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Secondary Traumatization in Parents Following Child
Disclosures of Extrafamilial Sexual Abuse

By Joanne E. McIntyre
Department of Psychology

A thesis submitted to the School of Graduate Studies
of the University of Ottawa as partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

June 21, 1993

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This thesis is dedicated to all families endeavouring to heal themselves in the face of traumatic stress.

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Abstract

This was a 6-month cohort study of secondary traumatization in parents following child disclosures of extrafamilial sexual abuse. Sixty-one case families (59 mothers, 27 fathers) were matched on child's age, sex, family constellation and occupational status with a normative comparison group of 59 families (58 mothers, 40 fathers) recruited from the local children's hospital. Case parents were recruited from the hospital's Child Protection Team, as well as from regional Children's Aid Societies, and Victim/Witness Programs. Parents were assessed at 3 and 6 months post-disclosure using the Brief Symptom Inventory, the Dyadic Adjustment Scale, the Parent Sense of Competence Scale, the Family Adaptability and Cohesion Evaluation Scales III, the Impact of Event Scale, and the Child Behavior Checklist. Adjustment was conceptualized as being related to 2 sources of trauma: the type of abuse, and the subjective experience of the event (cognitive appraisal, environmental sensitivity, and baseline emotional functioning). Two mediating variables, parent sexual abuse history, and court involvement were examined.

Results indicated a generalized pattern of distress for case mothers. They experienced poorer functioning in all areas except dyadic adjustment relative to comparison mothers at both time periods. Case fathers did not show such distress but had significantly higher levels of parent efficacy relative to the comparison group. Although case parents initially had significantly better dyadic adjustment, case primary caretakers showed a significant deterioration in marital adjustment over

time. Case mothers also experienced significantly higher levels of intrusive and avoidant symptoms and lower parent satisfaction relative to case fathers at both time periods. Although the nature of the sexual abuse was not a significant predictor of parent emotional distress, intrusive symptoms, parenting satisfaction, perceptions of child internalizing problems, quality of social support, and satisfaction with family adaptability were relevant predictors for mothers at 3 months. At 6 months, social support was no longer a significant predictor. No significant differences emerged as a function of court status. Parent and child sexual abuse history were significantly related to clinical risk for parent emotional distress. The clinical and research implications of working with parents following disclosure are discussed; risk groups for secondary traumatization are identified; and revisions to the secondary traumatization model are recommended.

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INTRODUCTION

There is little doubt that the discovery that one's child has been sexually abused can be a major stressor in the lives of that child's parents. Not only must the parents come to terms with the sense that the child has lost his/her sexual innocence, but they are also faced with the worry of emotional scarring of the child. In trying to deal with the aftermath for the child, parents may experience feelings of fear, outrage, anger, guilt, and powerlessness which may leave the victim feeling responsible for the parents' distress and the parents questioning their sense of parental competence (Bernbaum, 1986; Geiser, 1979). Although disclosure may terminate the abuse, it may also result in retaliation, stigmatization and disappointment (Finkelhor, 1987). For the parents of a child sexually abused by someone outside of the family, the crisis appears to begin with the disclosure of the abuse to them (Van Scoyk, Gray, & Jones, 1988). Although the parents may have been sensitive to behavioural changes in the child which led them to suspect abuse, the disclosure appears to create a crisis event for them. Both the nature of disclosure and its context may have an important impact on parent adjustment.

Child and parental responses following the disclosure of intrafamilial sexual abuse have been extensively discussed by clinicians and researchers within a family context. However, few studies have addressed the initial or longterm effects of extrafamilial sexual abuse specifically within this context.

Definitional Issues

Sexual abuse is typically defined as one or more sexual experiences prior to the age of 16 with a person who is at least 5

years older (Russell, 1983). Definitions vary as to the nature of the abusive act. Some researchers separate physical contact from non-contact (Russell, 1983; Wyatt, 1985) whereas others combine the two (Finkelhor, 1979; 1984). Contact sexual abuse typically includes any form of inappropriate sexual touching of a child such as intercourse, oral or anal sex, and fondling of breasts and genitals. It also includes when the child is made to perform such acts on the perpetrator. Non-contact abuse refers to encounters with exhibitionists, sexual solicitations, and the involvement of children in the making or viewing of pornographic materials (Peters, Wyatt, & Finkelhor, 1986).

Implicit in the distinction between contact and non-contact abuse is the assumption that contact abuse is more serious and has a higher potential for leading to adverse consequences. Not all researchers accept this assumption, as variables other than the nature of the abusive incident may affect the severity of trauma for the victim and the family. Controversy also exists regarding whether a five year age difference is a necessary criterion to constitute abuse. The power differential can also be present in sexually abusive incidents occurring between children and in adolescents. Typically, however, abuse by peers and "date rape" have been excluded from studies. Such variations in the definition of sexual abuse present problems in comparing the reported prevalence rates and in interpreting the severity of effects across studies. They also rely on the perceptions of the investigator rather than on the child or parents in defining an incident as abusive, thereby overlooking a potentially important determinant of outcome: how the parents and family members define

the event.

Similar problems exist in defining extrafamilial sexual abuse. Researchers generally agree that such abuse involves a perpetrator unrelated by blood or marriage. There is, however, great inconsistency as to how step-parents, foster-parents, and distant relatives are classified, what age groups are included, and how severe the abuse should be (e.g., Badgley, 1984; Finkelhor, 1979; Russell, 1983).

The definition used for the present study was developed following the recommendations of the reviewers at the National Health Research and Development Program who funded the project. Extrafamilial sexual abuse was defined as one or more sexual experiences prior to age 16 with someone unrelated by blood or marriage (official or common-law), or with a distant relative who was not part of the nuclear family and did not reside in the family's home. Sexual abuse included contact sexual abuse only. As recommended by Finkelhor (1979), neither the child's feelings of victimization, nor the child's consent was used in the criteria for abuse, nor was a five year age difference between the victim and perpetrator required. This definition is consistent with that used by Mannarino, Cohen and Gregor (1989) who studied the functioning of sexually abused children within two weeks of disclosure. Because the focus of the present study was to examine parental adjustment following the disclosure of extrafamilial child sexual abuse, the more inclusive criteria were judged to be more likely to capture parental perceptions of an extrafamilial sexual abuse incident, that is, an event perpetrated by someone outside of their immediate family.

Prevalence

Most of the studies on the prevalence of extrafamilial sexual abuse have used the narrower definition which excludes extended family members. In addition, there has been great variability in whether non-contact abuse and abuse by peers has been included in the prevalence rates. This makes comparisons across studies difficult without the researchers' original data.

Prevalence Rates Based on Adult Reports

American community surveys indicate that despite the clinical emphasis on intrafamilial sexual abuse, extrafamilial sexual abuse is more commonly reported in studies of childhood abuse histories of adults (Finkelhor & Hotaling, 1984). Unlike other types of child abuse, the majority of cases of child sexual abuse disclosed in this type of study are committed by non-family members who are non-caretakers (Finkelhor & Hotaling, 1984). Studies of adult women reporting on their childhood experiences have found that approximately 20% of such samples have experienced incestuous abuse and 35% have experienced extrafamilial sexual abuse (Russell, 1986; Wyatt & Peters, 1986). These surveys reflect only incidents which involved sexual contact and exclude date rape in children over the age of 14. A review of community studies by Finkelhor (1987) stressed that although sexual abuse by fathers and stepfathers dominate child welfare reports, they constitute no more than 7% to 8% of all cases of sexual abuse reported by adults. Much more prevalent is abuse by non-relatives known to the child which comprises 32% to 60% of the sexual abuse cases (Finkelhor, 1983, Russell, 1986).

Canadian prevalence rates also support this trend. Approximately eighteen percent of all sexual abuse cases identified in the National Population Survey (Badgley, 1984) were incestuous; 57.4% involved friends or acquaintances; and 17.8% involved strangers. Badgley's rates, however, included contact abuse, non-contact abuse, and threats of abuse in children before the age of 18. He also included sexual abuse by unrelated employers of females under the age of 21 in the incestuous guardianship group (with step-parents) which is atypical of other research in the area of child sexual abuse.

Data on prevalence by sex indicate that 56% to 67% of all women with a childhood history of sexual abuse and approximately 84% of all men with such histories have experienced extrafamilial abuse (Finkelhor, 1979; Finkelhor, Hotaling, Lewis & Smith, 1990). However, these studies include exhibitionism and taking pornographic pictures in their definition of child sexual abuse. The higher prevalence of extrafamilial sexual abuse among boys has been supported in a review by Vander Mey (1988) of 23 studies of child sexual abuse of boys.

It is important to recognize, however, that these prevalence rates rely solely on reports by adults who were sexually abused as children. To extrapolate to children currently being abused (a different cohort) may not be valid as the present cohort of children may not be experiencing the same prevalence level of sexual abuse as the adult cohorts (Finkelhor & Hotaling, 1984).

Prevalence and Incidence Rates Based on Child Cohorts

A study by Reinhart (1987) which compared 189 boys who were evaluated at a Sacramento medical clinic for sexual abuse between

1983 and 1985 with a random cohort sample of sexually abused girls lends some support for the prevalence rates seen in adult reports although the differences between boys and girls were less salient than in the studies using adult reports. Sixty-two percent of the sexually abused boys and 57% of the sexually abused girls were victims of extrafamilial sexual abuse by non-relatives with an additional 16% of boys and 24% of girls falling in the extended family category.

However, the data from The Children's Hospital of Eastern Ontario (CHEO) Annual Report of the Child Protection Program (Sirnick, Corsini, & Ensom, 1991) do not support the assumption that the incidence of extrafamilial sexual abuse is higher than that for intrafamilial sexual abuse in the catchment area of the present study (Eastern Ontario and Western Quebec). A comparison of the incidence rates of child sexual abuse cases reviewed by the team from 1980 to 1990 showed an inversion in the ratio of reported extrafamilial sexual abuse to intrafamilial sexual abuse (Figure 1). From 1980 to 1983, and in 1985 extrafamilial sexual abuse was more frequent (69% to 80% of all sexual abuse cases); however, since 1986 the number of reported cases of intrafamilial sexual abuse have continued to increase (57% to 71%), and have been consistently higher than reported extrafamilial sexual abuse cases (27% to 46%). Although the cases reviewed at CHEO do not represent the full incidence of child sexual abuse in the catchment area, the preponderance of intrafamilial sexual abuse over extrafamilial sexual abuse is consistent with the child welfare and police impressions in the area (Sirnick, Corsini, & Ensom, 1991). Of note is that these percentages do not classify

abuse by extended family members as extrafamilial sexual abuse. Ensom (1991) suggests that a "community learning curve" may have accounted for the increase in reports of both types of child sexual abuse in the early 1980's, and that current rates may be more accurate reflections of true incidence. As the community became more aware of child sexual abuse, more cases were reported. In particular, disclosures were enhanced by prevention programs which encouraged children to disclose to someone who they trusted so that the abuse would end. This was perceived as being an important incentive for children who experienced intrafamilial sexual abuse who were thought to require more potent inducements to disclose than children who experienced extrafamilial sexual abuse.

Insert Figure 1 about here

Given that such incentives have not been in place for adults, and programs do not target adult disclosures, it may be that prevalence rates based on adult reports lag behind and underestimate the prevalence of intrafamilial sexual abuse. Indeed, most publicized cases of adult disclosures have involved abuse by perpetrators of extrafamilial sexual abuse (e.g., cases in Alfred, Ont. and Newfoundland).

Despite the controversy over which form of child sexual abuse is more prevalent, it is evident that efforts to understand the impact of extrafamilial sexual abuse on families would contribute greatly to ameliorating a major social problem. According to Hindman (1989) we cannot restrict our analysis of the

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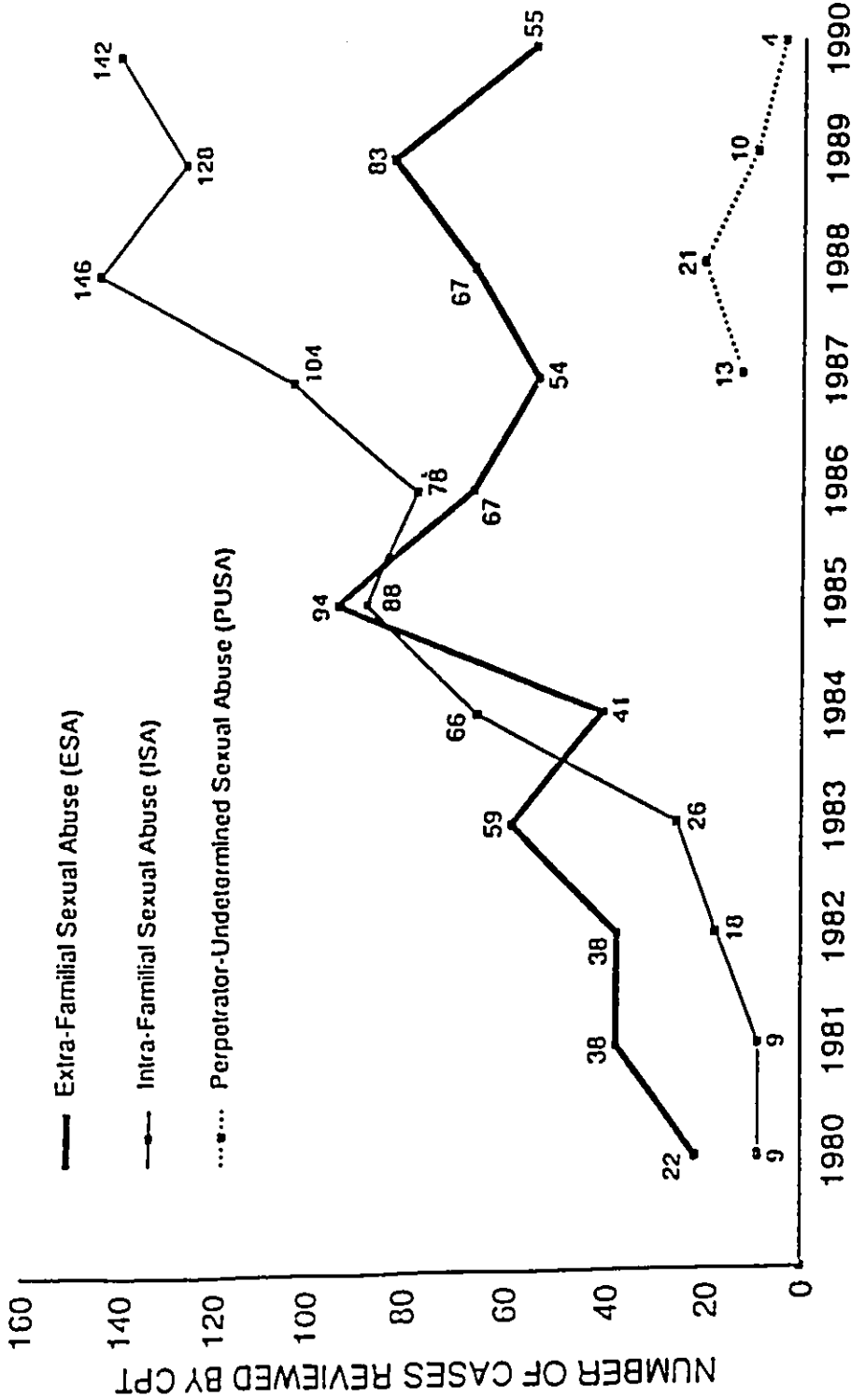


Figure 1. Year to year rates of child sexual abuse reviewed by the Child Protection Team of the Children's Hospital of Eastern Ontario.

Note. From "Statistical Profile of Child Protection Team Cases, Children's Hospital of Eastern Ontario 1990" by Ron Enscom, 1991, Unpublished manuscript, Ottawa, Ont: Child Protection Programme, Children's Hospital of Eastern Ontario. Reprinted by permission.

victimization process to the child. Victimization also occurs at three other levels: the entire family system of the victim, the community where the victim resides, and the society who needs to treat the traumatized family. Within this context, prevalence rates underestimate the number of victims affected by extrafamilial sexual abuse.

Family Characteristics which Increase the Child's
Vulnerability to Extrafamilial Sexual Abuse

Although most studies tend to address family reactions following the crisis of disclosure, it is important to recognize the contextual variables which may place a family at risk for having a child who is sexually abused by someone outside the nuclear family. That is, the origin of traumatic stress may not lie exclusively in the stress of disclosure, or the nature of the abuse, but may be associated with other traumatic stressors over the course of the family's history prior to the disclosure (Figley, 1989a).

A number of studies have identified family characteristics which make a child vulnerable to experience extrafamilial sexual abuse. However, this literature has been primarily cross-sectional and exclusively based on retrospective accounts of adults who were sexually abused as children. Therefore, it is difficult to know whether these characteristics actually preceded the abuse.

Finkelhor (1979) in a retrospective study of 796 female students from six New England colleges, found that girls whose parents had an unhappy marriage were 25% more likely to be sexually abused than those whose parents had a happy marriage. If

they never knew their father before age 16, the increased vulnerability was 50%; similarly, if they never knew their mother, vulnerability increased by 200%. Those living with a stepfather were 5 times more likely to be victimized by a friend of their parents than those living with their natural parents. When sexes were combined as in Finkelhor's study (1984) of 521 Boston families with children 6 to 14 years of age, children living with a step-parent were twice as likely to be sexually abused by someone outside of the family.

A more recent national survey of 2,626 American adults also found family variables to be significant risk factors (Finkelhor et al., 1990). Regardless of whether the abuse occurred at home or whether they had disclosed to their parents as a child, men and women were twice as likely to have been sexually abused as a child if their current perceptions of their family life during their childhood were unhappy. This relationship persisted even when responses of victims of intrafamilial and extrafamilial sexual abuse were analyzed separately. Girls were at a markedly higher risk to have been sexually abused than boys when they had lived with a single father or two non-biological parents but at less risk if they had lived with both biological parents. In addition, the risk of abuse for girls increased markedly if a mother had made the transition to a single mother with a new partner, or if the child had received inadequate sex education. Boys were at highest risk when they had lived with a single mother or two non-biological parents (Finkelhor et al, 1990).

These findings correspond with those of Gruber and Jones (1983) who compared social background variables of 20 sexually

abused female delinquents with 21 non-abused delinquents. Stepwise discriminant analysis revealed that poor parental marital relations, defined as extensive absence of one parent, was the most important discriminator, followed by living with a step-father or foster-father. As well, poor relations with the mother was more characteristic of non-abused delinquents.

In her review of 23 studies of sexually abused boys, Vander Mey (1988) identified the following potential risk factors for sexual abuse of boys by non-family members: a boy residing in a neglectful, disorganized, problem-ridden or physically abusive home; a boy living with a single parent with a low family income; a boy in need of affection, money or shelter; a boy loosely connected with his family and social network; and a boy who has had a previous homosexual experience. In addition, experiences of rape were more likely if the child was socially isolated, institutionalized, lacking parental supervision, or at risk by his own behaviour (e.g., hitchhiking or substance abuse).

Although some of the demographic risk factors such as the presence of a step-parent have been measured objectively in these studies, the presence of other risk factors such as marital distress and neglect has been measured using retrospective non-standardized victim perceptions. No meta-analysis of risk factors has been done across studies. Hence victim perception of family dysfunction may be a more accurate term for some of the vulnerability factors identified. Because of the retrospective nature of these reports, it is also unclear whether perceptions of the family have been shaped by the victims' attempts to conceptualize why the abuse occurred, and intervening family

incidents which may have occurred since the abuse.

In attempting to explain the greater vulnerability of children living with a step-parent to experience extrafamilial sexual abuse, Finkelhor (1984) has speculated on two mechanisms. First, having a step-father is usually associated with a mother who has been dating which increases the chance of bringing men to her home. Secondly, friends of the step-father may not feel the same restraint against making sexual advances towards a child, that would be present if the child were the biological or adopted child of a friend. More research, however, is required to identify why the vulnerability to experience extrafamilial sexual abuse is higher when the child is living with a step-father. Unhappy marriages and single parent families are hypothesized to increase the risk of extrafamilial sexual abuse by reducing child supervision and protection by parents, and by leaving a child feeling emotionally insecure or deprived with strong needs for attention and affection, and confused about parental messages regarding sex (Finkelhor, 1979; Finkelhor et al., 1990; Vander Mey, 1988).

When compared with incestuous families who are characterized as enmeshed and rigid (Trepper & Barrett, 1986), families where extrafamilial sexual abuse has occurred have been hypothesized to be chaotic and emotionally disengaged as evidenced by their apparent failure to protect the child (Alexander & Lupfer, 1987). A study of 586 female university students by Alexander and Lupfer (1987) using the Family Adaptability and Cohesion Evaluation Scales II (Olson, Russell & Sprenkle, 1983) did not support this. Students, who were exposed to either extrafamilial sexual abuse or

intrafamilial sexual abuse as a child, perceived their families to be disengaged and chaotic. When compared with non-abused students, victims of both forms of sexual abuse perceived their families to be less cohesive and adaptive. What distinguished incestuous families from extrafamilial sexual abuse families, was the presence of a traditional patriarchal family structure in incestuous families only. This study relies on retrospective accounts in which subjects were not asked to distinguish between family characteristics prior to and after the abuse. Therefore it is unclear whether these victims perceived their families to be disengaged and less cohesive prior to the abuse, or because of the abuse.

A study by Long and Jackson (in press) of 324 college women with a history of child sexual abuse suggests that the link between family characteristics and victimization may not be so much associated with whether sexual abuse occurs, as whether it reoccurs. Subjects from three groups (multiple perpetrators, single perpetrators and non-abused) were contrasted on their perceptions of their family-of-origin using the Family Environment Scale (Moos & Moos, 1986). They were asked to complete the measure based on how they viewed their family when they were growing up rather than presently. Of note was that for the multiple perpetrator group, the type of abuser (intrafamilial or extrafamilial sexual abuse) tended to persist from the first to subsequent incidents. Women who had been abused by more than one perpetrator reported that their families were less cohesive, less expressive, more conflictual, and more controlling than the families of women with either a history of single perpetrator

abuse or no abuse. However, both groups of women with an abuse history viewed their families as being less organized than non-abused women. There were insufficient numbers with a history of multiple perpetrators (only 16) to analyze any differences between victims of extrafamilial versus intrafamilial sexual abuse in their views towards the families .

The results of this study are consistent with the work of Alexander and Lupfer (1987). Although Lyon and Lenares (1987) suggest that children exposed to extrafamilial sexual abuse are at less risk for further sexual abuse because of better protection by parents after the abuse, Alexander and Lupfer (1987) found both types of children were at risk for further abuse. This was attributed, however, to the adoption of a victim role by the children rather than to family characteristics.

Finkelhor (1984) has hypothesized that four pre-conditions are necessary for sexual abuse to occur: (a) the motivation of the perpetrator to abuse children sexually, (b) the ability of the perpetrator to block internal inhibitors against sexual abuse through the use of alcohol or rationalizations, (c) reduced external inhibitors such as poor child supervision and access to the child alone, and (d) the resistance of the child. Children who are emotionally insecure, who lack knowledge about sex, and who trust the perpetrator are hypothesized to be especially vulnerable. The family characteristics previously described are identified as contributors to the last two pre-conditions only.

Summary

Retrospective studies of the perceptions of adults who experienced extrafamilial sexual abuse in childhood point to the

importance of considering family status prior to the abuse and subsequent to the disclosure. A non-supportive family which discourages members from expressing their concerns and feelings may foster self-doubt and unhappiness in their children and thereby increase their susceptibility to abuse (Long & Jackson, in press), non-disclosure, and reabuse. In addition, mothers who have less capacity to nurture their children may increase the chances that their child will be victimized due to being less aware of cues that their child is in danger and to being less diligent in supervising their child (Gomes-Schwartz, Horowitz et Cardarelli, 1990). Further, children without a close, accepting relationship with one parent figure, particularly those living with a step-father, may be more susceptible to the attention of potentially abusive individuals and fear retribution or disbelief if they disclose (Wolfe & Gentile, 1992).

Although these studies portray the families in which extrafamilial sexual abuse occurs in dysfunctional terms, it is unclear what percentage of the total population of families dealing with the trauma of extrafamilial sexual abuse possess characteristics comprise. It is also unclear whether retrospective perceptions of victimized children are an accurate reflection of the functioning within their family-of-origin. A major dilemma in studying families in which one member has been abused, is that different members of the same family may perceive the family differently. Hence, the literature to date has been biased towards victims' perceptions of their families as adults. It has yet to be established whether such perceptions accurately reflect the child's view of the family at the time of the abuse or

at the disclosure, or whether such perceptions would be consistent with objective assessments of these families (Long & Jackson, in press). These studies also fail to distinguish between family characteristics which apply to families where no disclosure was made as a child and those families where a child did disclose in childhood. In addition, few studies have attempted to ascertain how much of the variance in risk or in outcome post-disclosure is accounted for by family characteristics.

In order to clearly distinguish between pre-abuse and post-abuse family characteristics, studies would have to follow a group of children hypothesized to be at greater risk of abuse due to their family environment until some of them were sexually abused. However, there are several inherent problems with such a design such as the ethics of non-intervention and the expense of following large groups of children in order to target the subset who will eventually be sexually abused (Gomes-Schwartz et al., 1990). A prospective longitudinal design which followed families from the point of disclosure with an emphasis on family characteristics and objective measures of the functioning of family subsystems would eliminate some of the retrospective bias inherent in adult retrospective studies.

Family Characteristics Hypothesized to Affect the Child's
Vulnerability to Trauma Induction

Variables related to the state of the family have been neglected in studies assessing the psychological impact of sexual abuse (Alexander & Lupfer, 1987; Pelletier & Handy, 1986). Most of the studies addressing parental response to extrafamilial sexual abuse have done so within the context of the assessment of

the traumatic impact of sexual abuse on the child. Indeed, there is much controversy over whether family variables are more important than abuse-specific variables in trauma induction following the disclosure of child sexual abuse (Berliner & Wheeler, 1987).

Proponents who emphasize family variables view the child's reaction and coping with sexual abuse as primarily related to parental response, support and protection (Conte & Schuerman, 1987; Esquilin, 1987; Friedrich, Beilke & Urquiza, 1987; Wolfe & Gentile, 1992; Wyatt & Mickey, 1987). Although they accept that child sexual abuse can be a traumatic event, they perceive family support as facilitating coping, validating for the child that a traumatic event has occurred, minimizing self-blame, and providing the child with a sense of security and safety from reabuse. They conceptualize parental and family reactions as an important mediating variable in the development of emotional and behavioural problems in the sexually abused child and in the attributions developed around the abuse (Mannarino et al., 1989). They also stress that family variables contribute to victim adjustment independently of abuse variables (Conte & Schuerman, 1987; Esquilin, 1987; Harter, Alexander, & Neimeyer, 1988).

Mowbray (1988) proposed seven risk factors which are theorized to be related to the development of post-traumatic stress disorder (PTSD) in children following a traumatic event happening to the child. Of these, five are related to the status of the family. They include: the loss of a significant attachment figure, extremely disturbed parental reactions, disruption of the parenting abilities of the caretaker, a chaotic, non-supportive or

violent family atmosphere, and a delay in the acknowledgement of the trauma to the child. Although Hindman (1989) also emphasized the importance of family reactions in her relationship perspective, she also identified developmental and situational variables (e.g., how the child perceives the abuse, the habits developed after the abuse to cope) which were relevant in assessing trauma induction and bonding in 268 adults who were sexually abused as children. Berliner and Wheeler (1987), however, stressed that the abuse and experience of victimization themselves are more relevant to the induction of trauma. Hence, the distinction between responses related to the reactions of significant others to the disclosure and those related to the abuse itself are not clear and have been based on theoretical rather than empirical grounds.

Many studies have suggested that the response of the mother, in particular, to the disclosure of sexual abuse is an important mediating factor on the trauma suffered by the child both initially and in the longterm (Gold, 1986; Wyatt & Mickey, 1987, 1988). Typically, however, it is unclear whether the reported maternal reactions were actually in response to the act of disclosing, or to the sexual abuse.

Studies Relating Family Responses to Short-term Adjustment of Sexually Abused Children

In the studies of the initial effects of child sexual abuse, little attempt has been made to differentiate between parents of children who have experienced intrafamilial and extrafamilial sexual abuse. In addition, studies have typically neglected fathers to avoid the inherent biases from fathers who were the

perpetrators. In doing so, the reactions of fathers who were not the perpetrators, as is the case in extrafamilial sexual abuse, have been largely ignored.

For example, the Tufts (1984) study, which combined both types of sexual abuse, found that when mothers reacted to disclosure with anger and punishment, children displayed more behavioural problems. However, positive maternal responses were not related to better adjustment. Similarly, a study of 28 sexually abused children ranging from 2 to 15 years by Adams-Tucker (1982) revealed that the child's behavioural outcome was related to the degree of active support provided by their mothers. Support was defined behaviourally as active interventions such as calling the police, taking the child for medical or psychiatric treatment, and having the molester arrested. Unsupportive actions included doing nothing, allowing the child to be alone again with the molester, believing the molester's denial, and blaming the child. Children whose mothers were supportive scored in the mild to moderate range on the Louisville Behavior Check List (Miller, 1977) and tended to have diagnoses of adjustment or anxiety disorders. The children with unsupportive mothers showed more severe emotional and behavioural disturbances with scores in the severe and extreme ranges of the Louisville Behavior Check List. However, the duration of abuse was also longer in the latter group (3.5 versus 1.5 years), and the contribution of the fathers' reactions were not considered in either group.

Another study of 68 sexually abused children aged 7 to 13 (70.7% extrafamilial sexual abuse) by Clark, Bradley and Evans, (1990) yielded conflicting results. Mothers who believed their

sexually abused children at the time of disclosure, perceived their children to be more socially competent on the Child Behavior Checklist (Achenbach & Edelbrock, 1983) two to four years after the disclosure than those who disbelieved their child. However, those mothers who were judged to be supportive by their social workers also reported more behaviour problems in their child at follow-up. The authors suggested that social workers may have been biased towards rating mothers as overtly supportive when the child was displaying more external distress. Again fathers were excluded from this study.

One study which addressed the family variables related to trauma induction was undertaken by Friedrich, Beilke and Urquiza (1987). In this study, 93 sexually abused children aged 3 to 12 years of age were compared with children from an outpatient psychiatric department and children from well-child clinics using the Child Behavior Checklist (Achenbach & Edelbrock, 1983) which was completed by their mothers. Family functioning was assessed by social workers who rated family conflict, support of the child victim and family cohesion using a 3-point scale derived from Moos' and Moos' (1986) family dimensions. All assessments were conducted within 18 months of the sexual abuse incidents.

Multiple regression analyses indicated that family variables were more important than abuse variables in accounting for the degree of internalizing, externalizing and sexual behaviour problems in the sexually abused children. Greater family conflict, lower family cohesion and less time elapsed since the abuse were related to greater internalizing behaviour problems; greater family conflict, less cohesion and greater severity of

abuse were related to greater externalizing behaviour; and greater duration of abuse and reduced family support were related to sexual behaviour problems.

It is important to note that less than 14% of these children had experienced extrafamilial sexual abuse and that no analyses were conducted differentiating the contribution of extrafamilial sexual abuse family variables from incestuous situations. As well, the contribution of the fathers' reactions to the family dimensions studied was not considered. Nevertheless, these authors stated that even in non-incestuous families, parents varied in the degree to which they could be supportive and in the level of family conflict which preceded the sexual abuse and continued after its disclosure.

Conte and Schuerman (1987, 1988) have reported on a study of 369 sexually abused children who were contrasted with a sample of 318 non-abused children. Forty-four percent of the case group were victims of extrafamilial sexual abuse with an additional 23% being victims in the extended family category. Most were assessed within six months of the last incident of sexual abuse. In addition to completing a Child Behavior Profile developed for the study, parents completed questions on the number of significant life events in the child's life in the past year, the number of events perceived as stressful by the parent, and parent's general outlook on life. Social workers also completed a clinical assessment form on abused children only. It is not clear in either study whether both parents were included or what the sample size was of parents who participated. The authors mention only that offending parents were excluded.

The results indicated that four variables (a negative outlook in parents, number of stressful events experienced by the child, the education of the parents, and number of children in the family) explained 22% of the variation in child behaviour as reported by the parents. Differences between groups remained significant when these variables were controlled. More importantly, when multiple regression analyses were done using the social workers' scores and parents' scores as dependent variables, the largest amount of the variance on both measures of victim's symptoms were explained by the victim's supportive relationship with an adult or sibling, and the number of characteristics of the child's family indicative of poor functioning. Variables related to the experience of the abuse explained relatively small amounts of the variance in the victim's functioning. These authors also stressed the need to use another trauma group as a comparison to isolate the effects specifically related to the sexual nature of the trauma.

Two other studies combining intrafamilial sexual abuse and extrafamilial sexual abuse identified parent-child interactions which affected the child's response to traumatization. Friedrich and Luecke (1988) found that school-aged children who had poor mother-child relations characterized by lack of emotional support, and histories of scapegoating, neglect and abandonment were more likely to exhibit sexual aggression when compared to sexually abused children with good mother-child relationships. Maternal depression and chemical dependency also were associated with more sexual aggression after the sexual abuse experience.

A study by Friedrich and Reams (1987) attempted to follow the course of psychological trauma of eight sexually abused young children (aged 3 to 7) using the Child Behavior Checklist-Parent Form (Achenbach & Edelbrock, 1983). They hypothesized that the symptoms of the children could also reflect their family environment, the amount of support felt by the child and the level of family disruption following disclosure. However, none of these family variables was assessed using standardized measures. The authors found that a maternal history of sexual abuse (present in five of the mothers) or maternal psychiatric symptoms or both interacted with the child's response to trauma. Specifically, a mother's unresolved sexual abuse experience often delayed her ability to deal with her child's need for treatment.

Both of these studies have methodological flaws. Not all parents were assessed using the same measures of psychopathology, and the time periods of assessment in relation to abuse and disclosure, and across subjects were varied.

An exception to the tendency to combine intrafamilial sexual abuse and extrafamilial sexual abuse has been the work of Burgess, Hartman, and McCormack (1987). They conducted a follow-up study of 34 children who had been sexually abused in two different sex rings 6 to 8 years previously. All had been under the age of 12 when they disclosed. One group, who had been abused for less than a year, were matched with their sibling closest in age. The second group who had been abused for more than a year, were matched with schoolmates. No rationale is given for the difference in control groups. Interviews were conducted with the abused child to determine the family structure, new incidents of

abuse, and the effects of disclosure.

The children's perceptions of parental reactions to disclosure were significantly different between the two abused groups. The second group was much more likely to feel pressured, threatened or rejected for disclosing, and to feel punished and blamed by their families. Their family environments were more unstable and conflictual. Those in families that were disorganized, non-supportive, and blaming showed more overt aggression manifested in delinquent and criminal behaviour. No differences were found on the three dimensions of the Family Environment Scale (Moos & Moos, 1981) between siblings and abused children in group one. However, the second group reported more family conflict, open expression of anger, and aggression than did their controls. Burgess et al. also proposed that sexually abused children from supportive and non-blaming families who were unable to discuss the abuse may have a greater tendency towards peer aggression than children from families who openly discussed the abuse.

Because the reactions of the parents were reported retrospectively from the child's perspective, it is unclear how accurately this reflects parental reactions. In addition, the confounding of differing duration of abuse between the groups prevents concluding directly that the more severe outcome was related to parental response. Also, children abused in sex rings are a select group limiting generalizability.

Studies Relating Family Responses to Long-term Adjustment of Sexually Abused Children

Studies which relate family characteristics to the longterm adjustment of sexually abused children are subject to the same methodological flaws as all retrospective studies of the victim perceptions of family-of-origin functioning. Few studies have used standardized measures of support or adjustment. For example, Wyatt and Mickey (1988) in their probability sample of 61 women aged 18 to 36 who had experienced contact abuse only, found that the effect of the nature of the abuse on their present attitudes towards men could be mediated by the support they received from their parents or other family members as a child. However, ratings were crude and based on the investigators' ratings of interviews with the women, and no inter-rater reliability was reported.

A more rigorous study by Howell, Long and Johnson (1989) used standardized measures to assess the relationship between family cohesion and the longterm adjustment of 86 female college students with a history of child sexual abuse (Past Experiences Questionnaire [Messner et al., 1988], Social Adjustment Scale Self-Report [Weissman & Bothwell, 1976], Beck Depression Inventory [Beck, Ward, Mendelson, Mock & Erbaugh, 1961], and the Family Environment Scales [Moos & Moos, 1981]). Hierarchical multiple regression analyses revealed that family cohesion had a main effect on social adjustment. It also acted as a buffer against the impact of the amount of force used in the sexual assault on the current level of depression experienced by the women. With high cohesion, forceful sexual assault did not exert a large

negative effect; however, with low cohesion, force was associated with detrimental effects. They further found that family cohesion had a beneficial effect regardless of whether the perpetrator was a family member or a non-related person.

Summary

In summary, research addressing family characteristics which increase the child's vulnerability to the traumatogenic effects of extrafamilial sexual abuse specifically is scarce. Most of the studies have combined intrafamilial and extrafamilial sexual abuse and have failed to incorporate self-report measures of parent functioning from the parents' perspective. Nevertheless they still highlight maternal support as an important mediator of the child's response to child sexual abuse. Research on paternal response is noticeably lacking. By studying the child in isolation from the family context, the contribution of family variables has primarily been extrapolated from assessments of the child's functioning. Patten, Gatz, Jones and Thomas (1989) and Remer and Elliott (1988a, 1988b) stressed the need to consider the symptoms of family members as they relate to the symptoms of the child. Only by studying the child's reactions in relation to the reactions and characteristics of other family members can one identify familial factors which increase the vulnerability of the child to the traumatic sequelae of child sexual abuse. Regardless of whether the perpetrator is a family member, Conte and Schuerman (1987) and Esquilin (1987) emphasize the importance of identifying victims who live in families having difficulty functioning in adaptive and health supporting ways. With the focus of these studies being primarily on child outcomes following child sexual

abuse, this perspective neglects to consider that the reactions of other family members, particularly the parents, may be a valid focus of study in and of themselves.

General Implications

Given the fact that extrafamilial sexual abuse is so common, it is striking that so little research addresses the effects of extrafamilial sexual abuse on the family. Although several of the early intervention programs for these families were based on the premise that extrafamilial sexual abuse was a situational crisis where most of the family impact occurred within the first eight weeks of disclosure (DeVoss & Newlon, 1986; Sesan, Freeark, & Murphy, 1986), the more recent literature (Burgess, Hartman, Kelley, Grant & Gray, 1990; Kelley, 1990; Rogers, 1988; Van Scoyk, et al., 1988) supports the need to understand the impact in terms of "traumatized families" (Figley, 1989a) where the sequelae are more long lasting. Figley (1985) suggests that child traumatization which is caused by another person and which directly affects the intimacy and social support within the family is the most emotionally devastating catastrophe for families to experience. Indeed, both MacFarlane (1986) and Wolfe and Gentile (1992) suggest that when a young child is abused, the trauma to the parents is often more intense and devastating than the trauma to the child. In fact, in working with 13 families where extrafamilial sexual abuse had occurred, Bernbaum (1986) found that parental reactions of extreme disappointment, anger, and hurt persisted one year after the disclosure of sexual abuse even for parents who had been in a parent therapy group.

Noticeably lacking, even in studies which emphasize family variables, is a recognition of risk factors which increase the parent's vulnerability to the traumatogenic effects of extrafamilial sexual abuse. It is due to the connectedness of family members that all members are vulnerable to traumatic stress when one member is sexually abused. For this reason, it may be more appropriate to speak of traumatized families where the disclosure of extrafamilial sexual abuse results in unwanted disruptions to the family routine and in challenges to the individual and collective perceptions about themselves and others outside of the family system (Figley, 1989a).

Clinicians working with families following the disclosure of child sexual abuse suggest that families in which extrafamilial sexual abuse has occurred should be treated and understood differently from incestuous families (Alexander & Lupfer, 1987; Lyons & Lenares, 1987; Sesan et al, 1986; Van Scoyk et al, 1988). In general, when compared with incestuous families, extrafamilial sexual abuse families are described by clinicians as better functioning, less chaotic, more treatment oriented and freer in expressing affect (Sesan et al, 1986). There is less of a threat to family integrity following disclosure due to fewer torn loyalties (MacFarlane, 1986).

Nevertheless, some researchers have questioned whether the type of perpetrator has a significant effect on the trauma of sexual abuse for the victim (Finkelhor, 1979; Russell, 1984; Tsai & Wagner, 1979). For example, both Kelley (1989) and Mannarino et al. (1989) suggest that clinicians should not rely solely on the type of perpetrator in predicting child outcomes. This may result

in overpathologizing some victims (intrafamilial sexual abuse) and underestimating the emotional and behavioural problems of others (extrafamilial sexual abuse). Although there is some evidence to suggest that the status of the perpetrator is not a strong predictor of child outcomes following a disclosure, the question of whether the same holds true for secondary victims (other family members) remains to be established. Most of the subjects in the outcome studies never disclosed their abuse while a child. Therefore, they did not have the disclosure effects on the family to contend with (Hauguard & Reppucci, 1988) nor the opportunity for support from family members. A study by Sirles and Franke (1989) showed that this is particularly relevant for families where the abuse was by an extended family member. Mothers were more likely to believe and affirm their child following disclosure if the offender was an extended family member rather than a member of the nuclear family.

The research on family variables mediating child outcomes following child sexual abuse points to the need to adopt a systemic context for understanding the impact of extrafamilial sexual abuse. The interconnectedness and reciprocal influences of both primary and secondary victims (the parents and siblings) must be considered. Given that the secondary victims are usually the victim's primary support, the feelings and recovery processes of the secondary victims warrant further consideration. It has been suggested that mothers who are unable to support their abused child may impede or draw off the resources that the child requires for healing (Remer & Elliott, 1988b). Yet little attention has been focused on understanding what enables or prevents parents

from providing that support. Only by studying the adjustment process in parents as well as the abused child can the systemic impact of extrafamilial sexual abuse be fully understood.

Research is also beginning to recognize that by relying solely on parent reports of child functioning in isolation of their own adjustment, one fails to consider whether parent perceptions of child problems reflect parent personality and adjustment more so than child functioning (Everson, Hunter, Runyon, Edelsohn & Coulter, 1989; Newberger, Gremy & Waternaux, 1991). Parents who fail to be supportive may be struggling with their own problems and out of touch with their child's distress and needs. Distortions in their perceptions of child functioning may be attempts to minimize the significance of the sexual abuse. For mothers especially, severe parental distress may compromise her ability to clearly separate her own experience from that of her child and may be an important influence on her child's adaptation following disclosure (Newberger et al., 1991). As such, the methodology of studies which fail to consider parental functioning may seriously limit the interpretations drawn about child functioning.

Clinicians and researchers have also identified a lack of therapeutic resources available to help families where extrafamilial sexual abuse has occurred (Regehr, 1990; Van Scoyk et al., 1988) and have suggested that the incest models for intervention may be inappropriate for families recovering from extrafamilial sexual abuse (Finkelhor, Williams & Burns, 1988). Although parents need assistance in understanding how to help their sexually abused child (Conte & Schuerman, 1987), many also

want help with their own reactions to the victimization of their child, and with the disruptions to their lives following disclosure (Berliner & Wheeler, 1987). The need to pay increased attention to the needs of family members affected by the trauma of disclosure was identified by Rogers (1988). When the family's prior vulnerability status is coupled with limited therapeutic resources for families in which extrafamilial sexual abuse has occurred, it is evident that these families warrant further study. Clearly, children who experience and disclose extrafamilial sexual abuse do not experience the crises which follow in isolation (Regehr, 1990).

Lastly, although clinicians have stressed the importance of the process of disclosure, most research studies have failed to include disclosure data as important variables (Sauzier, 1989), and have failed to have the necessary longitudinal format to examine these variables. The impact of disclosing child sexual abuse on whole families should not be underestimated even in cases of extrafamilial sexual abuse. There is growing evidence that, regardless of the type of perpetrator, the disclosure process is perceived by parents as extremely distressful (Wolfe & Gentile, 1992). Researchers have only recently acknowledged that the process of disclosure adds a further stressor to the whole family that is lacking in families where the child did not disclose during childhood (Sauzier, 1989). How and from whom the parents learn about their child's abuse may also impact on how they respond and cope following disclosure. The fact that 45% of extrafamilial sexual abuse families in studies by Sauzier (1989) and Gomes-Schwartz et al. (1990) experienced family disruption

within 18 months of disclosure highlights the need to clarify the impact of disclosure on the whole family system.

Parental Adjustment Following Disclosure of Extrafamilial

Sexual Abuse

Empirical Studies of Parental Functioning

Research directly assessing parental response to extrafamilial abuse is scarce. Many studies of the impact of child sexual abuse on parents have combined parental reactions to extrafamilial sexual abuse with reactions to intrafamilial sexual abuse (Finkelhor, 1984; Gomes-Schwartz et al., 1990; Rivera, 1988; Winton, 1990). This has made it difficult to determine how generalizable their findings are to families where extrafamilial sexual abuse has occurred. In general, these studies support the premise that the disclosure of child sexual abuse may be a traumatic stressor for parents as well as children. Some of these studies have found that parents may become severely distressed following disclosure (Wolfe & Gentile, 1992) with approximately 60% rating the disclosure as the worst stressor in the previous three years (Gomes-Schwartz et al., 1990). In addition, moderate to high levels of stress as measured by the Parenting Stress Index (Abidin, 1983) tended to persist even after parents received group therapy (Winton, 1990).

Only four studies were found which used standardized parent self-report measures (Burgess, Hartman, Kelley, Grant & Gray, 1990; Kelley, 1990; Kiser et al., 1988; Wagner, 1991). Three of these studies focused exclusively on families who had children who had experienced extrafamilial sexual abuse in daycare settings. One other study contrasted mothers of children who had experienced

extrafamilial sexual abuse, with two other groups of mothers: mothers of children who had experienced intrafamilial sexual abuse and mothers of children with emotional or behavioural problems (Wagner, 1991).

The study by Kiser et al. (1988) assessed the functioning of parents of 10 young children aged 2 to 6 years who were sexually abused in a church-related day-care setting. All of the children exhibited signs of post-traumatic stress disorder. Parents were assessed 4 to 6 months following the alleged abuse using a videotaped semi-structured family interview (Preschool Children's Behavior Assessment), and the following self-report instruments: the Family Environment Scale (Moos & Moos, 1986), the Family Inventory of Life Events and Changes (McCubbin, Patterson, & Wilson, 1983), the Dyadic Adjustment Scale (Spanier, 1976) and the Millon Clinical Multiaxial Inventory (Millon, 1983). In addition, they completed the Minnesota Child Development Inventory (Ireton & Thwing, 1974), The Personality Inventory for Children (Wirt, Lachar, Klinedirst, & Seat, 1977) and Child Behavior Checklist (Achenbach & Edelbrock, 1983). All assessments were conducted prior to beginning family therapy. The families were assessed to ascertain whether the home environment, the level of general stress, the strength of their marriages and the intrapsychic functioning of each parent contributed to the development of post-traumatic stress disorder in their children. None of the parents demonstrated any clinically significant symptomatology on any of the parent measures. However, with a sample size of only ten families, it is unlikely that there was sufficient power to detect any significant relationships between parent variables and child

symptomatology. Nevertheless, several parental concerns were identified. Parents were reluctant to place their children in daycare centres and expressed concern over the effects of sexual abuse on normal sexual relationships and on religious and moral affiliations. In addition, many of the children developed distress reactions when affection was displayed between the parents, and became fearful of being away from their parents.

Because no control groups were used, and only 10 families were assessed, (all were parents from white, middle class families with intact marriages and two working parents) it is questionable whether the reactions of these parents can be generalized to all families where extrafamilial sexual abuse has occurred particularly to those with children older than six years of age or to parents whose children were subject to abuse outside of a religious daycare. In addition there may have been inherent supports available to these individuals (i.e., the parents from different families knew each other and could talk and share a common experience) which may have limited the isolation that so often is experienced by families who have a sexually abused child.

A larger scale study by Kelley (1990) assessed the degree to which parents of children in three groups (ritually sexually abused in daycare [$n=35$], sexually abused in daycare [$n=32$], and non-abused in daycare [$n=67$]) experienced post-traumatic stress disorder (PTSD) symptoms. Both mothers and fathers completed the Symptom Checklist 90-R (SCL-90R; [Derogatis, 1977]), the Impact of Event Scale (IES; [Horowitz, Wilner & Alvarez, 1979]), the Child Behavior Checklist (Achenbach & Edelbrock, 1983) and an inventory of 12 stressful life events. Children ranged in age from one to

seven years old with the mean time since disclosure being 2.2 years (range 8 to 36 months).

Parents of abused children scored significantly higher on all of the nine subscales of the SCL 90-R and experienced greater overall psychological distress than parents of non-abused children. The parents of children who were ritually abused were most distressed with 65% of them scoring in the clinical range for overall global distress versus 40% of parents whose children were sexually abused in a non-ritualized context. Although Kelley (1990) highlighted significant elevations in both abused groups on five subscales (depression, interpersonal sensitivity, hostility, paranoia, and anxiety), other subscales had higher elevations when the responses of mothers and fathers were examined separately from her tables. For example, fathers experienced significantly more overall distress and depression than mothers of abused children (both of these means in the clinical range for fathers) whereas mothers experienced significantly higher levels (sub-clinical) on the psychoticism subscale.

An examination of Kelley's tables of T-scores by sex of parent and type of abuse indicated other differences. None of the mean T-scores for mothers of sexually or ritually abused children were in the clinical range on any of the subscales or on the Global Severity Index. The mean T-scores for the Global Severity Index and the anxiety subscales were the only variables on which mothers of ritually abused children had significantly higher scores than mothers of children who were sexually abused without the use of rituals. The mean T-scores for fathers of ritually abused children however, were elevated in the clinical range for

all subscales except for psychoticism, somatization, and phobic anxiety. These fathers also had significantly higher mean T-scores for the following subscales than fathers of children who were sexually abused without the use of rituals: the Global Severity Index, depression, paranoia, anxiety, psychoticism, and somatization.

Even 2.2 years after the abuse, parents of abused children continued to experience intrusive and avoidant symptoms, with mothers reporting significantly more intrusive symptoms than did fathers. Of note was that no significant differences were found in the degree of PTSD symptoms between the two abused groups, further supporting the premise that factors other than the nature of the abuse affect the degree of trauma experienced by parents. Parental distress was also strongly correlated with intrusive symptoms and moderately correlated with avoidant symptoms. Mothers who had been sexually abused as a child also experienced greater psychological distress than mothers without an abuse history. This was not so for fathers. However, because only six fathers reported having a history of child sexual abuse, there may have been insufficient power to detect significant differences.

This study makes a major contribution to the literature in addressing maternal and paternal reactions to extrafamilial sexual abuse from a PTSD perspective. Kelley concluded that sexual victimization needs to be recognized as both an acute and a chronic stressor for parents. During the acute phase, parents are processing feelings of shock, anger, denial and guilt while simultaneously facing the legal, mental health, and social service systems. It becomes a chronic stressor due to the longterm impact

on the child, the possible need for therapy, and the lengthy court proceedings which impinge on the family's attempts to bring closure to the event. Kelley also hypothesized that fathers may experience a delayed stress reaction because of greater problems in expressing their thoughts and feelings related to their child's victimization to a confidante.

This study, nevertheless, has four major limitations: time since disclosure was variable; the age of the children in the control group was significantly older than the two case groups (6.6 [non-abused], vs. 2.3 [sexually abused], vs. 3.2 [ritually abused]); no attempt was made to correlate parent symptomatology with parents' perceptions of child symptomatology; and multiple paired t -tests without correction for inflated type I error were used as the basis for statistical interpretation of results.

Another study by Burgess et al. (1990) examined the stress responses of a convenience sample of parents of 67 children who were abused by caretakers in a daycare based on whether their child was required to testify in court. The time since disclosure varied from 6 to 46 months with a mean of 27 months. Time since court proceedings was not specified nor were data presented on whether the parents also testified. Parents completed the SCL-90R (Derogatis, 1977), the Impact of Event Scale (Horowitz, et al., 1979) and a questionnaire concerning their childhood history of abuse, stressful events since disclosure, their reactions to the court process and whether they received therapy for themselves or their child.

Mothers of children who testified experienced significantly greater psychological distress (58% in the clinical range) and had higher scores on both dimensions of PTSD (intrusion and avoidance) than mothers of children who did not testify. Fathers of children who testified had even more significant differences when compared to fathers of children who did not testify, with 90% scoring in the clinically distressed range. PTSD symptoms were notably higher in fathers when compared to mothers (avoidance $M=23.0$ vs. 18.24; intrusion $M=26.9$ vs. 24.06). The higher level of distress in fathers was conceptualized as being due to the demands placed on fathers to manage the mother-child dyad, sustain the economic resources of the family and simultaneously manage their own reactions to the abuse. Parents whose children testified also experienced significantly more negative life events since disclosure, with three events in particular distinguishing them from parents whose children were not involved in the court process: partner separation, death in the family, and a decrease in the family income. The latter was associated with mothers withdrawing from working outside the home until safe child care was arranged. The authors concluded that the legal process "resurrects the trauma that surfaced at the time of disclosure... and ... introduces the parent to a process that raises more anxiety rather than bringing closure to a stressful event" (Burgess et al., 1990, p.401).

Although this study highlights the differences two years following disclosure in parental functioning between parents whose children testified and those whose children did not testify, it is difficult to identify whether the court process alone accounted

for the greater parental distress reported. The authors did not control for time since court proceedings, and did not determine how much of the variance in parental distress was related to their child's court testimony. They also failed to acknowledge that parent court testimony may also have added to the families' stressors. In addition, factors such as the nature of the abusive incidents, the circumstances surrounding the court process (e.g., verdict, whether the perpetrator had since been released, reasons why the child was chosen to testify) and the presence or persistence of child distress may also have been relevant.

To date, there has been only one reported study which has attempted to conduct longitudinal evaluations of both the family and the child following extrafamilial sexual abuse. Although Conte and Schuerman (1988) and Kiser et al. (1988) are planning to follow their samples, their results have not yet been published. Mann and Gaynor (1980) studied 70 victims of single incident sexual abuse who were less than 18 years of age. Both the parents and the children were assessed by a semi-structured interview and a general three-point scale of emotional upset. Time of assessment was inconsistent as was the length of follow-up. Initially parents were found to be more severely upset than their child. Only 6% were not upset, 25% were concerned but not "over-emotional", whereas the remainder ranged from extremely agitated to immobile. At follow-up, six kinds of parental reactions were identified, all of which influenced the child's response to the abuse. Twenty-nine percent of parents were supportive, 20% over-reactive, 14% over-protective, 21% rejecting, 9% over-stressed, and 7% problem-child oriented. Because the classification of

parents was done subjectively, and the categories were chosen arbitrarily without standardized measures, the conclusions are of questionable validity and reliability. The authors concluded that parents often suffer more severe trauma than their child and that long-term response cannot be predicted from initial reactions. These conclusions are highly questionable given that comparisons between the parents' and the children's "trauma" were based solely on subjective measures. Therefore failure to predict longterm outcome may more accurately have reflected poor measurement of the construct.

Although the study was longitudinal, it provides little information on the course of resolution of extrafamilial sexual abuse and has several major methodological problems. There was no consistency regarding who conducted the interview (physician, crisis worker, or counsellor), the frequency of therapeutic contact or the duration of follow-up (1 week to 8 months). No attempts were made to establish inter-rater reliability of the classifications or to correlate responses with the nature and severity of abuse.

A study by Wagner (1991) was the only study found which attempted to contrast the functioning of mothers of children who had experienced extrafamilial sexual abuse ($n=26$) with mothers of children who had experienced intrafamilial sexual abuse ($n=32$), and mothers of non-abused children with common childhood emotional and behavioural problems ($n= 46$). All mothers completed the Beck Depression Inventory (BDI; Beck & Steer, 1987). There were no significant group differences in the mean BDI scores or in the proportion of mothers in each BDI category (normal, moderate

depression, moderately severe depression, extremely severe depression). Although not statistically significant, 69% of the extrafamilial mothers reported experiencing at least a moderate level of depressed mood as contrasted with 50% of the mothers in the other two groups. No significant effects were found for child variables (age, sex, race and presenting problem) on the level of maternal depression. Although these mothers who brought their sexually abused children for clinical evaluation were not reporting significantly higher levels of depressed mood than other mothers seeking psychological services for their children, the group mean for depressed mood in mothers of children who had experienced extrafamilial sexual abuse was in the clinical range ($M = 16$). Wagner suggested three possible reasons for this: the mother of a sexually abuse child may have depressed feelings in response to the stressors associated with the abuse and investigation; the mother may have had a pre-existing depressive state which affected her ability to effectively parent and protect her child from abuse; or the mother may have had a history of child sexual abuse which triggered depressive symptoms upon learning of her child's victimization.

It is important to note that the Beck Depression Inventory provided an indirect measure of self-reported depressed mood rather than clinical depression. As well, the time since disclosure was not considered and only 39% of the clinic mothers of sexually abused children participated in the study. No attempt was made to determine whether or not systematic differences existed between participants and those who refused to participate (a flaw present in most of the literature). In addition, the

presenting problem and the extent of the abuse were not defined behaviourally and categorization of the abuse was limited to type (intrafamilial, extrafamilial sexual abuse, non-abused). It is therefore unclear how representative the findings are of mothers seeking therapy for their children following disclosure of extrafamilial sexual abuse or of mothers who did not seek help. The question can also be raised as to whether the lack of a relationship between child variables and depressive symptoms would have remained if child symptomatology had been defined more specifically (e.g., externalizing vs. internalizing behaviours, depressive symptoms).

Wagner did, nonetheless, identify the need for a longitudinal study of mothers of sexually abused children beginning in the immediate post-investigation period which would focus on the longterm impact on mothers of child disclosures of sexual abuse. He further stressed the importance of considering parent variables such as marital functioning, childhood history of abuse, belief of their child's disclosure and satisfaction with how authorities responded to their child's allegations.

Summary

In summary, research addressing the reactions of parents to extrafamilial sexual abuse has had major methodological weaknesses. Most have combined incestuous and extrafamilial abuse, or have been retrospective with variable assessment procedures and non-standardized measures. Many studies are limited by their small restrictive samples, and the lack of control groups. None have done systematic analyses of families who refused to participate.

Only three studies have addressed the clinical symptomatology associated with the stress of being a parent of a child sexually abused by someone outside of the nuclear family using standardized measures (Burgess et al, 1990; Kelley, 1990; Kiser et al., 1988). However, these studies have all focused on children abused in daycare and therefore have limited generalizability to parents of children abused outside of daycare or who are older than six years of age. One other study has contrasted the level of depressive symptomatology in mothers of victims of extrafamilial sexual abuse with that seen in mothers of victims of intrafamilial sexual abuse and in mothers of children with emotional and behavioural problems. However, this study was restricted to mothers who were seeking psychological services for their children.

The one longitudinal study (Mann & Gaynor, 1980) lacked standardized measures and consistent follow-up periods. Only one study (Wagner, 1991) has considered whether age or gender differences in the child victim may affect the reactions of parents but this study has focused exclusively on depressive symptomatology. To date, no attempts have been made to chart the course of adjustment over time for parents or to identify which responses are adaptive and maladaptive for parental and family systems.

Descriptive Reports of Parental Functioning

The second source of information about parental response comes from clinical reports of intervention programs with parents of children who have experienced extrafamilial sexual abuse. In reviewing the literature, twelve articles were found specifically

addressing the reactions of parents to extrafamilial sexual abuse (Bernbaum, 1986; Burgess et al., 1990; DeVoss & Newlon, 1986; Ehrensaft, 1992; Esquilin, 1987; Hunt & Baird, 1990; Kiser, Pugh, McColgan, Pruitt & Edward, 1991; MacFarlane, 1986; Regehr, 1990; Reyman, 1990; Sesan, et al., 1986; Van Scoyk et al, 1988).

With the exception of the descriptions by MacFarlane (1986) and Reyman (1990), and the programs described by Van Scoyk et al. (1988), Kiser et al. (1991), Ehrensaft (1992) and Regehr (1990), the descriptions were based on parents in group intervention programs. The parental reactions described by Van Scoyk et al. (1988) were based on 37 families who were involved in family therapy and concurrent group therapy for the abused children over a nine-month period; Kiser et al.'s (1991) observations were based on ten families involved in ten sessions of family therapy following sexual abuse in a daycare setting. The reactions discussed by Regehr (1990) combined families seen by the Sexual Assault Team in an emergency department and in a follow-up counselling clinic, whereas those outlined by Ehrensaft were based on families presenting to a child development centre following abuse in a military daycare. Finkelhor et al (1988) studied a mixture of families of children abused in community and family daycares. Because their design relied only on phone interviews with social service agencies, and did not involve direct contact with the families, their research is considered to be limited even descriptively.

Effects on Individual Parental Functioning

There are several features which emerged repeatedly in the clinical descriptions of initial parental reactions. These

included: anger directed at the perpetrator or displaced onto a family member, helplessness, vulnerability, guilt, self-blame, panic, shock, denial, embarrassment, the desire for secrecy, and fear for the child. Also prominent was disbelief, a sense that "this can't be happening" and the hope that what was revealed was not true (Esquilin, 1987).

In addition, parents felt betrayed and were ambivalent about how to deal with their wish for revenge particularly if their family was religious. If the perpetrator was close to the family, parents were often overwhelmed by their need to alter their perception of the perpetrator while attending to their child's needs (Esquilin, 1987). Feelings of guilt were reinforced by others who believed that in a just world, bad things did not happen to good people (Regehr, 1990). For example, many parents were reported to be pressured by others to consider the perpetrator's welfare.

It was also common for parents in Finkelhor et al.'s study (1988) to suppress or deny their own reactions and needs until depression developed or alcohol and drug problems were reactivated. Many parents reported feeling isolated from neighbours and friends, and found their responses to be distressing and distancing. One year later, reactions of extreme disappointment, anger, and hurt persisted for Bernbaum's (1986) group.

Effects on Marital Functioning

Bernbaum (1986), MacFarlane (1986) and Finkelhor et al. (1988) also recognized the potential for exacerbation of recent marital problems following the disclosure of extrafamilial sexual

abuse. In brainstorming with 13 couples who had experienced the impact of extrafamilial sexual abuse, Bernbaum (1986) found many potential areas of marital strain: difficulty in simultaneously grieving and supporting each other, stress related to differences in the grieving process, displaced anger, jealousy related to differences in coping with severe stress, difficulty in sexual relations, and unequal sharing of support due to the depression of one spouse.

This is consistent with findings by Sauzier (1989) and Gomes-Schwartz et al. (1990). Both of their studies found marital disruption in 45% of families within the first 18 months following disclosures of extrafamilial sexual abuse. Finkelhor et al. (1988) found that the aftermath of disclosure caused major upheaval and life changes for parents, which often created a wedge between husbands and wives. Typical life changes included termination of employment by the mother, moves to a new area to avoid community and media attention, and endless medical, legal and therapy visits. Generally mothers became engrossed in the abuse while fathers became cool and distant further intensifying the distress experienced by the couple. If the couple had a history of marital problems preceding the abuse, the aftermath was often the trigger that terminated the relationship. Guilt and blame also intensified the marital problems.

Effects on Parent-Child Relationships

Within the parent-child subsystem, other effects have been identified by parents: doubts regarding their ability to parent, exhaustion, a lack of energy to interact with other children, overprotection of siblings (Bernbaum, 1986) and for fathers,

especially, reluctance to display physical affection with the victim (Bernbaum, 1986; Burgess et al., 1987). For Van Scoyk et al.'s (1988) group, the most difficult issue to resolve was the interplay between the parents' guilt at failing to protect the child and the child's anger at not being protected. This conflict often led to a response of overprotectiveness which further heightened the situation (Regehr, 1990) or over-involvement in the child's life which was perceived as inhibiting the child's sense of mastery and intensifying feelings of powerlessness and vulnerability (Esquilin, 1987).

Hunt and Baird (1990) found protection issues to be particularly salient in their study of 10 families who had children between the ages of 3 to 5 who had been sexually abused in sex rings. Although parents were initially overwhelmed by a sense of inadequacy and powerlessness, their perceived inability to protect their children tended to lead to long-term anger, depression, and guilt over their child's lost innocence. For some parents, even talking about the abuse exacerbated their sense of shame and failure. The authors perceived the effects on the parent-child subsystem to be so devastating because perpetrators in sex rings tended to systematically try to destroy the trust and security within the parent-child relationship to prevent disclosure. Therefore the parents had to deal with children who felt abandoned and isolated by them and who were unsure if their parents were really a part of the sex ring. The greater the number of offenders involved, the more the trust was invalidated in the parent-child subsystem. Two other difficulties were also prominent with these parents: maintaining normalcy in parent-child

relationships and differentiating normal stages of growth and development from the effects of sexual abuse, a finding also reported by Bernbaum (1986). Parents reported that their feelings of guilt, anger, and sadness interfered with their ability to consistently be appropriate in their responses to their child's behaviour. Hunt and Baird (1990) emphasized that parents needed to be prepared for the re-emergence of traumatic material as the child emotionally and cognitively re-explored the past at subsequent stages of development.

Anger towards the child was also prominent. This was in relation to the child not preventing or disclosing the abuse, for disrupting the parents' lives (Regehr, 1990), and for being vulnerable to abuse (Sesan et al., 1986). Doubts about whether the child consented were especially pronounced in parents of older children if the abuse occurred within the context of breaking a family rule (Esquilin, 1987; Regehr, 1990).

Similar to the potential for exacerbation of marital problems, Esquilin (1987) also noted that when maladaptive familial reactions to the abuse were overlooked, problematic family dynamics which predated the abuse began to solidify into rigid, destructive patterns. One reaction which was noted to be particularly prevalent in fathers was the tendency to acknowledge the abuse but to deny that the child understood what happened (Esquilin, 1987). In doing so, parents ignored the depression, anger, guilt or fear seen in their child to avoid evoking similar reactions within themselves. Children in these families either became stoic or were scapegoated to preserve parental harmony.

Summary

Although these descriptions provide a valuable preliminary portrayal of initial reactions of parents to extrafamilial sexual abuse within the first three years following disclosure, they are limited in several ways. They are based on small samples, primarily of families where children were abused in daycare and who were in therapy and may not generalize to families not in treatment and whose children were abused by other types of perpetrators of extrafamilial sexual abuse. Most of this body of literature has been based on subjective interpretation of clinical observations and on parents' presenting issues. Although most families were in some form of treatment usually lasting for approximately eight weeks, no attempt was made to quantify the prevalence of identified reactions prior to treatment and post-treatment, to chart the course of adjustment over time, or to identify which responses were adaptive. Nor have researchers or clinicians attempted to measure the effects of treatment on the abuse sequelae observed in parents. Nevertheless, the results of these qualitatively rich descriptive studies have tended to correspond well with the results obtained from the controlled studies. Indeed, more attention has been paid to the qualitative differences in the reactions between mothers and fathers in this clinical literature than in the empirical studies.

Factors Mediating the Impact of Extrafamilial Sexual Abuse onParentsParental Life History and Individual Dynamics

Few researchers or clinicians have attempted to conceptualize the mechanisms by which extrafamilial sexual abuse

impacts on the family or parents. Burgess (1985) has suggested that there are four important dynamics which may affect how individual parents respond to their child and the sexual abuse crisis: the parent's own experiences as a child, their relationship with their own parents, marital closeness, and personal issues of sexuality. Parents with a prior history of undisclosed or unresolved sexual abuse are speculated to experience worse trauma when their child is abused (Kelley, 1990; Lamb, 1986; MacFarlane, 1986; Tong, Oates, & McDowell, 1987). For mothers in particular, the sexual abuse of their child may evoke a double trauma in which they face simultaneously their own unresolved trauma as well as that of their child (Kelley, 1990). This has been attributed to the failure of abused parents to resolve the sense of the world as a threatening place and a lost sense that they can protect themselves or change the world (Lamb, 1986). These are the assumptions about the environment typically threatened after a traumatic event (Janoff-Bulman, 1985).

Only two of the dynamics identified by Burgess (1985) have been tested empirically: parental abuse history and their relationship with their own parents. The research surrounding abuse history in parents has yielded inconsistent findings. Three studies addressed this question in mothers only, but they combined responses to intrafamilial and extrafamilial sexual abuse.

In Friederich and Reams' (1987) study described previously, a history of child sexual abuse was reported to have delayed the mother's ability to respond to her child's needs. However, no standardized instruments were used to test maternal functioning.

Gomes-Schwartz et al. (1990) did not find empirical support for this assumption in their study of mothers of 156 children who had been sexually abused (33% non-familial sexual abuse, 22% extended family sexual abuse). They used clinical interviews and the Millon Clinical Multiaxial Inventory (Millon, 1983) in their study of mothers within the first 18 months following disclosure. They found no indications that mothers who had a history of child sexual abuse responded any differently to the child's abuse than non-abused mothers. No analyses were done to differentiate between the contribution of extrafamilial and intrafamilial sexual abuse childhood histories to the responses of the mothers. They did however, find that some of the variability in maternal responses to sexual abuse could be explained by the quality of their relationship with their own parents and with their child. Mothers who received poorer nurturance from their own parents had more difficulty developing empathic and nurturing responses to their abused child. Mothers who had a poor relationship with their own mother were especially likely to be dependent upon the child and be intrusive with the child whereas a poor relationship with their own father increased the likelihood that the mother would feel overburdened by her child's needs.

Another study by Friedrich (1991) contrasted the Minnesota Multiphasic Personality Inventories of 37 mothers of sexually abused children who were receiving outpatient therapy (57% intrafamilial /extended family, 43% extrafamilial) with a control group of psychiatric outpatients and a normative comparison sample. Case mothers with a history of child sexual abuse ($n = 28$) when compared with case mothers who did not have such

histories obtained significantly higher scores on scales measuring symptoms of non-conventional thinking, hypochondriasis, hysteria, psychopathic deviate, paranoia, psychasthenia, schizophrenia, and hypomania with a clinically significant elevation on the psychopathic deviate scale. This latter elevation was also evident when the combined case group was contrasted with outpatients. The elevations were interpreted as reflecting anger, family discord, alienation and depression which predisposed these mothers' children to experience abuse.

No recognition was given to the possibility that the disclosures added a further traumatic stressor which exacerbated these personality characteristics (especially given that these mothers' primary presenting problems were behaviour problems in their abused child and concurrent parenting difficulties). Because a history of sexual abuse was used as an exclusion criterion for both control groups and no data were presented on the mean time since the disclosures of sexual abuse, it is unclear whether these personality differences were actually related to having an abuse history or to experiencing the double traumatization process. Nevertheless this study does provide tentative support for these two dynamics in a subgroup of mothers requiring therapy following disclosures of sexual abuse. The last two dynamics identified by Burgess (1985), marital closeness, and personal issues around sexuality have yet to be tested empirically.

Court Proceedings

Both the empirical and descriptive literature have indicated a need to consider the contribution of court proceedings to the

degree and duration of trauma experienced by parents following the disclosure of sexual abuse (Burgess et al., 1990; Finkelhor et al., 1988; Regehr, 1990). Immediately following disclosure, parents are thrust into making major decisions at a time when they still have not processed their own reactions. This involves considering their sense of social responsibility to protect other children, their desire for retribution, their fears that the court process will further traumatize their child, and their sense of guilt for charging the perpetrator and impacting on his family (Regehr, 1990). Factors which have been identified as increasing the stress of court for children may be also relevant for their parents. These include dealing with unfamiliar crown and defense attorneys, seeing the defendant, being exposed to public scrutiny with its inherent invasion of privacy, and the waiting associated with delays and postponement of trials (Gomes-Schwartz et al., 1990; Weis & Berg, 1982, Whitcomb, 1986). Descriptive accounts of parental reactions have described court delays as a major stressor which often left parents unsure how to interact with the perpetrator, and faced with the constant reminder of the trauma incurred by their child due to the continued presence of the perpetrator within their environment (Van Scoyk et al., (1988).

Burgess et al. (1990), in their study of parents in 17 families with children who testified, found that parents had two types of fears prior to court testimony: fears that their child would be frightened, discounted or pressured by defense attorneys in a way that could precipitate acute stress symptoms, and concerns that the community would retaliate or reject the family for prosecuting the offender. Following the court proceedings,

most of the parents in this sample experienced ongoing doubts about their decision, and felt the need to re-evaluate whether they had retraumatized their children by involving them in the court process. This was salient despite the fact that the primary motive for going to court for most parents was to create safety for their child. This study, however, relied on retrospective accounts of parents well after the court process was concluded (an average of two years post-disclosure). As such, it is unclear whether the distress levels experienced by parents were indicative of the prolonged effect of court-related experiences on the parents, of their attempts to re-interpret these experiences, or of intervening factors.

Summary

The literature on factors mediating the impact of the disclosure of extrafamilial sexual abuse on parents has been primarily speculative and based on Burgess' work with children abused in sex rings or in daycare (Burgess, 1985; Burgess et al., 1990). The hypothesized dynamics highlight the importance of parents' life histories prior to the abuse, in particular, past traumatic events, dysfunctional interpersonal relationships, and issues surrounding sexuality as factors which may exacerbate the sequelae related to the disclosure of extrafamilial sexual abuse. However, empirical studies have compared parents of children who experienced extrafamilial sexual abuse with those who experienced intrafamilial sexual abuse and have only focused on past histories of childhood sexual abuse and relationships with parents in the family-of-origin. Although Burgess et al.'s study (1990) focused exclusively on parents of children who experienced extrafamilial

sexual abuse, the mean time since court proceedings was greater than two years. Despite this limitation, it is important to note that clinical observations support the premise that the involvement of the family in court proceedings may prolong the trauma associated with the disclosure of extrafamilial sexual abuse and may be itself a more prolonged and potentially traumatizing stressor than the actual disclosure of sexual abuse.

Theoretical Conceptualizations of the Impact of Extrafamilial Sexual Abuse on Parents

In attempting to conceptualize the process which parents experience in response to the disclosure of extrafamilial sexual abuse, a number of models have been proposed. They fall into five categories: crisis intervention (Sesan et al., 1986; DeVoss & Newlon, 1986), family existential crisis (Van Scoyk et al., 1988), traumatic stress processing (Figley, 1985; 1989a; Bernbaum, 1986; Horowitz, 1980), grief processing (Gomes-Schwartz et al., 1990) and information processing (Burgess et al., 1990).

Models which Conceptualize Parental Responses at a Systemic Level

Crisis Intervention Models.

Sesan et al. (1986) and DeVoss and Newlon (1986) described extrafamilial sexual abuse as a situational crisis for the family, in which most of the impact and resolution occurs within the first eight weeks. They combined sexual victimization and disclosure as one stressful event which alters the homeostatic balance of the family and individual family members and interferes with their ability to utilize previously developed coping mechanisms.

Although this model recognizes the disclosure of sexual abuse as a crisis, it fails to isolate elements pertaining to sexual abuse which differentiate this type of crisis from any other general crises. It also uses an acute framework and fails to recognize the potentially prolonged nature of this type of stressor. Such a view further neglects the potential for parents and the child to sexualize normal developmental issues over time (Bernbaum, 1986) particularly with the onset of puberty or dating, and mentions only in passing that the processing of the trauma may re-emerge as the child develops emotionally and physically. It does not consider at all the changes related to cognitive processing of the trauma and its meaning for the child or family. It also fails to consider the influence of the family environment and other stressors, particularly the protracted stressor of a possible court procedure, on the family (Kilpatrick, 1987).

Existential Crisis Model.

A second systemic framework developed by Van Scoyk et al., (1988) is specific to families where extrafamilial sexual abuse has occurred. The model is based on clinical work with 37 families whose children were victims of sexual abuse by a non-family member. They stressed that the evaluation and treatment issues following extrafamilial sexual abuse are different from incestuous families, and that the trauma of child sexual abuse affects the child and the parent at different time periods. Their model was adapted from Ferreira's (1963, 1965) and Byng-Hall's (1973) work on family myths. Because child sexual abuse is outside the usual range of human experience, it is viewed as creating a breach in the family's "protective shield". The family

becomes overwhelmed as its shared ideology, beliefs and myths which usually protect it are challenged. These myths are mutually agreed patterns of distorted roles that family members use defensively. Individual roles and defenses are intertwined to support these myths so that if one member is violated, the whole family system is threatened. The myths typically challenged following a sexual abuse incident are listed in Table 1. The

Insert Table 1 about here

impact on the family member varies with whether the incident was isolated or repeated, whether it was coercive, seductive or violent, and whether the perpetrator was a friend, relative or stranger. Extrafamilial sexual abuse is also viewed as an "existential crisis" which impacts on the family trajectory and leads to a derailment of each family member's expected future. This crisis impacts uniquely for each member so that the timing of reactions of family members may be out of synchrony. Van Scoyk et al. stressed that the child experiences a repetition of the trauma of sexual abuse at disclosure whereas for the parents, the initial trauma occurs at disclosure. The issues that arise as a consequence of disclosure are also perceived as being directly related to pre-existing family myths and beliefs. In order for the family to resolve the trauma, the family members need to integrate the new reality of child sexual abuse into their old belief and myth systems.

This model provides a clear set of parental and family beliefs and myths which a clinician can use to evaluate what myths

Table 1.

Parental/Familial Beliefs and Myths Commonly Affected by Child Sexual Abuse*

-
1. Our family is a SAFE PLACE.
 2. We can protect our children from evil.
 3. We can trust our judgement about those to whom we entrust our children's care.
 4. If something terrible does happen, "Justice will be done."
 5. "Vengeance will be ours" -sayeth the parents.
 6. We are law-abiding, ethical citizens.
 7. We can live in peace in our community.
 8. We can talk about things in our family and leave the problem behind.
 9. It will get worse if we talk about it.
 10. Children who are sexually abused are somehow ruined for life.
-

Note. * From "A theoretical framework for evaluation and treatment of the victims of child sexual assault by a nonfamily member" by S. Van Scoyk, J. Gray, & D. Jones, 1988, Family Process, 27, p. 105-113.

are relevant to each family. It is not clear, however, on the manifestations of poor or healthy adaptation to the trauma of child sexual abuse at levels other than the cognitive level (e.g., behavioural, or emotional). Nor has it been empirically tested.

Traumatized Families Model.

A third model that has been adopted to explain why the period following the disclosure of extrafamilial sexual abuse may be traumatic for parents is Figley's model (1985) of the impact of traumatic stress on the family (Bernbaum, 1986). Sexual abuse of any kind is viewed as a trauma of sufficient magnitude to potentially cause secondary catastrophic stress reactions in the family (Burge, 1983). Figley (1985) suggested that child victimization which is caused by another person and which directly affects the intimacy and social support within the family may be particularly emotionally devastating for families. He proposed that the characteristics of the event which make it troubling are its suddenness, the perceived danger and fear of injury of someone who is cared for deeply, and its capacity to overwhelm the family in terms of sensory overload, role strain, and overstimulation (Figley, 1983). At a time when parents are expected to provide social support for the child, they are also struggling to process their own emotional reactions. The anger, helplessness, guilt, blame, and denial previously described are considered to be typical catastrophic reactions (Figley, 1983). Figley (1989a, p. 21) stressed that "each person who appears to be suffering from post-traumatic stress reactions [should] be viewed within a family context of those victimized indirectly as a result of their concern for the victim".

Figley (1985, 1989) identified two ways in which families may be traumatized that are relevant for families where extrafamilial sexual abuse has occurred. First, the parents may experience vicarious effects. That is, because of their emotional attachment to the child, and the greater parental awareness of the sexual nature of the trauma, parents may initially experience more stress than the victim. Secondly, chiasmal effects may occur. That is, behaviours, attitudes, and emotions first seen in one person following trauma, may be subsequently observed in the person providing emotional support at a later time, in a process analogous to infecting the family (Kishur, 1984; Kishur & Figley, 1987). Supporter and victim distress are regarded as reciprocally influenced by distress levels in family members. These distress levels may also be influenced by the reaction of individual family members and the family as a whole to previous traumatic events which left lingering troubling memories (Figley, 1989a).

Figley (1989a) has also proposed a model of family adaptation to trauma which identifies characteristics of functional and dysfunctional family coping following a traumatic event. Adaptation is viewed systemically as an ongoing process which can hinder or help current and future family functioning. Intrinsic to this model is the idea that the stressful event and trauma do not occur simultaneously (see Figure 2). The stressor is defined as any event(s) which demands immediate attention from the family to control. Trauma induction depends on the resources of the family and the perceptions about the stressor held by family members especially the most influential members. An event becomes a "family traumatic event" when the family perceives that

Insert Figure 2 about here

all or some of its members are in danger or in a major upheaval. Post-traumatic stressors are the accumulation of strains and stressors imposed on the family system during and following the traumatic event.

For families where extrafamilial sexual abuse has occurred, this could include the stressful event and associated hardships (e.g., statement to police and the Children's Aid Society, court proceedings, confrontations with the perpetrator), normative transitions (e.g., puberty, first dating experience), prior unresolved strains, consequences of previous attempts to cope and the ambiguity within the family and their social world. This model suggests that parental perceptions would weigh heavily in the perception adopted by the child and the family as a whole due to the increased power typically present within the parent subsystem.

Figley (1989a) conceptualized three possible outcomes for families following a traumatic event (good, acceptable and poor adaptation). He focused primarily on good and poor adaptation and neglected to define acceptable adaptation even though this may represent a significant proportion of the families. Table 2 further dichotomizes the characteristics which differentiate families who cope well with highly stressful events from those who do not (Figley, 1989a, p. 27-28) and contrasts these with the adaptive and maladaptive parental responses

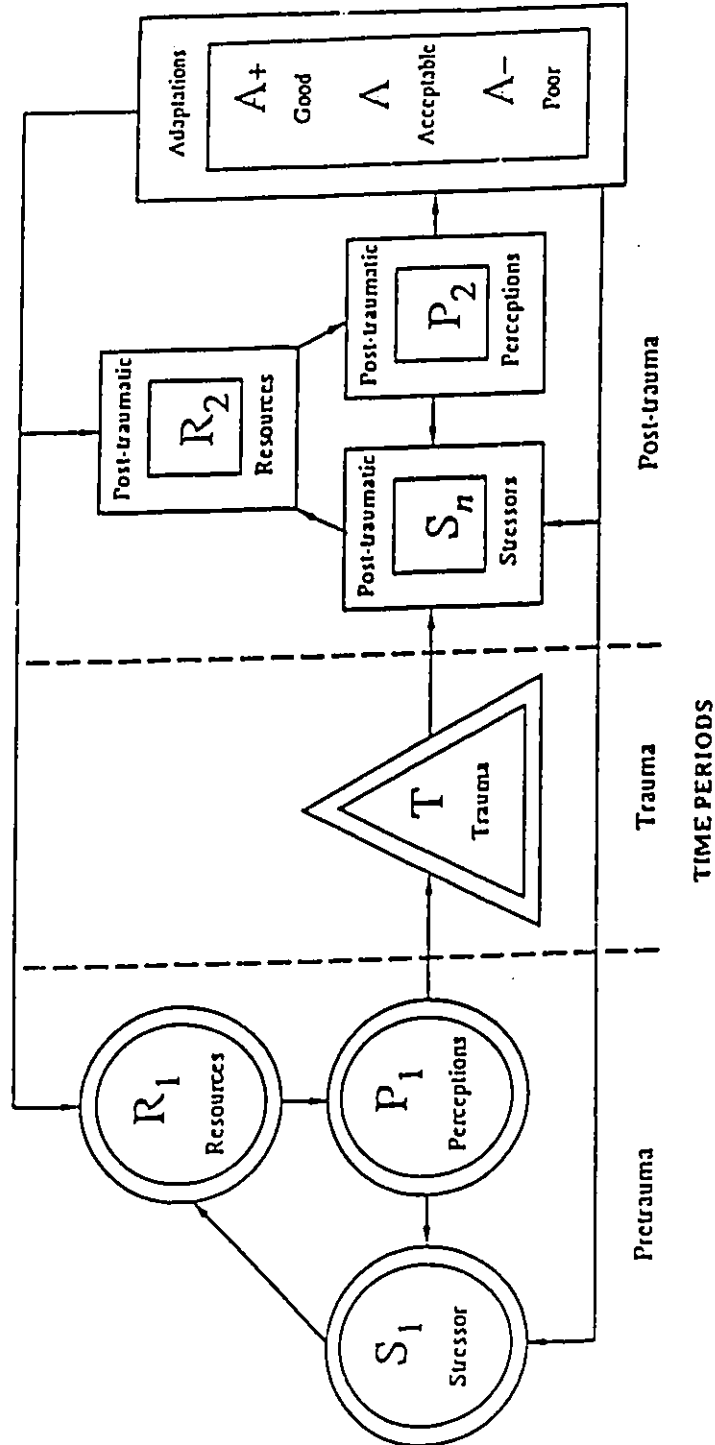


Figure 2. Systemic adaptation to trauma process.

Note. From Helping Traumatized Families (p.25) by Charles Figley, 1989, San Francisco: Jossey Publ. Reprinted by permission.

identified by Esquilin (1987) specifically in relation to families coping with the disclosure of extrafamilial sexual abuse.

Insert Table 2 about here

Figley's model of family adaptation to traumatic stress is strong in its systemic orientation and its consideration of pre-traumatic family resources and beliefs. He recognized that sexual abuse is outside of the realm of situational stressors, and that trauma does not occur in isolation from the influence of other family members. However, his model does not incorporate the adjustment of individual family members or make predictions about the influence of parental reactions on each other or on child adjustment. Nor did he consider the adjustment of secondary victims separate from the primary victims. He did however, elsewhere mention the use of family traumagrams in his clinical work in which he depicts the multiple and cumulative effects of major stressors and traumas for each member on current individual and family functioning.

Models which Conceptualize Parental Response at an Individual Level

Models which focus specifically on individual parental reactions have taken two primary directions. Gomes-Schwartz et al. (1990) focused mainly on the grieving process which follows the disclosure of sexual abuse while Horowitz (1980) and Burgess et al. (1990) focused on the process of trauma resolution with its incumbent post-traumatic stress symptoms.

Table 2

Characteristics of Functional and Dysfunctional Family Coping with Highly Stressful Events

Functional Family Coping	Dysfunctional Family Coping
General Family Characteristics (Figley, 1989) ^a	
clear acceptance of the stressor	denial or misperception of the the stressor
family-centred locus of control	individual-centred locus of control
solution-oriented problem solving	blame-oriented problem solving
high interpersonal tolerance	low interpersonal tolerance
clear, direct expressions of commitment and affection	indirect or missing expressions of commitment and affection
open, effective communication	closed, ineffective communication
high family cohesion	low or poor family cohesion
flexible family roles	rigid family roles
efficient resource utilization	inefficient resource utilization
absence of violence	utilization of violence
infrequency of substance use	frequent abuse of substances
Abuse-Specific Characteristics (Esquilin, 1987) ^b	
believes the child	persistent denial that the child was abused or understands what happened
protects the child from further harm	preoccupied with parental guilt for failing to protect
focuses on the child's physical and emotional well-being	blames the child
accepts the child's feelings	preoccupied with rage at the perpetrator
maintains an image of the child as a survivor	damaged image of the child

Note. ^aFrom Helping Traumatized Families, by Charles. R. Figley, 1989, San Francisco: Jossey-Bass Publ., pp. 27-30. ^bFrom "Family Responses to the Identification of Extra-Familial Child Sexual Abuse" by Susan Esquilin, 1987, Psychotherapy in Private Practice, 5, 105-113.

Grief Processing.

Gomes-Schwartz et al. (1990) proposed that the experience of mothers of children who have experienced extrafamilial sexual abuse are not fundamentally different from mothers of children who have experienced intrafamilial sexual abuse. Their model addresses mothers only and conceptualizes that the evolution of maternal responses to the disclosure of child sexual abuse is like a grieving process in which the mother passes through shock, denial, anger, and depression before she can accept the reality of the traumatic event (Kubler-Ross, 1969). They further stressed that the initial reactions do not necessarily predict the eventual capacity of the mothers to respond in protective ways to secure their child's safety.

This model is valuable in that it normalizes the emotions of shock, anger, denial and depression typically reported by parents. It emphasises the losses experienced by mothers following a disclosure, although the particular losses involved are never specified. One could speculate that the losses could be related to the following areas: the child's sexual innocence, maternal dreams for the child, loss of trust in others particularly of the same sex as the abuser, loss of any close relationship with the abuser, and changed perceptions of themselves, their child, the family and the world as a safe place. This model also fails to identify which of the emotions are adaptive for the whole family at a particular time, and the interplay between the level of resolution for each parent on the family system. In addition, the impact of the court process on the mother's progress towards resolution (e.g., court outcome, faith in the justice system) is

neglected.

Although this model does not conceptualize the duration of the grief (whether it is time-limited or chronic), the descriptive literature (e.g., Kelley, 1990) would suggest that a chronic sorrow model similar to that used to explain the experience of parents of mentally retarded children may be appropriate (Olshansky, 1962; Wikler, Waslow & Hatfield, 1981). In this model, chronic sorrow is perceived as a normal reaction to a tragic event which re-emerges periodically. The intensity of the emotions experienced would vary with the developmental stages of the child, periodic crises and the coping strengths of individuals within the family. Unlike the crises models, the chronic sorrow model acknowledges the potential for later events in a parent's life to reactivate the emotions experienced or blocked at disclosure. The grief models also are consistent with the levels of depression, avoidance and hostility reported in the few empirical studies using standardized measures of parental functioning (Burgess et al., 1990; Kelley, 1990).

Post-Traumatic Stress Models.

If the sexual abuse of a child is conceived to be a traumatic event for the family, one would expect that a sub-group of parents might exhibit post-traumatic stress reactions (Figley, 1989a). Horowitz (1980) formulated a model which includes the typical progression of psychological responses within an individual following serious life events. He identified two major states following traumatic stress: intrusion, characterized by unbidden distressing thoughts, images, feelings, and dreams related to the event, and avoidance, characterized by psychic

numbing, and conscious denial of the meaning and consequences of the event. Initially, a period of outcry may occur which is followed by a dominant way of reacting, either denial or intrusion. As the person works through the changes in perceptions of the self, others, and the world affected by the trauma, these two periods oscillate, gradually decreasing in frequency and intensity until resolution has occurred.

This model is valuable in predicting the post-traumatic responses of parents at an individual level, and has a standardized scale allowing for empirical verification (Impact of Event Scale, Horowitz et al., 1979). It does not, however, consider the influence of spousal and child subsystems on resolution. The adjustment displayed by the child and the spouse, as well as the extent of legal and therapeutic intervention, may influence the course.

Information Processing.

The model developed by Burgess et al. (1990), like that of Van Scoyk et al. (1988), is specific to parents of children who have experienced extrafamilial sexual abuse and is an extension of their model of information processing of trauma for children (Burgess et al., 1987; Hartman & Burgess, 1988). It combines the literature on human response to stressful life events (Hill, 1949) and post-traumatic stress disorder (Eth & Pynoos, 1985; Horowitz, 1976; Van der Kolk, 1984). They assumed that parents also experience post-traumatic stress related to their child's sexual abuse. Like the child, the parent has to psychologically process the perceptions, meanings and ideations created by the knowledge of their child's abuse. As parents process the trauma at a

sensory, perceptual and cognitive level, post-traumatic behaviours may develop. The model focuses mainly on how parents organize and reconstruct their thinking and memories about the abuse over time.

Within this context, the court process is perceived as an additional traumatic stressor, a "double burden" which activates and prolongs the traumatic recognition of their child's abuse in two ways. First, the trial provokes a sorting and recounting of the details surrounding their child's abuse. Secondly, the trial typically does not provide closure even if a verdict of guilty is rendered.

Burgess et al. (1990) further suggested that a "self traumatizing mechanism" may be operative in fathers and mothers, which has a strong visual component leading to intrusive symptoms. However, they did not elaborate on this mechanism further. They also identified a major weakness in all models to date; that is, that little is known about the ideation of fathers and its relationship to past trauma in their lives, anticipated trauma or fearful identification with the potential for sexual aggression within themselves.

Although this model is valuable in recognizing the importance of meaning construction and the protracted stressor of court involvement in trauma processing, the progression and resolution of the experience of information processing for parents is vague and not testable in its present format.

Summary

In summary, conceptual models of how parents respond to extrafamilial sexual abuse are still at the formulation stage and range on a continuum from authors who view sexual abuse as a

situational stressor (DeVoss and Newlon, 1986; Gomes-Schwartz et al., 1990; Sesan et al., 1986), to those who view it as a traumatic stressor outside of the normative range of events (Bernbaum, 1986; Burgess et al., 1990; Figley, 1985 & 1989a; Van Scoyk et al., 1988). None of the models have been tested empirically to any significant degree.

The models of Figley (1989a) and Burgess et al. (1990) suggest that the parent's perception of victim distress may be an important predictor of parental distress. They also support the notion that having a sexually abused child can result in the experience of post-traumatic stress by the parent which can be further exacerbated by the added stressor of court proceedings and by the traumatic history of individual family members prior to the abuse and disclosure. Tong et al. (1987), Lamb (1986), and MacFarlane (1986) pointed to previous parental sexual victimization, in particular, as colouring parents' perception of the event, especially for mothers. Gomes-Schwartz et al. (1990) however, suggested that the relationship between the mother and her parents may be more relevant than the abuse history of the parent. The frameworks of Van Scoyk et al. (1988) and Figley (1989a, 1989b) further identify previous family beliefs and myths as affecting how the family responds to the disclosure of child sexual abuse.

What is lacking in all of the models proposed to date is an attempt to integrate the individual dynamics occurring within the parent with their perception of the process of traumatization experienced by their child and other family members. Although the child literature has focused heavily on the nature of the sexual

abuse experience in predicting outcome, no parental model to date has attempted to conceptualize its relevance to the understanding of the psychological sequelae in parents of children who have disclosed extrafamilial sexual abuse. As well, while the empirical and anecdotal literature suggest that the processing of trauma by fathers may be different from that of mothers, no model has been formulated to explain these observed differences.

The Proposed Model for the Present Study: An Interactive Lifespan Model of Secondary Traumatization of Parents

One theoretical model which could be particularly relevant in bridging the gap between conceptualizing parental adjustment and the nature of the abusive experience is Newberger and De Vos' model (1988) of child sexual victimization outcomes. Although this model is intended to focus on child outcomes following sexual abuse, the potential sources of trauma identified within this model may be relevant for parents as well. These are the objective aversive aspects of trauma (the nature of the abusive experience), and the subjective experience of the trauma (based on Conte, 1985).

The subjective experience of trauma includes three domains: cognitive processes, environmental sensitivity, and emotional and behavioural functioning. Newberger and De Vos (1988) incorporated Lazarus and Launier's (1978) view that the meaning that a person gives to the stressful life event and not simply the event itself, determines the reaction of the person to the event. This is similar to the theoretical perspective of Elwell and Ephross (1987) who assumed that child sexual abuse is a potential crisis which may result in trauma when the situation is defined by the

child or significant others as a negative or threatening experience.

It should be noted, however, that parents were not addressed specifically in the original model. This has led to the development of the adapted model proposed for the present study. The Newberger and De Vos (1988) model was modified in the following ways:

1. For the parents, the traumatic stressful event is postulated to begin with the disclosure rather than over the course of the sexual abuse (as identified by Van Scoyk et al.; 1988), unless there are indicators in the child's behaviour suggestive of sexual abuse which may raise parental suspicion prior to the disclosure.
2. The aspects of parental experience relevant to each of the subjective domains are tailored to address areas relevant to parents.
3. The objective aspects of the abuse have been expanded to include not only the type of abuse but also the number of children abused within the family.
4. The court process has been added as another significant life stressor following the abuse which could impact on how the experience of having a sexually abused child is carried into their future life trajectory.

Using this adapted framework for parents of sexually abused children, the cognitive appraisal domain is conceptualized as including a parent's perceptions of the event, perceptions of child problems related to the abuse, and perceptions of parental competence. The environmental sensitivity domain has been

expanded to include the awareness by others of parental needs independent of the child's needs subsequent to the abuse. This includes spousal support (in two-parent families) and social support as well as factors also relevant to the child such as: family adaptability (the extent to which the family can respond to situational and developmental stress), family cohesion (emotional closeness), the helpfulness of intervention and other negative life events which may limit the sensitivity of the family environment. How cohesively a family functions under stress as well as how adaptive the family is to the changes within individual family members brought about by the experience and disclosure of sexual abuse, may affect the parent's sense of mastery. It may also affect the parent's ability to reappraise the stressful event in order to regain beliefs of personal invulnerability, of the world as meaningful, and of oneself as possessing positive attributes (Janoff-Bulman, 1985). The final domain, emotional and behavioural functioning, which considers the level of distress expressed in emotional and behavioural symptoms has been expanded to include anxiety, depression, and the post-traumatic stress symptomatology identified in previous studies (Burgess et al., 1990; Kelley, 1990; Kiser et al., 1988).

The objective aspects of the sexual abuse, plus the three domains of subjective experience interact to contribute to the impact of the trauma. Deficits or strengths in one domain can influence other domains as well as overall functioning. For example, the responsiveness of the environment to the needs of a parent and the child may influence the meaning the parent ascribes to the stressful event; the meaning may influence how the parent

responds; and the parent's and child's emotional and behavioural functioning may influence how the environment responds. Over time, the sexual abuse becomes an historical experience which may influence other negative life events and developmental transitions. The proposed model of secondary traumatization for parents used in the present research is presented schematically in Figure 3.

Insert Figure 3 about here

This adapted model has some striking parallels to Figley's model (1989a) of family adaptation to traumatic stress. The cognitive domain is consistent with Figley's perception category and the environmental sensitivity domain corresponds to Figley's resources category. The emotional and behavioural functioning domain is also consistent with the family traumagrams which Figley (1989a) uses to assess the individual functioning of family members. Both models also recognize that factors other than the stressful event itself may contribute to trauma induction and recognize the importance of the pre-abuse status of the family. Although Figley's model predicts the global functioning of the whole family, the adaptation of Newberger and De Vos' model (1988) proposed for this study predicts the functioning of individual family members within a framework that considers the impact of the family system.

In addition, this adapted model has the advantage of integrating individual, cognitive, and familial variables in predicting the outcome of secondary victims following sexual

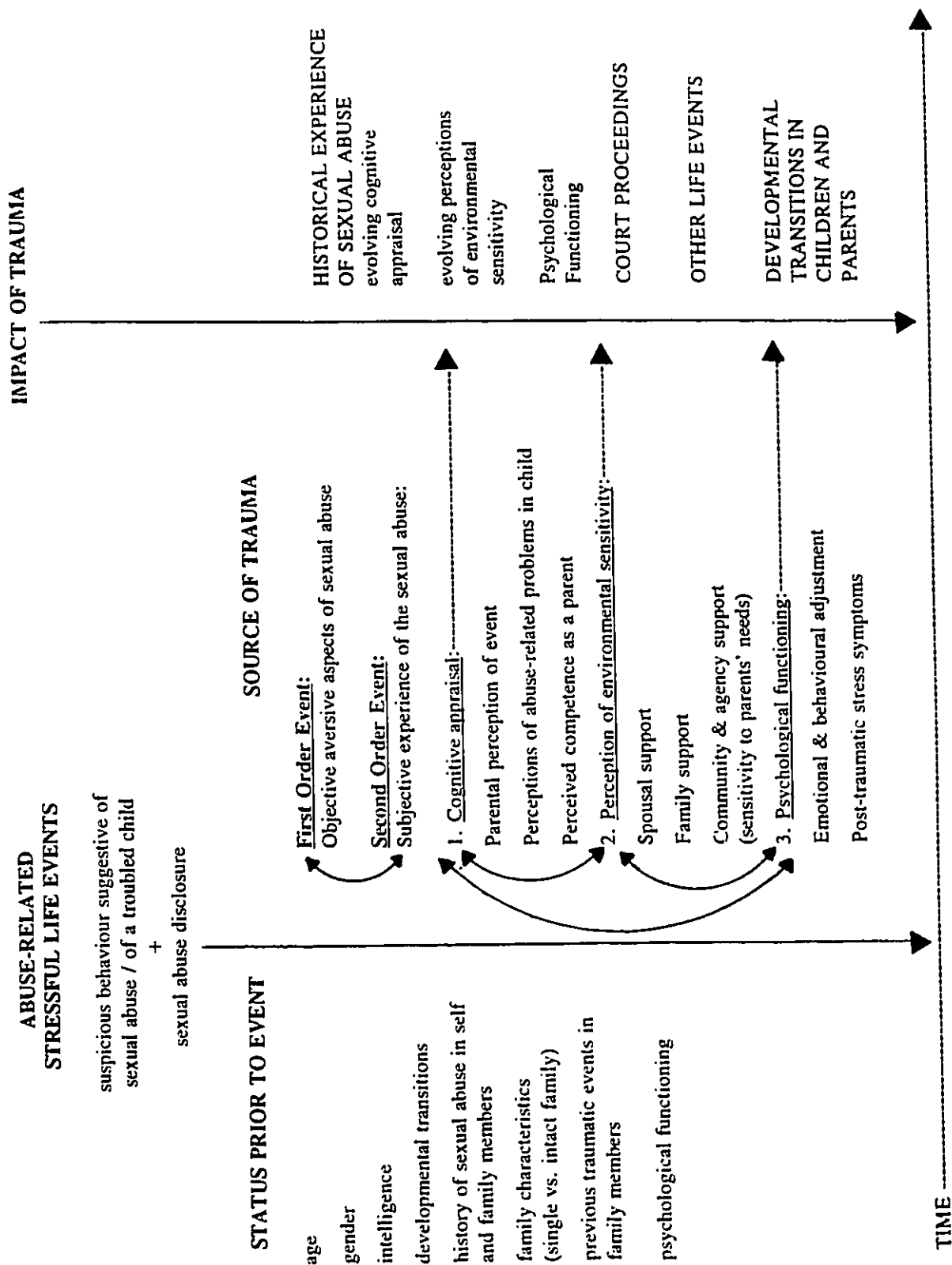


Figure 3. AN INTERACTIVE MODEL OF SECONDARY TRAUMATIZATION IN PARENTS OF SEXUALLY ABUSED CHILDREN

abuse. It also incorporates the background of the person prior to the stressful event and their prior functioning as an individual, spouse, and parent. However, Newberger and De Vos (1988) stressed that this background is insufficient to predict traumatic outcome. It is valuable in emphasizing the family context in which resolution occurs while also recognizing the objective aversive aspects of sexual abuse, and the experiencing of the persons involved at an individual level. Because of its applicability to people across the lifespan, it can also facilitate comparisons of the functioning of individual family members and of the interaction between child and parental outcome. For these reasons, it has been adopted as the theoretical model for this research.

Nevertheless, it is important to stress that like the other models it also has not been tested empirically. Nor does it conceptualize how the adjustment of mothers may differ from that experienced by fathers other than to suggest the importance of different previous traumatic life events. However, it does offer suggestions where differences across parents at various stages in the model may affect outcomes in different ways. For example, mothers may be more vulnerable to experience emotional distress and a deterioration in their sense of parent competence related to their child's abuse due to the increased vulnerability of women to parental role strain and the socialization of women to place a greater emphasis on the intimacy and closeness of the mother-child bond (Scott & Alwin, 1989). Similarly, the contribution of the environmental sensitivity domain to emotional distress may play a larger role in the level of trauma resolution in women given that

women tend to adopt a more relational perspective in their interactions with the world (Chodorow, 1978; Gilligan, 1982), in their perceptions of the self (Kaplan, 1987; Miller, 1986, 1987), and in the use of social support to buffer stress levels in general (Billings & Moos, 1982a, 1982b).

Rationale for the Study

The literature on parental response to stressful life events encountered by their children has mainly been in the area of life-threatening illness (Leahey & Wright, 1987) and general post-traumatic stress disorder (Figley, 1988a, 1989a, 1989b). Even within the area of post-traumatic stress disorder, one of the most understudied areas has been the immediate and long-term systemic sequelae of highly stressful life events (Figley, 1989a). Also lacking has been studies of parents who do not seek therapeutic help following exposure to traumatic events. By failing to consider the impact of disclosures of extrafamilial sexual abuse on parents, the full human impact of this stressor has been underestimated. Figley (1989a) identifies parents as being potentially hidden victims of traumatic events. Yet he also recognizes that not all parents remain traumatized. He identifies three major questions which are presently unanswered in current studies:

What are the major differences between those who recover from potentially traumatic events and those who do not? What accounts for the speed and fact of recovery? Do the family and social support system play a role... or is recovery a result of some other factor or set of factors, some of which have yet to be detected? (Figley, 1989a, p.142)

The empirical literature pertaining to typical parental reactions to extrafamilial sexual abuse and the course of

resolution is extremely limited, particularly in relation to considering specific time periods since disclosure. Standardized measures of parental functioning have only been used in studies published since 1988. Nor is it clear whether the effects on children based on parental reports are accurate reflections of child symptomatology following disclosure or whether they more accurately reflect parent symptomatology. Currently, predicted parental reactions have been extrapolated from the incest and rape literature for parents (Burge, 1983; Bernbaum, 1986; Remer & Elliott, 1988a, 1988b) and general traumatic stress literature (Figley, 1989a,, 1989b) with little attention paid to how this differs from the normative stressors facing families. Further, it is unclear which reactions may be adaptive, and what factors influence the ability of parents to cope successfully with their own reactions, and those of other family members.

Because the child is embedded within a family system, the disclosure of extrafamilial sexual abuse needs to be viewed as a potentially traumatic stressor which will likely impact on both the child and the family (Figley, 1985, 1988a, 1989a, 1989b). It is, therefore, important to consider how the adjustment of one member influences other members. Clinicians consistently assert that sexually abused children incorporate their parents' reactions to the abuse (DeVine, 1980; Esquilin, 1987; Kelley, 1990; MacFarlane, 1986). Given that the symptomatology of parents may bias their perceptions of symptomatology in their children (Mannarino et al., 1989), it is particularly important to understand the functioning of parents following the disclosure of extrafamilial sexual abuse. Family members need to be viewed as

susceptible to emotional trauma while simultaneously serving as an important resource for the child (Figley, 1985). This includes parents and siblings as well, although siblings are beyond the scope of this study. Further, it is important to recognize that the adjustment process of primary and secondary victims may not be synchronized such that secondary victims may draw off resources needed by the primary victim to heal (Remer & Elliott, 1988a, 1989b). Since parents are considered to ultimately be the most important therapeutic agents in their children's lives, an understanding of factors which enable or hinder their ability to provide support warrant further study (Finkelhor et al; 1988; Hunt & Baird, 1990). This is also relevant to understanding family characteristics which are associated with potential revictimization of the child (Long et al., in press). Finally, aspects of the sexual abuse incident which have been identified as being important for the impact on the child may not be the same for the parents (Finkelhor, 1984; Van Scoyk et al, 1988).

The major research objectives of the present study address some of the major theoretical gaps and methodological weaknesses of the research in the area of parental adjustment following the disclosure of extrafamilial sexual abuse.

Research Objectives

The present study evaluated the impact of extrafamilial sexual abuse on parents over the first six months following the disclosure of an abusive event. The study was undertaken as part of a larger investigation into the effects of the disclosure of extrafamilial sexual abuse on the family. There were three main objectives: to identify what types of parents respond to

extrafamilial sexual abuse as a traumatic event, to identify the typical course of adjustment for mothers and fathers following the disclosure of extrafamilial sexual abuse, and to identify factors which predict adaptive and maladaptive adjustment.

The study was designed to avoid many of the major limitations of the research to date such as a retrospective design, the lack of control groups, the tendency to overlook fathers, the utilization of subjective measures, the inconsistency in the time of assessments, and small sample sizes. It improved on some of the limitations identified in the research on family characteristics associated with extrafamilial sexual abuse by studying post-disclosure family characteristics from parents' current perspectives within 3 and 6 months of their child's disclosure of extrafamilial sexual abuse. Although parents' perceptions may still be biased by the trauma of disclosure, by attempting to involve both parents where possible, it provided some indication of the degree of interparent agreement between parents' perceptions within the family. However, the small sample size of participating case fathers placed limitations on the extent to which hypotheses could be fully tested for them.

Assessment of pre-abuse family characteristics included a self-report measure of family stressors within the previous 6 months and the sexual abuse history of individuals within the family. Because families were recruited following the disclosure and not prior to the abuse, the study targeted a subgroup of families where extrafamilial sexual abuse occurs: those families whose children were able to disclose within a year of their abusive incident, and who were willing to participate in a

descriptive short-term longitudinal study. It further improved on the studies to date by using a heterogeneous sample of parents of children who have experienced extrafamilial sexual abuse drawn from three types of referral sources. The sample was not limited to a specific type of extrafamilial sexual abuse or to parents receiving psychotherapy either for themselves or their children. In addition, efforts were made to differentiate demographic and abuse characteristics of those who agreed to participate from those who were unwilling to participate. The measures which were used tapped the objective and subjective aspects of traumatic experience which were proposed in this study's adaptation of the Newberger & De Vos' (1988) model.

It is important, however, to note that generalizations from this sample may not extend to families where the child was unable to disclose within a year of the last incident of abuse, or to families who chose to deal with the disclosure of extrafamilial sexual abuse as a private family matter. Similarly, generalization is limited to parents of children who were between the ages of 5 and 15 at the time of disclosure. As well, the smaller sample size of case fathers who participated limited the extent to which the experiences of fathers could be fully understood.

Hypotheses

Based on the literature reviewed, the following hypotheses were formulated:

1(a). Parents of children who had experienced extrafamilial sexual abuse, when compared to parents in a comparison group matched by the child's age and sex, and parental marital status

and socioeconomic status, were expected to initially show poorer individual, parental, spousal, and family functioning due to the traumatization effects of the disclosure of sexual abuse on the whole family (Figley, 1989a) and its potential for catastrophic reactions (Figley & McCubbin, 1983). Case parents were expected to have higher symptom levels of anxiety, depression, hostility, interpersonal sensitivity, and mistrust; to feel less competent as parents; to have poorer dyadic adjustment; and to rate their family as less cohesive and adaptive; as measured by the Brief Symptom Inventory (BSI; Derogatis & Spencer, 1982), Parent Sense of Competence Scale (Gibaud-Wallston & Wandersman, 1978), Dyadic Adjustment Scale (Spanier, 1976), and the Family Adaptability and Cohesion Evaluation Scales (FACES III; Olson, Porter & Lavee, 1985) respectively. Case parents were also expected to report significantly more family stressors than the comparison group.

(b) These differences were predicted to be more salient in the parent assuming the primary caretaker role due to the chiasmal effects of being in the primary caretaker role (Figley, 1985).

(c) At the six month follow-up period, the differences between groups were expected to persist for those families involved in court proceedings and to lessen in families who had completed court or who were not involved in court due to the potential for the reactivation of the trauma associated with the sexual abuse and its disclosure as well as further traumatization related to the court experience itself (Burgess et al., 1990).

(2) Parents in the case group who had a history of child sexual abuse were hypothesized to experience significantly more emotional distress than (a) comparison parents who had such histories and (b) case parents without sexual abuse histories due to the double traumatization associated with re-experiencing their own abuse because of their child's sexual abuse (Kelley, 1990).

(3) The level of emotional distress experienced by parents in the case group (as indicated by the Global Severity Index on the BSI [Derogatis & Spencer, 1982]) was expected to be directly related to both the objective aversive aspects of their child's sexual abuse and their subjective experience of the trauma as formulated in the adaptation of Newberger & De Vos' model (1988).

(a) The level of emotional distress experienced by case parents was expected to be directly related to the objective aspects of the extrafamilial sexual abuse incident (the nature and severity of the sexual abuse, and the number of children within the nuclear family sexually abused by the same perpetrator) as measured by the Nature of Abusive Experience Form (Wolfe & Wolfe, 1988). This relationship was expected to be more pronounced in those case parents who had a history of child sexual abuse (Kelley, 1990; Lamb, 1986; Tong, Oates & McDowell, 1987). Due to the lack of theoretical or empirical literature, no predictions were made concerning the direction of differences related to the sex or age of the child.

(b) The level of emotional distress experienced by case parents was expected to be directly related to parents' cognitive

appraisal of the situation (perceived distress in the abused child, parental sense of competence, parental perceptions surrounding the abuse and its aftermath), and their perceptions of the sensitivity of the environment (the quality of the spousal relationship, the level of family cohesion and adaptability, and community support) at all time periods (Newberger & De Vos, 1988; adapted) as measured by the Child Behavior Checklist - Parent Form (Achenbach & Edelbrock, 1983), the Parent Sense of Competence Scale (Gibaud-Wallston & Wandersman, 1978), the Parent Perception of Events Scale (Wolfe & Wolfe, 1988), the Dyadic Adjustment Scale (Spanier, 1976), the Family Adaptability and Cohesion Evaluation Scales III (Olson et al., 1985) and the Structured Interview (adapted from Bernbaum, 1986) respectively. The initial emotional functioning of the parents was expected to predict their functioning at the six-month follow-up.

(4) The degree of post-traumatic stress experienced by parents in the case group was anticipated to be positively related to the severity of the child's sexual abuse, the parents' perceptions of their child's emotional and behavioural functioning, the parents' history of child sexual abuse, and the involvement of the family in court proceedings. Intrusive and avoidant responses to the sexual abuse incident as measured by the Impact of Event Scale (Horowitz et al., 1979) were hypothesized to be directly related to the time since disclosure and to the time leading up to and immediately following court proceedings due to the re-experiencing of the trauma surrounding the disclosure (Burgess et al., 1990). Parents of children who were perceived to have experienced more

severe traumatic symptoms, or who were involved in court testimony were expected to experience symptoms of post-traumatic stress for a longer period of time, as were parents who had also been victims of child sexual abuse.

(5) Due to the limited empirical literature on sex differences in parental response to traumatic events during the initial disruptive phase of trauma resolution, no hypotheses were made concerning the direction of differences between mothers and fathers in the case group. However, given that both Burgess et al. (1990) and Kelley (1990) identified gender differences in the longterm adjustment of parents, exploratory analyses addressing gender differences were deemed appropriate to clarify the shorter term initial reactions and their relationship to the trauma of disclosures of extrafamilial child sexual abuse.

METHOD

Subjects

Case Group

The case group consisted of 85 parents of 68 children of both sexes (25 boys, 43 girls) who had been sexually abused by someone outside of the nuclear family. A total of 61 families participated, which included 59 mothers and 27 fathers. Thirty-nine (63.9%) of the families were from two parent families; 19 (31.1%) were single mothers; and 3 (4.9%) were single fathers. All parents had target children who were between the ages of 5 1/2 and 16 at the time of the first assessment. (One sexually abused sibling in one family was 17 at the time of disclosure). Appendix A summarizes the age distribution of the case children, and abuse characteristics of the children and their perpetrators. Families were recruited through the Children's Aid Societies (CAS) in Ottawa-Carleton, Kingston, Prescott-Russell, Pembroke-Renfrew, and Lanark, the Child Protection Team of the Children's Hospital of Eastern Ontario (CHEO), and the Victim Witness Programs (VWP) of the Crown Attorneys' offices in Ottawa-Carleton, Kingston, and Pembroke-Renfrew.

Families were selected according to the following criteria:

Inclusion Criteria

1. The child had disclosed within the previous 3 months an extrafamilial sexual abuse incident which occurred no longer than one year prior to disclosure as documented by the referring agency's records.
2. The child was living with at least one parent, step-parent, or foster parent who functioned in the primary caretaker role for at least six months prior to the sexual abuse incident, and continued to live in that household at

the time of the assessments.

3. The child spoke English and had an estimated IQ of at least 80 (based on the Peabody Picture Vocabulary Test-Revised; Dunn, 1981).

4. The parent(s) participating in the study had a minimum of grade six education, and had a good understanding of English.

Exclusion Criteria

1. The parent(s) of a child who was institutionalized or had a major handicap (e.g blindness, end-stage renal disease, terminal illness or major motor deficits) were excluded.

2. Parent(s) with a child who had experienced both intrafamilial and extrafamilial sexual abuse were excluded.

Children who had experienced a previous ESA incident were not excluded. Cases where more than one child within the family was a victim of ESA by the same perpetrator(s) were also included with the number of abused children noted as a variable in the analyses of trauma-related variables.

Comparison group:

The comparison group consisted of 98 parents of 59 children who were recruited from two sources: the medical records at CHEO and two single parent groups: The One Parent Families Association (Ottawa Chapter) and the Emily Murphy Housing Project (a project serving single parents). A total of 59 families participated which included 58 mothers and 40 fathers. Forty eight (81.4%) of the families were two parent families, 10 (16.9%) were single mothers and one (1.7%) was a single father. All families were matched on the sex and age of the child (within six months) and where possible, family constellation (single/two parent family). Attempts to match on socioeconomic status proved to be difficult and therefore this information was gathered on the first

assessment using Blishen, Carroll and Moore's (1987) occupational codes.

Comparison subjects were selected according to the following criteria:

Inclusion Criteria

1. The child had never experienced any form of sexual abuse as reported by the parents and/or the child.
2. The child was living with at least one parent, step-parent, or foster parent who functioned in the primary caretaker role for at least six months prior to the initial assessment and continued to live in that household at the time of the assessments.
3. The child spoke English and had an estimated IQ of at least 80 (based on the PPVT-R).
4. The parent(s) participating in the study had a minimum of grade six education and had a good understanding of English.

Exclusion Criteria

1. Parent(s) of a child who was institutionalized, had a major handicap (i.e. blindness, end-stage renal disease, terminal illness or major motor deficits) were excluded.

For both case and comparison groups, involvement of family members in psychotherapy was not an exclusion criterium although such involvement was noted.

Procedure

The study was part of a larger study funded by the National Health Research and Development Program (NHRDP) which was conducted through the Psychology Department at the Children's Hospital of Eastern Ontario, in Ottawa. It was approved by the Ethics and Science Committees at this hospital and at the University of Ottawa. The larger scale study is still in progress. The results presented for this study covered the recruitment period from October 1989 to December 1991.

Recruitment Procedure for Case Families

Families were recruited from three types of sources within the CHEO catchment area: the Child Protection Team at CHEO, the Children's Aid Societies/Family and Children Services and Victim/Witness programs. All families lived within a 2 hour drive of Ottawa.

Prior to initiating the referral procedure, members of the research team met with representatives of each participating agency's intake department and the victim/witness coordinators to review the goals of the study and the procedures to be followed in recruiting families. Each agency was provided with copies of a referral package for distribution to intake workers. This contained a brief description of the study, the recruitment procedure, and information letters for families who met the criteria for the study (see Appendix B).

At the time of the initial contact with the family by the referral agencies (except the Child Protection Team), families who met the case criteria were asked if they would like to receive an information letter about a study of family reactions following the disclosure of extrafamilial child sexual abuse. If they agreed to accept a letter, the referring agency sent the family the information letter with a response form and a postage paid return envelope (Appendix C). These response forms were returned to the referring agency who then notified the research team of any families who were interested in participating.

The Children's Aid Societies and Victim Witness Programs were contacted weekly to establish the status of referrals and to obtain the phone numbers of qualifying families. Weekly

meetings were held with a member of the Child Protection Team at CHEO to identify cases reviewed by the team which met criteria. All information letters for the Child Protection Team were sent by the research team. However, as with the other agencies, responses were returned to the Child Protection Team and not directly to the research team.

Parents who did not respond within three weeks, were contacted by phone by a member of the CHEO research team regarding their decision. At the time of this initial phone contact, the study was explained to the parents, and they were given the option of participating with their child (as part of the larger NHRDP study) or without their child. In either case, although both parents were encouraged to participate, parents who chose to participate without their partner were accepted. All were told that they would not be required to talk about the details of the abuse. When families refused, their reasons for refusal were also noted where possible.

Parents who agreed to participate were contacted as soon as possible after the disclosure of the sexual abuse and were given the option of being assessed in their homes or at the Children's Hospital of Eastern Ontario. For families from outlying areas, the option of being seen at their local Children's Aid Society or a mutually agreed location away from home was also provided.

Recruitment Procedure for Comparison Families

Comparison families were recruited primarily through the medical records of CHEO. Using the target child's sex and date of birth, the staff in medical records were asked to pull the next 15 to 20 charts of children of the same sex following that birth

date. A member of the research staff reviewed these charts and identified families meeting the inclusion, exclusion, and matching criteria (see Appendix D for the medical records recruitment sheet). Family physicians for these families were then sent a letter describing the study, and its criteria, and were asked to provide consent to contact the family (see Appendix E) and to indicate the family's marital status if known. Parents were sent information letters (Appendix F) only with their family physician's consent. This letter explained the essential aspects of the project and included a postage-paid return envelope. Because only one family was required per target child, families were not called if they failed to respond within three weeks unless no match had been found. When more than one family indicated an interest in participating they were placed on a waiting list in case another abused child of similar age required a match in the future.

Because of the difficulty in identifying and recruiting single parents through the medical records, single parent families were also recruited through the two single parent groups. Families from the One Parent Families Association (Ottawa Chapter) were recruited on a voluntary basis following a presentation on the study at one of their monthly meetings in September, 1991. At the end of this presentation, copies of the information letter for comparison families were distributed to all interested parents who had children between the ages of 6 and 16. In addition a recruitment letter was enclosed in their newsletter (Appendix G). Families who were interested mailed the response forms directly to the research team at CHEO. The recruitment letter also appeared

in the newsletter for the Emily Murphy Housing Project in Blackburn Hamlet. Families from this project who were interested, contacted the social worker assigned to their housing project, who then provided the team with the phone numbers of the parents.

Parents who indicated an interest in participating were contacted as soon as possible by phone to further elaborate on the nature of the study and to book a time for the initial assessment. As with the case families, the comparison families were given the option of being assessed at their homes or at the Children's Hospital of Eastern Ontario.

Assessment Procedures

At the time of the initial assessment, all parents who agreed to participate signed a general consent form which indicated that they were participating voluntarily, that they had discussed the project with their child, and that they believed their child was also participating voluntarily, as part of the larger study (Appendices H and I for the case and comparison groups, respectively). Due to the longitudinal nature of the study, all families were told that they were free to decide at each assessment period whether they wanted to remain in the project. In families in which both parents were participating, they were seen together. However, all self-report measures were completed separately and parents were asked not to compare their responses. For both groups, the first part of the demographic questionnaire was completed by the interviewer (Appendix J). The last half, which pertained to physical and emotional problems in the parent and the sexual abuse history of the family, was completed individually by the parents to provide them with the

opportunity to reveal abuse histories which had not yet been disclosed to their partner. Due to the sensitive nature of these questions, parents were also given the option of not responding. Following completion of the demographic questionnaire, parents in the case families only were interviewed using the Structured Interview Specific to Abuse (Appendix K). Both groups then completed the self-report measures. Parents in the comparison group completed only the measures that did not relate to the experience of having a sexually abused child. Children were administered the Peabody Picture Vocabulary Test-Revised (PPVT-R; Dunn & Dunn, 1981) by another research assistant who worked with the child in another room while the parents were being assessed. This measure was part of the larger assessment battery used with the children for the NHRDP project. An outline of the assessment measures completed by each group at each time period is presented in Appendix L.

Families who remained in the project were seen on at least two different occasions. For case families, the assessments were conducted within 3 months of the disclosure of sexual abuse and at six months following disclosure. Comparison families were seen at intervals matching these follow-ups (a three month interval between first and second assessment). However, as part of the NHRDP study, most of these families agreed to two more assessment periods: a one year follow-up and a two year follow-up to the disclosure for case families, and corresponding intervals or six months between the second and third assessments, and a one year interval between the third and fourth assessments for comparison families. For this study, only the data from the first two

assessment periods were used.

The procedure for the second assessment was the same as for the initial assessment, except that the demographic questionnaire was not repeated. In addition, the Follow-up Structured Interview Specific to Sexual Abuse was used for the case families (see Appendix M) instead of the Initial Structured Interview. Parents in the case group spent an average of 2 to 2 1/2 hours for the first assessment and 1 1/2 to 2 hours for the second assessment on the interview and self-report measures. Those in the comparison group spent an average of 1 1/2 hours for the first assessment, and one hour for the second assessment. A pilot study conducted for Health and Welfare ensured that the time required was reasonable and not too draining for the parents. The dropout rate between the first and second assessment was 8.2% ($n = 5$) for case families and 5.1% ($n = 3$) for comparison families. An additional six families joined the study for their initial assessment five to six months following their child's disclosure of sexual abuse. Their data were used for the second assessment only.

Parents in the case and comparison groups were provided with feedback on their functioning when areas of clinical concern were identified during the assessments or if problematic areas were revealed when measures were scored. In addition, those parents who specifically requested feedback, received this verbally or in writing according to their preferences. All cases with clinical issues were discussed at weekly to biweekly research team meetings. When appropriate, families were also provided with the names of referral sources.

The Nature of the Abusive Experience Form (Appendix N) was not part of the assessment battery used with the parents of sexually abused children. This information was obtained by the research staff through a review of the case records for the families at the referral agencies in Ottawa, and was completed by the intake workers in all outlying agencies.

Procedure for Gathering Information about Refusals

The records of the referral agencies in Ottawa were used by the CHEO research team to gather two types of information about families who refused to participate: a Demographic Questionnaire (Appendix O) and The Nature of the Abusive Experience Form (identical to case families). This was undertaken to reduce the workload required by front line workers. This same information was completed by the intake workers for all outlying agencies. In addition, the median income by postal code for each family was obtained from Statistics Canada using their data from the 'FSA and Postal Code Data Bank System' for 1989 (Cregheur, 1992). For two parent families, the median income level for combined genders was used. For single parent families, the median income for the appropriate gender was used.

Measures

Measures Used With Case and Comparison Groups

Parent Measures

1. Demographic Questionnaire (Appendix J) This questionnaire was developed for the study to gather basic demographic information about the family, about any history of medical or emotional problems in the parent or target child, as well as whether the child had received any sexual abuse prevention teaching in the

home or at school. The second part was completed separately by each parent and asked about the history of previous sexual abuse of any family members.

2. Brief Symptom Inventory. (BSI, Derogatis & Spencer, 1982): The Brief Symptom Inventory is a 53-item shortened version of the SCL-90R (Derogatis, 1977) which evaluates psychological symptoms experienced within the previous week. It was used as the primary outcome measure to assess the level of psychological distress experienced by parents and was chosen because of the breadth of symptomatology covered. It provides information on the nature and intensity of a person's emotional distress (global severity index), and the pattern of symptomatology along nine dimensions: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Internal consistency, based on a sample of 1002 outpatients reveals Cronbach alphas ranging from .71 for psychoticism to .85 for depression. Test-retest reliabilities at two week intervals range from .68 to .91 with dimensions regarded as more state determined having lower coefficients than trait dimensions. Factor analytic studies (Derogatis & Melisaratos, 1983) indicate good construct validity. It is recommended as being sensitive to treatment interventions, stressful and traumatic life events, and mental disorders with norms available for college-aged and adult non-patients, out-patients, and in-patients (Cochran & Hale, 1985; Derogatis & Melisaratos, 1983; Figley, 1989a). It has been used in another study of parental reactions to sexual abuse by Newberger et al. (in press). Similarly, the longer version, the SCL-90R, has been used in the

studies by Kelley (1990), Burgess et al. (1990), and Paradise (1991). As such, it enabled comparisons to be made with these other studies of parental reactions to sexual abuse. For this study, the T-scores for non-patient populations were used. The Global Severity Index was used as the primary measure of emotional distress plus the clinical subscales for subanalyses. Completion time was approximately 10 minutes.

3. Dyadic Adjustment Scale (Spanier, 1976; Appendix P): This 32 item scale was used with married and unmarried cohabiting couples as a measure of global dyadic adjustment. There are four subscales: dyadic consensus, dyadic satisfaction, dyadic cohesion, and expression of affection. Internal consistencies for these subscales are .90, .94, .86, and .73, respectively. Total scale reliability is .96. Content, criterion-related and construct validities are good with correlations of .86 for married couples and correlations of .88 for divorced couples when compared with Locke-Wallace Marital Adjustment Scale (Locke & Wallace, 1959). Antell and Cotton (1982) have found high correlations between husbands' and wives' scores. Because other studies have not been able to replicate the factor structure of the items in the expression of affection subscale, only the total score was used (Antell & Cotton, 1982; Sharpley & Cross, 1982; Sharpley & Rogers, 1984). Time for completion of the measure was about 15 minutes.

4. Parent Sense of Competence Scale (Gibaud-Wallston & Wandersman, 1978; Appendix Q): This 17 item self-report instrument was used to assess parents' perceptions of their parenting abilities. It measures parental self-esteem along two dimensions: skill and knowledge in parenting (also called efficacy), and the value and

degree of comfort related to the parenting role (also called satisfaction) and is one of the few parenting instrument suitable for use with parents across a wide age range of children. Items are tailored specifically for mothers and fathers on separate forms with norms available for both sexes. The original scale has satisfactory internal consistency with alpha coefficients of .82 for the satisfaction subscale and .70 for the efficacy subscale. Six-week test-retest reliability coefficients range from .46 to .82 for the subscales and total score (Gibaud-Wallston & Wandersman, 1978). The measure has shown theoretically expected correlations with self-report measures of general self-esteem and psychological functioning and with observations of parent and child functioning (Johnston & Mash, 1989).

The validity of the efficacy and satisfaction subscales has been supported by the differential relationship of these scales to parent and child characteristics and inter-parent differences. The scale has been previously used with parents of normal infants and older children and with clinical populations of hyperactive and physically abused children (Mash & Johnston, 1983; Mash, Johnston & Kovitz, 1983). Mash and Johnston (1983) have found an inverse relationship between parental self-esteem and parental perception of the child's problems.

As the factor analysis done by Johnston & Mash (1989) with Canadian parents of children between 4 to 9 did not replicate the original subscales, another factor analysis was done on this measure prior to entry of these data into the main analyses. Results of this analysis are presented in Appendix R. Confirmatory factor analysis using principal components analysis

with oblique rotation supported the scoring developed by Johnston & Mash with the exception that item 17 was retained as part of the efficacy subscale. Test administration time was about 10 minutes.

5. Family Life Stress Form (Appendix S): This instrument is based on the Life Stress subscale of the Parenting Stress Index (Abidin, 1983). It was used to assess situational and demographic life stress within the family system. It consists of a checklist of 25 items (19 drawn from the Parenting Stress Index) which were used to identify stressful life events which occurred within the previous 6 months. This differed from Abidin's form which assesses the number of stressors within the past year. This shorter time interval was chosen for two reasons based on the recommendations of Johnson (1986): 1. to enhance the reliability of parental recall which in adults tends to decrease over time periods of greater than six months, and 2. to maximize the ability to assess the temporal relationship between significant life stressors and the development or resolution of psychological symptoms. This is consistent with a study by Jenkins, Hurst and Rose (1979) who found adult retrospective reports of life events which occurred more than six months in the past were of questionable validity.

The original items from Abidin's (1983) Parenting Stress Index are part of an optional life stress index at the end of his measure. The measure was created following an extensive literature review to identify stressors associated with dysfunctional parenting. Content validity was established by 6 professionals who judged the relevance of items to infant development, parent-child interaction, attachment, child abuse and

neglect, child psychopathology, child-bearing practise and stress (Burke, 1978). Normative data are provided based on a sample of 534 parents of children between the ages of one month and 19 years drawn from pediatric clinics in central Virginia. Abidin (1983) assumed that the sources of parenting stress are additive.

Six additional items were added for this study based on the judgement of 3 members of the research team with backgrounds in child development, psychopathology, and abuse. Two of these items targeted stressors related to developmental changes in the child [speculated by many researchers (e.g., Hindman, 1989) to be relevant for the re-emergence of post-traumatic symptoms] and the occurrence of a major illness or operation in a family member. In addition, four items were developed which specifically targeted stressors related to the sexual abuse of a child which have been repeatedly identified in the empirical and clinical literature: having a sexually abused child, parent and child court testimony and the use of psychotherapeutic resources.

Two scores were obtained from this measure: general family stressors (for both groups), and abuse-related stressors (for the case group only). To further enhance the reliability of this measure of family life stressors, reports by each parent were cross-checked and also compared with the life stressors identified during the structured interview. The final family stress scores used in subsequent analyses were determined by the total of common and unique stressors identified by the parents. Due to the prolonged nature of the court process, this item was coded as a stressor if the parents reported forthcoming, ongoing, or recently completed court testimony within the previous six months. No

psychometric data were collected on the revised scale and therefore results obtained from it should be interpreted with some caution. Administration time was less than 5 minutes.

6. Family Adaptability and Cohesion Evaluation Scales (FACES III; Olson, Porter & Lavee, 1985; Appendix T): This is a 40 item self-report measure which was used to assess family functioning. There are two scales, one to assess perceived levels of family cohesion and adaptability (20 items) and another to assess desired levels of functioning (20 items). The discrepancy between the two indicates the level of family satisfaction. These characteristics are believed to be critical resources to cushion family members' perception of stress (Anderson, 1988). The measure is suitable for use with nuclear, blended, and single parent families (Porter & Lavee, 1985). Internal consistency is adequate (.62 for adaptability, .77 for cohesion, and .68 for total score). It has very good face and content validity and discriminates well between problematic and non-symptomatic families. The time required for administration was about 10 minutes.

7. Child Behavior Checklist - Parent Report Form (CBCL; Achenbach & Edelbrock, 1983): The 1983 version of this 138 item checklist was used for the assessment of parents' perceptions of emotional and behavioural problems in their child. It is suitable for use with parents of children between the ages of 4 to 16 years of age. Norms for each sex are provided for three age groups: 4 to 5 years, 6 to 11, and 12 to 16. The authors also state that it is possible to extend the scoring of profiles for children up to the age of 18. For purposes of this study, the total behaviour T-score, and the T-scores on the internalizing and externalizing

subscales were used. As recommended by Achenbach (1991) for longitudinal research, when the child's age extended across the two age groups (6-11, 12-16), the child was normed according to the age group into which the age fell for the majority of the two year follow-up period. One week test-retest reliability for these subscales across age groups has been reported to range from .82 to .97. The inter-parent agreement for the behaviour problem total, and the externalizing, and internalizing subscales has been reported to range from .40 to .75, .55 to .77, and .19 to .77, respectively, with more variability found between parents' reports of girls. Evidence for construct and criterion-related validity is good. Stability data indicate that the measure is sensitive to change over 3, 6, and 18 month intervals with coefficients generally decreasing over time for the behaviour problem scale (Achenbach & Edelbrock, 1983). Administration time was between 15 and 20 minutes.

8. Median Income by Postal Code: In addition to using the Blishen occupational codes (Blishen et al., 1987), socioeconomic status was also assessed in case and comparison families using the same census data from Statistics Canada as was used for case refusals (Cregheur, 1992). This information provides a guideline for the median income for each postal region based on the income reported on tax returns for 1989. For two parent families, the median income for combined sexes was used whereas for single parent families, the median income for the appropriate parent gender was used.

Measures used with case families only

9. Structured Interview Specific to Sexual Abuse (Initial, Appendix K; follow-up, Appendix M): This interview is based on a structured interview used by Bernbaum (1986) in an intervention program which addressed the needs of families where ESA had occurred. The interview is divided into two parts. The first part established the context under which the sexual abuse was disclosed, knowledge of sexual abuse, the relationship of perpetrator to the family, and the details surrounding any involvement of the family with the court system. The second part assessed the events following the disclosure from a cognitive and affective perspective. To assess cognitive appraisals of parents, they were asked about their perceptions of the aftermath of the sexual abuse on their family, their self-appraisal of how they dealt with the crises following disclosure, and the availability of emotional and community support for their own needs. To assess affective responses, the parents were questioned about their feelings at the time of the disclosure, and at the time of the interview. Two final questions which were open-ended, dealt with the perceived changes in their parenting strategies since the disclosure and the most difficult problem for them to deal with as a parent of a sexually abused child. These last two responses were classified into parent and child centred categories which were generated from a review by three members of the research team of the themes in the responses on the initial interviews with parents seen during the first year of the project (see Appendix U for the classification scheme used). All scoring of the interviews was double-checked, 38% of which was undertaken by a

different member of the parent research team, acting as an independent rater. Inter-rater agreement for the open-ended items ranged from .88 to .92 at time 1, and .95 to .98 at time 2. The initial and follow-up interviews took approximately one to 1 1/4 hours depending on whether the parents chose to talk beyond the questions asked.

10. Impact of Event Scale (IES; Horowitz, Wilner & Alvarez, 1979; Appendix V): This 15 item self-report scale is designed to evaluate stress responses to a traumatic event. It classifies the effects of stress into two major categories: intrusion and avoidance, and assesses the level of each over the past week. Intrusive items tap responses characterized by unbidden thoughts and images, troubled dreams, waves of feelings and repetitive behaviour. Avoidance responses address the denial of the meaning and consequences of the event, blunted sensations, behavioural inhibitions and emotional numbness. Reliability estimates are consistently high. Internal consistency scores range from .78 to .92 with test-retest reliabilities .87, .89, and .79 for total score, intrusion, and avoidance, respectively (Horowitz et al., 1979). Factor structure has been replicated by Zilberg, Weiss, and Horowitz (1982). This scale has been used by Murphy et al. (1988) to study the responses of 391 women who were victims of child and adult sexual assault. Although this measure was initially intended to be used with primary victims, Figley (1989a) has recommended its use with parents in traumatized families. Burgess et al. (1990) and Kelley (1990) have used it with mothers and fathers of sexually abused children and found that it also taps symptoms of post-traumatic stress in secondary victims. For

this study it was used to assess the degree of post-traumatic stress experienced by parents following the disclosure of extrafamilial sexual abuse. The time required for completion was less than 5 minutes.

11. Parent's Perception of Events (Wolfe & Wolfe, 1988; Appendix W): This 17 item self-report inventory is part of a larger Parent Impact Questionnaire which was devised by Wolfe & Wolfe (1988) for use with the parents of sexually abused children. This instrument was used to assess parents' beliefs and attributions of blame for the sexual abuse along four dimensions using a 5-point Likert scale: belief of the child, and attributions of responsibility to the perpetrator, to the child and to themselves. The second part assessed the satisfaction of parents with the interventions by the Children's Aid Society and the court as well as their perception of resources which could have benefitted their family. This last question was also used to categorize any interventions used by the families to cope with the aftermath of the abuse. Because no reliability or validity studies have yet been reported by the authors, this measure was used mainly descriptively.

Psychometrics will be run on the full sample as part of the larger Extrafamilial Sexual Abuse Project. Administration time was approximately 5 minutes.

12. The Nature of Abusive Experience Form (Wolfe & Wolfe, 1988; Appendix N): This form is part of the "History of Victimization Form" developed by Wolfe, Wolfe, Gentile, and Bourdeau (1986). It was used in this study to operationalize the severity of abuse in terms of type, duration, and frequency of sexual abuse, number of perpetrators, relationship of the perpetrator to the child and the

type of coercion used. As the original sample used for factor analysis was extremely small [48 sexually abused children, 13.5% abused by a family friend, babysitter, or acquaintance (Gentile, 1988)], the items from this form were subjected to further factor analysis using both refusals and participants prior to running the main analyses ($N = 151$). Results for these analyses using the raw items and V. Wolfe's scoring (cited in Gentile, 1988) are presented in Appendix X. As both correlation matrices indicated only one variable which correlated above .3, factor analysis was judged to be inappropriate.

The information about the nature of the sexual abuse was gathered from the referral agencies' records which contained the notes of the investigators who had formally interviewed the child. It was felt that this process was justified to avoid having the sexually abused child repeat the details of the abusive incidents and potentially experiencing further traumatization simply for research purposes. Because agency records are used for prosecutorial purposes, Bybee (1987) has suggested that investigators are likely to have the incentive to maintain accurate records. Analyses of differences in abuse information were computed for all families with records at more than one agency. No significant differences were found in ANOVAs for any of the abuse variables (type of abuse, duration, frequency, type of coercion, number or type of perpetrator or age differential). Due to the ongoing nature of most disclosures, when information differed or was missing, the sources who reported the most complete information, and the most severe type and duration of abuse were combined for subsequent analyses.

Child Measure:

1. Peabody Picture Vocabulary Test - Revised; Form M (Dunn & Dunn, 1981) This measure was used to screen children to ensure that their comprehension of English was sufficient to complete the remainder of the child battery for the larger NHRDP project and to ensure that their general intelligence quotient was at least 80. This test measures the auditory receptive vocabulary for American English. Norms are provided for individuals between the ages of 2 1/2 and 40. Split-half reliabilities for children between the ages of 6 to 16 using Form M range from .61 to .85, with immediate and delayed test-retest reliabilities ranging from .56 to .90. Content and construct validity data indicate that this is a measure of receptive vocabulary. As such its correlations with the WISC-R verbal and full scale scores which assess expressive vocabulary as well, tend to be in the .64 to .66 range. Administration time was between 10 to 20 minutes.

RESULTS

Overview of Statistical Analysis

Data analyses were conducted using BMDP (Dixon, 1985 & 1990) for testing univariate and multivariate assumptions and for factor analyses. SPSS Release 4.1 (Norusis, 1990a & 1990b) was used for all other analyses (Multivariate Analysis of Covariance [MANCOVAs], homogeneity of regression, multiple regressions, risk analyses, and chi-square analyses). Preliminary analyses were conducted between (a) case participants and case refusers to establish how representative participants were; (b) between subgroups of cases to determine whether any significant differences existed as a function of referral source, family type, and gender of child; and (c) between case and comparison groups to determine demographic differences which necessitated inclusion of covariates in further analyses.

For all hypotheses, data from mothers and fathers were analysed separately to avoid possible bias arising from two parent families who were responding to the same abused child/children and to avoid masking differences based on gender and parenting role. Appendix Y discusses the results of paired t -tests and correlation analyses between partners which led to the decision to treat mothers and fathers as separate groups. Evaluations of the assumptions underlying each particular analysis were undertaken prior to proceeding with planned analyses. Appendix Z presents a discussion of how assumptions were tested for MANCOVAs, Doubly Multivariate MANCOVAs, and standard and hierarchical regressions. Violations of assumptions, when present are reported in the discussion of results.

To analyse group differences between case and comparison parents (Hypothesis 1), MANCOVAs with follow-up Roy-Bargman Stepdown were utilized at each time period. Because of the unequal sample sizes between case and comparison groups, the method chosen to partition the sums of squares was the regression method (SSTYPE UNIQUE) as recommended by Tabachnick & Fidell (1983) and Norusis (1990c). In this method an effect is adjusted for all other effects in the model. Pillai's criterion was chosen as the multivariate statistic for assessing mean group differences because of its robustness when sample size decreases, n 's are unequal, and when assumptions of homogeneity of variance-covariance matrices are not met (Tabachnick & Fidell, 1983).

Stepdown analyses were used to correct for potential problems of inflated Type I error rate and the non-independence of univariate F -tests. In this approach, the dependent variables are prioritized in terms of theoretical or practical importance, then the dependent variables are tested in a sequence of Analyses of Covariance (ANCOVAs) with each subsequent dependent variable tested with the higher priority dependent variables as covariates. Each additional dependent variable is tested to determine whether it adds anything more to the combination of dependent variables already tested (Tabachnick & Fidell, 1983).

Doubly Multivariate analyses of covariance were performed to assess differences over time. Where significant multivariate statistics emerged, univariate F -tests, and post hoc Scheffé tests followed. Scheffé tests were chosen as the post hoc comparison method because it allowed for unequal sample sizes while controlling for inflated Type I error rates.

Relative odds ratios and chi-square analyses were used to assess differences in clinical risk for emotional distress, marital dysfunction, and family cohesion and adaptability. Relative odds ratios provide an estimate of the relative risk by dividing the odds that a target case group is in the distressed range on a measure by the odds associated with clinical distress in the comparison group.

A similar strategy (without covariates) was used to assess differences in emotional distress and post-traumatic stress symptomatology between subgroups of case parents as a function of parent sexual abuse history, court involvement, perception of trauma to the child, therapy use, and sex of parent (Hypotheses 2, 4 and 5).

To find out the degree to which the objective (nature of the sexual abuse) and subjective (emotional, cognitive, and social support) aspects of parents' experiences predicted initial and follow-up emotional distress, and post-traumatic stress symptomatology, a series of standard and hierarchical regressions was employed. First, reduction of the number of independent variables entering the equation was accomplished by inspecting correlation matrices for highly correlated independent variables and testing for multicollinearity. Secondly, separate regressions were run to determine the best cognitive, emotional and social predictors. Decisions to use hierarchical or standard regression were based on whether theory could establish an a priori hierarchy. Finally, a hierarchical regression was run entering the best emotional, cognitive, and social variables in blocks.

A more detailed account of the statistical procedures used is presented prior to discussing the results for each hypothesis. The results for mothers will be presented followed by the results for fathers (where there was sufficient sample size) and a final summary of each hypothesis. Lastly, the results of preliminary descriptive analyses of the Structured Interview for parents of sexually abused children will be discussed.

Preliminary Analyses

Comparisons of Case Participants with Case Refusers

A total of 76 families who met criteria for case parents refused to participate in the study, which resulted in an overall participation rate of 45%. To ascertain whether participants were truly representative of the sample of parents who had a child who had experienced extrafamilial sexual abuse, participants and refusers were compared on demographic and nature of abuse data. Multiple t -tests were used for continuous data and chi-squares tests were used for categorical data. No significant differences were found between groups on any of the demographic variables (age of parents, Blishen occupational code, number of adults or children living in the home, type of family or median income by postal code) except for the age of the child (participants: $M = 9.39$ years, $SD = 3.23$, refusers: $M = 10.47$ years, $SD = 2.95$, $t = -2.13$, $p < .035$). Nor were significant differences found on any of the abuse-related information provided by the collaborating agencies using the Nature of Abuse Forms (age of child at disclosure, child's sex, type of sexual abuse, type of coercion, physical injuries, type of perpetrator, and the age differential between the child and the perpetrator).

Parents were also compared on the sexual abuse history of the whole family based on agency reports (both groups) and self-reports (for participants). Documentation of parent abuse history was a routine part of the abuse notices for the Children's Aid Societies, and for the Child Protection Team but was not a routine procedure for the Victim Witness Programs unless volunteered by the parent. Families who participated were significantly more likely to have more than one child who was sexually abused $X^2 (1, N = 112) = 8.20, p < .004$, and to have disclosed a history of child sexual abuse themselves (mothers: $X^2 = (1, N = 119) = 20.53, p < .0000$; fathers; $X^2 = (1, N = 91) = 11.90, p < .0006$). No case refusers had a documented history of sexual abuse of the father. The differences in parent abuse history may have been a function of the additional opportunities to disclose provided to participants in the study rather than to any actual differences between the groups. However, only one parent disclosed an abuse history to the researchers which was not also documented at the referral agency.

Based on these analyses, it was concluded that the participants were representative of the population of parents of children who had experienced extrafamilial sexual abuse for the study's catchment area in terms of family demographics and the nature of their children's sexual abuse experiences.

Comparisons of Subgroups of Cases as a Function of Referral Source, Sex of Child and Family Type

Referral Source.

To determine whether the abuse histories of families were similar across referral sources, two analyses of variance (ANOVA)

were done with post hoc Scheffé tests. The first ANOVA compared the consistency of information about the child's sexual abuse across the three types of referral sources (Children's Aid, Child Protection Team, Victim/Witness Programs) for families who were involved with more than one agency. This analysis revealed that children were more likely to have more severe abuse recorded in their file at the Child Protection Team than in the records kept at the Victim/Witness Programs $F(2, 158) = 5.45, p < .006$. ($M = 10.55, SD = 3.00, M = 8.36, SD = 3.08$, respectively). No differences were found between the records at the Children's Aid Societies and the other two referral sources. This most likely reflects the primary role of Children's Aid in gathering information for investigative purposes. For further analyses, it was decided to use the most complete source and the most severe ratings to recognize the possibility of ongoing elaboration of disclosures. This sometimes involved combining data across sources to provide the most complete profile.

Using the most complete information on the Nature of Abuse Form, a second ANOVA was run comparing differences between groups based on which type of agency referred the family. No significant differences emerged. It was therefore justifiable to collapse families together regardless of referral agency for further analyses.

Gender of child.

An ANOVA of abuse characteristics and age of the child at disclosure failed to reveal any significant differences in the type of abuse experiences of boys or girls. Therefore, data by

gender of child were collapsed.

Family Type.

Because single versus two parent status was recognized to be a potentially confounding variable, especially for mothers, five analyses were run specifically targeting this variable:

1. Multiple t-tests established that there were no significant differences in the age or occupational status of mothers in the two subgroups (i.e. single vs. two parent families).

2. A multivariate analysis of variance (MANOVA) of abuse characteristics of the child by family status revealed no significant differences in the type of abuse, type of coercion, duration or frequency of abuse.

3. MANOVAs of emotional functioning failed to find any significant differences in the level of emotional distress (Global Severity Index T-score on the Brief Symptom Inventory) or post-traumatic stress symptomatology (intrusion and avoidance scores on the Impact of Event Scale). Nor was there any significant difference in the amount of change over time between subgroups when a doubly multivariate repeated measures MANOVA was done. Both subgroups had a significant time effect $F(3,39) = 3.62$, $p < .021$. Univariate follow-up tests indicated that intrusive symptoms improved by the six-month assessment regardless of family status $F(1,41) = 9.69$, $p < .003$.

4. MANOVAs and doubly multivariate MANOVAs were also used to assess differences in family functioning at time 1 and 2 and over time. No significant differences were found in the number of general or abuse-related stressors, in parenting competence

(efficacy and satisfaction subscales of the Parent Sense of Competence Scale) or in perceived family functioning (Individual Distance from Centre on the FACES-III) at time 1 or time 2 across the two subgroups. Nor was any interaction or main effect found for time.

5. Differences in the percentage of mothers scoring in the clinical range for each of the Brief Symptom Inventory subscales was assessed using chi-square analyses. Using a T-score of 63 or above as the clinical cutoff, no significant differences were found on any of the subscales. The only subscale associated with a significantly higher relative odds ratio for single mothers (3.61) was the interpersonal sensitivity subscale at time 2.

The lack of significant findings across these five dimensions led to the conclusion that the data from single parents could be collapsed with the data from two parent families in further analyses.

Comparisons of Demographics of Case and Comparison Families

Case and comparison families were contrasted in three areas (demographics, family abuse history, and family medical and psychiatric history) using multiple t -tests for continuous variables and chi-squares for categorical variables.

Demographics

No significant differences were found between groups in family type, marital status, urban or rural address, or whether the target child was adopted. However, comparison families had significantly higher scores for father's occupational status, father's educational level, mother's age, mother's occupational status, mother's educational level, number of years married or

living together and total family income (see Table 3).

Because father's occupational status was significantly correlated with education ($r = .69, p < .01$) and income ($r = .67, p < .01$), it was decided to use occupational status as a covariate in between-group analyses for fathers. Likewise, mother's occupational status was significantly correlated with education ($r = .46, p < .01$), and income ($r = .57, p < .01$). Therefore mother's age and occupational status were used as covariates for between-group analyses involving mothers. Because the sample sizes were somewhat unequal between case and comparison fathers due to some case mothers participating without their partners ($n = 27$ for case fathers; $n = 40$ for comparison fathers), it was decided to use only the comparison fathers who were matches for case families where the father actually participated. Analyses were also done for this reduced sample to ensure the pattern of results followed that for the full sample. Table 3 summarizes the results for the full sample and this subsample which was used for all main analyses of fathers.

Insert Table 3 about here

Family Abuse History

Chi-square analyses indicated that case mothers were significantly more likely to report a history of child sexual abuse ($\chi^2 (1, N = 115) = 9.36, p < .002$). Forty-four percent of case mothers and 19% of comparison mothers reported histories of sexual abuse. No significant differences were found in the proportion who had experienced intrafamilial or extrafamilial

Table 3

Descriptive Statistics for Demographic Variables of Case and Comparison Families^a

Demographic Variable	Case			Comparison			t value
	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	
Child's Age in months	60	123.10	37.22	59	120.95	35.48	.32
Father's Age in years	40 (27)	38.05 (37.33)	6.81 (7.64)	49 (28)	40.57 (41.46)	5.65 (5.72)	-1.91 -2.27*
Father's Education in years	39 (27)	12.13 (12.07)	3.67 (3.35)	49 (28)	16.37 (16.67)	3.13 (2.79)	-5.85*** -5.51***
Father's Occupation Status	40 (27)	44.21 (42.55)	15.74 (15.58)	49 (28)	59.09 (58.35)	14.81 (11.69)	-4.58*** -4.27***
Mother's Age in years	58	34.90	5.63	58	38.22	4.42	-3.54***
Mother's Education	58	12.69	2.48	58	15.24	2.87	-5.13***
Mother's Occupation Status	58	33.92	13.94	58	44.64	16.58	-3.77***
Income (thousands)	54	39.74	27.34	56	72.89	40.91	-5.01***
Total Family Member in Home	61	4.30	1.62	59	4.14	1.12	.63
Adults in Home	61	1.92	.74	59	1.93	.55	-.12
Children in Home	60	2.32	1.11	59	2.25	.80	.35
Years Married/Living Together	32 (26)	10.00 (9.40)	6.19 (6.44)	45 (27)	13.87 (14.48)	5.53 (5.17)	-2.88** -2.43**

Note. Age, education and occupation of parents based on participants and, in two parent families, on both partners. Twelve case mothers and two comparison mothers in two parent families participated without their partner. Statistics on non-custodial parent in single parent families was not included in this analysis.

^a Brackets refer to statistics for the subsample of fathers used for the main analyses involving fathers.

* $p < .05$ ** $p < .005$ *** $p < .001$.

Tables 4 and 5 further clarify the abuse experiences, disclosures and treatment experiences of mothers.

Insert Table 4 and Table 5 about here

Chi-square analyses using Fisher's Exact test also indicated that case fathers were significantly more likely to report a history of child sexual abuse, $X^2 (1, N = 75) = 5.90, p < .015$. Five case fathers (18.5%) and no comparison fathers reported histories of sexual abuse. Table 6 summarizes these experiences.

Insert Table 6 about here

Family Medical and Psychiatric History

Mothers in the case group were significantly more likely to report a history of psychological [$X^2 (1, N = 118) = 15.21, p < .0001$], and medical problems [$X^2 (1, N = 118) = 4.51, p < .034$] in themselves. No significant differences were found in fathers' histories of physical handicaps, medical or psychological problems. Parent reports also indicated that children in the case group were significantly more likely to have a history of emotional problems, $X^2 (1, N = 120) = 11.49, p < .0007$. Nineteen (31.1%) of case children and four (6.8%) of comparison children had such histories. Case children were also significantly more likely to have current emotional ($X^2 (1, N = 120) = 29.95, p < .00000$), behavioural ($X^2 (1, N = 120) = 20.55, p < .00001$), and social-peer interaction problems ($X^2 (1, N = 120) = 7.18, p < .007$) based on parents' reports on the demographic interview.

Table 4

Abuse Characteristics of Case and Comparison Mothers who Reported a History of Sexual Abuse

Abuse Characteristic	Case		Comparison	
	n	(%)	n	(%)
Positive Abuse History	26	(43.5)	11	(19.0)
Number of Perpetrators				
One	15	(57.7)	9	(81.8)
Two	4	(15.4)	2	(18.2)
Three	2	(7.7)	0	(0.0)
Five	2	(7.7)	0	(0.0)
Not specified	3	(11.5)	0	(0.0)
Mother's Age when First Abused				
2-5	2	(7.7)	1	(9.1)
6-10	15	(57.7)	4	(36.4)
11-16	5	(19.2)	5	(45.5)
19-30	3	(11.5)	1	(9.1)
Not specified	1	(3.8)	0	(0.0)
Type of First Perpetrator ^a				
Intrafamilial	17	(65.3)	3	(27.3)
Parent	3	(11.3)	3	(27.3)
Sibling	2	(7.7)	0	(0.0)
Uncle / Aunt	5	(19.2)	0	(0.0)
Cousin	1	(3.8)	0	(0.0)
Grandparent	5	(19.2)	0	(0.0)
Other relative	1	(3.8)	0	(0.0)
Extrafamilial	8	(30.7)	8	(72.8)
Stranger	1	(3.8)	4	(36.4)
Acquaintance	2	(7.7)	0	(0.0)
Neighbour	0	(0.0)	3	(27.3)
Family Friend	0	(0.0)	1	(9.1)
Teacher	1	(3.8)	0	(0.0)
Boarder	1	(3.8)	0	(0.0)
Babysitter	1	(3.8)	0	(0.0)
Other Non-Relative	2	(7.7)	0	(0.0)
Not specified	1	(3.8)	0	(0.0)
Type of Second Perpetrator				
Intrafamilial	4	(15.4)	0	(0.0)
Uncle	3	(11.3)		
Other relative	1	(3.8)		
Extrafamilial	4	(15.4)	2	(18.2)
Stranger	1	(3.8)	1	(9.1)
Acquaintance	1	(3.8)	0	(0.0)
Neighbour	0	(0.0)	1	(9.1)
Family Friend	1	(3.8)	0	(0.0)
Other non-relative	1	(3.8)	0	(0.0)

Note. 84.6% of first abusers and 75% of second abusers were male in the case group. 100% of abusers were male in the comparison group.

Table 5

Percentage of Case and Comparison Mothers with Sexual Abuse Histories Who Disclosed Their Abuse and Sought Treatment

	Case ^a		Comparison ^b	
	n	(%)	n	(%)
Reported History of Sexual Abuse	26	(43.5%)	11	(19.0)
Person To whom Abuse First Disclosed				
No one	7	(26.9)	3	(27.3)
Parent	9	(34.6)	4	(36.4)
Sibling	1	(3.8)	0	(0.0)
Extended Family	1	(3.8)	0	(0.0)
Spouse	1	(3.8)	1	(9.1)
Abused Child	1	(3.8)	--	-----
Teacher	1	(3.8)	0	(0.0)
Professional	4	(15.4)	1	(9.1)
Friend	0	(0.0)	1	(9.1)
Other	0	(0.0)	1	(9.1)
Unknown	1	(3.8)	0	(0.0)
Psychological Treatment				
None	19	(73.1)	8	(72.7)
Professional	5	(19.3)	3	(27.3)
Self Help Group	1	(3.8)	0	(0.0)
Unknown	1	(3.8)	0	(0.0)

Table 6

Abuse, Disclosure, and Treatment Characteristics of Case Fathers Who Reported a History of Sexual Abuse^a

Abuse Characteristic	n	(%)
Positive Abuse History	5	(18.5)
Number of Perpetrators		
One	5	(100.0)
Father's Age when First Abused		
6-10	1	(20.0)
11-16	4	(80.0)
Type of Perpetrator ^b		
Intrafamilial		
Parent	2	(40.0)
Parent	2	(40.0)
Extrafamilial	3	(60.0)
Stranger	1	(20.0)
Family Friend	1	(20.0)
Clergy	1	(20.0)
Person To whom Abuse First Disclosed		
No one	2	(40.0)
Professional	2	(40.0)
Unknown	1	(40.0)
Psychological Treatment		
None	2	(40.0)
Professional	2	(40.0)
Unknown	1	(20.0)

Note. ^aNo comparison fathers reported a history of sexual abuse. ^bAll perpetrators were male.

The same pattern of results was achieved when analyses of demographics, family abuse history, and family medical and psychiatric history were run using the subsample of fathers.

Comparisons of the Global Emotional Functioning of Parents in Case and Comparison Families.

Hypothesis 1a predicted that parents of children who had experienced extrafamilial sexual abuse would display poorer individual, spousal, parental, and family functioning due to the traumatization effects of the disclosure of sexual abuse on the family (Figley, 1989a). This hypothesis was tested using four strategies:

1. To focus on differences between groups at each time period (three and six months after disclosure for case parents with matched intervals for comparison parents), MANCOVAs were run with mother's age and occupational status as covariates for mothers and father's occupational status as a covariate for fathers. Five dependent variables were entered in the following order: the Global Severity Index (GSI) of the Brief Symptom Inventory, the total number of general family stressors, perceived parent efficacy and satisfaction, and the Individual Distance from Centre from the FACES III. Because the Family Adaptability and Cohesion Evaluation Scales are based on a curvilinear model, in order to include family functioning in MANCOVAs which assume linearity, a 'distance from centre' score was used indicating the distance of a parent's cohesion and evaluation scores from the centre of the circumplex model (see Appendix Z for the exact transformation formula). The distance from centre converts family types to a linear score on a continuum of balanced, midrange, and

extreme scores, with higher scores indicating greater family dysfunction (Olson et al., 1985). In order to include spousal adjustment as a variable, two subanalyses were run for two parent families with dyadic adjustment entering after the global severity index.

2. To focus on differences between groups over time, two repeated measures MANCOVAs were run with the same covariates, dependent variables, and groupings.

3. Because the correlations and squared multiple corrections between subscales of the Brief Symptom Inventory were too high which resulted in singularity, multivariate analyses could not be used to test for differences between groups in the symptom levels of anxiety, depression, hostility, interpersonal sensitivity and paranoia (mistrust). In addition, assumptions surrounding homogeneity of regression were violated. To circumvent this problem, risk analyses were done using chi-squares and relative odds ratios to determine whether there were differences in the relative risk of having clinical scores on any of the subscales and the GSI. The relative risk of marital distress was also calculated.

4. Lastly, chi-squares were used to assess differences in perceived and ideal family adaptability and cohesion, in order to capture family functioning in a meaningful way.

MANCOVA Results for Global Emotional Functioning of Mothers

MANCOVA results for mothers from single and two parent families.

A between subjects MANCOVA was performed on five dependent variables at time 1: emotional distress, general stressors, parent efficacy and satisfaction, and perception of family functioning.

The combined dependent variables were not significantly related to the two covariates (mother's age and occupation). Together they produced a significant multivariate group effect using Pillai's criterion, approximate $F(5,99) = 9.78, p < .000$. Stepdown analyses indicated that two dependent variables provided unique contributions to the prediction of group differences: emotional distress, stepdown $F(1,103) = 39.89, p < .000$, and parent satisfaction (once differences due to emotional distress, stressors, and parent efficacy were entered), stepdown $F(1,100) = 5.63, p < .02$. Table 7 shows that case mothers experienced significantly higher emotional distress, and felt significantly less satisfaction with the parenting role at time 1.

Insert Table 7 about here

A between subjects MANCOVA was performed on the same variables at time 2 to allow inclusion of five more case families who joined the study five to six months after the disclosure. As before, the combined dependent variables were not significantly related to the covariates. Homogeneity of variance-covariance matrices was achieved. The combined dependent variables produced a significant multivariate group effect, approximate $F(5,91) = 9.46, p < .000$. Stepdown analyses identified three dependent variables which contributed uniquely to group differences: emotional distress, stepdown $F(1, 95) = 24.34, p < .000$, general stressors, $F(1,94) = 6.38, p < .013$, and parent satisfaction, $F(1,93) = 11.14, p < .001$. Table 8 shows that case mothers experienced significantly higher emotional distress, had more general stress, and were less satisfied in their parenting role.

Table 7

MANCOVA Results for the Emotional Functioning of Mothers of Sexually Abused and Non-Abused Children (Group) at the First Assessment

Dependent Variable	n	M	SD	Main effect Group ^a Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY				$F(1,103) = 39.89^{**}$
GSI ^b				
Case	49	61.35	9.01	
Comparison	58	49.10	8.79	
STRESSORS^c				$F(1,102) = 1.10^d$
Case	49	3.67	2.62	
Comparison	58	2.28	1.77	
PARENTING COMPETENCE^e				$F(1,101) = .73$
EFFICACY				
Case	49	34.88	6.59	
Comparison	58	34.41	6.23	
SATISFACTION				$F(1,100) = 5.63^*$
Case	49	35.57	7.41	
Comparison	58	42.05	5.29	
FACES^f				$F(1,99) = .12$
Case	49	7.56	4.49	
Comparison	58	6.18	4.07	

Note: Multivariate analysis of covariance (MANCOVA) with mother's age and Blishen occupational code as covariates.

^aMultivariate test of significance (Pillai) $F(5,99) = 9.78$, $p < .000$. ^bGSI = Global Severity Index T-score. ^cSTRESSORS = Total general family stressors (non-abuse related). ^dUnivariate trend $F(1,103) = 5.79$, $p < .018$. ^ePARENTING COMPETENCE = Parent Sense of Competency Scale. ^fFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .02$. ** $p < .000$.

Insert Table 8 about here

MANCOVA results for mothers from two parent families.

For two parent families, dyadic adjustment was added as a dependent variable which was entered after emotional distress. The combined dependent variables were not significantly related to the two covariates. A significant multivariate group effect was achieved, approximate $F(6,69) = 6.92$, $p < .000$, with three variables providing unique contributions: emotional distress, Stepdown $F(1,74) = 20.63$, $p < .000$, dyadic adjustment, $F(1,73) = 5.20$, $p < .026$, and parent satisfaction, $F(1,70) = 5.81$, $p < .019$. Table 9 indicates that case mothers from two parent families experienced significantly more emotional distress, and felt less satisfied in the parenting role. Case mothers also reported significantly better dyadic adjustment once the contribution of emotional distress was controlled. However, the difference between means for dyadic adjustment was minimal (.76), and did not result in a significant univariate F .

Insert Table 9 about here

At time 2, results of the MANCOVA with dyadic adjustment included replicated the results for the full sample of mothers previously discussed with the exception that there was no univariate trend for efficacy. As shown in Table 10, case mothers in two parent families had significantly higher levels of emotional distress, experienced more general stressors and felt

Table 8

MANCOVA Results for the Emotional Functioning of Mothers of Sexually Abused and Non-Abused Children (Group) at the Second Assessment

Dependent Variable	n	M	SD	Main effect Group ^a Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY				$F(1,95) = 24.34^{***}$
GSI ^b				
Case	45	59.64	10.63	
Comparison	54	47.78	9.91	
STRESSORS^c				$F(1,94) = 6.38^*$
Case	45	3.78	2.28	
Comparison	54	2.07	1.59	
PARENTING COMPETENCE^d				
EFFICACY				$F(1,93) = .89^e$
Case	45	33.00	6.92	
Comparison	54	35.33	5.82	
SATISFACTION				$F(1,92) = 11.14^{**}$
Case	45	34.51	7.28	
Comparison	54	42.37	6.09	
FACES^f				$F(1,91) = .07$
Case	45	7.08	4.63	
Comparison	54	5.94	3.88	

Note: Multivariate analysis of covariance (MANCOVA) with mother's age and Blisshen occupational code as covariates.

^aMultivariate test of significance (Pillai) $F(5,91) = 9.46$, $p < .000$. ^bGSI = Global Severity Index T-score. ^cSTRESSORS = Total general family stressors (non-abuse related). ^dPARENTING COMPETENCE = Parent Sense of Competency Scale. ^eUnivariate trend $F(1,95) = 5.33$ $p < .023$. ^fFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .02$. ** $p < .001$. *** $p < .000$.

Table 9

MANCOVA Results for the Emotional Functioning of Mothers of Sexually Abused and Non-Abused Children from Two Parent Families (Group) at the First Assessment

Dependent Variable	n	M	SD	Main effect Group ^a
				Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY				F(1,74) = 20.63***
GSI ^b				
Case	30	60.50	9.24	
Comparison	48	49.94	8.69	
DYADIC ADJUSTMENT ^c				F(1,73) = 5.20*
Case	30	113.07	23.18	
Comparison	48	112.31	14.17	
STRESSORS ^d				F(1,72) = 2.00 ^e
Case	30	3.90	2.89	
Comparison	48	2.19	1.78	
PARENTING COMPETENCE ^f				
EFFICACY				F(1,71) = 1.89
Case	30	34.40	7.13	
Comparison	48	34.04	6.25	
SATISFACTION				F(1,70) = 5.81**
Case	30	36.00	7.01	
Comparison	48	41.71	5.03	
FACES ^g				F(1,69) = 1.58
Case	30	6.93	3.10	
Comparison	48	5.51	3.10	

Note: Multivariate analysis of covariance (MANCOVA) with mother's age and Blishen occupational code as covariates.

^aMultivariate test of significance (Pillai) $F(6,69) = 6.92$, $p < .000$. ^bGSI = Global Severity Index T-score. ^cDYADIC ADJUSTMENT = Total score on Dyadic Adjustment Scale. ^dSTRESSORS = Total general family stressors (non-abuse related). ^eUnivariate trend $F(1,74) = 5.04$ $p < .028$. ^fPARENTING COMPETENCE = Parent Sense of Competency Scale. ^gFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .026$. ** $p < .02$. *** $p < .000$.

less satisfied in the parenting role.

Insert Table 10 about here

MANCOVA Results for the Global Emotional Functioning of Fathers

MANCOVA results for fathers from single and two parent families.

The same variables as for mothers were entered into a between subjects MANCOVA for fathers with father's occupational status as the only covariate. No significant relationship was found between the dependent variables and the covariate. A significant multivariate effect was found at time 1, approximate $F(5,43) = 3.20, p < .015$, with only parent efficacy providing a unique contribution, $F(1,45) = 6.75, p < .013$, once emotional distress and general stressors were entered. Table 11 shows that case fathers reported higher efficacy scores than comparison fathers.

Insert Table 11 about here

At time 2, no relation was found between occupational status and the dependent variables. The multivariate test of significance indicated a significant group effect, approximate $F(5,42) = 2.97, p < .022$. General stressors was the only significant variable on follow-up stepdown $F(1,45) = 8.67, p < .005$. Case fathers reported double the number of general stressors of comparison fathers, as shown in Table 12.

Insert Table 12 about here

Table 10

MANCOVA Results for the Emotional Functioning of Mothers of Sexually Abused and Non-Abused Children (Group) from Two Parent Families at the Second Assessment

Dependent Variable	n	M	SE	Main effect Group ^a Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY				$F(1,72) = 15.60^{***}$
GSI ^b				
Case	29	58.90	9.57	
Comparison	47	48.02	10.07	
DYADIC ADJUSTMENT ^c				$F(1,71) = 2.01$
Case	29	110.24	19.28	
Comparison	47	113.45	18.49	
STRESSORS ^d				$F(1,70) = 4.60^*$
Case	29	4.14	2.55	
Comparison	47	2.21	1.63	
PARENTING COMPETENCE ^e				
EFFICACY				$F(1,69) = .37^f$
Case	29	33.21	6.31	
Comparison	47	35.13	6.01	
SATISFACTION				$F(1,68) = 5.52^{**}$
Case	29	35.48	7.20	
Comparison	47	42.38	6.18	
FACES ^g				$F(1,67) = .28$
Case	29	6.53	4.39	
Comparison	47	5.78	3.76	

Note: Multivariate analysis of covariance (MANCOVA) with mother's age and Blischen occupational code as covariates. ^aMultivariate test of significance (Pillai) $F(6,67) = 5.09$, $p < .000$. ^bGSI = Global Severity Index T-score. ^cDYADIC ADJUSTMENT = Total score on Dyadic Adjustment Scale. ^dSTRESSORS = Total general family stressors (non-abuse related). ^ePARENTING COMPETENCE = Parent Sense of Competency Scale. ^fSignificant univariate trend $F(1,74) = 5.04$, $p < .028$. ^gFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .05$. ** $p < .025$. *** $p < .000$.

Table 11

MANCOVA Results for the Emotional Functioning of Fathers of Sexually Abused and Non-Abused Children (Group) at the First Assessment

Dependent Variable	<u>n</u>	<u>M</u>	<u>SD</u>	Main Effect Group ^a Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY				
GSI ^b				$F(1,47) = 3.54$
Case	22	55.64	12.52	
Comparison	28	49.00	8.15	
STRESSORS^c				
Case	22	3.91	2.76	$F(1,46) = 3.49$
Comparison	28	2.25	1.65	
PARENTING COMPETENCE^d				
EFFICACY				
Case	22	37.23	6.06	$F(1,45) = 6.75^*$
Comparison	28	32.21	5.16	
SATISFACTION				
Case	22	39.27	6.67	$F(1,44) = .21$
Comparison	28	40.71	5.46	
FACES^e				
Case	22	6.40	2.72	$F(1,43) = .29$
Comparison	28	5.13	3.00	

Note: Multivariate analysis of covariance (MANCOVA) with father's Blischen occupational code as covariate.
^aMultivariate test of significance (Pillai) $F(5,43) = 3.20$, $p < .015$. ^bGSI = Global Severity Index T-score. ^cSTRESSORS = Total general family stressors (non-abuse related). ^dPARENTING COMPETENCE = Parent Sense of Competency Scale. ^eFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .02$.

Table 12

MANCOVA Results for the Emotional Functioning of Fathers of Sexually Abused and Non-Abused Children (Group) at the Second Assessment

Dependent Variable	n	M	SD	Main effect Group ^a Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY				
GSI ^b				$F(1,46) = .61$
Case	21	55.48	12.17	
Comparison	28	50.57	8.60	
STRESSORS^c				
Case	21	4.00	2.51	$F(1,45) = 8.67^*$
Comparison	28	1.92	1.15	
PARENTING COMPETENCE^d				
EFFICACY				
Case	21	36.24	4.54	$F(1,44) = .82$
Comparison	28	33.21	4.80	
SATISFACTION				
Case	21	39.10	8.10	$F(1,43) = .41$
Comparison	28	41.00	4.68	
FACES^e				
Case	21	5.83	3.43	$F(1,42) = 3.73$
Comparison	28	5.80	2.68	

Note: Multivariate analysis of covariance (MANCOVA) with father's Blishen occupational code as covariate.

^aMultivariate test of significance (Pillai) $F(5,42) = 2.97$, $p < .022$. ^bGSI = Global Severity Index T-score. ^cSTRESSORS = Total general family stressors (non-abuse related). ^dPARENTING COMPETENCE = Parent Sense of Competency Scale. ^eFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .005$.

MANCOVA results for fathers from two parent families.

A between subject MANCOVA with dyadic adjustment included was run for fathers in two parent families. As with the total group, occupational status was not significantly related to any of the dependent variables at time 1. A significant multivariate effect was found $F(6,38) = 3.60, p < .006$, with dyadic adjustment providing a unique contribution (stepdown $F(1,42) = 8.60, p < .005$). Case fathers in two parent families reported higher levels of marital adjustment (see Table 13).

Insert Table 13 about here

At time 2 no relation was found between occupational status and the dependent variables. The results replicated those found with the total sample of fathers. Table 14 shows that case fathers experienced significantly more stressors than comparison fathers, multivariate approximate $F(6,38) = 2.52, p < .038$, Stepdown $F(1,41) = 6.45, p < .015$.

Insert Table 14 about here

Repeated Measures MANCOVAs of Differences in Global Emotional Functioning of Parents over Time

A doubly multivariate MANCOVA with the same covariates and dependent variables was run with within subject effects (time and interaction) as doubly multivariate and between subject effects as singly multivariate (Tabachnick & Fidell, 1983, p.472-473).

Table 13

MANCOVA Results for the Emotional Functioning of Fathers of Sexually Abused and Non-Abused Children from Two Parent Families (Group) at the First Assessment

Dependent Variable	<u>n</u>	<u>M</u>	<u>SD</u>	Main effect Group ^a Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY				$F(1,43) = 3.16$
GSI ^b				
Case	19	56.11	13.35	
Comparison	27	49.37	8.06	
DYADIC ADJUSTMENT ^c				$F(1,42) = 8.60^*$
Case	19	118.37	11.42	
Comparison	27	108.19	14.79	
STRESSORS ^d				$F(1,41) = .81$
Case	19	3.74	2.92	
Comparison	27	2.26	1.68	
PARENTING COMPETENCE ^e				
EFFICACY				$F(1,40) = 3.87^f$
Case	19	36.63	5.72	
Comparison	27	32.48	5.67	
SATISFACTION				$F(1,39) = 1.06$
Case	19	39.47	4.10	
Comparison	27	40.59	5.53	
FACES ^g				$F(1,38) = 2.10$
Case	19	6.42	2.83	
Comparison	27	5.18	3.05	

Note: Multivariate analysis of covariance (MANCOVA) with father's Blishen occupational code as covariates.

^aMultivariate test of significance (Pillai) $F(6,38) = 3.60$, $p < .006$. ^bGSI = Global Severity Index T-score. ^cDYADIC ADJUSTMENT = Total score on Dyadic Adjustment Scale. ^dSTRESSORS = Total general family stressors (non-abuse related). ^ePARENTING COMPETENCE = Parent Sense of Competency Scale. ^fUnivariate trend $F(1,43) = 4.45$, $p < .041$. ^gFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .005$.

Table 14

MANCOVA Results for the Emotional Functioning of Fathers of Sexually Abused and Non-Abused Children (Group) from Two Parent Families at the Second Assessment

Dependent Variable	n	M	SD	Main effect
				Group ^a
				Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY				F(1,43) = .34
GSI ^b				
Case	19	55.74	12.69	
Comparison	27	51.15	8.19	
DYADIC ADJUSTMENT ^c				F(1,42) = 2.56
Case	19	114.37	14.65	
Comparison	27	108.37	13.97	
STRESSORS ^d				F(1,41) = 6.45*
Case	19	4.00	2.63	
Comparison	27	1.93	1.17	
PARENTING COMPETENCE ^e				
EFFICACY				F(1,40) = .01
Case	19	35.68	4.02	
Comparison	27	33.37	4.82	
SATISFACTION				F(1,39) = 1.78
Case	19	38.21	7.75	
Comparison	27	41.00	4.76	
FACES ^f				F(1,38) = 3.02
Case	19	5.90	3.44	
Comparison	27	5.64	2.61	

Note: Multivariate analysis of covariance (MANCOVA) with father's Blishen occupational code as covariates.

^aMultivariate test of significance (Pillai) $F(6,38) = 2.52$, $p < .038$. ^bGSI = Global Severity Index T-score. ^cDYADIC ADJUSTMENT = Total score on Dyadic Adjustment Scale. ^dSTRESSORS = Total general family stressors (non-abuse related). ^ePARENTING COMPETENCE = Parent Sense of Competency Scale. ^fFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .015$.

Results over time for mothers from single and two parent families.

Results of this analysis indicated that the combined dependent variables were significantly related to the combined covariates (mother's age and occupational status), $F(10,172) = 2.39, p < .011$. This association was small (effect size $\eta^2 = .12$). Multiple regressions were run with these covariates acting as multiple predictors for each dependent variable in turn. The age of the mother provided significant adjustment for family functioning only ($F(2,89) = 4.34, p < .016$, adjusted $R^2 = .068$). The β value of .26 was significantly different from zero, $t(172) = 2.56, p < .012$. With adjustment for covariates, a significant main effect was found for group, $F(5,85) = 9.53, p < .0000$. Univariate follow-up F -tests revealed three variables which had unique contributions once Bonferroni corrections were applied: emotional distress, $F(1,89) = 32.38, p < .000$, parent satisfaction, $F(1,89) = 28.51, p < .000$, and general stressors, $F(1,89) = 10.45, p < .002$. Case mothers reported more emotional distress, more general stressors, and less satisfaction with the parenting role (see Table 15).

Insert Table 15 about here

There were no significant changes over the three months in the dependent variables or in the group by time interaction.

Results over time for mothers from two parent families.

A doubly multivariate MANCOVA which included dyadic adjustment as an additional dependent variable was run for mothers

Table 15

Repeated Measures MANCOVA Results for the Emotional Functioning of Mothers of Sexually Abused and Non-Abused Children (Group) at the First and Second Assessment (Time)

Variable	Assessment						Main Effect Group ^a F(5,85)
	First			Second			
	n	M	SD	n	M	SD	
BRIEF SYMPTOM INVENTORY							
GSI ^b							32.38***
Case	39	60.77	8.49	39	59.28	11.05	
Control	54	49.13	8.75	54	47.78	9.91	
STRESSORS^c							
Case	39	3.87	2.74	39	3.59	2.26	10.45**
Control	54	2.26	1.80	54	2.07	1.59	
PARENT COMPETENCE^d							
EFFICACY							2.17
Case	39	34.77	6.41	39	32.97	7.20	
Control	54	34.32	6.43	54	35.33	5.82	
SATISFACTION							
Case	39	35.62	6.79	39	34.67	7.38	28.51***
Control	54	41.87	5.31	54	42.37	6.09	
FACES^e							
Case	39	7.46	4.72	39	7.27	4.65	4.36*
Control	54	5.80	3.17	54	5.94	3.88	

Note: Doubly Multivariate analysis of covariance (MANCOVA) with mother's age and Blishen occupational code as covariates.

^aMultivariate test of significance (Pillai) $F(5,85) = 9.53$, $p < .0000$.

^bGSI = Global Severity Index T-score. ^cSTRESSORS = Total general family stressors (non-abuse related). ^dPARENT COMPETENCE = Parent Sense of Competency Scale. ^eFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .05$. ** $p < .002$. *** $p < .0000$.

from two parent families. No dependent variables were significantly related to the covariates. A significant main effect was found for group, $F(6,59) = 5.24, p < .000$. Univariate follow-up identified three significant contributors: emotional distress, $F(1,64) = 15.11, p < .000$, parent satisfaction, $F(1,64) = 11.50, p < .001$, and general stressors, $F(1,64) = 8.24, p < .006$. The direction of differences as shown in Table 16 was the same as for the whole sample. No significant main effect was found for time or for the group by time interaction.

Insert Table 16 about here

Results over time for fathers from single and two parent families.

A doubly multivariate MANCOVA with father's occupational status as covariate did not indicate any significant relationship between the dependent variables and the covariates. Nor were any significant differences found between groups, within groups over time, or in the time by group interaction.

Results over time for fathers from two parent families.

When father's dyadic adjustment was included as an additional dependent variable, a significant main effect was found for group, approximate $F(6,35) = 2.41, p < .047$. No dependent variables provided unique contributions.

Table 16

Repeated Measures MANCOVA Results for the Emotional Functioning of Mothers of Sexually Abused and Non-Abused Children from Two Parent Families (Group) at the First and Second Assessment (Time)

Variable	Assessment						Main Effect Group ^a (1,64)
	First			Second			
	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	
BRIEF SYMPTOM INVENTORY							
GSI ^b							15.11***
Case	22	59.63	8.76	22	57.91	9.36	
Control	46	49.80	8.84	46	48.35	9.92	
DYADIC ADJUSTMENT^c							
Case	22	116.41	19.41	22	110.73	20.48	.08
Control	46	112.30	14.48	46	112.72	18.00	
STRESSORS^d							
Case	22	4.09	3.19	22	4.05	2.67	8.24*
Control	46	2.21	1.81	46	2.17	1.62	
PARENT COMPETENCE^e							
EFFICACY							
Case	22	34.46	7.38	22	33.55	6.96	.54
Control	46	33.98	6.36	46	34.98	5.99	
SATISFACTION							
Case	22	37.14	6.30	22	35.50	7.99	11.50**
Control	46	41.74	5.12	46	42.24	6.17	
FACES^f							
Case	22	6.55	2.89	22	6.27	4.29	1.61
Control	46	5.47	3.17	46	5.83	3.79	

Note: Doubly Multivariate analysis of covariance (MANCOVA) with mother's age and Blishen occupational code as covariates.
^aMultivariate test of significance (Pillai) $F(6,59) = 5.24, p < .0002$.
^bGSI = Global Severity Index T-score. ^cDAS = Dyadic Adjustment Scale total score. ^dSTRESSORS = Total general family stressors (non-abuse related). ^ePARENT COMPETENCE = Parent Sense of Competency Scale.
^fFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .006$ ** $p < .001$ *** $p < .0002$.

Analyses of Differences in Clinical Risk between Case and Comparison Parents on the Subscales of the Brief Symptom Inventory Mothers.

Table 17 presents the means and standard deviations for the subscales for each group. Scores on all subscales were higher in case mothers although no means were in the clinical range. Due to the generalization of distress across all subscales in the case group, correlations were too high to justify using MANCOVAs.

Insert Table 17 about here

Tables 18 and 19 present the results of 2x2 chi-square analyses with Bonferroni correction ($p < .0055$) and relative odds ratios. The latter statistic was used to provide an estimate of relative risk of case and comparison mothers scoring in the clinical range (T-score ≥ 63) on each of the subscales. At time 1, there were significantly more case mothers in the clinical range for all subscales except the interpersonal sensitivity subscale. At time 2, there were significantly more case mothers in the clinical range on all subscales. Relative odds ratios were all significantly greater than one at time 1 with the highest risk being for somatization, psychoticism, and anxiety. At time 2, all subscales except for the phobic anxiety subscale were associated with significantly higher risk levels.

Insert Tables 18 and 19 about here

Table 17

Mean T-scores and Standard Deviations for Mothers of Sexually Abused and Non Abused Children on the Subscales of the Brief Symptom Inventory

Subscale	Assessment Period							
	Time 1				Time 2			
	Case n = 52		Comparison n = 58		Case n = 51		Comparison n = 55	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Somatization	57.08	11.09	47.48	7.87	54.53	10.14	45.42	6.44
Obsessive-Compulsive	60.29	12.05	51.31	9.41	59.37	11.41	51.15	9.67
Interpersonal Sensitivity	56.10	9.93	48.53	8.81	56.53	12.19	49.00	9.71
Depression	58.71	9.47	47.55	7.48	58.29	10.77	49.15	7.97
Anxiety	59.87	9.78	48.84	8.25	59.24	9.77	49.11	8.83
Hostility	61.04	10.52	52.16	8.89	60.02	11.88	52.29	9.79
Phobic Anxiety	55.63	9.71	48.26	6.38	54.49	9.70	48.65	6.88
Paranoia	60.33	10.89	51.03	8.95	59.75	11.86	50.11	8.57
Psychoticism	60.87	11.24	51.76	7.62	60.67	11.59	50.22	7.66

Table 18

Odds Ratios and Percent of Case and Comparison Mothers Scoring in the Clinical Range of the Brief Symptom Inventory Subscales Based on T-Scores at the First Assessment

Subscale	Odds Ratio ^a	Percent in Clinical Range	
		Case n = 52	Comparison n = 58
Somatization	14.82	34.6	3.4 ** ^b
Obsessive-Compulsive	9.81	48.1	8.6 **
Interpersonal Sensitivity	4.30	28.8	8.6
Depression	9.71	34.6	5.2 **
Anxiety	12.42	40.4	5.2 **
Hostility	9.09	46.2	8.6 **
Phobic Anxiety	7.15	34.6	6.9 *
Paranoid Ideation	5.87	40.4	10.3 *
Psychoticism	12.50	48.1	6.9 **

Note: ^aAll odds ratios were significantly greater than 1.0 with 95% confidence levels. ^bSignificance level of chi-squares for 2 x 2 tables with Bonferroni correction.

*p<.0003. ** p<.0001.

Table 19

Odds Ratios and Percent of Case and Comparison Mothers Scoring in the Clinical Range of the Brief Symptom Inventory Subscales Based on T-scores at the Second Assessment

Subscale	Odds Ratio ^a	Percent in Clinical Range	
		Case n = 51	Comparison n = 54
Somatization	20.43	27.5	1.8 ** ^b
Obsessive-Compulsive	5.22	47.1	14.5 **
Interpersonal Sensitivity	4.11	41.2	14.5 **
Depression	7.57	37.3	7.3 **
Anxiety	17.10	39.2	3.6 **
Hostility	4.11	41.2	14.5 **
Phobic Anxiety	2.59	27.5	12.7 *
Paranoid Ideation	6.45	39.2	9.1 **
Psychoticism	8.93	41.2	7.3 **

Note: ^aAll odds ratios significantly greater than 1.0 with 95% confidence levels except for the phobic anxiety subscale.

^bSignificance level of chi-squares for 2 x 2 tables with Bonferroni correction.

*p<.0001. **p<.00005.

Fathers.

Table 20 shows the descriptive statistics for case and comparison fathers. The pattern of results for the 2x2 chi-square analyses and relative odds ratios for fathers was very different from that of mothers. At time 1, the only subscale where case

Insert Table 20 about here

fathers were significantly more likely to be in the clinical range was the paranoia subscale $X^2 (1, N = 51) = 13.74, p < .0002$ (see Table 21). At time 2, no significant differences were found between groups in the proportion of case and control fathers in the clinical range. The only subscale associated with a significantly higher odds ratio was the hostility subscale (see Table 22).

Insert Table 21 and Table 22 about here

Results of Chi-Square Analyses of Perceptions of Family Functioning

Two chi-square analyses were done to assess differences in family functioning. The first analysed differences in the proportion of parents scoring in the balanced, midrange and extreme clarifications of family types (Olson et al., 1985). The second set of analyses assessed differences in perceived and ideal family adaptability and cohesion.

Mothers.

No significant differences were found in the percentage of mothers rating their family in balanced, midrange or extreme

Table 20

Mean T-scores and Standard Deviations for Fathers of Sexually Abused and Non Abused Children on the Subscales of the Brief Symptom Inventory

Subscale	Assessment Period							
	Time 1				Time 2			
	Case n = 23		Comparison n = 28		Case n = 22		Comparison n = 28	
	M	SD	M	SD	M	SD	M	SD
Somatization	53.70	9.93	48.64	10.07	50.18	12.91	48.86	6.90
Obsessive-Compulsive	53.91	14.87	50.96	10.30	55.55	12.74	52.39	9.53
Interpersonal Sensitivity	52.52	10.95	49.96	6.64	52.23	14.50	50.32	7.82
Depression	52.61	10.07	49.18	6.57	57.32	10.00	51.04	8.03
Anxiety	54.13	13.32	50.43	8.98	55.86	13.75	52.14	8.91
Hostility	54.04	11.57	50.43	8.83	53.32	15.38	51.46	7.85
Phobic Anxiety	53.30	7.42	50.68	6.72	50.36	12.27	48.68	4.97
Paranoia	58.74	12.16	48.96	7.32	53.18	14.68	50.68	8.26
Psychoticism	52.70	8.56	50.18	6.90	53.86	13.80	52.46	9.27

Table 21

Odds Ratios and Percent of Case and Comparison Fathers Scoring in the Clinical Range of the Brief Symptom Inventory Subscales Based on T-Scores at the First Assessment

Subscale	Odds Ratio ^a	Percent in Clinical Range	
		Case n = 23	Comparison n = 28
Somatization	3.61	21.7	7.1
Obsessive-Compulsive	3.65	30.4	10.7
Interpersonal Sensitivity	---- ^b	17.4	0.0
Depression	7.50	21.7	3.6
Anxiety	2.94	26.1	10.7
Hostility	3.61	21.7	7.1
Phobic Anxiety	4.05	13.0	3.6
Paranoid Ideation	24.75	47.8	3.6 * ^c
Psychoticism	5.68	17.4	3.6

Note: ^aNone of the odds ratios were significantly greater than 1.0 with 95% confidence levels except for the paranoid ideation subscale. ^bOdds ratio could not be calculated as no control fathers scored in the clinical range. ^cSignificance level of chi-squares for 2 x 2 tables with Bonferroni correction.

*p<.0002.

Table 22

Odds Ratios and Percent of Case and Comparison Fathers Scoring in the Clinical Range of the Brief Symptom Inventory Subscales based on T-scores at the Second Assessment

Subscale	Odds Ratio	Percent in Clinical Range	
		Case n = 21	Comparison n = 28
Somatization	---- ^a	19.0	0.0
Obsessive-Compulsive	1.08	19.0	17.9
Interpersonal Sensitivity	1.88	23.8	14.3
Depression	3.6 ^c	38.1	14.3
Anxiety	1.84	28.6	17.9
Hostility	13.50 ^b	33.3	3.6
Phobic Anxiety	4.06	23.8	7.1
Paranoid Ideation	4.17	33.3	10.7
Psychoticism	2.60	23.8	10.7

Note: ^aOdds ratios could not be calculated as no comparison fathers scored in the clinical range. ^bOdds ratio significantly greater than 1.0 with 95% confidence levels.

family types. However, significant differences were found in perceived levels of cohesion at time 1 ($X^2(3, N = 108) = 9.89, p < .02$), and time 2 ($X^2(3, N = 104) = 10.25, p < .017$). At both assessment periods, case mothers were over-represented in the disengaged group when compared to comparison mothers. However, as Table 23 shows, it is important to note that at time 1, the classification of case mothers' levels of family cohesion was evenly distributed across connected, separated, and disengaged types. Three months later, the proportion in the connected range dropped, and the proportion in the separated range increased (see Table 24). No differences were found in mothers' desired levels of cohesion or in perceived or desired levels of adaptability.

Insert Tables 23 and 24 about here

Fathers.

There were no significant differences at time 1 or time 2 in the percentage of fathers rating their families in the balanced, midrange or extreme family types, or in the perceptions of family cohesion or adaptability. At time 2, significant differences were found in the proportion of case fathers desiring flexible or structured adaptability styles (see Table 25), $X^2(3, 48) = 8.96, p < .03$. Comparison fathers were more than twice as likely to desire structured adaptability styles, whereas case fathers were more than three times as likely to desire flexible adaptability styles.

Insert Table 25 about here

Table 23

Comparison Between Mothers' Perceptions of Family Cohesion in Families with Sexually Abused Children and Families with Non-abused Children at Time 1.

Perceived Level of Cohesion ^a	Percentage in Each Group	
	Case (n = 50)	Comparison (n = 58)
Disengaged	30.0	6.9
Separated	28.0	37.9
Connected	30.0	39.7
Enmeshed	12.0	15.5

Note. Perceptions of Family Cohesion based on mothers' scores on the Cohesion Subscale of the Family Adaptability and Cohesion Evaluation Scales-III.

^a $\chi^2 (3, N = 108) = 9.89, p < .020.$

Table 24

Comparison Between Mothers' Perceptions of Family Cohesion in Families with Sexually Abused Children and Families with Non-abused Children at Time 2.

Perceived Level of Cohesion ^a	Percentage in Each Group	
	Case ($n = 49$)	Comparison ($n = 55$)
Disengaged	32.7	14.5
Separated	44.9	36.4
Connected	18.4	30.9
Enmeshed	4.0	18.2

Note. Perceptions of Family Cohesion based on mothers' scores on the Cohesion Subscale of the Family Adaptability and Cohesion Evaluation Scales-III.

^a $\chi^2 (3, N = 104) = 10.25, p < .017.$

Table 25

Comparison Between Fathers' Desired Level of Family Adaptability in Families with Sexually Abused Children and Families with Non-abused Children at Time 2.

Desired Level of Family Adaptability*	Percentage in Each Group	
	Case ($n = 21$)	Comparison ($n = 27$)
Rigid	19.1	18.5
Structured	14.3	37.0
Flexible	47.6	11.1
Chaotic	19.0	33.3

Note. Desired Level of Family Adaptability based on fathers' scores on the Ideal Adaptability Subscale of the Family Adaptability and Cohesion Evaluation Scales-III.
 $\chi^2 (3, N = 48) = 8.96, p < .030.$

Summary

The results of the analyses of global emotional functioning between case and comparison mothers indicated that case mothers experienced poorer individual, and parental functioning (satisfaction only) at time 1 (three months post-disclosure). Generalization of emotional distress occurred across most of the subscales of the Brief Symptom Inventory which indicated a wide spectrum of emotional distress. However, dyadic adjustment was slightly higher in case mothers at time 1, once the effect of emotional distress was controlled. Case mothers also perceived their families as less cohesive, but not as less adaptable. They also reported more general stressors in the six-month period prior to each assessment. These effects persisted at time 2 (six months post-disclosure), with the exception of dyadic adjustment which was no longer significantly different. An additional significant difference was also found in perceptions of parent efficacy which became lower in case mothers.

The pattern of results was different for fathers. At time 1, case fathers actually reported higher dyadic adjustment and higher parent efficacy than comparison fathers. No differences were found in individual emotional distress except for the paranoia subscale at time 1. No differences were found in family functioning except that at time 2, case fathers were more likely to desire flexible adaptability styles. At time 2, only the number of general stressors distinguished case and control fathers.

Comparisons of the Global Emotional Functioning of Parents based
on Caretaker Status

Hypothesis 1b predicted that differences between case and comparison groups would be more salient in the primary caretakers due to the chiasmal effects of being the victim's primary support system. Although one would assume that mothers are more likely to adopt this role, this hypothesis was directly tested with primary and secondary caretakers because of the number of single parent fathers who also participated ($n = 6$). However, there was substantial overlap in the proportion of mothers who were primary caretakers (more than 91% in both groups, and in the proportion of secondary caretakers who were fathers (more than 90% in both groups). Patterns of results which differed from the between group analyses done for mothers and fathers will be presented.

This hypothesis was tested in four main ways:

1. Between group MANCOVAs were run for each time period for primary and secondary caretakers using the same dependent variables as were used for the analyses by gender of parent. Because of the overlap of sexes, age and occupational status were treated as covariates for primary and secondary caretakers.

2. To assess within group differences between caretakers a 2×2 (group \times caretaker status) MANCOVA was run for time 1 and 2 using the same dependent variables as previously described.

3. To assess changes over time in the functioning of primary and secondary caretakers Doubly Multivariate repeated measures MANCOVAs were run. A group by caretaker by time repeated measures MANCOVA was abandoned because of a lack of significant main effect for caretaker at step 2.

4. Lastly, relative odds ratios and chi-square analyses were used to assess relative risk for emotional distress on the Brief Symptom Inventory subscales.

MANCOVA Results for the Global Emotional Functioning of Primary Caretakers

Results for primary caretakers in single and two parent families.

Results at time 1 indicated that the combined dependent variables were significantly related to the covariates (age and occupational status), $F(10,208) = 2.19, p < .02$, with a very small effect size ($\eta^2 = .095$). The occupational status of the parent provided significant adjustment for parent efficacy ($F(2,105) = 4.85, p < .01$, adjusted $R^2 = .05$). The β value of .05 was significantly different from zero, $t = -2.04, p < .044$. With adjustment for covariates, a significant main effect for group was found which replicated the pattern of results seen for mothers (see Table 26).

Insert Table 26 about here

As for time 1, the combined dependent variables were significantly related to the combined covariates at time 2, $F(10,194) = 1.90, p < .047$ with a small effect size ($\eta^2 = .089$). Parental age provided significant adjustment for family functioning, $F(2,96) = 5.62, p < .005$, adjusted $R^2 = .076$. The β value of .30 differed significantly from zero, $t = 3.04, p < .003$. The combined dependent variables produced a significant main effect for group, $F(5,96) = 10.55, p < .000$. Stepdown analysis indicated that the pattern of

Table 26

MANCOVA Results for the Emotional Functioning of Primary Caretakers^a of Sexually Abused and Non-Abused Children (Group) at the First Assessment

Dependent Variable	<u>n</u>	<u>M</u>	<u>SD</u>	Main effect Group ^b Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY GSI ^c				$F(1,107) = 35.86^{**}$
Case	52	61.04	9.43	
Comparison	59	48.93	8.81	
STRESSORS ^d				$F(1,106) = 1.06^e$
Case	52	3.56	2.60	
Comparison	59	2.27	1.75	
PARENTING COMPETENCE ^f EFFICACY				$F(1,105) = .54$
Case	52	35.25	6.45	
Comparison	59	34.25	6.29	
SATISFACTION				$F(1,104) = 6.81^*$
Case	52	35.56	7.18	
Comparison	59	42.09	5.25	
FACES ^g				$F(1,103) = .01$
Case	52	7.18	4.34	
Comparison	59	6.14	4.05	

Note: Multivariate analysis of covariance (MANCOVA) with parent's age and Blishen occupational code as covariates.

^a92.7% of the primary caretakers in the case group were mothers. 98.3 % of the primary caretakers in the comparison group were mothers. ^bMultivariate test of significance (Pillai) $F(5,103) = 9.15$ $p < .000$. ^cGSI = Global Severity Index T-score. ^dSTRESSORS = Total general family stressors (non-abuse related). ^eUnivariate trend $F(1,107) = 4.63$, $p < .034$. ^fPARENTING COMPETENCE = Parent Sense of Competency Scale. ^gFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .01$. ** $p < .000$.

results again replicated mothers' functioning (see table 27).

Insert Table 27 about here

Results for primary caretakers from two parent families.

The pattern of results for primary caretakers in two parent families replicated the findings of between group MANCOVAs for mothers in two parent families at both time periods (see tables 28 and 29). The dependent variables were not significantly related to the covariates at either time period.

Insert Table 28 and Table 29 about here

Results for secondary caretakers from single and two parent families.

No significant differences were found between case and comparison secondary caretakers at time 1 or 2. That is, the differences in parent efficacy and number of general stressors seen in fathers were not replicated.

Results for secondary caretakers in two parent families.

Results of the between group MANCOVA for secondary caretaker from two parent families revealed a significant multivariate effect for group at time 1 (approximate $F(6,36) = 2.84, p < .023$). However, only dyadic adjustment provided a significant contribution to the prediction of group differences on stepdown follow-up, $F(1,40) = 5.85, p < .02$. Case secondary caretakers reported better marital adjustment than comparison

Table 27

MANCOVA Results for the Emotional Functioning of Primary Caretakers^a of Sexually Abused and Non-Abused Children (Group) at the Second Assessment

Dependent Variable	n	M	SD	Main effect Group ^b
				Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY				$F(1,100) = 25.78^{**}$
GSI ^c				
Case	49	59.78	10.76	
Comparison	55	47.55	9.97	
STRESSORS ^d				$F(1,99) = 8.85^*$
Case	49	3.86	2.22	
Comparison	55	2.07	1.57	
PARENTING COMPETENCE ^e				
EFFICACY				$F(1,98) = .61^f$
Case	49	33.45	6.79	
Comparison	55	35.22	5.83	
SATISFACTION				$F(1,97) = 11.90^{**}$
Case	49	34.41	7.46	
Comparison	55	42.35	6.04	
FACES ^g				$F(1,96) = .12$
Case	49	6.96	4.50	
Comparison	55	6.01	3.89	

Note: Multivariate analysis of covariance (MANCOVA) with parent's age and Blisshen occupational code as covariates.

^a91.3% of the primary caretakers in the case group were mothers. 98.2 % of the primary caretakers in the comparison group were mothers. ^bMultivariate test of significance (Pillai) $F(5,96) = 10.55, p < .000$. ^cGSI = Global Severity Index T-score. ^dSTRESSORS = Total general family stressors (non-abuse related). ^ePARENTING COMPETENCE = Parent Sense of Competency Scale. ^fUnivariate trend $F(1,100) = 4.14, p < .044$. ^gFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .005$. ** $p < .001$.

Table 28

MANCOVA Results for the Emotional Functioning of Primary Caretakers^a of Sexually Abused and Non-Abused Children from Two Parent Families (Group) at the First Assessment

Dependent Variable	n	M	SD	Main effect
				Group ^b
				Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY				$F(1,75) = 17.78^{***}$
GSI ^c				
Case	31	60.41	10.03	
Comparison	48	49.93	8.69	
DYADIC ADJUSTMENT ^c				$F(1,74) = 5.03^*$
Case	31	113.87	22.44	
Comparison	48	112.31	14.17	
STRESSORS ^d				$F(1,73) = 1.45$
Case	31	3.74	2.88	
Comparison	48	2.19	1.78	
PARENTING COMPETENCE ^f				
EFFICACY				$F(1,72) = 2.19$
Case	31	35.35	6.99	
Comparison	48	34.04	6.25	
SATISFACTION				$F(1,71) = 6.03^{**}$
Case	31	35.87	6.78	
Comparison	48	41.71	5.03	
FACES ^g				$F(1,70) = 1.34$
Case	31	6.45	2.81	
Comparison	48	5.51	3.10	

Note: Multivariate analysis of covariance (MANCOVA) with parent's age and Blishen occupational code as covariates.

^a96.8 % of primary caretakers in two parent case families were mothers; 100% of the primary caretakers in two parent comparison families were mothers. ^bMultivariate test of significance (Pillai) $F(6,70) = 6.25$, $p < .000$. ^cGSI = Global Severity Index T-score.

^dDYADIC ADJUSTMENT = Total score on Dyadic Adjustment Scale.

^eSTRESSORS = Total general family stressors (non-abuse related).

^fPARENTING COMPETENCE = Parent Sense of Competency Scale. ^gFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .03$. ** $p < .02$. *** $p < .000$

Table 29

MANCOVA Results for the Emotional Functioning of Primary Caretakers^a of Sexually Abused and Non-Abused Children from Two Parent Families (Group) at the Second Assessment

Dependent Variable	n	M	SD	Main effect Group ^b
				Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY				$F(1,75) = 17.02^{***}$
GSI ^c				
Case	32	59.21	10.09	
Comparison	47	48.02	10.07	
DYADIC ADJUSTMENT ^c				$F(1,74) = 1.54$
Case	32	108.88	19.66	
Comparison	47	113.45	18.49	
STRESSORS ^d				$F(1,73) = 6.04^*$
Case	32	4.18	2.45	
Comparison	47	2.21	1.63	
PARENTING COMPETENCE ^e				
EFFICACY				$F(1,72) = .16$
Case	32	33.72	6.23	
Comparison	47	35.13	6.01	
SATISFACTION				$F(1,71) = 6.98^{**}$
Case	32	35.00	7.52	
Comparison	47	42.38	6.18	
FACES ^f				$F(1,70) = .20$
Case	32	6.33	4.23	
Comparison	47	5.78	3.76	

Note: Multivariate analysis of covariance (MANCOVA) with parent's age and Blishen occupational code as covariates.

^a96.8% of primary caretakers in two parent case families were mothers; 100% of the primary caretakers in two parent comparison families were mothers. ^bMultivariate test of significance (Pillai); $F(6,70) = 5.80, p < .000$. ^cGSI = Global Severity Index T-score.

^dDYADIC ADJUSTMENT = Total score on Dyadic Adjustment Scale.

^eSTRESSORS = Total general family stressors (non-abuse related).

^fPARENTING COMPETENCE = Parent Sense of Competency Scale. ^gFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .02$. ** $p < .01$ *** $p < .000$.

secondary caretakers (see Table 30). No differences emerged at time 2 between the two groups.

Insert Table 30 about here

MANCOVA Results for Group by Caretaker Status

Results for Single and Two Parent Families.

Two 2x2 MANCOVAs with the previously described dependent variables were run to assess differences between primary and secondary caretakers. A significant multivariate effect was detected for group only, approximate $F(5,147) = 7.89, p < .000$. Three dependent variables provided significant contributions to group differences: emotional distress ($F(1,151) = 23.45, p < .000$), parent satisfaction ($F(1, 148) = 5.22, p < .024$), and general stressors ($F(1,150) = 4.88, p < .029$) (see Table 31). The direction of differences was consistent with previous results.

Insert Table 31 about here

At time 2, the combined dependent variables were significantly related to the covariates, $F(10,274) = 2.20, p < .018$. Parental age and occupation both provided significant adjustment for family functioning, $F(2,136) = 6.41, p < .002$, adjusted $R^2 = .076$. The β values differed significantly from zero (.277, $t = 3.36, p < .001$ for age; $-.185, t = -2.25, p < .026$ for occupation). With adjustment for the covariates, a significant main effect was found for group, approximate $F(5,136) = 6.81, p < .000$. The same variables provided significant contributions to group difference as at time 1 (see Table 32).

Table 30

MANCOVA Results for the Emotional Functioning of Secondary Caretakers of Sexually Abused and Non-Abused Children from Two Parent Families (Group) at the First Assessment

Dependent Variable	n	M	SD	Main effect Group ^b
				Roy-Bargman Stepdown
BRIEF SYMPTOM INVENTORY				F(1,41) = 2.55
GSI ^c				
Case	18	56.00	12.54	
Comparison	27	49.37	8.06	
DYADIC ADJUSTMENT ^d				F(1,40) = 5.85*
Case	18	117.28	13.32	
Comparison	27	108.19	14.79	
STRESSORS ^e				F(1,39) = 1.40
Case	18	4.00	2.93	
Comparison	27	2.26	1.68	
PARENTING COMPETENCE ^f				
EFFICACY				F(1,38) = 1.97
Case	18	35.11	6.21	
Comparison	27	32.48	5.06	
SATISFACTION				F(1,37) = 1.50
Case	18	39.89	4.23	
Comparison	27	40.59	5.53	
FACES ^g				F(1,36) = 2.41
Case	18	7.21	3.27	
Comparison	27	5.18	3.05	

Note: Multivariate analysis of covariance (MANCOVA) with parent's age and Blishen occupational code as covariates.

^a90.5 % of secondary caretakers in two parent case families were fathers; 100% of the secondary caretakers in two parent comparison families were fathers. ^bMultivariate test of significance (Pillai) $F(6,36) = 2.84, p < .023$. ^cGSI = Global Severity Index T-score.

^dDYADIC ADJUSTMENT = Total score on Dyadic Adjustment Scale.

^eSTRESSORS = Total general family stressors (non-abuse related).

^fPARENTING COMPETENCE = Parent Sense of Competency Scale. ^gFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .02$.

Table 31

MANCOVA Results for the Emotional Functioning of Parents of Sexually Abused and Non-Abused Children (Group) by Caretaker Status at the First Assessment

Variable	n	M	SD	Main Effect Group ^a Roy Bargman Stepdown
BRIEF SYMPTOM INVENTORY				
GSI ^b				F(1,151) = 23.45**
Primary Case	52	61.04	9.43	
Secondary Case	19	55.79	12.22	
Primary Control	59	48.93	8.81	
Secondary Control	27	49.37	8.06	
STRESSORS^c				F(1,150) = 4.88*
Primary Case	52	3.56	2.59	
Secondary Case	19	4.00	2.85	
Primary Control	59	2.27	1.75	
Secondary Control	27	2.26	1.68	
PARENT COMPETENCE^d				
EFFICACY				F(1,149) = 3.19
Primary Case	52	35.25	6.45	
Secondary Case	19	35.53	6.30	
Primary Control	59	34.25	6.29	
Secondary Control	27	32.48	5.06	
SATISFACTION				F(1,148) = 5.22*
Primary Case	52	35.56	7.18	
Secondary Case	19	38.79	6.31	
Primary Control	59	42.09	5.25	
Secondary Control	27	40.59	5.53	
FACES^e				F(1,147) = .81
Primary Case	52	7.18	4.33	
Secondary Case	19	7.17	3.19	
Primary Control	59	6.14	4.05	
Secondary Control	27	5.18	3.05	

Note: Multivariate analysis of covariance (MANCOVA) with parent's age and Blishen occupational code as covariates.

^aMultivariate test of significance (Pillai) F(5,147) = 7.89, p < .000.

^bGSI = Global Severity Index T-score. ^cSTRESSORS = Total general family stressors. ^dPARENT COMPETENCE = Parent Sense of Competency Scale. ^eFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

*p < .03. **p < .000.



Illustration of a seventeenth-century Dutch tobacco plantation. Skilled workers from such farms were sent to New Netherland where they set up similar projects on the bouweries of Augustine Herrman, Kiliaen Van Rensselaer and other prominent colonists. The success of these ventures led new settlers to neglect subsistence crops and compelled Stuyvesant to propose legislation that would curtail a sudden scarcity of bread. To native peoples, who were accustomed to gathering the sacred plant from small garden patches, this frenzied mass production must have seemed somewhat bewildering.

Table 32

MANCOVA Results for the Emotional Functioning of Parents of Sexually Abused and Non-Abused Children (Group) by Caretaker Status at the Second Assessment

Variable	n	M	SD	Main Effect Group ^a Roy Bargman Stepdown
BRIEF SYMPTOM INVENTORY				
GSI ^b				F(1,140) = 10.42**
Primary Case	49	59.78	10.76	
Secondary Case	16	54.50	12.06	
Primary Control	55	47.54	9.97	
Secondary Control	26	51.46	8.18	
STRESSORS^c				
				F(1,139) = 15.01***
Primary Case	49	3.86	2.22	
Secondary Case	16	3.88	2.80	
Primary Control	55	2.07	1.57	
Secondary Control	26	1.96	1.18	
PARENT COMPETENCE^d				
EFFICACY				
				F(1,138) = .14
Primary Case	49	33.40	6.79	
Secondary Case	16	35.13	4.08	
Primary Control	55	35.22	5.83	
Secondary Control	26	33.50	4.87	
SATISFACTION				
				F(1,137) = 6.77*
Primary Case	49	34.41	7.46	
Secondary Case	16	39.69	5.49	
Primary Control	55	42.35	6.04	
Secondary Control	26	41.08	4.84	
FACES^e				
				F(1,136) = .00
Primary Case	49	6.95	4.50	
Secondary Case	16	6.18	3.66	
Primary Control	55	6.01	3.89	
Secondary Control	26	5.62	2.66	

Note: Multivariate analysis of covariance (MANCOVA) with parent's age and Blishen occupational code as covariates.

^aMultivariate test of significance (Pillai) $F(5,136) = 6.81, p < .000$.

^bGSI = Global Severity Index T-score. ^cSTRESSORS = Total general family stressors. ^dPARENT COMPETENCE = Parent Sense of Competency Scale. ^eFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .01$. ** $p < .002$. *** $p < .000$.

Table 33

MANCOVA Results for the Emotional Functioning of Parents of Sexually Abused and Non-Abused Children from Two Parent Families (Group) by Caretaker Status at the First Assessment

Variable	n	M	SD	Main Effect Group ^a Roy Bargman Stepdown
BRIEF SYMPTOM INVENTORY ^b				F(1,118) = 16.91****
Primary Case	31	60.42	10.03	
Secondary Case	18	56.00	12.54	
Primary Control	48	49.94	8.69	
Secondary Control	27	49.37	8.06	
DYADIC ADJUSTMENT SCALE ^c				F(1,117) = 9.45***
Primary Case	31	113.87	22.44	
Secondary Case	18	117.28	13.32	
Primary Control	48	112.31	14.17	
Secondary Control	27	108.19	14.79	
GENERAL STRESSORS				F(1,116) = 5.44**
Primary Case	31	3.74	2.89	
Secondary Case	18	4.00	2.93	
Primary Control	48	2.18	1.78	
Secondary Control	27	2.26	1.68	
PARENT COMPETENCE ^d				
EFFICACY				F(1,115) = 5.22**
Primary Case	31	35.36	6.99	
Secondary Case	18	35.11	6.21	
Primary Control	48	34.04	6.25	
Secondary Control	27	32.48	5.06	
SATISFACTION				F(1,114) = 6.55**
Primary Case	31	35.87	6.79	
Secondary Case	18	39.89	4.23	
Primary Control	48	41.71	5.03	
Secondary Control	27	40.59	5.53	
FACES ^e				F(1,113) = 4.22*
Primary Case	31	6.45	2.81	
Secondary Case	18	7.21	3.27	
Primary Control	48	5.51	3.10	
Secondary Control	27	5.18	3.05	

Note: Multivariate analysis of covariance (MANCOVA) with parent's age and Blishen occupational code as covariates.

^aMultivariate test of significance (Pillai) F(6,113) = 9.11, p < .000.

^bGlobal Severity Index T-score. ^cDyadic Adjustment Total Score. ^dPARENT COMPETENCE = Parent Sense of Competency Scale. ^eFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

*p < .05. **p < .025 ***p < .005. ****p < .000.

Table 34

MANCOVA Results for the Emotional Functioning of Parents of Sexually Abused and Non-Abused Children from Two Parent Families (Group) by Caretaker Status at the Second Assessment

Variable	n	M	SD	Main Effect Group ^a Roy Bargman Stepdown
BRIEF SYMPTOM INVENTORY^b				$F(1,115) = 8.40^{**}$
Primary Case	32	59.22	10.09	
Secondary Case	16	54.50	12.06	
Primary Control	47	48.02	10.06	
Secondary Control	26	51.46	8.18	
DYADIC ADJUSTMENT SCALE^c				$F(1,114) = 4.65^*$
Primary Case	32	108.88	19.66	
Secondary Case	16	117.88	10.41	
Primary Control	47	113.45	18.49	
Secondary Control	26	107.73	13.84	
GENERAL STRESSORS				$F(1,113) = 12.10^{***}$
Primary Case	32	4.18	2.46	
Secondary Case	16	3.88	2.80	
Primary Control	47	2.21	1.63	
Secondary Control	26	1.96	1.18	
PARENT COMPETENCE^d				
EFFICACY				$F(1,112) = .00$
Primary Case	32	33.72	6.23	
Secondary Case	16	35.13	4.08	
Primary Control	47	35.13	6.01	
Secondary Control	26	33.50	4.87	
SATISFACTION				$F(1,111) = 5.59^*$
Primary Case	32	35.00	7.51	
Secondary Case	16	39.69	6.49	
Primary Control	47	42.38	6.18	
Secondary Control	26	41.08	4.84	
FACES^e				$F(1,110) = .00$
Primary Case	32	6.33	4.23	
Secondary Case	16	6.18	3.66	
Primary Control	47	5.78	3.76	
Secondary Control	26	5.62	2.66	

Note: Multivariate analysis of covariance (MANCOVA) with parent's age and Blishen occupational code as covariates. ^aMultivariate test of significance (Pillai) $F(6,110) = 5.48, p < .000$. ^bGlobal Severity Index T-score. ^cTotal Score. ^dPARENT COMPETENCE = Parent Sense of Competency Scale. ^eFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

* $p < .05$. ** $p < .005$. *** $p < .001$.

$p < .004$, effect size $\eta^2 = .13$. Results of the regression analyses indicated that parental age provided significant adjustment for family functioning, $F(2,93) = 4.57$, $p < .013$, adjusted $R^2 = .07$, with a β value of $.27$, $t(180) = 2.65$, $p < .009$. With adjustment of covariates, a significant main effect was found for group, $F(5,89) = 9.99$, $p < .000$, which replicated the results for mothers (see Table 35).

Insert Table 35 about here

Doubly multivariate analyses of primary caretakers from two parent families.

This analysis was the only analysis where significant main effects were found for group, $F(6,61) = 5.32$, $p < .000$, time, $F(6,63) = 2.48$, $p < .032$, and the group by time interaction, $F(6,63) = 2.35$, $p < .041$. As shown in Table 36, the same dependent variables provided unique contributions to group differences as were evident in contrasts between case and comparison mothers (emotional distress, parent satisfaction, and general stressors). A significant time and group by time interaction effect was present for dyadic adjustment (time: $F(1,68) = 8.52$, $p < .005$; group \times time: $F(1,68) = 10.77$, $p < .002$). Whereas case primary caretakers had better dyadic adjustment than comparison primary caretakers at time 1, the pattern was reversed at time 2. Case primary caretakers showed a significant deterioration in dyadic adjustment by time 2 whereas comparison primary caretakers remained essentially the same.

Table 35

Repeated Measures MANCOVA Results for the Emotional Functioning of Primary Caretakers^a of Sexually Abused and Non-Abused Children (Group) at the First and Second Assessment (Time)

Variable	Assessment						Main Effect Group ^b F(5,89)
	First			Second			
	n	M	SD	n	M	SD	
BRIEF SYMPTOM INVENTORY							
GSI ^c							
Case	42	60.35	8.71	42	59.17	11.12	30.92**
Control	55	48.95	8.78	55	47.55	9.97	
STRESSORS^d							
Case	42	3.81	2.68	42	3.67	2.22	11.90**
Control	55	2.26	1.79	55	2.07	1.57	
PARENT COMPETENCE^e							
EFFICACY							
Case	42	34.91	6.27	42	33.33	7.08	1.74
Control	55	34.15	6.49	55	35.22	5.83	
SATISFACTION							
Case	42	35.83	6.60	42	34.86	7.36	28.18**
Control	55	41.91	5.27	55	42.35	6.04	
FACES^f							
Case	42	7.28	4.60	42	7.18	4.53	4.23*
Control	55	5.77	3.15	55	6.01	3.89	

Note: Doubly Multivariate analysis of covariance (MANCOVA) with parent's age and Blishen occupational code as covariates.
^a92.9% of primary caretakers in case families were mothers; 98.2% of primary caretakers in comparison families were mothers.
^bMultivariate test of significance (Pillai) $F(5,89) = 9.99, p < .000$.
^cGSI = Global Severity Index T-score. ^dSTRESSORS = Total general family stressors (non-abuse related). ^ePARENT COMPETENCE = Parent Sense of Competency Scale. ^fFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

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

Insert Table 36 about here

Doubly multivariate analyses of secondary caretakers over time.

No significant main or interaction effects were found on either of the analyses (with and without dyadic adjustment) for secondary caretakers.

Analyses of Differences between Case and Comparison Parents in Clinical Risk on the Brief Symptom Inventory Subscales based on Caretaker Status

Chi-square analyses (2x2) with Bonferroni correction and relative odds ratios were used as estimates of the relative risk of clinical levels of emotional distress on each of the Brief Symptom Inventory subscales.

Primary Caretakers.

Primary caretakers showed a similar pattern of response as mothers except that significantly more case primary caretakers also scored in the clinical range on the interpersonal sensitivity subscale at time 1 ($\chi^2 (1, N = 113) = 9.52, p < .002$). At time 2, significantly more case primary caretakers were in the clinical range for all subscales except phobic anxiety. Relative odds ratios for all subscales were significantly higher in case primary caretakers at both periods.

Secondary Caretakers.

Findings for secondary caretakers replicated the findings when case and comparison fathers were compared. At time 1, the percentage of parents with paranoia scores in the clinical range

Table 36

Repeated Measures MANCOVA Results for the Emotional Functioning of Primary Caretakers of Sexually Abused and Non-Abused Children from Two Parent Families (Group) at the First and Second Assessment (Time)

Variable	Assessment				Main Effect Group (1,66)	Main Effect Time (1,68)	Group x Time (1,68)
	First		Second				
	M	SD	M	SD			
BRIEF SYMPTOM INVENTORY							
GSI ^a					13.96***	1.34	.01
Case	59.13	9.20	57.88	9.91			
Control	49.80	8.84	48.35	9.92			
DYADIC ADJUSTMENT^b							
Case	115.92	18.87	108.88	21.27	.01	8.52**	10.77**
Control	112.30	14.48	112.72	18.00			
STRESSORS^c							
Case	3.92	3.12	4.08	2.59	7.83*	.05	.14
Control	2.21	1.81	2.17	1.62			
PARENT COMPETENCE^d							
EFFICACY							
Case	34.83	7.19	34.00	6.85	.28	.02	1.86
Control	33.98	6.36	34.98	5.99			
SATISFACTION							
Case	37.17	6.02	35.46	7.91	12.08***	.79	2.63
Control	41.74	5.12	42.24	6.17			
FACES^e							
Case	6.45	2.78	6.14	4.14	1.52	.00	.43
Control	5.47	3.17	5.83	3.79			

Note: Doubly Multivariate analysis of covariance (MANCOVA) with mother's age and Blisshen occupational code as covariates. n=24 for case and 46 for comparison group. Multivariate tests of significance (Pillai) Group: F(6,61)= 5.32, p<.000; Time: F(6,63)= 2.48, p<.032; Group x Time: F(6,63) = 2.35, p<.041.

^aGSI = Global Severity Index T-score. ^bDAS = Dyadic Adjustment Scale total score. ^cSTRESSORS = Total general family stressors (non-abuse related). ^dPARENT COMPETENCE = Parent Sense of Competency Scale.

^eFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre.

*p<.01 **p<.005 ***p<.001.

was significantly higher in case secondary caretakers than comparisons, X^2 (Fisher's Exact) (1, $N = 47$) = 9.77, $p < .002$. There were no significant chi-square differences at time 2. Relative odds ratios indicated that case secondary caretakers had significantly higher risk for clinical levels of paranoia at time 1 (17.33), and for clinical levels of hostility at time 2 (10.42).

Summary

For primary caretakers, the MANCOVAs at time 1 and 2 replicated the results for mothers with the exception that at the second assessment period case parents who were primary caretakers also reported a significant deterioration in their spousal adjustment. Although secondary caretakers were predominately fathers in both the case and comparison groups (90-100%), parent efficacy and general stressors were not important contributors to group differences as they had been for fathers.

When primary caretakers were contrasted with secondary caretakers, no significant main effect for caretaker, or for the interaction of group by caretaker was found at either assessment. However, the group effect showed salient differences when parents were combined regardless of caretaker status. In two parent families, case parents experienced better marital adjustment, but worse individual and family functioning, lower parent satisfaction, and more general stressors at time 1. Family functioning was not significantly different when single and two parent families were combined. At time 2, the profile of differences was the same except that case parents in two parent families were now experiencing worse dyadic adjustment than the comparison group but were no longer different in family

functioning.

Differences Between Case and Comparison Groups Over Time as a
Function of Court Involvement

Hypothesis 1c predicted that differences between the comparison and case groups would vary over time as a function of court status. A 4x2 repeated measures MANCOVA was planned contrasting comparison parents with parents involved in court proceedings, parents with pending court involvement and parents who did not have to go to court. This hypothesis could not be tested due to the large discrepancy in the sample sizes for these groups (mothers [time 1: no court $n = 10$; court pending $n = 30$; court ongoing $n = 17$; court finished $n = 1$ vs. comparison $n = 58$; time 2: no court $n = 6$; court pending $n = 13$; court ongoing $n = 23$; court finished $n = 13$ vs comparison $n = 55$]; fathers [time 1: no court $n = 5$, court pending $n = 13$, court ongoing $n = 8$, court finished $n = 1$ vs. comparison $n = 28$; time 2: no court $n = 3$, court pending $n = 5$, court ongoing $n = 15$, court finished $n = 4$ vs. comparison $n = 27$]. Therefore analyses were restricted to case groups only.

Analyses of Differences in the Global Functioning of Case Families as a Function of Court Status

Four types of analyses were planned to assess differences in global functioning related to court: (a) a MANOVA was run to establish whether abuse experiences were equivalent in families who were involved in court and those who had no charges laid. (b) MANOVA's were run at each time period to identify differences in emotional distress, marital adjustment, perceptions of parenting competence, family functioning and number of general stressors.

(c) Doubly multivariate repeated measures MANOVA's were planned to assess differences over time based on whether families had no court involvement, pending involvement or ongoing court involvement. This was abandoned because of low sample size in the no court group at time 2. (d) Chi-square analyses were utilized to assess differences in the proportions of parents in the clinical range based on court involvement and court testimony of mothers, children and partners.

MANOVA results for comparisons of child sexual abuse experiences based on court involvement.

A between group MANOVA (court versus no court) was performed with the following dependent variables: type of abuse, type of coercion, frequency, duration, and age of perpetrator (child/adolescent/adult perpetrator with/without 5 year age differential). A significant main effect was found for group, $F(5,40) = 3.47, p < .011$. Groups were significantly different only in the age of the perpetrator, $F(1,44) = 14.27, p < .000$. The mean age of the perpetrator in families who went to court was in the adult range while the perpetrator, on average, was an adolescent for those who did not go to court.

MANOVA results for the global emotional functioning of parents by court status.

Mothers.

Analyses could not be run for two parent families at time 1 or 2 because sample sizes were too low in the group who did not go to court, or who had ongoing court involvement. Most families still had court pending. Therefore analyses were run for the full sample only. No significant differences were found in individual,

parenting or family functioning or in the number of general stressors at time 1. Analyses at time 2 were not valid because the small sample size in the group not involved in court resulted in singularity of the variance-covariance matrices.

Fathers.

Sample sizes were too small to look at group differences for fathers.

Analyses of the clinical risk on the subscales of the Brief Symptom Inventory and on the Dyadic Adjustment Scale based on court involvement and court testimony.

Chi-square analyses and relative odds ratios were run based on family court involvement and court testimony of family subsystems.

Court involvement.

No significant differences were found for mothers or fathers at either assessment period in the proportion in the clinical range on the subscales of the Brief Symptom Inventory based on court involvement (3x2: no court, ongoing court, court pending; or 2x2: court, no court). Nor were there any differences in the proportion experiencing marital distress as a function of court involvement. All odds ratios were non-significant.

Court testimony.

Only two fathers were involved in court testimony. Therefore analyses were run based on whether the mothers or children were involved in court testimony. The proportion of mothers and fathers in the clinical range for the Brief Symptom Inventory subscales and the Dyadic Adjustment Scale did not differ significantly at either time period based on whether the mother or

the child testified.

Differences in Parent Emotional Distress in Case and Comparison
Groups Based on Parent Sexual Abuse History

Hypothesis 2 predicted that parents in the case group who had a history of sexual abuse would experience more emotional distress due to 'double traumatization' than (a) comparison parents with such histories and (b) case parents without such histories. To test this hypothesis parents were divided according to two sources of sexual trauma: recent child trauma (having a sexually abused child) and past parent trauma (parent having a history of child sexual abuse). This resulted in four groups: no sexual trauma (non-abused comparison parents), recent child sexual trauma only (non-abused case parents), past parent sexual trauma only (sexually-abused comparison parents), and double sexual trauma (sexually-abused case parents). It was expected that distress would be lowest in the no sexual trauma group, higher in the single trauma groups, and highest in the double trauma group.

Two strategies were used to test this hypothesis:

1. Two 2x2 ANCOVAs (group by abuse history) were run with mother's age and occupational status as covariates for time 1 and 2, and the Global Severity Index of the Brief Symptom Inventory as the indicator of emotional distress. These analyses could not be run for fathers because no comparison fathers reported histories of child sexual abuse, and only 4 of the 5 case fathers with such a history had completed the Brief Symptom Inventory.

2. Chi-square analyses (4x2) were run to identify differences in the proportion of mothers falling in the clinical range on the Global Severity Index and the subscales of the Brief

Symptom Inventory, and in the distressed range of the Dyadic Adjustment Scale. Follow-up 2x2 chi-squares and relative odds ratios were done to identify which subgroups accounted for the significant differences. MANCOVAs could not be used to test for group differences on the subscales because of the presence of singular variance-covariance matrices for the abused comparison group at time 1 and 2. Therefore, for descriptive purposes only, mothers' means and standard deviations are presented in Tables 37 and 38.

Insert Tables 37 and 38 about here

ANCOVA Results for Mothers' Emotional Distress by Sexual Abuse History

Analyses were performed by SPSS ANOVA using the hierarchical approach for partitioning effects to accommodate unequal cell sizes. Mother's age provided significant adjustment for mothers' levels of emotional distress at time 1 (mother's age, $F(1,96) = 12.65, p < .001$). With adjustment for the covariate, significant main effects were found for abuse history ($F(1,96) = 26.06, p < .000$) and for group ($F(1,96) = 24.44, p < .000$). Mothers with a sexual abuse history were significantly more distressed (abused: $M = 61.83$, non-abused: $M = 51.79$) as were mothers whose children had been sexually abused (case: $M = 61.39$, comparison: $M = 49.24$). Although no interaction effect was found, case mothers with an abuse history were the only group whose mean fell within the clinical range ($M = 64.30$).

Table 37

Mean T-scores and Standard Deviations of Mothers' Scores on the Subscales of the Brief Symptom Inventory at Time 1 Based on Parent Sexual Abuse History

Subscale	Abused Case n = 22		Non-Abused Case n = 29		Abused Comparison n = 11		Non-Abused Comparison n = 47	
	M	SD	M	SD	M	SD	M	SD
Somatization	58.68	12.14	56.03	10.48	49.55	9.51	47.00	7.47
Obsessive-Compulsive	62.59	13.73	58.90	10.64	56.46	10.68	50.11	8.79
Interpersonal Sensitivity	58.59	9.88	54.24	9.89	57.73	10.73	46.38	6.81
Depression	59.18	9.63	58.55	9.62	53.82	10.75	46.09	5.72
Anxiety	62.27	7.46	58.21	11.14	53.82	9.95	47.68	7.46
Hostility	63.23	9.45	59.45	11.32	57.91	5.77	50.81	9.00
Phobic Anxiety	58.23	9.81	53.66	9.50	53.09	9.66	47.13	4.82
Paranoia	62.64	11.33	58.62	10.60	56.64	10.74	49.72	8.06
Psychoticism	61.50	10.35	60.35	12.21	59.36	9.04	49.98	6.09

Table 38

Mean T-scores and Standard Deviations of Mothers' Scores on the Subscales of the Brief Symptom Inventory at Time 2 Based on Parent Sexual Abuse History

Subscale	Abused Case <u>n</u> = 23		Non-Abused Case <u>n</u> = 25		Abused Comparison <u>n</u> = 9		Non-Abused Comparison <u>n</u> = 49	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Somatization	57.39	9.47	52.76	10.57	47.89	8.43	44.69	5.80
Obsessive-Compulsive	60.91	10.46	58.40	11.97	57.67	8.28	49.47	9.18
Interpersonal Sensitivity	58.48	12.29	55.20	11.38	58.00	13.06	46.76	7.34
Depression	60.44	9.98	57.04	11.28	55.00	9.66	47.58	6.65
Anxiety	61.22	9.42	58.20	8.68	54.78	9.39	47.84	8.41
Hostility	61.61	11.33	59.04	12.04	57.11	5.84	50.91	9.84
Phobic Anxiety	56.35	10.32	52.96	8.74	49.22	8.39	48.20	6.29
Paranoia	63.91	10.91	55.96	11.08	56.89	10.55	48.42	7.25
Psychoticism	64.87	10.27	57.12	11.80	55.56	9.67	48.51	5.23

At the three month follow-up, mother's age remained a significant covariate ($F(1,96) = 7.39, p < .008$). A significant main effect was found for abuse history ($F(1,96) = 25.32, p < .000$) and group ($F(1,96) = 12.47, p < .001$) with the direction of differences being the same as at time 1. Mothers with abuse histories had higher distress levels (abused: $M = 61.57$, non-abused: $M = 49.87$) as did mothers whose children had been sexually abused (case: $M = 59.54$, comparison: $M = 48.16$). The mean score for abused case mothers was in the clinical range ($M = 63.45$). No interaction of group by abuse history was found. Nor was any change over time found.

Analyses of Clinical Risk for Emotional and Marital Distress Based on Sexual Abuse History

Tables 39 and 40 present an overview of the percentage of mothers in the clinical range across the four groups with their associated chi-square values for the 4x2 analyses. At time 1, there were significant differences between groups in the percentage of distressed mothers on all subscales and the Global Severity Index. At time 2, groups varied significantly on all subscales except for phobic anxiety and hostility. No significant differences were found in the percentage of maritally distressed mothers in any group. The pattern of these results for each subscale is presented graphically in Appendix AA.

Insert Table 39 and Table 40 about here

Table 39

Percent of Case and Comparison Mothers Scoring in the Clinical Range (T-Score 63+) of the Brief Symptom Inventory Subscales at Time 1 Based on Sexual Abuse Histories

Subscale	Percent in Clinical Range				Overall Chi-Square
	Abused Case n=23	Non-abused Case n=29	Abused Comparison n=11	Non-Abused Comparison n=47	
Somatization	45.5 _a	27.6 _a	9.1 _{ab}	2.1 _b	21.32***
Obsessive-Compulsive	59.1 _a	41.4 _a	27.3 _{ab}	4.3 _b	26.54***
Interpersonal Sensitivity	31.8 _a	27.6 _a	36.4 _a	2.1 _b	14.95*
Depression	36.4 _a	34.5 _a	27.3 _{ab}	0.0 _b	20.12**
Anxiety	50.0 _a	34.5 _a	18.2 _{ab}	2.1 _b	23.58***
Hostility	54.5 _a	41.4 _a	18.2 _{ab}	6.4 _b	22.27***
Phobic Anxiety	40.9 _a	31.0 _a	36.4 _a	0.0 _b	21.66***
Paranoid Ideation	40.9 _a	41.4 _a	36.4 _{ab}	4.3 _b	18.78**
Psychoticism	59.1 _a	41.4 _a	27.3 _{ab}	2.1 _b	29.56***
Global Severity Index	45.4 _a	41.4 _a	18.2 _{ab}	2.1 _b	23.55***

Note. Subscripts refer to significance level of chi-squares for 2 x 2 tables with Bonferroni correction set at $p < .005$. Percentages with the same subscripts do not differ significantly at $p < .005$.

* $p < .002$. ** $p < .0005$. *** $p < .0001$.

Table 40

Percent of Case and Comparison Mothers Scoring in the Clinical Range (T score 63+) of the Brief Symptom Inventory Subscales at Time 2 based on Sexual Abuse Histories

Subscale	Percent in Clinical Range				Overall Chi-Square
	Abused Case n=24	Non-abused Case n=27	Abused Comparison n=10	Non-Abused Comparison n=45	
Somatization	37.5 _a	18.5 _{ab}	0.0 _{ab}	2.2 _b	18.11**
Obsessive-Compulsive	54.2 _a	40.7 _a	50.0 _a	6.7 _b	21.65***
Interpersonal Sensitivity	45.8 _a	37.0 _a	60.0 _a	4.4 _b	22.65***
Depression	37.5 _a	37.0 _a	30.0 _a	2.2 _b	17.72**
Anxiety	50.0 _a	29.6 _a	10.0 _a	2.2 _b	23.87***
Hostility	45.8 _a	37.0 _{ab}	0.0 _{ab}	11.1 _b	11.40
Phobic Anxiety	41.7 _a	14.8 _{ab}	30.0 _{ab}	8.9 _b	11.67
Paranoid Ideation	58.3 _a	22.2 _{ab}	40.0 _a	2.2 _b	29.00***
Psychoticism	50.0 _a	33.3 _a	30.0 _{ab}	2.2 _b	22.34***
Global Severity Index	58.3 _a	40.7 _a	30.0 _{ab}	2.2 _b	28.36***

Note. Subscripts refer to significance level of chi-squares for 2 x 2 tables with Bonferroni correction set at p<.005. Percentages with the same subscripts do not differ significantly at p<.005.

*p<.005. **p<.0005. ***p<.0001.

Comparisons of mothers' emotional functioning based on sexual trauma group.

Double trauma versus single trauma groups.

Follow-up 2x2 Chi-squares and relative odds ratios failed to find any differences between the proportion of abused case mothers who were clinically or maritally distressed when compared to either single trauma group (non-abused case mothers or abused comparison mothers).

Single trauma groups: Recent child sexual trauma versus past parent sexual trauma.

Non-abused case mothers did not differ in clinical risk from abused comparison mothers at either time 1 or 2 on either the Brief Symptom Inventory or the Dyadic Adjustment Scale.

Comparisons of Trauma Groups with the non-sexually traumatized group.

All three trauma groups differed significantly from the no trauma group. Compared to the no trauma group, the proportion of abused case mothers in the clinical range was significantly higher for all subscales at both time periods with all odds ratios being significant (see Table 41). A similar pattern emerged for non-abused case mothers with the exception of no differences in the proportions experiencing clinical levels of phobic anxiety (see Table 42). Abused comparison mothers also had significantly higher proportions in the clinical range at time 1 for the depression, phobic anxiety and interpersonal sensitivity subscales and higher relative risks for the obsessive-compulsive, paranoid ideation, and interpersonal sensitivity subscales and for marital distress. At time 2, these two groups differed only in the

proportion having clinical levels of interpersonal sensitivity and paranoia, although six subscales were associated with a higher relative risk: paranoid ideation, psychoticism, depression, obsessive-compulsive, interpersonal sensitivity and the Global Severity Index (see Table 43). No significant differences were present for marital distress at time 2.

Insert Tables 41 - 43 about here

There was also evidence that the magnitude of relative risk increased as a function of group membership. For five subscales (somatization, obsessive-compulsive, anxiety, hostility, and psychoticism) salient differences were present at time 1 when non-abused comparison mothers were used as the reference group. For these subscales, the relative odds values of case mothers with an abuse history was twice as high as case mothers without an abuse history who in turn had relative odds twice as high as comparison mothers with an abuse history. That is, the magnitude of relative odds scores for abused case mothers was four times higher than comparison mothers with abuse histories. At time 2, differences in relative odds scores were less salient with the above pattern evident only for the Global Severity Index, and the anxiety subscale.

Analyses of Fathers Based on Abuse History

Because of the small sample of case fathers who admitted to having a history of sexual abuse ($n = 5$), within group analyses were deemed to be inappropriate.

Table 41

Odds Ratios and Percent of Case Mothers with Sexual Abuse Histories Versus Comparison Mothers Without Sexual Abuse Histories Scoring in the Clinical Range of the Brief Symptom Inventory Subscales Based on T-Scores

Subscale	Assessment Period					
	Time 1			Time 2		
	Odds Ratio ^a	Percentage ^b		Odds Ratio	Percentage	
		Abused Case n=23	Non-abused Comparison n=47		Abused Case n=24	Non-abused Comparison n=45
Somatization	38.3	45.5	2.1***	26.4	37.5	2.2***
Obsessive-Compulsive	32.5	59.1	4.3****	16.5	54.2	6.7****
Interpersonal Sensitivity	21.5	31.8	2.1**	18.2	45.8	4.4****
Depression	----	36.4	0.0***	26.4	37.5	2.2***
Anxiety	46.0	50.0	2.1****	44.0	50.0	2.2****
Hostility	17.6	54.5	6.4***	6.8	45.8	11.1*
Phobic Anxiety	----	40.9	0.0****	7.3	41.7	8.9*
Paranoid Ideation	15.6	40.9	4.3***	61.6	58.3	2.2****
Psychoticism	66.4	59.1	2.1****	44.0	50.0	2.2****
Global Severity Index	38.3	45.4	2.1****	61.6	58.3	2.2****

Note: ^aAll odds ratios were significantly greater than 1.0 with 95% confidence levels at Time 1 and 2. ^bSignificance level of chi-squares for 2 x 2 tables with Bonferroni correction set at $p < .005$.

* $p < .003$. ** $p < .001$. *** $p < .0005$. **** $p < .0001$.

Table 42

Odds Ratios and Percent of Case and Comparison Mothers Without Sexual Abuse Histories Scoring in the Clinical Range of the Brief Symptom Inventory Subscales based on T-scores

Subscale	Assessment Period					
	Time 1			Time 2		
	Odds Ratio ^a	Percentage ^b		Odds Ratio ^c	Percentage	
		Case n=29	Non-abused Comparison n=47		Case n=27	Non-abused Comparison n=45
Somatization	17.5	27.6	2.1*	10.0	18.5	2.2
Obsessive-Compulsive	15.9	41.4	4.3***	9.6	40.7	6.7**
Interpersonal Sensitivity	10.4	27.6	2.1*	12.7	37.0	4.4*
Depression	-----	34.5	0.0***	25.9	37.0	2.2**
Anxiety	24.2	34.5	2.1***	18.5	29.6	2.2*
Hostility	10.4	41.4	6.4**	4.7	37.0	11.1
Phobic Anxiety	-----	31.0	0.0***	1.8	14.8	8.9
Paranoid Ideation	15.9	41.4	4.3***	12.6	22.2	2.2
Psychoticism	32.5	41.4	2.1***	22.0	33.3	2.2**
Global Severity Index	32.5	41.4	2.1***	30.3	40.7	2.2***

Note: ^aAll odds ratios were significantly greater than 1.0 with 95% confidence levels at Time 1. ^bSignificance level of chi-squares for 2 x 2 tables with Bonferroni correction set at p<.005. ^cAll odds ratios except for phobic anxiety were significantly greater than 1.0 at time 2.

*p<.005. **p<.0005. ***p<.0001.

Table 43

Odds Ratios and Percent of Comparison Mothers With and Without Sexual Abuse Histories Scoring in the Clinical Range of the Brief Symptom Inventory Subscales based on T-scores

Subscale	Assessment Period					
	Time 1			Time 2		
	Odds Ratio	Percentage ^a		Odds Ratio	Percentage	
		Abused n=11	Non-abused n=47		Abused n=10	Non-abused n=45
Somatization	4.6	9.1	2.1	-----	0.0	2.2
Obsessive-Compulsive	8.4 ^b	41.4	4.3	14.0 ^b	50.0	6.7*
Interpersonal Sensitivity	26.3 ^b	36.4	2.1*	32.3 ^b	60.0	4.4***
Depression	-----	27.3	0.0	18.9	30.0	2.2
Anxiety	10.2	18.2	2.1	4.9	10.0	2.2
Hostility	3.3	18.2	6.4	3.4	30.0	11.1
Phobic Anxiety	-----	36.4	0.0**	4.4	30.0	8.9
Paranoid Ideation	12.9	36.4	4.3	29.3 ^b	40.0	2.2*
Psychoticism	17.3 ^b	27.3	2.1	18.9	30.0	2.2
Global Severity Index	10.2	18.2	2.1	18.9	30.0	2.2

Note: ^aSignificance level of chi-squares for 2 x 2 tables with Bonferroni correction set at $p < .005$. ^bOdds ratios significantly greater than 1.0 with 95% confidence levels.

* $p < .005$. ** $p < .001$. *** $p < .0002$.

Summary

Results from the ANCOVAs and 2x2 chi-squares contrasting single trauma groups (non-abused cases, and abused comparisons) with the double trauma group (abused cases) did not reveal any significant differences between the proportion of mothers scoring in the clinical range for emotional or marital distress. Nor were the two single trauma groups significantly different from each other in regards to the proportion scoring in the clinical range.

However, contrasts between the single, and double trauma groups with the no sexual trauma group (non-abused comparisons) indicated that the three trauma groups differed significantly from the no trauma group in terms of the proportion of mothers scoring in the clinically distressed range. In addition, for five subscales (somatization, obsessive-compulsive, anxiety, hostility, and psychoticism) at time 1, the magnitude of relative risk increased as a function of group membership when non-abused comparisons were used as the reference group. At time 2, differences in relative risk scores were less salient with the above pattern evident only for the Global Severity Index, and the anxiety subscale.

Multiple Regression Analyses of Objective and Subjective Variables

Providing Significant Prediction of Emotional Distress in Case

Parents

Hypothesis 3 postulated that the level of emotional distress experienced by parents would be significantly related to objective aspects of the trauma (the nature of the child's sexual abuse) and their subjective experience of the event (emotional functioning, cognitive appraisal of the event and their perceptions of social

support). This hypothesis was tested using standard and hierarchical regressions as outlined in the overview of statistical analyses, with the Global Severity Index used as the dependent measure of emotional distress. Results of the preliminary regressions of objective, cognitive, emotional and social variables will be presented first, followed by the results of the hierarchical regressions which entered the best emotional, social and cognitive variables in blocks.

Hierarchical Regression Results for the Prediction of Emotional Distress in Parents from Abuse Variables

To assess the degree to which emotional distress could be predicted from abuse variables (hypothesis 3a) the independent variables were entered using the following hierarchy: Step 1: type of abuse, duration in weeks, severity of coercion, whether the perpetrator was known, and number of abused children, step 2: sexual abuse history of the target parent, and step 3: age and sex of the child at disclosure.

Mothers.

One case was deleted because it was a multivariate outlier at time 1 and 2. Sample size met the minimum requirement of at least 5 times more cases than independent variables ($N = 51$ at time 1, $N = 55$ at time 2; Tabachnick & Fidell, 1989). No suppressor variables were present. At both time periods, the obtained multiple R was not significantly different from zero, indicating that knowledge of abuse variables did not enhance the prediction of emotional distress in case mothers (time 1: $R = .37$, $R^2 = .13$; time 2: $R = .38$, $R^2 = .15$).

Fathers.

Because the sample size for fathers was substantially lower ($N = 27$), hierarchical regressions were run without step 3 (age and sex of child). At both time periods, the multiple R was not significantly different from zero (time 1: $R = .53$, $R^2 = .29$; time 2: $R = .61$, $R^2 = .37$). However, sample size most likely severely restricted the power of these analyses.

Similarly, regression analyses could not be run to test the hypothesis that the relationship between abuse variables and emotional distress would be more pronounced in case parents who had a history of sexual abuse because of insufficient sample size.

Prediction of Parent Emotional Distress from Cognitive Variables

The proposed model of secondary traumatization in parents also predicted that parents' emotional distress would be directly related to their cognitive appraisal of the situation (hypothesis 3b). Three groups of cognitive variables were used: parents' perceptions of the abuse (from the Parent Perception of the Event Scale), perceived distress in the abused child (internalizing and externalizing T-scores on the Child Behavior Checklist-Parent Form), and perceptions of self-competence as parents (efficacy and satisfaction scores on the Parent Sense of Competence Scale). Total CBCL T-scores were not used because of their high correlation with the two subscales. Because of sample size restrictions, parents' perceptions around the abuse were tested in one standard regression, and the remaining cognitive variables were tested in a second standard regression.

Standard regression results for the prediction of parent emotional distress from parents' perception of the event.

Mothers.

Standard multiple regressions were performed with self-blame (composite score), child blame, child belief, and perpetrator blame as independent variables. No suppressor variables were found. Although the overall multiple R was significant at time 1, $F(3,48) = 2.67$, $p < .044$, none of the individual independent variables were significant predictors. In combination they explained 18.5 (11.5% adjusted R^2) of the variance in emotional distress. No significant relationships between perceptions of the event and emotional distress were found at time 2.

Fathers.

Fathers' perceptions of the event were not significant predictors of fathers' emotional distress at time 1 or 2.

Standard regression results for the prediction of parent emotional distress from perceptions of child distress and parent competence.

Mothers.

A standard multiple regression was performed between emotional distress and parent efficacy, parent satisfaction, and parent's perceptions of child internalizing and externalizing symptomatology. Table 44 presents the correlation, unstandardized B and standardized β weights and R , R^2 , and adjusted R^2 for time 1. Multiple R was significantly different from zero, $F(3,47) = 4.85$, $p < .002$. Three of the independent variables contributed significantly to the prediction of emotional distress: parent sense of efficacy ($sr^2 = .12$), perception of internalizing

problems in the child ($sr^2 = .07$), and parenting satisfaction ($sr^2 = .06$). The four independent variables combined contributed another .04 in shared variability. Together, 29.7% (adjusted 23.6%) of the variance in emotional distress could be predicted from scores on these variables.

Insert Table 44 about here

These relationships were more salient at time 2 (see Table 45). Perceptions of child and parent functioning explained 52.8% (adjusted 48.5%) of the variance in parental emotional distress. Multiple R was significantly different from zero, $F(3,44) = 12.06$, $p < .0000$. The same three variables significantly enhanced prediction with perceptions of child internalizing problems providing the most unique contribution ($sr^2 = .37$), then parent efficacy ($sr^2 = .07$), and parenting satisfaction ($sr^2 = .06$). An additional .03 variability was shared.

Insert Table 45 about here

Fathers.

Knowledge of fathers' perceptions of child and parent functioning provided significant prediction at time 1 as shown in Table 46. The multiple R was significantly different from zero, $F(3,18) = 4.75$, $p < .009$. Only one independent variable contributed uniquely to the prediction of emotional distress: fathers' perceptions of internalizing problems in the child ($sr^2 = .11$). The four independent variables combined contributed an

Table 44

Standard Multiple Regression of Cognitive Variables on Mothers' Emotional Distress at Time 1

Variables (IV)	GSI (DV)	Parent Satisfaction	Parent Efficacy	CBCL INT	CBCL EXT
Correlations					
Parent Satisfaction	-.12				
Parent Efficacy	.16	.73			
CBCL INT	.43	-.23	-.15		
CBCL EXT	.33	-.40	-.28	.76	
Means	61.49	36.77	36.00	65.78	62.47
<u>SD</u>	9.23	11.49	11.12	10.44	9.46
Regression Coefficients and Intercept					
<u>B</u>		-.31*	.41**	.36*	-.00
<u>β</u>		-.38	.50	.41	-.00
Intercept = 34.17					
sr ² (unique)		.06	.12	.07	
R ² = .297*		Adjusted R ² = .236		R = .545***	

Note. GSI = T-score on Global Severity Index of the Brief Symptom Inventory. Parent Efficacy and Satisfaction from Parent Sense of Competency Scale. CBCL INT = T-score on the internalizing subscale of the Child Behavior Checklist. CBCL EXT = T-score on the Externalizing subscale of the Child Behavior Checklist.

* Unique variability = .26; shared variability = .04.

*p<.05. **p<.01. ***p<.0025.

Table 45

Standard Multiple Regression of Cognitive Variables on Mothers' Emotional Distress at Time 2

Variables (IV)	GSI (DV)	Parent Satisfaction	Parent Efficacy	CBCL INT	CBCL EXT
Correlations					
Parent Satisfaction	.06				
Parent Efficacy	.15	.90			
CBCL INT	.66	.15	.11		
CBCL EXT	.36	.13	.16	.69	
Means	59.96	37.46	35.92	65.35	62.71
SD	10.68	14.69	14.86	9.04	8.62
Regression Coefficients and Intercept					
<u>B</u>		-.43*	.44*	1.01**	-.31
<u>β</u>		-.59	.62	.85	-.25
Intercept = 13.57					
sr ² (unique)		.06	.07	.37	
R ² = .529*	Adjusted R ² = .485			R = .727**	

Note. GSI = T-score on Global Severity Index of the Brief Symptom Inventory. Parent Efficacy and Satisfaction from Parent Sense of Competency Scale. CBCL INT = T-score on the Internalizing subscale of the Child Behavior Checklist. CBCL EXT = T-score on the Externalizing subscale of the Child Behavior Checklist.
 * Unique variability = .50; shared variability = .03.

*p<.025 **p<.0000.

additional .42 in shared variability. Together 52.8% (adjusted 41.7%) of the variability in father's emotional distress could be predicted from these independent variables. The cognitive variables were not significant predictors at time 2.

Insert Table 46 about here

Summary

For mothers, perceptions of the abuse appeared to be relevant at time 1 only. Over time, mothers' perceptions of their functioning as a parent, and the functioning of their child became more relevant (the adjusted proportions of variance accounted for doubled from time 1 to time 2, 23.6% to 48.5%).

For fathers, perceptions of the abuse were not relevant at either time period. Although perceptions of parent and especially child functioning were significant at time 1 and accounted for more variance in fathers' distress (41.7%) than mothers' perceptions had for maternal distress, no cognitive variables enhanced prediction of functioning at time 2.

Prediction of Parent Emotional Distress from Perceptions of Social Support

Three sets of regression analyses were used at each time period to assess the contribution of social support variables to the prediction of parent emotional distress. These analyses could only be run for mothers because the sample size of fathers was insufficient to run regression analyses.

1. For two parent families who completed the Dyadic Adjustment Scale, a standard regression was run for the following family support variables: spousal support (dyadic adjustment total

Table 46

Standard Multiple Regression of Cognitive Variables on Fathers' Emotional Distress at Time 1

Variables (IV)	GSI (DV)	Parent Satisfaction	Parent Efficacy	CBCL INT	CBCL EXT
Correlations					
Parent Satisfaction	-.24				
Parent Efficacy	-.33	.04			
CBCL INT	.64	-.29	-.56		
CBCL EXT	.26	-.35	-.44	.73	
Means	55.64	39.27	37.23	63.36	61.82
<u>SD</u>	12.51	6.67	6.06	9.81	8.63
Regression Coefficients and Intercept					
<u>B</u>		-.25	.02	1.24**	-.72
<u>β</u>		-.14	.01	.97	-.50
Intercept = 31.16					
sr ² (unique)				.11	
R ² = .528*		Adjusted R ² = .417		R = .727*	

Note. GSI = T-score on the Global Severity Index of the Brief Symptom Inventory. Parent Efficacy and Satisfaction from Parent Sense of Competency Scale. CBCL INT = T-score on the Internalizing subscale of the Child Behavior Checklist. CBCL EXT = T score on the Externalizing subscale of the Child Behavior Checklist.

* shared variability = .42.

*p<.01. **p<.002.

score), family functioning (individual distance from the centre of the circumplex on the FACES-III), satisfaction with family cohesion and with family adaptability (difference scores between perceived and ideal cohesion and adaptability), and total quality of support (support for expression of feelings, availability of personal and community support, sense of isolation as parent of an abused child; all from the structured interview).

2. For single and two parent families combined, a standard regression was run for the six measures of global support: family functioning, satisfaction with family cohesion and adaptability, satisfaction with Children's Aid and crown support (from the Parents' Perception of the Event Form), and the parent's sense of isolation (from the structured interview).

3. The last set of regressions were hierarchical and looked at the contribution of general and abuse-related family stressors at step 2 once social support variables had been entered (the three family functioning variables described previously, plus quality of social support).

Standard regression results for the prediction of maternal emotional distress from family support in two parent families.

One case was removed at time 1 and a different one at time 2 because they were multivariate outliers. This left a sample size of 30 mothers. For time 1 and 2 (see Tables 47 and 48 respectively) the multiple R 's were significantly different from zero (time 1: $F(4,26) = 5.61, p < .002$; time 2: $F(4,26) = 2.62, p < .05$). Only one independent variable contributed uniquely to the prediction of emotional distress: quality of social support (time 1: $sr^2 = .16$; time 2: $sr^2 = .12$). At time 1 the five combined

variables contributed another .38 in shared variability. Taken together, 53.9% (adjusted 44.3%) of the variability in mother's emotional distress at time 1 could be predicted from these family variables. At time 2, the overlap of shared variability was less (.23) as was the percentage of variability accounted for (35.3%, adjusted 21.8%).

Insert Table 47 and Table 48 about here

Standard regression results for the prediction of maternal emotional distress from global social support.

The sample size of mothers was reduced at time 1 and 2 ($n = 49$, $n = 47$ respectively) because 13 families had no involvement with the crown attorney's office at time 1, and 9 still had no involvement at time 2 despite awaiting court proceedings. In addition, 8 families had no contact with the Children's Aid Society at time 1 or 2. Because of this, these families were unable to respond to the items pertaining to their satisfaction with these agencies. Therefore this analysis was really a subanalysis of families who had some contact with both of these external agencies.

Knowledge of global support variables did not significantly enhance prediction of mother's emotional distress at time 1. At time 2, multiple R (as shown in Table 49) was significantly different from zero, $F(5,41) = 2.59$, $p < .03$. Two independent variables provided unique contributions to the prediction of emotional distress: satisfaction with family adaptability ($r^2 = .12$) and satisfaction with support from the crown attorney's

Table 47

Standard Multiple Regression of Family Support on the Level of Emotional Distress in Case Mothers from Two Parent Families at Time 1

Variables (IV's)	GSI (DV)	DYADIC ADJUSTMENT	FACES	COHESION	ADAPTABILITY	TOTAL SUPPORT
Correlations						
DYADIC ADJUSTMENT	-.53					
FACES	-.09	-.02				
COHESION	.09	-.50	.01			
ADAPTABILITY	.37	-.48	.34	.34		
TOTAL SUPPORT	-.58	.39	.01	.04	-.03	
Means	60.50	113.07	6.96	5.30	5.40	2.40
SD	9.24	23.18	3.27	4.56	3.82	1.38
Regression Coefficients and Intercept						
B		-.10	-.58	-.28	.84	-3.07*
β		-.26	-.20	-.14	.35	-.46
Intercept = 80.55						
sr ² (unique)						.16
R ² = .539 ^a	Adjusted R ² = .443		R = .734**			

Note. GSI = T-score on Global Severity Index of the Brief Symptom Inventory. DYADIC ADJUSTMENT = Total score on the Dyadic Adjustment Scale. FACES = Individual distance from centre; COHESION = satisfaction with family cohesion; ADAPTABILITY = satisfaction with adaptability (both based on difference scores between perceived and ideal ratings); all from the Family Adaptability and Cohesion Evaluation Scales III. TOTAL SUPPORT = feeling of personal, and community support, support for expression of feelings plus lack of a sense of isolation.

^a Shared variability = .38.

*p<.01. **p<.002.

Table 48

Standard Multiple Regression of Family Support on the Level of Emotional Distress in Case Mothers from Two Parent Families at Time 2

Variables (IV's)	GSI (DV)	DYADIC ADJUSTMENT	FACES	COHESION	ADAPTABILITY	TOTAL SUPPORT
Correlations						
DYADIC ADJUSTMENT	-.36					
FACES	-.15	-.13				
COHESION	.18	-.20	.18			
ADAPTABILITY	-.15	-.17	.16	.14		
TOTAL SUPPORT	-.47	.13	.31	.12	.30	
Means	59.03	110.17	6.45	6.60	4.13	2.33
<u>SD</u>	9.43	18.95	4.19	4.57	3.40	1.21
Regression Coefficients and Intercept						
<u>B</u>		-.15	-.19	.42	-.28	-3.08*
<u>β</u>		-.29	-.08	.20	-.10	-.40
Intercept = 81.84						
<u>br²</u> (unique)						.12
<u>R²</u> = .353*	Adjusted R ² = .218		R = .594*			

Note. GSI = T-score on Global Severity Index of the Brief Symptom Inventory. DYADIC ADJUSTMENT = Total score on the Dyadic Adjustment Scale. FACES = Individual distance from centre; COHESION = satisfaction with family cohesion; ADAPTABILITY = satisfaction with adaptability (both based on difference scores between perceived and ideal ratings); all from the Family Adaptability and Cohesion Evaluation Scales III. TOTAL SUPPORT = feeling of personal, and community support, support for expression of feelings plus lack of a sense of isolation.

* shared variability = .35.

*p<.05.

office ($sr^2 = .08$). All variables in combination shared .08 of the variability. Overall, 28% (adjusted 17.2%) of the variability in mother's emotional distress could be predicted from family and external support variables.

Insert Table 49 about here

Hierarchical regression results for the prediction of maternal emotional distress from social support and family stressors.

Hierarchical regressions were employed to determine if knowledge of the number of general and abuse-related family stressors would improve prediction of emotional distress beyond that provided by social support variables. After step 1, with social support variables entered, R^2 was .32, $F_{inc}(3,46) = 5.25$, $p < .0015$ at time 1. The addition of general and abuse-related stressors at step 2 did not reliably improve R^2 . Two independent variables provided unique contributions to prediction (quality of support, $sr^2 = .18$; and satisfaction with family adaptability, $sr^2 = .07$, (see Table 50).

Insert Table 50 about here

At time 2, results were similar (see Table 51), with the exception that the unique contribution of satisfaction with family adaptability, present at step 1, was lost when family stressors were entered. At step 1, R^2 was .35, $F_{inc}(3,43) = 5.76$, $p < .0009$. Knowledge of family stressors did not reliably improve prediction.

Table 49

Standard Multiple Regression of Global Social Support on the Level of Emotional Distress in Case Mothers at Time 2

Variables (IV's)	GSI (DV)	FACES	COHESION	ADAPT	CAS	CROWN	ISOLATION
Correlations							
FACES	-.08						
COHESION	.07	.36					
ADAPTABILITY	-.29	.23	.36				
CAS	-.22	.09	-.15	.10			
CROWN	-.25	.09	.11	-.13	.20		
ISOLATION	-.25	.32	.12	.09	.03	.08	
Means	59.53	6.63	7.64	4.83	4.13	4.43	1.75
SD	10.48	4.27	5.06	4.03	2.33	2.20	1.05
Regression Coefficients and Intercept							
<u>B</u>		.07	.52	-1.02*	-.37	-1.43*	-2.24
β		.03	.25	-.39	-.08	-.30	-.25
Intercept = 71.79							
sr ² (unique)				.12		.08	
R ² = .280*	Adjusted R ² = .172			R = .529*			

Note. GSI = T-score on Global Severity Index of the Brief Symptom Inventory. DYADIC ADJUSTMENT = Total score on the Dyadic Adjustment Scale. FACES = Individual distance from centre; COHESION = satisfaction with family cohesion; ADAPTABILITY = satisfaction with adaptability; all from the Family Adaptability and Cohesion Evaluation Scales III. CAS = perceived support from the Children's Aid Society; CROWN = perceived support from the Crown Attorney's office. ISOLATION = sense of social isolation as a case parent.

* Unique variability = .20; shared variability = .08.

*p<.05.

Table 50

Hierarchical Regression of Family Support and Stressors on the Level of Emotional Distress in Case Mothers at Time 1

Variables (IV's)	GSI (DV)	FACES	COHESION	ADAPT	TOTAL SUPPORT	GENERAL STRESS	ABUSE STRESS
Step 1. Correlations							
FACES	.07						
COHESION	.15	.45					
ADAPT	.32	.37	.27				
TOTAL SUPPORT	-.48	-.04	-.05	-.09			
Step 2.							
GENERAL STRESS	.12	.05	.02	.16	-.07		
ABUSE STRESS	.14	.11	-.10	.04	-.19	-.11	
Means	61.16	7.41	6.24	4.86	2.30	3.64	3.32
<u>SD</u>	9.01	4.19	6.09	3.53	1.28	2.60	1.80
Regression Coefficients and Intercept							
<u>B</u>		-.25	.17	.72*	-3.07***	.19	.37
<u>β</u>		-.12	.11	.28	-.37	.06	.07
Intercept = 63.60							
sr ² (unique)				.07	.18		
sr ² (incremental)		Step 1: .318***			Step 2: .007		
R ² = .325 ^a		Adjusted R ² = .231		R = .570*			

Note. GSI = T-score on Global Severity Index of the Brief Symptom Inventory. FACES = Individual distance from centre; COHESION = satisfaction with family cohesion; ADAPT = satisfaction with adaptability; all from the Family Adaptability and Cohesion Evaluation Scales III.

^a Unique variability = .25; shared variability = .08.

*p<.05. **p<.01. ***p<.0015.

Insert Table 51 about here

Summary.

The most important social support predictors for mothers were the quality of social support, and satisfaction with the ability of the family to adapt. Over time, social support remained an important predictor for the total group. However, the proportion of variance accounted for in two parent families was substantially less at time 2 (44.3% vs. 21.8%, adjusted R^2 's). Dyadic adjustment was not relevant at either assessment period.

The sample size of fathers was insufficient to reliably test the contribution of social support variables to the prediction of emotional distress.

Prediction of Parent Emotional Distress at Time 2 Based on Initial Emotional Distress

Hierarchical multiple regression analyses were performed with initial emotional distress, and intrusion and avoidance scores (on the Impact of Event Scale) entered at step 1 and family stressors (general and abuse-related) entered at step 2.

Mothers.

Table 52 shows the results for mothers. After step 1, $R^2 = .48$, $F_{inc}(1,41) = 12.10$, $p < .0000$. Knowledge of family stressors at time 1 did not enhance prediction of mother's emotional distress at time 2. Emotional distress at time 1 was the only variable which provided a unique contribution to the prediction ($sr^2 = .21$). Taken together, the five variables shared .29 of the

Table 51

Hierarchical Regression of Family Support and Stressors on the Level of Emotional Distress in Case Mothers at Time 2

Variables (IV's)	GSI (DV)	FACES	COHESION	ADAPT	TOTAL SUPPORT	GENERAL STRESS	ABUSE STRESS
Step 1. Correlations							
FACES	-.08						
COHESION	.07	.36					
ADAPT	-.29	.23	.36				
TOTAL SUPPORT	-.52	.25	.10	.17			
Step 2.							
GENERAL STRESS	.13	.02	-.15	-.17	-.06		
ABUSE STRESS	.23	.00	-.10	.16	-.19	.25	
Means	59.53	6.63	7.64	4.83	2.32	3.77	2.72
<u>SD</u>	10.48	4.27	5.06	4.03	1.25	2.25	1.93
Regression Coefficients and Intercept							
<u>B</u>		.05	.48	-.68*	-3.99**	.31	.60
<u>β</u>		-.26	.23	-.26	-.48	.07	.11
Intercept = 65.29							
sr ² (unique)					.20		
sr ² (incremental)		Step 1: .354**			Step 2: .019		
R ² = .373 ^b		Adjusted R ² = .279		R = .611*			

Note. GSI = T-score on Global Severity Index of the Brief Symptom Inventory. FACES = Individual distance from centre; COHESION = satisfaction with family cohesion; ADAPT = satisfaction with adaptability; all from the Family Adaptability and Cohesion Evaluation Scales III.

* Adaptability was a significant predictor at step 1 only $F = 4.50$, $p < .040$. ^b Shared variability = .17.

* $p < .005$ ** $p < .001$.

variability and predicted 50.7% (adjusted 44.2%) of the variability in emotional distress at time 2.

Insert Table 52 about here

Fathers.

The results of the hierarchical regression for fathers are summarized in Table 53. At step 1, R^2 was .66, $F_{inc}(1,15) = 9.18$, $p < .0013$. As with mothers, knowledge of family stressors did not reliably enhance prediction of fathers' emotional distress at time 2. Similarly, fathers' initial level of emotional distress was the only unique predictor. With all five variables entered, R^2 was .77, $F(5,15) = 8.07$, $p < .0015$, accounting for 77% (adjusted 67.5%) of the variability in fathers' emotional distress at time 2.

Insert Table 53 about here

Summary

Post-traumatic stress symptomatology, and number of general stressors, and the number of abuse-related stressors were not reliable predictors of emotional distress in either mothers or fathers. The most salient predictor for both parents was their level of emotional distress at time 1.

Table 52

Hierarchical Regression of Emotional Distress and Stressors at Time 1 on Mothers' Emotional Functioning at Time 2

Variables (IV's)	GSI2 (DV)	GSI1	AVOID	INTRUSION	GENERAL STRESS	ABUSE STRESS
Correlations						
Step 1						
GSI1	.66					
AVOID	.46	.42				
INTRUSION	.31	.47	.48			
Step 2						
GENERAL STRESS	.24	.08	.01	-.23		
ABUSE STRESS	.14	.18	.32	.15	-.11	
Means	59.61	61.23	17.34	19.28	3.75	3.25
<u>SD</u>	11.77	9.20	8.97	9.71	2.67	1.87
Regression Coefficients and Intercept						
B		.71*	.32	-.03	-.06	.81
β		.55	.24	-.02	-.01	.18
Intercept = 8.53						
sr ² (unique)		.21				
sr ² (incremental)			Step 1 = .476**		Step 2 = .031	
R ² = .507*			Adjusted R ² = .442		R = .711**	

Note. GSI = T-score on Global Severity Index of the Brief Symptom Inventory. Numbers 1 or 2 refer to assessment time. AVOID = avoidance raw score; INTRUSION = intrusion raw score on the Impact of Event Scale. GENERAL and ABUSE STRESS taken from the Family Stress Index.

* shared variability = .29.

*p<.0002. **p<.0000.

Table 53

Hierarchical Regression of Emotional Distress and Stressors at Time 1 on Fathers' Emotional Functioning at Time 2

Variables (IV's)	GSI2 (DV)	GSI1	AVOID	INTRUSION	GENERAL STRESS	ABUSE STRESS
Correlations						
Step 1 GSI1	.69					
AVOID	-.16	.23				
INTRUSION	.12	.36	.50			
Step 2 GENERAL STRESS	.40	-.07	-.24	-.33		
ABUSE STRESS	.12	.44	.62	.37	-.28	
Means	55.78	55.22	11.39	10.50	3.94	3.22
SD	11.54	12.05	8.14	9.51	3.04	2.43
Regression Coefficients and Intercept						
B		.78**	-.24	-.31	1.36	.34
β		.81	-.20	-.22	.35	.07
Intercept = 12.51						
sr ² (unique)	.48					
sr ² (incremental)	Step 1 = .66*		Step 2 = .11			
R ² = .771*	Adjusted R ² = .675		R = .878*			

Note. GSI = T-score on Global Severity Index of the Brief Symptom Inventory. Numbers 1 or 2 refer to assessment time. AVOID = avoidance raw score; INTRUSION = intrusion raw score on the Impact of Event Scale. GENERAL and ABUSE STRESS taken from the Family Stress Index.

*Shared variability = .29.

*p<.05. **p<.002. ***p<.0003.

Multiple Regression Analyses of Parent Emotional Distress Based on
the Best Predictors Blocked According to the Secondary
Traumatization Model

Mothers

The final hierarchical regression entered the best emotional, cognitive, and social support variables for mothers in blocks as outlined for the subjective component of the model. No objective abuse variables were entered because preliminary analyses failed to find any significant predictors. At time 1, variables were entered in the hierarchical blocks shown in Table 54. Each of the steps significantly added to the prediction of emotional distress in mothers. At step 1, knowledge of mothers' intrusive and avoidant symptoms enhanced prediction by 20.4% (adjusted 17.0%). At step 2, knowledge of mothers' perceptions of child and parent functioning further improved prediction by 27.9%. An additional 13.9% of variance was accounted for when mothers' quality of support and satisfaction with family adaptability were entered. Overall variability accounted for was 62.2% (adjusted 56.0%). Five of the variables provided unique contributions: parent satisfaction ($sr^2 = .12$), quality of social support ($sr^2 = .08$), perceptions of internalizing problems in the child ($sr^2 = .06$), intrusive symptoms ($sr^2 = .05$), and satisfaction with family adaptability ($sr^2 = .05$).

Insert Table 54 about here

At time 2 the order of entry was the same with a fourth step added for emotional functioning at time 1 (see Table 55).

Table 54

Hierarchical Regression of Emotional, Cognitive and Social Support Variables on the Level of Emotional Distress in Case Mothers at Time 1

Variables (IV's)	GSI (DV)	INTRU	AVOID	CBCL INT	EFFIC	SATIS	ADAPT	TOTAL SUPPORT
Correlations								
Step 1. (Emotional)								
INTRU	.38							
AVOID	.40	.46						
Step 2. (Cognitive)								
CBCL INT	.47	.16	.24					
EFFIC	-.09	.25	.14	-.12				
SATIS	-.51	-.02	-.29	-.26	.28			
Step 3. (Social Support)								
ADAPT	.32	.08	.24	-.09	-.02	-.18		
TOTAL SUPPORT	-.48	-.19	-.35	-.30	.12	.11	-.09	
Means	61.16	19.56	17.14	65.92	34.74	35.52	4.86	2.30
<u>SD</u>	9.01	9.87	8.66	10.50	6.59	7.35	3.53	1.28
Regression Coefficients and Intercept								
<u>B</u>		.25*	-.09	.24*	.06	-.48***	.63*	-2.23**
<u>β</u>		.27	-.09	.28	.05	-.39	.24	-.32
Intercept = 59.25								
sr ² (unique)		.05		.06		.12	.05	.08
sr ² (incremental)		Step 1: .20**		Step 2: .28****		Step 3: .14**		
R ² = .622 ^a		Adjusted R ² = .560		R = .789*****				

Note. GSI = T-score on Global Severity Index of the Brief Symptom Inventory. INTRU = Intrusion raw score; AVOID = Avoidance raw score on the Impact of Event Scale. CBCL INT = T-score on the internalizing subscale of the Child Behavior Checklist. EFFIC = efficacy score; SATIS = satisfaction score on the Parent Sense of Competence Scale. ADAPT = satisfaction with family adaptability from the Family Adaptability and Cohesion Evaluation Scales III. TOTAL SUPPORT = feeling of personal and community support, support for expression of feelings and lack of a sense of isolation.
^a Unique variability = .37; shared variability = .26.

*p<.02. **p<.005. ***p<.001. ****p<.0002. *****p<.0000.

Knowledge of post-traumatic symptomatology, especially current intrusive symptoms provided a significant contribution to prediction (35.6%, adjusted 32.4% of the variance). An additional 28.1% of the variance was provided when mother's perceptions of child and parent functioning were entered. No significant contribution was provided by social support variables. However initial emotional functioning provided an additional 5.2% of the variance. Two independent variables contributed uniquely to the final solution: parents' perceptions of internalizing problems in their child ($sr^2 = .09$), and parents' initial level of emotional distress ($sr^2 = .003$). Together the eight variables contributed 69.1% (adjusted 61.8%) of the variance in mothers' emotional distress, and shared .60 of the variability.

Insert Table 55 about here

Fathers

The model could not be adequately tested for fathers because only one variable was a significant predictor at time 1 (perception of internalizing problems in the child) and at time 2 (initial emotional distress). Furthermore, sample size was too small to detect reliably any important social support predictors.

Analyses of Post-Traumatic Stress Disorder Symptomatology in Parents of Sexually Abused Children

Hypothesis 4 proposed that the degree of post-traumatic stress disorder (PTSD) symptomatology would be related to the severity of the abuse, parents' perceptions of symptomatology in the child, parent abuse history, family involvement in court

Table 55

Hierarchical Regression of Emotional, Cognitive and Social Support Variables on the Level of Emotional Distress in Case Mothers at Time 2

Variables (IV's)	GSI2 (DV)	INTRU	AVOID INT	CBCL	EFFIC	SATIS	ADAPT	TOTAL SUPPORT	GSI1
Correlations									
Step 1. (Current Emotional)									
INTRU	.57								
AVOID	.48	.60							
Step 2. (Current Cognitive)									
CBCL INT	.68	.36	.29						
EFFIC	-.23	-.04	-.13	-.25					
SATIS	-.39	-.35	-.25	-.16	.62				
Step 3. (Current Social Support)									
ADAPT	-.29	-.22	-.19	-.36	.08	-.04			
TOTAL SUPPORT	-.49	-.49	-.49	-.41	.19	.40	.21		
Step 4. (Initial Emotional)									
GSI1	.63	.55	.35	.42	.07	-.26	-.02	-.25	
Means	58.81	14.91	16.21	64.23	33.41	35.02	4.63	2.33	60.91
SD	11.53	10.18	10.48	9.94	6.91	7.25	4.23	1.21	9.51
Regression Coefficients and Intercept									
B		.08 ^a	.13	.46**	-.03	-.24	-.23	-.71	.38*
β		.07	.12	.40	-.02	-.15	-.07	-.07	.32
Intercept = 15.18									
sr ² unique				.09					.003
sr ² incremental	Step 1	.36***	Step 2	.28***	Step 3	.001	Step 4	.05*	
R ² = .691 ^b	Adjusted R ²	= .618			R	= .831****			

Note. GSI = T-score on Global Severity Index of the Brief Symptom Inventory. INTRU = Intrusion raw score; AVOID = Avoidance raw score on the Impact of Event Scale. CBCL INT = T-score on the internalizing subscale of the Child Behavior Checklist. EFFIC = efficacy score; SATIS = satisfaction score, both from the Parent Sense of Competence Scale. ADAPT = satisfaction with family adaptability from the Family Adaptability and Cohesion Evaluation Scales III. TOTAL SUPPORT = feeling of personal and community support, support for expression of feelings and lack of a sense of isolation.
^aSignificant at Step 1 only $F = 7.58, p < .009$. ^bUnique variability = .09; shared variability = .60.

* $p < .025$. ** $p < .005$. *** $p < .0001$. **** $p < .0000$.

proceedings, and number of abuse-related stressors. The relationship between these variables was tested using standard and hierarchical regressions. Although a second multiple regression was planned using the time periods since disclosure, previous court involvement, and time until next court involvement, this set of analyses was abandoned because only 14 families had previous court involvement, and too many families had court pending with the date unknown ($n = 43$).

In addition, MANOVAs and repeated measures MANOVAs were done to assess differences in post-traumatic stress symptomatology in subgroups of case parents as a function of court involvement, parents' perceptions of trauma to the child, parent abuse history, therapy use, and the level of emotional distress in the parent.

Multiple Regression Analyses of Intrusive and Avoidant Symptomatology as a Function of Trauma-Related Sources

Mothers.

Hierarchical and standard regressions were run separately for intrusive and avoidant symptoms. For the hierarchical regressions, variables were entered in the following order: severity of abuse (type, duration, and coercion), perception of trauma to the child (internalizing and externalizing scores on the CBCL - Parent Form), parent history of sexual abuse, court involvement, and number of abuse-related stressors. At time 1, none of the variables in combination significantly enhanced prediction of intrusive or avoidant symptoms. At time 2, a significant incremental F was obtained at step 2 for the prediction of avoidant symptoms once perceptions of child trauma were entered ($R^2 = .25$, $F_{inc}(1, 39) = 4.63$, $p < .02$). Mothers'

perceptions of internalizing problems in the child was the only variable which provided a unique contribution. Addition of abuse history, court involvement, or abuse-related stressors did not reliably enhance prediction. After all the variables were entered, the variance in avoidant symptoms could not be reliably predicted.

Fathers.

The sample size of fathers was too small to justify use of multiple regression with eight variables.

Subanalyses of Post-Traumatic Stress Symptomatology over Time Based on Court Involvement

Two doubly multivariate repeated measures MANCOVAs were run to analyze whether there were differences in PTSD symptoms over time based on mothers' testimony and child testimony. (Analyses were not done based on fathers' testimony because only two fathers testified.) Three groupings were formed: no testimony, testimony pending, and testimony started or completed.

PTSD symptoms in mothers based on whether the mother testified.

Although mothers who had testified or were waiting to testify had higher group means for intrusive symptoms, no significant main effect for court or for the court by time interaction was found. A significant main effect for time was obtained ($F(2,36) = 7.77, p < .002$). Intrusive symptoms were significantly reduced six months after the disclosure for all groups (see Table 56). No significant reduction in avoidant symptoms occurred at time 2.

Insert Table 56 about here

PTSD symptoms in mothers based on whether their child testified.

The same pattern of results occurred for mothers' functioning based on whether their child testified (see Table 57). No significant main effect for court or for the court by time interaction was present. A significant main effect was found for time ($F(2,36) = 7.22, p < .002$). Intrusive symptoms were significantly reduced in all groups, $F(1,37) = 14.10, p < .001$.

Insert Table 57 about here

PTSD symptoms in fathers based on whether their spouse or child testified.

Analyses for fathers based on spouse or child testimony were not interpretable due to the small number of children and mothers who were in the testimony completed groups ($n = 2$).

Subanalyses of PTSD Symptoms in Parents Based on Perceptions of Trauma to their Child

To assess the relationship between PTSD symptoms in parents and the degree of symptomatology in their abused child, MANOVAs with follow-up univariate stepdown F (intrusion, GSI, and avoidance) and Scheffé multiple comparisons were done for each time period. Avoidance was given the lowest priority as it was speculated that it would be more difficult to avoid thoughts about the abuse with a symptomatic child. Parents were divided into three groups based on whether their abused child was in the non-symptomatic (T-score < 63), borderline (T-score 63-69) or clinical

Table 56

Repeated Measures MANOVA Results for Post Traumatic Stress Symptomatology in Mothers Based on Whether Mothers Testified

Dependent Variable	Assessment					Main Effect Time ^a (1,59)
	n	First		Second		
		M	SD	M	SD	
INTRUSION^b						15.04*
Testified	9	25.44	9.41	18.56	10.14	
Did not Testify	16	16.13	8.29	11.56	9.27	
Pending	15	20.73	9.71	16.67	9.66	
AVOIDANCE						.76
Testified	9	18.90	9.49	18.11	12.33	
Did not Testify	16	17.00	10.30	14.81	11.49	
Pending	15	17.93	8.49	18.00	8.69	

Note: Doubly Multivariate analysis of variance (MANOVA) based on parent testimony status. Higher scores indicate more distress. ^aMultivariate test of significance (Pillai) Time: $F(2,36) = 7.77$, $p < .002$. ^bIntrusion and avoidant scores based on subscales of Impact of Event Scale.

* $p < .000$.

Table 57

Repeated Measures MANOVA Results for Post Traumatic Stress Symptomatology in Mothers Based on Whether The Child Testified

Dependent Variable	n	Assessment				Main Effect Time ^a (1,37)
		First		Second		
		M	SD	M	SD	
INTRUSION ^b						14.10*
Testified	13	23.39	9.46	18.39	10.04	
Did not Testify	13	17.00	8.95	12.39	10.07	
Pending	14	19.50	9.89	14.43	9.18	
AVOIDANCE						.96
Testified	13	16.46	9.47	17.85	10.38	
Did not Testify	13	18.77	10.35	15.62	12.45	
Pending	14	18.07	8.53	16.79	9.46	

Note: Doubly Multivariate analysis of variance (MANOVA) based on parent testimony status. Higher scores indicate more distress. ^aMultivariate test of significance (Pillai) Time: $F(2,36) = 7.22$, $p < .002$. ^bIntrusion and avoidant scores based on subscales of Impact of Event Scale.

* $p < .001$.

range (T-score > 69) on the CBCL-Parent Form. Separate analyses were run based on internalizing and externalizing symptoms. In families with more than one abused child, group was assigned based on the most symptomatic child.

Results of mothers' emotional functioning based on perceptions of child symptomatology.

Perceptions of internalizing symptoms.

No significant differences were found between groups at time 1. However at time 2, groups were significantly different on all measures, $F(6,86) = 5.67, p < .000$. Mothers with asymptomatic children had significantly less intrusive symptoms and emotional distress than mothers of children scoring in the clinical range. Mothers of asymptomatic children also had significantly less avoidant symptoms than mothers of children in the borderline range. Table 58 shows that the pattern of maternal emotional distress mirrored that seen in the child. When child internalizing scores were in the clinical range, the mean score for mothers was also in the clinical range; similarly, when child internalizing scores were borderline, mothers' means were also borderline, with a similar pattern detected for mothers of asymptomatic children.

Insert Table 58 about here

Perceptions of externalizing symptoms.

A significant difference between groups was found at time 1 ($F(6,94) = 2.31, p < .04$) but not at time 2. Mothers with asymptomatic children had significantly better GSI scores than both the clinical and borderline groups (see Table 59). Mothers

Table 58

MANOVA Results for the Level of Emotional Distress in Mothers of Sexually Abused Children Based on Mothers' Perceptions of Internalizing Symptoms in the Abused Child (Group) at the Second Assessment

Dependent Variable	n	M	SD	Main effect Group ^a Roy-Bargman Stepdown
EMOTIONAL DISTRESS^b				F(2,43) = 5.96**
Normal _a	17	52.24	7.20	
Borderline _{ab}	12	59.42	11.20	
Clinical _b	18	67.00	8.10	
POST TRAUMATIC STRESS^c				
INTRUSION				F(2,44) = 6.13**
Normal _a	17	10.88	8.54	
Borderline _{ab}	12	14.42	9.46	
Clinical _b	18	21.50	9.41	
AVOIDANCE				F(2,42) = 4.92*
Normal _a	17	11.06	10.74	
Borderline _b	12	20.92	11.22	
Clinical _{ab}	18	18.56	8.19	

Note: Multivariate analysis of variance (MANOVA) based on T-scores of Internalizing subscale of the Child Behavior Checklist. Normal = T-score < 63, Borderline = T-score 63-69, Clinical = T-score ≥ 70. Groups with the same subscript do not differ significantly at p<.05 on post-hoc Scheffe multiple comparisons.

^aMultivariate test of significance (Pillai) F(6,86) = 5.67 p<.000.

^b EMOTIONAL DISTRESS = Mother's Global Severity Index T-score on the Brief Symptom Inventory. ^c POST TRAUMATIC STRESS = raw score on subscales of Impact of Event Scale.

*p<.012. **p<.005.

of children who scored in the borderline or clinical range had mean scores for maternal emotional distress in the clinical range. No differences were present for intrusive or avoidant symptoms.

Insert Table 59 about here

Results of fathers' emotional functioning based on perceptions of child symptomatology.

Perceptions of internalizing symptoms.

Groups were not significantly different at time 1. At time 2, a significant multivariate effect was obtained for group, $F(6,34) = 2.46, p < .044$. No dependent variables were significant on stepdown analysis. Although avoidance approached significance on stepdown ($F(2,16) = 3.58, p < .052$), post hoc Scheffé tests revealed no significant group differences (asymptomatic: $M = 9.2, SD = 12.2$; borderline: $M = 8.2, SD = 10.6$; clinical $M = 15.0, SD = 12.3$). A univariate trend was obtained for GSI scores ($F(2,18) = 4.22, p < .031$). Fathers of asymptomatic children were less distressed ($M = 49.60, SD = 13.18$) than fathers of children who were perceived to be in the borderline range ($M = 66.40, SD = 5.60$). Paternal distress for the latter group was also in the clinical range.

Perceptions of externalizing symptoms.

Groups of fathers were not significantly different at time 1 or 2.

Repeated Measures MANOVA Results for PTSD Symptoms in Parents Based on Perceived Changes in Child Symptomatology over Time

Hypothesis 4 predicted that parents of children who were perceived to be more traumatized were expected to experience PTSD

Table 59

MANOVA Results for the Level of Emotional Distress in Mothers of Sexually Abused Children Based on Mothers' Perceptions of Externalizing Symptoms in the Abused Child (Group) at the First Assessment

Dependent Variable	n	M	SD	Main effect 'Group' Roy-Bargman Stepdown
EMOTIONAL DISTRESS ^b				$F(2,47) = 5.39^*$
Normal _a	22	56.68	8.73	
Borderline _a	12	66.75	6.85	
Clinical _a	17	64.00	8.64	
POST TRAUMATIC STRESS ^c				
INTRUSION				$F(2,48) = 1.14$
Normal	22	17.59	10.39	
Borderline	12	22.75	9.22	
Clinical	17	20.77	9.93	
AVOIDANCE				$F(2,46) = 1.00$
Normal	22	16.91	9.20	
Borderline	12	18.92	6.56	
Clinical	17	16.94	9.85	

Note: Multivariate analysis of variance (MANOVA) based on T-scores of Externalizing subscale of the Child Behavior Checklist. Normal = T-score < 63, Borderline = T-score 63-69, Clinical = T-score ≥ 70. Groups with the same subscript do not differ significantly at $p < .05$ on post-hoc Scheffe multiple comparisons.

^aMultivariate test of significance (Pillai) $F(6,94) = 2.31$ $p < .04$.

^b EMOTIONAL DISTRESS = Mother's Global Severity Index T-score on the Brief Symptom Inventory. ^c POST TRAUMATIC STRESS = raw score on subscales of Impact of Event Scale.

* $p < .008$.

symptoms for a longer period of time. This was tested by dividing parents into four change groups: same good (asymptomatic at both assessments), same bad (borderline or clinical at both assessments), better (improvement from clinical to borderline or normal; or borderline to normal) and worse (deterioration from asymptomatic to borderline or clinical; or borderline to clinical). For mothers and fathers, three doubly multivariate repeated measures MANOVA's were run based on the child's internalizing, externalizing, and total T-scores.

Mothers' perceptions of change in internalizing symptoms.

Due to singularity in the variance-covariance matrix for the 'worse' group ($n=7$), analyses were run between the three remaining groups. There were main effects for group ($F(6,68) = 2.55, p<.028$) and time ($F(3,33) = 6.90, p<.001$). As Table 60 shows, mothers of children who remained asymptomatic had significantly less emotional distress and less intrusive symptoms than mothers of children who remained symptomatic at time 2. Over time, significant reductions in symptoms were revealed for emotional distress, and intrusive and avoidant symptoms. Although no interaction was found, the pattern of results show that the direction of change corresponded to the perception of change in the child's symptomatology. Mean distress levels across all three measures were lower in groups whose children remained asymptomatic or improved. Mean distress levels persisted or increased in groups whose children stayed distressed or worsened.

Insert Table 60 about here

Table 60

Repeated Measures MANOVA Results for the Level of Emotional Distress in Mothers of Sexually Abused Children Based on Mothers' Perceptions of Changes in Internalizing Symptoms in the Abused Child (Group) over Time

Dependent Variable	n	Assessment				Main Effect Group (2,35)	Main Effect Time (1,35)
		First		Second			
		M	SD	M	SD		
EMOTIONAL DISTRESS ^a						5.20**	7.01*
Stayed Normal,	9	56.00	13.5	48.33	10.5		
Stayed Distressed,	18	64.06	9.5	63.94	11.5		
Improved _{ab}	11	60.55	5.3	56.82	8.2		
Worsened	6	61.17	6.6	65.33	7.9		
POST TRAUMATIC STRESS ^b							
INTRUSION						4.07*	19.58***
Stayed Normal,	9	17.33	12.0	11.33	10.4		
Stayed Distressed,	18	22.33	10.4	20.28	9.8		
Improved,	11	17.09	8.3	7.91	4.1		
Worsened	6	21.50	8.9	19.00	10.5		
AVOIDANCE						1.28	4.5*
Stayed Normal	9	17.33	10.3	13.00	12.0		
Stayed Distressed	18	18.89	10.3	19.39	8.9		
Improved	11	15.36	7.3	12.27	10.1		
Worsened	7	17.33	8.9	20.00	11.0		

Note: Doubly Multivariate analysis of variance (MANOVA) based on T-scores of Internalizing subscale of the Child Behavior Checklist. Due to singularity in the group who became worse, this group was not included in this analysis and is presented descriptively only. Multivariate test of significance (Pillai) Group: $F(6,68) = 2.55$ $p < .028$; Time: $F(3,33) = 6.90$, $p < .001$. Groups with the same subscript do not differ significantly at $p < .05$ on post-hoc Scheffe multiple comparisons. Post hoc differences present at Time 2 only.

^a EMOTIONAL DISTRESS = Mother's Global Severity Index T-score on the Brief Symptom Inventory. ^b POST TRAUMATIC STRESS = raw score on subscales of Impact of Event Scale.

* $p < .05$. ** $p < .02$. *** $p < .000$.

Mothers' perceptions of change in externalizing symptoms.

Singularity was also present for the worse group ($n = 3$) based on mothers' perceptions of externalizing behaviour. Therefore analyses were run with the three remaining groups. No interaction or group effect was found. A significant main effect was found for time, $F(3,37) = 4.56, p < .008$. Intrusive symptoms were significantly reduced at time 2 ($F(1,39) = 13.97, p < .001$; time 1: overall $M = 19.64, SD = 10.20$, time 2: $M = 14.95, SD = 10.40$).

Mothers' perceptions of change in total symptom scores.

Only one mother perceived her child as improving and none perceived their child as remaining asymptomatic. Therefore the repeated measures MANOVA was run with two groups only: mothers of children who remained distressed and mothers of children who worsened. No significant differences were found between these two groups or for the interaction of group by time. A significant main effect was found for time, $F(3,40) = 4.69, p < .007$. Both groups had a significant reduction in intrusive symptoms ($F(1,42) = 14.89, p < .001$; time 1: overall $M = 19.68, SD = 10.02$; time 2: overall $M = 15.30, SD = 10.26$).

Fathers' perceptions of change in internalizing and externalizing symptoms.

Sample size limitations did not allow for repeated measures analyses of these groups. For internalizing symptoms, seven fathers perceived their children to have remained asymptomatic, six were perceived as remaining distressed, four improved and 2 worsened. The same number of children were perceived to remain asymptomatic or distressed based on externalizing symptoms,

whereas three improved and three worsened.

Fathers' perceptions of change in total symptoms.

As with mothers, only two groups could be analyzed (remained distressed and worsened) because the other two cells were empty. No significant differences were found between groups or for the group by time interaction. A significant main effect was found for time, $F(3,14) = 4.03, p < .029$. Intrusive symptoms were significantly reduced six months after the disclosure for both groups, $F(1,16) = 8.03, p < .012$ (time 1: overall $M = 11.38, SD = 8.14$, time 2: overall $M = 7.94, SD = 8.21$).

Summary.

It is important to note that at all time periods where differences in perceptions of child distress were significantly related to parent's distress, the mean score for parent emotional distress mirrored the level of perceived child distress. At time 1, this pattern of results occurred for mothers of children who displayed borderline or clinical levels of externalizing symptoms. At time 2, this pattern occurred for both mothers and fathers when children displayed borderline or clinical levels of internalizing behaviour. For mothers this pattern also generalized to PTSD symptoms of intrusion and avoidance.

MANOVA Results for PTSD Symptomatology in Case Parents as a Function of Parent Abuse History

Hypothesis 4 also predicted that PTSD symptomatology would persist for a longer period of time in case parents who had a sexual abuse history. MANOVAs for time 1 and 2 and doubly multivariate repeated measures MANOVAs were run using intrusive and avoidant symptoms plus emotional distress (GSI) as dependent

variables.

Mothers.

No significant differences were found at time 1 or 2 based on parent abuse history. The repeated measures MANOVA revealed a significant multivariate group effect, $F(3,39) = 4.28, p < .011$ (see Table 61). Univariate F 's failed to find any unique contributors to the effect. A significant main effect was also found for time, $F(3,39) = 3.90, p < .016$, with intrusive symptoms significantly reduced over time $F(1,41) = 11.64, p < .001$ (time 1: overall $M = 19.23, SD = 9.77$; time 2: overall $M = 15.21, SD = 10.08$). No significant interaction was found.

Insert Table 61 about here

Fathers.

No significant differences were found between abused and non-abused fathers at time 1 or 2, or over time for PTSD symptomatology.

MANOVA Results for PTSD Symptoms in Parents as a Function of Therapeutic Interventions with the Family

Because participants were not restricted from seeking therapeutic services, it was important to establish whether any differences within the case groups were attributable to therapeutic intervention. Tables 62 and 63 illustrate the services desired and used by families at each time period. At time 1, 21 (40.4%) of the mothers has used some type of intervention for their family; 14 (26.9%) had used some form of child therapy, and 12 (23.1%) had used some form of therapy for themselves. At time 2, 30 (61.2%) had used some form of

Table 61

Repeated Measures MANOVA Results for Post Traumatic Stress Symptomatology in Mothers Based on Mothers Sexual Abuse History (Group)

Dependent Variable	n	Assessment				Main Effect Group (1,41)	Main Effect Time (1,41)
		First		Second			
		M	SD	M	SD		
POST TRAUMATIC STRESS^a							
INTRUSION							
Abused	19	17.68	10.5	13.68	10.7	.95	11.64*
Non-abused	24	20.46	9.2	16.42	9.6		
AVOIDANCE						.28	1.51
Abused	19	18.42	8.5	16.84	10.4		
Non-abused	24	16.46	9.9	15.75	10.7		
EMOTIONAL DISTRESS ^b						3.53	1.21
Abused	19	63.58	7.7	62.90	9.6		
Non-abused	24	59.75	9.5	56.92	11.3		

Note: Doubly Multivariate analysis of variance (MANOVA) based on parent status. Higher scores indicate more distress. Multivariate test of significance (Pillai) Group: $F(3,39) = 4.28, p < .011$; Time: $F(3,39) = 3.90, p < .016$.

^aPOST TRAUMATIC STRESS = raw score on subscales of Impact of Event Scale. ^bEMOTIONAL DISTRESS = Mother's Global Severity Index T-score on the Brief Symptom Inventory.

* $p < .001$.

intervention for their family; 12 (26.9) had used child therapy, and 18 (36.7%) had used therapy for themselves. For fathers, at time 1, 10 (43.5%) had used some form of therapy for family members; 7 (30.4%) had used child therapy, and 4 (17.4%) had used therapy themselves. By the second assessment, 12 (57.1%) had used therapeutic services for their family, 8 (38.1%) had used child therapy, and 5 (23.8%) had used therapy for themselves.

Insert Table 62 and Table 63 about here

Three MANOVAs were run for mothers and fathers looking at emotional distress, intrusive and avoidant symptoms based on whether any family member used therapy, whether the abused child used therapy and whether the target parent used therapy. No significant differences were found at time 1 or 2 between any of these groups.

Parent PTSD Symptoms based on Clinical versus Non-Clinical Levels of Parent Emotional Distress

To understand the relationship between general emotional distress and the development of PTSD symptomatology, MANOVAs were run comparing the level of PTSD symptoms in parents based on whether their level of general emotional distress was in the clinical or non-clinical range (GSI T-score ≥ 63 vs. < 63). For time 1, analyses were based on current symptomatology. For time 2, analyses compared current PTSD symptoms based on past and current emotional distress. Correlation matrices were also inspected for these variables.

Table 62

Therapeutic Services Desired and Used by Mothers of Sexually Abused Children at Time 1 and 2.

Therapeutic Service	Assessment Period							
	Time 1				Time 2			
	Desired		Used		Desired		Used	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
CHILD-ORIENTED:								
Individual Therapy	33	62.3	15	28.3	37	75.5	24	48.0
Group Therapy	26	49.1	2	3.8	23	46.9	4	8.0
Stress Management for Court Testimony	36	67.9	1	1.9	29	59.2	4	8.0
PARENT ORIENTED:								
Individual Therapy	29	50.0	10	18.9	29	59.2	14	28.0
Support Group	25	47.2	2	3.8	28	57.1	4	8.0
Educational Group about Child Abuse	24	45.3	1	1.9	28	46.9	0	0.0
FAMILY ORIENTED:								
Family Therapy	24	45.3	4	7.5	24	49.0	5	10.0
Marital Therapy	15	28.8	1	1.7	12	24.5	2	4.0
Hot-line/ Drop-In Centre	39	73.6	2	3.4	34	69.4	4	8.0
Other ^a	5	9.4	7	12.1	5	10.2	5	10.0

Note. Responses based on Parent's Perception of Events Scale.

^a Other desired services at Time 1 included child management training, mother-daughter therapy, and education for teachers on child sexual abuse; at Time 2 other desired services included, in addition, help for the children of the abuser ($n=1$). Other services used included at Time 1: pediatricians, a sexual abuse survivors' group for abused parents, the Rape Crisis Centre (for one mother who was also assaulted by the abuser), Victims of Violence resource centre, and the Children's Aid Society; at Time 2: bibliotherapy, a church group for the child, and a caseworker assigned to the child from the Youth Services Bureau.

Table 63

Therapeutic Services Desired and Used by Fathers of Sexually Abused Children at Time 1 and 2.

Therapeutic Service	Assessment Period							
	Time 1				Time 2			
	Desired n	%	Used n	%	Desired n	%	Used n	%
CHILD-ORIENTED:								
Individual Therapy	14	58.3	7	29.2	14	66.7	8	38.1
Group Therapy	8	33.3	2	8.3	8	38.1	2	9.5
Stress Management for Court Testimony	15	62.5	0	0.0	9	42.9	1	4.8
PARENT ORIENTED:								
Individual Therapy	11	45.8	1	4.2	8	38.1	4	19.0
Support Group	65	25.0	0	0.0	8	38.1	1	4.8
Educational Group about Child Abuse	7	29.2	2	8.3	8	38.1	0	0.0
FAMILY ORIENTED:								
Family Therapy	14	58.3	1	4.2	9	42.9	1	4.8
Marital Therapy	4	16.7	0	0.0	5	23.8	0	0.0
Hot-line/ Drop-In Centre	10	41.7	0	0.0	7	33.3	4	19.0
Other*	4	16.7	7	12.1	3	14.3	4	19.0

Note. Responses based on Parent's Perception of Events Scale.
 * Other desired services at Time 1 included child management training, and child support groups; at Time 2 other desired services included, in addition, school groups to prevent abuse (n=1). Other services used included at Time 1: pediatricians, a sexual abuse survivors' group for abused parents, Victims of Violence resource centre, and the Children's Aid Society; at Time 2: bibliotherapy (n=1). At both times several parents identified the research project as a therapeutic contact.

Mothers.

At time 1, there was a significant multivariate effect for group, $F(2,49) = 6.22, p < .004$. Univariate F -tests revealed significantly higher intrusion and avoidant scores in the clinically distressed group although with Roy Bargman Stepdown, only intrusive scores reached significance, $F(1,50) = 9.59, p < .003$. The correlations between the level of emotional distress and post-traumatic stress symptomatology were both significant (intrusion, and avoidance both $r = .41, p < .002$). A significant multivariate effect was also found at time 2 for PTSD symptomatology based on current emotional distress, $F(2,45) = 13.39, p < .000$. Both univariate F 's and stepdown tests showed significant differences for intrusion, $F(1,46) = 19.70, p < .000$, and avoidance, $F(1,45) = 5.26, p < .027$. Scores on both scales were twice as high in the clinically distressed group. The correlation between emotional distress and avoidant symptoms was $.47, p < .001$, whereas that for intrusive symptoms was $.59, p < .000$.

A significant difference was also found in the level of PTSD symptomatology at time 2 based on emotional distress at time 1, $F(2,42) = 8.59, p < .001$. Intrusive symptoms were worse at time 2 in mothers who had been clinically distressed at time 1 (intrusion: $F(1,43) = 17.27, p < .000$). Although avoidance was not significant on stepdown, a significant univariate F was achieved, $F(1,43) = 7.09, p < .011$ (see Table 64). Inspection of the correlations revealed a significant relationship between initial emotional distress and intrusive symptoms at time 2 ($r = .57, p < .000$), and a trend towards significance for the relationship between initial emotional distress and avoidant symptoms at time 2

($r = .37, p < .012$).

Insert Table 64 about here

Fathers.

No significant differences were found at time 1 or 2 in the level of PTSD symptomatology between fathers with clinical and non-clinical levels of general emotional distress.

Summary

The results suggest that the level of parental emotional distress was significantly related to the development of PTSD symptoms for mothers, but was not relevant for fathers.

Gender Differences in the Responses of Parents to the Sexual Abuse of their Child

Five sets of analyses were run to determine whether there were any gender differences in the responses of case parents. The first four analyses focused on functioning based on the gender of the parent, and the last focused on functioning based on the gender of the child.

1. To determine differences in emotional distress at each time period, MANOVAs were run with GSI, intrusion and avoidance as dependent variables. This was followed by Doubly Multivariate Repeated Measures MANOVAs to assess differences over time.

2. To determine relative risk for clinical levels of emotional symptomatology, chi-square analyses were run for the proportion of parents in the clinical range for each Brief Symptom Inventory subscale and the Global Severity Index.

3. To determine differences in perceptions of family functioning, MANOVAs were run for each assessment period with

Table 64

MANOVA Results for Post-Traumatic Stress Symptomatology in Mothers of Sexually Abused Children Based on Clinical vs Non-Clinical Emotional Distress on the Brief Symptom Inventory (Group)

Dependent Variable	Group	n	M	SD	Main Effect Group ^a Roy Bargman Stepdown
Time 1					
POST TRAUMATIC STRESS ^b					
INTRUSION					F(1,50) = 9.59**
Clinical		22	24.55	7.76	
Non-Clinical		30	16.57	10.09	
AVOIDANCE					F(1,49) = 2.56 ^c
Clinical		22	21.09	8.07	
Non-Clinical		30	14.63	8.19	
Time 2 based on distress at Time 1					
INTRUSION					F(1,43) = 17.27***
Clinical		18	21.89	9.25	
Non-Clinical		27	10.93	8.27	
AVOIDANCE					F(1,42) = .21 ^d
Clinical		18	21.22	7.81	
Non-Clinical		27	13.37	10.74	
Time 2 based on distress at Time 2					
INTRUSION					F(1,46) = 19.70***
Clinical		23	21.61	8.54	
Non-Clinical		25	10.76	9.38	
AVOIDANCE					F(1,45) = 5.26*
Clinical		23	22.65	7.49	
Non-Clinical		25	10.96	9.88	

Note: Multivariate analysis of variance (MANOVA) based on T-scores on Global Severity Index. Non Clinical = T-score < 63; Clinical = T-score ≥ 63.

^aMultivariate tests of significance (Pillai) time 1: $F(2,49) = 6.22$, $p < .004$; time 2 based on time 1 emotional distress: $F(2,42) = 8.59$, $p < .001$; time 2 based on time 2 emotional distress: $F(2,45) = 13.39$, $p < .000$. ^bPOST TRAUMATIC STRESS = raw score on subscales of Impact of Event Scale. ^cUnivariate trend $F(1,50) = 8.00$, $p < .007$. ^dUnivariate trend $F(1,43) = 7.10$, $p < .011$.

* $p < .05$. ** $p < .005$. *** $p < .000$.

family functioning measured by individual distance from the centre of circumplex (FACES III), parenting efficacy and parenting satisfaction (and dyadic adjustment for two parent families) as dependent variables. Doubly multivariate repeated measure analyses were used to measure differences over time.

4. A repeated measures MANOVA was run for parent functioning based on child sex.

MANOVA results for differences in emotional functioning of case parents by gender of parent.

At time 1, a significant main effect was found for group, $F(3,71) = 4.07, p .01$. All variables were significant with univariate follow-up, however only intrusion was significant using Roy Bargman stepdown analysis, $F(1,73) = 11.46, p < .001$. As Table 65 shows, mothers had significantly higher levels of intrusive symptoms than fathers. No significant differences were found at time 2.

Insert Table 65 about here

Repeated measures MANOVA results for differences over time in the emotional functioning by gender of parent.

Although there was no interaction effect, there were significant main effects for group, $F(3,57) = 3.40, p < .024$, and time, $F(3,57) = 5.29, p < .003$. As Table 66 indicates, intrusive and avoidant symptoms were significantly higher in mothers. Over time, there was a significant reduction in intrusive symptoms for mothers and fathers.

Insert Table 66 about here

Table 65

MANOVA Results for Post-Traumatic Stress Symptomatology in Mothers and Fathers of Sexually Abused Children (Group) at Time 1

Dependent Variable	Group	N	M	SD	Main Effect Group ^a Roy Bargman Stepdown
POST-TRAUMATIC STRESS^b					
INTRUSION					$F(1,73) = 11.46^*$
Mothers		53	19.94	9.92	
Fathers		23	11.82	8.72	
AVOIDANCE					$F(1,72) = .25^c$
Mothers		53	17.37	8.68	
Fathers		23	12.26	10.98	
EMOTIONAL DISTRESS^d					
Mothers		53	61.75	9.33	$F(1,71) = .68^e$
Fathers		23	55.83	12.26	

Note: Multivariate analysis of variance (MANOVA) based on parent status. Higher scores indicate more distress.

^aMultivariate test of significance (Pillai) $F(3,71) = 4.07, p < .01$.

^bPOST-TRAUMATIC STRESS = raw score on subscales of Impact of Event Scale. ^cUnivariate trend $F(1,73) = 4.67, p < .034$. ^dEMOTIONAL DISTRESS = T-score on the Global Severity Index of the Brief Symptom Inventory.

^eUnivariate trend $F(1,73) = 5.28, p < .024$.

* $p < .001$.

Table 66

Repeated Measures MANOVA Results for Post-Traumatic Stress Symptomatology in Mothers and Fathers of Sexually Abused Children (Group) Over Time

Dependent Variable	n	Assessment				Main Effect Group (1,59)	Main Effect Time (1,59)
		First		Second			
		M	SD	M	SD		
POST-TRAUMATIC STRESS^a							
INTRUSION						9.35**	14.78***
Mothers	43	19.23	9.7	15.21	10.1		
Fathers	18	11.38	8.1	7.94	8.2		
AVOIDANCE						6.84*	1.33
Mothers	43	17.33	9.3	16.23	10.5		
Fathers	18	10.50	9.6	9.33	10.8		
EMOTIONAL DISTRESS ^b						3.58	.26
Mothers	43	61.44	8.9	59.56	10.8		
Fathers	18	55.22	12.1	55.78	11.5		

Note: Doubly Multivariate analysis of variance (MANOVA) based on parent status. Higher scores indicate more distress. Multivariate test of significance (Pillai) Group: $F(3,57) = 3.40$ $p < .024$; Time: $F(3,57) = 5.29$, $p < .003$.

^aPOST-TRAUMATIC STRESS = raw score on subscales of Impact of Event Scale. ^bEMOTIONAL DISTRESS = Parent's Global Severity Index T-score on the Brief Symptom Inventory.

* $p < .01$. ** $p < .005$. *** $p < .000$.

Results of chi-square analyses of gender differences in clinical risk on the Brief Symptom Inventory subscales.

With Bonferroni corrections, there were no significant gender differences in clinical risk for any subscale or for the Global Severity Index.

Gender differences in the perception of family functioning.

No significant differences were found between mothers and fathers in two parent families at time 1 or 2 for perceptions of dyadic, parental or family functioning. Without the inclusion of dyadic adjustment for the full sample, a significant multivariate effect was obtained at time 1 only $F(3,68) = 2.85, p < .044$. Parent satisfaction was significantly higher in case fathers $F(1,70) = 4.21, p < .044$ (see Table 67).

Insert Table 67 about here

The results of the repeated measures MANOVA found a significant main effect for group $F(3,55), 3.56, p < .02$, but not for time or the group by time interaction (see Table 68). As above, parent satisfaction was higher in case fathers ($F(1,57) = 7.91, p < .007$).

Insert Table 68 about here

Parental emotional functioning based on child gender.

No significant differences were found in the level of emotional distress of mothers or fathers based on child gender.

Summary.

The results of the analyses of gender differences indicated that parents differed primarily in the areas of post-traumatic

Table 67

MANOVA Results for Perceptions of Family Functioning of Mothers and Fathers of Sexually Abused Children (Group) at the First Assessment

Dependent Variable	<u>n</u>	<u>M</u>	<u>SD</u>	Main effect Group ^a Roy-Bargman Stepdown
PARENTING COMPETENCE^b				
SATISFACTION				$F(1,70) = 4.21^*$
Mothers	50	35.52	7.35	
Fathers	22	39.27	6.67	
EFFICACY				$F(1,69) = 1.11$
Mothers	50	34.74	6.59	
Fathers	22	37.22	6.06	
FACES ^c				$F(1,68) = 3.06$
Mothers	50	7.40	4.19	
Fathers	22	6.02	3.02	

Note: Multivariate analysis of variance (MANOVA) based on parent status.

^aMultivariate test of significance (Pillai) $F(3,68) = 2.85$, $p < .044$. ^bPARENTING COMPETENCE = Parent Sense of Competency Scale. Higher scores indicate better functioning. ^cFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre. Higher scores indicate poorer functioning.

* $p < .044$.

Table 68

Repeated Measures MANOVA Results for Perceptions of Family Functioning of Mothers and Fathers of Sexually Abused Children (Group) over Time

Dependent Variable	n	Assessment				Main Effect Group ^a (1,57)
		First		Second		
		M	SD	M	SD	
PARENTING COMPETENCE^b						
SATISFACTION						
Mothers	41	35.46	6.65	34.73	7.20	7.91*
Fathers	18	40.67	4.94	38.89	6.56	
EFFICACY						
Mothers	41	34.71	6.37	33.00	7.04	1.83
Fathers	18	36.44	6.18	35.61	4.46	
FACES^c						
Mothers	41	7.24	4.13	6.85	4.20	3.35
Fathers	18	5.59	2.42	5.32	2.53	

Note: Multivariate analysis of variance (MANOVA) based on parent status.

^aMultivariate test of significance (Pillai) $F(3,55) = 3.55$ $p < .02$.

^bPARENTING COMPETENCE = Parent Sense of Competency Scale. Higher scores indicate better functioning. ^cFACES = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre. Higher scores indicate poorer functioning.

* $p < .007$.

stress symptoms which were higher in mothers at time 1 and 2, and parent satisfaction which was higher in fathers at time 1. The gender of child did not affect parental responses.

Results from the Qualitative Information Obtained from The Structured Interview for Parents of Sexually Abused Children

Four major areas were chosen for further examination of qualitative responses on the Structured Interview: the type of person used to provide social support, the prominent feelings experienced by parents of children who had experienced extrafamilial sexual abuse, the most serious problem faced by parents, and their perception of changes in their parenting as a function of their child's disclosure of sexual abuse.

Appendix BB presents qualitative information about the type of people used by case parents to provide personal and community support and to facilitate expression of their feelings related to the abuse of their child(ren). Of particular importance is the high percentage of fathers (43.5% - 57.9%) who had no one to fulfil these roles for them, as compared to 38.3% - 36.5% of mothers. The most frequent choices of confidantes for mothers were a friend, and less frequently her spouse, with therapists also being used by the six-month period. In contrast, fathers most often confided in their spouse when expressing their feelings. Community support was primarily provided by social workers for mothers, whereas fathers were also likely to use clergy or police officers.

Appendix CC itemizes the prominent feelings experienced by parents as reported retrospectively for the disclosure period, and at the three and six-month assessments. For both fathers and

mothers, a noticeable increase was evident at the six-month period, in the proportion of parents endorsing the feelings typically experienced in the immediate post-disclosure period (in particular, disbelief, feeling overwhelmed, fearful and helpless). A marked increase in the percentage of mothers reporting anger was also evident at the six-month assessment.

Appendix DD shows the most common problems identified by case parents at each assessment. For mothers, the most common issues at the three-month period were coping with their own feelings, perpetrator issues, dealing with their fears surrounding the impact of the abuse on their child and the impending court process, and coping with their child's emotional problems. By the six-month follow-up, parenting abilities were also an important issue for mothers. For fathers, perpetrator issues were prominent at the three-month assessment. However, at follow-up, coping with their own feelings, and the effect on their parenting abilities, and on the family or spousal system were also important.

The final appendix (EE) illustrates the areas of parenting which parents perceived as having changed as a result of their child's sexual abuse. For mothers and fathers, the most salient areas were protection of their children and increased emotional availability. Although approximately a quarter of the mothers at the three-month assessment tried to remain consistent with their parenting prior to the abuse, this percentage dropped to 12% at the six-month follow-up. This was unlike the pattern for fathers where the proportion who reported no change in their parenting style increased over time (20.8 - 30.0%).

DISCUSSION

Summary of Findings

The model presented in this study conceptualized that parents of children who were sexually abused by someone outside of the family would be vulnerable to experience secondary traumatization because of their role as the primary support for child victims, and because of the connectedness of the family system. It was expected that the disclosure of extrafamilial sexual abuse would impact on all subsystems resulting in poorer individual, spousal, parental, and family functioning when compared with parents of children who did not experience such abuse. It was hypothesized that the level of general emotional distress experienced by case parents would be a function of their pre-abuse status (whether the parent had a history of child sexual abuse), the nature of the child's abusive experience (objective aspects of the trauma) and the parent's subjective experience of the trauma (perceptions surrounding the abuse and its aftermath, emotional symptomatology in the parent, and the availability of social support). In addition, the degree of post-traumatic stress symptomatology was expected to be related to the severity of the child's abuse, the severity of the child's emotional trauma expressed symptomatically, the involvement of the family in court proceedings and parent abuse history.

Group Differences Between Parents of Sexually Abused and Non-Abused Children

Hypothesis 1a predicted that parents of children who had experienced extrafamilial sexual abuse would display poorer individual, spousal, parental, and family functioning due to the

traumatization effects of the disclosure of sexual abuse on the family (Figley, 1989a). This hypothesis was supported for mothers in all areas except for dyadic adjustment. Case mothers experienced poorer emotional functioning, less parental satisfaction, and less functional levels of family cohesion at three and six months following disclosure. In addition, case mothers' sense of efficacy as a parent was significantly lower than comparison mothers at the six month assessment. Unexpectedly, spousal adjustment was higher in case mothers and fathers at the initial assessment. However, the magnitude of the difference for mothers was slight and not considered to be clinically relevant.

The hypothesized differences for fathers were not supported. In sharp contrast, case fathers did not show the expected poorer functioning across subsystems. Rather, paternal sense of efficacy as a parent was actually higher in case fathers at the three month assessment. At an individual level, the only area associated with higher risk was the paranoid ideation subscale at three months and the hostility subscale at six months. Case fathers did, however, report more general stressors and a desire to have more flexible adaptability styles in their families.

The results of these analyses highlight the importance of understanding the differences between the experiences of mothers and fathers as parents. Contrasts between case and comparison mothers indicated a wider generalization of distress than that seen between groups of fathers.

Comparisons of the Global Emotional Functioning of Parents based
on Caretaker Status

Hypothesis 1b predicted that differences between case and comparison groups would be more salient in the primary caretakers due to the chiasmal effects of being the victim's primary support system. As predicted, results indicated that primary caretakers, experienced a wider generalization of distress across subsystems in a pattern similar to mothers, who comprised over 50% of this group. Primary caretakers in two parent families also experienced a significant deterioration in their spousal adjustment at the six month assessment. Results for secondary caretakers did not replicate the differences found in efficacy and general stressors between the two groups of fathers, even though they made up more than 90% of secondary caretakers. Case secondary caretakers had increased risk for clinical levels of paranoid symptoms at three months post-disclosure, and for hostility at six months post-disclosure. They also had better dyadic adjustment at the three month assessment.

These findings provide some support for the hypothesis that group differences would be more salient in primary caretakers where distress generalized across all subscales of the Brief Symptom Inventory, as well as to interpersonal areas of spousal and parental functioning. This is in sharp contrast to the more confined differences found between groups of secondary caretakers. However, these findings are confounded with gender due to the high overlap between gender and caretaker status. When primary caretakers were contrasted with secondary caretakers, no significant main effect for caretaker status, or for the

interaction of group by caretaker was found at either assessment.

Differences between Case and Comparison Groups over Time based
on Court Involvement

Hypothesis 1c predicted that differences between the comparison and case groups would vary over time as a function of court status. Because of the large discrepancy in sample sizes for these groups, contrasts were done only with the subgroups of case families based on court involvement and court testimony of family members. Results failed to find any differences in global individual, parental or family functioning at time 1, or in relative risk for clinical levels of emotional distress at either time period. However, sample size severely limited the power to detect differences, particularly at time 2.

Differences in Parent Emotional Distress in Case and Comparison
Groups Based on Parent Sexual Abuse History

Hypothesis 2 predicted that parents in the case group who had a history of sexual abuse would experience more emotional distress than (a) comparison parents with such histories and (b) case parents without such histories due to 'double traumatization'. It was expected that distress would be lowest in the no sexual trauma group, higher in the single trauma groups (non-abused case parents and abused comparison parents), and highest in the double trauma group (abused case parents). The results failed to provide strong evidence for a double traumatization model for mothers. Although the general level of distress was significantly different based on each of these two factors, the two single trauma groups did not differ significantly from the double trauma group in respect to the proportion in the

clinically distressed range on any of the subscales of the Brief Symptom Inventory. However, comparisons between the single, and double trauma groups with the no sexual trauma group (non-abused comparisons) indicated that the three trauma groups differed significantly from the no trauma group.

Inspection of the relative odds ratios associated with each of these groups lends some support to the double trauma theory. For five subscales (somatization, obsessive-compulsive, anxiety, hostility, and psychoticism) at time 1, the magnitude of relative risk increased as a function of group membership when non-abused comparisons were used as the reference group. For these subscales, the relative risk scores of case mothers with an abuse history were twice as high as that of case mothers without an abuse history who in turn had relative risks twice as high as comparison mothers with an abuse history. That is, the magnitude of relative risk scores for abused case mothers was four times higher than comparison mothers with abuse histories. At time 2, differences in relative risk scores were less salient. However the pattern of double trauma persisted for the Global Severity Index, and the anxiety subscale.

This hypothesis could not be tested for fathers due to the low sample sizes in some cells.

Prediction of Case Parent Distress From Objective and Subjective
Aspects of the Trauma Experience

Hypothesis 3 postulated that the level of emotional distress experienced by parents would be significantly related to objective aspects of the trauma (the nature of the child's sexual abuse) and their subjective experience of the event (emotional functioning,

cognitive appraisal of the event and their perceptions of social support). Contrary to predictions, the nature of the child's sexual abuse was not a significant predictor of emotional distress in mothers or fathers.

A number of the components comprising the subjective aspects of the trauma model were relevant for the prediction of maternal distress when entered hierarchically in separate conceptual blocks (emotional, cognitive, and social support). Five variables provided significant contribution to the prediction of maternal distress three months after disclosure: maternal intrusive symptoms, satisfaction with the parenting role, perceptions of internalizing problems in their abused child, the quality of social support, and the level of satisfaction with the family's adaptability. At the six month follow-up, social support variables were no longer relevant once emotional and cognitive variables were entered. However, the mothers' current perceptions of internalizing symptoms in the abused child, their own current degree of intrusive symptoms and their own initial level of emotional distress at the three month assessment were significant predictors.

Due to the limitations imposed by the sample size of case fathers, it was difficult to reliably determine whether important predictors were actually detected.

Post-Traumatic Stress Disorder Symptomatology in
Parents of Sexually Abused Children

Hypothesis 4 proposed that the degree of post-traumatic stress disorder symptomatology would be related to the severity of the abuse, parents' perceptions of symptomatology in the child,

parent abuse history, family involvement in court proceedings, and the number of abuse-related stressors. None of the anticipated variables were significant predictors of the level of post-traumatic stress symptomatology for mothers. Sample size was insufficient to analyze this hypothesis for fathers.

Further, analyses of differences in intrusive and avoidant symptoms failed to show significant differences between groups based on whether the child or parent testified, whether the child or parents received therapeutic intervention, or whether parents had a history of child sexual abuse. For all subgroups of mothers, intrusive symptoms decreased at the six-month assessment regardless of group membership.

Significant relationships were found between parents' perceptions of the degree of internalizing and externalizing symptomatology in their child (normal/borderline/clinical) and the level of emotional distress in the parent. Where significant results occurred, the level of parent symptomatology tended to mirror perceptions of child symptomatology.

In addition, there was also a significant relationship between the level of current emotional distress, previous emotional distress, and the level of intrusive and avoidant symptoms. Mothers with clinical levels of emotional distress had significantly higher intrusive and avoidant symptoms at both time periods. No such relationship was found for fathers.

Differences in the Maternal and Paternal Responses to the Sexual Abuse of Their Child

Hypothesis 5 did not predict the direction of differences between parents based on their own gender or that of their child. Mothers

and fathers differed primarily in the areas of post-traumatic stress symptoms which were higher in mothers at time 1 and 2, and parent satisfaction which was higher in fathers at time 1. However, there were no significant differences in parent satisfaction in the subgroup of case parents from two parent families. The gender of the abused child did not affect differentially the emotional adjustment of parents.

Differences Between Groups over Time

The study found only one change over time in the differences between case and comparison families. Case parents who were primary caregivers experienced a significant deterioration in their marital functioning at the six-month assessment when compared with comparison primary caregivers who maintained their level of marital adjustment. The only area of emotional adjustment which changed over time regardless of the subgroup of case parents was the level of intrusive symptoms. For both mothers and fathers, intrusive symptoms decreased at the six-month follow-up. Relative functioning in all other areas of parent adjustment remained essentially the same at the three and six-month assessment periods.

Interpretation of Findings

The study's key findings will now be discussed as they pertain to the existing theoretical and empirical literature. Ten areas of case parents' experiences were chosen as warranting more detailed discussion: the emotional functioning of parents, parent self-esteem, marital adjustment, perceptions of family functioning, the effect of court proceedings, the role of parent sexual abuse history, post-traumatic stress symptomatology in

parents, the relationship between parent distress and perceptions of child functioning, the role of social support in case parents' adjustment, and proposed modifications to the secondary traumatization model.

The Emotional Functioning of Parents

Mothers.

This study found that mothers of sexually abused children when compared with comparison mothers, had significantly higher levels of emotional distress across all subscales of the Brief Symptom Inventory and were at a greater risk for clinical levels of distress. This is consistent with the findings reported by Kelley (1990) who compared parents of sexually and ritually abused children with a comparison group at a mean of 2 years post-disclosure. Comparison of the means obtained in the present study at 3 and 6 months post-disclosure with her sample who were assessed at variable intervals ranging from 8 to 36 months post-disclosure indicated a similar pattern of results for the levels of depressed feelings, phobic anxiety, and hostility. Levels of obsessive, paranoid-ideation, and psychoticism were similar to the levels observed in her ritually abused group whereas levels of somatization, anxiety and overall distress (Global Severity Index) were higher than her two abused groups. Interpersonal sensitivity was lower than that found in her groups of mothers. Close to 50% of case mothers at both time periods (42.3% at 3 months, 49% at 6 months) were in the clinical range for overall global distress although no subscale means were in the clinically distressed range.

Two possible explanations can account for these findings. Given that 36.6% of case mothers reported a history of previous psychological problems, and that the results of the hierarchical regression failed to find significant abuse-related predictors of emotional adjustment, the findings could represent the pre-morbid functioning only. That is, the levels of emotional distress may reflect only pre-abuse maternal pathology which placed the child at risk for sexual abuse. Alternatively, the disruption caused by the disclosure may have sent mothers who already had personal adjustment difficulties affecting their parenting abilities into crisis, especially those mothers whose identity was tied to the child-rearing role.

However, because the regression and risk analyses failed to find significant differences between groups of case parents with or without sexual abuse histories, as Wagner suggests (1991), one cannot assume that parent abuse history alone accounted for the observed differences. Similarly, because groups of mothers were not different in the amount of general stressors, it is unlikely that other stressors were sufficient to account for differences. Furthermore, it is unclear whether self-reported histories of psychological problems were at the clinical level used in the post-abuse assessments. The percentage of distressed mothers at three and six months post-disclosure reflected an additional 6% and 15% above levels reported for pre-abuse history. This suggests that the experience of their child's disclosure and its aftermath may have contributed to the distress levels seen.

The other explanation consistent with this study's hypothesis is that case mothers were vulnerable to experience

secondary traumatic stress because of their role as the primary support of their abused child (Burge, 1983; Figley, 1983). This is compatible with Figley's model of traumatized families (1989a), the clinical literature on initial parent reactions to extrafamilial sexual abuse (Gomes-Schwartz et al., 1990; Newberger et al., 1991), and Keiley's (1990) premise that the sexual victimization of one's child can be an acute and chronic stressor for parents. Viewed within this context, the primary elevations on psychoticism, hostility, obsessive-compulsive, paranoia, anxiety, depression, and somatization subscales can be reframed within the acute post-traumatic stress and concurrent grief reaction paradigms.

Elevations on the psychoticism and paranoid ideation subscales may be related to the withdrawal and social isolation experienced by many families post-disclosure and to the general mistrust of people outside the family due to the violation and betrayal of the family's trust by the perpetrator (Reyman, 1990). It is also consistent with the reduced involvement with the external world seen in trauma survivors. In this respect, Ehrensaft (1992) noted that many of the mothers in her treatment group for parents of children who had experienced sexual abuse in a military daycare, felt alienated from their children and their partners. They also felt that their parenting was hindered by difficulties in separating their own feelings from those experienced by their abused child.

Similarly, the elevations in anxiety, obsessive-compulsive, and somatic symptoms may be a reflection of the autonomic arousal and hyperalertness associated with post-traumatic stress disorder.

Mothers in this study repetitively confided during the Structured Interviews their fears of "going crazy" because of the intensity of their ruminative rage and destructive imagery of avenging the victim by punishing the perpetrator.

The elevations in depressive symptomatology can be conceptualized as both post-traumatic stress and grief reactions. The items tapped by this subscale are consistent with the lack of interest in the environment, the hopelessness about the future, and the sense of worthlessness as a parent identified by other researchers and clinician working with parents of children who have experienced extrafamilial sexual abuse (Ehrensaft, 1992; Gomes-Schwartz et al., 1990; Hagans & Case, 1988; and Reyman, 1990). The percentage of mothers who experienced depressive symptoms in the clinical range was substantially lower (34.6% at 3 months, 37.3% at 6 months) than that reported by Wagner (1991) who found that 65% of the mothers who sought treatment for their abused child following extrafamilial sexual abuse were in at least the moderately depressed range on the Beck Depression Inventory (Beck & Steer, 1987). The lower percentage of distressed mothers may be a function of the differences in the use of therapeutic services for the child (note only 27% of the mothers in this study accessed therapeutic services for their child) or in the use of different measures of depressive symptomatology. Thus although approximately one third of the case mothers experienced clinical levels of depressive symptoms on the Brief Symptom Inventory, the range of distress across most subscales suggests a wider generalization of distress than grief models would propose and appears more consistent with a post-traumatic stress disorder

framework.

It is important to note that case mothers, in their role as the abused child's primary caretaker, experienced more distress in all family subsystems except the spousal system at the three month assessment with a marked deterioration by the six month assessment in their level of marital adjustment. Taken with the significantly higher levels of intrusive symptoms in mothers, when compared with fathers, this suggests that case mothers, like their abused child were a vulnerable risk group for traumatizing sequelae following the disclosure of sexual abuse.

Although it could be argued that a mother's level of emotional distress coloured her perceptions of all other family subsystems, it could also be that her perceptions of parental competence, family functioning, dyadic adjustment, and child adjustment were influenced by the adjustment reactions of individual family members as well as her internal cognitive appraisal of the event. Though the study failed to identify specific perceptions related to the abuse which were unique predictors of maternal emotional distress, mother's perceptions of the amount of blame she assigned to herself, her child and the perpetrator in combination, accounted for 11.5% of the variance in maternal distress.

Fathers.

The differences found between case and comparison fathers' emotional functioning were much more circumscribed. Although it could be postulated that the comparison group of fathers was atypical, their mean scores on the Brief Symptom Inventory subscales did not differ substantially from that of the comparison

mothers at either time period. Nevertheless, given the differences in marital distress, it is possible that comparison fathers may have participated as an indirect cry for help. Although father's age was not used as a covariate, it is possible that differences between case and comparison groups were masked by comparison fathers who were in the age range associated with mid-life crises ($M = 41.46$, $SD = 5.72$) whereas case fathers were only approaching this phase ($M = 37.33$, $SD = 7.64$).

There were two areas where case fathers had higher levels of clinical symptomatology: paranoid ideation at 3 months, and hostility at 6 months. These findings are consistent with the observations of Ehrensaft (1992) who found that fathers' reactions differed from mothers', especially in relation to their level of rage. This rage was conceptualized as being related to the fathers' sense of emasculation and 'double rape', the molestation of their children and the intrusion into their families' private lives by professionals. The paranoid-like symptoms were viewed as a consequence of the violation of their basic trust in the world.

Contrary to the findings of Kelley (1990), fathers were not significantly more distressed than mothers. When compared to Kelley's sample of fathers of sexually abused children who were assessed 8 to 36 months post disclosure, this study's case fathers had lower mean T-scores for overall emotional distress (Global Severity Index) and the following subscales: obsessive-compulsive, interpersonal sensitivity, depression, anxiety, and psychoticism. Hostility scores were substantially lower (10 T-score points; > 1 standard deviation). However, they experienced similar levels of somatization, phobic anxiety, and paranoid ideation. The study's

findings suggest that perhaps the full extent of fathers' reactions to disclosures of sexual abuse are delayed. Unlike Kelley's results which showed that fathers differed from mothers only in their level of risk for depressive symptoms, this study found no differences on any subscales. It is therefore, important to remember that case fathers experienced similar levels of individual distress to that experienced by case mothers, and as such, were affected by their child's disclosure of extrafamilial sexual abuse.

Parent Self-Esteem

This study found that case mothers' self-esteem as a parent was significantly lower at both the three and six month assessment periods when compared to comparison mothers and to case fathers. The most salient, persistent effect was in the mothers' sense of satisfaction with the parenting role (the affective dimension). This component of parent self-esteem measures levels of anxiety, frustration, and motivation associated with the parenting role and is also the most sensitive to the effects of symptomatic child behaviour (Johnston & Mash, 1989). Less salient were the effects on parent efficacy which emerged as trends for mothers in two parent families at the six month assessment.

These parenting competence issues for mothers of children who have experienced extrafamilial sexual abuse have been identified by several clinicians as prevalent both in the initial post-disclosure period (Bernbaum, 1988; Hagan & Case, 1988; Regehr, 1990; Reyman, 1990), and at two years post-disclosure (Kiser et al., 1991). Several explanations have been offered.

Ehrensaft (1992) in her work with mothers of preschoolers who had been abused in a military daycare, noted that mothers in particular were vulnerable to have their sense of efficacy as a parent undermined. Because mothers' locus of control and sense of self-worth are more likely to be tied to the child-rearing role, they are more vulnerable to experience self-blame, loss, helplessness and futility to prevent or change what happened. Many also, in their role as primary caretaker, feel ill-equipped to manage the emotional and behavioural sequelae in their abused children. Compounding these issues is a tendency for society to blame the parents rather than the perpetrator for the occurrence of the sexual abuse and for the child's symptoms which further compromises parent self-esteem (Ehrensaft, 1992; Reyman, 1990). In the present study, several mothers who participated alone reported that they were blamed, as well, by their partners or parents. Like Kiser et al.'s (1991) treatment sample, many parents also believed that their responses to the sexual abuse were hindering their ability to be effective parents, an issue which became more salient at the 6-month period. Issues of responsibility, guilt, betrayal, depression, and anger were also identified. However, the key issue targeted as affecting parent efficacy in Kiser et al.'s study, was dealing with the sense of the child as damaged. Mothers struggled to maintain normal parent-child relationships while simultaneously fearing that their reactions would convey to the child that he/she was unloved. Kiser et al. (1991) and Hunt and Baird (1990) identified the critical need to regain trust in their own parenting skills and abilities; that is, to sort out their responsibility in failing to

protect their child while preserving their sense of competence as a parent.

Another possible explanation for the differences observed between case and comparison mothers and case fathers on measures of parent self-esteem may be the increased vulnerability of women to parental role strain and gender differences in the orientation to the parenting role. Scott and Alwin (1989) suggest that mothers are socialized to place greater emphasis on the intimacy and closeness of the mother-child bond and to subordinate their personal needs for their children. Therefore, in a traumatic situation which directly affects the child's ability to trust and relate to others, mothers may assume responsibility for the changes in relational patterns within the family.

Another proposed dynamic suggested by Hagan and Case (1988) concerns the relationship between parent grieving and parent guilt. They postulate that parent anger over the abuse becomes redirected inward for mothers resulting in doubts of their abilities to be protective and effective parents. That is, depressive feelings result in negative distortions of their true parenting abilities.

This lower parental self-esteem in mothers of children who have experienced extrafamilial sexual abuse is also consistent with the shattering of core assumptions of self-worth typically seen in trauma survivors (Janoff-Bulman, 1992). In particular, evaluations of the self as not a 'good enough' mother (Ehrensaft, 1992) and the self-evaluation that she failed to protect her child, and is now incompetent to control the outcome of her family are typical of the cognitive distortions seen in human-induced

trauma victims. The differences observed between mothers' cognitive perceptions of themselves as parents as a function of having an abused child is consistent with recent trends in the literature on the stresses of parenting which recognizes the importance of parental cognitions. Abidin (1990) emphasized that a full understanding of the impact of distal factors on parent-child relationships requires the development of a comprehensive theory of parent cognitions in which the relational history of the parent and their current developmental status are considered. This is also consistent with the developed model of secondary traumatization which recognizes the importance of the meaning ascribed to the event and of changes in perceptions of parent competence to trauma resolution .

It is also possible that the differences in mothers' perceptions of parenting competence, particularly parent satisfaction, represent a risk factor which predates the abuse and persisted after the abuse. Very little empirical literature exists in this area except in respect to the parenting styles of child sexual abuse survivors.

For the subgroup of parents who were victims of child sexual abuse, it is possible that conflicted feelings about their family-of-origin may have influenced their perceptions when faced with the emotional demands of parenting (Fine & Carnevale, 1984). Several authors have reported that incest survivors in therapy express concerns about their parenting abilities. For example, Herman (1981) found that incest survivors experienced overly high expectations for parent conduct which resulted in feelings of guilt and worthlessness as parents. Butler (1978) also found that

many were resentful of providing for their children's emotional needs when they had never experienced this as a child.

A study by Cole and Woolger (1989) which compared 21 mothers with incest histories to 19 mothers with extrafamilial sexual abuse histories found that mothers who were incest survivors were significantly more likely to value child autonomy with trends towards lower child acceptance and higher conflict over child rearing based on the Parental Attitudes Research Instrument (Schaefer & Bell, 1958). They suggested that this orientation towards avoidance of their child's dependency needs may result in experiences of anxiety and anger in some child-rearing contexts (hence lower parent satisfaction) as well as a distancing of themselves from the parenting role. Both of these tendencies were viewed as placing their child at risk for sexual abuse to meet affectional needs.

Further support for the difficulties in parenting experienced by abuse survivors was found in a study by Cole, Woolger, Power and Smith (1990) which compared parenting difficulties in incest survivors, adult children of alcoholics, and no risk mothers. Incest survivors experienced less confidence and less sense of control as a parent than the no risk group, and were even more likely to be less satisfied with their spouses' role as a parental partner based on the Family Experiences Questionnaire (Frank, Hole, Jacobson, Huyck, & Justkowska, 1986), and the Parenting Dimensions Inventory (Slater & Power, 1987). These authors suggested that these types of parenting difficulties could result in less well-behaved children further contributing to a mother's sense of inadequacy, to her tendency to withdraw from

the parenting demands and to desire more autonomy in her children. Given that 43.3% of mothers in the present study had a history of child sexual abuse, the possibility of pre-existing deficits in parenting self-esteem must be considered. With the abuse of one's child, it would be expected that any pre-existing deficits would be exacerbated following disclosure. Analyses of differences in parenting competence based on abuse history were not the main focus of this thesis and will be tested in future analyses of the data.

An unexpected finding was the increased sense of parental efficacy observed in case fathers at the three-month assessment when compared to comparison fathers. The mean for comparison fathers was actually lower than that found for case mothers. Although this might suggest that this group was an atypical comparison group, the mean efficacy scores for comparison fathers was not outside the normal range on the normative data provided by Mash and Johnston (1989) for Canadian fathers of non-clinical children. An alternative explanation is that case fathers may have responded to their partners' increased personal distress and feelings of low parental competence by becoming more involved in parenting and hence feeling a greater sense of control in the parenting role (Webster-Stratton, 1988). Similarly, the reporting of the extrafamilial sexual abuse may have led some fathers to become more aware and confident in their role as fathers. It is also possible that case fathers who chose to participate in this study were more intimately involved in their family's coping following the abuse disclosure than those who refused to participate.

Marital Adjustment

Another unexpected finding was that the dyadic adjustment of couples was significantly better in case parents (mothers and fathers) at the three month assessment. Given the small magnitude of differences between groups of mothers, only that found for fathers is considered to be clinically relevant. Indeed, although there were no significant differences in the proportion of case and comparison couples in the clinical range, the proportion of maritally distressed comparison fathers was actually higher than that for case fathers at both time periods (22.2% comparison vs. 5% case). These differences were less pronounced for mothers with fairly equivalent rates of distress (12.5% comparison vs. 16.1% case at time 1; 18.2% comparison vs. 18.8% case at time 2). Nevertheless, the rates of marital distress for both mothers and fathers are substantially lower than the 45% rate found by Sauzier (1989) and Gomes-Schwartz et al. (1990). This suggests that this study's sample may have become closer or had stronger marital bonding prior to the abuse which enabled them to use each other during the initial post-disclosure period. This is consistent with the anecdotal data gathered from the interview.

One possible explanation for the lower distress levels seen in case fathers is that fathers who were experiencing marital distress self-selected out of participating in the study. (For 12 out of 39 two-parent families [32%], mothers participated without their partners). Inspection of the mean distress levels of mothers from these families indicated that their marital adjustment levels were lower than for the full sample and close to the distress cutoff (time 1: $M = 98.7$, $SD = 21.8$, time 2: $M =$

100.8, $SD = 24.0$), with a greater proportion in the maritally distressed range (time 1: 28.6%, time 2: 33.3%).

At the six month follow-up, case primary caretakers (primarily mothers), experienced a significant deterioration in their marital functioning. This is consistent with the descriptive findings of Bernbaum (1986), Finkelhor et al. (1988), and Kiser et al. (1991). Several factors may have contributed to this finding. The disclosure of the abuse with the resulting changes in the emotional and behavioural functioning of family members may have exacerbated pre-existing marital conflicts (Bernbaum, 1986; Finkelhor et al., 1988; MacFarlane, 1986). Secondly, fathers may have responded to their partners' increased and persistent emotional distress by withdrawing from their wives and providing less support in the parenting role (Webster-Stratton, 1988). In addition, both partners may have struggled with assigning blame for the abuse and have blamed each other for failing to protect and for being unable to prevent or correct symptomatic behaviour in their child. Although self, child, and perpetrator blame was assessed directly using the Parent Perception of Event form, this study failed to measure the degree to which the partner was blamed, and felt blamed, an issue which a number of women identified during the course of the Structured Interview.

Similarly, many individuals identified difficulty in understanding differences in their partner's reactions to the abuse and struggled with not wanting to misperceive their partner's reactions as indifference or over-reaction. Ehrensaft (1992) identified, in particular, gender differences in the

expression of rage associated with the abuse. Whereas mothers turned their anger onto themselves, fathers directed their anger both at themselves and outward towards their wives and children, creating marital discord. Although the present study found elevated levels of hostility in men at the second assessment which coincided with the marital deterioration reported by their wives, mothers reported consistently more fears about the intensity of their own feelings of rage.

Finally, as identified by Kiser et al. (1991), conflictual sexual lives may have developed, with one partner becoming asexual to compensate for an 'oversexualized' environment. Of particular importance, was the finding on the interviews, that many of the women had difficulty not generalizing their new mistrust of men to their partner. This issue could be partially responsible for the reduced dyadic adjustment experienced by women over time.

Perceptions of Family Functioning

Case mothers were significantly more likely to describe their families as less cohesive when compared to comparison mothers at both assessment periods, with the proportion in the separated family type increasing over time. At the three-month assessment case families were equally represented in the connected, separated, and disengaged groups (approximately 30% in each group), and by the six-month assessment over 78% were in the separated or disengaged groups. Thus, like the pattern for increased marital distress over time, mothers also felt that the emotional bonding of family members was less cohesive. The research on family response to stress suggests that connected families have stronger family resources, more effective coping

resources, and are less vulnerable to disruption following a stressful life event than less cohesive (separated or disengaged) family types (Lavee & Olson, 1991; Olson, 1986). This would suggest that close to two-thirds of the case sample were at risk for developing difficulties in the adaptation phase of trauma resolution.

This finding is consistent with that of Kiser et al. (1991) who found that increasing marital and family cohesion were important treatment issues even two years after disclosure. The present study adds to the Kiser et al.'s work in suggesting a more temporal relationship to the abuse disclosure. Kiser et al. (1991) propose that family cohesion may be affected because the abused child was coerced into secrecy. Hence, open communication and trust within the family need to be re-established. In addition, many mothers in the present study expressed difficulty in trusting that their child had disclosed everything, whereas others noted that they had become aligned with their abused child against the 'males' in the family until they could resolve trust issues. Figley (1988b) also notes a tendency for less family cohesion associated with the family's attempts to cope with extraordinary life stressors. Although they may desire closeness for mutual comfort and emotional support, family interactions following the stressful event often increase stress resulting in a tendency to separate to avoid painful interactions related to the traumatic event.

It is also possible that the observed differences in the levels of family cohesion reflect the family's pre-abuse functioning. Ray, Jackson and Townsley (1991) in their

comparisons of adult college women who had experienced intrafamilial, extrafamilial and no sexual abuse, found that both intrafamilial, and extrafamilial sexual abuse survivors reported less family cohesion in their family of origin. Similar results were found in a study by Long, Ray and Jackson (1989) of child sexual abuse survivors who had been abused by single or multiple perpetrators. Children from less cohesive families may be at greater risk of falling prey to the attention initially offered by many perpetrators.

Although no differences were found in levels of family adaptability, perceptions of family functioning along the combined dimensions of cohesion and adaptability were perceived as less functional by primary caretakers in case families when compared with primary caretakers in comparison families. Although Lavee and Olson (1991) have suggested that it is more important to consider the interaction of cohesion with adaptability to predict the outcome of a family's response to stressful events, the construct which combined these dimensions (individual distance from centre of circumplex) was not a significant predictor of either maternal or paternal distress.

However, desired family adaptability proved to be an important discriminator for differences between case and comparison fathers, and an important predictor of mothers' initial emotional functioning. At the six-month follow-up, close to 50% of case fathers desired more flexible family adaptability styles compared to comparison fathers who desired more structured family styles. These results are in keeping with Hansen and Johnston's perspective (1979). They propose that in stressful circumstances,

greater structure protects the family from crises but that once disruption occurs, flexible adaptability styles are more conducive to recovery. Hence, in the face of their family's sequelae post-disclosure, case fathers may have been perceiving in an appropriate way the direction needed to ameliorate their family's distress. Similarly, the relationship found between a mother's emotional distress and her level of satisfaction with her family's adaptability lends support to the importance of family adaptation to trauma resolution.

Hypothesized Mediating Factors in Parent Emotional Adjustment

Two factors have been proposed to have key roles in mediating how families cope with the sequelae of the disclosure of extrafamilial sexual abuse. The term "double trauma" has been used in relation to families who are involved in court proceedings and in families who are confronted with their own past histories of sexual abuse when their child discloses. This study examined both of these issues.

Court proceedings.

The results failed to support the premise that parents vary in the degree of symptomatology experienced as a function of court involvement or court testimony. Contrary to the formulations of Burgess et al. (1990), testifying as a witness did not appear to consistently precipitate another crisis event for the families. No differences were found in the relative risk for emotional distress or marital distress as a function of family court involvement. However, these results must be considered tentative due to the fact that small cell sizes may have reduced the power to detect actual differences.

Unexpectedly, intrusive symptoms in mothers decreased at the six-month assessment regardless of whether the family was involved in court testimony. However, the fact that avoidant symptoms and other measures of individual distress did not decrease suggests that, for the majority of the families who were involved in court proceedings, this added stressor may have prolonged the initial levels of distress seen in this sample of parents. It is important to note that Burgess et al.'s results (1990) were based on multiple t-tests rather than the use of multivariate statistical procedures. Although this study failed to find statistically significant differences in the mean intrusive and avoidant symptoms, the mean scores for avoidant and intrusive symptoms were similar to those obtained by Burgess et al. based on whether the child testified. The proportion of mothers in the clinical range for the Global Severity Index based on child court testimony at six months (46.7% in testified group, 40% no testimony group) was slightly lower than that found by Burgess et al. (58.8% in testified group, 45.3% in no testimony group). Most important was the fact that mothers who had children still waiting to testify had the highest proportion in the clinical range (68.8%). A similar pattern also emerged based on whether the mother testified. This suggests that the anticipatory stress of pending court may be as relevant as the actual court experience. (Note the high percentage of parents who identified the need for stress management as part of court preparation). Given that most families were still awaiting court testimony at the six-month follow-up, it may be that the findings obtained by Burgess et al. two years post-disclosure represent a risk factor for delayed or

chronic post-traumatic stress symptomatology.

The failure to find differences over time during the first six months may also reflect the fact that closure was not yet achieved even for families who had begun testifying. Most families who had testified by the six-month assessment had done so at preliminary hearings and were still waiting or expecting to testify again when the case went to trial. Hence their experiences were likely to be similar to the pending group.

Parent sexual abuse history.

The percentage of case mothers and fathers in the present study who reported sexual abuse histories was double that reported in Kelley's (1990) sample and higher than the rates expected for the general Canadian population. As Kelley was unclear whether being 'victimized as children' referred to any type of child abuse or specifically to child sexual abuse, the differences found between the studies may have been even more salient. This suggests that having a child sexual abuse history may predispose one's children to becoming sexually abused by others.

Although having an abuse history in and of itself was associated with greater mean levels of overall emotional distress (Global Severity Index) and higher risks for psychological distress on the depression, interpersonal sensitivity and phobic anxiety subscales (consistent with the findings of Greenwald, Leitenberg, Cado & Tarran, 1990), there was no evidence of higher levels of overall distress in case mothers based on abuse history relative to comparison mothers with similar histories. Nor did abused case mothers have significantly higher post-traumatic stress disorder symptoms. The mean levels of emotional distress

observed in abused and non-abused case mothers at both time periods were comparable to those seen in Kelley's sample (1990) at an average of two years post-disclosure. Taken with the significant differences in risk for all subscales for case and comparison parents without abuse histories, this suggests that the observed differences could not be solely related to parent abuse history. Indeed this variable failed to be an important predictor of general emotional distress or post-traumatic stress symptomatology in case parents. Hence these differences may represent either the profiles of parent adjustment following an abuse disclosure or a personal adjustment risk factor unrelated to child sexual abuse history. It is, however, possible that abuse history could have been under-reported especially in fathers.

Six dimensions warrant further attention given that the magnitude of relative risk increased as a function of group membership in the direction anticipated by the double trauma theory: somatization, obsessive-compulsive, anxiety, hostility, and psychoticism at the initial 3 month assessment, and anxiety and global distress at the 6 month assessment. In order to truly establish whether abuse history affects emotional adjustment, regression analyses could have been run for each of the subscales associated with higher relative risk. It may also be that differences based on abuse history are camouflaged during the disruptive phase of traumatic experiences and become manifested only later when the family attempts to adapt. This is consistent with the self-reports of many mothers who attempted to avoid dealing with their own experiences of past sexual abuse until they felt their child's symptoms had resolved. It is also possible

that differences will become even more salient over time as non-abused case parents will be dealing with a more acute situation while abused case parents are dealing with a more chronic repetitive cycle.

An alternative hypothesis, consistent with the literature on dissociative and post-traumatic stress disorders, is that the true prevalence of child sexual abuse was underestimated in the case group because some abuse survivors did not admit to having an abuse history. Although this possibility must be considered, three arguments work against this theory: (a) The reported prevalence was already higher than the expected 1:3 ratio of child sexual abuse histories expected for the general population. (b) Research by Dill, Chu, Grob and Eisen (1991) has shown that women are twice as likely to disclose abuse histories in survey studies with structured questions than in general psychiatric intakes. (c) Having an abused child would be more likely to serve as a trigger to recall past experiences of abuse rather than to perpetuate dissociation of memories. However, given that the abuse rates reported by fathers in this study was lower than anticipated in the general population, and that men are less likely to admit to child sexual abuse histories, it is possible that the prevalence of sexual abuse in case and comparison fathers was under-reported.

Post-Traumatic Stress Symptomatology in Parents of Sexually Abused Children

The conceptual basis for secondary traumatization in parents proposed that parents were vulnerable to experience post-traumatic stress disorder symptomatology because of vicarious and chiasmal effects associated with caring for a sexually victimized child

(Figley, 1989a). It proposed that there were two sources of trauma: the objective aversive aspects of the trauma and the subjective meaning ascribed to the traumatic stressor based on the parents perceptions of the event, perceptions of social support, and the level of parent emotional distress.

None of the anticipated trauma variables (severity of abuse, perception of trauma to the child, parent abuse history, court involvement or number of abuse-related stressors) were significant predictors of intrusive or avoidant symptoms in mothers. However, this relationship could not be tested for fathers. Whereas the results of this study suggest that the subjective sources of trauma are particularly salient for predicting general emotional distress in parents, it is unclear whether these variables were also important to the prediction of specific PTSD symptomatology as this was not tested directly.

The Impact of Event Scale (Horowitz et al., 1979) provided direct measures of the degree to which parents experienced intrusive and avoidant symptoms specifically related to their child's sexual abuse. Consistent with the findings of Kelley (1990) mothers scored significantly higher than fathers in intrusive symptoms, but were similar in avoidant symptoms. However, the magnitude of symptoms varied slightly from Kelley's sample with fathers experiencing lower levels of intrusive symptoms and mothers experiencing higher levels of avoidant symptoms than in her sample. Also important was the relationship found between emotional distress and post-traumatic stress disorder symptomatology for mothers which failed to materialize for fathers. Both the correlations and the regression analyses

indicated that over time, the relationship between post-traumatic stress disorder symptomatology became more salient accounting for 17% of the variance at time 1 and 32.4% of the variance at time 2 in emotional distress. This suggests that the experience of secondary traumatization did play a role in parent symptomatology for mothers.

However, the failure to find any relationship between post-traumatic stress disorder symptomatology and emotional distress in fathers suggests a more circumscribed effect. Although they experienced post-traumatic stress disorder symptoms, it did not generalize to the same extent to other aspects of their lives as for mothers. Four possible explanations may account for these findings: (a) Fathers may be less vulnerable to experience post-traumatic stress disorder symptomatology initially following disclosures of extrafamilial sexual abuse. The increased involvement in parenting and sense of efficacy may have engendered an empowering experience for case fathers. [Indeed, a similar pattern of gender differences was found by Perconte et al. (1993) in their study of Gulf War survivors of a missile attack]. (b) Fathers may have had post-traumatic stress disorder symptoms, but been socialized against admitting to negative feelings associated with being shamed, overwhelmed and helpless (Osherson, 1992). (c) Fathers may be more vulnerable to experience a delayed and more chronic post-traumatic stress process similar to that experienced by war veterans (Laufer, Frey-Wouters & Gallop, 1985) due to gender differences in the expression of post-traumatic stress disorder, and the lack of a confidante to whom they can express their feelings (Kelley, 1990). (d) The most distressed

case fathers may have chosen not to participate, leaving a group of case fathers more representative of highly functioning fathers.

Unexpectedly, avoidant symptomatology was not a significant predictor of higher emotional distress for mothers or fathers (although correlations were significant for mothers at both time periods; time 1: $r = .41$ and time 2: $r = .47$). Although the use of denial and avoidance has been found to be a significant predictor of higher emotional distress in adult sexual abuse survivors (Leitenberg, Greenwald & Cado, 1992), avoidance did not appear to serve a similar function for secondary victims during the six-month period following disclosure. Failure to find significant differences may also have been a function of how distress was defined. If extremely low T-scores (<40) had been used as indicators of denial, as done by Newberger et al. (1991) in her study of mothers following disclosures of intrafamilial and extrafamilial sexual abuse, perhaps a clearer relationship would have been found between the level of distress and avoidance. However, the number of parents with such low T-scores was extremely small in the present study. No mothers had T-scores on the Global Severity Index below 40 at time 1, and only 2 (4.4%) were in this range at time 2. Three fathers (13.0%) at time 1 and two (10%) at time 2 were in this range.

Parent Distress and Perceptions of Child Distress

One of the most striking findings of the present study pertained to the relationship found between parent distress and perceptions of child distress. Several explanations can be offered for this relationship which make it difficult to interpret whether vicarious or chiasmal effects occurred. (Vicarious

effects refer to parent symptomatology resulting from witnessing victim distress, and chiasmal effects refer to symptomatic behaviour previously observed in one family member subsequently being displayed by another member (Figley, 1989a)).

First, it is important to recognize that parents' perceptions of children's behaviour is a function of the combined influence of parental and child symptomatology (Phares, Compas, & Howell, 1989). Several authors have interpreted the reports of distressed parents as cognitively biased (Estroff, Herrera, Gaines, Schaffer, Gould, & Green, 1984; Reid, Kavanagh, & Baldwin, 1987; Everson et al., 1989; Newberger et al. 1991), yet Jensen, Traylor, Xenakis and Davis (1988) stress that the correlations found may reflect an actual relationship between child and parental symptomatology as a function of an external event, in this case, the disclosure of sexual abuse. Their research (using the Child Behavior Checklist and the Hopkins Symptom Checklist, a precursor of the Brief Symptom Inventory) found that distressed mothers, in particular were more sensitive to their child's mood than was the child's father. They concluded that when parents are experiencing the effects of either external (e.g., court) or family-related stressors (e.g., abuse) themselves, they may be oriented to observe for non-verbal evidence of similar reactions in their child.

Parental distress may compromise however, the parents' ability to clearly separate their experiences from their child's. Newberger et al. (1991) in their study of mothers of 49 victims of intrafamilial and extrafamilial sexual abuse at two to four months post-disclosure found that mothers' reports of child symptoms but

not child self-reports were related to more severe sexual abuse of the child. In addition, mothers' reports of symptoms in their child were related to their own symptom levels but not that reported on child self-reports (Children's Depression Inventory, Kovacs, 1981; and the Revised Children's Manifest Anxiety Scale, Reynolds & Richmond, 1985). They concluded that mothers were also victims when their child was sexually abused and that her own adaptation predicted how she would view her own child's adaptation.

Given the 'shattering of assumptions' accompanying a traumatic event (Janoff-Bulman, 1992), it is possible that distortions of the child as 'damaged goods' may also have contributed to the perceptions of child functioning. Estroff et al. (1984) using the same two measures as this study, found that mothers of physically abused and neglected children had a tendency to view the abused child as more symptomatic than they viewed non-abused siblings. However, no independent observations were used to determine whether the abused children were in fact more symptomatic because of the abuse. Mash, Johnston and Kovitz (1983) did find, however, such a bias for physically abused children using independent observers as did Reid et al. (1987). Alternatively, Reid et al.'s study of abusive parents' perceptions proposed that environmental stress may reduce parents' tolerance of normal child behaviour problems. Although these three studies provide some support for bias related to abuse status of a child, the present study's sample differs in a key way in that the parents were not the perpetrators of the abuse. Therefore, motives for cognitive distortion could be different.

Given that the aftermath of sexual abuse can be framed as a traumatic stressor, the potential to tax parent tolerance while simultaneously coping with their own abuse-related distress must be considered. Because a relationship was found between post-traumatic stress disorder symptoms and perceptions of child functioning primarily for mothers, this would suggest that this was more of a potential mediator for mothers than for fathers. Future analyses of the initial interview data correlating parent beliefs regarding the development of emotional, behavioural, social and sexual problems in their abused child should help to clarify this relationship further.

A final consideration, consistent with the research on family variables mediating the adjustment of children who were sexually abused, is that chiasmal effects occurred in the reverse direction. That is, parental response, especially maternal distress affected the subsequent adjustment of their child (Conte & Schuerman, 1987; Esquilin, 1987; Friedrich et al., 1987; Wolfe & Gentile, 1992; Wyatt & Mickey, 1987). As this thesis did not use the data from the Extrafamilial Sexual Abuse Project obtained from child or teacher reports, and the only indices of pre-abuse functioning were from the interview, it is difficult to disentangle the exact nature of the relationship. Figley (1988b) and Janoff-Bulman (1992) have cautioned against representing the family as the victimizing system. They note that the bias in psychological literature to assume that the family created the distress rather than that the family experiences distress as a consequence of a family's traumatic experience, is not supported by the empirical literature. In this respect, both fathers and

mothers in this study appeared to be in tune with their reports of their child's level of internalizing behaviour with the intensity of their own distress mirroring that they reported in their child at the six-month assessment.

The Role of Perceived Social Support in Case Parents' Adjustment

The quality of perceived social support was an important predictor of maternal distress at the three-month assessment even after post-traumatic stress symptomatology and perceptions of child and parent distress were entered. Such a relationship could not be tested for fathers. Consistent with constructivist self development theory (Green, Wilson, & Ludy, 1985; McCann & Pearlman, 1990), social support was assessed based on the parents' perceptions and psychological experiences of the availability of others to meet their emotional needs rather than the objective number of people used since disclosure. The key issue focused on was whether they felt they had personal and community support in general, and more specifically, support for the expression of their feelings. This was judged to be important because the clinical literature repeatedly advises parents against showing their rage, anger and guilt to their abused child (MacFarlane et al., 1986; Reyman, 1990).

The fact that social support was so relevant for mothers is consistent with the literature on women's psychological experience which proposes that women adopt a more relational perspective in their interactions with the world (Chodorow, 1978; Gilligan, 1982) and in their perceptions of the self (Kaplan, 1987; Miller, 1986, 1987) than men. These theorists place as central to women's experience their sense of connection, with their sense of

personhood grounded in the motivation to make and promote relatedness with others (Miller, 1985). Lifton (1979) and McCann and Pearlman (1990) have both addressed the issue of connectedness in traumatized populations. Lifton describes a process of 'broken connection', a sense of severing one's identification with other human beings which accompanies traumas affecting a group. This is consistent with the sense of social isolation and alienation identified by Ehrensaft (1992), Reyman (1990), and Kiser et al. (1991) as common to the experience of parents of children who were victims of extrafamilial sexual abuse. Indeed in the present study's sample, 58.5% of mothers and 34.8% of fathers reported feeling alone as a parent of a sexually abused child at three months post-disclosure. This was less salient at the six-month period with 38.8% of mothers and 21.1% of fathers endorsing such feelings.

Given that the sexual abuse of one's child places parents at risk for secondary traumatization because of their connectedness with the victim (Figley, 1989a), one could propose that traumatization would be heightened in mothers who place a high value on connection and on a sense of empowerment in their role as a parent. If such connection is more important for women, and is so intimately connected with the sense of self, one would expect that the quality of support provided by others would play a key role in post-traumatic adjustment and recovery.

Similarly, McCann and Pearlman (1990) propose that post-trauma reactions involve key disruptions in cognitive schema related to intimacy. The need for intimate connection with others becomes fragile and associated with pain, and loss making it

difficult to maintain a connection with others without risk to the self. They also extend the loss of connection to the traumatized person's sense of connection with themselves, resulting, for some, in an inability to tolerate being alone.

Janoff-Bulman (1992) suggests that the people offering social support to the victimized person play a special role in challenging the key assumptions shattered following a traumatic event: "the world is benevolent; the world is meaningful; the self is worthy" (p.6). One of the key tasks involved in trauma resolution is rebuilding a positive sense of the self and a non-threatening view of the world. Through their interactions with others, mothers may receive experiential information about whether the world is actually malevolent, and whether their perceived worth in the eyes of others has changed because of the traumatic event. Because mothers are also more likely to be the primary support for their abused child, one would also expect that the social support they receive would also influence the perceptions they formulate about their abused child and the 'damage' done to their family system.

Modifications to the Secondary Traumatization Model

The study's results suggest that the model for secondary traumatization in parents should be revised. In particular, the objective aversive aspects of the traumatic event do not appear to play an important role in the prediction of secondary traumatization. Rather, in keeping with Figley's (1985,1989) theoretical basis of secondary traumatization, a measure of the degree of connectedness to the traumatized family member may have been overlooked in the standardized measures chosen for the study.

Specifically, the level of attachment in the parent-child dyad and the spousal dyad may play a primary role in predicting what parent is more vulnerable to chiasmal and vicarious effects at a particular time, and may partially explain the gender differences found in the initial 6-month period following the disclosure of extrafamilial sexual abuse.

For example, Osherson (1992), in his theoretical formulation of attachment in men, suggests that father-child attachment is more ambivalent because of a Western culture undercurrent which implies that fathers are not important emotionally to the family. Central to his thesis is that men have an inner conflict over attachment to people they love: they need to connect but are reluctant to do so. He further suggests that attachment is likely to be stronger in the spousal dyad. If one accepts these premises, the model would predict that those more closely attached to their partner would be more vulnerable to chiasmal effects at a later time following support of a symptomatic mother.

This addition of an attachment domain also requires that another element be added to the cognitive appraisal domain. Not only are perceptions of child distress relevant, but perceptions of distress in the partner also become potentially important predictors.

It is less clear whether parents' perceptions surrounding the sexual abuse are relevant. Although the study failed to find any unique predictors in this area, this may have been a function of the measure chosen (Parent Perception of Events Scale) rather than a weakness with the theoretical construct.

Because the environmental sensitivity domain could not be adequately tested for fathers due to sample size restrictions, it remains unclear whether further revisions are required to the model for fathers. There was, however, some support for the importance of the cognitive and emotional domains in the prediction of fathers' level of adjustment. All three subjective domains were relevant for mothers.

Clinical Implications

The findings from this study suggest that regardless of whether maternal distress developed prior to their child's sexual abuse, or as a function of the disclosure, mothers as a group are vulnerable to experience secondary traumatization effects and that these effects do not resolve themselves at least in the short-term. From a systems perspective, this means that not only must other members cope with potentially distressing reactions in the abused child, they must also adjust to the changes that each member experiences. Although case fathers as a group were not significantly different from comparison fathers, and actually felt more effective as fathers, the secondary trauma literature would propose that they too will be vulnerable to experience chiasmal effects as they potentially support a distressed partner and a distressed child. Indeed, case fathers' mean and risk levels of emotional distress was not significantly lower than that of their partners which suggests that one should not minimize the effect on fathers. Potential delayed effects occurring later than six months post-disclosure would not have been detected in this study. Therefore, it is important that clinicians assess the full impact of the traumatic stressors associated with extrafamilial sexual

abuse across the whole family system at the individual, couple, parent, and parent-child subsystems. If this were done routinely, clinicians could access a wealth of information from the subgroup of parents who cope effectively, as well as determine what kind of support from the closest family members ameliorates the intensity of distress in the child and the mother.

The study's results also appear to indicate that a crisis intervention approach may not be adequate for this population. The initial levels of global emotional distress persisted at the six-month period, with only intrusive symptoms declining for mothers. Given that mothers with clinical levels of distress at the three-month assessment were significantly more likely to have higher levels of post-traumatic stress disorder symptomatology at the six-month assessment, it appears crucial to direct intervention towards these distressed mothers early to prevent the development and persistence of chronic post-traumatic stress disorder. For both mothers, and fathers, the level of avoidant symptoms did not significantly decline at the six-month assessment which suggests that parents using avoidant strategies may be at risk for the development of chronic post-traumatic stress disorder (Newberger et al., 1991).

The timing of intervention also appears to be crucial for several groups: families with abused children who are perceived to be symptomatic, parents with a sexual abuse history, mothers without adequate social support, and families involved in court proceedings. Mothers appear to be more reactive to externalizing behaviour in the initial three months whereas both mothers and fathers are vulnerable to experiencing higher levels of emotional

distress if their child is perceived to be withdrawn or depressed at the six-month assessment. Therefore, to prevent chiasmal effects in parents, it may be important to treat symptomatic children early.

The results also suggest that parents with a history of abuse, even without having an abused child, are vulnerable to experience greater interpersonal sensitivity, paranoia, and obsessive-compulsive behaviour. Although case parents with abuse histories did not present significantly different than this group, or case parents without such histories during the first six months, the longterm effects have yet to be established. Relative risk trends indicate that special attention to the needs of this group is warranted at both the initial and six-month stage. Given that several of the case mothers verbalized intentionally delaying dealing with their own abusive past until they were sure their child was healed, special attention should be paid to ensuring that their children receive early intervention and to validate the importance of early intervention to meet their own needs.

Similarly, early therapeutic support for mothers without adequate personal support appears to be crucial to facilitate expression of feelings and to relieve emotional distress. Parents in families involved in court proceedings also may need attention in the area of stress management. The anticipatory stress of going to court appeared to be as relevant as the actual court process which suggests the need to intervene early, at frequent intervals, and following court to allow for the development of stress management skills and for debriefing.

Four treatment approaches appear to be relevant in addressing the needs of parents in traumatized families following extrafamilial sexual abuse: individual therapy, couple therapy, parent support groups, and family therapy.

Individual therapy may be important for parents with unresolved past trauma issues (not only sexual abuse), or who feel unable to control their feelings about the abuse in a way that will enable them to support their child. For many parents, therapeutic work also includes normalizing their experiences within the post-traumatic stress disorder framework, and validating that their sense of connection with their child has enabled them to experience the intensity of trauma so personally. For those experiencing clinical levels of distress, this form of therapy appears crucial to prevent the development of chronic post-traumatic stress disorder symptomatology, psychiatric relapse, or role reversal with the abused child assuming a nurturing and comforting role for the parent.

Couple therapy has rarely been advocated as a treatment method even though several authors recognize the potential for exacerbation of marital problems (Bernbaum, 1986; Kiser et al., 1991). Kiser et al. found that dyadic adjustment and expression of affection could be enhanced through family therapy. However, several issues may be more suited for dyadic work: feelings of responsibility for the abuse, assigning of blame to the partner, maternal withdrawal and generalization of distrust of men to her partner, and resentment of differential coping styles related to the abuse. A particularly important area in conjoint sessions is the facilitation of sexual expression. Intrusive images of the

abuse during sexual expression, and fears of showing affection in front of the abused child are common and are likely to be even more salient in case parents with sexual abuse histories. Given that the present study found social support to be especially relevant for case mothers' level of adjustment, therapeutic endeavours to facilitate bonding with her closest support (her partner) appears warranted to avoid further chiasmal effects. It will also reinforce the use of appropriate adult support to avoid burdening the abused child.

The third therapeutic resource, parent support groups, appears crucial to help mothers and fathers who have experienced a deterioration in their self-esteem as parents or who lack adequate personal support for the expression of their feelings. The issues typically addressed in these groups for parents of children who have experienced extrafamilial sexual abuse are: confronting their guilt, anger and sadness over failing to protect their child, reaffirming parents' efficacy and worth, normalizing the behaviour and resilience of children, helping parents to discriminate between normal developmental issues from abuse-related issues, and teaching parent management techniques to cope with the sequelae observed in their abused child (Bernbaum, 1986, Ehrensaft, 1992, Kiser et al., 1991). Rivera (1988) highlights the clinical value of such groups in connecting traumatized parents and easing the sense of isolation and stigmatization following the disclosure of sexual abuse. In addition, these groups convey the message that sexual abuse is a social problem that touches many "good" families. Given that poor parenting abilities and low parent self-esteem are also associated with a history of sexual abuse,

parenting groups specifically geared to abuse survivors appear to be crucial in preventing and reducing the risk for this group's children to be abused and revictimized.

The fourth approach endorsed by Figley (1988b), Kiser et al. (1991), Reyman (1990) and Van Scoyk et al. (1988) is the use of family therapy. Figley advocates this approach as the treatment of choice with families experiencing post-traumatic stress disorder symptoms to alleviate current distress and to provide families with more adaptive coping skills for future stressors. The present study's findings indicated that case families were less cohesive and desired more adaptability in their families. Given that the secondary traumatization theory rests on the premise that it is due to the connectedness of family members that they are vulnerable to vicarious and chiasmal effects, it makes sense to use this approach when more than one family member is symptomatic to prevent an escalation of chiasmal effects and withdrawal when pain becomes intolerable. This is also the only approach which allows consideration of the effects of sexual abuse disclosures on non-abused siblings, and prevents the family from organizing itself around presenting symptoms (Kiser et al., 1991). Kiser et al.'s description of the type of family who sought family therapy following extrafamilial sexual abuse aptly portrays the issues identified in this study's results: "The disruptions in their emotional stability, their belief systems, and their support systems were affecting their ability to deal with this crises, especially concerning their sense of competency" (Kiser et al., 1991, p. 38). Hence such family therapy attempts to enhance cohesion, return control to the family, build on child and parent

competencies, and identify and validate growth enhancing coping strategies.

Despite the relevance of these four treatment modalities for families of children who have experienced extrafamilial sexual abuse, the families in this study were most likely to seek individual child therapy and individual parent therapy even though more than 40% of mothers and fathers desired family therapy. This speaks to the availability of services and points to the need for clinicians to expand their treatment focus to potentially traumatized families and to normalize the potential for all close family members to be vulnerable to experiences of post-traumatic stress disorder symptoms. The indirect benefits of child individual therapy for the parent represent another, somewhat limited, way to influence parent functioning. By diffusing the sense of responsibility for child functioning, this approach may represent a point of entry into mental health services to access the four approaches mentioned here.

It is also important to stress that more than half of the parents did not experience clinically significant levels of emotional distress. This suggests that the majority of parents cope fairly well despite the stressors which follow the disclosure of extrafamilial child sexual abuse. Clinically, it is therefore important to emphasize family strengths when dealing with such trauma.

The study's findings also provide some indications of the type of parents who are likely to cope well in the initial six-month period following the disclosure of extrafamilial sexual abuse. For mothers, a number of factors appear to be relevant.

Mothers who cope well initially appear to experience less emotional distress and post-traumatic stress symptomatology at six months post-disclosure. Similarly, mothers also tend to experience less distress if they have an abused child who is perceived as being asymptomatic, if they have adequate personal and community supports on which to draw to express their feelings, if they are able to maintain their self-esteem as a parent, and if they perceive their family as being able to adapt in the direction desired by them. For fathers, the findings must be viewed more tentatively due to sample size restrictions. Nevertheless, the present study indicates two potentially important variables. Fathers who experience less distress initially and who do not perceive their child as displaying internalizing symptoms at the six-month period were more likely to have lower levels of emotional distress. These findings suggest that parents who cope well initially may be better prepared to deal with the longterm consequences of extrafamilial sexual abuse.

Strengths and Limitations of the Study

The present study improves on previous research by using a large sample of mothers and fathers from multiple referral sources (Children's Aid Societies, Victim/Witness Programs, and the Child Protection Team of the Children's Hospital of Eastern Ontario), rather than relying solely on a therapeutic sample. It also used standardized measures and measured multiple constructs derived from a theoretical framework for parental adjustment to secondary traumatization. In addition, case refusals were monitored for differences in demographic and sexual abuse experiences. It is the first study to monitor parental adjustment following

extrafamilial sexual abuse using multiple consistent assessment times from the point of disclosure. Further, unlike the other studies in the area, this study focused on families of children who were beyond the pre-school age (5-15) and represented a more heterogeneous source of perpetrators (not limited to daycare centres).

Nevertheless, several limitations must be considered in interpreting and generalizing the results. In spite of the analyses of refusers, a self-selection bias may have influenced the sample investigated. In particular, in reviewing the records at the referral agencies, one group which appeared to consistently self-select out of the study were families whose abused child was an adolescent flagged as at risk for abuse because of her/his own behaviour (i.e. a history of running away, substance abuse, or prostitution). In addition, fathers who refused to participate with their partners were more likely to have partners who described their relationship as maritally distressed. It is possible, therefore, that the most distressed case fathers may have self-selected out leaving a group more representative of highly functional fathers. The small sample of fathers may also have resulted in a loss of power to detect real differences, and may have underestimated the importance of predictors of fathers' emotional adjustment.

Secondly, the analyses of the contribution of court-related variables must be considered very tenuous given that the majority of parents still had ongoing involvement in court at the six-month assessment, and that the time since previous and forthcoming court proceedings could not be consistently determined.

Although the research project did not have a therapeutic focus, it is possible that the ongoing follow-up with the research team was perceived as providing some support or intervention which alleviated some of the social isolation experienced by case parents. Similarly, it is unclear whether the comparison group had inherent biases which motivated them to participate (e.g., marital distress for comparison fathers).

Though the results indicated differences between case and comparison groups based on the sexual abuse of their child, without a trauma comparison group, as recommended by Conte and Schuerman (1987), it is difficult to determine whether the obtained results were specifically related to extrafamilial sexual abuse, to trauma affecting children in general, or to pre-morbid family functioning. Briere (1992) however, advises against matching other types of abuse groups because these groups may not represent the unmatched population from which they were taken. The present study chose a non-clinical control group because the traumatization framework assumes essentially normal functioning in most families prior to a traumatic event (Figley, 1988b). However, it is important to consider that differences between the demographics of the two groups, especially those related to socio-economic status, may have confounded the results obtained.

Another limitation common to most studies in the area of sexual abuse was the choice of self-report measures which were oriented to detecting psychopathology. Such an approach made it difficult to identify the strengths within these families, even though there were a higher percentage of case families who scored in the non-clinical range. Hence the courage and strength evident

to the researchers while interviewing the families was not captured in the standardized measures used. In addition, the study lacked direct measures of family coping styles. Siblings' reactions as members of the family system were not assessed. Nor were they used as respondents on parent and child victim functioning.

Although the Parent Perception of Events Scale (Wolfe & Wolfe, 1988) had good face validity for the parents, because its psychometric properties have not been established, it was difficult to clarify whether the lack of significant findings in parents' cognitive appraisal of the events surrounding the abuse was due to the theoretical construct or how it was measured. However, most parents readily identified with the items tapped by this measure. They further suggested an area of blame neglected by the scale which they found to be a salient issue for them: their perceptions of the degree to which they blamed their partner and were blamed by him/her. Further assessment of the psychometric properties of this instrument will be part of the larger Extrafamilial Sexual Abuse project.

Lastly, the generalizability of findings is restricted to families whose children were able to disclose or admit to sexual abuse within one year of its last occurrence, and may not extend to parents of sexually abused preschoolers. However, the similarities of some of the findings to other studies suggests that some aspects of parent experience may overlap regardless of the age of the child.

Future Directions

As identified by Figley (1988b), the field of secondary traumatization of families, and the potential for the development of chiasmal and vicarious effects in the closest supporters of victims has received minimal attention from researchers. Instead, the family has been conceptualized as a 'victimizing' system whose family dysfunction placed the family at risk for experiencing traumatic effects and for coping in maladaptive ways following the event. This bias assumes that families (in particular, parents) created the sequelae rather than experienced them as a result of one member's traumatic episode (Figley, 1988b; Janoff-Bulman, 1992). Without measures of the family's functioning prior to the event, it is difficult to know whether findings represent a general family coping style, individual parent coping style, or an abuse-specific adaptation (Briere, 1988; Leitenburg et al., 1992). Nevertheless, acknowledgement of family members' genuine attempts to support their abused child does not preclude the recognition of problems and strains in survivors' families (Janoff-Bulman, 1992).

In the same vein, one cannot ignore that psychological adjustment preceding the abuse disclosure may play a major role in adjustment to the traumatic stressors associated with extrafamilial sexual abuse. It is therefore important that future research include assessment of individual and family traumatic events which precede the abuse disclosure and the level of resolution achieved on prior family issues (Briere, 1992; Figley, 1989a). The use of traumagrams as described by Figley (1989a) may facilitate this understanding.

Given that a higher proportion of case parents in this study reported child sexual abuse histories than would be expected in the general population, special attention should be paid to the factors which enhance or impede parenting in parents who report such histories. Studies by Cole & Wagner (1989) and Cole et al. (1990) are unique in this area in their use of standardized measures assessing parenting attitudes in survivors' family of origin and their family of procreation. This population represents a group warranting prospective longitudinal studies to determine the factors which place their children at risk for sexual abuse, and the factors which protect their children, and enhance parent well-being. In addition, assessment of trauma should be expanded to encompass a wider range of childhood traumas which could negatively affect parenting.

A review of the literature on the psychological adjustment of parents revealed very little normative data on the functioning of adults who are also parents. Most measures of adult psychological well-being provide norms based on age or clinical status irrespective of parenting status or gender of parent. Hence, without parent control groups, studies cannot attribute observed differences from the developed norms uniquely to a traumatic event. This study also suggests that the experiences of mothers differ from fathers with a more generalized traumatic response occurring for mothers. Therefore researchers should be cautious in combining these groups when drawing conclusions about parent functioning.

General family stress theory has also highlighted the need to understand the influence of spousal adjustment and the

interaction of family cohesion and adaptability on family adjustment to normative and non-normative stressors (Lavee & Olson, 1991; McCubbin & Thompson, 1986; Olson & McCubbin, 1982; Olson, McCubbin & Lavee, 1984). Lavee and Olson (1991) propose that future research should focus on how families with different interaction patterns along the combined dimensions of adaptability and cohesion process general family stress. Their approach suggests that the vulnerability to experience traumatic events and to successfully adapt to change may be experientially different dependent on differing family system types.

Research also needs to focus attention on the interaction between maternal and paternal adjustment. Although researchers have recognized the importance of parent adjustment on child functioning, the interplay between parents' individual reactions to traumatic events which affect their family has yet to be established. A critical question requiring further clarification is why fathers are not as vulnerable to immediate chiasmal effects. Is this adaptive, or as Kelley (1990) suggests, does this place fathers at a greater risk for delayed post-traumatic stress symptomatology? Multimodal longitudinal assessment of family members is needed to clarify which partner or family member is most vulnerable to experience emotional distress at different phases of the trauma recovery process. Such an approach must recognize that reactions from intimates and loved ones may be experientially different from those of more distant people offering social support to the abused child (Janoff-Bulman, 1992).

The failure to find any clear abuse-related predictors of parent functioning suggests that cognitive factors such as the

parent's perception of the traumatic event and its effect on their family may be relevant. However, in order to conclude that the changes in parents' adjustment are directly related to cognitive factors, the cognitive assumptions which are typically challenged following a traumatic event need to be measured directly in parents of abused and non-abused children (schemas relating to the benevolence of the world, the meaningfulness of the world, and self-worth). The World Assumptions Scale (Janoff-Bulman, 1989) is a psychometrically sound measure which has been used with a variety of victimized and non-victimized populations. Given that children are still developing their schemata about the self and the world, and that they are vulnerable to adopt the perceptions of more influential family members (Figley, 1989a), an understanding of the effect of disclosures of sexual abuse on parent's schemas appears to be an important area of future investigation.

Lastly, the field of traumatic stress studies is now recognizing that an understanding of the full human impact of traumatic stressors requires moving beyond a victimization orientation to a traumatization orientation (Figley, 1988b). Victimization limits its focus to people who are objects of abuse, whereas traumatization acknowledges that all involved in promoting the recovery of people exposed to highly stressful events are at risk to experience secondary traumatization effects. This perspective, in essence, validates the connectedness of all who encounter traumatized families and suggests the need to also study what hinders or enables professionals and supportive others to interact in growth-promoting ways with traumatized families.

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Appendix A

Descriptive Information on the Age Distribution, and Abuse Characteristics of the Sexually Abused Children

- Figure A-1 Ages of Participants' Abused Children at the Time of the Disclosure
- Table A-1 Type of Sexual Abuse Experienced by Participants' Children Based on The Nature of Abuse Form
- Table A-2 Type of Coercion and Physical Injury Experienced by Participants' Children Based on the Nature of Abuse Form
- Table A-3 Duration and Frequency of Abuse Experienced by Participants' Children Based on the Nature of Abuse Form
- Table A-4 Characteristics of the Perpetrators of the Sexual Abuse on Participants' Children

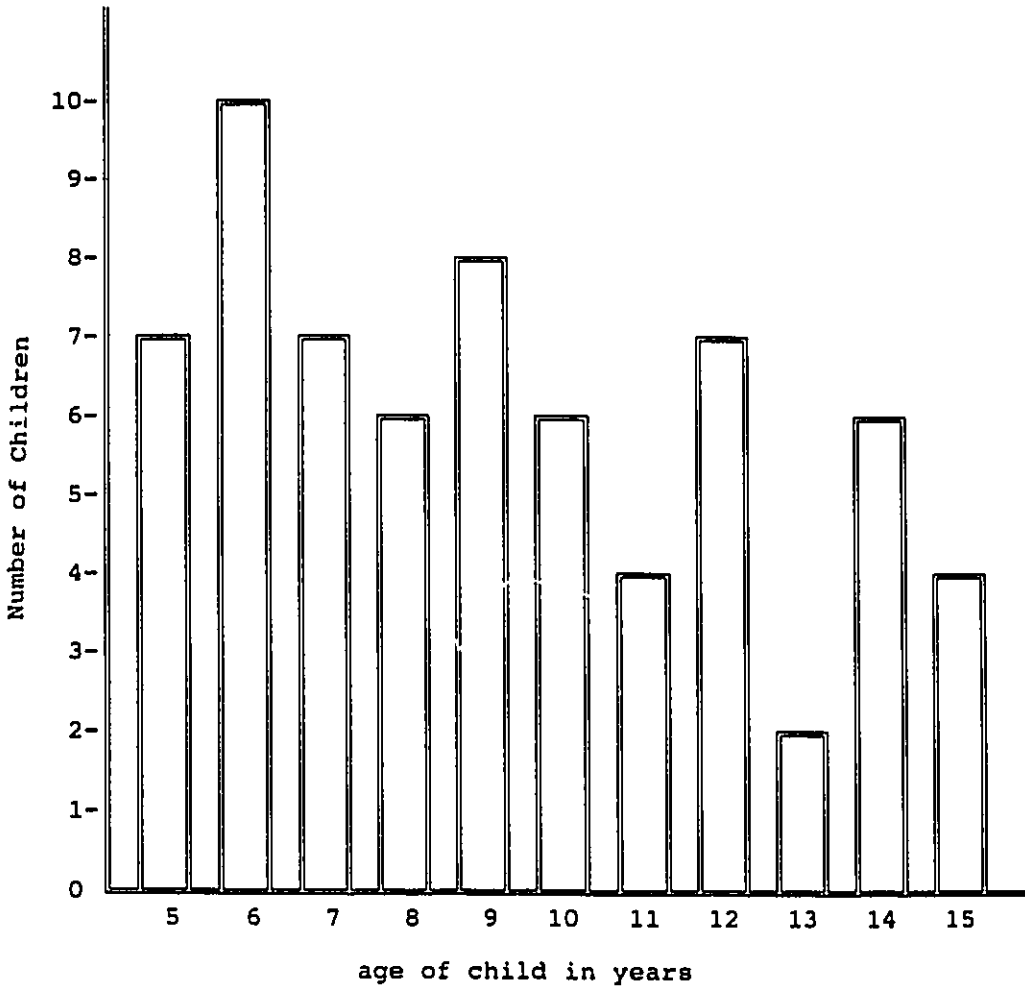


Figure A-1 Ages of Participants' Abused Children at the Time of the Disclosure.

Note: Total number of abused children = 68. One child who was the older sibling of a target child was not included in the histogram as she was 17 at the time of disclosure.

Table A-1

Type of Sexual Abuse Experienced by Participants' Children' Based on The Nature of Abuse Form

Abuse Characteristic	Most Severe Type of Abuse		All Documented Types	
	n	(%)	n	(%)
Type of Sexual Abuse				
Invitation for Sexual Behaviour	0		12	(17.6)
Exposure	0		20	(29.4)
Forced to View Pornography	0		7	(10.3)
Forced Exposure of Child's Genitals	0		8	(11.8)
Open-Mouthed Kissing	1	(1.5)	9	(13.2)
Clothed Fondling	14	(20.6)	37	(54.4)
Unclothed Fondling	19	(27.9)	40	(58.8)
Simulated Intercourse over Child's Clothes	2	(2.9)	4	(5.9)
Digital Penetration	2	(2.9)	13	(19.1)
Oral Contact with Child's Genitals	8	(11.8)	14	(20.6)
Oral-Genital Contact with Perpetrator	3	(4.4)	9	(13.2)
Vaginal Intercourse	7	(10.3)	10	(14.7)
Anal Intercourse	5	(7.4)	8	(11.8)
Forced Participation in Pornography	4	(5.9)	4	(5.9)
Other Worse	2	(2.9)	1	(1.5)
Missing information	1	(1.5)	1	(1.5)

Note: *Sample is based on 62 families and all abused siblings who participated. 5 families had 2 children who were sexually abused; 1 family had 3 children who were sexually abused.

Table A-2

Type of Coercion and Physical Injury Experienced by Participants' Children Based on the Nature of Abuse Form

Abuse Characteristic	Most Severe Most Severe Type Only		All Documented Types	
	n	(%)	n	(%)
Type of Coercion				
None mentioned	23	(33.8)	23	(33.8)
Status differential	8	(11.8)	15	(22.1)
Use of blackmail	2	(2.9)	3	(4.4)
Offer of reward or affection	0	(14.7)	13	(19.1)
Threat of injury	5	(7.4)	12	(17.6)
Withdrawal of affection	2	(2.9)	4	(5.9)
Physical force/violence	9	(13.9)	14	(20.9)
Threat of death	4	(5.9)	5	(7.4)
Other worse	4	(5.9)	5	(7.4)
Missing information	1	(1.5)	1	(1.5)
Type of Physical Injury				
No physical injury	58	(85.3)	58	(85.3)
Non-sexual injury	4	(5.9)	5	(7.4)
Sexual injury	1	(1.9)	2	(2.9)
Sexually transmitted disease	5	(7.4)	5	(7.4)

Note: * Sample is based on 62 families and all abused siblings who participated.

Table A-3

Duration and Frequency of Abuse Experienced by Participants' Children
Based on the Nature of Abuse Form

Abuse Characteristic	n	(%)
Duration of Abuse		
one day	34	(50.0)
one week	1	(1.5)
one month	3	(4.4)
1 to < 6 months	8	(11.8)
6 to < 12 months	7	(10.3)
12 to < 24 months	3	(4.4)
24 to < 36 months	3	(4.4)
36 to < 48 months	3	(4.4)
48 to 84 months	2	(2.9)
unknown	3	(4.4)
Frequency of Abuse*		
single incident	28	(41.2)
twice	6	(8.8)
3 incidents	10	(14.7)
4 to 10 incidents	11	(16.1)
11 to 30 incidents	4	(5.9)
36 to 52 incidents	2	(3.0)
60 to 260 incidents	3	(4.4)
more than once but unclear	3	(4.4)
unknown	1	(1.5)

* In cases where duration was known but frequency unclear, frequencies were calculated using an estimate of once per month. If both duration and frequency were unknown, no estimate was made.

Table A-4

Characteristics of the Perpetrators of the Sexual Abuse on Participants' Children^a

Characteristic	n	(Percentage)
Relationship of Perpetrator to Child^a		
Non-Relatives:		
Peer	4	(5.9)
Stranger	5	(7.4)
Neighbour	10	(14.7)
Family Friend	13	(19.1)
Boarder	3	(4.4)
Boyfriend of Parent	1	(1.5)
Babysitter	3	(4.4)
Friend's Father	6	(8.8)
Son of Parent's Friend	2	(2.9)
Acquaintance	5	(7.4)
Babysitter's Relatives	2	(2.9)
Boarders of Extended Family/Friend	2	(2.9)
Other Non-Relative ^b	7	(10.3)
Extended Relatives:		
Grandfather	1	(1.5)
Uncle (unrelated by blood)	4	(5.9)
Perpetrator Known by Child/Family		
yes	55	(80.9)
no	13	(19.1)
Perpetrator Involved Socially with child		
yes	29	(42.6)
no	39	(57.4)
Number of Perpetrators		
1	64	(94.1)
2	4	(5.9)
Gender of oldest perpetrator		
male	67	(98.5)
female	1	(1.5)
Age of Perpetrator		
child with <5 yrs. age difference	2	(2.9)
adolescent with <5 yrs. age difference	4	(5.9)
adolescent with >5 yrs. age difference	17	(25.0)
adult with >5 yrs. age difference	45	(66.2)

Note: ^aFor cases with 2 perpetrators, information on the oldest perpetrator was used. ^bThis category included a farmhand, 2 store clerks, a cadet leader, and relatives of families for whom 2 children were babysitting.

Appendix B

Recruitment Package for Referral Agencies

Description of the Extrafamilial Sexual Abuse Project

Recruitment Procedure

Procedure to be Followed by the Coordinator in Each Recruitment Agency

Masterlist of Families Contacted by Referral Agency

Parent and Child Reactions to Extrafamilial Child Sexual Abuse

Description of the Extrafamilial Child Sexual Abuse Project

This study is a multisite research project directed by Dr. Ian Manion of the Psychology Department at the Children's Hospital of Eastern Ontario and Dr. Phil Firestone of the Child Study Centre at the University of Ottawa. It is being funded by the Family Violence Initiative at Health and Welfare Canada. The study focuses on families where extrafamilial child sexual abuse has occurred and follows them 3, 6, 12 and 24 month intervals following the disclosure of abuse. Although families usually participate as a unit with one person working with the parents, and another person working with the abused child, some families choose to only participate as parents.

The study does not require the parents or children to describe the details of the abuse. We are interested in how the disclosure of abuse and its aftermath affect family members' functioning individually, as a couple, as parents, and as a family. The first assessment usually takes about 2 1/2 hours for the child and 2 hours for the parents. Later assessments take 1 hour for the child and 1 1/2 hours for the parents. Assessments involve an interview with the parents and standard questionnaires which are completed by the parents and read to the child. Teachers are also asked to complete a questionnaire on the child's functioning at school with the parents' consent. This questionnaire does not identify the child as having a history of abuse. Families usually choose to be seen in their home but, if they prefer, can be seen by us at CHEO or at the local Children's Aid Society. These families are compared with families in the community who have a child of the same age who has not been abused.

Our goals in conducting this project are:

1. to identify the types of families which respond to extrafamilial sexual abuse as a traumatic event.
2. to learn more about the typical course of adjustment for parents and children following the disclosure of extrafamilial sexual abuse (including their adjustment to related stressors like the court process).
3. to identify what factors are predictive of good and poor adjustment for parents and children.

If you have any questions about the study or the suitability of a particular family, you may contact any members of the research team at the numbers listed on the last page. Joanne McIntyre and Gosia Ligezinska are the primary people working with the families.

Recruitment Procedure

For the past year families have been recruited through the Child Protection Team at CHEO, the Children's Aid Society of Ottawa-Carleton, and the Victim/Witness Program at the Ottawa Court House. We are presently expanding the agencies involved to include Kingston, Stormont, Dundas & Glengarry, Prescott-Russell, Pembroke-Renfrew, and Lanark.

..... at the Intake department has agreed to be responsible for coordinating referrals originating from the CAS in We ask that intake workers become familiar with the inclusion criteria for potential families which is listed below.

Our definition of extrafamilial sexual abuse includes both third party abuse and abuse by family members outside the nuclear family.

Following the suggestions of the reviewers at Health and Welfare, we are defining extrafamilial child sexual abuse as one or more sexual experiences prior to the age of 15 with either:

1. someone who is not related by blood or marriage (official and common-law)
- OR 2. who is a blood relative who is not residing with the child and is not part of the nuclear family.

We do not require a minimum 5 year age difference between the child and the perpetrator.

Inclusion Criteria:

1. The child is between the ages of 6 and 15 years.
2. The child has disclosed within the past three months, an extrafamilial sexual abuse incident which occurred no longer than one year prior to disclosure as documented by the involved agencies' records. When more than one child in a family has experienced abuse, all children will be included.
3. 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 prior to the sexual abuse incident.
4. The child is English speaking and has an estimated IQ of 80 or above.
5. The parent is English speaking and has a minimum of grade six education.
6. Children with a psychiatric history will not be excluded unless their psychiatric disorder precludes their ability to complete the measures (i.e. active psychosis).

Exclusion Criteria

1. The child who is institutionalized, has a major handicap, i.e., blindness, end-stage renal disease, terminal illness and major motor deficits, or who has experienced both intrafamilial and extrafamilial sexual abuse will be excluded.

If you have a family which meets the criteria for the project, we suggest that you follow the following procedure:

1. At the time of your initial phone contact with the family, we ask that you tell them that there is a study going on which is looking at how extrafamilial child sexual abuse affects families. Then ask them if they would be willing to receive a letter which describes the study in greater detail. We suggest that you let them know that their decision whether or not to participate will not affect the services they receive from any agencies with which they are currently involved.

2. If the family agrees to receive a letter, we ask that you mail them the information package which contains an information letter, a response form on which they indicate their decision and a return envelope. Your local CAS project coordinator will decide where these letters are kept. [The CAS in Ottawa keeps these in a box in the intake dept.] These letters will be returned to the agency from which they were sent.

3. At the time of mailing, we ask that you write the name, and phone number of contacted families on the master lists provided. The names of families sent letters will be collected on a weekly basis and should be given to (the CAS project coordinator). Families who have not indicated their decision in two weeks will be contacted by us regarding their decision.

4. If you know of any families which meet our criteria with whom you have had contact since November 1990, they may also be sent letters.

Funding Agency:	HEALTH AND WELFARE CANADA MENTAL HEALTH DIVISION ROOM 567 JEANNE MANCE BUILDING TUNNEY'S PASTURE, OTTAWA File #: 6606-4154	Contact Person: Katherine Stewart Coordinator, Family Violence (613) 954-8650
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CHEO Cost Centre: 9977

INVESTIGATORS:

Ian Manion, Ph.D. CHEO, Department of Psychology
401 Smyth Rd. Ottawa, K1H 8L1
Work: 737-2492

Philip Firestone, Ph.D. Child Study Centre
University of Ottawa
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CO-INVESTIGATORS:

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Ron Ensom, M.S.W. CHEO, Department of Social Work
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Cossette Chafe
Victim/Witness Program
Court House, Room 1179
161 Elgin St. Ottawa, K2P 2K1
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George Wells
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RESEARCH ASSISTANTS

Malgorzata Ligezinska (Gosia) Dept. of Psychology
CHEO: 738-3625
Child Study Centre: 564-8101

Helene Gauthier
&
Yassemin Cohanim
Dept. of Psychology
CHEO: 738-3625

**Procedure to be Followed by the Coordinator of the ESA Project
in each Recruitment Agency**

1. On a weekly basis, check with your staff members whether they have contacted any families meeting the inclusion criteria for the study. If families have been contacted, they should have returned the masterlist to you. Please supply these workers with a new masterlist. If no families have been contacted, they will give you this information verbally.
2. Families who have been sent an information letter, should have sent their response back to your agency in an envelope labelled "The CHEO Project, c/o "(CAS project coordinator)" within 2 weeks of receiving the letter. If you have not received their response after 2 weeks, we will take over contacting them by phone regarding their decision. [If you feel this would be violating their privacy, you may change this and ask the intake worker involved to contact the family].
3. Every two weeks, a representative from the ESA project at CHEO will contact you to ask about any families who have agreed to participate, or who need a followup phone call. We ask that you use the masterlists to tell us the name of the parents, phone number and the date on which they were first contacted.
4. Any letters from families who are interested in participating should be mailed to us in the prepaid envelopes addressed to " I. Manion, ESA Project".
5. Please let us know when you need more information letters. We have enclosed 10 letters as a starter kit.
6. For families who have refused to participate, we will be collecting basic demographic information. We ask that you keep track on the masterlist of the names of these families for us. [At the CAS of Ottawa-Carleton we have been designated "unpaid research assistants" which enables to collect this information ourselves. If you prefer to do this yourself, we will supply the appropriate forms.]

Appendix C

Information Letter for Case Families

Date _____

Dear _____,

Information Letter

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. Also participating are the Children's Aid Societies in Kingston, Stormont, Dundas & Glengarry, Prescott-Russell, Pembroke-Renfrew, and Lanark.

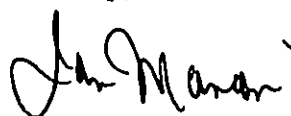
We are interested, more specifically, in seeing how sexual abuse affects the emotions and behaviours of children and their parents. If you agree to participate, two team members from the study will visit you at your home or, if you prefer, the appointment will be made at CHEO at our expense at a time 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: within the first three months of the disclosure of sexual abuse; 6 months after the disclosure; 12 months after the disclosure; and 24 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.

Sincerely,



Ian Manion, Ph.D., Psychologist

For: Philip Firestone, Ph.D., Psychologist
Ron Ensom, Child Protection Team, CHEO
Cossette Chafe, Victim/Witness Program
George Besner, Children's Aid Society of
Ottawa- Carleton

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

Medical Records Recruitment Sheet

Control Recruitment Data Sheet

Data to be matched:

Date of Birth of Child: Age:..... Sex:.....

Family Constellation: Single Parent Mother Two Parent
..... Father

Blishen Occupational Classification:

Names of Potential Families For Recruitment:

1. Name of Family Parent's 1st name.....
DOB of Child
Child's Name.....
Address:.....
.....

Phone Number.....

Name of Physician..... Date Notified.....
Address:
.....
.....

Response: Yes..... No.....

Date Family Contacted:.....
Response: Yes..... No.....

2. Name of Family Parent's 1st name.....
DOB of Child
Child's Name.....
Address:.....
.....

Phone Number.....

Name of Physician..... Date Notified.....
Address:
.....
.....

Response: Yes..... No.....

3. Name of Family Parent's 1st name.....
DOB of Child
Child's Name.....
Address:.....
.....

Phone Number.....

Name of Physician..... Date Notified.....
Address:
.....
.....

Response: Yes..... No.....

Date Family Contacted:.....
Response: Yes..... No.....

Appendix E

Physician's Letter

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.

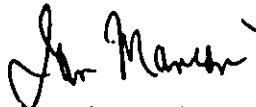
Potential comparison families have been selected from the medical records of the Children's Hospital of Eastern Ontario. We are seeking your permission to contact the family of (date of birth:.....). This family has been selected from the records in order to match the case subjects according to the age 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 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 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 behavioural functioning of children and their parents.

The family's participation in the project is fully voluntary and confidential. They are free to withdraw from the study at any time. 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.

Sincerely,



I. Manion, Ph.D., Psychologist

PARENTAL AND CHILD REACTIONS TO EXTRAFAMILIAL SEXUAL ABUSE

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):.....

Please indicate if this is:

- 1/ single parent family
- 2/ two-parent family
- 3/ do not know

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 the 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 (eg. blindness, end-stage renal disease, terminal illness or major motor deficits) will be excluded.

- Thank you -

Appendix F

Control Information Letter

Date: _____

Dear: _____ ,

Information Letter

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. Your 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. Also participating are the Children's Aid Societies in Kingston, Prescott-Russell, Pembroke-Renfrew, and Lanark.

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.

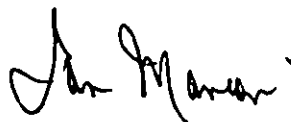
The study involves the assessment of typical emotions and behaviours of children and their parents. If you agree to participate, two team members from the study will visit you at your home, or if you prefer, the appointment will be made at CHEO at our expense at a time convenient to you. One team member 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 visit will be followed by three visits approximately 3, 9 and 21 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.

Sincerely,



Ian Manion, Ph. D., Psychologist

For: Philip Firestone, Ph. D., Psychologist
Ron Ensom, Child Protection Team, CHEO
Cossette Chafe, Victim/Witness Program
George Besner, Children's Aid Society
of Ottawa-Carleton

Appendix G

Recruitment Letter for Single Parent Association

ATTENTION: SINGLE PARENT FAMILIES

We are looking for single parent families with children between the ages of 6 to 15 to participate as comparison families in a research project directed by Dr. Ian Manion of the Psychology Department at the Children's Hospital of Eastern Ontario and Dr. Phil Firestone of the Child Study Centre at the University of Ottawa. The study is funded by Health and Welfare under the Family Violence Initiative.

The study compares families where there has been sexual abuse of a child by someone outside the family with families who have never experienced sexual abuse of a child. Having a group of families who have not experienced the sexual abuse of a child will help us better understand how abused children and their families differ following the disclosure of abuse from families who have the regular stressors associated with parenting and family life.

The study looks at the emotions and behaviours of children and parents using an interview and questionnaires at four time periods; an initial meeting is followed by three more visits at 3, 6 and 12 months later. Two team members will visit your home, or if you prefer, you can meet with us at the Children's Hospital (CHEO). One team member works with the child while the other works with the parent. We will also ask your permission to allow your child's teacher to fill out a behaviour checklist on your child similar to the one you will be completing. Each visit takes about 90 minutes. The questions do not talk about sexual abuse specifically and it is not necessary for your child to know that this is a study comparing them with abused children.

If you are a single mother or father who would like to contribute in a valuable way to our understanding of the effect of child sexual abuse on families, you can learn more about the study, by contacting Dr. Manion at 737-2492 or 738-3625. If you choose to be seen at the hospital, we will pay your parking.

Appendix H

Consent Form for Case Families

Informed Consent

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 along with the Child Protection Team at the Children's Hospital of Eastern Ontario, the Ottawa-Carleton Children's Aid Society, and the Victim/Witness Programs in Ottawa, Kingston and Pembroke. Also participating are the Children's Aid Societies in Kingston, Stormont, Dundas & Glengarry, Prescott- Russell, Pembroke-Renfrew, and Lanark.

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 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 for 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.

Each family will be visited: 1) within the first three months of the disclosure of sexual abuse; 2) 6 months after the disclosure; and 3) 12 months after the disclosure and 4) 24 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 I

Consent Form for Comparison Families

Informed Consent

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. Also participating are the Children's Aid Societies in Kingston, Stormont, Dundas & Glengarry, Prescott- Russell, Pembroke- Renfrew, and Lanark.

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 for 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 visit will be followed by two visits at approximately 3 and 6 month intervals. Each visit will take about 90 minutes of your time.

Your participation in the project is fully voluntary. You are free to withdraw from the study at any time and all 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 J

Demographic Questionnaire

Demographic Questionnaire

Child's Name Sex

Date of Birth Age

Home Address

Phone Number: 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:

.....

.....

Has your child been exposed to any sexual abuse prevention programs at home *.....

.....

.....

at school*

.....

* if yes, please specify

Demographics for Comparison Families

This part is to be filled out individually by you as parents.

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

.....
.....

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

Name of child

If yes, specify when 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

Demographics for Case Families

This part is to be filled out individually by you as parents.

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

.....
.....

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

Name of child

If yes, specify when 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 K

Initial Structured Interview Specific to Sexual Abuse

Structured Interview Specific to Sexual Abuse*
(Initial)

1. Current age of abused child Sex:
2. Age of child when abuse occurred
3. Date of disclosure.....
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).....
 If not to you, how did you find out about the abuse?

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(specify).....
 person in position of authority (teacher, priest, etc.)

10. Do you know the offender personally? yes..... no.....
 Is the offender in contact with the family now
11. Has the offender been charged
 plea entered:guilty not guilty
 convicted.... sentenced*
- * if known, please indicate court datesand
 sentence received
12. Before the child's victimization, had you ever talked to your
 child specifically about sexual abuse? yes.... no....
 kind of instructions.....

Has this child ever been sexually abused before?

Age:..... By whom:

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

- emotional
- school
- social
- sexual

14. 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

15. Do you feel that you have had the opportunity to express your feelings about the sexual abuse? yes ... no...

If yes, to whom

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

.....

17. Do you feel an adequate personal support system exists for this problem? yes.... no....

If yes, who is this support.....

18. Do you feel an adequate community support system exists for this problem? yes no....

If yes, what is it
Have you used it

19. 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? yes.... no....

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

When interviewing both parents, please use M to indicate mother's responses & F to indicate father's responses.

* adapted from Bernbaum (1986)

Appendix L

Outline of Assessment Procedure

Measures Completed by Case and Comparison Groups at Each Assessment Period

Measure	Initial Assessment		6-Month Follow-up Assessment	
	Case	Comparison	Case	Comparison
Demographic Questionnaire	yes	yes	no	no
Structured Interview Specific to Sexual Abuse ^a	yes	no	yes	no
Impact of Event Scale	yes	no	yes	no
Parent's Perception of Events	yes	no	yes	no
Brief Symptom Inventory	yes	yes	yes	yes
Dyadic Adjustment Scale ^b	yes	yes	yes	yes
Parent Sense of Competence Scale	yes	yes	yes	yes
Family Life Stress Form	yes	yes	yes	yes
Family Adaptability and Cohesion Evaluation Scales III	yes	yes	yes	yes
Child Behavior Checklist	yes	yes	yes	yes

Note: ^aVersions of the Structured Interview differ for first and second assessment. ^bCompleted by two parent families only.

Appendix M

Follow-up Structured Interview Specific to Sexual Abuse

Structured Interview Specific to Sexual Abuse* (Follow-up)

1. Current age of abused child
2. Your relationship to child:
 - biological mother ... biological father ...
 - step-mother step-father
 - adoptive mother adoptive father
 - foster mother foster father
3. Has the abuse been disclosed to anyone else within the last six months?
 - siblings - extended family
 - therapist - friends
4. Has the offender been charged or convicted.....?
 sentenced
 type of sentence received
- Date of trial..... sentencing.....
 Did the child have to testify?
 Did you have to testify?
5. Has the child experienced further sexual abuse within the last six months?

 If yes, when and by whom.....

6. 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
7. Do you feel that you have had the opportunity to express your feelings about the sexual abuse? If yes, to whom?

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

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

 If yes, who is this support.....

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

.....

If yes, what is it

Have you used it

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

- anger - shock - disbelief

- shame - scared - overwhelmed

- helpless - other(s)

.....

12. 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

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

.....

.....

If yes, how

Has your child received any prevention programs for sexual abuse in the school since our last visit?

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

.....

.....

15. Is your child displaying any problems now?

if yes, describe

.....

.....

If not otherwise specified, the questions are answered in a YES- NO fashion. Please use M & F to indicate mother's and father's responses respectively.

* adapted from Bernbaum (1986)

Appendix N

Nature of Abusive Experience Form

Parental and Child Reactions to Extrafamilial Sexual Abuse

The Nature of Abusive Experience Form*

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.....

Family Abuse History:

Sexual abuse history in mother father siblings

Previous sexual abuse of target child

- THANK YOU -

* Adapted from Wolfe & Wolfe (1988)

Appendix O

Demographic Form for Refusals

Parent and Child Reactions to Extrafamilial Sexual AbuseDemographic Information
(For families who refuse to participate)

Date: Agency:
Code Number Assigned to Family:
CHILD: Sex: M F Date of Birth:
Age:
FATHER: Age: Education:
Occupation:
MOTHER: Age: Education:
Occupation:
Parents' 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):
Family's postal code:

- Thank you -

Appendix P

Dyadic Adjustment Scale

	All the Time	Most of the Time	More Often than Not	Occasionally	Rarely	Never
16. How often do you discuss or have you considered divorce, separation, or termination of your relationship?
17. How often do you or your mate leave the house after a fight?
18. In general, how often do you think that things between you and your partner are going well?
19. Do you confide in your mate?						
20. Do you ever regret that you married (or lived together)?
21. How often do you and your partner quarrel?
22. How often do you and your mate "get on each others nerves"?

	Every	Almost Every Day	Occasionally	Rarely	Never
23. Do you kiss your mate?
	All of Them	Most of Them	Some of Them	Very Few of Them	None of Them
24. Do you and your mate engage in outside interests together?

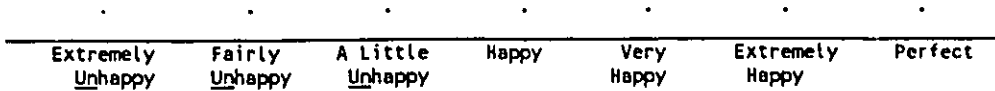
How often would you say the following events occur between you and your mate?

	Never	Less Than Once a Month	Once or Twice a Month	Once or Twice a Week	Once a Day	More Often
25. Have a stimulating exchange of ideas
26. Laugh together
27. Calmly discuss something
28. Work together on a project

These are some things about which couples sometimes agree and sometimes disagree. Indicate if either item below caused differences of opinions or were problems in your relationship during the past weeks. (check yes or no.)

	Yes	No	
29.	Being too tired for sex
30.	Not showing love

31. The dots on the following line represent different degrees of happiness in your relationship. The middle point, "happy" represents the degree of happiness of most relationships. Please circle the dot which best describes the degree of happiness, all things considered, in your relationship.



32. Which of the following statements best describes how you feel about the future of your relationship?

- I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
- I want very much for my relationship to succeed, and will do all I can to see that it does.
- I want very much for my relationship to succeed and will do my fair share to see that it does.
- It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed.
- It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
- My relationship can never succeed, and there is no more that I can do to keep the relationship going.

Appendix Q

Parent Sense of Competence Scale

Being a Parent (Mothers)

Listed below are a number of statements. Please respond to each item, indicating your agreement or disagreement with each statement in the following manner:

If you strongly agree, circle the letters	SA
If you agree, circle the letter	A
If you mildly agree, circle the letters	MA
If you mildly disagree, circle the letters	MD
If you disagree, circle the letter	D
If you strongly disagree, circle the letters	SD

1. The problems of taking care of a child are easy to solve once you know how your actions affect your child, an understanding I have acquired.

SA A MA MD D SD

2. Even though being a parent could be rewarding, I am frustrated now while my child is at his/her present age.

SA A MA MD D SD

3. I go to bed the same way I wake up in the morning - feeling I have not accomplished a whole lot.

SA A MA MD D SD

4. I do not know why it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated.

SA A MA MD D SD

5. My mother was better prepared to be a good mother than I am.

SA A MA MD D SD

6. I would make a fine model for a new mother to follow in order to learn what she would need to know in order to be a good parent.

SA A MA MD D SD

7. Being a parent is manageable, and any problems are easily solved.

SA A MA MD D SD

8. A difficult problem in being a parent is not knowing whether you're doing a good job or a bad one.

SA A MA MD D SD

9. Sometimes I feel like I'm not getting anything done.

SA A MA MD D SD

10. I meet my own personal expectations for expertise in caring for my child.

SA A MA MD D SD

11. If anyone can find the answer to what is troubling my child, I am the one.

SA A MA MD D SD

12. My talents and interests are in other areas, not in being a parent.

SA A MA MD D SD

13. Considering how long I've been a mother, I feel thoroughly familiar with this role.

SA A MA MD D SD

14. If being a mother of a child were only more interesting, I would be motivated to do a better job as a parent.

SA A MA MD D SD

15. I honestly believe I have all the skills necessary to be good mother to my child.

SA A MA MD D SD

16. Being a parent makes me tense and anxious.

SA A MA MD D SD

17. Being a good mother is a reward in itself.

SA A MA MD D SD

* Gibaud-Wallston & Wandersman (1978)

Being a Parent (Fathers)

Listed below are a number of statements. Please respond to each item, indicating your agreement or disagreement with each statement in the following manner:

If you strongly agree, circle the letters	SA
If you agree, circle the letter	A
If you mildly agree, circle the letters	MA
If you mildly disagree, circle the letters	MD
If you disagree, circle the letter	D
If you strongly disagree, circle the letters	SD

1. The problems of taking care of a child are easy to solve once you know how your actions affect your child, an understanding I have acquired.

SA A MA MD D SD

2. Even though being a parent could be rewarding, I am frustrated now while my child is at his/her present age.

SA A MA MD D SD

3. I go to bed the same way I wake up in the morning - feeling I have not accomplished a whole lot.

SA A MA MD D SD

4. I do not know why it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated.

SA A MA MD D SD

5. My father was better prepared to be a good father than I am.

SA A MA MD D SD

6. I would make a fine model for a new father to follow in order to learn what he would need to know in order to be a good parent.

SA A MA MD D SD

7. Being a parent is manageable, and any problems are easily solved.

SA A MA MD D SD

8. A difficult problem in being a parent is not knowing whether you're doing a good job or a bad one.

SA A MA MD D SD

9. Sometimes I feel like I'm not getting anything done.

SA A MA MD D SD

10. I meet my own personal expectations for expertise in caring for my child.

SA A MA MD D SD

11. If anyone can find the answer to what is troubling my child, I am the one.

SA A MA MD D SD

12. My talents and interests are in other areas, not in being a parent.

SA A MA MD D SD

13. Considering how long I've been a father, I feel thoroughly familiar with this role.

SA A MA MD D SD

14. If being a father of a child were only more interesting, I would be motivated to do a better job as a parent.

SA A MA MD D SD

15. I honestly believe I have all the skills necessary to be good father to my child.

SA A MA MD D SD

16. Being a parent makes me tense and anxious.

SA A MA MD D SD

17. Being a good father is a reward in itself.

SA A MA MD D SD

* Gibaud-Wallston & Wandersman (1978)

Appendix R

Principal Component Analyses of the Parent Sense of Competence Scale

- Table R-1. Factor Structure of the Parenting Sense of Competence Scale (Mothers & Fathers Combined).
- Table R-2. Factor Structure of the Parenting Sense of Competence Scale for Mothers only.

Principal Component Analyses of the Parent Sense of Competence Scale

Two principal component analyses were run with mothers and fathers combined following the approach of Johnston and Mash (1989), and for mothers only. The sample size for fathers was insufficient to justify doing a principal component analysis with 17 items. Although one could argue that partner ratings were not independent due to parents responding to the same child, interpartner correlations, as shown in Appendix Y, Table Y-3, failed to find significant correlations between partners for the satisfaction and efficacy subscale at either time period.

The first principal component analysis with oblique rotation was performed on 155 case and comparison parents who had completed the measure at the first assessment (96 mothers and 56 fathers). One father and six mothers were deleted because of multivariate outliers. The initial factor analysis identified three components with eigenvalues greater than 1.0. Only the first two factors accounted for more than 10% of the variance (factor 1 = 27.4%; factor 2 = 18.5%). Two items failed to load clearly on any factor (items 14 and 16). Therefore, principal component analyses were run forcing a two factor solution. Table R-1 shows the resulting loadings after oblique rotation. The first factor with an eigenvalue of 4.66 explained approximately 27.4% of the variance. This factor when obliquely rotated was like Johnston & Mash's (1989) efficacy subscale except that item 17 also loaded here at .49. The second factor with an eigenvalue of 2.81 explained 18.5% of the variance. This factor replicated the satisfaction subscale derived by Johnston and Mash (1989). Together the two factor solution accounted for a higher percentage of variance than the amount explained with Johnston and Mash's (1989) sample (45.9% versus 36%). The correlation between factors was .20. Cronbach alpha scores were calculated for the total score and for the revised efficacy and satisfaction scales derived

from this factor analysis. Internal consistencies were all better than those attained by Johnston and Mash (1989) (total score: alpha .82, efficacy .83, satisfaction .83).

A second factor analysis was run using mothers only to see if the revised scoring system would be replicated. Four cases were deleted due to multivariate outliers leaving a sample of 96 mothers. The initial run identified five factors with eigenvalues greater than one but only two explained more than 10% of the variance. When principal component analysis was repeated forcing a two factor solution, results replicated those of the full sample (see Table R-2). Factor one, efficacy, explained approximately 28.1% of the variance with an eigenvalue of 4.77. The loading of item 17 was even higher in this sample at .57. Factor two, satisfaction, explained approximately 16.3% of the variance with an eigenvalue of 2.76. Total variance explained was 44.3% with a between factors correlation of .22. Cronbach alphas again showed good internal consistency (total score: alpha .83, efficacy .80, satisfaction .80). Nevertheless, findings from this analysis should be viewed with caution as the sample size of mothers only approached an adequate sample to conduct factor analysis.

Because the psychometrics of this new scoring were better than that obtained by Johnston & Mash (1989) and were based on the study's sample, for all analyses involving the Parent Sense of Competence Scale, the measure was scored using the revisions based on this set of analyses (McIntyre & Cloutier revisions).

Table R-1

Factor Structure of the Parenting Sense of Competence Scale
(Mothers & Fathers Combined) N = 155.

Item	Efficacy ^a	Satisfaction ^b
1. understanding of how one's own actions affect the child	.70	
6. fine parental model for new parents	.65	
7. problems of parenting manageable	.67	
10. personal expectations for being a parent met	.71	
11. finding answers to what troubles one's child	.58	
13. familiarity with parenting role	.84	
15. parenting skills	.74	
17. being a good parent rewarding	.49 ^c	
2. frustration with child at present age		.72
3. sense of accomplishment		.78
4. sense of being manipulated		.55
5. sense of being less prepared for parenting than one's own parent		.52
8. knowledge of whether one is a good parent		.52 ^d
9. sense that one is not getting anything done		.53
12. talents and interests not in parenting		.47
14. motivation & interest in parenting		.76
16. anxiety around parenting		.48

Note: ^aFactor 1 explained approximately 27.4% of the variance.

^bFactor 2 explained approximately 18.5% of the variance. Together they accounted for 45.9% of the variance. ^cThe loading of this item on the efficacy subscale differs from the Johnston and Mash (1989) scoring system. ^dThe loading of this item on the satisfaction subscale differs from the Gibaud-Wallston & Wandersman (1978) scoring system .

Table R-2

Factor Structure of the Parenting Sense of Competence Scale for Mothers Only N = 96.

Item	Efficacy ^a	Satisfaction ^b
1. understanding of how one's own actions affect the child	.70	
6. fine parental model for new parents	.57	
7. problems of parenting manageable	.65	
10. personal expectations for being a parent met	.70	
11. finding answers to what troubles one's child	.48	
13. familiarity with parenting role	.86	
15. parenting skills	.74	
17. being a good parent rewarding	.57 ^c	
2. frustration with child at present age		.68
3. sense of accomplishment		.79
4. sense of being manipulated		.46
5. sense of being less prepared for parenting than one's own mother		.59
8. knowledge of whether one is a good parent		.60 ^d
9. sense that one is not getting anything done		.57
12. talents and interests not in parenting		.46
14. motivation & interest in parenting		.81
16. anxiety around parenting		.46

Note. ^aFactor 1 explained approximately 28.1% of the variance.

^bFactor 2 explained approximately 16.3% of the variance. Together they accounted for 44.3% of the variance. ^cThe loading of this item on the efficacy subscale differs from the Johnston and Mash (1989) scoring system. ^dThe loading of this item on the satisfaction subscale differs from the Gibaud-Wallston & Wandersman (1978) scoring system.

Appendix S

Family Life Stress Form

Name:.....

Date:.....

Family Life Stress Form*

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/parent, operation** |
| | | | |
| 21. | ... | ... | Sexual abuse of child** |
| | | | |
| 22. | ... | ... | Developmental changes in child** (eg. puberty) |
| | | | |
| 23. | ... | ... | Psychotherapy** (parent or child) |
| | | | |
| 24. | ... | ... | Child court testimony |
| | | | completed ongoing.... forthcoming |
| 25. | ... | ... | Parent court testimony |
| | | | completed ongoing.... forthcoming |

* adapted from Abidin (1983)

** If yes, please specify

Appendix T

Family Adaptability and Cohesion Evaluation Scales III

FACES III

David H. Olson, Joyce Portner, and Yoav Lavee

1	2	3	4	5
ALMOST NEVER	ONCE IN AWHILE	SOMETIMES	FREQUENTLY	ALMOST ALWAYS

DESCRIBE YOUR FAMILY NOW:

- ___ 1. Family members ask each other for help.
- ___ 2. In solving problems, the children's suggestions are followed.
- ___ 3. We approve of each other's friends.
- ___ 4. Children have a say in their discipline.
- ___ 5. We like to do things with just our immediate family.
- ___ 6. Different persons act as leaders in our family.
- ___ 7. Family members feel closer to other family members than to people outside the family.
- ___ 8. Our family changes its way of handling tasks.
- ___ 9. Family members like to spend free time with each other.
- ___ 10. Parent(s) and children discuss punishment together.
- ___ 11. Family members feel very close to each other.
- ___ 12. The children make the decisions in our family.
- ___ 13. When our family gets together for activities, everybody is present.
- ___ 14. Rules change in our family.
- ___ 15. We can easily think of things to do together as a family.
- ___ 16. We shift household responsibilities from person to person.
- ___ 17. Family members consult other family members on their decisions.
- ___ 18. It is hard to identify the leader(s) in our family.
- ___ 19. Family togetherness is very important.
- ___ 20. It is hard to tell who does which household chores.



FACES III: Ideal Version

David H. Olson, Joyce Portner, and Yoav Lavee

1	2	3	4	5
ALMOST NEVER	ONCE IN AWHILE	SOMETIMES	FREQUENTLY	ALMOST ALWAYS

IDEALLY, how would you like YOUR FAMILY TO BE:

- ___ 21. Family members would ask each other for help.
- ___ 22. In solving problems, the children's suggestions would be followed.
- ___ 23. We would approve of each other's friends.
- ___ 24. The children would have a say in their discipline.
- ___ 25. We would like to do things with just our immediate family.
- ___ 26. Different persons would act as leaders in our family.
- ___ 27. Family members would feel closer to each other than to people outside the family.
- ___ 28. Our family would change its way of handling tasks.
- ___ 29. Family members would like to spend free time with each other.
- ___ 30. Parent(s) and children would discuss punishment together.
- ___ 31. Family members would feel very close to each other.
- ___ 32. Children would make the decisions in our family.
- ___ 33. When our family got together, everybody would be present.
- ___ 34. Rules would change in our family.
- ___ 35. We could easily think of things to do together as a family.
- ___ 36. We would shift household responsibilities from person to person.
- ___ 37. Family members would consult each other on their decisions.
- ___ 38. We would know who the leader(s) was in our family.
- ___ 39. Family togetherness would be very important.
- ___ 40. We could tell who does which household chores.



Appendix U

Classification System Used to Score Open-Ended
Questions on the Structured Interview

Most Serious Problem as a Parent of a Sexually Abused Child
Reported Changes in Parenting Strategies

Classification System Used to Score Open-Ended Questions
From the Adapted Structured Interview Specific to Sexual Abuse

Most Serious Problem as a Parent of a Sexually Abused Child

1. Parent Centred

Perpetrator Issues

- Concern that perpetrator still has access to children
- breach of trust by perpetrator
- threats by perpetrator
- having to face the perpetrator because he is not in jail or is in the neighbourhood
- angry that the perpetrator doesn't think he did anything wrong
- having to confront the perpetrator with the abuse disclosure

Concerns with Traumatic Impact of Abuse on the Marriage/Family (non-specific)

- not having a mother
- bad father image
- having to resume living with mother/father previously separated from for protection or economic reasons

Dealing with own Feelings About the Abuse

- guilt re failing to protect the child
- fear of leaving the child alone
- fear of being unable to protect child from further abuse
- resentment about court process and abuse
- feeling overwhelmed
- being easily frustrated
- keeping cool and not letting feelings show
- not being able to calmly discuss things
- loss of trust in people

Effects on Ability to Parent or Parent/Child Relationship

- guilt re threatening to return child to biological mother
- not able to talk about sexuality
- dealing with child's emotions and acting out
- being able to trust that the child will confide in the future
- feeling unable to help until they confide
- not knowing how to respond when the child talks about the abuse
- differentiating normal developmental issues from abuse-related issues

Court Preparation of Self

- fear of being accused in court of coercing the child to say certain things

Dealing with own History of Abuse

Lack of Support System

2. Child Centred

Perpetrator Issues

- child's anger with the perpetrator
- child's fear of the perpetrator once released

Court Issues

- court preparation, wondering how the child will react
- further traumatization by the court process

Concern with Traumatic Impact on Child

- uncertainty about the future, not knowing how the abuse has affected the child
- accepting the reality that the abuse has occurred
- witnessing what the child has to go through in dealing with the abuse
- length of time to recover from abuse, slow progress
- fear that child will deny & not work through emotions
- being worried that the child may become like the perpetrator and abuse other kids
- feeling that the child has lost his/her innocence

Dealing with Emotional Problems of Child

- loss of trust in people, having to teach a child that people can't be trusted
- child seems lost
- suicide note
- negative feelings about him/herself which affect his/her relationships with others
- changes in the child's relationships with everyone

Dealing with Behavioural Problems of Child

- vandalism
- having to cope with a child who sleeps under the bed
- bedwetting
- child does not want to listen
- child wanting money all the time
- physical pains, eating compulsively
- child lying
- aggression towards boys, bullying other children

Dealing with Sexual Problems of Child

- child acting out sexually
- child has sexually transmitted disease

School Problems

- child being teased at school
- child refusing to go to school

Reported Changes in Parenting Strategies

1. Child Centred

Emotional Availability

- try to be more open, allow more time to talk
- try to identify problems
- doing more things together, more quality time
- ask more questions about feelings, more sensitive to child's feelings, persist in encouraging child to talk when moody
- pulled the family closer together
- cleared the air about sibling rivalry

Protection Issues

- over-protective of females
- overprotective of child and afraid to leave the child alone
- overprotective of other people's children
- involved others in protecting children from perpetrator
- need to know child's whereabouts
- question intentions of men who get involved with parents
- cynical about sleepovers
- cautious about friends and babysitters

Discipline Issues

- more strict, less flexible about child's whereabouts,
- imposing more limits
- easier on discipline

Abuse-related Issues

- avoids talking about sexual issues
- talk more openly about sexuality
- careful about sexual jokes
- less physical affection
- avoiding things that might remind the child about the abuse
- no watching of abusive movies

2. Parent-Centred

- scream more at the child
- less trusting of others
- always aware of the possibility of another abusive incident
- loss of confidence in parenting
- doubt decision-making abilities
- don't take things as casually now

Appendix V

Impact of Event Scale

Impact of Event Scale*

Below are a list of comments made by people after stressful life events. Please check each item, indicating how frequently these comments were true for you DURING THE PAST MONTH in regard to your thoughts about your child's abuse experience. If they did not occur during this time period, please mark the "not at all" column.

	NOT AT ALL	RARELY	SOMETIMES	OFTEN
1. I thought about it when I didn't mean to.	0	1	3	5
2. I avoided letting myself get upset when I thought about it or was reminded of it.	0	1	3	5
3. I tried to remove it from my memory.	0	1	3	5
4. I had trouble falling asleep or staying asleep because pictures or thoughts of it came into my mind.	0	1	3	5
5. I had waves of strong feelings.	0	1	3	5
6. I had dreams about it.	0	1	3	5
7. I stayed away from reminders of it.	0	1	3	5
8. I felt as if it hadn't happened or it wasn't real.	0	1	3	5
9. I tried not to talk about it.	0	1	3	5
10. Pictures about it popped into my mind.	0	1	3	5
11. Other things kept making me think about it.	0	1	3	5
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	0	1	3	5
13. I tried not to think about it.	0	1	3	5
14. Any reminder brought back feelings about it.	0	1	3	5
15. My feelings about it were kind of numb.	0	1	3	5

* Horowitz, Wilner & Alvarez (1979)

Appendix W

Parent Perceptions of Events Scale

Name _____

Date _____

Parent's Perception of Events

A. Sometimes it is difficult to determine whether a child's story is accurate. For example, we might have concerns that the child has fantasized what happened, or incorrectly understood what happened to him or her. To what extent do you feel your child's story about what happened is accurate?

1	2	3	4	5
not at all accurate		somewhat accurate		very accurate

B. Sometimes it is difficult to determine who was responsible for events such as this. To what extent do you believe the ACCUSED was responsible for what happened?

1	2	3	4	5
not at all responsible		somewhat responsible		very responsible

C. Sometimes parents have concerns that their child might have done something that caused this to happen. For example, they may feel the child went someplace he or she was not supposed to go, or the child should have told somebody as soon as it happened the first time. To what extent do you feel that your child was responsible for what happened?

1	2	3	4	5
not at all responsible		somewhat responsible		very responsible

D. Sometimes parents have thought that they could have done something to prevent or stop what happened.

a) To what extent do you find yourself thinking such thoughts?

1	2	3	4	5
very often		sometimes		never

b) To what extent do you actually believe you could have done something to prevent or stop what happened?

1	2	3	4	5
have strong belief		have questionable belief		do not really have such a belief

E. Sometimes parents have mixed feelings about how their case was handled by the Children's Aid Society (CAS) and by the Crown Attorney's Office.

a) How pleased have you been with the CAS investigation of your child's case?

1	2	3	4	5
very		somewhat		very
displeased		pleased		pleased

b) How pleased have you been with the action taken by the Crown Attorney's office?

1	2	3	4	5
very		somewhat		very
displeased		pleased		pleased

F. What kinds of psychological services would you like to see available for your child and family?

- 1. individual therapy for child
- 2. group therapy for child
- 3. stress-management for child for court testimony
- 4. individual therapy for parents (to relieve stress)
- 5. support groups for parents
- 6. educational groups for parents to teach them about child abuse
- 7. family therapy for all family members
- 8. marital therapy
- 9. "hot line" or "drop-in centre" for victims of abuse so that they can contact professionals under times of stress
- 10. Other (please explain) _____

G. Have you used any of these services since you child's disclosure of sexual abuse?

If yes, please specify: _____

* adapted from Wolfe & Wolfe (1988)

Appendix X

Principal Component Analyses of the Nature of Abuse Form

Principal Component Analyses of the Nature of Abuse Form

Two factor analyses were done using the scoring system developed by Wolfe, Wolfe, Gentile and Bourdeau (1987) and the scoring system developed by McIntyre and Cloutier (1992). Wolfe et al.'s scoring system rated type of abuse on a 6-point scale, type of coercion on a 5-point scale, and type of perpetrator on a 3-point scale which assigned a higher weight to abuse by extended relatives (2). The scoring system developed by McIntyre & Cloutier retained the original 14 levels of types of abuse and added a fifteenth item for ritual abuse or more severe abuse. Coercion was also scored based on the original eight levels of severity. In addition, the age of the perpetrator was coded using a classification which combined the age level of the perpetrator (child/ adolescent / adult) with the presence or absence of a five year age differential between the victim and the perpetrator.

The Nature of Abuse forms from the first 152 families (case participants and refusals) were used to run the analyses using BMDP4M. Three cases were removed due to multivariate outliers, with an additional 13 lost due to incomplete data. For the Wolfe et al. (1987) scoring system, six variables were used: type of sexual abuse, type of perpetrator, type of coercion, number of perpetrators, duration of abuse in weeks, and frequency of abuse. Although the sample size was more than three times larger than the sample used by Gentile (1988), her results were not replicated by this study's sample. Inspection of the correlation matrix revealed that only one bivariate correlation exceeded .30 (duration and frequency $r^2 = .54$). Therefore it was not appropriate to interpret the principal component analysis using Wolfe et al.'s (1987) scoring system (Tabachnick & Fidell, 1983; pp. 379).

For the McIntyre and Cloutier (1992) scoring system, eight variables were entered: type of sexual abuse, duration in weeks, frequency, type of coercion, perpetrator's age group and differential, number of perpetrators, whether the perpetrator was known, and whether there was a social relationship with the perpetrator. Thirteen cases were removed due to missing data which resulted in a final sample size of 139. As only three of the bivariate correlations exceeded .30, principal component analysis was done with varimax rotation. Four factors had eigenvalues greater than one. The first factor which explained approximately 25.9% of the variance consisted of the duration and frequency of sexual abuse. Factor two explained approximately 18.2% of the variance and encompassed whether the perpetrator was known by the family and had a social relationship with the family. Factor 3, was a composite of the severity of the type of abuse and the degree of coercion involved. It explained approximately 13.6% of the variance. The final factor included the perpetrator's age group and differential with an inverse relationship to the number of perpetrators. All factor loadings were above .73. Together the four factors explained 70.25% of the variance.

Another principal component analysis was run forcing three factors to see if a solution could be generated without two-variable factors. The number of perpetrators failed to load clearly on any component. The first factor was a composite of duration, frequency and the perpetrator's age group and differential. Factor two and three encompassed the same two factors as in the previous analysis.

Because of the low number of bivariate correlations exceeding .30, and the fact that the best solution was composed of two variable factors, it was decided not to collapse abuse variables into either the three or four factor solution. Tabachnick and Fidell (1983, p.380) caution against using two-variable factors because the two-variable factors may not be real. Inspection of the residual correlation matrix for the four factor solution indicated that four residual correlations were well above the .10 cutoff (.21-.35). This suggests that extraction may not have been adequate. In addition, the squared multiple correlations were low ranging from .07 to .34 indicating that the internal consistency of the solution was not good. Therefore the scoring system developed by McIntyre and Cloutier (1992) was used in its original form for data analyses requiring abuse variables.

Appendix YResults of Paired t-tests and Correlations Between Case Partners

Table Y-1 Means, Standard Deviations, and Correlations Between Partners' Ratings on Emotional Variables for the First and Second Assessment

Table Y-2 Means, Standard Deviations, and Correlations Between Partners' Perceptions of the Abuse in Families with Sexually Abused Children for the First and Second Assessment

Table Y-3 Means, Standard Deviations, and Correlations Between Partners' Perceptions of Parent Competence and of Symptomatology in their Abused Children for the First and Second Assessment

Table Y-4 Means, Standard Deviations, and Correlations Between Partners' Ratings on Social Support Variables in Families with Sexually Abused Children

Results of Paired t-tests and Correlations Between Case Partners

Prior to deciding to run separate analyses for mothers and fathers, paired t -tests and correlations were run between partners to determine whether the planned variables for measuring subjective aspects of parents' experiences were independent. Variables were grouped according to the conceptual areas planned for the multiple regression analyses. Bonferroni corrections were applied according to the number of variables in each group. Emotional variables consisted of the Global Severity Index, intrusion and avoidance (see Table Y-1) plus the Brief Symptom Inventory subscales which were analysed separately. Cognitive variables were parents' perception of the event (see Table Y-2), perceptions of symptomatology in the abused child, and their perceptions of their parenting (see Table Y-3). Social support variables consisted of dyadic adjustment, family functioning, Children's Aid and Crown Attorney's support, total qualitative support, and sense of isolation (see Table Y-4).

No paired t -tests were significant which meant that mean scores between partners were similar and could not be treated independently. At time 1 and 2 partner scores were not significantly correlated on any of the Brief Symptom Inventory subscales, on the intrusion subscale of the Impact of Event Scale, nor on the perceptions of parenting competence, and family functioning. At time 1, partners' responses were significantly correlated for perceptions of isolation and total qualitative support, for parent avoidant symptoms and overall emotional distress, and for perceptions of the level and internalizing and overall symptomatology in their abused child. At time 2, the correlation between overall emotional distress, total support and isolation were no longer significant. However, parent avoidance symptoms, and perceptions of child internalizing and overall

symptomatology remained significantly correlated. In addition, dyadic adjustment and perception of support from the Children's Aid Society were significantly correlated.

The failure to find significant correlations between partners on a number of the proposed variables was taken as an indication that sex and parent role differences would be masked if analyses combined mothers with fathers on measures where their scores were not correlated.

Table Y-1

Means, Standard Deviations, and Correlations^a Between Partners' Ratings on Emotional Variables for the First and Second Assessment

Variable	Assessment							
	First				Second			
	<u>n</u>	<u>M</u>	<u>SD</u>	<u>r</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>r</u>
EMOTIONAL DISTRESS ^b	21			.55*	17			.42
Mother		59.38	8.9			57.65	9.6	
Father		56.10	12.7			53.82	12.0	
PTSD SYMPTOMS ^c								
INTRUSION	22			.48	17			.53
Mother		16.45	9.8			12.35	8.9	
Father		12.27	8.6			9.30	9.3	
AVOIDANCE	22			.56*	17			.66**
Mother		13.82	8.7			11.41	9.0	
Father		13.00	10.8			10.41	12.2	

Note. Higher scores indicate more distress. Paired t-tests all not significant.

^aSignificance level for correlations set at p.016 with Bonferroni correction. ^bEMOTIONAL DISTRESS = T-score on Global Severity Index of Brief Symptom Inventory. ^cPTSD SYMPTOMS = raw scores on Impact of Event Scale subscales.

*p.01. **p.005.

Table Y-2

Means, Standard Deviations, and Correlations^a Between Partners' Perceptions of the Abuse in Families with Sexually Abused Children for the First and Second Assessment

Variable	Assessment							
	First				Second			
	n	M	SD	r	n	M	SD	r
PERCEPTIONS OF EVENT^b								
BELIEF OF CHILD	22			.52	17			.35
Mother		4.68	.89			4.76	.44	
Father		4.55	.80			4.82	.59	
BLAME PERPETRATOR	22			.26	17			.51
Mother		4.91	.29			4.88	.33	
Father		4.82	.40			4.76	.56	
BLAME CHILD	22			.39	17			.23
Mother		4.73	.70			4.59	.71	
Father		4.82	.50			4.41	1.12	
SELF BLAME THOUGHTS	22			.49	17			.30
Mother		2.91	1.38			3.59	1.06	
Father		2.91	1.60			3.94	1.09	
BELIEF COULD HAVE PREVENTED ABUSE	22			.54	17			.02
Mother		3.28	1.27			3.41	1.46	
Father		3.32	1.52			3.94	1.09	

Note. Higher scores indicate more positive perceptions. Paired t-tests and correlations all not significant.
^aSignificance level for correlations set at p.0055 with Bonferroni correction for all cognitive variables (perception of event, perceptions of own parent competence, perception of symptomatology in abused child). ^bPERCEPTIONS OF EVENT = raw scores on the Parent Perception of Event Scale.

Table Y-3

Means, Standard Deviations, and Correlations^a Between Partners' Perceptions of Parent Competence and of Symptomatology in their Abused Children for the First and Second Assessment

Variable	Assessment							
	First				Second			
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>r</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>r</i>
PARENTING COMPETENCE^b								
EFFICACY	20			.24	17			-.27
Mother		34.60	7.3			32.65	6.68	
Father		36.95	5.7			35.24	3.98	
SATISFACTION	20			.44	17			.05
Mother		35.76	7.14			35.53	6.88	
Father		38.45	6.07			39.00	6.89	
CBCL^c								
INTERNALIZING	20			.71**	18			.65*
Mother		65.30	10.27			66.00	9.38	
Father		64.50	9.42			64.17	8.60	
EXTERNALIZING	20			.58	18			.53
Mother		61.50	9.51			63.61	7.94	
Father		63.10	6.75			63.94	6.77	
TOTAL	20			.69**	18			.49
Mother		66.15	11.49			66.11	8.75	
Father		67.05	8.75			65.94	8.14	

Note. Paired *t*-tests all not significant.

^aSignificance level for correlations set at *p*.0055 with Bonferroni correction for all cognitive variables (perceptions of the event, perceptions of parent competence, and perceptions of symptomatology in the abused child). ^bPARENTING COMPETENCE = Parent Sense of Competency Scale. ^cCBCL = T-scores on subscales of the Child Behavior Checklist- Parent form.

p*.005. *p*.001.

Table Y-4

Means, Standard Deviations, and Correlations^a Between Partners'
Ratings on Social Support Variables in Families with Sexually Abused
Children

Variable	Assessment							
	First				Second			
	n	M	SD	r	n	M	SD	r
CHILDREN'S AID SOCIETY ^b	17			.58	16			.88**
Mother		2.59	1.58			4.00	2.73	
Father		3.29	1.65			3.75	2.17	
CROWN ATTORNEY ^b	22			.32	16			.52
Mother		3.25	1.44			4.25	2.11	
Father		3.69	1.49			4.25	1.39	
DYADIC ADJUSTMENT ^c	20			.54	17			.63*
Mother		121.35	14.79			116.47	12.07	
Father		117.20	12.28			117.24	10.42	
FAMILY SUPPORT ^d	20			-.28	18			.52
Mother		7.07	3.63			6.20	4.56	
Father		6.02	2.91			10.93	21.55	
TOTAL SUPPORT ^e	21			.81**	16			.61
Mother		2.71	1.27			2.44	.96	
Father		2.62	1.24			2.13	1.15	
FEELING ALONE ^e	21			.66**	16			.30
Mother		1.52	.51			1.88	.34	
Father		1.71	.46			1.81	.40	

Note. Paired *t*-tests all not significant.

^aSignificance level for correlations set at *p*.008 with Bonferroni correction. ^bTaken from raw scores on the Parent Perception of Event Scale. ^cDYADIC ADJUSTMENT = total score on Dyadic Adjustment Scale. ^dFAMILY SUPPORT = Family Adaptability and Cohesion Evaluation Scales III - Individual Distance from Centre. ^eTaken from Structured Interview Specific to Sexual Abuse-Revised.

p*<.006. *p*<.001.

Appendix Z

Evaluation of Assumptions for Data Analyses

Evaluation of Assumptions for Data Analyses

For all analyses, BMDPAM was used to evaluate the pattern of missing data, and to detect univariate and multivariate outliers in each group (i.e., cases with extreme values on one variable or on a combination of variables). A decision was made not to replace missing values with group means or to estimate values with regressions to avoid biasing the results when regressions were later done to predict emotional distress and post-traumatic stress disorder symptomatology. (Most of missing data were from six families who joined the project five to six months post-disclosure and therefore did not have a three-month assessment.) There were very few outliers and when present, these were removed for the reported results. However, the pattern of results did not change when these were included. Because missing values were not replaced, it was decided to run MANOVAs at each time period to capture between subject effects for the full group who participated at each period. Doubly multivariate repeated measures analyses were conducted across time periods. Subjects with missing data for either time period were removed. Pillai's criterion was chosen as the multivariate statistic for assessing significant multivariate effects because of its robustness when sample sizes decrease or are unequal, and when assumptions of homogeneity of variance-covariance matrices are not met (Tabachnick & Fidell, 1983, 1989).

To assess normality, the distributions of variables were examined to detect violations of kurtosis (level of peak distribution) and skewness (level of symmetry of distribution) using SPSS FREQUENCIES and BMDPAM. In addition, for multiple regressions, residual plots were examined for homoscedasticity. This assumption assumes that the variability in scores on one variable is similar at

all levels of another variable. Violation typically occurs when the two variables are not related in a linear way (Tabachnick & Fidell, 1989). It was decided not to transform data routinely for ease in interpretation and because MANOVAs are typically robust to violations of this assumption when Pillai's criterion is used. Two variables (family adaptability and family cohesion) were transformed to one variable 'individual distance from the centre of the circumplex' because scores on these variables are based on a curvilinear model. As recommended by Olson et al (1985) the following formula was used:

$$\sqrt{(\text{cohesion} - 39.8)^2 + (\text{adaptability} - 24.1)^2} .$$

The data for each analyses were also assessed for problems of multicollinearity (correlations > .90 and high squared multiple correlations) and singularity (perfectly correlated variables). Correlation matrices were used to examine bivariate correlations, with squared multiple correlations and tolerances used for multivariate correlations (BMDPAM). In addition, analyses were deemed invalid if SPSS MANOVA detected singularity in any of the cell matrices. In most cases where this occurred, it was due to low sample sizes in the violating cell. Multicollinearity was most evident in analyses involving the subscales of the Brief Symptom Inventory. For mothers, generalization of distress in the case group resulted in eight subscales being correlated above .73 with squared multiple correlations all above .6. As Tabachnick and Fidell (1989) recommend not including variables with a bivariate correlation greater than .70 in the same multivariate analysis, MANOVAs and MANCOVAs were not used to analyze group differences in these subscales. The high correlation between the Total T-Score and

the T-Scores of the Internalizing and Externalizing subscales of the Child Behavior Checklist-Parent Form also resulted in the deletion of the Total T-score as a variable in analyses involving these subscales.

For ANCOVAs, MANCOVAs, and MANOVAs the assumption of the homogeneity of variance-covariance matrices was also tested. This was important as violations are more likely to occur when sample sizes are unequal. This issue was judged to be potentially problematic for fathers where the original sample consisted of 46 comparison and 27 case fathers. (Comparison fathers were over-represented because in some two parent families where only the case mother participated, the matched family had both parents participating; as well, some single parent families originally had a two parent match.) To overcome this problem, the comparison father was used only if the father in the case match had participated. To ensure robustness, a ratio of 4:1 for largest to smallest cell size was used as a guide as recommended by Tabachnick and Fidell (1989). In addition, variance-covariance matrices were examined to detect cells where the ratio of largest to smallest variance exceeded 20:1. For multivariate analyses of variance and covariance, Box's M with a cutoff of $p < .001$ was used to test the homogeneity of variance-covariance matrices. With this cutoff, no analyses had Box's M values exceeding this significance level.

For analyses of variance involving covariates (ANCOVAs and MANCOVAs), the assumption regarding homogeneity of regression was tested using the sequential sum of squares method. This assumption supposes that the slope of the regression (Beta weights) of the dependent variable on the covariates are equivalent across all cells. That is, the interaction between covariates and the

dependent variable at different levels of the independent variable is the same. In cases where groups differed in their regression lines, multivariate analyses were not done.

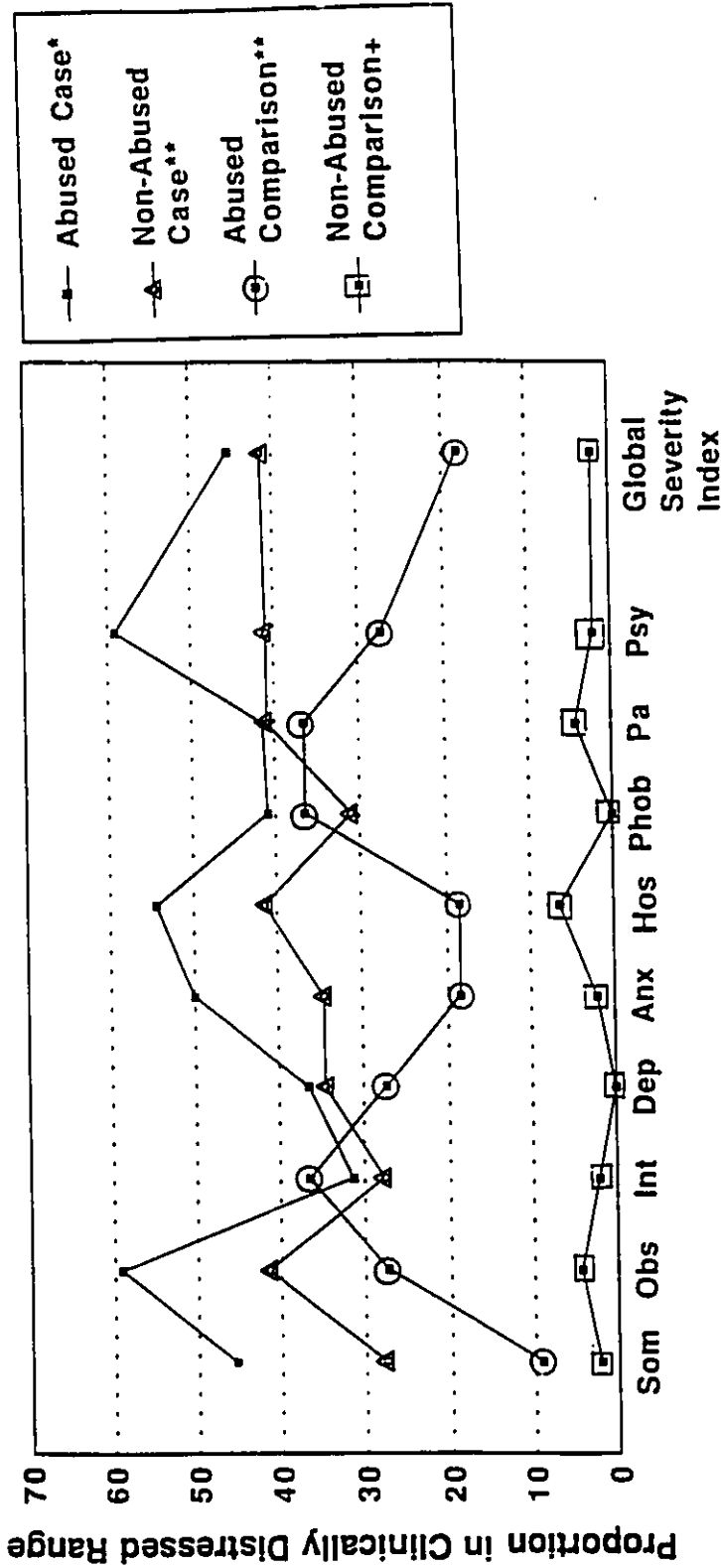
For repeated measures analyses, the doubly multivariate approach was chosen to avoid potential problems associated with violations of the assumption of homogeneity of covariance and sphericity if time had been used as a within subject independent variable in the alternative univariate repeated measures ANOVA. (Homogeneity of covariance assumes equivalence of correlations between scores measured at each time period; however, variables measured closer in time tend to be more highly correlated than variables measured at a further time). The doubly multivariate approach assumes that the repeated measures, like the multiple dependent variables, represent a multivariate set of observations (time segments). The repeated measures for each of the dependent variables are transformed into orthogonal dependent variables which replace the treatment of time as a within-subject independent variable. Because of this transformation, assumptions of homogeneity of covariance were not required. This approach yields a multivariate F statistic with a more honest Type I error rate than a mixed multivariate model when non-sphericity occurs (Schutz & Gessaroli, 1987). However, there is a loss of power when the other basic assumptions previously described are not met. Following the recommendations of Schutz and Gessaroli (1987) analyses were only run if sample size per group exceeded the total number of observations per subject (number of dependent variables by number of assessment periods).

Appendix AA

Percentage of Mothers Showing Clinical Levels of Emotional Distress on the Brief Symptom Inventory Subscales Based on Sexual Abuse History.

Figure AA-1. Percentage of mothers scoring in the clinical range for the Brief Symptom Inventory Subscales at Time 1.

Figure AA-2. Percentage of mothers scoring in the clinical range for the Brief Symptom Inventory Subscales at Time 2.

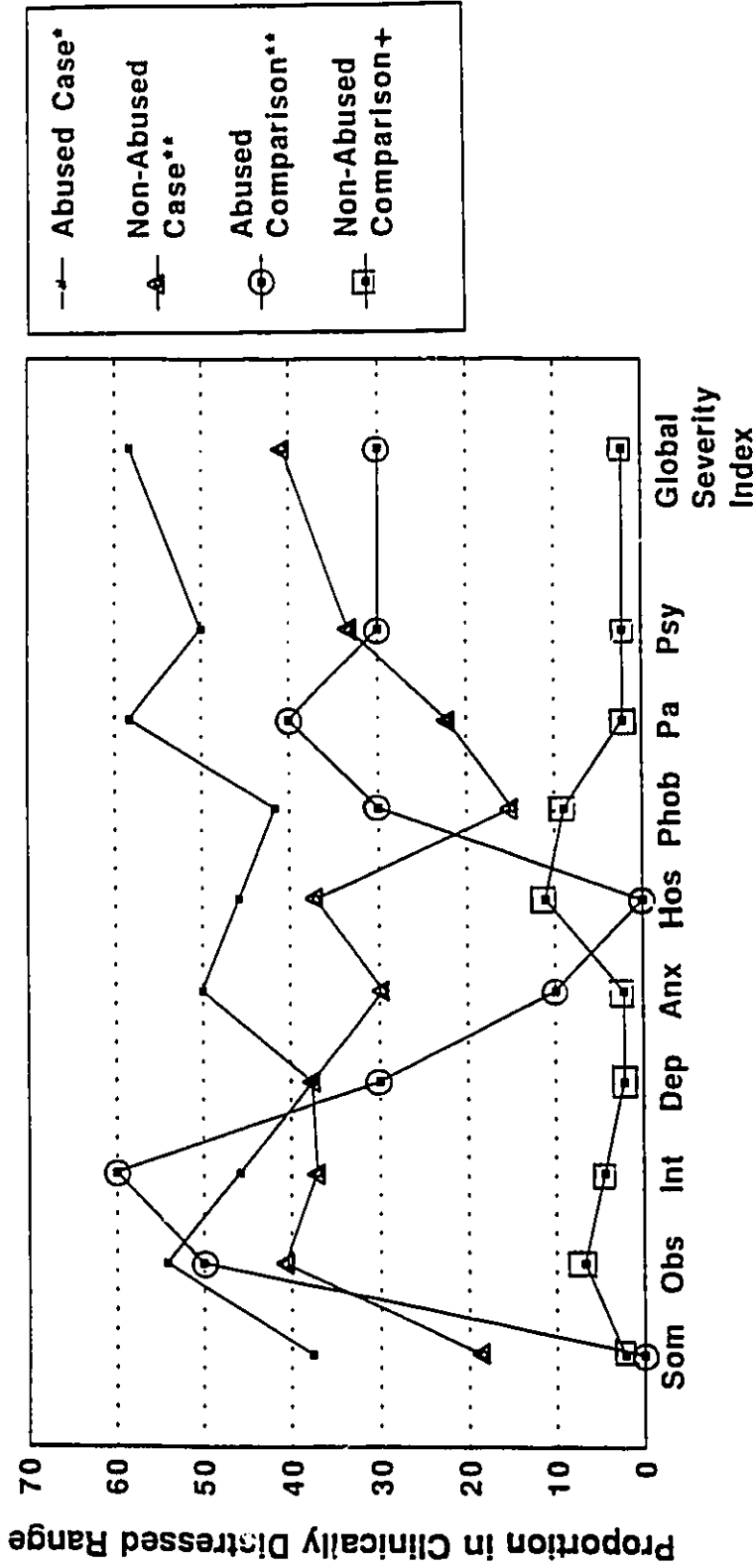


Brief Symptom Inventory Subscales

Figure AA-1. Percentage of mothers scoring in the clinical range for the Brief Symptom Inventory Subscales at Time 1.

Note. Clinical range = T-Score \geq 63.

* double trauma group; ** single trauma group; + no trauma group.



Brief Symptom Inventory Subscales

Figure AA-2. Percentage of mothers scoring in the clinical range for the Brief Symptom Inventory Subscales at Time 2.

Note. Clinical range = T-Score \geq 63.

* double trauma group; ** single trauma group; + no trauma group.

Appendix BB

Qualitative Information on the Persons Providing Social Support
for Case Parents

Table BB-1 Type of Persons Providing Emotional Support to Case
Parents for the Expression of their Feelings at Time 1

Table BB-2 Type of Persons Providing Emotional Support to Case
Parents for the Expression of their Feelings at Time 2

Table BB-3 Type of Persons Providing Personal Support to Case
Parents at the First Assessment

Table BB-4 Type of Persons Providing Personal Support to Case
Parents at the Second Assessment

Table BB-5 Type of Persons Providing Community Support to Case
Parents at the First Assessment

Table BB-6 Type of Persons Providing Community Support to Case
Parents at the Second Assessment

Table BB-1

Type of Persons Providing Emotional Support to Case Parents for the Expression of their Feelings at Time 1

Relationship of Person Providing Support	Percentage of Parents with Support			
	Primary Support		Secondary Support	
	Mothers ^a	Fathers ^b	Mothers	Fathers
No Supportive Person	28.3	43.5	not applicable	
Spouse	17.0	26.1	1.9	4.3
Parent	5.7	0.0	1.9	0.0
Sibling	5.7	4.3	1.9	4.3
Son or Daughter	1.9	4.3	7.5	0.0
Friend	22.6	8.7	11.3	8.7
Therapist	7.5	0.0	3.8	0.0
Police	1.9	4.3	0.0	0.0
Doctor	3.8	0.0	3.8	0.0
Clergy	0.0	0.0	0.0	4.3
Other ^c	5.7	8.7	9.4	0.0
No Secondary Support	not applicable		30.2	34.8

Note. Information based on parent responses on the adapted Structured Interview Specific to Sexual Abuse.

^an = 53. ^bn = 23. ^cOther persons used for the expression of feelings were for mothers: other mothers of sexually abused children, Children's Aid caseworkers, mother-in-laws, and the ESA research staff; for fathers: co-workers and the ESA research staff.

Table BB-2

Type of Persons Providing Emotional Support to Case Parents for the Expression of their Feelings at Time 2

Type of Person Providing Support	Percentage of Parents with Support			
	Primary Support		Secondary Support	
	Mothers ^a	Fathers ^b	Mothers	Fathers
No Supportive Person	28.6	50.0	not applicable	
Spouse	10.2	30.0	12.2	0.0
Parent	4.1	0.0	4.1	5.0
Sibling	4.1	0.0	8.2	0.0
Son or Daughter	4.1	0.0	0.0	0.0
Friend	18.4	0.0	6.1	15.0
Therapist	16.3	5.0	0.0	0.0
Police	2.0	0.0	2.0	0.0
Doctor	6.1	0.0	0.0	0.0
Clergy	4.1	5.0	2.0	0.0
Other ^c	2.0	10.0	8.2	0.0
No Secondary Support	not applicable		28.6	30.0

Note. Information based on parent responses on the adapted Structured Interview Specific to Sexual Abuse. ^an = 53. ^bn = 20. ^cOther persons used for expression of feelings included for mothers: other mothers of sexually abused children, Children's Aid caseworkers, a church group, the ESA research project and co-workers; and for fathers, the ESA research project and co-workers.

Table BB-3

Type of Persons Providing Personal Support to Case Parents at the First Assessment

Type of Person Providing Support	Percentage of Parents with Support			
	Primary Support		Secondary Support	
	Mothers ^a	Fathers ^b	Mothers	Fathers
No Supportive Person	36.5	50.0	not applicable	
Spouse	25.0	37.5	3.8	0.0
Parent	1.9	0.0	1.9	4.2
Sibling	3.8	0.0	0.0	0.0
Son or Daughter	1.9	4.2	0.0	0.0
Friend	21.2	4.2	7.7	16.7
Therapist	3.8	0.0	3.8	0.0
Police	1.9	0.0	0.0	0.0
Doctor	0.0	0.0	1.9	0.0
Clergy	1.9	4.2	0.0	0.0
Other ^c	1.7	0.0	7.7	0.0
No Secondary Support	not applicable		34.6	29.2

Note. Information based on parent responses on the adapted Structured Interview Specific to Sexual Abuse. ^an = 52. ^bn = 24. ^cOther persons used for personal support for mothers: Children's Aid caseworkers, the ESA research staff, and a school counselor.

Table BB-4

Type of Persons Providing Personal Support to Case Parents at the Second Assessment

Type of Person Providing Support	Percentage of Parents with Support			
	Primary Support		Secondary Support	
	Mothers ^a	Fathers ^b	Mothers	Fathers
No Supportive Person	33.3	52.6	not applicable	
Spouse	18.8	26.3	4.2	0.0
Parent	4.2	0.0	2.1	0.0
Sibling	6.3	0.0	8.3	5.3
Son or Daughter	6.3	0.0	0.0	0.0
Friend	18.8	10.5	14.6	10.5
Therapist	6.3	5.3	2.1	0.0
Police	2.1	0.0	0.0	0.0
Doctor	0.0	0.0	2.1	0.0
Clergy	0.0	5.3	4.2	5.3
Other ^c	4.2	0.0	4.2	5.3
No Secondary Support	not applicable		25.0	21.1

Note. Information based on parent responses on the adapted Structured Interview Specific to Sexual Abuse.

^an = 48. ^bn = 19. ^cOther persons used for personal support for mothers: the Crown Attorney's staff, and the ESA research staff.

Table AA-5

Type of Persons Providing Community Support to Case Parents at the First Assessment

Relationship of Person Providing Support	Percentage of Parents with Support			
	Primary Support		Secondary Support	
	Mothers ^a	Fathers ^b	Mothers	Fathers
No Support	45.3	45.8	not applicable	
Therapy Group	1.9	4.2	1.9	0.0
Individual Therapist	1.9	0.0	1.9	0.0
Psychologist or Psychiatrist ^c	9.4	0.0	1.9	0.0
Social Worker	20.8	12.5	5.7	4.2
Support Group	1.9	8.3	3.3	0.0
Physician	11.3	8.3	0.0	0.0
Police	3.8	12.5	0.0	0.0
Other ^d	3.8	4.2	0.0	0.0
No Secondary Support	not applicable		37.7	50.0

Note. Information based on parent responses on the adapted Structured Interview Specific to Sexual Abuse. ^an = 52. ^bn = 24. ^cThese two groups were combined because most parents were unclear whether the therapist was a psychologist or psychiatrist. ^dOther persons used for community support for mothers were: a guidance teacher, neighbours, the Victims of Violence group, and the ESA research project; and for fathers: a guidance counselor.

Table AA-6

Type of Persons Providing Community Support to Case Parents at the Second Assessment

Relationship of Person Providing Support	Percentage of Parents with Support			
	Primary Support		Secondary Support	
	Mothers ^a	Fathers ^b	Mothers	Fathers
No Support	30.6	57.9	not applicable	
Therapy Group	2.0	0.0	4.1	0.0
Individual Therapist	10.2	0.0	2.0	0.0
Psychologist or Psychiatrist	18.4	5.3	8.2	10.5
Social Worker	20.4	10.5	4.1	5.3
Support Group	2.0	5.3	2.0	0.0
Clergy	2.0	10.5	0.0	0.0
Physician	2.0	0.0	2.0	0.0
Police	10.2	5.3	2.0	0.0
Other ^d	2.0	0.0	4.1	0.0
No Secondary Support	not applicable		38.8	21.1

Note. Information based on parent responses on the adapted Structured Interview Specific to Sexual Abuse.

^an = 49. ^bn = 19. These two groups were combined because most parents were unclear whether the therapist was a psychologist or psychiatrist. ^dOther persons used for community support for mothers were: neighbours, the Children's Aid Society, the Rape Crisis Centre, and the ESA research project.

Appendix CC

Prominent Feelings Experienced by Case Parents

Table CC-1 Prominent Feelings Experienced By Case Mothers at Disclosure, and at Three and Six Months after the Disclosure

Table CC-2 Prominent Feelings Experienced By Case Fathers at Disclosure, and at Three and Six Months after the Disclosure

Table CC-1

Prominent Feelings Experienced By Case Mothers at Disclosure, and at Three and Six Months after the Disclosure

Type of Feeling	Percentage of Mothers Endorsing Feeling		
	Disclosure ^a n = 58	3 Months n = 52	6 Months n = 50
Shock	91.4	5.8	22.4
Anger	84.5	51.9	78.0
Disbelief	62.1	13.5	38.8
Overwhelmed	62.1	13.5	40.0
Fear	56.9	17.3	46.0
Helpless	53.4	13.5	51.0
Shame	27.6	7.7	14.3
Other: ^b			
Guilt	13.8	11.5	14.0
Sadness	10.3	15.4	8.0
Hate/Revenge	8.6	8.6	4.0
Betrayed	6.9	5.7	4.0
Numb	6.9	3.8	6.0
Frustrated	3.4	11.5	8.0
Hurt	3.4	5.2	2.0
Reliving Own Abuse	1.7	0.0	8.0

Note: Responses based on the Structured Interview Specific to Sexual Abuse which asked about specific feelings.

^aFeelings at disclosure were assessed through retrospective reports. ^bOther feelings refer to feelings identified by parents when asked in open-ended format whether any other feelings were prominent.

Table CC-2

Prominent Feelings Experienced By Case Fathers at Disclosure, and at Three and Six Months after the Disclosure

Type of Feeling	Percentage of Fathers Endorsing Feeling		
	Disclosure ^a n = 26	3 Months n = 24	6 Months n = 20
Shock	80.8	17.4	25.0
Anger	84.6	73.9	75.0
Disbelief	57.7	8.7	35.0
Helpless	53.8	17.4	35.0
Fear	42.3	17.4	31.6
Overwhelmed	38.5	13.0	26.3
Shame	11.5	0.0	10.0
Other: ^b			
Frustrated	11.5	13.0	0.0
Guilt	3.8	4.3	5.0
Hate/Revenge	3.8	13.0	10.0
Sadness	0.0	13.0	0.0
Betrayed	0.0	4.3	0.0
Numb	0.0	8.7	10.0

Note: Responses based on the Structured Interview Specific to Sexual Abuse which asked about specific feelings.

^aFeelings at disclosure were assessed through retrospective reports. ^bOther feelings refer to feelings identified by parents when asked in open-ended format whether any other feelings were prominent.

Appendix DD

Parents' Perceptions of the Most Serious Problems Associated with
Having a Sexually Abused Child

Table DD-1 Case Parents' Perceptions of the Most Serious Problems
Faced by Them as Parents of a Sexually Abused Child at
Time 1

Table DD-2 Case Parents' Perceptions of the Most Serious Problems
Faced by Them as Parents of a Sexually Abused Child at
Time 2

Table DD-1

Case Parents' Perceptions of the Most Serious Problems Faced by
Them as Parents of a Sexually Abused Child at Time 1.

Type of Problem	Percent of Parents Endorsing Problem			
	Most Serious Problem		Secondary Problem	
	Mother ^a	Father ^b	Mother	Father
PARENT-CENTERED:				
Coping with Own Feelings	32.1	8.3	13.2	4.2
Perpetrator Issues	22.6	25.0	1.9	4.2
Impact on Spousal & Family System	3.8	12.5	5.7	4.2
Parent Abilities	9.4	0.0	1.9	8.3
Court Preparation of Self	3.8	4.2	0.0	0.0
Lack of Support	5.7	8.3	7.5	4.2
Dealing with own Abuse History	0.0	0.0	5.7	0.0
No Parent Issues	22.6	41.7	not applicable	
CHILD-CENTERED:				
Feared Impact on Child	17.0	8.3	13.2	12.5
Perpetrator Issues	5.7	20.8	1.9	0.0
Court Issues	15.1	12.5	3.8	8.3
Emotional Problems	15.1	12.5	9.4	4.2
Behavioural Problems	5.7	8.3	5.7	4.2
School Problems	3.8	4.2	0.0	0.0
No Child Issues	37.7	33.3	not applicable	

Note. Perception of problems based on parent responses on adapted Structured Interview Specific to Sexual Abuse. Issues were scored based on responses to open-ended question.

^an = 53. ^bn = 24.

Table DD-2

Case Parents' Perceptions of the Most Serious Problems Faced by Them as Parents of a Sexually Abused Child at Time 2

Type of Problem	Percent of Parents Endorsing Problem			
	Most Serious Problem		Secondary Problem	
	Mother ^a	Father ^b	Mother	Father
PARENT-CENTERED:				
Coping with Own Feelings	32.0	20.0	14.0	15.0
Perpetrator Issues	2.0	5.0	2.0	5.0
Impact on Spousal & Family System	10.0	15.0	2.0	0.0
Parent Abilities	16.0	20.0	8.0	10.0
Court Preparation of Self	2.0	5.0	6.0	0.0
Lack of Support	6.0	10.0	4.0	5.0
Dealing with own Abuse History	4.0	0.0	4.0	0.0
No Parent Issues	22.6	25.0	not applicable	
CHILD-CENTERED:				
Feared Impact on Child	32.0	15.0	6.0	0.0
Perpetrator Issues	2.0	5.0	0.0	0.0
Court Issues	6.0	5.0	10.0	5.0
Emotional Problems	20.0	10.0	8.0	0.0
Behavioural Problems	10.0	15.0	6.0	10.0
School Problems	2.0	5.0	6.0	0.0
Sexual Problems	2.0	0.0	4.0	5.0
No Child Issues	26.0	45.0	not applicable	

Note. Perception of problems based on parent responses on adapted Structured Interview Specific to Sexual Abuse. Issues were scored based on responses to open-ended question.

^an=50. ^bn = 20.

Appendix EE

Case Parents' Reports of Changes in Parenting Related to their
Child's Sexual Abuse

Case Parents' Reports of Changes in Parenting Related to their Child's Sexual Abuse

Type of Change	Percentage of Parents Reporting Changes			
	Time 1		Time 2	
	Mothers n = 53	Fathers n = 24	Mothers n = 50	Fathers n = 20
Emotional Availability	26.4	29.2	32.0	15.0
Protection Issues	49.1	58.3	56.0	50.0
Discipline Issues	15.1	8.3	20.0	20.0
Abuse-Related Issues	5.7	4.2	2.0	5.0
Parent Ability Issues	11.3	8.3	10.0	5.0
No Change	24.5	20.8	12.0	30.0

Note. Reports of changes in parenting are based on responses on the adapted Structured Interview Specific to Sexual Abuse.

Appendix FF

Letters of Permission for Reproduction of Figures



Children's Hospital of Eastern Ontario
Hôpital pour enfants de l'est de l'Ontario

401 SMYTH, OTTAWA, ONT. K1H 8L1 TELEPHONE (613) 737-7600

CHEO
Child Protection Programme

January 15, 1993

Dear Joanne,

re: CPT CSA stats

This is to verify that you have my permission to cite/reprint the Child Protection Program 1990 CSA stats I provided to you some time ago for purposes of your thesis and our ESA Project.

Ron Ensom, M.S.W., C.S.W.

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May 15, 1992

Joanne E. McIntyre
ESA Project-Department of Psychology
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401 Smyth, OTTAWA, ONT. K1H8L1 Canada

Dear Ms. McIntyre:

In your recent letter you indicated that your dissertation focused on secondary victimization in parents of children who have disclosed experiences of extrafamilial child sexual abuse and your wish to reproduce Figure 1 on page 25 in my Helping Traumatized Families. I assume that you wish permission to include it in your dissertation. Of course you can. I am glad to know that it is useful to you and so similar to your approach. Brilliant minds think alike, ah?

Please send me any papers you have on the topic. My next book, Trauma and Its Wake, Volume III: Secondary Traumatic Stress Theory, Research, Treatment, and Prevention, focuses on this topic more than any other and I want to make sure you and your colleagues are included in the review of current literature.

I am enclosing information on the Society and subscription to the Journal of Traumatic Stress. Membership includes subscription, by the way. You might consider applying for a post-doc here at FSU. Send me your vita.

Best,

Charles Figley
Professor and Editor

Enclosures