset are interrelated. According to the findings of this and previous studies, duration, severity, and age at onset can be important correlates of outcomes following sexual abuse. In fact, these variables were found to significantly predict school-related problems, and together they accounted for a significant amount of variance in school-related problems.

It was found that the years of schooling a child had received was not significantly related to school-related problems. This was surprising, as it was felt that the

longer a child had attended school, the more likely they would have developed educational problems. A possible explanation is that attending school may have served as a mediating variable. It is also possible that some of the children developed strong relationships with peers or teachers, or were sufficiently successful in school due to intellectual factors, resiliency, or some other mediating variables. Another possible explanation which was addressed earlier could be the way in which the different school systems identified, assessed, and/or remediated educational problems.

The findings of this study could have implications directly related to interventions designed to prevent or reduce educational difficulties in children who have been victims of sexual abuse. These results suggest that children who have been abused at an earlier age, in a more severe manner, and over a longer period of time, may be more inclined to develop school-related problems. The relationship of each of the variables age at onset, relationship to perpetrator, severity, duration, and maternal support with school-related problems indicate that these variables may be beneficial to obtain during an intake interview, as they may enhance a clinician or school

psychologist's ability to determine which children are more likely to develop educational problems in the future.

A surprising, but not unexpected, finding of this study was that clinicians working in child guidance centers who provide psychosocial services to children who have been victims of sexual abuse do not typically address or assess school-related problems in their clients. It may be that they view their role as assisting the children and their families with behavioral and emotional problems and apparently do not perceive academic or school related problems as relevant issues to be addressed. It is felt that this creates an artificial dichotomy between emotional-behavioral problems and school-related problems. It is recommended that clinicians working in mental health settings, school psychologists, and other school officials begin to work together in a more collaborative manner in order to provide a better continuum of services to children who have been sexually abused. When mental health clinicians recognize the importance of addressing school-related issues to the sexually-abused children they are working with, they will be in a better position to assist school psychologists and school officials in developing more appropriate and effective educational interventions. These interventions would ideally begin with early identification

of potential problems and more comprehensive assessment of the variables which contribute to school-related problems.

Summary

Based on the results of this study, it can be concluded that the variables age at onset, relationship to perpetrator, severity, duration, and maternal support are each significantly related to school-related problems; therefore, Null Hypothesis One was rejected. Each of the variables was significant at the $p < .01$ level, except age at onset, which was significant at the $p < .05$ level. Thus, these family-environmental variables which have been found to be associated with emotional and behavioral problems in children who have been victims of sexual abuse, are also related to school-related problems outcome in child sexual abuse victims.

The amount of schooling a child had received was not found to be significantly related to school-related problems; therefore, Null Hypothesis Two was not rejected. An implication of this finding is that it would be unwise to assume that school-related problems will not develop until later years. This finding suggests that school officials and mental-health professionals should emphasize early

identification and remediation of academic problems in children who have been victims of sexual abuse.

In this study, 50% of the variance in school-related problems was accounted for by the set of predictors age at onset, relationship to perpetrator, severity, duration, and maternal support. Since these variables did combine to account for a significant amount of variance in additional academic services received by children who have been victims of child sexual abuse, Null Hypothesis Three was not rejected.

The family-environmental variables duration, age at onset, and severity were each found to be significant predictors of school-related problems. Thus, Null Hypothesis Four was rejected.

The findings from this study indicate that the family-environmental variables which have frequently been found to be associated with and predictors of behavioral and school-related problems in children who have been victims of sexual abuse are also associated with and predictors of school-related problems in children who have been sexually abused.

Limitations of the Current Research

The findings obtained in this study indicate that there is a relationship between school-related problems and the

family-environmental variables age at onset, relationship to perpetrator, severity, duration, and maternal support. Further, age at onset, severity, and duration were all significant predictors of school-related problems. The findings also indicated that there is no relationship between number of years of schooling a child has received and school-related problems. These findings, however, must be interpreted with caution, as they are subject to a number of methodological problems and limitations, which will be discussed below.

First, the researcher had no control in selecting the subjects who were identified as having been sexually abused. It is believed that the agencies who confirmed the abuse did utilize a standard definition; however, there is often a degree of subjectivity involved. Thus, there was no way to determine whether the children who were identified as having been sexually abused in this study were reliably identified.

Second, the study involved a record review; thus, it was not possible to corroborate information available in the charts. It was assumed that each clinician reliably and accurately recorded the information regarding the aspects of the abusive incidents. There was no way to determine the degree of certainty involved in gathering this information.

It is possible that when precise information was unavailable, the clinician utilized their best guess.

Third, the size of the sample was rather small. The number of subjects available for this study was limited by the availability of clinical records containing the necessary information regarding the family-environmental factors.

Fourth, the sample utilized in this study cannot be considered to be representative of the population of sexually abused children as a whole. All subjects were referred to child guidance centers following the determination of sexual abuse or the abuse was later identified and substantiated during the course of psychological services. Although it is not likely that the sample is representative of sexually-abused children as a whole, it is felt to be representative of sexually-abused children who are referred to child guidance centers. It is possible that this sample may, on the whole, be more biased toward more severe abuse and overrepresents low socioeconomic Caucasian families.

Fifth, there was often an extended period of time that had elapsed between the onset of abuse and the clinical intake. On the average, two years had passed between the onset of abuse and the intake; thus, many intervening and

mediating factors could have impacted on school-related variables.

Sixth, the measures used could be subject to criticism. At this time, there is no consistency in the way in which the abuse-related variables are measured. The measures used in this study could be seen as crude and imprecise, especially since they were limited to information available in the client's charts.

The school-related problems measure was developed as a result of information available, i.e., convenience. It could be argued that this is not a valid measure of educational problems. Actual school records would have provided more valid information regarding school-related problems.

Directions for Future Research

Although the results of this study may have important implications, they must be viewed as preliminary in nature. On the whole, studies have found a relationship between child sexual abuse and school-related problems (Lusk, 1988; Paradise, et al., 1994; Reyome, 1988). The results of the studies have not been unequivocal but do indicate that a history of sexual abuse is associated with a higher likelihood of developing school-related problems. To date,

most studies are retrospective in nature. Hopefully, the results of these studies will provide a direction for developing better designed, prospective approaches which would rely less on information available in records.

Future studies also need to address the role of pre-existing conditions which may contribute to the sexual abuse victim's school-related problems. Unlike abuse-related and post-abuse factors, pre-abuse conditions have been addressed very minimally in the literature on child sexual abuse. Previous dysfunctional family patterns, early stressors, or pre-existing psychiatric difficulties in the child could result in increased vulnerability or effect later outcomes. The interaction of pre-existing problems and child sexual abuse, as well as how they contribute to increased symptomatology, is a complex issue that few researchers have attempted to address. Other pre-existing conditions which would be interesting to address are intelligence, quality of parent-child relationship, and the child's attributional style.

A trend has developed in child abuse research to identify types of maltreatment. Researchers are beginning to distinguish between physical abuse, sexual abuse, and neglect. The preliminary findings from these studies suggest that maltreated children, on the whole, perform

significantly below non-maltreated peers on standardized educational tests and are more likely to have repeated a grade. Interestingly, the children from the sexual abuse groups were not consistently found to significantly differ from non-maltreated children in academic achievement and discipline problems. Future studies should address whether it is the type of abuse that results in school-related problems or the existence of important mediating variables, which enhances resiliency, thus making it less likely that the child will develop school-related problems.

Many authors have made a distinction between familial and non-familial abuse in their studies of outcomes associated with child sexual abuse. It would be interesting for further research to determine if there are significant differences in school-related problems with familial versus non-familial abuse groups.

There is also a need to control for the way in which school-related problems are identified, assessed, and remediated in future studies addressing school-related problems associated with child sexual abuse. The use of more standardized measures and procedures would enhance the ability to more reliably compare outcomes.

This and other studies have found that children who have been sexually abused may develop a number of academic

and school-related problems. Interestingly, a large number of children who have been sexually abused do not develop educational problems. Future research efforts should be concerned with not only identifying the factors which increase the likelihood sexually abused children will develop educational problems, but also identifying those factors which appear to mediate the trauma and prevent children from developing educational problems. This information could assist in developing better clinic and school-based interventions for sexually-abused children.

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Appendix A

School History for Guidance Intake Sheet

SCHOOL HISTORY:

If this is a school referral state reason for referral: _____

Current School: _____

Is child currently enrolled in a pre-school or child care center? _____

If so, how many pre-schools or child care centers has this child attended? _____

Number of schools attended since 1st grade: _____

Name of center: _____

Has this child ever:

a. been placed in a special class? _____
What kind? _____

b. received remedial instruction? _____
What subjects? _____

c. repeated any grades? _____
What grades? _____

d. received tutoring? _____
What subjects? _____

e. received speech therapy? _____ When? _____
How long? _____

f. been tested by school counselor? _____
When? _____

g. been expelled from school? _____ When? _____
Reason? _____

Do you have any concerns about your child's school performance? _____

Appendix B
Data Collection Form

Subject No. : _____

Data Collection Form

Grade (at intake): _____

Age (in years): _____

Race: Black _____ White _____ Hispanic _____
Asian _____ American Indian _____
Other (specify): _____

SES: 1) _____ 2) _____ 3) _____
\$10,000 or less \$10,000-\$25,000 \$25,000-\$40,000
4) _____ 5) _____ **UNKNOWN**
\$40,000 or more

Mother's Education 1) 8 years or less _____
2) some high school _____
3) high school grad or GED _____
4) some college _____
5) college degree _____
6) unknown _____

Father's Education 1) 8 years or less _____
2) some high school _____
3) high school grad or GED _____
4) some college _____
5) college degree _____
6) unknown _____

Marital Status of Parents at Time of Abuse:

1) Divorced _____ 2) Separated _____
3) Never Married _____ 4) Married _____ 5) Unknown _____

Family-Environmental Information

Age at Onset of Initial Abuse: _____

Alleged perpetrator/Relationship to child:

1) Parent or step-parent _____
2) Sibling or non-parental family member _____
3) Friend, neighbor, or babysitter _____
4) Stranger _____
5) Other _____ Specify _____

Type/Severity of Sexual Abuse

(See Guidelines on first page)

- 1) Very serious _____
- 2) Serious _____
- 3) Least serious _____
- 4) Unknown _____

- Estimated Length of Abuse:**
- 1) > 1 year _____
 - 2) 6 months - 1 year _____
 - 3) 1 month - 6 months _____
 - 4) 1 week - 1 month _____
 - 5) 1 time only _____

- Maternal Support:**
(See Guidelines)
- 1) Unsupportive _____
 - 2) Ambivalent _____
 - 3) Supportive _____
 - 4) Other _____

- Who Determined:**
- 1) DHS _____
 - 2) Clinician _____
 - 3) Other _____ Specify _____
-

Has the child been sexually abused by more than one perpetrator?

Yes _____ No _____ Unknown _____

Please provide relevant information including the child's age, relationship to perpetrator, severity, and duration of abuse. _____

Educational Information

The following information to be collected is to assist in determining what types of educational outcomes may have occurred as a result of the sexual abuse. Thus, complete the following checklist only if it is clear that these outcomes occurred following the abusive incidents.

Retained: Yes _____ No _____

Once _____ Twice _____ More than twice _____

If yes, what grade(s): _____

Placed in a special education classroom? Yes _____ No _____

If yes, what grade? _____

Type of placement: Learning Disabled _____ EMH _____ TMH _____
Emotional Disturbed _____ Other _____

Specify: _____

Has the child received any type of additional or remedial services? (See Guidelines) Yes _____ No _____

If yes, what grade(s)? _____

Please specify: _____

Appendix C

School-Related Problems Ranking Scale

School-Related Problems Ranking

- 1 - Placement in a full-time Learning Disabled or Seriously Emotionally Disturbed classroom and retained one academic year
- 2 - Full-time placement in a Learning Disabled or Seriously Emotionally Disturbed classroom
- 3 - Received tutoring and retained one academic year
- 4 - Retained one academic year
- 5 - Remedial Services - two or more areas
- 6 - Remedial Services - one area
- 7 - No academic problem requiring additional intervention

Appendix D

Oklahoma State Department of Health's
Institutional Review Board Approval



OKLAHOMA STATE DEPARTMENT OF HEALTH

JERRY R. NIDA, M.D.
COMMISSIONER

Memorandum

October 10, 1994

To: Bruce D. Cook, Ed.D., Director
Behavioral Health Division

From: Keeta S. Gilmore, Ph.D., Chairman *KS*
Institutional Review Board

Subject: IRB Review

The Institutional Review Board has conducted an expedited review of the project: *Family and Environmental Factors Associated with School-Related Problems in Children Who have been Sexually Abused*. It has been determined that this study presents little or no risk to the human subjects involved and approval has been granted. If you have questions or need additional information, please contact me at 1-5070.

Board of Health

Garrett Mason, III, Esq.
President

Burton F. Green, M.D.
Vice President

Dan H. Fisher, D.D.
Secretary-Treasurer

Jim S. Carmichael, D.D.S.

Carson H. Deckert, M.D.

Beth Anna Gordon

Frank W. Stewart

R. Brent Smith, M.D.

Orange Welborn, M.D.

Appendix E

Oklahoma State University's Institutional
Review Boards Approval

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW

Date: 04-12-95

IRB#: ED-95-071

Proposal Title: FAMILY AND ENVIRONMENTAL FACTORS ASSOCIATED WITH SCHOOL-RELATED PROBLEMS IN CHILDREN WHO HAVE BEEN SEXUALLY ABUSED

Principal Investigator(s): Paul Warden, Kelly Griffith

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

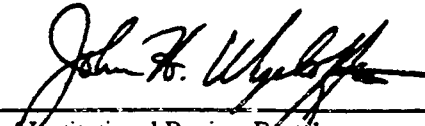
ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING.

APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL.

ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Reasons for Deferral or Disapproval are as follows:

Signature:



Chair of Institutional Review Board

Date: April 14, 1995

Appendix F

Memorandum to Local Health Administrators

PAYNE COUNTY HEALTH DEPARTMENT

701 South Walnut
P.O. Box 1478
STILLWATER, OKLAHOMA 74078

Phone: 405-372-8200

MEMORANDUM

TO: Local Administrator

Through: Mike O'Connor
Administrator; Payne, Noble, and Kay Counties

From: Kelly Griffith, M.S.
Psychological Assistant/Supervisor - Payne County

Subject: Collection of data from Health Department Records

At the suggestion of Mike O'Connor and Steve Ramsey, Ph.D., I would like to enlist your support and assistance in collecting specific information from Health Department records. The information I am requesting is to be used in my doctoral dissertation, "School Related Problems In Children Who Have Been Victims Of Sexual Abuse." The goal of the research is to investigate the impact of family and environmental variables on school-related problems in school age children who have been sexually abused. This study is an anonymous chart review survey of clinical records and involves no face to face contact with clients.

Subjects in the study will be female school-age children (ages 6-13) who have been identified as being victims of sexual abuse by either law enforcement agencies or the Department of Human Services Child Welfare Unit. A protocol of information to be extracted from the clinical chart was drawn up by this investigator and is included on the attached page.

No identifying information (name, address, date of birth, etc.) will be collected which could compromise client confidentiality. All data will be handled in a appropriate, ethical manner consistent with the requirements and expectations of the Department of Public Health.

cc: Mike O'Connor
Steve Ramsey, Ph.D.

2
VITA

Kelly J. Griffith

Candidate for the Degree of

Doctor of Philosophy

Thesis: FAMILY AND ENVIRONMENTAL FACTORS ASSOCIATED WITH
SCHOOL RELATED PROBLEMS IN CHILDREN WHO HAVE BEEN
SEXUALLY ABUSED

Major Field: Applied Behavioral Studies

Biographical:

Personal Data: Born in Ponca City, Oklahoma, December 15, 1955, the son of
Eddie B. Griffith and Caroline Bernardy.

Education: Graduated from Ponca City High School, Ponca City, Oklahoma in
May 1974; received Bachelor of Arts degree in Psychology from University
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Science degree at Southwestern Oklahoma State University in Applied
Psychology in December 1980; completed requirements for Doctor of
Philosophy degree in May 1996.

Professional Experience: Psychological Assistant, Pittsburg County Health
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Coordinator, Pittsburg County Health Department, June 1989 to December
1991. Psychological Assistant/Supervisor, Payne County Health
Department, January 1991 to May 1996.

Professional Memberships: American Association for Marriage and Family
Therapy.