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Children's Emotional and Behavioral Functioning
Following the Disclosure of Extrafamilial Sexual Abuse

Dissertation

Submitted to the School of Graduate Studies

of the

University of Ottawa

In Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy

by

Malgorzata Ligezinska

Ottawa, Ontario

1994



Malgorzata Ligezinska, Ottawa, Canada, 1994



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To my Mother

for her

Love and Dedication

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Abstract

The present investigation is a prospective follow-up cohort study of 47 children who experienced extrafamilial sexual abuse (ESA). The children were referred by several child protection agencies in the Ottawa-Carleton and southeastern region of Ontario between 1989 and 1992. All participants were assessed within the first three months post disclosure and six months later. The abuse of children ended within the year prior to the disclosure. A comparison group, matched on child's age, gender, and family constellation was recruited from the medical records of the Children's Hospital of Eastern Ontario. The children were evaluated from three different perspectives: self-perceptions of emotional functioning, parental reports of behavioral functioning and teachers' evaluations of behavioral functioning. Standardized measures of depression, self-concept, anxiety, general and abuse related fears, and social functioning were used.

The results of multivariate analyses of covariance (MANCOVAs), conducted to control for the variability in children's intellectual functioning and family socioeconomic status, revealed that, in comparison to non-abused children, children in the sexually abused group reported more symptoms of depression and fearfulness, were evaluated by the parents as exhibiting more externalizing and internalizing behaviors, and evaluated by the teachers as showing more externalizing difficulties. These problematic behaviors were present within the first three months post disclosure and at the six-month follow-up. No significant group differences were revealed on the social self-efficacy measure at either assessment time, and self-reports of fearfulness did not differentiate between the groups at the follow-up assessment. As a group, the sexually abused children reported symptoms of post-traumatic stress at both assessments.

The results of standard regression analyses revealed, that among the sexually abused children, elevated levels of post-traumatic symptomatology, feelings of guilt and blame for the abuse were predictive of the children's self-reports of emotional functioning. These variables were not predictive of either the parental or teachers' reports. The objective aspects of the abusive experience and the demographic characteristics of the sexually abused group did not predict significantly the children's functioning, except for the gender of the child which was predictive of fearfulness.

The discussion of the results points to the importance of utilizing multidimensional assessments conducted from different perspectives. The need to evaluate in a consistent way the children's own perceptions of abusive experiences is underscored. A specific emphasis is placed on the evaluation of perceived self-blame and guilt, perception of social supports and reports of intrusive thinking, avoidant behavior, and anxiety related to sexuality. Implications for therapeutic interventions are noted. The limitations of the study and suggestions for further research are discussed. Finally, the advantages of working within a comprehensive theoretical model are presented.

Children's Emotional and Behavioral Functioning

Following the Disclosure of Extrafamilial Sexual Abuse

Overview

The last decade has witnessed a dramatic increase in clinical and empirical reports of child sexual abuse (CSA). Since 1986, for example, a striking number of studies have examined children's initial reactions to being sexually abused, focusing predominantly on girls' and women's reactions to being abused by a family member. Despite this active interest, however, very few investigations have addressed the initial and long-term effects of extrafamilial sexual abuse (ESA) on children.

Until the mid 1970s sexual abuse was seen predominantly as an intrafamilial phenomenon (Finkelhor & Browne, 1988), and sexual victimization was viewed as a family rather than as a social problem. With the emergence of the feminist movement, which brought issues of family violence and rights of women and children to the forefront, many legal and educational agencies have adopted mandatory and uniform procedures for reporting cases of CSA (DeYoung, 1982; Finkelhor, 1982, 1986; Wolfe & Wolfe, 1988).

Early literature on children's adjustment to ESA is predominantly based on clinical reports. Changes in the legal procedures, introduction of mandatory reporting, and high social awareness and receptiveness, have encouraged disclosures of CSA and have begun to uncover the scope of this social problem. These changes have led to an increase in empirical investigations which, as defined by Finkelhor & Browne (1988), include comparison groups and employ standardized assessment measures. In the majority of these investigations, however, the effects of sexual abuse are studied in groups combining children who experienced the sexual victimization by a related perpetrator and/or by someone outside

of the family system.

Present literature consistently indicates that sexual abuse of a child constitutes a major risk factor for adult psychopathology. The specificity of this impact, however, is not well established (Finkelhor & Browne, 1988). The literature on long-term effects of CSA usually combines intrafamilial and extrafamilial abuse, and indicates that survivors can experience a variety of adjustment difficulties. The most frequently cited long-term effects include: impaired sexual functioning; self-reports of promiscuity, which are a function of low self-esteem; vulnerability to subsequent victimization; depression; guilt; self-blame; fear; substance abuse; anxiety; hostility; and delinquency (see overviews: Alexander, 1992; Beitchman, Zucker, Hood, DaCosta, Akman & Cassavia, 1992; Briere & Runtz, 1993; Browne & Finkelhor, 1986; Finkelhor, 1990; Finkelhor & Browne, 1988; Green, 1993).

Because the majority of studies to date combine extrafamilial and intrafamilial abuse victims, the specific impact of ESA has not been identified. There is, however, some evidence that ESA can be a traumatic experience which has long-lasting consequences (Friedrich & Reams, 1987; Kelly, Brant & Waterman, 1993; Kendall-Tackett & Simon, 1988). In view of the potentially deleterious long-term effects, the scarcity of investigations addressing the initial functioning of sexually abused children is especially surprising. Moreover, the number of prospective follow-up studies is limited and this does not allow for consistent evaluation of the children's adjustment over time. Especially scarce are studies which address the initial and long-term functioning following the abuse by a nonfamily member.

Clinical reports, defined by Finkelhor and Browne (1988) as those which do not include comparison groups or do not use standardized measures, consistently revealed that

the trauma of disclosing ESA negatively affects the entire family system (Barnes Reyman, 1990; Cohen Esquilin, 1987; McLeer & Rose, 1992; Regehr, 1990) including the abused child, the parents and the siblings (Dickstein, Hinz & Eth, 1991; Haase, Kempe & Grosz, 1990). The child's adjustment post-disclosure has been reported to be dependent on the reactions of other family members and the coping abilities of the parents. The family unit can respond with powerful feelings of guilt and self-blame for not providing appropriate care for the child, a sense of loss of control, anger toward the child for not avoiding the abuse, ambivalence related to physical contact with the child, revenge or retribution towards the offender, guilt toward the offender, ambivalence about the truthfulness of the child's reports, and ambivalence related to the decision to report (Barnes Reyman, 1990; Cohen Esquilin, 1987; McLeer & Rose, 1992; Regehr, 1990; Van Scoyk, Gray & Jones, 1988).

The nature of family members' reactions can have a significant impact on the child's functioning as the child is dependent on the parents not only for emotional support but also for clarifying the ambivalence associated with the sexually abusive acts. The lack of available services for such families is, therefore, surprising (Roesler, Savin & Grosz, 1993; Sesan, Freeark & Murphy, 1986). Furthermore, current research investigating the functioning of these children and their perceptions of familial and environmental support is also in its infancy.

The main goal of the present investigation was to evaluate children's emotional and behavioral adjustment following the discovery of ESA. Recognizing the scarcity of prospective follow-up studies in the area, children's functioning was assessed three and six months post disclosure. Standardized evaluations conducted from the child's, the primary caregiver's and the teacher's perspectives were employed. A matched nonclinical

comparison group was used to investigate differences on standardized measures of depression, anxiety, self-concept, general and abuse specific fears, social functioning, internalizing and externalizing symptoms. Finally, the abuse related variables, and children's perceptions of trauma and environmental support were investigated as primary predictors of the initial and follow-up adjustment.

The following sections will present definitional challenges encountered in the area, the definition of sexual abuse as included in the study, and will discuss the incidence and prevalence of CSA. In addition, a summary of the literature on risk factors and children's initial reactions following CSA will be provided, and factors moderating the impact of abuse and conceptual models guiding the research will be presented. Finally, the rationale, objectives and hypotheses of the investigation will be introduced.

Definitions

Defining sexual abuse is one of the most prominent challenges in the area with many studies employing different definitions of CSA or not defining the sexual abuse altogether (Green, 1993). This lack of consistency in defining sexual abuse makes it difficult to compare prevalence rates and to interpret the severity of impact across studies. The literature is not consistent with respect to three main components of the definitions. First, the studies include different types of sexual exploitation, which may involve incidents of exhibitionism, voyeurism, kissing, fondling of breasts or genitals, masturbation, penetration, oral and anal sex, and pornographic exploitation. Some studies consider exclusively sexually abusive physical contacts (Russell, 1983; Wyatt, 1985) and some combine contact and non-contact abuse (Finkelhor, 1979, 1984; Peters, Wyatt & Finkelhor, 1986).

Second, although there is a general consensus that the abuse must involve exploitation for a sexual gratification of a perpetrator who is at least five years older than the child (Green, 1993), some studies consider other age differences (e.g., Goldston, Turnquist & Knutson, 1989). In general, for children younger than 16, the five years age differential is used, and for those older than 16 the ten-year age difference is employed. In the older group, this eliminates a substantial number of peer abuse incidents (Russell, 1983).

Studies also differ in their definition of the type of perpetrators. Although it is generally agreed that the relationship between a child and perpetrator should involve an imbalance of power, there is a great inconsistency as to how perpetrators living in the same household, and extended relatives not living at home, are defined (Anderson, Martin, Mullen, Romans & Herbison, 1993). The current literature is, however, consistent in recognizing that ESA is more likely to occur from a known rather than an unknown perpetrator (Russell, 1983, 1984).

These definitional difficulties are present in studies which focused predominantly on intrafamilial as well as on extrafamilial abuse. The most widely cited definition of ESA, proposed by Russell (1984), included:

"One or more unwanted sexual experiences with persons unrelated by blood or marriage ranging from attempted petting (touching of breasts or genitals or attempts at such touching) to rape, before the victim turned 14 years and completed or attempted forcible rape experiences from ages of 14 to 17 years (inclusive)" (Russell, 1984, p. 180).

Inclusion of forceful contact in the older group of victims makes this definition particularly rigorous and eliminates potential cases of abuse which, although not involving force, are also abusive.

This study defined ESA as one or more sexual experience between a child prior to

age 16 with a person not related either by blood or marriage (official or common law) who was at least 5 years older. Only contact sexual abuse was included and the child's consent or feelings of victimization were not used as criteria of abuse. As emphasized by clinicians and researchers, children's ability to understand the implications of sexual abuse is very limited and they, therefore, cannot be seen as giving an informed consent to such an activity (Finkelhor, 1979; Regehr, 1990). For perpetrators who were minors at the time of the abuse, the five year difference was maintained to exclude sexual peer play, although it is recognized that some of these contacts might be abusive.

Incidence and Prevalence of Extrafamilial Sexual Abuse

A number of Canadian and American community surveys indicate that ESA of children is the most prevalent form of sexual abuse. Despite a considerable emphasis on intrafamilial sexual abuse (ISA), surveys reveal that approximately 20% of respondents report ISA, in contrast to 35% who report ESA (Russell, 1986; Wyatt & Peters, 1986). These estimates reflect only contact sexual abuse. When non-contact abuse is included, the estimates of ESA are even higher, reaching 71% of the samples (Finkelhor & Hotaling, 1984). Russell's (1986) survey of 930 women in San Francisco revealed that among 31% of women who experienced ESA before the age of 18, 15% were abused by strangers, 47% by acquaintances, and 41% by family friends, dates, and boyfriends. In 40% of all ESA cases, the perpetrator was classified as an authority figure.

A more recent report on the American National Survey, conducted in 1985 by the Los Angeles Times Poll (Finkelhor, Hotaling, Lewis & Smith, 1990), revealed exceptionally high occurrence of ESA, perhaps due to differential methodology which included telephone

contacts as opposed to either questionnaires or interviews used in other studies (McLeer & Rose, 1992). In their sample, 72% of respondents reported sexual abuse by someone outside the family. More specifically, 27% experienced abuse by a stranger, 36% by someone known, and 9% by a friend. As in Russell's survey (1986), almost half of the participants reported abuse by a person in a position of authority. The Canadian National Population Survey (Badgley, 1984) obtained similar results with approximately 18% of all identified cases in a sample of 2,008 reporting incest, another 18% sexual abuse involving strangers, and 57% sexual abuse involving friends or acquaintances.

Two survey studies indicated higher prevalence of ESA among sexually abused boys as compared to sexually abused girls. Finkelhor's (1979) study of Boston college students and Finkelhor et al.'s (1990) telephone survey study, found that between 56% to 71% of all abused girls and between 83% to 89% of all abused boys have experienced ESA. Similar trends were revealed by Vander Mey (1988) in her extensive review of studies on the impact of sexual victimization on male victims.

The studies addressing the effects of ESA also reveal that boys are experiencing this type of abuse more frequently than any other form of sexual victimization. Kelly (1989) in her study on children's responses to sexual and ritualistic sexual exploitation in daycare centres found that 50% of sexually abused and 40% of ritualistically abused children were boys. A national study of 1,639 children abused in daycare centres revealed that girls were more frequently victimized than boys (62% vs. 38%), however, for boys the daycare abuse was the most frequent type of abuse experienced (Finkelhor, Williams & Burns, 1988). With respect to age, there are some indications that ESA might be more prevalent among school-age children as opposed to preschoolers (Mian, Wehrspann, Klajner-Diamond, LeBaron & Winder,

1986).

High prevalence rates are in a dramatic contrast to the incidence rates derived from the official records of abuse reports. Although some authors estimate that between 200,000 to 400,000 children are abused each year (Sesan, Freeark & Murphy, 1986), only a small proportion of cases are officially reported, and only third of these reports include ESA (Finkelhor & Hotaling, 1984). Finkelhor (1987) in his review of community studies stressed that only seven to eight percent of all abuse cases are reported to child welfare agencies. A recent overview of clinical and legal issues specific to ESA by McLeer and Rose (1992) suggests that incidence rates are biased by two factors. First, they are derived from child protection agencies, which often do not register these rates because they are not involved in the investigative process, and from police departments, which tend to follow only the most severe cases. The second bias is related to underreporting by the adolescents, who often do not perceive the abuser as culpable, and to underreporting by the parents, who in cases of ESA, are most likely to be the first people to whom the child discloses. The adolescent's confusion about what acts constitute the abuse is another factor contributing to the low representativeness of this age group in survey studies (Gidycz & Koss, 1989; Parrot, 1989). The findings clearly indicate that ESA is the most frequently occurring type of sexual abuse and both gender groups, boys and girls, can be subjected to this form of sexual exploitation.

Vulnerability Factors

A review of community surveys and empirical studies indicates a number of demographic and family background variables which characterize sexually abused children. These factors include: child's gender and age, family environment, availability of natural

parents, family composition, and the quality of child-parent relationship.

One of the most consistent findings in the area reveals that girls are more vulnerable to sexual abuse than are boys. Finkelhor (1986) in his review of eight random sample community surveys found that the mean ratio is 2.5 women for every man. This indicates that among all victims, 71% are females and 29% are males. In the general population, Finkelhor and Baron (1986) estimated that 15% of men and 27% of women experience some form of sexual victimization prior to age 18.

When the relationship between the perpetrator and the victim is taken into consideration, however, males are found to be victims of ESA as often as are girls (Pierce & Pierce, 1985; Reinhart, 1987; Vander Mey, 1988). Coulborn Faller (1989), investigating the differences between ESA and ISA, found that boys experienced ESA more frequently (36%) than did girls (10.9%). In addition, Reinhart (1987) showed that abuse by unrelated but known perpetrators increased with age and that this type of abuse started earlier for boys than for girls.

Age of the child at the onset of abuse is another demographic characteristic related to higher risk. A number of researchers reported that children in the preadolescent period, between ages eight and 12, are at the highest risk (Anderson et al., 1993; Finkelhor, 1984, 1987; Russell, 1983; Wyatt, 1985). Controlling for the vulnerability at different ages and the upper age limits of the abuse, Finkelhor (1986) showed that children between ten and 12 years of age were particularly at risk. These children were victimized at more than double the average rate. Another group that was highly susceptible to sexual abuse included children between six and seven years of age (Finkelhor, 1986), with one fourth of all the victimizations occurring before the age of eight (Finkelhor, 1987).

In cases of ESA, some studies have suggested that school-age children, as compared to younger children, are more vulnerable. Among children older than five, Mian et al. (1986) found that 73% experienced ESA, and among those younger than five only 36% experienced this type of victimization. The authors suggested that the age of five might be a crucial turning point for putting the children at a higher risk for extrafamilial molestation.

Among the family variables related to CSA, the most consistent findings indicate that the family environment, especially poor relationships between the parents, is the most powerful vulnerability factor. Gruber and Jones (1983) found that poor marital relations were potent predictors of sexual abuse in their group of delinquent girls, and Finkelhor (1984), Fromuth (1983) and Peters (1984) revealed that the rates of sexual abuse were highest among subjects who reported their parents to have either unhappy marriages or not showing mutual affection. In the telephone survey which included intrafamilial and extrafamilial abuse, Finkelhor et al. (1990) found that reports of having an unhappy family during childhood were the most powerful predictors of sexual abuse. In fact, subjects who reported living in an unhappy family at some point in their lives were twice as likely to be victimized than those who lived in stable families. When the analysis was repeated exclusively for cases of ESA, the variable remained a strong predictor.

Finkelhor et al. (1990) postulated that the lack of parental supervision, frequently associated with unstable families, and children's need for attention which can be fulfilled by people outside of the family, explain this association with ESA. Berliner and Conte (1990) provided some support for this notion in their report of 23 interviews conducted with sexually abused children who stated that the abuse was fulfilling a significant deficit in their lives.

One of the few empirical investigations which compared ESA and ISA in a sample of

80 females, revealed that the family conditions, assessed with the Family Environment Scale (Moos & Moos, 1986), were not different for the two types of abuse (Ray, Jackson & Townsley, 1991). However, the families of sexually abused participants were significantly different from non-abused controls and were evaluated as less cohesive, less involved in outside activities, not emphasising moral or religious values, lacking encouragement of independence and family organization. Although methodologically sound, including a comparison group matched on age, sex, race, socioeconomic status and religion, standardized measures and a clear definition of abuse, the study used retrospective reports of college women.

Absence or unavailability of natural parents some time during childhood is another risk factor. In Finkelhor's (1984) study, living apart from a natural mother was the most powerful predictor followed by not living with a natural father. Similar findings were revealed by number of other researchers (Badgley & Ramsay, 1986; Finkelhor, 1979; Fromuth, 1983; Herman & Hirschman, 1981; Peters, 1984; Russell, 1986) who showed that girls living without natural fathers were at the highest risk. Russell's (1986) finding is particularly relevant because it applies exclusively to ESA, where the child's vulnerability was intensified by increased social contacts of single mothers.

In Finkelhor et al.'s (1990) telephone survey, whether or not the child lived with a natural parent was the second most predictive variable following the family environment conditions. The study investigated seven different family constellations and revealed that living alone with the father or with two non-natural parents constituted two highest risks for girls. The only identified protective factor for girls was living with two natural parents. For boys, living with natural mother alone and with two non-natural parents were the highest and

the only risks. These findings were analyzed with respect to both, intrafamilial and extrafamilial abuse, and no significant differences were revealed. The study also showed that race, parental education, and having few friends were not significant predictors of sexual victimization.

Having poor relationships with parents, particularly with the mother, is recognized as another risk factor. Peters (1984) showed that not being close to the parents was the most predictive factor and Finkelhor (1984) further revealed that, in addition to having a distant relationship, the mothers of sexually abused children were also rated as lacking affection and being sexually punitive.

Based on his survey of 796 college students conducted in 1979, Finkelhor (1984) developed a "Sexual Abuse Risk Factor Checklist" consisting of the following variables: presence of a step-father, absence of a natural mother, distant relationship with mother, mother never completing high school, punitive mother, lack of affection from father, family income less than \$10,000, and child having three or less friends. If none of these factors were present the child was not at risk for abuse, however, if five or more were present, two-thirds of the sample was correctly classified. Similarly, Gruber and Jones (1983) reported that poor marital relationship, living with step- or foster-father, and poor child-mother relationship discriminated between abused and non-abused groups, correctly classifying 80% of the sample.

A literature review of male victims by Vander Mey (1988) supported the findings that family variables constitute the best predictors of abuse. In her review, low family income, disrupted family composition, neglectful parents, prior homosexual experiences, and high need for affection, money and shelter were identified as best predictors of ESA among boys.

Only the family income and disrupted family composition were the same risk factors for ISA. Margolin (1991) provided support for the notion that parental neglect contributed significantly to the abuse of children by non-related caregivers. In her study, which reviewed abuse notices, she found that 13% of the sample was abused because of parental neglect. This was the second highest reason for the abuse.

In summary, although these studies point to important vulnerability factors of sexual abuse, they provide almost no data about risk factors related specifically to ESA. In general, girls in the preadolescent years, living without their natural mothers or with step-fathers in disruptive family environments appear to be at the highest risk. Although the importance of these predictors is evident, their specificity in identifying sexually abused children is low. These variables can constitute risk factors for other disadvantageous situations of childhood. Based on the reviewed studies, such factors as social class, ethnicity, religion and social isolation appear to be unrelated to childhood sexual victimization (Finkelhor, 1986).

General Implications

Intrafamilial and extrafamilial sexual abuse are often regarded as presenting different clinical challenges, with fewer treatment resources available for children and parents experiencing ESA (Barnes Reyman, 1990; Conte & Berliner, 1988; Sesan et al., 1986). Although the ESA families are described as better functioning than families of ISA (Trepper & Barrett, 1986), the impact of abuse is substantial and these families require and are motivated for treatment (Barnes Reyman, 1990; Burgess, Hartman, McCausland & Powers, 1984; Sesan et al., 1986). Despite apparent differences between the two types of abuse, some researchers indicated that ESA is more closely related to ISA than it is to the abuse by

strangers because this type of victimization involves a known adult who misuses the emotional bond with the child to gain physical access and to perpetuate the abuse (Trepper & Barrett, 1986).

Although the treatment programs which exist identify prominent clinical issues and needs related to the children's adjustment following ESA, there is little empirical support available (Haase et al., 1990; Hunt & Baird, 1990; Regehr, 1990; Sesan et al., 1986). According to clinical reports, children's reactions can be related to the nature of sexual abuse and to their perceptions of parental and professional supports available post disclosure (Cohen Esquilin, 1987; Friedrich, Beilke & Urquiza, 1987). There is most likely an additive effect where disclosure can alleviate or exacerbate the negative effects of the abuse (Haugaard & Reppucci, 1988). Further, the children's reactions may be also moderated by developmental changes such as timing of puberty and development of intimate relationships. To date, these factors have received minimal attention in the literature.

Considering the high prevalence of ESA and the scarcity of empirical findings, further investigations are clearly needed. Particularly limited are the reports addressing the adjustment of boys who, as revealed by many prevalence studies, experience ESA at a similar rate as the girls do and suffer negative consequences (Vander Mey, 1988). Moreover, boys are less likely to receive treatment, and when they do, the treatment tends to be of a short duration (Pierce & Pierce, 1985). Because of limited resources and the expense of available services, it becomes especially important to identify children at the highest risk for development of future psychological problems. The recognition of such needs can assist in the distribution and effective management of the existing resources.

Children's Responses to Extrafamilial Sexual Abuse

A dramatic increase of studies on children's responses to CSA can be clearly seen in various reviews of literature. In 1986, a widely cited overview by Browne and Finkelhor on short- and long-term functioning following CSA identified only four studies that addressed initial reactions in both ESA and ISA samples. These reactions included primarily feelings of fear, anger, hostility, guilt and shame, depression, low self-esteem, anxiety, sexual behaviors and impaired social functioning. In contrast, a recent examination by Kendall-Tackett, Meyer Williams and Finkelhor (1993) specifically addressed children's initial adjustment following CSA, and was based on 36 investigations of ISA and ESA, which used comparison groups or standardized measurements. Moreover, five of these studies reported exclusively on the effects of ESA.

Despite this increase and a significant improvement in methodology, the studies frequently do not distinguish between the time of abuse and its disclosure, do not control for abuse-specific variables such as duration and frequency, lack adequate comparison groups, and use one source of evaluation (Beitchman, Zucker, Hood, DaCosta & Akman, 1991). Moreover, the studies addressing the impact of ESA include very small samples of children abused in daycare and sex ring settings thereby limiting the generalizability of the findings.

The current knowledge of children's adjustment following the disclosure of ESA is very limited and is based on two main groups of studies: those which included only cases of ESA and those which compared the effects of extrafamilial to intrafamilial abuse. These investigations are very scarce with the majority of reports addressing the functioning of combined ESA and ISA samples.

In the first group of studies, results of empirical reports indicate that ESA can have

deleterious effects on children's functioning. Kiser, Pugh, McColgan, Pruitt and Edwards (1991) showed that nine out of ten children abused in a church related daycare exhibited post-traumatic stress disorder (PTSD) symptomatology consistent with the DSM-III-R criteria (American Psychiatric Association, 1987). According to the parents, these children relived the traumatic events, avoided stimuli reminiscent of the abuse, and experienced intensification of symptoms when exposed to abuse related stimuli. Further, parental reports on a number of standardized measures indicated that sexually abused children were more symptomatic than 39 comparison children recruited from an outpatient clinic. They exhibited more sexual problems as assessed by the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983), scored in the lowest 10% on gross motor, personal and social development on the Minnesota Child Development Inventory (Ireton & Thwing, 1974), and were rated as more problematic on the Personality Inventory for Children (PIC; Wirt, Lachar, Klinedinst & Seat, 1977). Several gender differences were also revealed, boys were rated as more anxious and exhibiting more general and abuse-specific fears than were girls.

At one year follow-up the sexually abused children remained more problematic than the comparison group, however, the boys showed more improvement than did the girls who became more symptomatic over time. The results of this study are based on a very small group of two to six year old children, who were abused in the same setting. The initial assessment was conducted four to six months after the end of abuse and the date of disclosure was not controlled for.

Other studies that included children abused in daycares also showed impaired functioning following the abuse. Kelly (1989) reported on a daycare sample of 32 sexually abused children, four to eight years old, and 35 ritualistically abused children, four to eleven

years old. The abuse groups were compared to 67 children matched on age, gender, SES, and history of attending daycare. Children were evaluated by their parents on the CBCL (Achenbach & Edelbrock, 1983) approximately two years after the disclosure. Results revealed that both sexually abused groups were rated as less socially skilled, showing more general behavioral problems, and more internalizing (especially depression, withdrawal and somatic complaints) and externalizing difficulties (especially aggression and sex problems). Ninety five percent of these children also exhibited significant fearfulness as reported by parents.

Waterman, Kelly, McCord and Oliveri (1993) further showed that in contrast to a non-abused group, this sample of sexually abused children had higher scores on the Louisville Fear Survey (Miller, 1976), and that the subsample of ritualistically abused children had lower self-concept, as assessed by the Self-Perception Profile (Harter, 1985), and was rated by the parents on the CBCL (Achenbach & Edelbrock, 1983) as exhibiting more internalizing behaviors.

Fearfulness was also revealed as one of the most prominent reactions by Finkelhor et al. (1988) in their sample of daycare abused children. According to parental reports, the children were afraid of the immediate daycare setting, different objects that reminded them of the abuse, and were fearful of being alone. Faller (1988) further indicated that the 48 children in his study were described as exhibiting sexually inappropriate behaviors, sleep difficulties, physical symptoms, and phobias. The children ranged in age from one to nine years and were abused either in licensed daycare centres or home daycares within the last two and a half years. Although a descriptive report, it provides some information on the scope of experienced symptoms.

Other studies that report on ESA include children abused within sex ring settings (Burgess et al., 1984; Burgess, Hartman & McCormack, 1987). Burgess et al. (1987) reported on a group of 34 adolescents 14 to 20 years of age abused six to eight years prior to the evaluation who were compared either to their closest in age sibling or to children from the same class. Results showed that the sexually abused group displayed more anxiety, fears and intrusive thoughts. These symptoms were explained within a chronic post-traumatic stress disorder framework. Furthermore, the study showed that children abused for more than a year exhibited additional reactions of flashbacks, physical fights, aggressiveness, and unresponsiveness to authority, and those abused for less than a year reported problems with interpersonal relations. Although these findings are consistent with other reports, the study is flawed by its retrospective nature, the lack of standardized measurement, and variable time intervals between the end of abuse and the evaluations.

Another earlier study on victims of sex rings reported by Burgess et al. (1984) included children six to 16 years old, a majority of whom were referred for clinical services. Child or parent interviews with 66 subjects were conducted during the time of disclosure and the follow-up data was collected from 62 subjects two years post-disclosure. Four response patterns were recognized on the follow-up. Twenty five percent of the sample showed an "integrative" style, characterized by good adjustment and appropriate interpretation of abuse; 27% of children exhibited an "avoidant" style by denying the abuse, but at the same time, exhibiting fears when exposed to stimuli reminiscent of abuse; 26% showed a "repetitious" style of behavior in which post-traumatic symptomatology was chronic; and 21% of the subjects showed "identification with the exploiter" style by which the cycle of abuse was perpetuated. The study did not reveal gender differences and indicated that adjustment

difficulties can persist over an extended period of time. However, typical of studies on ESA, this investigation included a specific sample of children abused by a sex ring thereby limiting generalizability of the findings.

One of the studies which did not include a specific population was an earlier investigation reported by Mann and Gaynor (1980). Seventy children and adolescents, 18 years of age or less, who experienced a single incident of ESA were followed over time and results indicated that the severity of reactions was directly related to the age of victims. Preschoolers showed minimal distress, latency age children showed mild distress, and adolescents exhibited signs of fear, anger, helplessness, confusion, and self-blame. The study also found that perceptions of parental reactions to the incident were related to the subjects' emotional functioning. This was most prominent among the adolescent group. Because of methodological limitations, the findings must be viewed cautiously. The study did not use a comparison group and employed a semi-structured interview designed specifically for the study. Moreover, the follow-up assessments were conducted at different times, ranging from one week to eight months, and inter-rater reliabilities for the interviews were not established.

Friedrich and Reams (1987) reported on a single case of ESA with two different incidents of abuse over an extended period of time. The findings, based on the parental reports on the CBCL (Achenbach & Edelbrock, 1983) collected at five different points of time, indicated progressive intensification of symptoms especially with the emergence of sexualized behaviors, aggression and cruelty. This single case report carries all the limitations inherent in this type of study, nevertheless, it is one of the very few investigations which does report on children's long-term adjustment following ESA using a standardized assessment

instrument.

The empirical findings on children's responses to ESA correspond to clinical observations of these children in therapy. Three reports of treatments, designed especially to meet the needs of families who experienced ESA, indicated that these children exhibited symptoms of fear, depression, low self-esteem, sleep disorders, sexualized behaviors, panic and anxiety attacks, powerlessness, aggression, and feelings of guilt for the abuse (Haase et al., 1990; Hunt & Baird, 1990; Van Scoyk et al., 1988). Moreover, the clinical literature emphasized parental role in moderating the effects. Children often responded with feelings of confusion because they lacked cognitive abilities to understand the sexual nature of the abuse. Thus, they were likely to perceive and internalize the parental interpretations of sexual acts (Barnes Reyman, 1990). Further, the child's coping and adjustment post disclosure were highly correlated with the family support and responsiveness, especially in alleviating the child's feelings of guilt for the abuse (McLeer & Rose, 1992; Pelletier & Handy, 1986; Regehr, 1990). Despite their pivotal importance, to date these dynamics have not been investigated in empirical literature.

The second group of studies which provides information on children's adjustment following ESA includes investigations which compared functioning of ESA to ISA victims. In general, these empirical findings suggested that ISA victims exhibit more severe symptomatology. Due to the methodological limitations of the studies, however, the results are not conclusive.

Anderson, Bach and Griffith (1981) showed that the "internalized psychosocial" reactions of sleep and eating disturbances, fears and phobias, depression, guilt, shame, and anger occurred in 67% of ISA victims and in 49% of ESA victims. What the authors call the

"externalizing responses", which included school problems and running away, were noted in 66% of ISA and 21% of ESA victims. This early study was based on chart reviews of 155 adolescent victims referred for treatment and, thus, the results should be viewed cautiously.

More recent reports by Mannarino and colleagues are more revealing due to their prospective nature and rigorous methodology (Cohen & Mannarino, 1988; Mannarino, Cohen & Gregor, 1989; Mannarino, Cohen, Smith & Moore-Motily, 1991). A sample of 94 sexually abused girls between six to 12 years of age was assessed on three different occasions. First assessment was conducted within six months after the end of abuse and no more than two weeks post disclosure. The second and third assessment took place six and 12 months later. The sexually abused sample was compared to clinic and normal controls on a number of standardized measures completed by children and their parents. In addition, because the sexually abused group contained 49% of ESA victims, the analyses were conducted with respect to the type of perpetrator. No significant differences were found between the ISA and ESA victims at any of the three assessment times. At the initial assessment the sexually abused group, with ISA and ESA victims combined, compared to two control groups reported higher anxiety scores on the State Anxiety Inventory for Children (STAIC A-State; Spielberger, 1973). No group differences were present on other self-report measures: the Piers-Harris Self-Concept Scale (PHSCS; Piers & Harris, 1969), the Child Depression Inventory (CDI; Kovacs, 1983), and the Trait Anxiety Inventory for Children (STAIC A-Trait; Spielberger, 1973). According to parental reports, the sexually abused children were comparable to the clinical group but exhibited more symptomatology than normal controls on the CBCL (Achenbach & Edelbrock, 1983). At the six months follow-up, the sexually abused group reported significantly lower self-concept than either the clinical or normal control group.

The parental reports of sexually abused and clinic control girls still showed that the two groups were more problematic than normal comparisons but not different from each other. The results at 12 month follow-up revealed no differences on self-report measures, and according to parental reports, the two clinical groups were less socially competent than the normal comparison group.

Overall, the results of Mannarino and colleagues consistently showed that ESA and ISA victims were similar on self- and parent-report measures with significant improvements over time. Most striking were the findings that clinical groups did not differ from normal comparisons on self-report measures and significant differences were found on parental reports. Based on these results, the researchers strongly suggested the need for multidimensional assessments conducted from different perspectives.

Similar results were also reported by Wagner (1991) who did not find significant differences between 37 ESA victims, 44 ISA victims and 46 controls on self-report measures of depression assessed by the CDI (Kovacs, 1983), and self-concept assessed by the PHSCS (Piers, 1984). The group effect was found for the parental reports of depression, with ISA victims exhibiting more depressive symptomatology than either the ESA or non-abused group.

In summary, current evidence clearly shows that children exposed to ESA may show symptoms of post-traumatic stress, exacerbated fears, anxiety, sexual problems, difficulties in social interactions, depression and low self-esteem. Not all children, however, exhibit impaired functioning and there does not appear to be a consistent pattern of symptomatology. The majority of findings are based on very specific samples of children who were abused in either sex rings or within daycare settings. In the former case, abuse

tends to be more severe, longer lasting, and involve multiple perpetrators. In addition, children themselves can serve as agents perpetuating the abuse because, with time they may be recruiting new members to the rings. Therefore, these children constitute a specific group of victims with added dynamics of threats, loyalties and financial rewards. In daycare abuse multiple perpetrators are also involved, and the severity is intensified by extreme threats designed to keep the secret (Kelly et al., 1993). The specificity of these samples limits the generalizability of findings, and although the results point to important emotional and behavioral impairments, they are based on small, mostly clinical samples of very young children. Although the emergence of longitudinal studies is encouraging, no well designed follow-up studies have been conducted that investigate the long-term effects in a large and representative sample of ESA victims.

Factors Moderating the Impact of Child Sexual Abuse

To account for the differential impact, a variety of factors related to the severity of abuse have been examined. The most commonly investigated variables include: duration and frequency of abuse, relationship between the child and perpetrator, type of abuse, and time between the end and disclosure of abuse. More recent investigations have also examined the influence of demographic and family-related variables. In general, the findings indicate that abuse-specific variables are related to parental reports of children's functioning but not to the children's self-reports.

Friedrich, Urquiza and Beilke (1986) found that sexual abuse characteristics were related to behavioral problems of 6 to 12 year-old children as reported by mothers on the CBCL (Achenbach & Edelbrock, 1983). Stepwise regression analyses revealed that the more

frequent and severe abuse committed by a close perpetrator was predictive of internalizing behaviors in girls, and the long-lasting abuse disclosed long after the termination which was committed by a close perpetrator was predictive of externalizing behaviors in boys. For both genders, higher frequency of abuse and greater number of perpetrators were predictive of sexualized behaviors.

Moore Newberger, Gremy and Waternaux (1991) revealed similar findings in their study of 49 sexually abused boys and girls with an even distribution of ESA and ISA victims. Severity of abuse was related to the Total and Externalizing scores on the CBCL (Achenbach & Edelbrock, 1983) completed by mothers, and force and type of perpetrator were related to Internalizing scores. These variables explained from 8% to 18% of the variance. Conte and Berliner (1988) showed that among 20 different variables potentially related to the impact, the experiencing of several forms of abuse, receiving of rewards, close relationship between child and perpetrator, and physical restraint during the abuse were all predictive of children's impaired functioning. However, similarly to Moore Newberger et al. (1991), only 18% of total variance was explained.

When self-reports of child victims are considered, a number of studies indicate that they are not related to abuse-specific characteristics. For example, Mannarino et al. (1989) found that frequency of abuse, type of involved contact and use of force were not related to children's reports of depression, self-concept and anxiety. Using the same population of children in another study, Cohen and Mannarino (1988) found that the child's age, type and frequency of experienced abuse, relationship to perpetrator, and use of force were again not related to any of the self-report measures. In Kelly et al.'s (1993) study of ESA victims in a daycare, none of the factors related to the abuse were predictive of children's functioning.

In light of the limited predictability of abuse-related variables, the emergence of studies that have investigated other characteristics, such as family functioning or the children's personality, are encouraging. Friedrich et al. (1987), for example, showed that family variables, evaluated by case workers, were predictive of parental reports of children's functioning on the CBCL (Achenbach & Edelbrock, 1983). Internalizing behaviors were predicted by higher family conflict, lesser cohesion, and shorter time between the abuse and evaluation accounting for 44% of variance. Externalizing behaviors were also predicted by higher family conflict, lower cohesion and greater severity of abuse accounting also for 44% of variance. Sexual problems were predicted by longer duration of abuse and lower family support and these variables explained 24% of total variance. Furthermore, Conte and Berliner (1988) revealed that family support systems, between either the parents and the abused child or the sibling and the abused child, served as moderating factors. Their results showed that the availability of family supports were important factors in protecting from the negative impact of sexual abuse.

Wolfe, Gentile and Wolfe (1989) showed that children's attributional style and age were predictive of children's social competence as assessed by the CBCL (Achenbach & Edelbrock, 1983), the CDI score (Kovacs, 1983), the Children's Manifest Anxiety Scale - Revised score (CMAS-R; Reynolds & Richmond, 1978) and the STAIC A-State score (Spielberger, 1973). Age of the child predicted fears related to sexuality, assessed by the Sexual Abuse Fear Evaluation Scale (Wolfe & Wolfe, 1986), and severity of abuse, in addition to the other variables, predicted the STAIC A-Trait score (Spielberger, 1973). Percentages of explained variance ranged from 21%, for fears related to sexuality, to 82% for STAIC A-Trait.

In summary, the relationship between abuse-related variables and number of outcome

measures is not well established. Studies indicate that the source of the reports is an important variable, with the parental-reports being more often related to the characteristics of the abuse than the self-reports. Nevertheless, the relationship is marginal and no single abuse-specific variable is consistently related to more severe impact (Conte & Berliner, 1988). Although the inclusion of other family variables and child demographic characteristics improves predictability of the impact, these results must be viewed as preliminary due to the limited number of studies that have investigated these relationships. Furthermore, there is a dearth of studies that have focused on moderating variables in the adjustment of ESA victims.

Theoretical Conceptualizations of the Impact of Extrafamilial Sexual Abuse on Children

The lack of a consistent theoretical framework in investigating the effects of CSA constitutes one of the major challenges in the area (Finkelhor & Browne, 1988). Several researchers have attempted to conceptualize the mechanisms of impact within the Post-Traumatic Stress Disorder (PTSD) model. The disorder was defined by the Diagnostic and Statistical Manual of Mental Disorders - Revised (DSM III-R; American Psychiatric Association, 1987) as including four main components. First, it identifies the existence of a recognizable stressor that has a potential to evoke symptoms of distress in almost anyone. Second, it recognizes that the trauma may be reexperienced either through recurrent intrusive recollections, dreams, or sudden feelings. Third, it assumes that a numbing of responsiveness or reduced involvement in the external world receives its expression in diminished interests in activities, feelings of estrangement and constricted affect. Lastly, it postulates that at least two of the following sets of symptoms need to be present:

hyperalertness, sleep problems, survival guilt, problems with memory and concentration, avoidance of activities or the intensification of symptoms when exposed to stimuli related to traumatic event.

In the recent literature, the PTSD model has been used frequently to help conceptualize the effects of sexual abuse on children (e.g., Deblinger, McLeer, Atkins, Ralphe & Foa, 1989; Kiser et al., 1991; McLeer, Deblinger, Henry & Orvaschel, 1992; Wolfe et al., 1989). The model has advantages of providing a clear label and description of some of the children's reactions and it encourages investigations into the effects in a more structured fashion. However, the main limitations of the model are that not all symptoms can be explained and the process by which the negative reactions are acquired is not revealed. For example, Finkelhor (1988) has criticized the model for not incorporating prominent cognitive disturbances of distorted beliefs about self and others, self-blame, and confusion and misinformation related to sexuality. In addition, the model does not address the influence of the familial and environmental stressors, particularly the stressors related to possible court procedures and therapeutic involvement (Kilpatrick, 1987).

A more comprehensive model of the dynamics that can account for the impact of sexual abuse was presented by Finkelhor and Browne (1985, 1988). Their model, the Traumagenic Dynamics Model, postulates that the effects of child sexual abuse can be explained in terms of four trauma-causing factors: (1) Traumatic Sexualization; (2) Betrayal; (3) Powerlessness; and (4) Stigmatization. The first factor, Traumatic Sexualization, explains the process by which the child experiences developmentally inappropriate sexuality and acquires developmentally inappropriate sexual knowledge. This occurs in a context of a dysfunctional interpersonal relationship when the victim is repeatedly rewarded for sexual behaviors, when

force is used, or when the victim is required to actively participate in the sexual act.

The second factor, Betrayal, accounts for the process by which children come to realize that the person who is in a position of trust and is invariably responsible for a well-being of the child caused them harm. Feelings of betrayal can apply directly to the perpetrator, and indirectly, to the people in the child's environment who either did not prevent the abuse or exhibited ambivalent feelings toward the child following the disclosure.

The third factor, Powerlessness or Disempowerment, describes a process by which the child's sense of self is repeatedly invaded. The invasion of personal space occurs on physical and psychological levels and is exacerbated by the perpetrator's threats of harm and injury either directly towards the child or towards the people who are emotionally close to the child. The support received during the post-disclosure phase can result in feelings of empowerment. If, on the other hand, the disclosure is coupled with the feelings of disbelief, the child's sense of powerlessness is exacerbated.

The last factor, Stigmatization, proposes that all negative self-perceptions of the child, over time, contribute to the child's low self-image. Often, the abused child may internalize the feelings of guilt, shame, worthlessness, and badness. Those feelings can be instilled by the perpetrator during the course of abuse and can be maintained by the unsupportive environment upon disclosure.

Each of these traumagenic factors has its own specific dynamics, proposes differential impact on the child's psychological functioning, and describes a variety of behavioral manifestations. As such, the model might be highly relevant for clinical work, both in terms of assessment and intervention. Knowing the extent of traumatic sexualization, stigmatization, betrayal and powerlessness which the child experiences following the abuse can have direct

implications for the type of clinical services offered. The utility of the model to guide empirical research is, however, limited. Not only does the model attempt to explain a very broad range of reactions but it also suggests that some reactions to sexual abuse, for example depression, might arise from more than one factor (Finkelhor & Browne, 1988). The wide range of reactions exhibited and the diversity of its origins hinders the empirical testability of the model (Haugaard & Reppucci, 1988).

Moore Newberger and De Vos (1988) have proposed a theoretical model that views the outcomes of childhood sexual abuse within a developmental perspective, accounting not only for the direct impact of abuse but also for developmental changes of the child, and social reactions to the abusive event. The model conceptualizes the trauma of sexual victimization as beginning with the onset of the abuse, lasting through the disclosure phase, and having a potential to continue throughout the child's development. The impact of trauma can be moderated by variables present prior to the abuse, such as child's age, gender, cognitive abilities, and family characteristics. Based on Conte's (1985) distinction between first and second order events, two potential sources of trauma were identified. The first order event corresponded to the objective aversive aspects of trauma which encompass different characteristics of the abuse, such as duration and frequency, closeness of the perpetrator, type of personal invasion, and the degree of used coercion.

The second order event, the subjective experience, was based on Lazarus and Launier's (1978) view that the meaning a person gives to the stressful life event, and not simply the event itself, determines the reactions to the abuse. Thus, this event referred to the child's personal experiencing and perceiving of trauma. The child's processing of the abuse occurs within three separate domains. Processes within the cognitive domain were proposed

to account for the child's internalized beliefs about self, feelings of betrayal, guilt, helplessness, and stigmatization. The perceptions of the environmental sensitivity included immediate familial reactions to the abuse, as well as broader responses of the systems within which the child functions. The last domain referred to the emotional and behavioral distress that might be expressed in depression, anxiety, low self-concept, fear, and poor social functioning with different levels of symptomatology displayed by the child.

The model is transactional with cognitive, behavioral, biological, and sociological factors influencing the response patterns. It considers the objective and subjective aspects of trauma as mutually affecting one another, with changes in one domain affecting the functioning in other domains. For example, the child's attribution of guilt influences the level of exhibited symptomatology which, in turn is related to the child's perceptions of familial and environmental support. With time, in order to adjust to sexual trauma, the child has to regain the feeling of personal invulnerability, and reestablish positive perceptions of the self and the environment. At the same time, the abuse becomes a historical experience, adjustment to which is also determined by occurrence of other negative life events, and developmental transitions.

Moore Newberger and De Vos' (1988) model is promising in that it integrates a number of pre-abuse, abuse, and post-abuse variables, assuming that none of the variables can contribute to prediction of victimization outcomes in isolation. Demographic variables alone, for example, cannot account for negative impact. The model also has the advantage of emphasizing children's phenomenological experiencing of the abuse, their perceptions of environmental reactions, while also recognizing the influence of objective aversive aspects of sexual victimization. Finally, the impact of trauma over time is considered with post-abuse

adjustment dependent on developmental, normative, and non-normative life transitions.

Because of these advantages, this model was chosen as a framework for the study.

Rationale and Objectives of the Study

Presently, the literature on ESA is very limited. Existing empirical investigations are based on rather homogenous samples of children abused in either daycare settings or in sex rings. These specific types of abuse are not very common, however, prevalence reports indicate that ESA victims constitute a large proportion of sexually victimized children. Moreover, the studies indicate that boys are highly susceptible to ESA, yet as a group they have received minimal attention.

Despite scarcity of literature, both clinical and empirical reports consistently show that abuse can be a traumatic event which has a detrimental impact on children's adjustment. Clinical reports in particular emphasize the importance of children's perceptions of trauma in determining the impact, and more recent empirical literature points to the important role of family variables as possible moderating factors of the effects. Specifically, familial and environmental supports are postulated as the most important factors moderating child's functioning. To date, no empirical study has been reported which investigates the impact of ESA among a representative, age diversified sample of male and female victims. Considering the high prevalence rates and the limitations of current empirical investigations, it is clear that a methodologically sound study is needed.

The primary objectives of this research were twofold. First, the study attempted to answer three key questions: (1) does ESA have an impact on children's emotional and behavioral functioning and, if so, how does this impact change over time? (2) do the children

who experienced ESA victimization report post-traumatic symptomatology and what is the course of resolution for this symptomatology? and (3) to what extent can objective aspects of the abusive incident(s) and child's subjective experiencing of trauma predict the children's immediate and long-term adjustment?

Second, the study was designed to overcome the numerous methodological limitations of current literature by: employing standardized multidimensional measurements conducted from the child's, the parents', and the teachers' perspectives; including a matched comparison group; employing a prospective follow-up design with three and six months post-disclosure assessments; including a pure ESA nonclinical sample of boys and girls; controlling for time between the end of abuse and first assessment by including cases where the abuse ended within one year prior to disclosure; and having an explicit definition of what constituted the abuse.

Hypotheses

In light of the above stated objectives, the following hypotheses were formulated for the study:

1. Sexually abused boys and girls, when compared to non-abused boys and girls, will report initially impaired emotional and behavioral functioning.

- a) In the emotional domain, sexually abused children will report significantly more symptoms of depression, lower self-concept, higher level of anxiety, and more global, sex-related and interpersonal fears. The abused children will also perceive themselves as less

assertive in concrete social situations. Respectively, these responses will be assessed with the following measures: Depression Self-Rating Scale for Children (Birlleson, 1981), Piers-Harris Children's Self-Concept Scale - Revised and its Anxiety subscale (Piers, 1984), Fear Survey Schedule for Children - Revised (Ollendick, 1978) and the Sexual Abuse Fear Evaluation Scale (Wolfe & Wolfe, 1986), and Children's and Adolescents' Social Self-Efficacy Scales (Wheeler & Ladd, 1982; Connolly, 1988).

b) In the behavioral domain, sexually abused boys and girls will be evaluated by their primary caregivers and teachers as exhibiting significantly more Internalizing and Externalizing behaviors. These behaviors will be assessed with the Parent and Teacher versions of the Child Behavior Checklist (Achenbach & Edelbrock, 1983; Edelbrock & Achenbach, 1984).

2. The differences in emotional and behavioral functioning, as assessed with measures specified in Hypotheses 1a and 1b, between sexually abused and non-abused boys and girls will change over time. More specifically, they are expected to be less pronounced at the follow-up period.

3. PTSD symptomatology in sexually abused boys and girls will be highest initially and, over time, this symptomatology will diminish. PTSD symptoms will be assessed with the Intrusive Thoughts, Avoidance, and Sexual Anxiety subscales of the Children's Impact of Traumatic Events Scale (CITES; Wolfe, Wolfe, Gentile & LaRose, 1986b).

4. The initial subjective aspects of the abusive incident(s), comprised of the child's PTSD symptomatology, perceptions of blame and guilt, and perceptions of the family and environmental support, will be predictive of the child's emotional and behavioral functioning within the first three months post-disclosure and six months later. The PTSD symptomatology will be assessed as specified in Hypothesis 3, perceptions of blame and guilt will be assessed with the Self-Blame and Guilt subscale of CITES (Wolfe et al., 1986b), and perceptions of family and environmental support will be assessed with the Social Reactions subsale of CITES (Wolfe et al., 1986b). Children's emotional and behavioral functioning will be assessed with measures specified in Hypotheses 1a and 1b.

5. The objective aspects of abusive incident(s), child's age, child's gender, and total family stressors including involvement with mental health professionals, court participation, developmental changes, and subsequent abuse will be predictive of the emotional and behavioral functioning of sexually abused boys and girls and their PTSD symptomatology. The aspects of abusive incident(s) and total family stress will be assessed with the Nature of Abusive Experience Form (adapted from Wolfe, Wolfe, Gentile & Bourdeau, 1986a) and the Family Life Stress Form (adapted from Abidin, 1983), respectively. Children's emotional and behavioral functioning will be assessed with measures specified in Hypotheses 1a and 1b, and their PTSD symptomatology will be evaluated with the measure specified in Hypothesis 3.

Method

This study is a part of a larger, two-year follow-up investigation into the impact of ESA on the functioning of the family. The project entitled "Parent and Child Reactions to Extrafamilial Sexual Abuse", also referred to as the "ESA Project", was conducted through the Department of Psychology at the Children's Hospital of Eastern Ontario (CHEO) between July of 1989 and November of 1993. The investigation received the National Health Research and Development Program's funding (6606-4689-FV) on three separate occasions (Firestone, Manion, McGrath, Ensom, Besner & Wells, 1989; Firestone, Manion, McIntyre, Ensom & Wells, 1991; Firestone et al., 1993).

Participants

Case Group

Forty seven sexually abused children who met the selection criteria for the study along with their primary caregiver(s) were recruited between October of 1989 and July of 1992, and assessed on two different occasions (Time 1 and Time 2 assessment). Eighteen boys and 28 girls were referred by three organizations which interact with families after a discovery of abuse: (1) the Child Protection Team at CHEO; (2) the Children's Aid Societies in the Ottawa-Carleton Region, the County of Lanark and the Town of Smith Falls, the Prescott-Russell Region, and Pembroke and County of Renfrew; and (3) the Victim/Witness Assistance Programs of the Ottawa-Carleton Region, Pembroke-Renfrew, and Kingston. One additional family with a sexually abused boy self-referred to the study. Children were selected for the project if they met the following criteria:

1. Within the last three months there was a discovery of the ESA incident(s) which occurred no longer than one year prior to the disclosure as documented by the records of the agencies.
2. The child was living with at least one parent, step-parent, or foster parent who had functioned in the primary caregiver role for at least six months prior to the ESA incident(s).
3. The child was English speaking and had an estimated IQ of 80 or above.
4. The primary caregiver was English speaking and had a minimum of grade six education.
5. Any child who was institutionalized, had a major handicap (e.g., blindness, end-stage renal disease, terminal illness and major motor deficit), or who had experienced both intrafamilial and extrafamilial sexual abuse was excluded.

If more than one child in the family was abused, only the oldest child was included in the study. Of 47 case children, 38 participated at both assessment times, four completed Time 1 but not Time 2 assessment, and due to procedural difficulties in recruitment, five children joined the study only at Time 2 assessment. The average age of case participants was 10 years ($SD = 2.9$ years) and ranged from five years and six months to 15 years and eight months. Thirty children were living in two-parent families, two children in single-father families, and 15 children in single-mother families.

Comparison Group

Forty seven children who did not experience any form of sexual abuse were recruited by hired research assistants from: (1) the medical records at CHEO; (2) the One Parent Families Association - Ottawa Chapter; and (3) the Emily Murphy Housing Project. The last two agencies were included in order to increase the number of participating one-parent families (McIntyre, Manion & Ligezinska, 1991). The recruitment occurred between October of 1989 and October of 1992, and similar to case participants, the children were assessed on

two different occasions (Time 1 and Time 2 assessment). The number of participating boys and girls for case and comparison groups referred by different organizations is presented in Table 1.

Insert Table 1 about here

Three demographic variables, child's age, child's gender, and family constellation (single-mother, single-father, or two-parent family), were used as balancing variables in order to ensure equality between groups. The next child on the medical records meeting the following criteria was selected by a member of the research team:

1. The child had never experienced any form of sexual abuse as documented by the medical records and reported by parents and/or child.
2. The child was living with at least one parent, step-parent, or foster parent who has functioned in the primary caregiver role for at least six months.
3. The child was English speaking and had an estimated IQ of 80 or above.
4. The primary caregiver was English speaking and had a minimum of grade six education.
5. Any child who was institutionalized, had a major handicap (e.g., blindness, end-stage renal disease, terminal illness and major motor deficit) was excluded.

At Time 2 assessment two children did not participate in the study. The average age of the comparison children was 10 years ($SD = 2.9$ years) and ranged from five years and six months to 15 years and eight months. Thirty five children were living in two-parent families, 11 with a single-parent mother, and one with a single-parent father. None of the children experienced any form of sexual abuse between Time 1 and Time 2 assessment.

Table 1

Number of Participating Boys and Girls by Referral Source

Referral source	Case		Comparison	
	Boys	Girls	Boys	Girls
Child Protection Team	4	13	a	a
Victim/Witness Programs	8	6	a	a
Children's Aid Societies	6	9	a	a
Self-referred	1	0	a	a
Medical Records	a	a	17	26
One Parent Families Association and Emily Murphy Housing Project	a		2	2
Total	19	28	19	28

Note. An "a" indicates that participants were not recruited from this referral source.

Procedure

Recruitment

The primary caregiver(s) of case children were informed about the investigation by the designated personnel within each agency, either in writing or verbally. They were given or sent an information letter (Appendix A) describing the study in detail and asked to respond whether or not they would like to participate. A response form and a self-addressed, prepaid return envelope were provided. The research staff made weekly contacts with the designated workers and inquired about potential participants. If a family was willing to participate, the next contact was made by a member of the research team. For the families who refused participation, the agencies kept a record of major demographic characteristics. Data on the characteristics of sexual abuse were collected for both, the participating and refusing to participate families (refer to the Measures section for description of these instruments). These data were collected for the outlying agencies by the designated internal workers, and for the agencies in the Ottawa-Carleton region by the members of the research team.

Prior to contacting comparison participants selected from the medical records, the families' physicians' permission was sought (Appendix B). During the course of the ESA Project, 716 physicians were contacted and their permission was obtained for 405 families. Of these, 71 families agreed to participate and were subsequently assessed, 110 did not agree to participation, 134 did not answer, 10 could not be located, 71 were not contacted because an appropriate comparison child was already recruited, and nine were put on a waiting list. The 71 assessed families and four additional families recruited from the One Parent Families Association and the Emily Murphy Housing Project, served as a pool for the selected matched comparison sample of this study. As with the case participants, each

family was informed in writing about the investigation and asked to participate (Appendix C). A response form and a self-addressed prepaid return envelope were also provided. Those families, both case and comparison, who did not respond within the first two weeks of sending a letter were contacted by phone and asked about their decision regarding participation. If, at this time, the family decided to take part in the study, an assessment was scheduled. If the family refused participation, all contacts were terminated.

Family Assessments

The primary caregiver(s) and the child who decided to participate had a choice of being assessed either at home, at CHEO, or at any other referring agency. Most of the families, however, preferred to be seen at their homes. Those who decided to be seen elsewhere were reimbursed for travel and parking expenses. During both assessments, scheduled at the families' convenience, one researcher worked with the child and, at the same time, another with the parent. To ensure that all children understood the assessment measures, those younger than 12 years of age had the self-report measures read to them in a standardized format.

At Time 1 assessment case participants were seen on average 12.8 weeks (SD = 2.6, range 3 to 20) after the disclosure of sexual abuse, and at Time 2 assessment they were seen on average 26.7 weeks (SD = 2.6, range 21 to 33) post disclosure. The average time period between the assessments for case and comparison children was 14 weeks (SD = 4, range 9 to 25) and 15 weeks (SD = 3, range 9 to 24), respectively.

On the first visit, the parent(s) signed a consent form (Appendix D and E for case and comparison families, respectively) and the children were informed about the general

nature of the study and the limits of confidentiality. Those who were seven years of age or older also signed a consent to participate (Appendix F). The demographic questionnaire, and either the Peabody Picture Vocabulary Test - Revised (Dunn & Dunn, 1981) or the Information and Block Design Short Form of the Wechsler Intelligence Scale for Children - Revised (Wechsler, 1984) were administered only at Time 1 assessment. All the other measures were repeated at both assessment times. The first visit took approximately one and a half hours for the case children and one hour for the comparison children. The second visit was usually much shorter, and lasted approximately one hour for the case and 40 minutes for the comparison children.

Teachers' Evaluations

The consent forms for teachers' evaluations (Appendix G) were obtained at each assessment, unless the parent and/or child did not want the evaluation to be completed or the assessment occurred during the summer holidays. The teacher who was identified by the parent and/or the child as having the closest contact with the child, or knowing the child the best, was contacted and asked for the evaluation. If the family was seen at the beginning of a school year, the teachers were not contacted until the end of October in order to allow for the required two-month interval for a more complete evaluation of the child (Achenbach & Edelbrock, 1986). The cover letter for the teachers (Appendix H), as well as the actual questionnaire, were also available for those parents who wished to see it. When parental consent was obtained, the research assistant contacted the child's teacher by mail as soon as possible following the assessment. The teachers were provided with a prepaid, self-addressed return envelope. On average, if no response was obtained within the first four

weeks of sending a letter, the teachers were called and asked about the status of a questionnaire. The average times between Time 1 assessment and completion of questionnaires for case and comparison participants were three weeks ($SD = 3$, range 1 to 11) and two weeks ($SD = 2$, range 1 to 9), respectively. At Time 2 assessment the average times for case and comparison participants were four weeks ($SD = 3$, range 1 to 12) and three weeks ($SD = 2$, range 1 to 14), respectively. The overall response rates for Time 1 and Time 2 assessments across participants were 88% and 90%, respectively. A more detailed description of the teacher responses' status is provided in Table 2.

Insert Table 2 about here

As revealed in Table 2, the teachers' response rates were almost identical for the two groups at both assessment times.

Measures

Data in this study were obtained from four main sources: children's self-reports, primary caregiver-reports, teacher-reports and referring agencies. In addition, Statistics Canada Advisory Services Division served as a source for obtaining income data for those families who refused participation in the study. The following sections present descriptions of the utilized measures in order of their administration. For the statistical analyses, the child, primary caregiver, and teacher data were coded according to the adapted version of the Coding Manual for the ESA Project (McIntyre, Cloutier & Ligezinska, 1992). Coding of the information collected from the referring agencies on the characteristics of the sexual abuse

Table 2

Status of the Child Behavior Checklist - Teacher Report Form (CBCL-T) at Time 1 and Time 2 Assessment

Status	Case		Comparison	
	Time 1	Time 2	Time 1	Time 2
Completed	28	29	30	36
Not returned by teacher	4	3	4	4
Parental consent not given	4	4	1	1
Not sent to teacher:	11	11	14	6

Note. Reasons for not sending the CBCL-T: child too new to school, child did not participate at this assessment time, child dropped out of school, the child's teacher was too new to complete the form.

was conducted according to the adapted version of the Nature of Abuse Coding Manual for the ESA Project (McIntyre, 1992), and the coding of the demographic information on families who refused to participate was carried out according to the manual created by the author (Ligezinska, 1992).

Children's Measures

1. Peabody Picture Vocabulary Test - Revised (PPVT-R; Dunn & Dunn, 1981): This test was used to obtain an estimate of the children's intellectual functioning. For each child an intelligence quotient (IQ) expressed by a standard score was calculated. Specifically, the measure assesses the individual's vocabulary and can be used with subjects from two and a half years of age to adulthood. It is a nonverbal, untimed, multiple-choice test which has two alternate forms, L and M, each containing 175 items. Every item, or presented word, corresponds to one of the four pictures depicted on a plate. A subject can indicate which picture best corresponds to the word in several ways: by telling the examiner the corresponding number; by pointing to the right picture; or by giving some kind of a prearranged signal when the examiner points to the right picture. The plates are clearly drawn and do not contain any figure-ground problems (Sattler, 1982). The PPVT-R was standardized on a large, representative sample of 4,200 children stratified on gender, geographic region, race, occupation, and community size (Dunn & Dunn, 1981). Split-half reliability coefficients range from .88 to .67 for Form L, and from .86 to .61 for Form M. Alternate-form reliabilities ranged from .74 to .89 when the forms were administered within the same time period, and from .50 to .89 when administered within 9 to 31 days. Internal and alternate-form reliability estimates are .80. Criterion-related validity coefficients range from .20

to .90, with median correlations being in the .60s. The test was administered to 93 children and Form M was used for all the participants.

2. Wechsler Intelligence Scale for Children - Revised, Information and Block Design Short Form (WISC-R; Wechsler, 1974): For one child the Information and Block Design Short Form of the WISC-R was used. This child was functionally bilingual, however, the knowledge of receptive, English vocabulary, as assessed by the PPVT-R, would not have provided the most accurate estimate of this participant's intellectual functioning. The selected short form of the WISC-R can be used for screening purposes and the subscales are judged to be good measures of a general intelligence factor (correlations are: .76 for Information and .73 for Block Design; Sattler, 1982, pp. 161-163). Consistently high reliabilities of .85 for the Information and .85 for the Block Design subtests, and the combined validity coefficient of .89 are reported. The scaled scores obtained for the two subtests were used to estimate the Full Scale intelligence quotient according to the formula described by Sattler (1982, p.162): $[(BD + I) \times 2.9] + 42$.

3. Piers-Harris Children's Self-Concept Scale - Revised (Piers, 1984): This self-report measure, subtitled "The way I feel about myself", consists of 80 brief statements to which children respond in a "yes-or-no" fashion. Although it is suggested that the scale be used with children and adolescents eight to 18 years of age, when read, the instrument can also be administered to younger groups (Piers, 1984, pp. 7-8). Test-retest reliability ranges from .42 (an interval of 8 months) to .96 (an interval of 4 weeks), internal consistency from .88 to .93, and content, criterion-related, and construct validities are adequate. The total and the

anxiety scores were used and all participating children completed the measure at Time 1 and Time 2 assessment.

4. Depression Self-Rating Scale for Children (Birleson, 1981; Appendix I): This brief 18-item self-report scale is widely used with children between the ages of seven to 18. Based on the results obtained from a sample of 155 randomly selected children, a modest inter-rater diagnostic reliability is reported (Birleson, Hudson, Gray-Buchanan & Wolff, 1987). The test-retest reliability of the scale was reported to be .80 with the correlations for individual items ranging from .65 to .95. The internal consistency was reported to be .86 (Birleson, 1981). The scale is employed as an assessment tool with both clinical and nonclinical populations. Following the suggestion of Firth and Chaplin (1987), particular caution was paid in the administration of this scale to very young children and, similarly to all other measures, it was read to those 12 years of age and younger. A total score reflecting the level of depressive symptomatology was used. All participating children completed the scale, except one comparison child who did not complete it at Time 1 assessment.

5. Children's Self-Efficacy for Peer Interaction Scale (Wheeler & Ladd, 1982; Appendix J): This scale assesses the ability of primary school aged children to perform successfully in a variety of social situations with peers. It consists of 22 statements which describe hypothetical social interactions and the child is asked whether or not these interactions would be problematic for him/her. The scale yields a total, conflict and non-conflict score for which the internal consistencies are reported to be .85, .85, and .73, respectively. Test-retest reliability appears to be higher for boys (.90) than for girls (.80). Construct validity data

obtained by correlating the total score with the total Piers-Harris Children's Self Concept (Piers & Haris, 1969) score indicate highest correlations for high grade levels and a close association between self-efficacy for nonconflict situations and general self-concept. For purposes of the study a total score was used. The scale was administered to children 12 years of age and younger. It was completed by 31 and 30 case children on Time 1 and Time 2 assessment, respectively. In the comparison group, 33 children completed the scale at both assessment times.

6. Adolescent Social Self-Efficacy Scale (Connolly, 1988; Appendix K): This scale measures adolescents' perceptions of social effectiveness in concrete social situations and as such is an upward extension of the Children's Self-Efficacy for Peer Interaction Scale (Wheeler & Ladd, 1982). Therefore, the measure was administered to participants older than 12 years. It consists of 25 items which target perceived self-efficacy in the following areas: friendship/intimacy; social assertiveness; social groups/parties; and giving/receiving help. Internal consistency of the scale ranges from .90 to .95 for samples of 87 and 76 high school students, respectively. Factor analyses show that one dimension is sufficient in order to describe the scale. Consistent with this finding and in line with the Children's Self-Efficacy Scale (Wheeler & Ladd, 1982), a total score was used in the study. Test-retest reliability is reported to be .84 for a two-week period. The scale is highly correlated with other measures of self-concept, including perceived social acceptance, general self-worth, cognitive and physical competence and self-esteem. The scale was completed by 11 and 12 case children, and by 13 and 11 comparison children, at Time 1 and Time 2 assessment, respectively.

7. Children's Impact of Traumatic Events Scale (CITES; Wolfe et al., 1986b; Appendix L): The CITES consists of 54 items assessing perceptions and attributions related to sexually abusive experiences. The measure was used with case participants only and according to the authors' suggestion it was administered in an interview-like format (Wolfe, Gentile, Michienzi, Sas & Wolfe, 1991). Although a revised version is available (CITES-R; Wolfe et al., 1991) an original scale was used throughout the study for reasons of continuity. The scale combines Finkelhor and Browne's (1985) model of traumatogenic factors of sexual abuse, Abramson, Seligman and Teasdale's (1981) model of attribution, and Horowitz, Wilner, and Alvarez's (1979) model of cognitive responses to traumatic stress. The children are asked to evaluate the statements on a three-point scale ranging from "not true" to "very true". Three subscales assessing the PTSD symptomatology were used: Intrusive Thoughts, Avoidance, and Sexual Anxiety (Wolfe & Gentile, 1992). As well, the Social Reactions and the Self-Blame and Guilt subscales were added to assess the children's perceptions of social supports and abuse attributions. High to moderate internal consistencies for the scales are reported and they are in order: .91, .72, .84, .94 and .83 (Wolfe & Gentile, 1992). Preliminary analyses for this study revealed the following internal consistencies for the subscales: for Intrusive Thoughts .81; for Avoidance .61; for Sexual Anxiety .86, for Social Reactions .75; and for Self-Blame and Guilt .68. The scale was completed by 38 and 40 case children at Time 1 and Time 2 assessment, respectively.

8. Fear Survey Schedule for Children - Revised (FSSC-R, Ollendick, 1983) and The Sexual Abuse Fear Evaluation Scale (SAFE; Wolfe & Wolfe, 1986; Appendix M): For administration purposes these two scales are presented in one format which consists of 107 items. The

children are required to evaluate their level of fearfulness on a three-point scale ranging from one, not being afraid, to three, being afraid a lot. The FSSC-R includes 80 short statements that ask about fears related to: failure and criticism, unknown, injury and small animals, danger and death, and health. Psychometric results with 171 school children and 35 special classes children revealed that the total score and subscale scores are internally consistent (Ollendick, 1978). A more recent study of 217 children indicated high internal consistencies, ranging from .92 to .95, and moderate test-retest reliabilities, ranging from .82 to .85 (Ollendick, 1993). The SAFE includes additional 27 items which cluster along two dimensions: Sex-Associated Fears and Interpersonal Discomfort (Wolfe & Gentile, 1992). Internal consistencies for the two dimensions, assessed on a sample of 171 school children and 62 sexually abused children, were reported to be .80 and .81, respectively. A total score of the FSSC-R and the two subscale scores of the SAFE were used. Forty five and 44 comparison children, and 40 and 42 case children completed the measure at Time 1 and Time 2, respectively.

Primary Caregivers' Measures

1. Demographic Questionnaire (Appendix N): This questionnaire was adapted for the study from Manion, Keene, McGrath, Goodman, Humphreys & Whiting (1988). It assesses demographic and background characteristic of families and was administered to all participating primary caregivers in an interview-like format. Exact information was collected for most of the characteristics. One variable, occupation, was subsequently coded according to Blishen, Carrol and Moore (1987) and two additional codes were included, one to differentiate between students and homemakers and the second to identify unemployed and

people on welfare. Several questions related to the children's exposure to sexual abuse prevention programs and to parental history of sexual abuse were subsequently added for the parent part of the project (McIntyre, 1993). This measure also served to monitor whether or not the comparison children ever experienced any form of sexual abuse.

2. Structured Interview Specific to Sexual Abuse (Appendix O): This interview, adapted from Bernbaum (1986) by McIntyre (1993), was conducted with the primary caregivers of the case children. It was used for this study at Time 1 assessment to gather information on the following variables: the date when the abuse ended; the date of disclosure; whether or not the child disclosed; to whom the child disclosed; and the incidence of prior ESA. At Time 2 assessment, parents were also asked if the child had experienced any further abuse. This descriptive information is presented in the Part I of the Results section and the frequencies and percentages for all the variables are reported.

3. Family Life Stress Form (Appendix P): This form was adapted from the optional Life Stress subscale of the Parenting Stress Index (PSI; Abidin, 1983). The scale assesses situational life stressors within the family system which are beyond one's control and which do not include stressors related to the parent-child relationship (Abidin, 1990). Five items were added to the original 19 item-scale in order to assess child-related developmental and medical stress, provision of professional help, and child court involvement. Questions related to the parental involvement in psychotherapy, court testimony, and health status were subsequently added for the parent part of the project (McIntyre, 1993). At Time 1, the parents were asked to check the applicable stressors if they occurred within six months prior

to the assessment, and at Time 2 if they too had place since the last assessment. Abidin (1990) reports evidence for concurrent, construct, discriminant, and predictive validity for the entire PSI, however, research on the Life Stress subscale is limited. Only two studies are cited, one reporting a significant negative correlation between the total Life Stress subscale score and the Maternal Social Support Index (Adamakos, Ryan & Ullman, 1986), and the other revealing the ability of the scale to discriminate between three samples of mothers with normal, Spina Bifida, and autistic children (Chavkin, 1986). Normative data, based on a Virginia sample of 2,633 parents, provides profiles of normal and in crisis families, as well as families with an abused child. A total number of family stressors was used in this study and the information was not available only for one case family at Time 2 assessment.

4. Child Behavior Checklist - Parent Report Form (CBCL-P; Achenbach & Edelbrock, 1983):

This checklist is used for the assessment of behavioral problems and competencies in children four to 16 years of age and is widely used in the sexual abuse literature (Achenbach & Brown, 1991). One hundred and eighteen items comprise a Behavior Problem Scale and 20 items comprise a Social Competence Scale. For the purpose of the study, the Internalizing and Externalizing subscales' t-scores and the 1983 scoring system were used. Although a new version was introduced (Achenbach, 1991), for continuity reasons, the 1983 scoring system was maintained throughout the study. The longitudinal nature of the project also required to score the forms of children who were at the top of a six to 11 age range as 12-years olds (Achenbach & Edelbrock, 1983, pp. 142-143). Test-retest reliability across factors has been reported to range from .61 to .96. The inter-rater reliabilities for the Behavioral, Social Competence, Externalizing, and Internalizing factors have been reported to

range from .26 to .98, .44 to .97, .74 to .67, respectively. Evidence for construct and criterion-related validity is good. Stability data indicate that the scale is sensitive to change over three-, six-, and 18-month intervals with coefficients generally decreasing over time for the Behavior Problem scale and with coefficients generally increasing for the Social Competence scale (Achenbach & Edelbrock, 1983). All participating primary caregivers completed this measure at both assessment times.

Teachers' Measure

1. Child Behavior Checklist - Teacher's Report Form (CBCL-T; Edelbrock & Achenbach, 1984): This 118 item scale is designed to assess child behavioral problems in a manner similar to the Parent Form of the instrument. It is used with children and adolescents between six and 16 years of age. Test-retest reliabilities of the scale are .89 (for a one-week interval), .64 (for a four-month interval), and .77 (for a two-month interval). Inter-rater reliability ranges from .29 to .61. Construct, concurrent and discriminant validity of the scale is acceptable. Two scores, the Internalizing subscale t-score and the Externalizing subscale t-score were used in the study and the response rates for Time 1 and Time 2 assessments were reported in the Procedure section.

Data from the Agencies

1. The Nature of Abusive Experience Form (NAEF; Appendix Q): This measure was adapted from Wolfe's et al. (1986a) History of Victimization Form and used to collect information on the characteristics of the sexual abuse for the participating and refusing to participate case subjects. The form operationalizes the severity of abuse in terms of type, duration,

frequency, number of perpetrators, and the type of coercion. A principal component factor analysis conducted on the information for 48 sexually abused children (Gentile 1988) revealed that the severity of abuse can be described along two dimensions: (1) course of the sexual abuse, which explained 34% of variance, included duration, frequency and relationship between perpetrator and child, and (2) seriousness of sexual abuse, which explained 29% of variance, included type of sexual abuse, force or coercion used and number of perpetrators. Because the sample included only 17 percent of ESA, a similar analysis was attempted in this study (refer to the Results section). The information was collected from all participating agencies and presented in detail in the Participants section. For purposes of statistical analyses the following variables were considered: duration of abuse, frequency of abuse, most severe type of abuse, most severe type of coercion, perpetrator's relationship to the child, and perpetrator's age.

2. Demographic Questionnaire (Appendix R): The agencies provided the available information on the basic demographic characteristics for the case families who refused to participate in the study. This information was gathered according to a short version of the questionnaire used with the participants and the comparative results for these two groups are reported in the Results section.

3. Demographic and income data for selected postal code areas and FSA's, 1989 (Table #9, Statistics Canada Advisor Services, 1989; an example presented in Appendix S): This table was used in order to obtain income data for the refusing to participate case families. During the course of the study, it became apparent that the agencies did not always have a

complete record of the families' income and, therefore, this information was obtained from the Statistics Canada Advisory Services Division (1989). Similar data were obtained for the case participants and the results of these analyses are also reported in the Results section.

The following is a summary of the self-, parent-, and teacher-report measures and their corresponding abbreviations. The abbreviations are introduced to facilitate the presentation of findings and use of the "Depression" and the "PTSD" short forms does not reflect diagnostic categories.

<u>Measures</u>	<u>Abbreviations</u>
Depression Self-Rating Scale for Children	Depression
Children's Self-Efficacy for Peer Interaction Scale or Adolescent Social Self-Efficacy Scale	Social
Children's Impact of Traumatic Events Scale: a) Intrusive Thoughts, Avoidance, Sexual Anxiety b) Social Reactions c) Self Blame and Guilt	PTSD Reactions Blame
Fear Survey Schedule for Children - Revised	Fears
Sexual Abuse Evaluation Scale: a) Sex-Associated Fears b) Interpersonal Discomfort	Fsex Fpersonal
Family Life Stress Form	Stress
Child Behavior Checklist - Parent or Teacher Form: a) Internalizing b) Externalizing	Internalizing Externalizing

Ethical Issues

Numerous ethical considerations warrant discussion due to a very sensitive nature of the study. First, throughout the course of the investigation, the anonymity of subjects was maintained by assigning code numbers to all participating families. One master list was kept, and all participants were identified at each stage of the project by their corresponding numbers. Second, it was feasible that one family could be involved with several referring agencies simultaneously, and thus, receive the same initial information letter on more than one occasion. This could result in a possible discomfort for the parents and children, especially for those who did not want to participate or those who found making a decision regarding participation particularly challenging. This likely discomfort was recognized and, as a result, an explanatory paragraph was included in the information letter, with hope that this would help ameliorate possible negative reactions if more than one letter might be received by a family.

Third, all contacts with the families were conducted with an understanding of a professional responsibility to report any cases of unreported abuse. Also, the parents and children were participating strictly on voluntary basis, that is, they could withdraw from the study at any time, and participate in any aspect of the project. For example, they could participate in the assessments, however, refuse to give a permission for the teacher's evaluation, or could refuse to provide answers on some measures. Their decision in no way affected services received from the agencies.

Fourth, for those families who required professional services, a referral list was provided and an active search for the most appropriate service was carried out by the research team. All case primary caregivers received basic information pertinent to the

disclosure of sexual abuse and could decide whether or not to share this information with the child. This package included: Canada's law on child sexual abuse: A handbook (Wells, 1990); What to do if the child tells you of sexual abuse: Understanding the law (Minister of Justice and Attorney General of Canada, 1989); The secret of the silver horse (Minister of Justice and Attorney General of Canada, 1990); Helping parents cope with extrafamilial molestation (MacFarlane, 1986); and What's my job in court?: An answer and activity book for kids who are going to court (Victim/Witness Assistance Program, 1989). The comparison families received the first three handouts as basic preventative information at the last assessment.

Fifth, on parental request, verbal and/or written feedback of the assessment was provided. The parent(s) were informed that the measures used in the assessment procedures were primarily of a research nature and, therefore, did not comprise a full psychological evaluation. As required, professionals already involved with the families were given feedback on the child's functioning, again qualified by a statement that the assessment was conducted for research purposes. The contents of the assessment were not accessible for a therapeutic or legal use.

Lastly, the abuse related measure was administered in an interview-like format towards the end of each session to allow time for development of a better rapport with a child. Recognizing the challenge of multiple reporting, it was decided at the beginning of the study that this information would not be gathered from the children. However, throughout the course of the project, some children felt very comfortable relating the events and volunteered this information. These reports became a part of the research clinical files kept for each family throughout the duration of the study.

Statistical Analyses

All statistical analyses were conducted using the SPSS package, and using the BMDP program for testing the assumptions underlying multivariate analyses. The analyses were conducted in two major steps. Step one involved preliminary analyses and addressed the following questions: (1) differences between the case and comparison participants on a number of demographic and background variables; (2) differences between families who continued in the project and those who either dropped out or joined the study at Time 2 assessment; (3) differences among participating and refusing to participate case families; and (4) differences among case participants referred by different agencies.

For these analyses, a number of continuous and dichotomous variables were examined. The continuous variables were assessed using t statistics with two-tailed tests of significance. In order to control for variability within groups, for each of the analyses the F statistics were examined, and if significant, separate variance results are reported and denoted as " t_s ". In case of non-significant F statistics, the pooled variance results are reported and denoted as " t_p ". ANOVA was used to make comparisons between three different groups and the F , SS, and MS statistics are reported. The dichotomous variables were analyzed using the chi-square statistics (χ^2).

Step two of the analyses involved testing of the hypotheses and MANCOVA, repeated measures (RM) MANCOVA and RM ANCOVA, as well as the standard multiple regression analyses were conducted. Where applicable, separate analyses were carried out with and without cases who either dropped out or joined the study at Time 2 assessment. Because the results were similar, these participants were included in all analyses for appropriate time periods. Further, the data was analyzed with respect to children's age and no significant

differences were revealed on any of the dependent variables (DVs). Lack of these statistical findings and the fact that no specific predictions were made with respect to age, the variable was not considered in further analyses. The overall adapted significance level was .05 and the Bonferroni correction was used for multiple comparisons to control for Type I error. Following significant multivariate statistics, separate RM ANCOVAs were conducted with the adjusted alpha level ($\alpha = .05/p$, p = number of variables). For the data with randomly missing values, imputation with the corresponding cell means was performed. At each stage of the analyses the presence of univariate outliers was investigated according to the SPSS "Examine" procedure. The outliers were detected separately for each cell in the analyses and within each set of Dvs and independent variables (IVs). If detected, they were recoded one unit larger or smaller than the next most extreme case to preserve the differences of the scores, however, without influencing the correlations (Tabachnick & Fidell, 1989, p.70). Multivariate outliers for the MANCOVAs and RM MANCOVAs were identified through the BMDP7M program, and for the regression analyses through the BMDP4M program. Mahalanobis distances with their corresponding χ^2 statistics were investigated and the identified cases eliminated from the analyses.

The assumptions of multivariate normality, linearity and homoscedasticity were examined with the SPSS "Regression" program which provides scatterplots of residuals. If these assumptions were violated, the variables were either transformed or eliminated from the analyses. To evaluate the assumption of the homogeneity of variance-covariance matrices, Box's M statistics were examined and $p < .001$ adopted. In cases where the statistic approached the established p level, further examination of variance ratios between the groups were examined for each DV. In addition, the Pillai's criterion was adapted for the evaluation

of multivariate statistical significance in order to improve robustness of the tests (Tabachnick & Fidell, 1989, p. 379, p.399).

Because the analyses involved two variables that served as covariates, an additional assumption of the homogeneity of regression was evaluated. The overall tests, as well as the tests for each DV within each group were performed and .01 was adopted as the adjusted alpha level. In order to establish if multicollinearity or singularity was present between the variables, the determinants of the pooled within cell correlation matrixes and the squared multiple correlations (SMCs), calculated according to the SPSS "Reliability" program, were investigated.

For the regression analyses, initial runs with untransformed variables were conducted to examine the distributions of residuals against the predicted Dvs. If the assumptions of multivariate normality, linearity, and homoscedasticity were violated, appropriate transformations were performed or the variables were excluded from the analyses. Next, the univariate and multivariate outliers were detected within all sets of predictor variables, and univariate outliers were examined within each DV. Similar to the analyses described above, the univariate outliers were recoded and cases with multivariate outliers were excluded. Finally, the SMCs were calculated for each cluster of predictors.

Results

Part I: Preliminary Analyses

Abuse Characteristics of Case Participants

Information obtained from the participating agencies indicated that the sexually abusive experiences varied in terms of their duration, frequency, type, degree of coercion,

and characteristics of the perpetrators. This information was collected according to the Nature of Abusive Experience Form (NAEF), a measure adapted for the study from the History of Victimization Form (Wolfe et al., 1986a). Based on the data available for 42 children, the average time for the duration of abuse was 26 weeks (SD = 51 weeks), however, there was a substantial range among the participants. Twenty two children (47%) were abused over one day, and this included mostly one-time abuse; for nine children (19%) abuse lasted from one week to six months; for six children (13%) it lasted from six to 12 months; and for five children (11%) the duration exceeded 24 months. The information on the frequency of abuse was available for 43 case participants and indicated that on average the children were abused eight times (SD = 13, range 1 to 60, mode = 1, median = 2). Nineteen children (40%) experienced abuse once; 14 children (30%) between two and nine times; seven children (15%) between ten and 30 times; and the estimated frequency of abuse for three children (6%) was 36, 52, and 60 times, respectively.

The nature of sexually abusive contact(s) involved either one or several inappropriate behaviors. The most severe type of abuse experienced, the information available for all case participants, was entered into one of the six mutually exclusive categories, ranging from least to most severe (Gentile, 1988). Type 1 of sexual abuse included invitation for the child to engage in sexual behavior, exposure of genitalia to the child, forcing the child to view sexually explicit material, and instructing the child to expose own genitals. This category did not involve physical contact and although some children experienced this type of abuse, at the same time, consistent with the criteria of the study, they were exposed to other forms of abuse which did involve physical contact.

Type 2 of sexual abuse included open-mouthed kissing and touching of the child's

clothed body parts with sexual connotation. For 11 children (23%) this was the most severe abuse experienced. Type 3 included: fondling of child's unclothed genitals or instruction to masturbate; simulated intercourse; and penetration. This category represented most severe abuse for 18 children (38%). Type 4, which included oral contact with child's genitals and instruction to have oral contact with perpetrator's genitals, was most severe for eight children (17%). Type 5 included completed and/or attempted anal and/or vaginal intercourse, and was most severe for seven children (15%). Type 6 included forceful participation of the child in pornography, and other forms of abuse such as buggery and use of sexual aids. This category was most severe for three children (6%). A detailed presentation of frequencies and percentages for each type of abuse is provided in Table 3.

Insert Table 3 about here

Similar to the type of sexual abuse, there was also a great variability among the children in the degree of experienced coercion. The information on coercive experiences of the children was available for 32 (68%) case participants. With the most severe type of coercion considered, and arranged from least to most severe within 5 different categories (Gentile, 1988), the distributions were as follows: for five children (11%) there was an implication that the child should do what the other person tells him or her to do (Type 1); nine children (19%) were blackmailed and offered a reward or affection for their compliance (Type 2); six children (13%) experienced threat of injury to themselves, loved one or pet and implicit threat that affection, privilege or other positives will be taken away if no compliant (Type 3); 11 children (23%) experienced use of physical punishment or force to insure

Table 3

Frequencies and Percentages of Type of Sexual Abuse for Case Participants^a

Type of sexual abuse		<u>N</u>	%
Type 1:	Invitation to engage in sexual behaviour	9	19.1
	Exposure of genitalia	17	36.2
	Child forced to view sexually explicit material	5	10.6
	Child instructed to expose own genitals	6	12.8
Type 2:	Open-mouthed kissing	6	12.8
	Touching of clothed body parts with sexual connotation	28	59.6
Type 3:	Fondling of child's genitals or child instructed to masturbate	30	63.8
	Simulated intercourse	3	6.4
	Digital penetration	9	19.1
Type 4:	Oral contact with child's genitals	10	21.3
	Child instructed to have oral contact with perpetrator's genitals	4	8.5
Type 5:	Vaginal intercourse	7	14.9
	Anal intercourse	4	8.5
Type 6:	Child forced to participate in pornography	2	4.3
	Other: e.g., buggery, use of sexual aids	3	6.4

Note. The frequencies and percentages are non-additive because some children experienced more than one type of sexual abuse.

^aType of sexual abuse was assessed according to the Nature of Abusive Experience Form adapted from Wolfe, Wolfe, Gentile & Bourdeau, 1986a.

compliance and threats of death (Type 4); and one child (2%) experienced abduction (Type 5). A detailed description of the different types of coercion is presented in Table 4.

Insert Table 4 about here

Forty four children were abused by one perpetrator (94%), and three (6%) by two perpetrators. All the children, except one, were abused by a male perpetrator. The information on age of perpetrator was available for 40 (85%) children and indicated that on average the perpetrators were 32 years old ($SD = 16$, range 14 to 64, median = 30, mode = 16). Thirteen children (28%) were abused by adolescents and 34 (72%) by adults. According to the criteria of the study, the five-year age difference between the child and the perpetrator was present. Perpetrator's relationship to the child, arranged for the study in four mutually exclusive categories according to the level of intimacy between the child and perpetrator (Gentile, 1988), was as follows: Type 1 included strangers ($N = 8$, 17%) and other non-relatives ($N = 6$, 12.8%); Type 2 included neighbours ($N = 11$, 23.4%) and friends' father or step-father ($N = 3$, 6.4%); Type 3 included family friends ($N = 7$, 14.9%) and boarders ($N = 4$, 8.5%); and Type 4 included babysitters ($N = 3$, 6.4%) and mothers' boyfriends not living in the same household, or living with the family for less than six months ($N = 5$, 10.6%).

Parental reports on the semistructured Interview Specific to Sexual Abuse, a measure adapted from Bernbaum (1986) by McIntyre (1993), revealed a some variability in time between the termination and the discovery of abuse. However, consistent with the selection criteria, this time did not exceed a one-year period. For 20 participants (43%) the discovery

Table 4

Frequencies and Percentages of Type of Coercion for Case Participants^a

Type of coercion		<u>N</u>	%
Type 1:	Status differential: implication that the child should do what the other person tells her to do	10	21.3
Type 2:	Use of blackmail to gain compliance	2	4.3
	Offer of reward or affection for compliance	11	23.4
Type 3:	Threat of injury to the child, loved one or pet if not compliant	10	21.3
	Implicit threat that affection, privilege or other positives will be taken away if not compliant	2	4.3
Type 4:	Use of physical punishment or force to insure compliance	10	21.3
	Threat of death	4	8.5
Type 5:	Other: e.g., abduction	1	2.1

Note. The frequencies and percentages are non-additive because some children experienced more than one type of coercion.

^aType of coercion was assessed according to the Nature of Abusive Experience Form adapted from Wolfe, Wolfe, Gentile & Bourdeau, 1986a.

occurred on the same day as the abuse, for 11 (24%) it took place during the first four weeks, for eight (17%) between five to 26 weeks, and for another eight children (17%) between 28 to 42 weeks. Also according to the parent(s), nine children (19%) did not disclose the abuse themselves, 19 children (40%) disclosed the abuse to their mothers, four (9%) to their fathers, one (2%) to the teacher, four (9%) to their friends, three (6%) to their siblings, and seven (15%) to other adults such as extended family members.

For ten children (21%) in the study, the parent(s) reported a prior history of ESA, for 35 children (75%) the target ESA was their first abusive experience, and for two participants (4%) this information was not reported. All of the children with a prior history of ESA, except one, were previously abused once by one, male perpetrator. The mean age on prior abuse was five years and seven months ($SD = 2.8$ years, range 2 to 12 years). One child had two incidents of prior ESA at the age of five by a male perpetrator, (the perpetrator was the same as in the target abuse of this study). None of the children experienced revictimization between the assessments.

Differences Between Case and Comparison Participants on Demographic and Background Variables

As expected, the matching procedure for selecting the comparison group resulted in non-significant differences between the case and comparison participants on child's age, family constellation, and gender composition. As indicated in Table 5, the two groups were, however, significantly different on a number of other demographic characteristics.

Insert Table 5 about here

The primary caregivers in the comparison group were older, $t(92) = -3.99$, $p < .001$; had higher education, $t(92) = -4.60$, $p < .001$; higher occupational status, $t(92) = -4.12$, $p < .001$; and reported higher total family income, $t(87) = -4.66$, $p < .001$. The information on the family income was not available for one comparison and four case families, and a square root transformation was performed because of a moderate positive skewness of the variable.

Analyses of other background variables (Table 6) revealed that the case children obtained lower estimates of intellectual functioning (IQ), $t(92) = -4.05$, $p < .001$; and, as expected, were identified by their parents as having more psychological problems, $\chi^2(1, N=94) = 8.69$, $p < .004$; and more frequent involvement in psychotherapy at both assessment times, $\chi^2(1, N=89) = 21.9$, $p < .001$, and $\chi^2(1, N=87) = 29.6$, $p < .001$, for Time 1 and Time 2 assessment, respectively.

Insert Table 6 about here

At Time 2 assessment, there was a trend for case children to be more frequently involved in court, $\chi^2(1, N=87) = 4.49$, $p < .05$. The two groups did not differ in terms of their place of residence, type of school attended, first language used, presence of physical handicaps, medical problems or services received.

Table 5

T-test and Chi-Square Results of Demographic Characteristics for Case and Comparison Participants (N = 94)

		Case (<u>n</u> = 47)	Comparison (<u>n</u> = 47)	<u>t</u> or χ^2
Child:				
Gender				χ^2 (1, <u>N</u> =94) = .00
Boys	<u>Fg</u> %	19 40	19 40	
Girls	<u>Fg</u> %	28 60	28 60	
Age	<u>M</u> <u>SD</u>	10.0 2.9	10.0 2.9	<u>t</u> (92) = .01
Primary caregiver:				
Age	<u>M</u> <u>SD</u>	34.8 5.8	39.2 4.8	<u>t</u> (92) = -3.99*
Education	<u>M</u> <u>SD</u>	12.7 2.7	15.3 2.8	<u>t</u> (92) = -4.60*
Occupation	<u>M</u> <u>SD</u>	34.9 14.6	47.5 15.0	<u>t</u> (92) = -4.12*
Income	<u>M</u> <u>SD</u>	38.6 ^a 28.3	66.7 ^b 31.3	<u>t</u> (87) = -4.66*
Family constellation:				
SPM	<u>Fg</u> %	15 31.9	11 23.4	χ^2 (2, <u>N</u> =94) = 1.33
SPF	<u>Fg</u> %	2 4.3	1 2.1	
TPF	<u>Fg</u> %	30 63.8	35 74.5	

Note. Age reported in years. Education = highest grade completed. Occupation = Blisshen code. Income = square root transformation performed but actual income in thousands reported. SPM = single-parent mother. SPF = single-parent father. TPF = two-parent family.

^an = 43. ^bn = 46.

*p < .001.

Table 6

T-test and Chi-Square Results of Background Variables for Case and Comparison Participants (N = 94)

		Case (<u>n</u> = 47)	Comparison (<u>n</u> = 47)	<u>t</u> or χ^2
Child IQ				<u>t</u> (92) = -4.05***
	<u>M</u>	98.3	109.4	
	<u>SD</u>	13.2	13.4	
Residence:				χ^2 (1, <u>N</u> =94) = .71
City	<u>Fq</u>	38	41	
	<u>%</u>	80.9	87.2	
Rural	<u>Fq</u>	9	6	
	<u>%</u>	19.1	12.8	
Type of school:				χ^2 (2, <u>N</u> =94) = .36
Public	<u>Fq</u>	29	29	
	<u>%</u>	61.7	61.7	
Separate	<u>Fq</u>	16	17	
	<u>%</u>	34.0	36.2	
Other	<u>Fq</u>	2	1	
	<u>%</u>	4.3	2.1	
First language:				χ^2 (2, <u>N</u> =94) = 1.51
English	<u>Fq</u>	42	43	
	<u>%</u>	89.4	91.5	
French	<u>Fq</u>	5	3	
	<u>%</u>	10.6	6.4	
Other	<u>Fq</u>	0	1	
	<u>%</u>	0.0	2.1	
Physical handicaps	<u>Fq</u>	2	0	χ^2 (1, <u>N</u> =94) = 2.04
	<u>%</u>	4.3	0.0	

Table 6 continued

Table 6 continued

Medical problems	<u>Fq</u> %	16 34.0	14 29.8	$\chi^2 (1, N=94) = .19$
Psychological problems	<u>Fq</u> %	14 29.8	3 6.4	$\chi^2 (1, N=94) = 8.69^{**}$
Services received (other than psychotherapy)	<u>Fq</u> %	14 29.8	7 14.9	$\chi^2 (1, N=94) = 3.01$
Involvement with Mental Health Professionals:				
Time 1	<u>Fq</u> %	18. ^a 42.9	1 2.1	$\chi^2 (1, N=89) = 21.9^{***}$
Time 2	<u>Fq</u> %	21. ^a 50.0	0. ^b 0.0	$\chi^2 (1, N=87) = 29.6^{***}$
Court involvement:				
Time 1	<u>Fq</u> %	3. ^a 7.1	0 0.0	$\chi^2 (1, N=89) = 3.47$
Time 2	<u>Fq</u> %	4. ^a 9.5	0. ^b 0.0	$\chi^2 (1, N=87) = 4.49^*$

Note. IQ = Peabody Picture Vocabulary Test - Revised or Wechsler Intelligence Scale for Children - Revised, Information and Block Design Short Form.

^a $\bar{n} = 42$. ^b $\bar{n} = 45$. Adjusted $\alpha = .004$.

* $p < .05$. ** $p < .004$. *** $p < .001$.

Comparisons of Participants who Dropped out or Joined the Study at Time 2 Assessment

As described in the Method section, only four case and two comparison children dropped out from the study at Time 2 assessment. This resulted in a low overall dropout rate of 6.4% (9.5% and 4.3% for case and comparison group, respectively). Within each group, case and comparison, participating families and those who did not continue at Time 2 assessment were compared on major demographic characteristics and child's IQ (Table 7).

Insert Table 7 about here

In the case group, dropouts were not significantly different from participants on the following variables: child's IQ, $t(42) = .35$, $p > .05$; child's age, $t(42) = .95$, $p > .05$; primary caregiver's age, $t(42) = 1.32$, $p > .05$; education, $t(42) = .92$, $p > .05$; occupation, $t(42) = -.11$, $p > .05$; and family income, $t(38) = -.85$, $p > .05$.

In the comparison group, the low number of children who dropped out at Time 2 assessment precluded any formal analyses. However, the examination of means suggested that the comparison dropouts were similar to those who participated at both assessment times in terms of the primary caregiver's age, level of education, and occupational status. The comparison children who dropped out seemed to be older, have lower IQ and lower family income than the children who participated at both assessment times. Due to a very small number of comparison dropouts and the nature of conducted analyses, these differences were not considered critical.

Table 7 also displays demographic information for five case participants who joined the study at Time 2 assessment. No significant differences were found between these

Table 7

Means and Standard Deviations of Main Demographic Variables and Child's IQ for Families who Dropped out or Joined the Study at Time 2 Assessment

		Case		Comparison Dropouts (<i>n</i> = 2)
		Dropouts (<i>n</i> = 4)	Joined at Time 2 (<i>n</i> = 5)	
Child:				
IQ	<u>M</u>	97.5	89.8	98.5
	<u>SD</u>	21.9	6.6	.7
Age	<u>M</u>	8.6	11.0	14.2
	<u>SD</u>	2.8	2.9	1.6
Primary caregiver:				
Age	<u>M</u>	30.5	35.6	38.0
	<u>SD</u>	6.9	8.3	4.2
Education	<u>M</u>	11.5	12.6	13.5
	<u>SD</u>	1.7	2.5	2.1
Occupation	<u>M</u>	34.6	43.7	47.1
	<u>SD</u>	16.9	16.1	3.9
Income	<u>M</u>	49.8	50.0	31.5
	<u>SD</u>	40.5	40.5	26.2

Note. IQ = Peabody Picture Vocabulary Test - Revised or Wechsler Intelligence Scale for Children - Revised, Information and Block Design Short Form. Age reported in years. Education = highest grade completed. Occupation = Blishen code. Income = square root transformation performed but actual income in thousands reported.

participants and those who completed both assessments on the following variables: child's age, $t(43) = -.73$, $p > .05$; child's IQ, $t(43) = 1.66$, $p > .05$; primary caregiver's age, $t(43) = -.17$, $p > .05$; education, $t(43) = .16$, $p > .05$; occupation, $t(43) = -1.46$, $p > .05$; and family income, $t(39) = -1.10$, $p > .05$.

Comparisons of Case Participants and Refusers

Throughout the course of recruitment, 111 families meeting the criteria for the study were contacted. Of these, 64 declined to participate resulting in a 57.7% refusal rate. The three recruiting agencies did not differ in the frequency of referred participants and refusals, $\chi^2(2, N=110) = .10$, $p > .05$.

The participants and refusers were compared on major demographic characteristics and variables related to the nature of experienced sexual abuse (Table 8).

Insert Table 8 about here

No significant differences were found between these two groups on the following variables: child's age, $t(109) = -1.89$, $p > .05$; child's gender, $\chi^2(1, N=111) = .43$, $p > .05$; primary caregiver's age, $t(109) = -.88$, $p > .05$; occupation, $t(71) = .35$, $p > .05$; income (assessed according to the postal codes areas obtained from Table #9, Statistics Canada Advisory Services Division Regional Operations, 1989), $t(104) = .72$, $p > .05$; and nature of family constellation, $\chi^2(1, N=111) = .43$, $p > .05$. An attempt was made to compare the groups also on the educational level of the primary caregivers, however, this information was not available for a majority of refusing to participate families.

Table 8

T-test and Chi-Square Results for Demographic Characteristics of Case Participants and Refusers (N = 111)

		Participants (<u>n</u> = 47)	Refusers (<u>n</u> = 64)	<u>t</u> or χ^2
Child:				
Gender				χ^2 (1, <u>N</u> =111) = .43
Boys	<u>Fq</u> %	19 40.4	22 34.4	
Girls	<u>Fq</u> %	28 59.6	42 65.6	
Age	<u>M</u> <u>SD</u>	10.0 2.9	11.1 2.9	<u>t</u> (109) = -1.89
Primary caregiver:				
Age	<u>M</u> <u>SD</u>	34.8 5.8	35.8 5.5	<u>t</u> (109) = -.88
Occupation	<u>M</u> <u>SD</u>	34.9 14.6	33.7 ^a 13.6	<u>t</u> (71) = .35
Income	<u>M</u> <u>SD</u>	21.4 4.9	20.8 ^b 4.1	<u>t</u> (104) = .72
Family constellation:				χ^2 (2, <u>N</u> =104) = .07
SPM	<u>Fq</u> %	15 31.9	19. ^c 33.43	
SPF	<u>Fq</u> %	2 4.3	3. ^c 5.3	
TPF	<u>Fq</u> %	30 63.8	35. ^c 61.4	

Note. Age reported in years. Education = highest grade completed. Occupation = Blishen code. Income = according to the postal code areas. SPM = single-parent mother. SPF = single-parent father. TPF = two-parent family.

^a*n* = 26. ^b*n* = 59. ^c*n* = 57.

Information on the characteristics of sexual abuse was collected for both groups, the participants and those who refused to participate, according to the NAEF. Results of these analyses are presented in Table 9.

Insert Table 9 about here

The groups did not differ on any of the following variables: duration of abuse, t_s (100) = 1.84, $p > .05$; number of perpetrators, t_s (108) = -.26, $p > .05$; perpetrator's age, t (86) = 1.43, $p > .05$; perpetrator's gender, χ^2 (1, $N=111$) = .10, $p > .05$; perpetrator's relationship to the child, χ^2 (3, $N=105$) = .55, $p > .05$; type of sexual abuse, χ^2 (4, $N=110$) = 5.49, $p > .05$; and type of coercion, χ^2 (4, $N=75$) = 1.95, $p > .05$.

Comparisons of Case Participants by Referral Source on Sexual Abuse Variables

For these analyses the total sample size was 46 because one family self-referred to the project and was not included. In addition, the gender of perpetrator variable was excluded from these analyses because only one child was abused by a female perpetrator. The chi-square and ANOVA results, presented in Tables 10 and 11, indicated that there were no significant differences between the children referred by the Child Protection Team (CPT), Victim/Witness Assistance Programs (V/Wps), and the Children's Aid Societies (CASs) on any of the nature of abuse variables.

Insert Tables 10 and 11 about here

Table 9

T-Test and Chi-Square Results for the Nature of Abuse Characteristics of Case Participants and Refusers (N = 111)^a

Nature of abuse		Participants	Refusers	t or χ^2
Frequency (exact number)	<u>M</u>	7.7	2.6	$t_s (102) = 2.47^*$
	<u>SD</u>	13.3	2.8	
	<u>n</u>	43	61	
Duration (in weeks)	<u>M</u>	25.8	10.2	$t_s (100) = 1.84$
	<u>SD</u>	51.2	23.5	
	<u>n</u>	42	60	
Number of perpetrators	<u>M</u>	1.1	1.1	$t_s (108) = -.26$
	<u>SD</u>	.2	.4	
	<u>n</u>	47	63	
Perpetrator's age (in years)	<u>M</u>	32.2	27.6	$t (86) = 1.43$
	<u>SD</u>	16.1	14.1	
	<u>n</u>	40	48	
Perpetrator's gender:	<u>n</u>	47	64	$\chi^2 (1, N=111) = .10$
	Male			
	<u>Fq</u>	46	62	
	%	97.9	96.9	
	Female			
	<u>Fq</u>	1	2	
Perpetrator's relation to child:	%	2.1	3.1	$\chi^2 (3, N=105) = .55$
	<u>n</u>	47	58	
	Type 1			
	<u>Fq</u>	14	21	
	%	29.8	36.2	
	Type 2			
	<u>Fq</u>	14	15	
	%	29.8	25.8	
	Type 3			
	<u>Fq</u>	11	12	
	%	23.4	20.7	
	Type 4			
	<u>Fq</u>	8	10	
	%	17.0	17.2	

Table 9 continued

Table 9 continued

Type of sexual abuse:	<u>n</u>	47	63	$\chi^2 (4, N=110) = 5.49$
Type 2	<u>Fq</u>	11	7	
	%	23.4	11.1	
Type 3	<u>Fq</u>	18	25	
	%	38.3	39.7	
Type 4	<u>Fq</u>	8	8	
	%	17.0	12.7	
Type 5	<u>Fq</u>	7	19	
	%	14.9	30.2	
Type 6	<u>Fq</u>	3	4	
	%	6.4	6.3	
Type of coercion:	<u>n</u>	32	43	$\chi^2 (4, N=75) = 1.95$
Type 1	<u>Fq</u>	5	7	
	%	15.6	16.3	
Type 2	<u>Fq</u>	9	8	
	%	28.1	18.6	
Type 3	<u>Fq</u>	6	6	
	%	18.8	13.9	
Type 4	<u>Fq</u>	11	19	
	%	34.4	44.2	
Type 5	<u>Fq</u>	1	3	
	%	3.1	6.9	

Note. $t_s = t$ for separate variance. Perpetrator's relationship to child = Type 1: strangers and other non-relatives; Type 2: neighbours and friend's father or step-father; Type 3: family friend and boarders; Type 4: babysitters and mother's boyfriends. Type of sexual abuse = according to Table 1. Type of coercion = according to Table 2.

^aAbuse characteristics assessed according to the Nature of Abusive Experience Form adapted from Wolfe, Wolfe, Gentile & Bourdeau, 1986a. Adjusted $\alpha = .006$.

* $p < .05$.

Table 10

ANOVA and Chi-Square Comparisons of the Nature of Abuse Variables^a for Case Participants by Referral Source: Child Protection Team (CPT), Victim Witness Program (VWP), and Children's Aid Society (CAS)

Nature of abuse		CPT	VWP	CAS	F or χ^2
Frequency (exact number)	<u>M</u>	5.5	7.6	11.2	$F(2, 40) = .59$
	<u>SD</u>	-2.3	-.2	3.4	
	<u>n</u>	16	14	12	
Duration (in weeks)	<u>M</u>	17.8	26.1	38.3	$F(2, 39) = .49$
	<u>SD</u>	-8.4	-.3	12.2	
	<u>n</u>	16	14	11	
Number of perpetrators (exact number)	<u>M</u>	1.0	1.1	1.1	$F(2, 44) = .59$
	<u>SD</u>	-.1	.03	.1	
	<u>n</u>	17	14	15	
Perpetrator's age (in years)	<u>M</u>	33.8	29.9	34.3	$F(2, 37) = .29$
	<u>SD</u>	1.2	-2.7	1.7	
	<u>n</u>	12	14	13	
Perpetrator's relation to child:					$\chi^2(6, N=46) = 9.54$
Type 1	<u>Fq</u>	4	7	2	
	<u>%</u>	8.7	15.2	4.3	
Type 2	<u>Fq</u>	4	2	8	
	<u>%</u>	8.7	4.3	17.4	
Type 3	<u>Fq</u>	6	2	3	
	<u>%</u>	13.0	4.3	6.5	
Type 4	<u>Fq</u>	3	3	2	
	<u>%</u>	6.5	6.5	4.3	

Table 10 continued

Table 10 continued

Type of sexual abuse:					$\chi^2 (8, N=46) = 7.60$
Type 2	Fq	2	5	4	
	%	4.3	10.9	8.7	
Type 3	Fq	7	5	5	
	%	15.2	10.9	10.9	
Type 4	Fq	3	2	3	
	%	6.5	4.3	6.5	
Type 5	Fq	4	0	3	
	%	8.7	0.0	6.5	
Type 6	Fq	1	2	0	
	%	2.2	4.3	0.0	
Type of coercion:					$\chi^2 (8, N=31) = 4.49$
Type 1	Fq	2	1	2	
	%	6.5	3.2	6.5	
Type 2	Fq	3	3	3	
	%	9.7	9.7	9.7	
Type 3	Fq	2	3	1	
	%	6.5	9.7	3.2	
Type 4	Fq	6	2	2	
	%	19.4	6.5	6.5	
Type 5	Fq	1	0	0	
	%	3.2	0.0	0.0	

Note. Perpetrator's relation to child = Type 1: strangers and other non-relatives; Type 2: neighbours and friend's father or step-father; Type 3: family friend and boarders; Type 4: babysitters and mother's boyfriends. Type of sexual abuse = according to Table 1. Type of coercion = according to Table 2.

^aAbuse characteristics assessed according to the Nature of Abusive Experience Form adapted from Wolfe, Wolfe, Gentile & Bourdeau, 1986a.

Table 11

ANOVA Results for the Nature of Abuse Variables for Case Participants by Referral Source: Child Protection Team (CPT), Victim/Witness Program (V/WP), and Children's Aid Society (CAS)

Effect	SS	DF	MS	F	p
Frequency					
Group	221.4	2	110.7	.59	.555
Residual	7217.1	39	185.1		
Total	7438.5	41	181.4		
Duration					
Group	2745.5	3	1372.8	.498	.612
Residual	104708.1	38	2755.5		
Total	107453.6	40	2686.3		
Number of Perpetrators					
Group	.1	2	.03	.591	.558
Residual	1.86	43	.04		
Total	1.91	45	.04		
Perpetrator's Age					
Group	156.1	2	78.0	.289	.751
Residual	9737.4	36	270.5		
Total	9893.4	38	260.4		

Note. Frequency = Exact number. Perpetrator's Age = in years. Duration = in weeks. Number of Perpetrators = exact number.

^aNature of Abuse Variables were assessed according to the Nature of Abusive Experience Form adapted from Wolfe, Wolfe, Gentile & Bourdeau, 1986a.

The three groups were similar in terms of frequency and duration of the sexual abuse, number of perpetrators involved, their age and relationship to the child, as well as in terms of the type of sexual abuse and experienced coercion. In addition, the agencies referred similar number of boys and girls, $\chi^2 (2, N=46) = 3.65, p > .05$; who did not differ significantly on age, $F (2, 45) = 1.66, p > .05$.

Part II: Testing Hypotheses

General Considerations

Prior to testing of hypotheses, z-transformations of the total scores on the Children's and Adolescents' Social Self-Efficacy Scales were performed. This procedure allowed for a simultaneous entry of the transformed score in the analyses of the social self-perceptions for children in both age groups: those younger and older than 12 years of age. The case and comparison children reported their functioning on a substantial number of measures. Pearson Product Moment correlations between these measures at Time 1 and Time 2 assessment (Table 12) indicated that Self-Concept and Anxiety scores had moderate and highly significant correlations with Depression; and Fsex and Fpersonal scores were highly related to Fears.

Insert Table 12 about here

In view of these results, the total scores on the three measures, Depression, Social, and Fears, were kept for the between group analyses in testing of Hypotheses 1 and 2.

Table 12

Product Moment Correlations for Child Self-Report Measures at Time 1 and Time 2
Abuse nt

	2	3	4	5	6	7
Time 1						
1. Self-Concept ^a	.79***	-.73***	.51***	-.38***	-.49***	-.29**
2. Anxiety ^a		-.67***	.46***	-.48***	-.46***	-.46***
3. Depression			-.35**	.52***	.53***	.41***
4. Social ^a				-.39***	-.39***	-.26**
5. Fears					.79***	.76***
6. Fsex						.65***
7. Fpersonal						
Time 2						
1. Self-Concept ^a	.80***	-.71***	.36**	-.24*	-.40***	-.19
2. Anxiety ^a		-.54***	.22*	-.49***	-.49***	-.44***
3. Depression			-.32**	.43***	.53***	.30**
4. Social ^a				-.34**	-.26*	-.33**
5. Fears					.76***	.88***
6. Fsex						.63***
7. Fpersonal						

Note. Self-Concept and Anxiety = Piers-Harris Children's Self-Concept Scale - Revised, total and Anxiety subscale score. Depression = Depression Self-Rating Scale for Children, total score. Social = z-transformation of total scores for the Children's and Adolescents' Social Self-Efficacy Scales. Fears = Fear Survey Schedule for Children - Revised, total score. Fsex and Fpersonal = Sexual Abuse Evaluation Scale, subscale scores.

^aHigher scores indicate better functioning.

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

As presented in Part 1 of the Results section, only some case children were involved with mental health professionals and in court proceedings. To investigate a possibility that these involvements constitute confounds for the within-group analyses of Hypotheses 3, 4, and 5, point biserial correlations were computed between these variables and all self-, parent- and teacher-report measures (Table 13).

Insert Table 13 about here

As Table 13 indicates, children's involvement with mental health professionals and court process did not relate significantly to any of the measures.

The case group also contained ten children who had a prior history of ESA. These children were compared to those who did not experience any sexual abuse prior to the study. The results indicated that the two groups did not differ on any of the self-report measures and that the children were rated by others as exhibiting similar levels of emotional and behavioral functioning. Therefore, the group of children with prior ESA was not excluded from the analyses.

Determination of Covariates

Part 1 of the Results section also indicated that the case and comparison groups differed significantly on child's IQ, primary caregiver's age, education, occupation, and family income. The Pearson Product Moment correlations for these variables (Table 14) revealed that all variables indicative of the socioeconomic status were highly intercorrelated.

Table 13

Point Biserial Correlations Between Case Participant's Involvement with Mental Health Professionals and Court Proceedings with Self-, Parent-, and Teacher-Report Measures at Time 1 and Time 2 Assessment

	Psychotherapy Involvement	Court Involvement
Time 1		
Self-Report		
Depression	.04	.07
Social	-.02	-.14
Fears	-.03	-.01
PTSD	-.03	-.10
Parent-Report		
Internalizing	-.21	.09
Externalizing	-.25	.03
Teacher-Report		
Internalizing	.05	.03
Externalizing	.09	.10
Time 2		
Self-Report		
Depression	.08	.02
Social	-.06	-.19
Fears	-.03	.26
PTSD	.11	-.09
Parent-Report		
Internalizing	-.14	.15
Externalizing	-.10	.08
Teacher-Report		
Internalizing	-.17	-.02
Externalizing	-.17	.01

Note. Depression = Depression Self-Rating Scale for Children, total score. Social = z-transformation of total scores for the Children's and Adolescents' Social Self-Efficacy Scales. Fears = Fear Survey Schedule for Children - Revised, total score. PTSD = Total score of Intrusive Thoughts, Avoidance, and Sexual Anxiety subscale scores of CITES. Internalizing and Externalizing = Child Behavior Checklist Parent or Teacher Report Form, Internalizing and Externalizing t-score.

Insert Table 14 about here

The correlations for child's IQ were the lowest and least significant, and correlations for Occupation were moderate and highly significant. Also, there was no statistically significant relationship between these two variables. Occupation was significantly related to the primary caregiver's age, education and family income. In view of these findings, child's IQ and primary caregiver's Occupation were chosen as covariates in testing of predictions posed by Hypotheses 1 and 2.

Data on these variables were available for all participants and judged to be reliable. As expected, based on a non-significant correlation between the two variables, the squared multiple correlation (SMC) was also very low, .049. Two univariate and four multivariate outliers were found, in the case and comparison group, respectively. The data on univariate outliers were subsequently recoded, whereas the cases with multivariate outliers were excluded from the analyses.

Testing Hypothesis 1: Comparisons Between Sexually Abused and Non-Abused Children at Time 1 Assessment

Hypothesis 1 predicted that at Time 1 assessment, the sexually abused boys and girls would exhibit more severe symptomatology than their comparison counterparts on the self-, parent-, and teacher-report measures. To test this hypothesis, for each source of reports, a separate MANCOVA was conducted with Occupation and IQ serving as covariates. A 2 x 2 between-subjects (gender x group: boys and girls x case and comparison)

Table 14

Pearson Product Moment Correlations Between Primary Caregiver's Age, Education, Occupation, Reported Family Income, and Child's IQ (N = 89)

	2	3	4	5
1. Age	.37***	.48***	.47***	.25*
2. Education		.55***	.45***	.34**
3. Occupation			.63***	.19
4. Income				.33**
5. Child IQ				

Note. Age reported in years. Education = highest grade completed. Occupation = Blishen code. Income = square root transformation performed but actual income in thousands reported. Child IQ = Peabody Picture Vocabulary Test - Revised or Wechsler Intelligence Scale for Children -Revised, Information and Block Design Short Form. Adjusted $\alpha = .005$. * $p < .05$. ** $p < .005$. *** $p < .001$.

doubly multivariate design was used. In each analysis the covariates did not provide significant adjustments for the dependent measures and the omnibus F statistics for the three sources of reports were as follows: for self-reports $F(6,154) = 1.09$, $p > .05$; for parent-reports $F(4,156) = .79$, $p > .05$; and for teacher-reports $F(4,96) = 1.70$, $p > .05$. No interaction effects were found in these analyses. The means and standard deviations for all reports are presented in Table 15.

Insert Table 15 about here

Results for Self-Reports

There were missing data present for one case child on Fears, and for three comparison children, one on Depression, one on Social and one on Fears. No univariate outliers were found and one case child, identified as a multivariate outlier with $\chi^2 = 11.34$, $df = 3$, and $p < .01$, was excluded from the analysis. Squared multiple correlations for Depression, Social and Fears were .29, .16, and .29, respectively, indicating absence of multicollinearity and singularity. Examination of residual plot did not reveal substantial departures from assumptions of multivariate normality or linearity. Statistics for Box's M, $F(45, 13252) = 1.38$, $p > .01$, revealed acceptable homogeneity of variance-covariance matrices. An overall test for the homogeneity of regression, as well as the tests for each dependent measure, revealed sufficient homogeneity (in all cases $p > .10$).

Main effects of Gender, $F(3,76) = 8.70$, $p < .001$, and Group, $F(3,76) = 3.97$, $p < .05$, were found (Table 16). Follow-up ANCOVA for Gender effect indicted that girls in

Table 15

Means and Standard Deviations for the Self-, Parent-, and Teacher-Report Measures at Time 1 Assessment

		Case		Comparison	
		Boys	Girls	Boys	Girls
Self-Report:					
Depression	<u>M</u>	8.5	12.2	5.4	7.2
	<u>SD</u>	4.1	6.5	3.6	3.8
	<u>n</u>	19	22	17	26
Social	<u>M</u>	.1	-.3	.4	-.1
	<u>SD</u>	.9	1.2	1.0	.8
	<u>n</u>	19	22	17	26
Fears	<u>M</u>	125.9	166.2	126.5	141.1
	<u>SD</u>	21.8	28.7	26.9	27.5
	<u>n</u>	19	22	17	26
Parent-Report:					
Internalizing	<u>M</u>	64.6	67.3	53.2	57.2
	<u>SD</u>	8.5	12.6	7.9	8.9
	<u>n</u>	18	23	17	26
Externalizing	<u>M</u>	62.1	62.8	52.1	52.4
	<u>SD</u>	10.4	8.9	8.7	8.3
	<u>n</u>	18	23	17	26
Teacher-Report:					
Internalizing	<u>M</u>	59.4	58.1	56.0	56.1
	<u>SD</u>	9.5	10.8	13.2	9.9
	<u>n</u>	13	15	9	17
Externalizing	<u>M</u>	60.3	59.0	54.4	50.5
	<u>SD</u>	10.1	8.8	9.6	8.7
	<u>n</u>	13	15	9	17

Note. Depression = Depression Self-Rating Scale for Children, total score. Social = z-transformation of total scores for the Children's and Adolescents' Social Self-Efficacy Scales. Fears = Fear Survey Schedule for Children - Revised, total score. Internalizing and Externalizing = Child Behavior Checklist Parent or Teacher Report Form, Internalizing and Externalizing t-score.

comparison to boys, reported significantly more depressive symptoms and more fears. The follow-up ANCOVA for the Group effect revealed that the case children reported more symptoms of depression and more fears than did the comparison children.

Insert Table 16 about here

Results for Parent-Reports

In both groups, the children had a similar number of biological and adoptive primary caregivers, $\chi^2 (1, N=89) = 2.29, p > .05$. There were no missing data and no univariate outliers were found. One multivariate outlier in the case group, identified with $\chi^2 = 9.21, df = 2$, and $p < .01$, was excluded from the analysis. Squared multiple correlation for the Internalizing and Externalizing scales was .61 and judged sufficiently different from one. Examination of residual plots did not reveal departures from the normality and linearity assumptions. Box's M with $F (30, 14156) = 1.09, p > .05$, revealed that variance-covariance matrices were homogeneous, as well as all the tests of homogeneity of regression revealed all values at $p > .05$.

A main Group effect, $F (2, 77) = 9.17, p < .001$, was found and a follow-up ANCOVA indicated that the case children, in contrast to the comparison children, obtained significantly higher Internalizing and Externalizing scores (Table 16).

Results for Teacher-Reports

Based on the available information for 53 participants, time periods between the assessment and completion of teacher-reports were similar for the case and comparison

Table 16

ANCOVAs Results for Significant Main Effects of MANCOVAs on Self-, Parent-, and Teacher-Report Measures at Time 1 Assessment

Effect	Hypoth. MS	Error MS	DF	F
Self - Report (N = 84)				
Gender ^a			1,78	
Depression	150.6	22.4		6.72**
Social	5.1	.9		5.42*
Fears	17025.9	673.9		25.27***
Group ^b			1,78	
Depression	232.1	22.4		10.35**
Social	1.4	.9		1.53
Fears	4141.9	673.9		6.15**
Parent - Report (N = 84)				
Group ^c			1,78	
Internalizing	1722.9	98.6		17.47***
Externalizing	1155.5	81.7		14.15***
Teacher - Report (N = 54)				
Group ^d			1,48	
Internalizing	9.1	116.4		.09
Externalizing	446.2	80.4		5.55*

Note. Depression = Depression Self-Rating Scale for Children, total score. Social = z-transformation of total scores for the Children's and Adolescents' Social Self-Efficacy Scales. Fears = Fear Survey Schedule for Children - Revised, total score. Internalizing and Externalizing = Child Behavior Checklist Parent or Teacher Report Form, Internalizing and Externalizing t-score. For Self-Report measures adjusted $\alpha = .017$. For Parent- and Teacher-Report measures adjusted $\alpha = .025$.

^aMultivariate $F(3,76) = 8.70, p < .001$. ^bMultivariate $F(3,76) = 3.97, p < .05$.

^cMultivariate $F(2,77) = 9.17, p < .001$. ^dMultivariate $F(2,47) = 3.72, p < .05$.

* $p < .025$. ** $p < .017$. *** $p < .001$.

children, $t(53) = 1.71$, $p > .05$. The data did not contain univariate or multivariate outliers and SMC between the Internalizing and Externalizing scores was .29. Residual plots did not indicate significant departures from the normality or linearity assumptions; a nonsignificant Box's M , $F(30, 4283) = 1.14$, $p > .05$, suggested homogeneity of variance-covariance matrices; and the results for all tests of homogeneity of regression had values at $p > .01$.

A significant Group main effect was found, $F(2, 47) = 3.72$, $p < .05$, and a follow-up ANCOVA revealed that the case children were rated as exhibiting more Externalizing problems than the comparison children. There were no significant differences between the two groups on the Internalizing scores (Table 16).

In summary, testing of Hypothesis 1 revealed a strong Group effect across all three sources of reports. In contrast to the comparison group, the sexually abused children reported more symptoms of depression, more fears, were rated by their parent as exhibiting more internalizing and externalizing behavioral problems, and by their teachers as showing more externalizing difficulties. In addition, the Gender effect was significant for the self-report measures indicating that girls, in comparison to boys, reported more symptoms of depression and more fearfulness.

Testing Hypothesis 2: Differences Between Sexually Abused and Non-Abused Children Over Time

Hypothesis 2 stated that the differences between sexually abused and comparison children on self-, parent-, and teacher-report measures would diminish over time. To test this prediction, three separate doubly multivariate RM MANCOVAs were conducted for each source of reports. A $2 \times 2 \times 2$ mixed factorial design (gender $\times$ group $\times$ time: boys and girls

x case and comparison x Time 1 and Time 2 assessment) was used with RM on the last factor. Again, Occupation and IQ served as covariates and the listwise selection of cases resulted in the analyses of subjects who participated at both assessment times. The omnibus F tests for the covariates once more did not reveal statistical significance. For the three kinds of reports they were as follows: for self-report, $F(6,142) = .67, p > .05$; for parent-report, $F(4,144) = 1.76, p > .05$; and for teacher-report, $F(4,64) = 2.11, p > .05$. There were no significant differences between the two groups on the time elapsed between the assessments, $t(83) = -.50, p > .05$. The means and standard deviations for each cell in the MANCOVAs analyses are presented in Table 17.

Insert Table 17 about here

Results for Self-Reports

In addition to the missing data identified for testing of Hypothesis 1, at Time 2 assessment, one case and one comparison child had missing scores on Social, and also, one case and one comparison child had missing values on Fears. Among the case group, two univariate outliers were found, one on Fears and one on Social; and in the comparison group two univariate outliers were found on Depression and three on Social. With $\chi^2 = 11.34, df = 3$, and $p < .01$, one multivariate outlier was identified within the case group and excluded from the analysis. Examination of Box's M suggested that the assumption of homogeneity of variance-covariance matrices was met, $F(63,11667) = 1.54$, at $p > .001$, however, the F statistics was marginally significant (actual $p = .004$).

Table 17

Means and Standard Deviations for the Self-, Parent-, and Teacher-Report Measures at Time 1 and Time 2 Assessment

		Case				Comparison			
		Time 1		Time 2		Time 1		Time 2	
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Self-Report:									
Depression	<u>M</u>	8.7	12.2	6.5	11.7	5.8	7.1	4.3	5.7
	<u>SD</u>	4.3	6.6	5.3	4.8	3.4	3.9	3.8	3.3
	<u>n</u>	17	20	17	20	16	25	16	25
Social	<u>M</u>	.1	-.3	.3	-.3	.4	-.2	.1	-.1
	<u>SD</u>	.9	1.2	1.2	1.2	1.0	.8	.9	.8
	<u>n</u>	17	20	17	20	16	25	16	25
Fears	<u>M</u>	127	167	112	149	129	143	120	126
	<u>SD</u>	22.5	29.5	18.9	30.9	25.7	26.6	23.6	28.4
	<u>n</u>	17	20	17	20	16	25	16	25
Parent-Report:									
Internalizing	<u>M</u>	65.0	68.1	61.3	66.7	53.8	57.1	51.8	54.0
	<u>SD</u>	8.9	10.4	9.9	9.7	7.9	9.1	9.4	7.8
	<u>n</u>	16	21	16	21	16	25	16	25
Externalizing	<u>M</u>	62.0	62.9	59.8	62.5	53.1	50.9	52.4	50.9
	<u>SD</u>	11.1	7.9	10.2	9.1	7.9	7.5	7.3	7.5
	<u>n</u>	16	21	16	21	16	25	16	25
Teacher-Report:									
Internalizing	<u>M</u>	59.2	57.9	57.1	57.1	57.8	56.3	55.6	54.1
	<u>SD</u>	10.8	12.2	8.7	10.6	12.9	10.8	12.2	12.8
	<u>n</u>	9	9	9	9	8	12	8	12
Externalizing	<u>M</u>	64.0	58.6	62.8	59.8	55.1	50.9	55.1	51.1
	<u>SD</u>	9.7	9.6	5.9	8.5	10.1	9.9	9.4	9.5
	<u>n</u>	9	9	9	9	8	12	8	12

Note. Depression = Depression Self-Rating Scale for Children, total score. Social = z-transformation of total scores for the Children's and Adolescents' Social Self-Efficacy Scales. Fears = Fear Survey Schedule for Children - Revised, total score. Internalizing and Externalizing = Child Behavior Checklist Parent or Teacher Report Form, Internalizing and Externalizing t-score.

In view of these results, sample variances for each report in the two groups at both assessment times were examined. None of the variances approached the 20:1 ratio suggested by Tabachnick and Fidell (1989, pp. 232-266) as critical. In fact the largest ratios, found for Depression at Time 1 and Time 2 assessment, were 2.7:1 and 2.4:1, respectively. With such small differences in variances, and with the use of two-tailed tests and Pillai's criterion, MANCOVA can be performed even when cell sizes are discrepant (Tabachnick & Fidell, 1989, p. 411).

Preliminary examination of distributions revealed that Depression scores had a moderate positive skewness for the comparison children on Time 2 assessment. A number of different transformations were attempted, however, they did not normalize the distribution. Because MANCOVA is considered to be robust to moderate violations of the normality assumption when this violation is caused by skewness and not by presence of outliers (Tabachnick & Fidell, 1989; p. 378), the original, untransformed total score for Depression was kept for the analysis. For the Fears and Social scores investigation of residual plots did not reveal significant departures from the linearity assumption.

The overall tests of homogeneity of regression as well as tests for each measure at both assessment times revealed non-significant statistics at the alpha level of .01. Squared multiple correlations for Depression, Social, and Fears for Time 1 and Time 2 assessments ranged from .15 to .32, and the determinant of the pooled within-cell correlation matrix was -.26. These results indicated that neither multicollinearity nor singularity were present among the variables.

Repeated measure MANCOVA did not reveal significant interaction effects. The main effects of Gender, $F(3,70) = 7.69$ $p < .001$; Group, $F(3,70) = 5.81$ $p < .002$; and Time,

$F(3,72) = 20.79$ $p < .001$ were found (Table 18). Follow-up RM ANCOVA for Gender effect revealed that girls, in comparison to boys, had higher scores on Depression and Fears. Follow-up RM ANCOVA for Time effect indicated that these scores decreased significantly over time. Further, follow-up RM ANCOVA for Group effect revealed that the case group reported more depressive symptomatology than the comparison group.

Insert Table 18 about here

Results for Parent-Reports

Similar to Time 1 assessment, the two groups had a comparable number of biological and adoptive parents, $\chi^2(1, N=89) = 2.9$, $p > .05$, at Time 2 evaluation. There were no missing data in either group. The scores for two case and two comparison children had univariate outliers on the Internalizing scale and one comparison child had a univariate outlier on the Externalizing scale. Two multivariate outliers with $\chi^2 = 9.21$, $df = 2$, and $p < .01$ were identified in the case group and excluded from the analysis. Statistics for Box's M, $F(30,11710) = 1.01$ $p > .05$, indicated that the homogeneity of variance-covariance assumption was met, and the examination of residual plots suggested that the variables had normal, linear distributions. Tests for the homogeneity of regression assumption revealed that all statistics had $p > .01$. The determinant of the pooled within-cell correlation matrix was -.77 and the highest SMC of .83 was found for the Externalizing score at Time 2 assessment. These results did not suggest significant multicollinearity and singularity among the variables.

The results, presented in Table 19, did not reveal significant interaction effects.

Table 18

Repeated Measures ANCOVAs Results for Significant Main Effects of Repeated Measures MANCOVA Analyses on Self-Report Measures (N = 78)

Effect	Hypoth. MS	Error MS	DF	F
Gender ^a			1,72	
Depression	328.0	29.6		11.08**
Social	7.2	1.5		4.75*
Fears	24404.3	1204.5		20.26***
Group ^b			1,72	
Depression	519.2	29.6		17.53***
Social	.8	1.5		.49
Fears	5393.2	1204.5		4.47*
Time ^c			1,74	
Depression	75.1	11.7		6.39**
Social	.0	.4		.01
Fears	8585.8	159.3		53.89***

Note. Depression = Depression Self-Rating Scale for Children, total score. Social = z-transformation of total scores for the Children's and Adolescents' Social Self-Efficacy Scales. Fears = Fear Survey Schedule for Children - Revised, total score. Adjusted $\alpha = .017$.

^aMultivariate $F(3,70) = 7.69, p < .001$. ^bMultivariate $F(3,70) = 5.81, p < .002$.

^cMultivariate $F(3,72) = 20.79, p < .001$.

* $p < .05$. ** $p < .017$. *** $p < .001$.

Insert Table 19 about here

Main effects of Gender, $F(2,71) = 3.48$, $p < .04$; Group, $F(2,71) = 10.17$, $p < .001$; and Time, $F(2,73) = 6.40$, $p < .004$, were found. A follow-up RM ANCOVA for the Gender effect did not show significant differences between boys and girls on any of the measures at the adjusted alpha level of .025. A follow-up RM ANCOVA for the Group effect revealed that the sexually abused children exhibited more Internalizing and Externalizing behaviors than their comparison counterparts, and the follow-up RM ANCOVA for the Time effect showed significant change from Time 1 to Time 2 assessment on the Internalizing score indicating, that over time, children's Internalizing scores diminished.

Results for Teacher-Reports

As at Time 1 assessment, the overall time period between the assessment and completion of the teacher-reports was similar for the two groups, $t(63) = 1.30$, $p > .05$. Data contained one univariate outlier among the Externalizing scores at Time 2 assessment in the case group and no multivariate outliers. Statistics for Box's M indicated that the assumption of homogeneity of variance-covariance was met, $F(30, 2681) = .68$, $p > .05$, and the examination of residual plots did not reveal departures from the normality and linearity assumptions. All tests for homogeneity of regression had values with alpha levels greater than .05. The determinant of the pooled within-cell correlation matrix was .62 and the highest SMCs were .88 for Externalizing scores at both assessment times. These results suggested acceptable degree of multicollinearity and singularity.

Table 19

Repeated Measures ANCOVAs Results for Significant Main Effects of Repeated Measures MANCOVAs Analyses on Parent- and Teacher-Report Measures

Effect	Hypoth. MS	Error MS	DF	F
Parent-Report (N = 78)				
Gender ^a			1,72	
Internalizing	450.1	151.8		2.96
Externalizing	1.7	128.8		.01
Group ^b			1,72	
Internalizing	3129.7	151.8		20.61***
Externalizing	1503.9	128.8		11.67**
Time ^c			1,74	
Internalizing	243.3	18.9		12.85**
Externalizing	43.9	14.8		2.97
Teacher-Report (N = 38)				
Group ^d			1,32	
Internalizing	2.9	230.7		.01
Externalizing	909.5	146.4		6.2**

Note. Internalizing = Child Behavior Checklist, Internalizing t-score. Externalizing = Child Behavior Checklist, Externalizing t-score. Adjusted $\alpha = .025$.

^aMultivariate $F(2,71) = 3.48, p < .04$. ^bMultivariate $F(2,71) = 10.17, p < .001$.

^cMultivariate $F(2,73) = 6.40, p < .004$. ^dMultivariate $F(2,31) = 5.97, p < .007$.

* $p < .05$. ** $p < .025$. *** $p < .001$.

The results revealed no significant interaction effects and one significant main Group effect, $F(2,31) = 5.97, p < .007$, was found. The follow-up RM ANCOVA, presented in Table 19, indicated that the sexually abused children, in contrast to their comparison counterparts, were rated by their teachers as showing more Externalizing behaviors. The Gender and Time effects were not significant.

In summary, RM MANCOVAs revealed significant main effects of Gender, Group, and Time for the self- and parent-report measures and a significant main Group effect for the teacher-report measure. For the self-report measures, gender differences were present on Depression and Fears with girls reporting higher symptomatology. Collapsed over the Group effect, the Depression and Fears scores decreased from Time 1 to Time 2 assessment. Further, collapsed over Gender and Time effect, the sexually abused children reported significantly more depressive symptomatology. The primary caregivers in the sexually abused group, in comparison to those in the non-abused group, rated their children as exhibiting more internalizing as well as externalizing behaviors. Collapsed over group and child's gender, the parents reported lower internalizing behaviors at Time 2 assessment. The teachers rated the sexually abused children as exhibiting more externalizing behaviors, did not report significant differences between the boys' and girls' functioning, and did not report behavioral changes from Time 1 to Time 2 assessment.

Testing Hypothesis 3: Differences Between Sexually Abused Boys and Girls on the PTSD Symptomatology

Hypothesis 3 predicted that the initial degree of the PTSD symptomatology reported by the sexually abused boys and girls would decrease at Time 2 assessment. To test this

hypothesis, RM ANOVA was performed on the total PTSD score computed as a sum of the Intrusive Thoughts, Avoidance, and Sexual Anxiety subscale scores of the CITES. A 2 x 2 mixed factorial design (Gender x Time: boys and girls x Time 1 and Time 2 assessment) was used with RM on the Time factor. The sexually abused boys and girls were similar in their age, $t(38) = -.66$, $p > .05$, and IQ, $t(38) = 1.05$, $p > .05$.

Out of the 38 case children who participated at both assessment times, five children had randomly missing data on one of the subscales. No univariate outliers were detected, the distributions of the scores were normal at both assessment times, and the univariate Cochran's tests of homogeneity of variance had all alpha levels higher than .05. The means and standard deviations for each cell, as well as the results of the analysis are presented in Table 20.

Insert Table 20 about here

As Table 20 indicates, RM ANOVA did not reveal any significant interaction or main effects. The boys reported a similar degree of the PTSD symptomatology as did the girls, $F(1,36) = 2.48$, $p > .05$; collapsed over Group effect there was no significant change from Time 1 to Time 2 assessment, $F(1,36) = 2.04$, $p > .05$; and this symptomatology did not change significantly in the two groups over time, $F(1,36) = .65$, $p > .05$.

Further examination of the PTSD scores, revealed that a substantial proportion of the case children reported some degree of PTSD symptomatology at both assessment times. Complete data for these scores were available for 38 and 40 children at Time 1 and

Table 20

Means, Standard Deviations and Repeated Measures ANOVA Results of the PTSD Total Score for the Case Participants at Time 1 and Time 2 Assessment (N = 38)

	Time 1		Time 2	
	Boys	Girls	Boys	Girls
PTSD				
<u>M</u>	19.7	21.5	17.9	21.0
<u>SD</u>	5.7	4.9	4.9	5.7
<u>n</u>	17	21	17	21
ANOVA				
<u>Effect^a</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>
Gender	112.2	1, 36	112.2	2.48
Time	22.4	1, 36	22.4	2.04
Gender x Time	7.1	1, 36	7.1	.65

Note. PTSD = total score of the Intrusive Thoughts, Avoidance, and Sexual Anxiety subscale scores of CITES. Minimum total score = 10. Maximum total score = 30.

^aNo significant effects were found.

Time 2 assessment, respectively. At Time 1 assessment only one child (2.1%) reported the minimum score of 10, and at Time 2 assessment only two children (4.3%) reported not having any PTSD symptoms.

Testing Hypothesis 4: Predicting Functioning of Sexually Abused Children from Their Subjective Perceptions of Abuse

This hypothesis stated that the Self-Blame and Guilt (Blame), Social Reactions (Reactions), and PTSD scores as assessed by the CITES would be predictive of the emotional and behavioral functioning of sexually abused children within each assessment time. Furthermore, the Blame and Reactions variables as assessed at Time 1 would be predictive of the children's functioning at Time 2 assessment. To test this prediction, standard multiple regression analyses were conducted for each outcome measure (the self-, parent-, and teacher-report) at both assessment times, and for predictors at Time 1 and outcome measures at Time 2 assessment. The randomly missing data among the outcome measures were substituted with the corresponding cell means and univariate outliers recoded in a similar fashion as in the previous analyses.

As an initial step in the analyses, residual plots were investigated for each of the predictor variables against all outcome measures at both assessment times. The distribution of Blame and Reactions scores violated assumptions of normality, linearity, and homoscedasticity of variance. The Blame variable, which had moderate positive skewness, was normalized with the square root transformation and kept for the analyses. The distribution of the Reactions variable, however, was excluded from the analyses because of a very small score variability and severe positive skewness which could not be normalized with

neither the logarithmic nor inverse transformations. The correlations and corresponding significance levels for the predictors and all outcome measures are presented in Table 21.

Insert Table 21 about here

At Time 1 assessment one univariate outlier was detected among Blame scores, and no univariate outliers were found at Time 2 assessment. With $\chi^2 = 4.6$, $df=2$ and $p < .001$, three and one multivariate outliers were detected at Time 1 and Time 2 assessment, respectively. Following the elimination of outliers and the square root transformation of Blame scores, the residual plots did not indicate departures from the assumptions.

The results of standard regression analyses for which significant R statistics were found are presented in Table 22 and Table 23 for Time 1 and Time 2 analyses, respectively. The tables also include the unstandardized regression coefficients (B) and intercept, the standardized regression coefficients (β), the semipartial correlations (sr^2), R^2 , and adjusted R^2 .

At Time 1 assessment (Table 22), R for regression was significant for Depression, $F(2,36) = 5.53$, $p < .05$; Social, $F(2,36) = 3.49$, $p < .05$; Fears, $F(2,36) = 3.70$, $p < .05$; Fsex, $F(2,36) = 8.45$, $p < .001$; and Fpersonal, $F(2,36) = 3.99$, $p < .05$.

Insert Table 22 about here

Knowing the scores on Blame and PTSD, the percentages of explained variability in the Depression, Social, Fears, Fsex, and Fpersonal scores were, respectively, as follows:

Table 21

Pearson Product Moment Correlations for the Self-Blame/Guilt and PTSD Subjective Predictor Variables and Self-, Parent-, and Teacher-Report Outcome Measures at Time 1 and Time 2 Assessment

	Time 1		Time 2	
	1.	2.	1.	2.
Predictors:				
1. Blame		.01		.28*
2. PTSD				
Self-Report:				
Depression	.40**	.27*	.40**	.15
Social ^a	-.40**	-.03	-.12	.12
Fears	.23	.34*	.34*	.33*
Fsex	.38**	.42**	-.01	.14
Fpersonal	.33*	.28*	.01	.14
Self-Concept ^a	-.29*	-.12	-.36**	.03
Anxiety ^a	-.34*	-.17	-.40**	-.16
Parent-Report:				
Internalizing	-.14	.18	.15	.23
Externalizing	-.03	.10	.20	.08
Teacher-Report:				
Internalizing	.28	-.21	-.34*	-.47**
Externalizing	-.01	-.28	-.33*	-.35*

Note. Blame = Square root of Self-Blame/Guilt subscale score of CITES. PTSD = Sum of Intrusive Thoughts, Avoidance, and Sexual Anxiety subscale scores of CITES. Depression = Depression Self-Rating Scale for Children, total score. Social = z-transformation of total scores for the Children's and Adolescents' Social Self-Efficacy Scales. Fears = Fear Survey Schedule for Children - Revised, total score. Fsex and Fpersonal = Sexual Abuse Evaluation Scale, subscale scores. Self-Concept and Anxiety = Piers-Harris Children's Self-Concept Scale - Revised, total and Anxiety subscale score. Internalizing and Externalizing = Child Behavior Checklist Parent or Teacher Report Form, Internalizing and Externalizing t-score.

^aHigher scores indicate better functioning.

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

Table 22

Standard Multiple Regressions of Self-Blame/Guilt and PTSD Variables on Children's Self-Report Measures of Depression, Social Functioning, and General, Sexual, and Interpersonal Fears at Time 1 Assessment

Predictors	B	β	sr^2 (unique)
Depression ($N = 39$)			
Blame	5.25*	.40	.16
PTSD	.33	.27	.07
Intercept = -18.20			$R^2 = .24$
			Adjusted $R^2 = .19$
			$R = .49^*$
Social ($N = 39$)			
Blame	-.88*	-.40	.16
PTSD	-.01	-.03	.00
Intercept = 3.79			$R^2 = .16$
			Adjusted $R^2 = .12$
			$R = .40^*$
Fears ($N = 39$)			
Blame	16.33	.23	.03
PTSD	2.29*	.34	.12
Intercept = 34.24			$R^2 = .17$
			Adjusted $R^2 = .12$
			$R = .41^*$
Fsex ($N = 39$)			
Blame	4.52*	.37	.14
PTSD	.48**	.42	.18
Intercept = 9.36			$R^2 = .32$
			Adjusted $R^2 = .28$
			$R = .57^{**}$

Table 22 continued

Table 22 continued

Fpersonal (N = 39)			
Blame	3.28*	.32	.10
PTSD	.27	.28	.08
Intercept = 8.20			
			$R^2 = .18$
			Adjusted $R^2 = .14$
			$R = .43^*$

Note. Blame = Square root of Self-Blame/Guilt subscale score of CITES. PTSD = Total score of Intrusive Thoughts, Avoidance, and Sexual Anxiety subscale scores of CITES. Depression = Depression Self-Rating Scale for Children, total score. Social = z-transformation of total scores for the Children's and Adolescents' Social Self-Efficacy Scales. Fears = Fear Survey Schedule for Children - Revised, total score. Fsex and Fpersonal = Sexual Abuse Evaluation Scale, subscale scores. Adjusted $\alpha = .007$.

* $p < .05$. ** $p < .007$.

24% (19% adjusted); 16% (12% adjusted); 17% (12% adjusted); 32% (28% adjusted); and 18% (14% adjusted). Only the Blame variable contributed significantly to the prediction of Depression ($\underline{sr}^2 = .16$), Social ($\underline{sr}^2 = .16$), and Fpersonal ($\underline{sr}^2 = .10$). The PTSD variable was the only significant contributor to the prediction of Fears ($\underline{sr}^2 = .12$). Both variables, Blame and PTSD, were significant in contributing to the prediction of Fsex ($\underline{sr}^2 = .14$ and $\underline{sr}^2 = .18$, respectively).

At Time 2 assessment (Table 23), $\underline{R}$ for regression was significant for Depression, $\underline{F}(2,39) = 3.76$, $p < .05$; Fears, $\underline{F}(2,39) = 4.12$, $p < .05$; Self-Concept, $\underline{F}(2,39) = 3.50$, $p < .05$; Anxiety, $\underline{F}(2,39) = 3.72$, $p < .05$; and Teacher-Internalizing score, $\underline{F}(2,39) = 5.15$, $p < .05$.

Insert Table 23 about here

As Table 23 indicates, the percentages of explained variability in the Depression, Fears, Self-Concept, Anxiety, and Teacher-Internalizing scores were as follows: 16% (12% adjusted); 18% (13% adjusted); 15% (11% adjusted); 16% (12% adjusted); and 29% (24% adjusted), respectively. Only the Blame variable contributed significantly to prediction of Depression ($\underline{sr}^2 = .14$), Self-Concept ($\underline{sr}^2 = .15$), and Anxiety ($\underline{sr}^2 = .14$). The PTSD variable was the only significant contributor to prediction of Teacher-Internalizing scores ($\underline{sr}^2 = .18$). None of the two considered variables provided significant unique contribution to the prediction of Fears (for both, $\underline{sr}^2 = .06$), however, in combination they contributed .13 in shared variability.

Table 23

Standard Multiple Regressions of Self-Blame/Guilt and PTSD Variables on Children's Self-Report Measures of Depression, General Fears, Self-Concept, Anxiety, and Teacher-Report of Internalizing Behaviors at Time 2 Assessment

Predictors	B	β	sr^2 (unique)
Depression (N = 42)			
Blame	7.42*	.39	.14
PTSD	.04	.04	.01
Intercept = -20.60			$R^2 = .16$
			Adjusted $R^2 = .12$
			R = .40*
Fears (N = 42)			
Blame	28.13	.26	.06
PTSD	1.60	.26	.06
Intercept = -8.36			$R^2 = .18$
			Adjusted $R^2 = .13$
			R = .42*
Self-Concept (N = 42)			
Blame	-15.48*	-.41	.15
PTSD	.32	.15	.02
Intercept = 112.28			$R^2 = .15$
			Adjusted $R^2 = .11$
			R = .39*
Anxiety (N = 42)			
Blame	-3.91*	-.38	.14
PTSD	-.03	-.05	.01
Intercept = 25.56			$R^2 = .16$
			Adjusted $R^2 = .12$
			R = .40*

Table 23 continued

Table 23 continued

Teacher: Internalizing ($N = 28$)			
Blame	-8.32	-.28	.08
PTSD	-.66*	-.42	.18
Intercept = 103.87			
			$R^2 = .29$
			Adjusted $R^2 = .24$
			$R = .54^*$

Note. Blame = Square root of Self-Blame/Guilt subscale score of CITES. PTSD = Total score of Intrusive Thoughts, Avoidance, and Sexual Anxiety subscale scores of CITES. Fears = Fear Survey Schedule for Children - Revised, total score. Self-Concept and Anxiety = Piers-Harris Children's Self-Concept Scale - Revised, total and Anxiety subscale score. Teacher: Internalizing = Child Behavior Checklist-Teacher Report Form, Internalizing t-score. Adjusted $\alpha = .007$.

* $p < .05$. ** $p < .007$.

The two predictor variables as assessed at Time 1 were also used to predict the children's functioning at Time 2 assessment. The correlation matrix for these variables is presented in Table 24.

Insert Table 24 about here

The results, presented in Table 25, revealed that R for regression was significant for Social, $F(2,34) = 5.16, p < .05$; Fears, $F(2,34) = 4.01, p < .05$; Fsex, $F(2,34) = 4., p < .05$; Fpersonal, $F(2,34) = 3.33, p < .05$; Self-Concept, $F(2,34) = 4.11, p < .05$, and Teacher-Externalizing score, $F(2,34) = 5.75, p < .05$.

Insert Table 25 about here

As Table 25 indicates, the percentages of explained variability in the Social, Fears, Fsex, Fpersonal, Self-Concept, Teacher-Externalizing scores were as follows: 23% (19% adjusted); 19% (14% adjusted); 19% (14% adjusted); 16% (12% adjusted); 20% (adjusted 15%) and 37% (30% adjusted). Only the Blame variable contributed significantly to prediction of Social ($sr^2 = .23$) and Self-Concept ($sr^2 = .19$) scores, and the PTSD variable was the only significant contributor to prediction of scores on Fears ($sr^2 = .18$), Fsex ($sr^2 = .13$), Fpersonal ($sr^2 = .15$), and Teacher-Externalizing ($sr^2 = .34$).

Table 24

Pearson Product Moment Correlations for the Self-Blame/Guilt and PTSD Subjective Predictor Variables at Time 1 Assessment and Self-, Parent-, and Teacher-Report Outcome Measures at Time 2 Assessment

	1.	2.
Predictors:		
1. Blame		.09
2. PTSD		
Self-Report:		
Depression	.32*	.11
Social ^a	-.47**	.07
Fears	.04	.44**
Fsex	.24	.39**
Fpersonal	.12	.40**
Self-Concept ^a	-.44**	-.06
Anxiety ^a	-.15	-.21
Parent-Report:		
Internalizing	-.05	.17
Externalizing	.02	.10
Teacher-Report:		
Internalizing	.31	-.30
Externalizing	.16	-.57**

Note. Blame = Square root of Self-Blame/Guilt subscale score of CITES. PTSD = Sum of Intrusive Thoughts, Avoidance, and Sexual Anxiety subscale scores of CITES. Depression = Depression Self-Rating Scale for Children, total score. Social = z-transformation of total scores for the Children's and Adolescents' Social Self-Efficacy Scales. Fears = Fear Survey Schedule for Children - Revised, total score. Fsex and Fpersonal = Sexual Abuse Evaluation Scale, subscale scores. Self-Concept and Anxiety = Piers-Harris Children's Self-Concept Scale - Revised, total and Anxiety subscale score. Internalizing and Externalizing = Child Behavior Checklist Parent or Teacher Report Form, Internalizing and Externalizing t-score. *Higher scores indicate better functioning.

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

Table 25

Standard Multiple Regressions of Self-Blame/Guilt and PTSD Variables at Time 1 Assessment on Children's Self-Report Measures of Social Functioning, General, Sexual, and Interpersonal Fears, Self-Concept, and Teacher-Reports of Externalizing Behaviors at Time 2 Assessment

Predictors	B	β	sr^2 (unique)
Social (N = 37)			
Blame	-1.10**	-.48	.23
PTSD	.02	.11	.01
Intercept = 4.07			$R^2 = .23$
			Adjusted $R^2 = .19$
			R = .48*
Fears (N = 37)			
Blame	-.05	-.765	.00
PTSD	2.66*	.44	.18
Intercept = 75.63			$R^2 = .19$
			Adjusted $R^2 = .14$
			R = .44*
Fsex (N = 37)			
Blame	6.85	.21	.04
PTSD	1.06*	.37	.13
Intercept = -31.86			$R^2 = .19$
			Adjusted $R^2 = .14$
			R = .44*
Fpersonal (N = 37)			
Blame	2.68	.08	.01
PTSD	1.08*	.39	.15
Intercept = -8.99			$R^2 = .16$
			Adjusted $R^2 = .12$
			R = .41*

Table 25 continued

Table 25 continued

Self-Concept (N = 37)			
Blame	-11.63*	-.44	.19
PTSD	-.04	-.02	.00
Intercept = 106.09			R ² = .20
			Adjusted R ² = .15
			R = .44*
Teacher: Externalizing (N = 23)			
Blame	3.64	.20	.04
PTSD	-.10**	-.58	.34
Intercept = 66.48			R ² = .37
			Adjusted R ² = .30
			R = .60*

Note. Blame = Square root of Self-Blame/Guilt subscale score of CITES. PTSD = Sum of Intrusive Thoughts, Avoidance, and Sexual Anxiety subscale scores of CITES. Social = z-transformation of total scores for the Children's and Adolescents' Social Self-Efficacy Scales. Fears = Fear Survey Schedule for Children - Revised, total score. Fsex and Fpersonal = Sexual Abuse Evaluation Scale, subscale scores. Self-Concept = Piers-Harris Children's Self-Concept Scale - Revised, total score. Externalizing = Child Behavior Checklist Parent or Teacher Report Form, Externalizing t-score. Adjusted $\alpha = .007$.

* $p < .05$. ** $p < .007$.

Testing Hypothesis 5: Predicting Functioning of Sexually Abused Children from the Objective Aspects of Abuse, Family Stress, and Child's Age and Gender

This hypothesis stated that the children's functioning would be predicted from the objective aspects of the abuse as assessed by the NAEF, total family stressors (Stress), child's age (Cage), and child's gender (CGender). Due to a small number of the available teacher-reports, only the child- and parent reports were considered for these analyses. As reported in the Method section, the NAEF can be scored along two dimensions, the course and the severity of sexual abuse (Gentile, 1988). Because, the sample used in the factor analysis contained only 17% of children who experienced ESA, internal consistencies were calculated for the two scales and were .48 and .58 for the course and the severity dimensions, respectively. These values were judged as low and thus the variables were not entered in current analyses.

In view of the above findings the following objective predictors were used: most severe type of sexual abuse (TypeSA), perpetrator's relationship to the child (PRelationship), number of times the child was abused (logarithmic transformation performed to normalize substantial positive skewness; Frequency), and perpetrator's age (Page). Two predictors, type of coercion and duration of abuse, could not be used in the analyses. For the coercion scores, a large proportion of data was missing (32%) and the distribution of the duration scores had a severe positive skewness. Most of the children (47%) were abused over one day and this correlated highly with the frequency of abuse (.86). The exact age of perpetrators could not be used (also due to missing data; 17%), therefore, the dichotomous age variable, adolescent or adult, was employed (Prelationship). Intercorrelations for predictor variables and correlations between predictor and outcome variables for Time 1 and Time 2

assessments are presented in Table 26 and 27, respectively.

Insert Table 26 and 27 about here

Separate analyses were conducted for each assessment time, and for the randomly missing data mean substitution was performed. The univariate outliers among the outcome measures were recoded. Among the predictor variables, at Time 1 assessment, three univariate outliers were found on Stress and one multivariate outlier with $\chi^2 = 3.48$, $df = 7$, and $p < .001$. Squared multiple correlations ranged from .13 for Cage to .48 for TypeSA. At Time 2 assessment no univariate outliers were identified and one multivariate outlier was detected. Squared multiple correlations ranged from .10 for Stress to .44 for TypeSA. Evaluation of residual plots, following the transformations of some variables, recoding of univariate outliers, and elimination of multivariate outliers, did not indicate departures from the assumptions of multivariate normality, linearity, and homoscedasticity.

At both assessment times the only significant R for regression was found for Fears: at Time 1, $F(7,33) = 5.45$, $p < .001$, and at Time 2, $F(7,34) = 4.37$, $p < .01$. These results are presented in Table 28.

Insert Table 28 about here

As Table 28 indicates, the percentages of explained variability in the Fears scores at Time 1 and Time 2 assessment were 53% (44% adjusted) and 47% (37% adjusted), respectively. Only Cgender contributed significantly to prediction of Fears (at Time 1 $\beta^2 = .46$, and

Table 26

Pearson Product Correlations Between Objective Predictor Variables and Self- and Parent-Report Measures at Time 1 Assessment

	1.	2.	3.	4.	5.	6.	7.
Predictors:							
1. TypeSA		.50***	.58***	.01	.19	-.16	.04
2. Prelationship			.34*	-.05	.07	-.23	.10
3. Frequency				-.17	.24	-.19	-.13
4. Page					.30*	.37**	.30*
5. Stress						-.02	-.07
6. Cage							.05
7. Cgender							
Self-Report:							
Depression	.05	.15	.05	.10	.15	.03	.40**
Social ^a	-.04	-.15	-.11	-.33*	-.13	.04	-.22
Fears	.02	.20	.08	-.01	-.02	-.17	.65***
Fsex	.18	.28	.03	-.31*	-.13	-.31*	-.04
Fpersonal	.19	.26*	.04	-.37**	-.18	-.22	-.10
Self-Concept ^a	.13	-.05	.10	-.18	.04	-.20	-.31*
Anxiety ^a	.15	-.01	.14	-.02	.10	-.22	-.45**
PTSD	.08	-.12	.09	-.01	-.01	-.09	.27*
Parent-Report:							
Internalizing	.20	.21	.14	-.13	.30*	-.24	.07
Externalizing	.28*	.23	.12	-.14	.32*	-.36**	-.03

Note. TypeSA = Type of sexual abuse. Prelationship = Perpetrator's relation to child. Frequency = logarithm of times abused. Page = Perpetrator's age, adolescent or adult. Stress = Total number of family stressors. Cage = Child's age. Cgender = Child's gender. Depression = Depression Self-Rating Scale for Children, Total score. Social = z-transformation of total scores for the Children's and Adolescents' Social Self-Efficacy Scales. Fears = Fear Survey Schedule for Children - Revised, Total score. Fsex and Fpersonal = Sexual Abuse Evaluation Scale, subscale scores. Self-Concept and Anxiety = Piers-Harris Children's Self-Concept Scale - Revised, Total and Anxiety subscale score. PTSD = total score of the Intrusive Thoughts, Avoidance, and Sexual Anxiety subscale scores of CITES. Internalizing and Externalizing = Child Behavior Checklist Parent Report Form, Internalizing and Externalizing t-score.

^aHigher scores indicate better functioning.

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

Table 27

Person Product Correlations Between Objective Predictor Variables and Self- and Parent-Report Measures at Time 2 Assessment

	1.	2.	3.	4.	5.	6.	7.
Predictors:							
1. TypeSA		.39**	.52**	-.01	.01	-.15	.04
2. Prelationship			.25	-.06	.16	-.13	.04
3. Frequency				-.17	.14	-.26	-.08
4. Page					.07	.41**	.39**
5. Stress						.23	.12
6. Cage							.14
7. Cgender							
Self-Report:							
Depression	.14	-.01	.01	-.02	-.06	-.11	.46**
Social ^a	.19	.17	.13	-.25	.17	.03	-.19
Fears	.02	.13	.21	.07	.20	-.13	.58***
Fsex	-.02	.06	.08	-.24	-.06	-.23	.01
Fpersonal	-.07	-.02	.07	-.14	.04	-.11	.06
Self-Concept ^a	.01	.08	.07	-.03	.00	.02	-.20
Anxiety ^a	-.04	-.14	-.08	.08	-.26	-.01	-.24
PTSD	.28*	.15	.31*	-.15	.19	-.29*	.21
Parent-Report:							
Internalizing	.33*	.22	.18	.03	.19	-.28*	.26*
Externalizing	.27*	.23	.07	.02	.20	-.30*	.14

Note. TypeSA = Type of sexual abuse. Prelationship = Perpetrator's relation to child. Frequency = logarithm of times abused. Page = Perpetrator's age, adolescent or adult. Stress = Total number of family stressors. Cage = Child's age. Cgender = Child's gender. Depression = Depression Self-Rating Scale for Children, Total score. Social = z-transformation of total scores for the Children's and Adolescents' Social Self-Efficacy Scales. Fears = Fear Survey Schedule for Children - Revised, Total score. Fsex and Fpersonal = Sexual Abuse Evaluation Scale, subscale scores. Self-Concept and Anxiety = Piers-Harris Children's Self-Concept Scale - Revised, Total and Anxiety subscale score. PTSD = total score of the Intrusive Thoughts, Avoidance, and Sexual Anxiety subscale scores of CITES. Internalizing and Externalizing = Child Behavior Checklist Parent Report Form, Internalizing and Externalizing t-score.

^aHigher scores indicate better functioning.

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

Table 28

Standard Multiple Regressions of Objective Predictor Variables on Children's Self-Report Measure of Fears^a at Time 1 and Time 2 Assessment

Predictors	B	β	sr^2 (unique)
Time 1			
Cgender	47.89**	.73	.46
TypeSA	-2.66	-.22	.03
Cage	-.10	-.11	.01
Stress	.83	.06	.00
Prelationship	4.17	.13	.01
Page	-11.65	-.16	.02
Frequency	11.81	.20	.02
Intercept = 108.77			$R^2 = .53$
			Adjusted $R^2 = .44$
			$R = .73^{**}$
Time 2			
Cgender	41.92*	.64	.34
TypeSA	-2.51	-.20	.03
Stress	1.31	.12	.01
Cage	-.15	-.16	.02
Prelationship	2.16	.07	.01
Page	-4.66	-.07	.00
Frequency	17.74	.28	.05
Intercept = 94.40			$R^2 = .47$
			Adjusted $R^2 = .37$
			$R = .69^*$

Note. Cgender = Child's gender. TypeSA = Type of sexual abuse. Cage = Child's age. Stress = Total number of family stressors. Prelationship = Perpetrator's relation to child. Page = Perpetrator's age, adolescent or adult. Frequency = logarithm of times abused. ^aFears = Fear Survey Schedule for Children - Revised, Total score.

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

Time 2 $sr^2 = .34$) and, as a group, all the variables together contributed another .07 in shared variability. None of the other outcome measures were significantly predicted at either assessment time by the used predictor variables.

Discussion

Despite a substantial increase in the number of empirical investigations into the effects of sexual abuse on children's functioning, there have been few reports on the impact of extrafamilial sexual abuse (ESA). Existing empirical knowledge is based largely on studies which included small samples of very specific types of daycare and sex ring abuse. The present study assessed the impact of ESA in a representative sample of boys and girls between the ages of six to 15, who disclosed and were seen within one year of the abuse. In general, the results indicated that in comparison to non-abused children, the sexually abused children experience negative effects and suffer emotional and behavioral difficulties. These difficulties are present within the first three months post-disclosure, and persist over time. Results indicated that at six month follow-up these children were still affected by the abuse. The impaired functioning of sexually abused children was revealed not only on self-report measures, but was also reported by the primary caregivers and classroom teachers.

Despite the consistency of results across all three distinct sources of reports, the abused children, on average, did not score in the clinical ranges, except for parent reports of internalizing behaviors. The results also provide preliminary evidence that the impact of ESA is similar for boys and girls and suggest that prediction of child's functioning, based on variables related to the abusive act and the demographic characteristics of the children and

their families, is difficult. Attribution of self-blame and guilt for the abuse, and the extent of perceived traumatization proved to be most helpful in recognizing the most affected children.

The study defined ESA as an inappropriate physical contact of a sexual nature between a child, 16 years of age or younger, and a person at least five years older. According to the criteria presented by Peters et al. (1986) this definition is rigorous and conservative. Exclusive consideration of contact abuse and an inclusion of a specific age range is advantageous for generalizability of findings, and although peer sexual contacts and non-contact experiences were recognized as being potentially abusive, they were excluded to avoid confounding with peer play and to facilitate interpretation of the results.

Typically, in this study sexual abuse involved a ten year old boy or a girl abused on one to nine occasions. The abuse lasted, in general, for one day to six months. There was one male adult perpetrator who was either a neighbour or someone not related to the child. The abusive acts included fondling of genitals and inappropriate touching, and children were offered some kind of reward or affection. Frequently, the perpetrator used coercion which included threats of injury either toward the child or toward people close to the child, the use of physical force, and the implications that the child should do what the older person expected. The abuse was disclosed most often within one month after termination, and generally the first evaluation of the child was conducted within the first 12 weeks after the disclosure.

Characteristics of the Sample

The sexually abused group was recruited from two Child Protection agencies and the Victim/Witness Assistance Programs in the Ottawa-Carleton area and the southeastern region

of Ontario. The research project functioned independently from the services offered by these agencies. At the time of first assessment, 43% of children were involved with mental health and 7% were involved in court proceedings. At the follow-up assessment, 50% of the children were in contact with mental health professionals and 10% were involved in the court process. Therefore, despite a large number of participants who were involved with mental health professionals, the sample was not a pure clinical group. This is in sharp contrast to the majority of studies in the area, which recruit exclusively from clinical services (e.g., Kiser et al., 1988; Mannarino et al., 1991). The involvement with mental health and court proceedings was not related significantly to any of the outcome measures and, therefore, these variables were not considered in the analyses of within group differences.

Participating and refusing to participate sexually abused children did not differ on major demographic and abuse specific variables. The groups were similar in terms of child's age, gender, primary caregiver's age, occupation, income and type of family composition. Among abuse specific variables, no differences were found on frequency and duration of abuse, number of perpetrators, perpetrator's age, gender and relation to child. Additionally, the groups did not differ on the type of experienced abuse and coercion. These findings suggest that the sample can be viewed as representative of all ESA cases disclosed in this geographic area.

The present study had 42% participation rate which is in the mid-range of studies reporting these statistics. Tong, Oates and McDowell's (1987) investigation, which included both the ISA and ESA victims, had 22% participation rate and Mannarino et al. (1989) reported a 91% participation rate. These two studies, however, recruited from sexual assault treatment centres. Moore Newberger et al. (1991) reported a 64% participation rate for her

sample referred by the local children's hospital and district attorney' offices. In general, most of the studies recruit from treatment centres and their evaluation measures are an integral part of the initial intake procedures. Thus, higher participation rates are to be expected. The present investigation, conducted independently of services offered by the referring agencies, might have been biased by attracting families who needed help the most and were dissatisfied with the wait for appropriate services. Clinical observations indicated that a substantial number of participants perceived their involvement not only as fulfilling the goals of research, but also as partially serving their clinical needs.

The sexually abused group in this study differed significantly from the non-abused group on number of demographic characteristics. In general, abused children had lower IQ, younger parents with less education, with lower occupational status, and with lower family income. Similarly to the sexually abused group, it is highly plausible that among the comparison families, the decision to participate was biased and resulted in significant differences between the groups on the socioeconomic status.

The study had a very low attrition rate, with 10% for the sexually abused group and 4% for the non-abused group which is lower than in other prospective follow-up studies. Mannarino et al. (1991), for example, at their six-month follow-up reported dropout rates of 16% and 5% for the sexually abused and control children, respectively. In the present study, there were no significant differences between the subjects who continued throughout the project and those who either dropped out or joined the study at the follow-up assessment on major demographic and abuse related variables. Therefore, in this study, the participant dropout can be seen as random and not related to either the demographic or abuse characteristics of the children or their families. Furthermore, comparable results were

obtained when analyses were conducted with and without subjects who dropped out of the study.

Emotional and Behavioral Functioning of Sexually Abused Children

Consistent with the predictions of the study, the children who experienced ESA, as compared to the non-abused group, exhibited impaired psychological functioning. The psychological difficulties were revealed on a number of self-, parent-, and teacher-report measures of the child's emotional and behavioral functioning. The results revealed that within the first three months post disclosure the abused group did report more symptoms of depression and general fears, but did not differ on self-reports of social efficacy. Over time, the results indicated a significant abatement of depressive symptomatology and fearfulness, and no change in social functioning. Nevertheless, the Depression scores remained significantly higher in the ESA group as compared to non-abused children, whereas the differences on Fears scores did not reach statistical significance at the follow-up. Therefore, the expected abatement of group differences occurred only for general fearfulness but not for depressive symptomatology.

Because the Depression and general Fears scores were significantly related to the Total and Anxiety scores on the PHSCS - Revised (Piers, 1984) and the Sex-Associated and Interpersonal Discomfort subscale scores on the Sexual Abuse Fear Evaluation Scale (Wolfe & Wolfe, 1986), at both assessment periods, respectively, it can be postulated that the children were also experiencing significantly lower self-concept and high anxiety on the initial and follow-up assessment. The abuse specific fears, similarly to general fears, were most likely problematic on the initial but not on the follow-up assessment.

The children's behavioral functioning was assessed with the parent and the teacher versions of the CBCL (Achenbach & Edelbrock, 1983). Two broad band classes of functioning were evaluated: the internalizing behaviors which in general include symptoms of depression, somatic complaints, obsessions, compulsions; and the externalizing behaviors which include symptoms of aggression, cruelty, delinquency, hyperactivity, immaturity, and sex problems. Initially, the parents rated their sexually abused children as exhibiting significantly more internalizing and externalizing problems than their non-abused counterparts. Over time, a significant decrease of internalizing behaviors was reported for all children, however, group differences revealed on the initial assessment, on both the internalizing and externalizing subscales, were still present six months post disclosure. The teachers' reports indicated, consistently over time and across gender, that sexually abused children in comparison to non-abused children were showing more externalizing behaviors. No significant differences were found on internalizing behaviors. This finding, however, must be viewed cautiously because teachers might not report behaviors which are not disruptive within a regular classroom environment.

In general, the results of this study are consistent with other investigations which have reported that sexually abused children exhibit psychological problems which might be long-lasting. For example, Tuft's New England Medical Centre's study (Sauzier, 1989) found that sexually abused children, in comparison to normative data, reported more symptoms of low self-concept on the PHSCS - Revised (Piers, 1984). Some studies, however, have not revealed significant differences on the self-report measures (Cohen & Mannarino, 1988; Mannarino et al., 1989; Mannarino et al., 1991; Shawchuck, Pisaruk & Hoier, 1987; Wagner, 1991). Mannarino et al. (1991) in their prospective follow-up study found on their first

assessment significant differences only on state anxiety, and not on depression, self-concept, and trait anxiety. Six months later, sexually abused children reported only on low self-concept, and at 12 month follow-up, the sexually abused and non-abused children did not differ on any of the measures. These discrepant findings suggest that future research should continue using self-report measures along with other sources of evaluations.

Most investigations point to an impaired social functioning of sexually abused children (Burgess et al., 1987; Kelly, 1989; Mannarino et al. 1991) which was not apparent in present findings. These differences can be attributed to the fact that most of the investigations used parental reports not the child's own evaluations of social competency. It is plausible that children have different perceptions of their own social relatedness than do their parents. Further, the present sample included a large proportion of children who disclosed the abuse to either a parent or to other significant adult and this might have influenced the children's enhanced perceptions of their own assertiveness.

Although no specific hypotheses were posed with regard to gender differences, the study explored the possibility that girls might differ from boys in their adjustment following ESA. The inclusion of a gender factor in the empirical investigations is important for two main reasons. First, boys are often excluded from studies due to a substantial focus on ISA victims where girls are more prevalent. Second, it is plausible that boys might respond with a different behavioral pattern than the girls. Forty percent of the sexually abused group in this study were boys. The results indicated that, as a group, boys reported fewer symptoms of depression and fearfulness at both assessment times. There were no interaction effects for gender and group factors, suggesting that within the first three to six months post disclosure sexually abused boys and girls do not exhibit differential functioning. Furthermore,

no gender differences were revealed within the sexually abused group on the PTSD symptomatology. As in Wolfe et al.'s (1989) study most of the children reported some level of symptomatology at the initial assessment and, in the present study, the symptomatology did not abate over the first six months post disclosure. These results do not support the initial prediction that the PTSD symptomatology would significantly diminish by the follow-up evaluation. Thus, the impact of ESA is more persistent than anticipated. Kiser et al. (1988) using parental reports on a semi-structured interview revealed similar findings. The sexually abused children, according to parental reports, exhibited symptoms consistent with the PTSD diagnosis on the assessments conducted within the first six months and one year after the termination of abuse.

The results of parental reports are highly consistent with other literature employing the CBCL (Achenbach & Edelbrock, 1983) for evaluating parental perceptions of children's functioning (e.g., Friedrich & Reams, 1987; Friedrich et al., 1986; Kelly, 1989; Mannarino et al., 1991; Moore Newberger et al., 1991; Waterman et al., 1993). Conte and Schuerman (1987a, 1987b), using unstandardized parental reports, found significant differences on self-esteem, aggression, fearfulness, irrationality, withdrawal, acting out, and anxiety in their sample of 369 sexually abused children. The children were reported as problematic at the initial assessment, and their functioning deteriorated further at the 12 month follow-up. Although these findings are similar to the results of this study, they are not directly comparable because they were based on a different and unstandardized assessment instrument. The literature to date consistently reveals that when parental reports are used for the evaluations, the sexually abused children are rated as exhibiting significant psychological difficulties. However, it is highly plausible that these reports are based on the parents' own

perceptions of their child's victimization and the parents' own ability to cope with the abuse rather than on the child's behavior. Similarly to the self-report measures, lack of interaction effects suggests that the impact of ESA is not different for boys and girls.

Factors Predicting the Functioning of Sexually Abused Children

Two main groups of variables were investigated in predicting the initial and long-term emotional and behavioral functioning of sexually abused children. The first group included factors related to the children's perceptions of their own guilt and self-blame for the abuse, their perception of supports available within the family and peer group following the disclosure, and their own reports of PTSD symptomatology. In exploratory analyses, the study investigated whether these factors significantly predict the children's functioning at each assessment time, and from the initial to the follow-up evaluation.

At each assessment time the children's reports of self-blame were significantly related to their reports of depressive symptomatology. The same variable predicted children's initial lower social functioning and the initial high levels of interpersonal fearfulness. Six months post disclosure, self-blame was predictive of children's reports of poor self-concept and high anxiety. The PTSD symptomatology was initially related to higher levels of general fears and, at the follow-up, to lower levels of internalizing behaviors as reported by the teachers. Both variables, self-blame and PTSD, predicted initial reports of sexual fears and the follow-up reports of general fearfulness.

When the children blamed themselves for the abuse within the first three months post disclosure, their perceptions of impaired social functioning and lower self-concept were significantly predicted at the follow-up. Initial reports of the PTSD symptomatology were

predictive of the children's follow-up reports of general and abuse specific fears and of their teachers' reports of lower externalizing behaviors.

Two main observations can be drawn from these results. First, the children's attributions of guilt and blame for the abuse are important factors in evaluating their initial and long-term emotional functioning. In this study, the children who felt guilty and blamed themselves for the abuse also reported more symptoms of depression, anxiety, poor self-concept, and impaired social efficacy. Children who felt traumatized by the sexual abuse and reported intrusive thinking patterns, avoidance behaviors, and sexual anxieties also experienced high levels of general and abuse specific fears, and their behavioral functioning was rated by the teachers as less problematic. Second, despite these significant results, the amount of explained variability was relatively small ranging from 16% to 32% at the initial assessment, from 15% to 29% at the follow-up assessment, and from 16% to 37% for the initial to the follow-up assessment. Furthermore, the children's reports of subjective experiencing of the abuse were only related to their own reports of emotional functioning, to only some of the teachers' reports, and were not related at all to any of the parental reports.

Within the first group of variables, the self-reports of social supports indicated that almost all of the sexually abused children perceived their environments as extremely supportive. Thus, the distribution of the scores did not have a sufficient variability to be entered into the regression equations. Although it is possible that the children did in fact perceive their environments as supportive, these reports have to be viewed with caution. Due to the nature of the assessment instrument, it is possible that the high scores reflected lack of disclosure of sexual abuse to people in the child's environment rather than an active environmental support.

The second group of predictors included variables related to the background characteristics of the children and to the objective aspects of the sexual abuse. Among the background variables child's age and gender, and total family stress, including involvement with mental health professionals and in court process, were examined. Among the objective aspects of the sexual experience the severity and frequency of abuse, perpetrator's age and relationship to the child were examined. The results of regression analyses, for the initial and the follow-up assessment, revealed that only the child's gender predicted significantly self reports of general fears. Specifically, higher levels of fearfulness were predicted for girls but not for boys. None of the remaining variables were significantly predictive of children's emotional and behavioral functioning.

Consistent with other investigations, these results point to the complexity of predicting children's adjustment to sexual abuse, and suggest the need for a multidimensional assessment of victimized children (Mannarino et al., 1991; Wolfe et al., 1989). In this study, self-perceptions of the abusive experiences were significantly predictive of some areas of children's functioning when this functioning was assessed by self-report measures. The children's subjective experiencing of trauma was not predictive of their functioning as assessed by any of the parent measures and the majority of teachers' measures. The objective aspects of the abuse were not predictive of the children's adjustment and only child's gender, among the background variables, was predictive of fearfulness. These findings are consistent with a majority of recent studies which do not report a significant relationship between the abuse specific variables and measures of children's functioning (Cohen & Mannarino, 1988; Einbender & Friedrich, 1989; Koverola, Pound, Heger & Lytle, 1993; Moore Newberger et al., 1991; Sauzier, 1989). It is highly plausible that the evaluations

of children's own perceptions of the trauma of the abuse are the best predictors of their functioning.

Clinical Implications

The most significant implication emerging from the results of this study is that children who experience ESA, in comparison to non-abused children, exhibit impaired emotional and behavioral functioning. Because of statistical considerations, few cases with either univariate or multivariate outliers were recoded or eliminated from the analyses. A closer examination of these participants revealed that these children obtained extreme scores on the self- and parent-report measures. The procedure of recoding and excluding extreme cases might have diluted the differences. Nevertheless, the sexually abused children, with the exception of parental reports of internalizing behaviors, did not obtain clinically significant scores. When compared to the non-abused group, the negative impact of ESA is reported not only by the children themselves but is also reflected in parental and teachers' reports. Furthermore, the impaired functioning is present during the first three months post disclosure and persists over the first six months following the revelation of the abuse. The results also indicate that ESA has the same negative impact on boys and on girls, thus the treatment interventions should be directed at all victims, regardless of gender. Specifically, particular interventions directed at symptomatology of depression, poor self-esteem, anxiety and fearfulness might be most needed by the ESA victims. Providing sex education might prove especially beneficial for those children who report high levels of abuse related fears and sexual anxiety (McLeer & Rose, 1992).

Interventions directed specifically at helping children cope and resolve patterns of

Intrusive thinking and avoidance behaviors might be particularly important because children's self-perceptions of the abuse are significantly related to their emotional functioning. Clinical intervention directed at reducing feelings of self-blame and guilt for the abuse are likely to result in lower reports of depression and anxiety, and reports of higher self-concept.

Although significant predictions were found, no consistent patterns (except the prediction of depressive feelings) were revealed at the initial and the follow-up assessment. This suggests the need to evaluate the children's perceptions of the abuse as close to the treatment implementation as possible. As the emotional and behavioral functioning can change over time, so can the subjective perception and evaluation of the abuse.

The primary goal of this study was to assess the functioning of ESA victims from different perspectives using a number of standardized measures. As such, the study did not focus on the interactive processes between the parental and children's reactions. However, clinical observations indicate several important issues. First, it seems particularly valuable that the caregiver maintains the same level of affection in the post-disclosure phase as was present prior to the revelation of the abuse. This may create a secure environment for the child to recover from the impact of the molestation and, more importantly, may ensure that the child does not experience additional anxiety related to differential treatment. Both withdrawal of affection and the overprotectiveness were reported by the children as having negative effects, heightening the child's feelings of guilt and sense of powerlessness.

Second, the children shared with their parents anger at the perpetrator and often described powerful feelings of revenge. For some, the anticipated involvement in legal proceeding was perceived as fulfilling the wish for retribution, however, most of the children who were either already involved or completed court testimony, reported dramatic

disappointment. Only a very small proportion of children perceived their court involvement as a positive and empowering experience. Although the current study does not provide any empirical evidence that the involvement in court process is either harmful or beneficial due to a very small percent of children who participated in court, the clinical observations clearly suggest that these children are faced with significant additional stressors. Provision of consistent and comprehensive interventions directed at court preparation might help to ameliorate the negative impact on the children and provide the parents with strategies to assist their children in this process.

Consistent with the literature reporting on clinical interventions with ESA victims, the above observations underscore the need for working with the entire family system (Barnes Reyman, 1990; Haase et al., 1990; McLeer & Rose, 1992; Regehr, 1990;). Especially important is empowerment of parents because they are the primary support systems for their children, and their reactions to the disclosure can significantly affect the child's interpretation of the abusive experience. The parents, as well as professionals, can be most instrumental in communicating proper attributions of blame and guilt for the abuse.

Limitations of the Study and Directions for Future Research

Three major limitations of the current investigation that merit consideration are: measurement, selection of the comparison group, and timing of the follow-up assessment. Typically, measurement is difficult in the area of child sexual abuse, and poses particular difficulties in prospective longitudinal research (Conte & Schuerman, 1987a). Several studies have emerged which have consistently revealed that sexually abused children exhibit age inappropriate sexualized behaviors (e.g., Kolko, Moser & Weldy, 1988; Sansonnet-Hayden et

al., 1987; White, Halpin, Strom & Santilli, 1988). Some researchers found that the inappropriate sexual conduct not only discriminated between sexually abused and non-abused children, but was the only behavioral pattern which differentiated between clinical samples of sexually abused and non-abused children (Deblinger et al., 1989; Goldston et al., 1989). The present study did not assess sexualized behaviors although it is highly possible that victims of ESA would also exhibit impaired functioning within this domain.

To date, research investigating sexualized behaviors has used predominantly the Sex Behavior subscale of the CBCL (Achenbach & Edelbrock, 1983). However, as indicated by Friedrich (1993), this scale is not appropriate because it is not scored uniformly across gender and age, and does not include all relevant items of the checklist. A recent instrument, the Child Sexual Behavior Inventory (Friedrich, Grambsch, Broughton, Kuiper & Bellke, 1991), might prove particularly useful in further research.

The present study assessed social functioning of the children using exclusively the self-report measures with no significant differences emerging between the sexually abused and non-abused groups. Because it is possible that self-reports of social assertiveness might have been influenced by the children's own ability to disclose the abuse, it would be most beneficial to adapt other measures of social functioning. For example, the Social Competency subscale of the parent and teacher forms of the CBCL (Achenbach & Edelbrock, 1983) could be used to tap another dimension of social competency.

To date, clinical reports clearly indicate that children's functioning following the disclosure of ESA is highly influenced by their perceptions of family supports (McLeer & Rose, 1992; Pelletier & Handy, 1986; Rayman, 1990; Roesler, Savin & Grosz, 1993). For example, Regehr (1990) states: "The ability of a child to adjust to a sexual assault

experience is profoundly affected by the response of adults to the event. This includes social workers, law enforcement personnel, medical personnel, and most significantly, the parents" (p.117). Furthermore, family variables were postulated as the most important factors in predicting children's immediate and long-term reactions (Conte & Schuerman, 1987a; Friedrich et al., 1987). Despite the paramount importance of these variables, the literature does not present uniform and standardized measurements. In the preliminary stages of the present study, attempts were made to construct a scale which would reliably assess the children's perceptions of familial and environmental supports. For this purpose, the Parent Impact Questionnaire, developed by Wolfe and Wolfe (1987), was adapted. The children were asked four questions that assessed specifically: (1) the children's perception that the parents believed their story, (2) the extent of parental blame placed on the perpetrator for the abuse, (3) the extent of parental blame placed on the child for the abuse, and (4) the children's believes that the parents did not protect them from the abuse. In addition, the children answered three questions related to their perceptions of supports received for the Children's Aid Society, police and Crown Attorney, and physicians.

Two general scores were obtained reflecting parental and environmental support. All questions were scored on a five-point scale with higher scores reflecting greater support. Internal consistencies of these two scales proved to be very low, therefore, the results could not be used in the analyses. Overcoming this measurement difficulty is one of the most prominent challenges in the area, however, the investigation of support variables in future research appears to hold much promise. This study used the Negative Reactions subscale of the CITES (Wolfe et al., 1986b) and the results indicated that most of the children perceived their environment as extremely supportive, however, the scale only included items

related to the children's perceptions of the external and not the familial supports. Knowing the children's perceptions of supports available within the family might greatly enhance our predictions of their functioning.

Another measurement difficulty encountered in this study relates to the assessment of a total family stress. The results of the regression analyses revealed that this variable was not predictive of the children's emotional and behavioral functioning as reported by themselves, parents and teachers. The Total score, which was a sum of all reported stressors, was used and two potential problems are recognized. First, the score did not distinguish between stressors related specifically to the sexual abuse and, in addition, some of the questions included items which might have been endorsed by parents, which, however, were not perceived by them as stressful. Differentiating between stressors related specifically to the abuse and those which are likely to be present in families without a sexually abused child, seems to be particularly important for future work. Furthermore, incorporating a scale which assesses the presence of stressors as well as their intensity is most likely to provide a more accurate description of the families.

The last measurement problem relates specifically to the assessment of the child-perpetrator relationship. This study classified these relationships into four mutually exclusive categories based on the level of intimacy. However, the intimacy was not assessed directly and was judged according to the information available from the referring agencies. As with any data gathered from the records, the validity of these reports has to be viewed cautiously. In future research, a consideration of both, the agency information and the child and/or parent reports, is likely to provide a more accurate measure of emotional distance between the child and perpetrator.

A second limitation of the study relates to the selection of the comparison group. As already indicated in the Characteristics of the Sample section, the comparison group in this study had a much higher socioeconomic status than the sexually abused group. It is highly plausible that the economic situation of these families facilitated their decision to participate. Although an adequate number of families was recruited, the process was extremely difficult. Initial screening by the family doctors eliminated approximately 43% of potential participants, and 63% either did not agree to participate, did not answer to the initial letter, or could not be located. Particularly challenging was the selection of single parent families. In view of these difficulties substantial resources had to be allocated to the recruitment and this is consistent with other reports in literature (Conte & Schuerman, 1987b). Furthermore, as pointed by Conte and Schuerman (1987b), having an additional comparison group of children who experienced other type of trauma would have been beneficial in testing the differential impact of sexual abuse.

Finally, the results did not reveal substantial changes in the children's emotional and behavioral functioning from the initial assessment at three months post disclosure to their functioning six months after the abuse. The self-reports of fears were the only exception. The lack of significant changes did not support the initial prediction that the impact of ESA would abate significantly by the follow-up assessment. Incorporating longer follow-up assessments would allow the monitoring of changes over an extended period of time, and the group differences revealed in this study might no longer be present.

Conclusions

The current investigation provides clear empirical evidence that children who

experienced sexual victimization by someone outside the family do exhibit emotional and behavioral difficulties as compared to non-abused children. These problems are not only prevalent shortly after the disclosure, but tend to persist over the first six months following the revelation of sexual abuse. Indicators of impaired functioning were present on a number of self-, parent-, and teacher-report measures. When compared to non-abused children, the sexually abused children reported higher depressive symptomatology, were more fearful, and most likely had lower self-concept, higher anxiety and more abuse related fears. Their parents perceived them as exhibiting more externalizing and internalizing behaviors, and the teachers saw them as having more externalizing problems.

A conceptual model proposed by Moore Newberger and De Vos (1988) guided this research and proved valuable in investigating the impact of ESA. Especially important was the distinction between the first and second order events which led to investigate both, the subjective and the objective aspects of sexual abuse. The most revealing findings suggest that the evaluation of children's own perceptions of trauma is an important variable in predicting their immediate and long-term adjustment. Considering the scarcity of current research which explores subjective variables, the present results have to be viewed as preliminary, and at best, as providing some direction for future research with considerations for the child's perceptions of the familial and environmental supports, the extent of perceived traumatization and the scope of perceived blame and guilt for the abuse.

The model also accounts for the variables present prior to the abuse which might be important determinants of the psychological functioning. One of these variables, not investigated in this study, was age. The preliminary analyses did not indicate any age differences within this sample, however, a consideration of developmental changes and

adaptations seems to be of a paramount importance in the sexual abuse research. The children can be affected by sexual abuse differently because their developmental level gives them different understanding of sexual acts. Research conducted within this perspective (Downs, 1993) would be most revealing if the developmental and life transitions were assessed in a consistent manner.

The present study showed that the time of disclosure is a valid starting point in the evaluation of the impact of abuse, provided that the termination of the abuse is controlled for. The time of disclosure is a much easier identifiable time reference because it is not dependent on the child's memory for the timing of events. This identification might be specially problematic for young children because their perceptions of time are often distorted (Wagner, 1991).

The model also provided a conceptual framework for the assessment of changes events occurring between the assessments. The important factors included the children's involvement in court proceedings and their involvement with mental health professionals. Although with respect to therapeutic interventions, parental and child involvements were monitored, court involvements were only assessed for the children. Considering the importance of evaluating sexually abused children within their family context, it is apparent that the involvement of all family members should be considered.

To date, the emotional and behavioral functioning of children abused by the extrafamilial perpetrator is most comprehensively assessed from different perspectives. The present investigation clearly indicated that the use of all three sources, self-, parent- and teacher-reports, are helpful in addressing the differences between sexually abused and non-abused children. Furthermore, the results indicated that boys are as affected by the

extrafamilial abuse as are girls, and should not be excluded from future empirical investigations on the impact of ESA. To help these children to overcome negative effects, more resources are needed, and the family treatment approach is recommended. The creation of familial and environmental supports and protection is crucial for a successful recovery from the extrafamilial sexual molestation.

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Appendix A

Information Letter for Case Families

PARENT AND CHILD REACTIONS TO EXTRAfamilial SEXUAL ABUSE

We know that having a child who has been sexually abused is a very sensitive matter. From working with families where there has been sexual abuse of children we recognize that there are a variety of reactions to such an event. In order to be more helpful to parents and children we need to better understand their reactions.

To accomplish this, we are conducting a study to learn more about the specific effects of child sexual abuse on children and their parents. We are interested in families with a child who has been sexually abused by someone outside of the family.

This study is being directed by Dr. I. Manion of the Department of Psychology at the Children's Hospital of Eastern Ontario and Dr. P. Firestone of the Child Study Centre at the University of Ottawa in conjunction with the Child Protection Team at the Children's Hospital of Eastern Ontario, the Ottawa-Carleton Children's Aid Society, and the Victim/Witness Program of the Ottawa-Carleton Crown Attorney's office.

We are interested, more specifically, in seeing how sexual abuse affects the emotions and behaviours of children and their parents. If you agree to participate, two team members from the study will visit you at your home or, if you prefer, the appointment will be made at CHEO at our expense at a time convenient to you. One team member will work with the child while the other will work with the parents. We will also ask your permission to allow your child's teacher to fill out a behaviour checklist similar to the one we will be using with you. The teachers will not have any knowledge that your child has been sexually abused. Families will be asked standard questions about their feelings and how they are managing this experience.

Each participating family will be visited: 1) within the first three months of the disclosure of sexual abuse; and 2) 6 months after the disclosure. Each visit will take approximately two and a half hours of your time.

You have been contacted through your involvement with the collaborating agencies, however, your participation in the study is fully voluntary and will in no way affect any services from these agencies. Since several agencies are involved in this project, you may have already received an invitation to participate. If this has happened, we apologize for any inconvenience this may have caused you. If you agree to participate, you are free to withdraw from the study at any time. Your participation will provide valuable information concerning the needs of families where sexual abuse has occurred. All gathered information will be confidential. If you have any concerns or questions, they can be directed to Dr. Manion by calling the Department of Psychology at 737-2492.

If you are interested in participating and would like to be contacted by a member of our team, please complete the attached form and return it in the envelope provided. If not, please indicate so, and return your reply in the envelope provided. If we have not heard from you in two weeks, we will be contacting you by phone regarding your decision. Thank you.

I AM INTERESTED IN RECEIVING MORE INFORMATION:

YES NO

Name of the Child:

Date of Birth:

Name of the Parent:

Date

Parent's Signature:

Telephone: (Home)

(Office)

Please indicate if you are a single or two parent family:

Single

Two parent

THANK YOU

Appendix B

Letter to the Physicians

Dr. _____

Date: _____

Dear Dr. _____,

We are looking for families with children who have not experienced sexual abuse to serve as a comparison group with families whose children have been sexually abused by someone outside the family.

Potential comparison families have been selected from the medical records of the Children's Hospital of Eastern Ontario. We are seeking your permission to contact the family of..... (date of birth:.....). This family has been selected from the records in order to match the case subjects according to the age and gender of the child as well as the socioeconomic and marital status of the parents. Further selection criteria are enclosed.

The investigation is being directed by Drs. I. Manion of the Department of Psychology at the Children's Hospital of Eastern Ontario and Dr. P. Firestone of the Child Study Centre at the University of Ottawa in conjunction with the Child Protection Team at the Children's Hospital of Eastern Ontario, the Children's Aid Society of Ottawa-Carleton, and the Victim/Witness Program of the Crown Attorney's office. Having a group of families that have not experienced the sexual abuse of a child will help us understand better how abused children and their families differ from those who have not experienced such abuse. Considering the strikingly high prevalence of extrafamilial abuse and the seriousness of its consequences, the participation of this family will not only enhance our knowledge of the subsequent reactions but will also help to develop much needed early intervention programs. The study involves the assessment of typical emotional and behavioral functioning of children and their parents.

The family's participation in the project is fully voluntary. They are free to withdraw from the study at any time. All the information contained in the study will be confidential. If you have any concerns or questions, they can be directed to Dr. Ian Manion by calling the Department of Psychology at 737-2492.

Please complete the attached form in order to let us know whether or not we may contact this family.

YES I give my permission to contact this family

NO I do not give my permission to contact this family

Name of the Child:

Date of birth:

Name of the Parent(s):

Date:

Physician's Signature:

- THANK YOU -

Parental and Child Reactions to Extrafamilial Sexual Abuse

Selection Criteria for Comparison Families:

Comparison subjects will be selected according to the following criteria:

1. The child has never experienced any form of sexual abuse as reported by parents and/or child.
2. The child is living with at least one parent, step-parent, or foster parent who has functioned in the primary caretaker role for at least six months.
3. The child is English speaking and has an estimated IQ of 80 or above.
4. The parent has a minimum of grade six education.
5. Parents of a child who is institutionalized, has a major handicap (e.g., blindness), end-stage renal disease, terminal illness or major motor deficits will be excluded.

Appendix C

Information Letter for Comparison Families

PARENT AND CHILD REACTIONS TO EXTRAfamilial SEXUAL ABUSE

We are looking for families with children who have not experienced sexual abuse to serve as a comparison group with families whose children have been sexually abused by someone outside the family. Your family was drawn from the medical records at CHEO matching according to the date of birth and gender of the sexually abused child. The family physician was then contacted and permission to contact you was obtained. This is a common way of recruiting families.

This study is being directed by Dr. I. Manion of the Department of Psychology at the Children's Hospital of Eastern Ontario and Dr. P. Firestone of the Child Study Centre at the University of Ottawa in conjunction with the Child Protection Team at the Children's Hospital of Eastern Ontario, the Children's Aid Society of Ottawa-Carleton, and the Victim/Witness Program of the Ottawa-Carleton Crown Attorney's office.

Having a group of families that have not experienced the sexual abuse of a child will help us understand better how abused children and their families differ from those who have not experienced such abuse. Considering the strikingly high prevalence of extrafamilial abuse and the seriousness of its consequences, your participation will not only enhance our knowledge of the subsequent reactions but will also help to develop much needed early intervention programs.

The study involves the assessment of typical emotions and behaviours of children and their parents. If you agree to participate, two team members from the study will visit you at your home, or if you prefer, the appointment will be made at CHEO at our expense at a time convenient to you. One team member will work with the child while the other will work with the parents. We will also ask your permission to allow your child's teacher to fill out a behaviour checklist similar to the one we will be using with you.

For each participating family, the initial assessment will be followed by one more visit at approximately 3 months later. Each visit will take about 90 minutes of your time.

If you agree to participate, you are free to withdraw from the study at any time. All gathered information will be confidential. If you have any concerns or questions, they can be directed to Dr. Ian Manion by calling the Department of Psychology at 737-2492.

If you are interested in participating and would like to be contacted by a member of our team, please complete the attached form and return it in the envelope provided. If not, please indicate so, and return your reply in the envelope provided. If we have not heard from you in two weeks, we will be contacting you by phone regarding your decision. Thank you.

I AM INTERESTED IN RECEIVING MORE INFORMATION: .

YES NO

Name of the Child:

Date of Birth:

Name of the Parent:

Date

Parent's Signature:

Telephone: (Home)

(Office)

Please indicate if you are a single or two parent family:

Single

Two parent

T H A N K Y O U

Appendix D

Informed Consent for Case Families

PARENT AND CHILD REACTIONS TO EXTRAFAMILIAL SEXUAL ABUSE

In order to be more helpful to families where there has been sexual abuse of children we are conducting a study to learn more about the specific effects of child sexual abuse on children and their parents. We are interested in families with a child who has been sexually abused by someone outside of the family.

This study is being directed by Dr. I. Manion of the Department of Psychology at the Children's Hospital of Eastern Ontario and Dr. P. Firestone of the Child Study Centre at the University of Ottawa in conjunction with the Child Protection Team at the Children's Hospital of Eastern Ontario, the Ottawa-Carleton Children's Aid Society, and the Victim/Witness Program of the Ottawa-Carleton Crown Attorney's office.

We are interested in seeing how sexual abuse affects the emotions and behaviours of children and their parents. Two team members will visit you at your home or, if you prefer, the appointment will be made at CHEO at our expense at a time convenient to you. One team member will work with the child while the other will work with the parents. We will also ask your permission to allow your child's teacher to fill out a behaviour checklist similar to the one we will be using with you. The teachers will not have any knowledge that your child has been sexually abused. Families will be asked standard questions about their feelings and how they are managing this experience.

Each participating family will be visited: 1) within the first three months of the disclosure of sexual abuse; and 2) 6 months after the disclosure. Each visit will take approximately 2 1/2 hours.

Your participation in the study is fully voluntary and will in no way affect any services from the agencies involved with you. You are free to withdraw from the study at any time. All gathered information will be confidential. If you have any concerns or questions, they can be directed to Dr. Manion by calling the Department of Psychology at 737-2492.

Name of Child..... Name of Parent.....

I have been informed and agree to participate in this investigation. I have discussed the nature of the study with my child and believe that she/he has understood and is participating voluntarily.

Date..... Parent's Signature.....

Witness..... Relationship to Child.....

Appendix E

Informed Consent for Comparison Families**PARENT AND CHILD REACTIONS TO EXTRAfamilial SEXUAL ABUSE**

Your family is participating as a comparison group in our study of families where there has been sexual abuse of the child by someone outside the family.

This study is being directed by Dr. I. Manion of the Department of Psychology at the Children's Hospital of Eastern Ontario and Dr. P. Firestone of the Child Study Centre at the University of Ottawa in conjunction with the Child Protection Team at the Children's Hospital of Eastern Ontario, the Children's Aid Society of Ottawa-Carleton, and the Victim/Witness Program of the Ottawa-Carleton Crown Attorney's office.

Having a group of families that have not experienced the sexual abuse of a child will help us understand better how abused children and their families differ from those who have not experienced such abuse.

The study involves the assessment of typical emotions and behaviours of children and their parents. Two team members from the study will visit you at your home, or if you prefer, the appointment will be made at CHEO at our expense at a time convenient to you. One team member will work with the child while the other will work with the parents. We will also ask your permission to allow your child's teacher to fill out a behaviour checklist similar to the one we will be using with you.

For each participating family, the initial assessment will be followed by one more visit at approximately 3 months later. Each visit will take about 90 minutes of your time.

We understand that your participation in the project is fully voluntary. You are free to withdraw from the study at any time. All the information contained in the study will be confidential. If you have any concerns or questions, they can be directed to Dr. Ian Manion by calling the Department of Psychology at 737-2492.

Name of Child..... Name of Parent.....

I have been informed and agree to participate in this investigation. I have discussed the nature of the study with my child and believe that he/she has understood and is participating voluntarily.

Date..... Parent's Signature.....

Witness..... Relationship to Child.....

Appendix F

Child Information and Consent Form

The following information should be given to each child prior to the administration of tests:

"As you might already know, we are interested in finding more about you and your family.

My name is
Name of investigator working with the child

and I will be working with you in the other room, while
Name of investigator working with the parent(s)

will work with your parent(s). I will be asking you different questions about school, friends, feelings and so on. Our talk and all the information that you tell me will stay only between the two of us and I will ask your parent(s) not to even ask you what we were talking about. If there are any questions you do not want to answer just tell me and we will stop. As I said, I will not tell your parent(s) about our talk, except if you tell me something that makes me worry about you. Then, I will have to talk to your parent(s), is this okay ? "

Child's Name

Signature (if age 7 or older)

I have explained the study to the child and believe he/she has understood and is participating voluntarily.

Signature

Date

Appendix G

Consent for Teacher's Evaluation

I
Name of Parent

give my permission for
Name of the teacher

of
Name of the School

to complete the Child Behaviour Checklist on my child
Name of the Child

I understand that the results of this evaluation are strictly confidential and will not become a
part of school records.

Signature

Date

Witness

Signature

Date

-THANK YOU-

Appendix H

Information Letter for the Teachers

Date:

Name of the child

Date of birth

Dear
Name of teacher

Please find enclosed a consent form for information pertaining to:

.....
Name of the Child

As part of our ongoing work with families at the Children's Hospital of Eastern Ontario we are asking you to complete the enclosed questionnaire, the Child Behaviour Checklist. The child's parent(s) have consented to participate in the project. It is important to stress that your contribution plays a key role in the research design. Because of your opportunity to observe the child on a regular basis your information will provide a valuable, objective assessment of this child. You may return the completed questionnaire to us by mail using the enclosed stamped and self addressed envelope.

Should you require any further assistance, you may contact Dr. I. Manion at 737-2492.

Appendix I

Depression Self-Rating Scale for Children
(Birleson, 1981)

Instructions: Please answer as honestly as you can. The statements refer to how you have felt over the past week. There are no right answers, it is important to say how you have felt. Thank you.

	Most	Sometimes	Never
1. I look forward to things as much as I used to			
2. I sleep very well			
3. I feel like crying			
4. I like to go out and play			
5. I feel like running away			
6. I get tummy aches			
7. I have lots of energy			
8. I enjoy my food			
9. I can stick up for myself			
10. I think life isn't worth living			
11. I am good at things I do			
12. I enjoy the things I do as much as I used to			
13. I like talking with my family			
14. I have horrible dreams			
15. I feel very lonely			
16. I am easily cheered up			
17. I feel so sad I can hardly stand it			
18. I feel very bored			

Appendix J

Children's Self-Efficacy for Peer Interaction Scale
(Wheeler & Ladd, 1982)

Instructions: For each item, please circle the word that is most like you.

1. Some kids want to play a game. Asking them if you can play is:
HARD! hard easy ! for you.
2. Some kids are arguing about how to play a game. Telling them the rules is:
HARD! hard easy ! for you.
3. Some kids are teasing your friend. Telling them to stop is:
HARD! hard easy ! for you.
4. You want to start a game. Asking other kids to play the game is:
HARD! hard easy ! for you.
5. A kid tries to take your turn during a game. Telling the kid it's your turn is:
HARD! hard easy ! for you.
6. Some kids are going to lunch. Asking if you can sit with them is:
HARD! hard easy! for you.
7. A kid cuts in front of you in line. Telling the kid not to cut in is:
HARD! hard easy ! for you.
8. A kid wants to do something that will get you in trouble. Asking the kid to do something else is:
HARD! hard easy! for you.
9. Some kids are making fun of someone in your classroom. Telling them to stop is:
HARD! hard easy ! for you.
10. Some kids need more people to be on their teams. Asking to be on a team is:
HARD! hard easy ! for you.
11. You have to carry some things home after school. Asking another kid to help you is:
HARD! hard easy ! for you.

12. A kid always wants to be first when you play a game. Telling the kid you are going first is:

HARD! hard easy ! for you.

13. Your class is going on a trip and everyone needs a partner. Asking someone to be your partner is:

HARD! hard easy ! for you.

14. A kid does not like your friend. Telling the kid to be nice to your friend is:

HARD! hard easy ! for you.

15. Some kids are deciding what game to play. Telling them about a game you like is:

HARD! hard easy ! for you.

16. You are having fun playing a game but the other kids want to stop. Asking them to finish playing is:

HARD! hard easy ! for you.

17. You are working on a project. Asking another kid to help is:

HARD! hard easy ! for you.

18. Some kids are using your play area. Asking them to move is:

HARD! hard easy ! for you.

19. Some kids are deciding what to do after school. Telling them what you want to do is:

HARD! hard easy ! for you.

20. A group of kids wants to play a game that you don't like. Asking them to play a game you like is:

HARD! hard easy! for you.

21. Some kids are planning a party. Asking them to invite your friend is:

HARD! hard easy ! for you.

22. A kid is yelling at you. Telling the kid to stop is:

HARD! hard easy ! for you.

Appendix K

Adolescent Social Self-Efficacy Scale
(Connolly, 1988)

Instructions: Please indicate on a scale from 1 to 7 how hard or easy it is for you to do the following activities.

1. Start a conversation with a boy or girl who you don't know very well.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

2. Express your opinion to a group of kids discussing a subject which is of interest to you.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

3. Join a group of kids in the school cafeteria for lunch.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

4. Work on a project with a student you don't know very well.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

5. Help make a new student feel comfortable with your group of friends.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

6. Share with a group of kids an interesting experience you once had.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

7. Put yourself in a new and different social situation.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

8. Volunteer to help organize a school dance.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

9. Ask a group of kids who are planning to go to a movie if you can join them.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

10. Stand up for rights when someone accuses you of doing something you didn't do.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

11. Get invited to a party that's being given by one of the most popular kids in the class.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

12. Keep up your side of the conversation.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

13. Be involved in group activities.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

14. Find someone to spend recess with.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

15. Wear the kind of clothes you like even if they are different from what others wear.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

16. In a line-up, tell a student who pushes in front of you to wait his or her turn.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

17. Stand up for yourself when another kid in your class makes fun of you.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

18. Help a student who is visiting your school for a short time to have an interesting experience.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

19. Join a school club or sports team.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

20. Express your feelings to another kid.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

21. Ask someone over to your house on a Saturday.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

22. Ask someone to go to a school dance or movie with you.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

23. Go to a party where you are sure you won't know any of the kids.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

24. Ask another student for help when you need it.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

25. Make friends with kids your age.

1	2	3	4	5	6	7
impossible to do				extremely easy to do		

Appendix L

Children's Impact of Traumatic Events Scale
(Wolfe, Wolfe, Gentile & LaRose, 1986b)

To the examiner: Prior to presenting this questionnaire, read the following instructions to the child:

"I am going to ask you several questions about what happened between you and (perpetrator). I am NOT going to ask you to describe what happened, instead, I want to know YOUR thoughts and feelings about what happened. I will read a sentence and you can tell me whether or not it is very true, somewhat true, or not true. There are no right or wrong answers to the questions I will be asking. Some of the questions may cause you to remember things that were unpleasant. If you feel very uncomfortable answering any question, let me know, and I can move on to another question."

IT ____ A ____ NR ____ SB ____ DW ____

E ____ PV ____ SS ____ SA ____ ERO ____

TOTAL ____

VERY TRUE	SOMEWHAT TRUE	NOT TRUE
--------------	------------------	-------------

1. Things like this WILL NOT happen again. (PV)
2. Some people believe that I did a very bad thing. (NR)
3. I try to stay away from things that remind me of what happened. (A)
4. People who know what happened to me think bad thoughts about me. (NR)
5. Some people blame me for what happened. (NR)

- | | VERY
TRUE | SOMEWHAT
TRUE | NOT
TRUE | |
|--|--------------|------------------|-------------|------|
| 6. I have trouble falling asleep because pictures or thoughts of what happened keep popping into my head. | | | | (IT) |
| 7. I dislike or feel uncomfortable spending time alone with older boys or men. | | | | (PV) |
| 8. If adults bother me, I can stop them. | | | | (E) |
| 9. I DON'T trust people the way I used to. | | | | (PV) |
| 10. I have dreams or nightmares about what happened. | | | | (IT) |
| 11. This happened to me because I was too young to do anything about it. | | | | (SB) |
| 12. Bad things happen to me all the time. | | | | |
| 13. After people learned about what happened, they no longer wanted to spend time with me. | | | | (NR) |
| 14. Something like this might happen to me again. | | | | (PV) |
| 15. I was to blame for what happened. | | | | (SB) |
| 16. People often take advantage of children. | | | | (DW) |
| 17. These kinds of things happen to a lot of children. | | | | (DW) |
| 18. I think about what happened to me even when I don't want to. | | | | (IT) |
| 19. I was not to blame for what happened. | | | | (SB) |
| 20. This happened to me because I acted in a way that caused it to happen. | | | | (SB) |
| 21. Pictures of what happened often pop into my mind. | | | | (IT) |

- | | VERY
TRUE | SOMEWHAT
TRUE | NOT
TRUE | |
|---|--------------|------------------|-------------|-------|
| 22. I DON'T have much to say about things
that happen to me. | | | | |
| 23. Adults often take advantage of me. | | | | |
| 24. Things in my life will get better | | | | (PV) |
| 25. These kinds of things happen often. | | | | |
| 26. Some kids in school make fun of me
because of what happened. | | | | (NR) |
| 27. Most people who know about what
happened are nice and understanding. | | | | (SS) |
| 28. I feel I have caused trouble to my
family. | | | | (SB) |
| 29. Some people think I am lying about
what happened. | | | | (NR) |
| 30. This happened to me because I was not
smart enough to stop it from happening. | | | | (SB) |
| 31. I try not to think about what happened. | | | | (A) |
| 32. Things like this happen to only a few
children. | | | | |
| 33. Most people believe me when I talk
about what happened. | | | | (SS) |
| 34. I think about sex even when I don't
want to. | | | | (ERO) |
| 35. Kids in school treat me the same as
before this happened to me. | | | | |
| 36. This happened to me because I was
bad and needed to be punished. | | | | (SB) |
| 37. I am embarrassed when I see people
who know what happened. | | | | (SB) |

- | | VERY
TRUE | SOMEWHAT
TRUE | NOT
TRUE | |
|--|--------------|------------------|-------------|-------|
| 38. There are many people who do bad things to children.(. | | | | (DW) |
| 39. I feel I have caused problems for many people. | | | | (SB) |
| 40. I feel guilty about what happened. | | | | (SB) |
| 41. Thinking about sex upsets me. | | | | (SA) |
| 42. This happened to me because I always have bad luck. | | | | (SB) |
| 43. I get frightened when I think about sex. | | | | (SA) |
| 44. As a result of what happened, people who used to care about me no longer do. | | | | (NR) |
| 45. I have more sexual feelings than my friends. | | | | (ERO) |
| 46. (Perpetrator) was to blame for what happened. | | | | (SB) |
| 47. If something like this happen again, I CAN stop it. | | | | (E) |
| 48. I sometime want to cry when I think of what happened. | | | | (IT) |
| 49. Some people think that I was to blame for what happened. | | | | (NR) |
| 50. No matter what I do, I CAN'T stop such things from happening. | | | | (PV) |
| 51. If something like this happens again, I think I KNOW what to do to stop it. | | | | (E) |
| 52. People who I trusted let me down. | | | | (NR) |
| 53. Many things remind me of what happened. | | | | (IT) |
| 54. I feel I should be punished for what I did. | | | | (SB) |

Appendix M

Fear Survey Schedule for Children - Revised and The Sexual Abuse Fear Evaluation Scale
(Ollendick, 1983; Wolfe & Wolfe, 1986)

A number of statements that boys and girls use to describe the fears they have are given below. Read each fear carefully and put an "X" in the box in front of the words that describe your fear. There are no right or wrong answers. Remember, find the words that best describe how much fear you have.

- | | | | |
|--|-------------------------------|-------------------------------|--------------------------------|
| 1. Giving an oral report | ☐ None | ☐ Some | ☐ A lot |
| 2. Riding in the car | ☐ None | ☐ Some | ☐ A lot |
| 3. Being alone on a playground | ☐ None | ☐ Some | ☐ A lot |
| 4. Getting punished by Mom | ☐ None | ☐ Some | ☐ A lot |
| 5. Lizards | ☐ None | ☐ Some | ☐ A lot |
| 6. Looking foolish | ☐ None | ☐ Some | ☐ A lot |
| 7. People who seem crazy | ☐ None | ☐ Some | ☐ A lot |
| 8. Ghosts or spooky things | ☐ None | ☐ Some | ☐ A lot |
| 9. Sharp objects | ☐ None | ☐ Some | ☐ A lot |
| 10. Speaking to police | ☐ None | ☐ Some | ☐ A lot |
| 11. Having to go to the hospital | ☐ None | ☐ Some | ☐ A lot |
| 12. Death or dead people | ☐ None | ☐ Some | ☐ A lot |
| 13. Mean looking people | ☐ None | ☐ Some | ☐ A lot |
| 14. Getting lost in a strange place | ☐ None | ☐ Some | ☐ A lot |
| 15. Talking or thinking about sex | ☐ None | ☐ Some | ☐ A lot |
| 16. Talking on the telephone | ☐ None | ☐ Some | ☐ A lot |
| 17. Roller coaster or carnival ride | ☐ None | ☐ Some | ☐ A lot |
| 18. Getting sick at school | ☐ None | ☐ Some | ☐ A lot |
| 19. Being sent to the principal | ☐ None | ☐ Some | ☐ A lot |
| 20. Watching people kiss on TV | ☐ None | ☐ Some | ☐ A lot |
| 21. Snakes | ☐ None | ☐ Some | ☐ A lot |
| 22. Being left at home with a sitter | ☐ None | ☐ Some | ☐ A lot |
| 23. Riding on a train | ☐ None | ☐ Some | ☐ A lot |
| 24. Bears or wolves | ☐ None | ☐ Some | ☐ A lot |
| 25. Meeting someone for the first time | ☐ None | ☐ Some | ☐ A lot |

26. Bombing attacks -- being invaded	___	None	___	Some	___	A lot
27. Someone kissing or hugging me	___	None	___	Some	___	A lot
28. Getting a shot from the doctor	___	None	___	Some	___	A lot
29. Going to the dentist	___	None	___	Some	___	A lot
30. High places	___	None	___	Some	___	A lot
31. Being teased	___	None	___	Some	___	A lot
32. Naked people	___	None	___	Some	___	A lot
33. Fire -- getting burned	___	None	___	Some	___	A lot
34. A burglar breaking into our house	___	None	___	Some	___	A lot
35. Flying in a plane	___	None	___	Some	___	A lot
36. Being called on by a teacher	___	None	___	Some	___	A lot
37. Getting poor grades	___	None	___	Some	___	A lot
38. Taking my clothes off	___	None	___	Some	___	A lot
39. Bats or birds	___	None	___	Some	___	A lot
40. My parents criticizing me	___	None	___	Some	___	A lot
41. Guns	___	None	___	Some	___	A lot
42. Being in a fight	___	None	___	Some	___	A lot
43. Doing something that is nasty	___	None	___	Some	___	A lot
44. Getting a cut or an injury	___	None	___	Some	___	A lot
45. Being in a big crowd	___	None	___	Some	___	A lot
46. Being tickled	___	None	___	Some	___	A lot
47. People not believing me	___	None	___	Some	___	A lot
48. Thunderstorms	___	None	___	Some	___	A lot
49. Having to eat foods I don't like	___	None	___	Some	___	A lot
50. Having older boys or men look after me alone	___	None	___	Some	___	A lot
51. Cats	___	None	___	Some	___	A lot
52. Failing a test	___	None	___	Some	___	A lot
53. Being hit by a car or truck	___	None	___	Some	___	A lot

54. Having to go to school	___	None	___	Some	___	A lot
55. Playing rough games	___	None	___	Some	___	A lot
56. Having my parents argue	___	None	___	Some	___	A lot
57. Dark rooms or closets	___	None	___	Some	___	A lot
58. Having to put on a recital	___	None	___	Some	___	A lot
59. Ants and beetles	___	None	___	Some	___	A lot
60. Being alone	___	None	___	Some	___	A lot
61. Being criticized by others	___	None	___	Some	___	A lot
62. Strange looking people	___	None	___	Some	___	A lot
63. Going to the doctor	___	None	___	Some	___	A lot
64. Taking a bath	___	None	___	Some	___	A lot
65. Strange or mean-looking dogs	___	None	___	Some	___	A lot
66. Cemeteries	___	None	___	Some	___	A lot
67. Getting a report card	___	None	___	Some	___	A lot
68. Getting a haircut	___	None	___	Some	___	A lot
69. Sleeping alone	___	None	___	Some	___	A lot
70. Deep water or the ocean	___	None	___	Some	___	A lot
71. Nightmares	___	None	___	Some	___	A lot
72. Telling on someone for bothering me	___	None	___	Some	___	A lot
73. Falling from high places	___	None	___	Some	___	A lot
74. Getting a shock from electricity	___	None	___	Some	___	A lot
75. Saying "no" to an adult	___	None	___	Some	___	A lot
76. Going to bed in the dark	___	None	___	Some	___	A lot
77. Mom finding out about something I did	___	None	___	Some	___	A lot
78. Getting car sick	___	None	___	Some	___	A lot
79. Someone in my family getting in bad trouble	___	None	___	Some	___	A lot
80. Having to wear clothes different from others	___	None	___	Some	___	A lot

81. Getting punished by my father	___	None	___	Some	___	A lot
82. Having to stay after school	___	None	___	Some	___	A lot
83. Being lied to by someone I trust	___	None	___	Some	___	A lot
84. Spiders	___	None	___	Some	___	A lot
85. The sight of blood	___	None	___	Some	___	A lot
86. Making mistakes	___	None	___	Some	___	A lot
87. Mystery movie	___	None	___	Some	___	A lot
88. Doing something new	___	None	___	Some	___	A lot
89. Loud sirens	___	None	___	Some	___	A lot
90. Being told to do something I shouldn't do	___	None	___	Some	___	A lot
91. Germs or getting a serious illness	___	None	___	Some	___	A lot
92. Closed places	___	None	___	Some	___	A lot
93. Going to court to talk to a judge	___	None	___	Some	___	A lot
94. Earthquakes	___	None	___	Some	___	A lot
95. Russia	___	None	___	Some	___	A lot
96. Elevators	___	None	___	Some	___	A lot
97. Being blamed unfairly	___	None	___	Some	___	A lot
98. Dark places	___	None	___	Some	___	A lot
99. Being taken away from my parents	___	None	___	Some	___	A lot
100. Not being able to breathe	___	None	___	Some	___	A lot
101. People knowing bad things about me	___	None	___	Some	___	A lot
102. Getting a bee sting	___	None	___	Some	___	A lot
103. Someone getting drunk	___	None	___	Some	___	A lot
104. Worms or snails	___	None	___	Some	___	A lot
105. Mom not at home	___	None	___	Some	___	A lot
106. Rats or mice	___	None	___	Some	___	A lot
107. Taking a test	___	None	___	Some	___	A lot

Appendix N

Demographic Questionnaire

(Adapted from Manion, Keene, McGrath, Goodman, Humphreys & Whiting, 1988)

Child's Name

Child's Sex

Date of Birth

Age

Home Address

.....

.....

Phone Numbers

Home:

Business:

Father

Mother

School (Name and Address):

.....

.....

Father's Name:

Age:

Education:

Occupation:

Mother's Name:

Age:

Education:

Occupation:

Family Income (per year):

Parent's Marital Status: married..... common-law.....
separated..... divorced

Is your child adopted? No..... Yes..... If yes, at what age?.....

Languages spoken most frequently at home.....

Other languages the child can communicate in

Family Household Members by Name, Age, and Relationship to the child:

1)

Name	Age	Relationship
------	-----	--------------

2)

Name	Age	Relationship
------	-----	--------------

3)

Name	Age	Relationship
------	-----	--------------

4)

Name	Age	Relationship
------	-----	--------------

5)

Name	Age	Relationship
------	-----	--------------

Please list any handicaps, medical, or psychological problems experienced by your child:

.....

Please list any services or programs that your child is receiving or involved in other than school:

.....

Please describe any problems or difficulties that you may presently be experiencing with your child:

.....

Please list any handicaps, medical or physical problems experienced by you or your spouse:

.....

Ask the following questions to the comparison group only:

Please indicate whether any of your children have ever been sexually abused: No.... Yes....

If yes, specify when..... by whom.....

Have you ever been sexually abused? No.... Yes.....

If yes, approximate age:..... by whom

Was this disclosed to anyone? No... Yes.....

If yes, to whom

Did you receive treatment? No.... Yes

If yes, by whom

Completed by:..... Date:.....

Relationship to child

Appendix O

Structured Interview Specific to Sexual Abuse - Initial
(Adapted from Bernbaum, 1986 by McIntyre, 1993)

1. Current age of abused child
2. Age of child when abuse occurred
3. Sex of abused child
4. Your relationship to child:
 - biological mother biological father
 - step-mother step-father
 - adoptive mother adoptive father
 - foster mother foster father
5. To whom was the sexual abuse first reported?
 - mother..... - father.....
 - teacher..... - friend.....
 - other (specify).....
6. To whom was the sexual abuse officially reported?
 - police - Children's Aid Society
 - physician - other (specify).....
7. Has the abuse been disclosed to anyone else?
 - siblings - extended family
 - therapist - friends
8. How long after the abuse was the abuse disclosed?
9. Relation of sexual abuser to child:
 - stranger - trusted neighbour
 - friend - relative
 - person in position of authority (teacher, priest, etc.)
10. Do you know the offender personally?

Is the offender in contact with the family now.....
11. Has the offender been charged convicted.....
12. Before the child's victimization, had you ever talked to your child specifically about sexual abuse?

13. Do you feel that your child will have problems in the following areas due to the sexual abuse?

- emotional - school
- social - sexual

14. Have you ever been sexually abused?

If yes, approximate age

Was this disclosed to anyone

If yes, to whom

Did you receive treatment

15. As a result of what happened to your child, how have things changed?

More Strained Same Improved

family life

work

self

relationship with spouse

abused child

your other children

parents

friends

16. Do you feel that you have had the opportunity to express your feelings about the sexual abuse?

.....

If yes, to whom

17. Do you feel "alone" as a parent of a sexually abused child?

18. Do you feel an adequate personal support system exists for this problem?

.....

If yes, who is this support

19. Do you feel an adequate community support system exists for this problem?

.....
If yes, what is it

Have you used it

20. When the sexual abuse was disclosed what were your feelings?

- anger - shock - disbelief
- shame - scared - overwhelmed
- helpless - other(s)

.....

20. What are your feelings now about the sexual abuse?

.....
.....
.....

21. As a parent, do you feel good about the way you have handled the trauma of sexual abuse with:

- yourself - the abused child
- other siblings - significant other

22. Have your parenting strategies changed as a result of the abuse?

.....
If yes, how

23. What do you feel has been the most serious problem for you as a parent of a sexually abused child?

.....
.....
.....
.....

If not otherwise specified, the questions are answered in a YES- NO fashion.

Appendix P

Family Life Stress Form
(Adapted from Abidin, 1983)

During the last 6 months, have any of the following events occurred in your immediate family? Please check below any that have happened.

yes no

1. Divorce
2. Marital reconciliation
3. Marriage
4. Separation
5. Pregnancy
6. Other relative moved into household
7. Income increased substantially (20% or more)
8. Went deeply into debt
9. Moved to a new location
10. Promotion at work
11. Income decreased substantially
12. Alcohol or drug problem
13. Death of close family friend
14. Began new job
15. Entered new school
16. Trouble with superiors at work
17. Trouble with teachers at school
18. Legal problems
19. Death of immediate family member
20. Major illness of child*
21. Sexual abuse of child*
22. Developmental changes in child* (eg. puberty)
23. Psychotherapy*
24. Child court testimony*

* if yes, please specify

Appendix Q

The Nature of Abusive Experience Form
(Adapted from Wolfe, Wolfe, Gentile & Bourdeau, 1986a)

PARENT AND CHILD REACTIONS TO EXTRAFAMILIAL SEXUAL ABUSE

Date: Agency Source: CAS..... VWP..... CHEO.....

Name of the Child:

A. Type of sexual abuse: (complete as many as are pertinent to this case)

1. invitations for child to engage in sexual behaviour
2. exposure of adult genitalia to child
3. child forced to view sexually explicit material
4. child instructed to expose own genitals
5. open-mouthed kissing
6. adult touching of child's clothed body parts with sexual connotation (buttocks, thighs, breasts, genitals)
7. adult fondling of child's genitals (unclothed); child instructed to masturbate adult
8. simulated intercourse (over child's clothed genitals)
9. digital penetration
10. adult oral contact with child's genitals
11. child instructed to have oral contact with adult genitals
12. vaginal intercourse (include unsuccessful attempts)
13. anal intercourse (include unsuccessful attempts)
14. child forced to participate in pornography
15. other (describe):

B. Duration and Frequency of abuse:

Date abuse began

Date abuse ended

Date abuse reported to this agency

If the abuse occurred more than once, complete the following:

Sexual abuse occurred time(s) per (week, month, year)

over (weeks, months, years).

C. Number of perpetrators:

D. Relationship of perpetrator(s) to child:

(1)

(2)

E. Age of perpetrator(s):

(1)

(2)

If unsure, specify:

adult..... or adolescent.....

F. Sex of the perpetrator(s):

(1)

(2)

G. Type of coercion (if known):

___ 1. Status differential (implication that the child should do what older person tells him/her to do)

___ 2. Use of blackmail to gain compliance ("If you don't, I'll tell that you did")

___ 3. Offer of reward or affection in exchange for compliance.

___ 4. Threat of injury of the child, loved one or pet if not compliant.

___ 5. Implicit threat that affection, privilege or other positives will be taken away if not compliant.

___ 6. Use of physical punishment to insure compliance.

___ 7. Threat of death.

___ 8. Other.....

Appendix R

Demographic Information
(for families who refuse to participate)

PARENT AND CHILD REACTIONS TO EXTRAFAMILIAL SEXUAL ABUSE

Date:

Code Number Assigned to Family:

To your knowledge has the family been referred to the CAS ?

Yes No

CHILD

Sex: M F

Date of Birth

Age

FATHER

Age

Education

Occupation

MOTHER

Age

Education

Occupation

Parent's marital status: married..... common-law.....

separated..... divorced.....

Is the child adopted? No..... Yes.....

Language spoken most frequently at home:

Number of children living in the household:

Number of other family members living in the household (not including parents):

- THANK YOU -

Appendix S

Table #9: Demographic and Income Data for Selected Postal Code Areas and FSA's, 1989
(Statistics Canada Advisory Services, 1989)

All taxfilers

Number	2,475
% Change, 1984-89	29
% Female	48
% Married	68

% By age

< 25	15
25 - 44	50
45 - 64	28
> 64	7

% Apartment

x

Taxfilers reporting income

Number	2,475
--------	-------

% With income

> \$ 15,000	70
> \$ 25,000	52
> \$ 35,000	34
> \$ 50,000	16
> \$ 75,000	4
> \$100,000	2

Median total income

Male	32,900
Female	20,000
Both Sexes	26,300
Canadian Index	145
Provincial Index	128
% Change, 1984-89	30

Taxfilers reporting employment income and/or U.I.

Number	2,175
% Female	46
% U.I.	13

Median employment income

Male	31,500
Female	20,700
Both Sexes	25,600

Taxfilers reporting Family Allowance income

Number	600
Dollars (\$ '000)	419