THE MATERNAL ENVIRONMENT OF CHILD SEXUAL ABUSE VICTIMS

by

Karen L. M. Campbell

A thesis

presented to The University of Manitoba

in partial fulfillment of the

requirements for the degree of

Doctor of Philosophy

Department of Psychology

Winnipeg, Manitoba

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Abstract

Of all the aspects of a child's environment, non-offending mothers of child sexual abuse victims have received the most speculation, but little critical study. A review of the literature on child victims of intra- and extra-familial sexual abuse reveals the importance of mother-related factors in child sexual abuse. However, there is need for greater clarification of relevant maternal environment characteristics, especially those which can be explained and united by a coherent theory.

This project examined the maternal environment of child sexual abuse victims from an ecological perspective (Bronfenbrenner, 1986). This perspective considers the impact of a child's immediate relationships (e.g., mother-child), their secondary relationships (e.g., mother-others), and their all-encompassing environment (e.g., socio-economic status) upon the risk for sexual victimization. Hypothetically, mothers appear to be important in child sexual abuse because they are vulnerable in psychological, social, and/or economic areas. Their children, therefore, are vulnerable as well.

Some maternal factors noted by sexual abuse specialists as frequently occuring in sexual abuse situations include various maternal personal characteristics, childrearing patterns, spousal/romantic relations, social support, and

stress. Physical abuse/neglect research has linked similar factors together in a maternal resource-drain model to explain child abuse. The same model applies in this study: although the mother is not the offender, her 'protection resources' become more scarce, her needs become greater, she becomes overwhelmed or preoccupied, and opportunity for child victimization becomes a greater risk. The study examined these maternal factors and their additive value in

differentiating occurence of child sexual assaults: microsystem factors of personal characteristics related to childrearing attitude/behavior patterns, mesosystem factors of abusiveness in adult male-female relationship patterns and quality/quantity of social support; and macrosystem factors, such as recent positive and negative life events and socio-economic status.

The following hypotheses and measures were proposed:

1) On the Michigan Screening of Parenting Potential (Helfer, Hoffmeister and Schneider, 1978) scale, negative reports of emotional needs being met, relationship with parents, expectations of children and coping were expected to characterize mothers of victims as compared to controls. Control mothers were expected to report significantly more positive perceptions of these characteristics. These factors were expected to relate significantly to the occurrence of child victimization.

2) On the Mother-Child Relationship Evaluation Scale (Roth, 1980), rejection, overprotection and/or overindulgence scores were expected to be significantly higher in mothers of victims as compared to controls. Concurrently, maternal acceptance was expected to be lower in mothers of sexually abused children. These factors were expected to relate significantly to occurrence of child victimization.

3) On the Center for Social Research (CSR) Abuse Index, mothers of victims were expected to report a greater number of abusive experiences in adult male-female relationships, especially significant (e.g. parental) relationships witnessed by the child. This factor was expected to significantly relate to the occurrence of child sexual victimization. Number of relationships was also expected to significantly relate to victimization.

4) On the Sarason et al (1983) Social Support Questionnaire, the number of supportive

relationships and satisfaction with them was expected to be signficantly lower in mothers of victims as compared to controls. Social support factors were expected to significantly discriminate mothers of victims from controls.

5) On the Sarason, Johnson & Siegel (1978) Life Experiences Survey, the number of recent stressful life events and those with negative impact were expected to be significantly higher for mothers of sexually victimized children as compared to controls.

6) On the Hollingshead Two-Factor Index of Socio-Economic Status, mothers of victims were expected to have lower socio-economic status than control mothers.

7) The combination of these factors was expected to maximally discriminate maternal environment of child sexual abuse victims from non-victims and support application of ecological theory toward understanding of maternal impact in child sexual victimization.

8) Lastly, a three-system ecological approach was utilized to analyze relative importance of each level in child sexual victimization.

Subjects were 46 mothers of girls reporting recent sexual assault experiences at North Carolina victim's assistance programs. Control subjects were an equal number of mothers of school aged girls volunteering participation after responding to a newspaper advertisement announcing the project.

Data analysis included discriminant function analyses. Results indicated that mothers' perceptions of their own coping, relationships with parents, and emotional needs met significantly discriminated between victims' and non-victims' mothers groups, with the control group reporting higher self-ratings of these characteristics. Control group mothers also reported a less "rejecting" parenting style, as indicated by the Rejection scale score of the Mother-Child Relationship

Evaluation Scale.

Conflict severity between a mother and an adult male partner, and the number of conflicted relationships experienced, was significantly higher in mothers of victims. Social support quantity and satisfaction also significantly discriminated between these two groups, with the control group reporting more of both support qualities.

Life events and negative impact of these events were significantly lower in the control group of mothers. Socio-economic status, particularly head-of-household income, differed significantly in mothers of victims and mothers of non-victims groups.

Maximal discrimination between these two groups of mothers was obtained with a combination of conflict severity between mother and a partner, mother's social support satisfaction, a more "rejecting" maternal parenting style, and head-of-household socio-economic status, in order of significance. Maximal discrimination between the three groups of mothers of incest victims, mothers of non-incest victims, and mothers of non-victims included the first three variables, but did not include socio-economic status.

Acknowledgements

My gratitude is offered to my advisor Michael Thomas, Ph.D., who provided so much of his time and energy toward completion of this dissertation. Many thanks to committee members Gordon Barnes, Ph.D., Rayleen DeLuca, Ph.D., and Sally Longstaffe, M.D., for their continued patience, guidance and support throughout this project.

The dedication shown by professionals in the North Carolina agencies involved, and the determination of participating mothers to aid in prevention of child sexual abuse have made this project a reality. You have inspired me both personally and professionally.

Special thanks to Reena Sommer, Ph.D. and her family for support and assistance with those last-minute details.

Finally, for all the years of your love and support, Richard Charles Campbell and Olivia Marie Campbell, I thank you.

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Introduction

Child sexual abuse is a current problem of major proportions. U.S. statistics indicate that 28% of women have been sexually abused before 14 years of age (Russell, 1983). In 1984, approximately 100,000 children were victims of sexual abuse, occurring at an estimated rate of 15.88 per 10,000 children (Suski, 1986). Five percent of all childhood sexual abuse victims sustained injury (Sedlak, 1991). For a social issue of such magnitude, however, child sexual abuse has not been researched thoroughly enough to provide even approximate answers as to etiology, treatment and prevention. Exploration of environmental risk factors for child sexual abuse could provide those answers.

Of all the aspects of a child's environment, non-offending mothers of sexually abused children have received the most speculative attention and the least critical study. The mother's crucial role in father-daughter incest has been reported frequently by clinicians and theorists (Machotka et al., 1967; McIntyre, 1981; Forward and Buck, 1983; Thorman, 1983; Fontana and Bersharov, 1979). Mothers often are viewed "as the most culpable individual either through default or...direct involvement" (McIntyre, 1981, p. 462). However, research supporting direct maternal responsibility does not exist.

Nevertheless, clinicians historically have delineated four categories of maternal involvement in incestuous families (Cammaert, 1988). These categories include: 1) mothers with disturbances of personality and social skills (Kaufman, Peck and Tagiuri, 1954; Sgroi and Dana, 1982); 2) " neglecting" wives/mothers, (Cormier, Kennedy and Sangowicz, 1962; Kaufman et al, 1954; Sgroi and Dana, 1982; Meiselman, 1978); 3) family dysfunction (Machotka, Pittman and Flomenhaft, 1967; Lustig, Dresser, Spellman and Murray, 1966); and 4) mothers who appear to provide opportunities for incest and deny its existence (Guthiel and Avery, 1977; Lustig et al, 1966; Machotka et al, 1967; Meiselman, 1979; Sgroi & Dana, 1982). While the available data does not easily fit into these vague categories, research review does suggest an alternative ecological framework which may clarify how maternal factors relate to child victimization.

Some past research has explored personal characteristics of mothers of incest victims. Identified maternal characteristics include general impairment (Finkelhor, 1993; Williamson et al, 1991), low self esteem (Sahd, 1980: Sgroi and Dana, 1982), depression (Harrer, 1981; Herman and Hirshman, 1981), helplessness (Herman and Hirshman, 1981; Knudson, 1982; Meiselman, 1979; Sahd, 1980; Sgroi and Dana, 1982), MMPI scale elevations (Fredrickson, 1981; Friedrich, 1991), alcohol abuse (Herman and Hirshman, 1981; Julian and Mohr,

1980), and greater incidence of incest victimization themselves (Goodwin et al, 1981). Friedrich (1991) found that mothers of sexually-victimized children generally had normal MMPI profiles; however, a subset demonstrated elevations of some codes, suggesting aggressive, immature and self-centered behavior. These findings suggest that these mothers may have personal characteristics and/or overwhelming life circumstances which impair their emotional functioning and coping strategies. There is no evidence of serious maternal "pathology" alone contributing to incest.

Few researchers have studied parental and/or spousal "neglect" in incestuous families, although some studies imply difficulties in these areas. Fifty-seven percent of incestous families from a Connecticut sexual trauma treatment program reported adult sexual problems (Bander, Fein and Bishop, 1982). Other studies have correlated marital disruptions and sexual difficulties in women with child sexual abuse histories (Briere and Runtz, 1990; Briere and Runtz, 1987; Finkelhor et al, 1989), who often become mothers of victims themselves. However, sexual difficulties in the marital relationship cannot be solely ascribed to the pedophile's spouse when the primary sexual interest of the pedophile is in children (Groth and Birnbaum, 1979; Abel, Blanchard, Barlow and Mavissakalian, 1975).

With respect to maternal neglect, observations of mother-daughter

role-reversal are supported by data: 45% of incest victims reported acting as "little mothers" at an early age (Herman, 1981). Gordon (1986) reviewed 500 incest cases and found role reversal. As well, Paveza (1988) found that distant mother-daughter relationships were associated with higher risk for father-daughter incest. Freidrich's (1991) MMPI profiles of victims' mothers suggested features that may contribute toward spouse selection and parenting difficulties, and, indeed, Hoagwood (1990) found that mothers of sexually abused children reported more difficulty in these roles. Mothers who were sexually abused in childhood (often mothers of sexual abuse victims themselves) were more self-focused and relied on their children for emotional support (Burkett, 1991). Leahy (1991) noted that such mothers often lack empathy. Coupled with clinical observations (Weiner, 1962; Spencer, 1978), these findings suggest that mother-child relationship problems and poor social support networks exist in mothers of incest victims.

Family dysfunction has long been considered a correlate of and/or contributor to incest (Genuis et al, 1991; Rush, 1980; de Young, 1982). A survey of 102 incestuous households by Julian and Mohr (1980) revealed significantly larger family size, family discord, alcohol/mental health problems, and spousal abuse. Similarly, Herman and Hirshman (1981) studied 40 adult incest victims' families of origin, finding a significant degree of paternal

violence, wife battering, social isolation of mother and children, maternal unavailability, and more siblings. Paveza's (1988) study of 34 incestuous families indicated marital dissatisfaction and spousal violence as among the most strongly associated risk factors for father-daughter incest. Ray et al (1991) found less cohesion, independence and personal growth in families of incest and extra-familial abuse victims, while Lanktree, Briere and Zaidi (1991) similarly found incest families to be higher in conflict and organization, and lower in cohesion that non-incest families in a psychiatric population. These findings suggest that mothers of incest victims have high levels of stress, poor social support and abusive spousal relationships which can affect maternal functioning, yet there is no research support for identifying a mother as "responsible" for family dysfunction.

Lastly, research exploring "maternal collusion" indicates that some mothers do not act effectively upon incest disclosure (Stacey and Shupe, 1983; Fontana and Bersharov, 1983). Approximately three quarters of mothers who know about the incest do not act to protect the child (Knudson, 1982; Meiselman, 1979). Herman (1981) reports that mothers of incest victims were "unwilling or unable to defend their daughters" (p. 88). Consideration of the mother's environment, however--her relationships with her spouse (potentially violent), to her child, to outside social supports (possibly limited), her life

circumstances (possibly low socio-economic status and quite stressful) and personal coping resources-- is paramount to understanding her actions and her child's victimization.

Thus, from the available data on incest, it is clear that mothers are not directly responsible for child victmization. However, they clearly do play an important role in a child's vulnerability to intrafamilial sexual assualt. Her role in her child's victimization appears associated with an accumulation of personal, social and contextual risk factors which surround the child victim. However, which factors and how they combine to contribute toward victimization remains unclear.

The existing data on the maternal role in incest underscore three key issues. First, the mother's role in child sexual victimization appears important. Second, understanding how a mother impacts upon her child's victimization with research rather than "mother-blaming" (Caplan & Hall-McCorquodale, 1985) would be an important contribution to child sexual abuse theory, treatment and prevention. Third, there is need for a cohesive theory of child sexual victimization, rather than a hodge-podge of observational and pejorative categories. Research identifying maternal risk factors united by a systematic theory would add greatly to understanding maternal involvement in child sexual abuse.

The application of an ecological model (Bronfenbrenner, 1986; Garbarino, 1977) to the study of mothers and child sexual victimization appears to be a logical theoretical framework from which to begin. For example, Urie Bronfenbrenner (1977, 1986), Briere and Runtz (1988), and others have proposed examination of the "ecological environment" as a method of understanding human development and maltreatment. Development is "affected by relations...within and between these immediate settings, as well as the larger social contexts...in which the settings are embedded" (Bronfenbrenner, p. 514, 1977). The environment is "a nested arrangement of structures, each contained within the next" (p. 514, 1977). For example, a child is surrounded by the microsystem (immediate major influences such as parents, peers), contained within a mesosystem of "once-removed" influences (such as parental relations and community), lying within the macrosystem of larger-scale influences (such as socio-economic status or life events). Thus, the ecological approach demands "examination of multiperson systems of interaction not limited to a single setting and...(considering) the environment beyond the immediate situation containing the subject" (p. 514).

This same "person-process-context" model (Bronfenbrenner, 1986) can be applied to the study of mothers and child sexual abuse. The model can help explain a mother's role when a child is sexually victimized by the interactions

among and progressive accumulation of maternal environmental risk factors. The ecological model alleviates direct responsibility for victimization foisted upon mothers in the past, and provides a ready framework for further research. The model also expands the conceptualization of how a mother and her social and economic circumstances impact upon her child's risk for victimization. Thus, a mother's personal resources and skills, spousal/parental-child relations, intrafamilial situations, extrafamilial relationships, and life circumstances can combine to provide a maternal mileau which may decrease or increase risk of child sexual victimization.

According to ecological theory, these variables are interactive in their potential to influence child sexual abuse. Indeed, this interactive approach has been applied to similar factors in the study of child physical abuse and neglect with much success. The literature indicates that an interaction of variables, rather than one factor in isolation, precipitates physical abuse or neglect (Polansky et al, 1981; Thorman, 1983). More specifically, major theorists in this area (Wolfe, 1985; Smith, 1984) view child abuse as resulting from an interaction of parental "competence" and situational demands.

Several studies add credence to this approach. For example, Conger, McCarty, Yang, Lahey, and Kropp (1984) found that authoritarian child-rearing values, negative perceptions of children and parental emotional

distress augment the influence of life stress and precipitate abuse. Maternal stress accounted for 36% of the variance in maternal behavior toward children, while maternal psychological characteristics secondarily accounted for 15% of the variance. Similarly, Gaines et al (1978) examined the contribution of maternal stress, personality and mother-child bond to child abuse/neglect. Together, maternal "stress" and "personality" accounted for 12% of the variance, with "stress" contributing most. Maternal "emotional needs met" and "coping ability" ratings accounted for the second largest amount of the variance. Still, these studies have in common an emphasis on interaction of maternal environmental systems as contributors to child victimization. The similarity between these interactive approaches, relevant variables and significant findings supported examination of the maternal environment of intra- and extrafamilial child sexual abuse victims with an ecological model. As well, approximately 22% (Tarter et al 1984) to 39% (Runtz, 1986) of physically abused children are also sexually abused as children, so the relationship appeared worthy of exploration. The ways these characteristics combine to enhance risk of child abuse has not yet been clarified, however (Hallett, 1988).

The data on mothers of incest victims fits Bronfenbrenner's nested ecological categories of microsystem, mesosystem, and macrosystem

(Bronfenbrenner, 1986), those environmental arenas where interactions directly affect a child. A child's "microsystem," "principal settings in which human development occurs" (p. 723, Bronfenbrenner, 1986), could include the mother's childrearing attitudes and personal characteristics. The "mesosystem" could include settings in which the "child's parents live their lives" (p. 723, Bronfenbrenner, 1986), e.g., parental and social relationships, etc. The "macrosystem" may include all-encompassing change in the environment (Berns, 1989) and its impact upon the child. Of particular interest are the effects of socio-economic status and recent cumulative life events (e.g., stressful circumstances) upon mother and child. An ecological model, therefore, allows the unification of data into a cohesive theory of maternal risk factors which considers the mother's personal resources, the mother-child relationship, and the context in which these occur as key areas where a mother functions as external inhibitor of child sexual victimization.

Further, if an environmental approach can explain child victimization within the home, then the same model should be applicable to child victimization outside the home. Because approximately 73% percent of reported child sexual abuse is perpetrated by acquaintances, family members outside the home, and strangers (DeFrancis, 1969), the study of maternal environments of both intra- and extra-familial sexual abuse victims is of

interest and practical significance. Indeed, the existing data supports application of ecological theory to non-incestuous child sexual abuse as well.

Of course, a sex offender's behavior is the "cause" of child sexual abuse (Lukianowicz, 1972; Lustig et al, 1966; Wells, 1981), but some theorists (Finkelhor, 1984) have applied ecological models to describe its occurence as the breakdown of internal and external inhibitors of the offender's behavior. Identifying how and when a mother acts (or fails to act) as an "external inhibitor" (Finkelhor, 1984) is of practical and theoretical interest.

Williamson, Borduin and Howe (1991) applied an ecological model of maltreatment to 50 adolescents and mothers who were subjected to neglect, physical abuse, sexual abuse, and no abuse. When individual characteristics, family relations, and stress/social support were evaluated, it was noted that adolescent sexual abuse was related to "maternal emotional problems" and adolescent behaviors, with lower family cohesion and stress. Although these results support an ecological examination of sexual abuse and articulate the importance of the maternal environment in child sexual abuse, they fail to explore it in depth.

Several comprehensive studies of risk factors in combined samples of intra- and extra-familial child sexual abuse victims exist (Russell, 1986; Miller, 1976; Finkelhor, 1979, 1984; Murphy, 1985; Fromuth, 1983). Most are general

surveys of major-city populations, while some are limited to student populations (Finkelhor, 1984; Fromuth, 1983). Their findings can be categorized, generally, along ecological lines: 1) microsystem factors of maternal personal characteristics and disturbed mother-child relations; 2) mesosystem factors of questionable social support and abusive maternal spousal relations; and 3) macrosystem factors such as socio-economic status (SES) and maternal stresses. For example, Paveza (1988) found strongest risk for father-daughter incest associated with low income, marital dissatisfaction, spousal violence, and mother-daughter distant relationships. As well, David Finkelhor and Larry Baron (1987) list five of the strongest and most consistent factors for all child sexual victimization as: 1) lived without their natural fathers or mothers; 2) mothers employed outside the home; 3) mothers disabled or ill; 4) witnessed conflict between parents; and 5) reported poor relationship with one of the parents. Finkelhor et al (1990) found that an unhappy family life was the most powerful risk factor of child sexual abuse. In a more recent literature review, Finkelhor (1993) noted that some of the factors associated with greatest risk include having an "impaired" mother, poor parenting, or witnessing family conflict. Overall, these findings fit neatly into Bronfenbrenner's microsystem (maternal absence/illness), mesosystem (employment, parental conflict), and macrosystem (life stressors) categories. A

review of the literature on maternal environment characteristics can identify the combination of maternal characteristics most relevant to both intra- and extra-familial child sexual abuse.

The Microsystem: Maternal Personal Characteristics

Maternal psychological characteristics have long been linked to occurrence of incest: general impairment (Finkelhor, 1993), depression (Kaufman et al, 1954; Machotka et al, 1967; Harrer, 1981; Herman and Hirshman, 1981; Wald et al, 1990), low self esteem (Sahd, 1980; Sgroi and Dana, 1982), passivity (Herman and Hirshman, 1981; Knudson, 1982; Meiselman, 1979; Sahd, 1980; Sgroi and Dana, 1982), weaknesses in reality testing and interpersonal guardedness (Wald et al, 1990), and various psychological disturbances (Williamson et al, 1991; Fredrickson, 1981; Herman and Hirshman, 1981). As well, child victims of both incest and non-incestuous sexual assault are more likely to have mothers who are ill, show little affection toward and have distant relationships with their children, and are sexually punitive (Finkelhor, 1979; 1984). Similarly, Genuis, Thomlison and Bagley (1991) surveyed male child sexual abuse victims and found a greater liklihood of alcoholism and "personality disorder" in one or both parents, excess physical punishment, and emotional neglect. Additionally, Friedrich (1991) suggests that a subset of mothers of child victims have MMPI profiles predisposing

them toward spouse selection and parenting difficulties.

These maternal characteristics, however, need to be organized into a coherent explanation of how they may predispose the child toward sexual victimization. The maternal attributes most relevant to victimization should be those correlated to the parenting process, because maternal characteristics do seem to influence parenting behavior. For example, maternal psychological characteristics of non-abusing mothers account for as much as fifteen percent of the variance in positive and negative parenting behaviors (Conger et al, 1984). Thus, those personal maternal characteristics linked with dysfunctional parenting may leave a child with low self esteem, a model of learned helplessness, and/or poor supervision and support, enhancing vulnerability to sexual abuse. Positive parenting may foster the opposite. Historically, Freud used the term "identification" to describe children's incorporation of the thoughts, feelings and behavior of a same-sex parent (Bronfenbrenner, 1960), while socialization theories underscore the importance of other social-learning processes, e.g., modeling. (Bronfenbrenner, 1960; Bandura, 1969a; 1969b). Additionally, a mother may hold attitudes toward childrearing which may occasionally place her child in incapable or even abusive hands. Whatever the mechanism, personal characteristics related to parenting are more likely to be those related to child sexual victimization. Indeed, Finkelhor's (1993) review

of risk factors finds "poor parenting" a substantial risk for child sexual victimization.

The Michigan Screening Profile of Parenting (MSPP) (Helfer, Hoffmeister and Schneider, 1978), a questionnaire developed to measure potential dysfunctional parenting, has been used to study abusive and neglectful mothers. In the Gaines et al (1978) study, two of the MSPP subscales, "Coping" and "Emotional Needs Met," significantly distinguished abusive/neglectful mothers from controls. Most importantly, the MSPP assumes an ecological perspective, assessing a range of parents' past and present perceptions of relationships and skills, rather than parenting "style" alone. The Michigan Screening Profile of Parenting (MSPP) measures four maternal characteristics: 1) emotional needs met; 2) relationship with parents; 3) expectations of children; and 4) coping. Each was evaluated for its potential relevance to child sexual victimization.

Emotional Needs Met

Helfer, Hoffmeister and Schneider (1978) describe the "Emotional Needs Met" (ENM) subscale of the MSPP as "indicat(ing) an emotionally nurturing (or deprived) upbringing with a current feeling of being able (or unable) to experience emotional support in personal relationships." (p. 2). For example, Gaines, Sandgrund, Green and Power (1978) examined abusing, neglecting and normal mothers with the MSPP and found that neglecting mothers had

significant difficulty meeting their own emotional needs. Morris and Gould (1963) noted that neglectful and battering parents exhibited parent-child role reversal. Justice and Justice (1976) describe "symbiosis" in abusing families, where parents take the child's role in relationships with their children. Justice, Calvert and Justice (1985) found that "symbiosis," defined as "forcing others to meet (parental) emotional needs," was a major factor distinguishing between abusers and non-abusers. In the non-offending mother of a child sexual abuse victim, then, the parent may seek to satisfy parental emotional needs before those of the child, resulting in poor bonding or supervision, or a role-reversal relationship. Thus, mothers lacking love and support in their own lives may tend to lapse in efforts to protect their children. Indeed, Koch and Jarvis (1987) have described this symbiotic relationship observed in three case studies.

The child-mother role reversal found in incestuous families may indicate maternal emotional neediness as well, (Cormier at el, 1962; Lustig et al, 1966; Gutheil and Avery, 1977). After reviewing fourteen cases of incest, Browning and Boatman (1977) portray the typical incestuous family as having family interactions characterized by role reversal. Further, adolescent incest victims' family dynamics have been found to include role reversal (Endert and Daniel, 1986). Lustig, Dresser, Spellman and Murray (1966) even consider role

reversal, especially the mother's "sanction" for the daughter to nurture the father, a prerequisite of incest. In addition, two studies utilizing the MMPI with mothers of adolescent sexual abuse victims found a greater frequency of 4-3 codes (Friedrich, 1991). The authors suggest that the elevations of these scales, although within normal limits, are associated with immature and self-centered behavior, placing a child at risk via inappropriate parenting or mate selection.

Thus, although research has not yet fully linked maternal emotional neediness with child sexual abuse, there are clinical indications that such a connection may exist (Fontana and Bersharov, 1979). Research has indicated more "little mothers" among childhood incest victims (Herman and Hirshman, 1981), but other than the current study, there has been no investigation to date with either intra- or extra-familial sexual abuse victims.

Relationship with Parents

Helfer, Hoffmeister and Schneider (1978) indicate that the MSPP "Relationship with Parents" (RWP) subscale evaluates enduring "feelings of closeness and warmth" with parents, "particularly the mother." (p. 2). The authors hypothesize that a parent's negative perception of his/her relationship with parents may be associated with disruptions of the current parent-child relationship. Theoretically, this association may occur through modelling of

poor parenting behavior, the respondent's emotional neediness, and/or the respondent's general interpersonal skills level. Whatever the mechanism, a mother's relationship with parents provides an important aspect of the environment in which a child develops.

Whether the RWP subscale is connected to child sexual abuse is unclear. There is no existing data. However, in addition to indicating potential parenting difficulties, RWP responses indicate the presence/absence of important social supports and maternal stressors. Both social isolation and a number of stressful events have been connected with incest. The expectation in this project, then, was that a mother's negative RWP scores would be associated with increased risk of child sexual victimization.

Expectations of Children

In the MSPP manual, Helfer, Hoffmeister and Schneider (1978) write that the "Expectations of Children" (EOC) subscale queries "realistic" parental expectations for children versus "feelings that very young children should be well-behaved and sensitive to what their parents want from them." (p. 3). Age-inappropriate expectations, then, are theoretically related to abusive parenting.

Similarly high expectations of children have been associated with negative parenting behaviors (Conger et al, 1984; Berger, 1980; Steele and Pollack,

1974). For example, Conger et al used EOC subscale items to assess parental belief in using external controls to gain child compliance. They obtained a Cronbach's alpha of .82 for their four-item "authoritarian values" scale. "Authoritarian values" correlated positively with observed negative maternal behaviors and correlated negatively with positive parenting behaviors.

Although no research exists on parental expectations of children and their connection to child sexual abuse, expectations of child compliance was hypothesized to leave a child at risk for sexual victimization. Such a child may fear violating an adult's directives, for example, and thus possess greater vulnerability to sexual abuse. Thus, a high score on the EOC subscale was hypothesized to be more common in mothers of child sexual abuse victims than in mothers of non-victims.

Coping

The coping (COP) subscale is defined by Helfer et al (1978) as "a feeling of being able or unable to cope with crises." (p. 3). Families experiencing child abuse and neglect report a greater number of stresses and less ability to cope with them than non-abusing families (Faller and Zeifort, 1981). Gaines et al (1978) reported that abusive mothers have a greater sense of coping failure than do neglecting or non-abusing mothers. Self-reported coping ability, then, may be an important mediator of stress and dysfunctional parenting.

To date, there has been little research connecting maternal coping behavior and child sexual victimization. However, Hoagwood (1990) noted that mothers of subjects who were sexually abused reported more family dysfunction in problem-solving. Reis and Heppner (1993) studied child sexual abuse victims and mothers adaptation following the child's disclosure, and found that mothers reported more stress and negative perceptions of problem-solving, and more communication problems than mothers of non-victims. However, these were considered post-disclosure adaptations rather than pre-existing risk factors or even correlations. The clinical literature on non-offending mothers of incest victims also suggests that most felt "unwilling or unable to defend their daughters" (Herman, 1981, p. 88). Given the number of stressful life events reported by these mothers, good coping skills may have made a significant difference in their protection of their daughters.

A mother who perceives herself as having positive coping capabilities also may be better able to model effective coping strategies. Sexual victimization, therefore, was expected to occur more frequently in children whose mothers perceive themselves as incapable of coping.

The Microsystem: Mother-Child Relationship Characteristics

An association between intrafamilial child sexual victimization and disturbed mother-child relationships has been noted by several clinicians

(Brooks, 1982; Weiner, 1962; Gutheil and Avery, 1977; Kaufman,1954; Finkelhor, 1979; Browne and Finkelhor, 1986; Spencer, 1978). Similarly, adolescent incest victims reported feeling "less loved" than non-victimized adolescents, according to a study conducted by Edwall and Hoffmann (1988).

Although the mother-child relationship has been viewed as "setting the stage" for child sexual abuse (Finkelhor, 1979; Browne and Finkelhor, 1986), few researchers have examined its characteristics closely. Finkelhor's (1984) survey of college students found a significant association between all types of child sexual victimization and physical and emotional disruptions in the mother-child relationship. Significantly more abuse victims endorsed the items "ever lived without mother," and "not close to mother" on Finkelhor's questionnaire. Using self-reports from mothers themselves, Paveza (1988) found that a distant mother-child relationship put a daughter at 11.61 times greater risk of father-daughter incest. However, the nature of the mother-child relationship remains ill-defined, and more specific details regarding parenting needs to be secured from the mothers themselves.

The Mother-Child Relationship Evaluation scale (MCRE) (Roth, 1980) allows mothers to rate their degree of acceptance, rejection, overprotection and overindulgence of a child. Its items describe parental attitudes and behaviors toward a specific child which characterize positive versus poor parenting styles.

The MCRE can provide important information on the kinds of disruption mothers and children are experiencing concurrent with victimization. Because research on maternal relationships with sexual abuse victims is sparse, research involving physically abusive and neglectful mothers appears theoretically useful to review.

Maternal Acceptance-Rejection

Maternal rejection has been linked with child physical abuse and neglect. Herrenkohl et al (1984) found physical abuse significantly associated with maternal behavior rated as rejecting by observers. Further, Herrenkohl, Herrenkohl, Toedter, and Yanushefski (1984), in a study of 439 abusing and non-abusing parent-child dyads, found that abuse was associated with parental rejection, despite income level or sex of child or parent. Age of the child did have an impact, and childrearing patterns varied strongly with income (Herrenkohl et al, 1984).

Similarly, a general climate of physically-abusive and neglectful parenting has been noted in incestuous families (Greenberg, 1979). Bess (1982) questioned psychiatrically-hospitalized incest victims and found that a triad of incest, parental alcoholism and child maltreatment emerged, with 40% reporting abuse and neglect by their parents. Further, Endert and Daniel's (1986) clinical observations indicate that poor parental supervision is a factor in occurrence of

sibling incest. In addition, the finding that only three-fourths of women report incest disclosed by their children (Knudson, 1982; Meiselman, 1979) may be suggestive of maternal rejection. Burkett's (1991) finding that mothers who had been sexually abused in childhood (as many mothers of victims are) were rated as more self-focused rather than child-focused may also suggest parental rejection. Theoretically, the mother-child relationship is of profound importance to child development and socialization (Bronfenbrenner, 1960; Bandura, 1969a & 1969b; Bowlby, 1969). A bond of acceptance between mother and child facilitates a child's self-worth and social skills (Egeland and Sproufe, 1981), and promotes active engagement in and protection of a child's life. In contrast, a rejecting relationship allows the potential for victimization by preventing the child's acquisition of positive interpersonal behaviors and skills (Egeland and Sproufe, 1981), lowering the child's self-esteem, and reducing the quality of parental care.

Maternal Overprotection and Overindulgence

Overprotection and overindulgence represent dimensions of parental control (Roth, 1980). "Overprotection" is defined by Roth as parental anxiety, excess control and prevention of a child's independent behavior. Theoretically, overprotection-- which may be defined primarily as overcontrol-- may jeapordize a child's ability to act against an adult sexual aggressor and/or limit

the child's exposure to experiences which develop confidence and social skills. On the other hand, "overindulgence" is operationally defined as overgratification and a lack of parental control (Roth, 1980). Overindulgence, which may be defined primarily as undercontrol, may be equally hazardous, permitting social experiences or environments for which the child is not developmentally prepared.

Controlling childrearing practices commonly appear among physically-abusive parents. Susman et al (1985) studied child-rearing patterns in depressed, abusive and normal mothers. The abusive mothers were controlling, and unlikely to encourage independence. Similarly, other researchers have found that neglectful parents demonstrate parental undercontrol, while abusers tend to overcontrol (Bousha and Twentyman, 1984; Crittendon, 1985; Oldershaw, Walters, and Hall, 1986). Similarly, Paulson, Schwemer, Afifi and Bendel (1977) used the Parent Attitude Research Instrument to identify abusive mothers 65% of the time by their reports of less egalitarianism, less encouragement of verbalization, and greater fear of harming the child. These findings support the notion of parental over-control in physically abusive families.

If this type of parental overcontrol can be considered overprotection, one may consider the research substantiating excessive parental control in families

of sexual abuse victims, as well. Ray et al (1991) found that families of both intra- and extra-familial sexual abuse victims were less likely to encourage personal growth and independence. As well, mothers in incestuous families are described in the literature as sexually repressive or punitive (Cormier, Kennedy and Sangowicz, 1962; Finkelhor, 1979; Maisch, 1973). Finkelhor (1984) lists maternal sexual punitiveness as a "risk" factor for sexual abuse both within and outside the family. These overcontrolling maternal attitudes and behaviors, at least with respect to sexual matters, appear to characterize the environment of sexual abuse victims.

In contrast, parental undercontrol (or overindulgence) has received no attention in the sexual abuse literature. Abusing and neglecting mothers tend to undercontrol by infrequently supervising or checking on children during play (Oates, 1982). However, whether this undercontrol translates into "overindulgence" on Roth's MCRE scale is unknown. Roth's "overindulgence," a form of maternal "non-acceptance" (Roth, 1980, p. 3), may be associated with child sexual victimization, then, but clarification on this issue was necessary.

The Mesosystem: Maternal Social Support

Finkelhor's (1984) inter-relational theory considers a strong social support network an external inhibitor which could prevent an offender's victimization

of a child. University students reporting child sexual abuse (Runtz, 1986; Finkelhor, 1984), as well as incest victims (Finkelhor, 1978; Julian and Mohr, 1980), have reported a lack of familial social support in their families of origin. Despite some opposing findings (Miller, 1976; Wyatt, 1985), higher incidence of sexual abuse has also been reported in rural environments, which tend to be more socially isolated as well (Finkelhor, 1984; Walters, 1975; Summit and Kryso, 1978; Russell, 1986). Williamson et al (1991) did not find social isolation to be related to child sexual abuse. Inconsistent findings appear due to a lack of consensus on the definition of social support. As well, ambiguity exists about quality and quantity of social support, and who received this support. The quality and quantity of maternal social support, functioning as a mediator of stressful circumstances, appeared to be an important factor in child sexual victimization.

Stress may explain why some mothers do not adequately fulfill their roles, but does not explain why others also under stress fulfill parenting roles adequately (Cook, 1980). One intervening factor may be the level of social support a mother experiences, mediating stress and insulating her from stress-induced illnesses and psychological distress (Brown and Harris, 1978). An individual's perceived degree of social support, for example, correlates positively with self-confidence and a sense of control (Cobb, 1976).

Theoretically, mothers with adequate support networks are less vulnerable to the negative impact of stress and thus less likely to abuse (Garbarino, 1977; Garbarino and Sherman, 1980; Kempe, 1973). For example, Kempe believes that during stressful times social supports offer a "lifeline" which can diffuse frustration and helplessness. Similarly, Garbarino purports that the mismatch between high stress levels and low social support is the most critical factor in child maltreatment. It may be hypothesized, then, that maternal social support attenuates the negative impact of stress upon mothering.

Indeed, adequate parents have more social support and are better at finding and utilizing it than abusive parents (Egeland et al, 1980). Good social support has been a predictor of positive mother-child interaction (Weinraub and Wolf, 1983; Crittenden, 1985; Dunst, Trivette and Cross, 1986) as well as parental well-being (Dunst et al, 1986). Virtually every study that has examined social isolation and child maltreatment has identified a positive relationship between these two variables (Garbarino, 1977; Kempe, 1973; Light, 1973; Newberger and Hyde, 1975; Polansky et al, 1979; Zalba, 1966; Garbarino et al, 1980).

Thus, as in the child maltreatment studies, maternal social support may combine with maternal stress to reduce or enhance risk of child sexual victimization. The present study assessed the number of maternal social

supports as well as the satisfaction with those supports. These two variables were measured by the Social Support Questionnaire (Sarason, Levine, Basham, and Sarason, 1983).

The Mesosystem: Adult Male-Female Relationships

There has been a great deal of clinical research data on spousal relationships in incestuous families. Julian and Mohr (1980), for example, found that 65% of incest victims reported severe marital and family discord, while 25% acknowledged spousal abuse. In another study, 74% of adolescent incest victims reported family members "beating other family members," while 52% reported family members "sexually abusing other family members" (Edwall and Hoffman, 1988). Unhappy marriages were noted in several studies, too (Landis, 1956; Gruber and Jones, 1983; Finkelhor, 1984; Fromuth, 1983; Paveza, 1988). These findings suggest that disturbed, sometimes abusive, familial and spousal relationships, characterize homes of child sexual abuse victims.

More specifically, mothers of sexual abuse victims demonstrate "extreme inequality in the power balance" of the relationship (Cammaert, 1988, p. 317). Mothers are largely less educated than their spouses (Finkelhor, 1979), treated like children (Herman, 1981; Reposa and Zuelzer, 1983; Rush, 1980; Server and Janzen, 1982), and typically act in a passive and subordinate role within

the relationship (Stern and Meyer, 1980; Groth, 1982). These mothers hold strikingly conservative views about marriage, considering the spouse as head of household, dominant and powerful (Groth, 1982; Herman, 1983; Stern and Meyer, 1980).

Theoretically, abusive parental relationships may predispose a child toward sexual victimization by increasing maternal stress and preoccupation; by instilling a general fear of potential physical harm; by modelling powerlessness or inappropriate male-female interactions; or by shaking the child's sense of security. As well, when an abuser is directing violence toward a mother, a mother can no longer act as protector of her child if s/he should be assaulted by her husband or his family or acquaintances. In addition, the abusive maternal relationship need not be extreme or continuously apparent to have an effect upon the child. A study by Jaffe, Wolfe, Wilson and Zak (1986) found similar behavioral and social maladjustments in children physically abused and in children within auditory or visual range of at least one serious parental conflict in the year past.

Witnessing domestic violence appears to affect children's adjustment and behavior patterns as significantly as physical abuse itself (Jaffe, Wolfe, Wilson & Zak, 1986). In a recent study, abused boys demonstrated more outward symptomatology, but boys witnessing violence still demonstrated more

clinging, loneliness, unhappiness, sadness, worry and feelings of not being loved, in addition to external behavior problems, than controls. The children witnessing violence were selected for having been in visual or auditory range of the partners in conflict at least once in the past year. Thus, even minimal exposure to parental violence has a major impact upon children's adjustment and behavior. Indeed, Finkelhor's review (1993) indicates that witnessing family conflict is one of the greatest risk factors to child sexual abuse, and suggests that future research should focus upon how forms of victimization occur together.

Assessment of abusive incidents witnessed by the child victim also included any male partner, rather than just the child's father or mother's "spouse". Gathering this information may be a better index of child exposure to a pattern of abusive adult male-female relationships, particularly if those are significant relationships. Further, the higher rate of remarriage in mothers of incest victims (Edwall and Hoffman, 1988) indicates at least two romantic partners. If respondents were confined to reporting upon one significant relationship, confusion and misrepresentation of child-witnessed abuse could result.

Thus, the questionnaire in this study evaluated abusive incidents in <u>all</u> adult male-female relationships, as well as abusiveness in a significant

(spousal) relationship.

The Macrosystem: Maternal Stress

As previously noted, many maternal stressors have been found with greater frequency in mothers of incest victims, e.g. mothers who are disabled (Herman, 1981), absent (Weiner, 1962; Finkelhor, 1979), or depressed (Kaufman et al, 1954; Machotka, Pittman and Flomenhaft, 1967), with a larger number of children (Julian and Mohr, 1980; Herman, 1981), marital dissatisfaction (Finkelhor, 1984), maternal illness (Herman, 1981) or absence from the home (Weiner, 1962), and low income (Finkelhor, 1984). A few major studies exist which examine the relationship between specific maternal stressors and child victimization.

For example, Herman and Hirschman (1981) explored impaired maternal functioning in mothers of adult incest victims and in women whose fathers were seductive but not incestuous. Significantly more incest mothers were chronically ill, disabled, battered, depressed, alcoholic, psychotic or repeated childbearers. These findings could be interpreted as linking maternal stress and childhood incest.

Glenace Edwall and Norman Hoffman (1988) asked adolescent incest victims about family stresses in the past year and found only one significant difference: incest victims reported more remarriage (13%) in their families

than did non-victims (2%). This finding implies that one source of major stress falls upon the primary parent, but these young children could not be expected to articulate all of the maternal stresses related to possible divorce, courtship and remarriage. Maternal report of recent stressors is likely a more reliable and accurate avenue for assessment.

A study by Suzanne Ageton (1983) of sexually victimized adolescents indicates that disruptive events for two or more years significantly discriminated between victims and controls. Family crises such as divorce and unemployment, with potentially greater stressful impact on the custodial parent and child, are mentioned by Ageton as important in creating vulnerability to sexual assault. However, no study has linked maternal stress to other maternal risk factors to predict child sexual victimization, as an ecological model suggests.

In his 1984 study of university students, Finkelhor cites numerous factors that are correlated with both extrafamilial and intrafamilial child sexual abuse. The maternal factors, such as "often ill" and "never finished high school" imply stressful life events. Family characteristics of "income less than $10,000" and "parents had unhappy marriage" also likely indicate stressful circumstances. In addition, Williamson et al (1991) found more daily stress in the lives of sexually abused adolescents, while Gale et al (1988) noted similar family stress

in physical and sexual abuse victims under age seven. Thus, stressful life circumstances, especially for a mother, can be hypothesized to be associated with children who have been sexually victimized.

Virtually all of the risk factors associated with child sexual abuse (Finkelhor and Baron, 1987) could be viewed as having a common denominator of maternal stress. However, these major risk factors can be categorized from an ecological perspective as macrosystem variables such as life stressors of maternal disability or illness (Finkelhor, 1984; Peters, 1984; Herman and Hirschman, 1981) and lower socio-economic status (Finkelhor, 1984; Fromuth, 1983); mesosystem variables of parental relationship factors such as parental conflict (Landis, 1956; Gruber and Jones, 1983; Finkelhor, 1984; Fromuth, 1983) and higher incidence of blended families (Miller, 1976; Finkelhor, 1980; Gruber and Jones, 1983); and microsystem variables of parent-child relationship factors, such as living without a natural mother (Finkelhor, 1984) or father (Finkelhor, 1984; Fromuth, 1983; Peters, 1984), having a poor relationship with mother (Miller, 1976; Finkelhor, 1984; Landis, 1956), and maternal employment (Fromuth, 1983; Landis, 1956; Russell, 1986).

To understand the theoretical ecological connections between maternal stress and child sexual abuse, one may draw from the literature on child physical abuse and neglect. Stress, conceptualized popularly as cumulative

change experiences (Holmes and Rahe, 1967), has been associated with a taxing of physiological and emotional resources, reflected in increased illness, and linked to dysfunctional parenting. Stressful demographic conditions have accounted for 36% of the variance associated with positive and negative maternal behaviors toward children (Conger et al, 1984). Thus, when situational demands exceed parental resources (social support, childrearing and/or coping skills), less than optimal parenting is most likely to occur. Stressful events also may physically or emotionally distract primary parents, increasing a child's vulnerability to sexual assault through substitute caretaking arrangements, lack of nurturance, reduced ability to protect, or maternal illness or absence (Kaplan and Pelcovitz, 1982; Zussman, 1980). Lastly, maternal stress probably creates stress for the child, leaving a vulnerable child with less effective parenting.

Child physical abuse and neglect research supports a theory of stress/resource imbalance. In several studies, mothers who had physically abused (Justice and Justice, 1976; Conger, Burgess and Barrett, 1979; Gaines et al, 1978; Straus, 1980; Gelles, 1976) or neglected (Gaines et al, 1978; Spinetta, 1978) their children reported greater life stress than those who did not. Gaines, Sandgrund, Green and Power (1978) found that the best discriminator of maternal "neglect" was self-reported stressful life events. Neglecting mothers

exceeded abusing mothers in accumulating the poverty-related experiences measured by the Family Life Form scale. Egeland and Brunnquell (1979) found no difference between abusive and non-abusive mothers on stressful life events until Egeland, Breitenbucher and Rosenberg, 1980) covaried event severity and degree of disruption in their statistical analysis: abusive mothers then experienced more stressful events.

In short, abuse and neglect appear to be influenced by stress (Polansky et al., 1981). Whereas stress for the physical abuser equates with child violence, stress for the non-abusing mother may translate into a lack of physical or emotional connection with her child. Williamson, Borduin and Howe (1991) found that physically and sexually abused adolescents reported more family life changes than did non-maltreated adolescents, while their mothers reported more daily stress than mothers of non-victims.

Based upon the existing research and literature, it was hypothesized that maternal stress plays an important role in a child's vulnerability to sexual abuse. "Stress" was herein defined by the number of life events identified by the Sarason, Johnson and Siegel (1978) Life Experiences Survey (LES). Positive and negative life impact was examined, as well. The current study evaluated the relationship between recent stressful maternal impact and child sexual victimization, and assessed the relative importance of maternal stress in

predicting types of victimization in conjunction with other variables.

The Macrosystem: Socio-economic Status

Finkelhor (1979, 1984) found that a family income less than $10,000 was one of the eight strongest predictors of both intra- and extra-familial child sexual victimization. Finkelhor (1984) also found that lower maternal education was a risk factor. A cross-validation study of Finkelhor's risk factors by Bergner, Delgado and Graybill (1994) found that only low family income proved predictive of sexual victimization. As well, Paveza (1988) found income one of five strongest predictors of family incest, and others agree that low income may be a significant risk factor in child sexual abuse (Jason, Williams, Burton & Rochat, 1982). In contrast, other studies have found no connection between socio-economic status and sexual abuse (Russell, 1984, Herman, 1981; Mieselman, 1979; Miller, 1976). Russell (1986) even suggests that upper-income families are at higher risk for incest. However, the greater incidence of physical child abuse in lower SES families and its association with economic pressures is well-known (Jason et al, 1982; Gil, 1970; Kempe, Silverman, Steele, Droegemueller & Silver, 1962). The discrepancies found in the literature may be due to the presence of other ecological factors which combine with low socio-economic status to create increased risk for child victimization. In addition, it must be considered that sample sizes, biased

samples (with more affluent individuals less likely to report and be included in studies of identified sexual abuse cases), or type of socio-economic meaure employed (e.g., income versus class measure) may have influenced these findings.

These findings suggest that families (mothers) of sexual abuse victims tend toward a lower socio-economic status. Such a status would give them fewer opportunities to protect a child by their presence (given greater need for employment), perhaps fewer legitimate childcare resources, less money to secure better childcare, or leave an abusive relationship of potential danger to a child. The Hollingshead (1957) Two-factor Index of social position, therefore, was utilized in the current study to evaluate the relevant contribution of social class to child sexual victimization.

The current study improved upon past research in several respects. First, studies reviewed gathered retrospective data from primarily adult sexual abuse victims. Findings, therefore, may be long-term effects, rather than predictors, of abuse, and may be biased due to time and distortion. For example, the risk factor of a "sex-punitive mother" (Finkelhor, 1984) in fact may be victims' recall of punitive parental response to abuse disclosure rather than a preemptor of abuse. Second, data on the maternal environment was gathered from mothers themselves. Sampling mothers, with a minimal time interval between

abuse disclosure and data collection, likely improved validity and reliability. Third, previous measures have usually been simple survey questions, with reliability and validity data not provided, or specific questions which may hide the larger theoretical picture (Finkelhor and Baron, 1987).

Finally, clinical samples such as the one used in the present study are useful and necessary given the paucity of theory and research in this area. In the sensitive area of sexual victimization, obviously, some selection bias will occur by virtue of their willingness to disclose abuse. Yet other studies allowing only cautious generalizations have been conducted on college student samples (Finkelhor, 1984; Fromuth, 1983; Runtz, 1986) and revealed useful and important findings, most of which are consistent with general survey data. Although Russell estimates that only 2-6% of all child sexual abuse cases are reported to police, community assistance programs such as those used in this study likely deal with a larger percentage and more representative sample of victims. As well, the control group sample revealed cases of abuse which were utilized, thus reducing this type of sample bias.

The current study, then, improved upon past research by applying an ecological model to a sample of mothers of recently disclosing victims in North Carolina community agencies. Assessments having generally valid and reliable measures were employed, thus providing a broad theoretical interpretation of

the data. The following issues were addressed:

1) Identification of significant differences in aspects of the maternal environment of sexually abused versus non-abused children, as well as that of intra- versus extrafamilial abuse victims. Categories included microsystem factors of maternal personal characteristics and qualities of the mothering process; mesosystem characteristics of abusive adult male-female relationships and maternal social supports; and macrosystem variables such as life events and SES.

2) Identification of a combination of variables most likely to identify mothers of victims and evaluation of the relative importance of these factors (and their ecological categories) in child victimization. Most importantly, evaluation of the data for goodness of fit with ecological theory, a multi-factor model of environmental influences upon children, was conducted.

In summary, an ecological model has been applied to the study of the maternal environment of child sexual abuse victims. Three ecological levels of interacting variables, each nested within the other, were explored: the microsystem (personal characteristics and childrearing attitudes/practices); the mesosystem (social support and male-female relationship patterns); and the

macrosystem (socio-economic status and life stressors).

Hypotheses

The following hypotheses were proposed:

1) Within the microsystem category and using the Michigan Screening of Parenting Potential scale, negative maternal reports of emotional needs being met, relationship with parents, expectations of children, and coping scores were expected to characterize mothers of sexually victimized children in comparison with control mothers. Control mothers were expected to report significantly more positive perceptions of these personal characteristics. These characteristics were expected to significantly discriminate between groups of mothers of victims and non-victims. Further, it was hypothesized that mothers of incest victims would report more negative perceptions on the subscales of the MSPP than mothers of extrafamilial abuse victims.

2) Also within the microsystem category and on the Mother-Child Relationship Evaluation scale, maternal rejection, overprotection and/or overindulgence were expected to be significantly higher in mothers of sexually-abused children when compared to control mothers. Concurrently, maternal acceptance was expected to be lower in mothers of sexually abused children. These factors were expected to significantly discriminate between groups of victims versus non-victims mothers. As well, it was hypothesized

that mothers of incest victims would report higher rejection, overprotection and/or overindulgence and lower acceptance than mothers of extrafamilial abuse victims.

3) Within the mesosystem category and using the Center for Social Research Abuse Index, mothers of sexually victimized children were expected to have experienced more abusive events in significant male-female relationships than mothers of controls, and this factor was anticipated to significantly discriminate between groups of victims' versus non-victims' mothers, as well between intra- and extra-familial abuse victims' environment. Higher numbers of abusive events were expected to be reported by incest victims' mothers, As well, a greater number of such relationships was anticipated in victims' mothers.

4) Also with the mesosystem category and using the Social Satisfaction Questionnaire, the number of socially supportive relationships and satisfaction with those supports was expected to be significantly lower in mothers of victims as compared to control mothers, and to significantly discriminate between these groups. Compared to mothers of extrafamilial victims, lower levels of support and satisfaction were anticipated in mothers of incest victims.

5) Within the macrosystem category and using the Life Experiences Survey, recent stressful impact from both positive and negative life changes

was expected to be significantly higher for mothers of sexually victimized children as compared to control mothers. When compared to mothers of extrafamilial abuse victims, higher life stress levels were predicted for mothers of incest victims.

6) Also within the macrosystem category and using the Hollingshead Two-factor Index (Hollingshead, 1958) of socio-economic status, mothers of incest victims were predicted to have the lowest socio-economic status, followed by non-incest victims' mothers, with control mothers being of highest status.

7) The combination of microsystem variables (personal and child-relationship variables), mesosystem variables (social support, conflict variables), and macrosystem variables (life stress, socioeconomic status) was expected to provide maximal discrimination between abuse and non-abuse victims, and secondarily between intra- and extra-familial abuse victims. The data was expected to fit with Bronfenbrenner's ecological model, with these psychological, social and economic categories contributing significantly toward risk of victimization.

8) The relative importance of maternal factors toward child sexual victimization was hypothesized as: macrosystem variables (life events, socio-economic status) contributing most to victimization; mesosystem (social

systems) variables contributing next most; and the microsystem (personal and parenting) variables contributing least.

Method

Subjects

Subjects were 96 biological mothers of children 2 to 14 years of age. The target group included 46 biological mothers of girls and boys 2 to 14 years old who had disclosed an alleged incident of child sexual abuse within the past 18 months. Child sexual abuse was herein defined as any reported physical contact involving sexual exploitation with an individual at least five years the child's senior when the victim was 12 years or less, or at least ten years older if the victim was between 12 and 14 (Finkelhor, 1984). These mothers had an initial contact with eight agencies across North Carolina offering services to child sexual assault victims. Three agencies were in the western part of the state, four in the middle area, and one in eastern North Carolina.

Thirty-seven percent of this group consisted of non-offending mothers of paternal (or a live-in "father-figure") incest victims (N=17). The remaining mothers (N=29) had children disclosing sexual abuse by non-parent figures: 15% by a friend, 11% by the parents' friend, 9% by an uncle, 6% by a non-resident sibling/step-sibling, 6% by a babysitter, 4% by an acquaintance, 4% by others, and one child assaulted by a cousin, one by a grandparent, and one by a

stranger. Although there were many ways to categorize the subjects, it was decided that these mothers would constitute a non-parent (figure) abuse group, primarily representing sexual abuse perpetrated by offenders outside the victim's home. This categorization best fits with earlier research (Paveza, 1988) and the acquired sample.

As well, the mothers of nine abused boys were included in the sample of victims (see Table 2) in order to bolster sample size, a problem in much of the sexual abuse research, as well (Briere and Runtz, 1988). The victims' age range, originally restricted to school-aged children, was expanded to include preschoolers aged 2 to 5 years in order to increase the sample size. Thirty-seven percent of the victims of both intra- and extra-familial sexual abuse were 2 to 5 year old preschoolers. Sixty-three percent of the victims were school-aged.

In the parent-figure incest group, the mothers ranged in age from 25 to 40 years, with a mean age of 31.9 years (see Table 1). Fifteen subjects were married, and 2 were divorced/separated. All were caucasian, and their mean Hollingshead (1957) educational level was 3.7, a high-school graduate/partial college level. Their highest educational attainment ranged from graduate-school (N=1) through junior high-school (N=2). Income for these women ranged from over $40,000 to less than $10,000 annually, with a modal

income range between $11,000 and $30,000 per year. Their head-of-household Hollingshead socio-economic classifications were Class 3 through Class 5 (middle to lower classes), respectively.

These mothers had an average of 2.3 children (ranging from 1 to 5 children each), and were employed a mean of 29 (ranging from 0 to 58 hours) per week. Victim mean age was 7.29 years (ranging from 2 to 13 years), with 7 preschool victims and 10 school-aged victims. Two male victims were included in this group.

In the non-incest abuse group, the mothers ranged in age from 23 to 45 years, with a mean age of 32.5 years. Twenty subjects were married, 3 living with a male companion, 4 divorced or separated, and 2 never married. All were caucasian, and their mean Hollingshead score for educational level was 3.4 (high school graduate/partial college level), with a range from graduate school (N=1) through junior high school (N=1). Modal income range for these women was $11,000 to $30,000 per year, the same as for the incest mothers' group. Their head-of-household socio-economic status classifications (Hollingshead, 1958) ranged from Class 1 through Class 5 (upper to lower classes). This difference between the two mothers-of-victims groups on socio-economic status was not significant, according to chi square analysis.

These mothers had an average of 2.2 children (ranging from 1 to 6

children), and were employed a mean of 26.8 hours (ranging from 0 to 60 hours) per week. Victim mean age was 7.13 years (ranging from 2 to 13 years), with 10 preschool and 19 school-aged victims. Seven male victims were included in this non-incest mothers-of-victims' group.

Control subjects were 50 biological mothers of children up to 14 years of age from the same geographic locales in North Carolina as sampled for the target group. These mothers volunteered participation via mail after reading a local newspaper advertisement announcing the research and requesting volunteers. The first 50 mothers responding to the advertisement were contacted and screened as to the age(s) of child(ren): those mothers with a child of either gender between the ages of 2 and 14 were interviewed. The mothers were also advised that personal questions would be asked, particularly regarding sexual abuse of children. Those mothers still wishing to participate and indicating that the child had not experienced sexual victimization in the past year and a half were included in this group. Those mothers indicating sexual abuse of the child within that time period were combined with the target group.

In the no-abuse control group, the 50 mothers ranged in age from 23 to 46 years, with a mean age of 33.6 years. Forty-one were married, 7 were divorced/separated, and 2 were single. Four women originally answering the

survey were non-caucasian. Because all women in the target groups were caucasian, the majority of statistical analyses were conducted without the non-caucasian mothers.

However, including all races, the 50 women had a mean Hollingshead score for educational level of 3.0, a partial-college level. They ranged from graduate school graduates (N=3) through high school graduates (N=19). The two lowest educational levels were not represented in this group. Modal income range was $21,000 to $39,000 annually, slightly higher than the two abuse groups. Income range was the same as the target groups. Their head-of-household Hollingshead (1958) socioeconomic status classifications were 1 through 5 (upper to lower classes). The only significant differences between these groups was in socio-economic status, as predicted.

These mothers had an average of 1.8 children (ranging from 1 to 5 children each), and were employed a mean of 22.4 hours (ranging from 0 to 60 hours) per week. The target child's mean age was 6.33 years, ranging from 2 to 14 years. There were 21 preschool and 29 schoolage subjects in the control group, with 10 males and 40 females included.

Procedure

All mothers reporting sexual assault of a child under 14 years of age within the past 1 1/2 years at 8 participating North Carolina agencies were

mailed a letter inviting participation in the project (see Appendix A). These agencies included two social service agencies, five family, child or rape-crisis victim assistance agencies, and one mental health agency. Agency staff willing to participate in the research project reviewed current and past caseloads to identify potential recipients of these letters, according to the subject criteria. To ensure confidentiality, envelopes were addressed by agency staff. An invitation letter and stamped/self-addressed envelope for return to the investigator were enclosed. Participation was described as voluntary; however, a total of $15 was paid as a possible aid to offset cost of childcare while parent was interviewed. A $5 incentive was offered for beginning the questionnaire, while $10 was given for completion of the questionnaire.

Interested mothers returned a portion of the invitation letter with first name, telephone number, and county. An appointment was made by telephone to complete the questionnaire, at a location of the mother's choice. The survey averaged about one hour to complete. Confidentiality statements (see Appendix B) and questionnaires (see Appendix C) were completed at the individual's home or at another specified location, such as a cafe. Informed consent papers were signed, with one copy returned to the respondent, and one copy kept in the primary investigator's locked file cabinet.

Respondents were offered the opportunity to debrief with the researcher. To receive a summary of the project results upon completion of the study, mothers wrote name or initials and address on a separate sheet of paper, which was then removed from the questionnaire and placed in a separate file. Individual results were not provided to participants. A copy of general results of the survey was mailed to each participant.

Materials

Measures (see Appendix C) included a survey of demographic information, Hollingshead Two-factor Socio-economic Status scale (Hollingshead, 1957), questions similar to those on the Sexual Victimization of Children Survey (Finkelhor, 1979), the Michigan Screening Profile of Parenting (Helfer et al, 1978), the Mother-Child Relationship Evaluation Scale (Roth, 1980), the Centre for Social Research (CSR) Abuse Index (Stacey and Shupe, 1983), the Social Support Questionnaire (Sarason et al, 1983), and the Life Experiences Survey (Sarason, Johnson and Siegel, 1978). Available reliability and validity data for measures are provided in Appendix D.

Results

The maternal environment predictor variables of child sexual victimization for this study were Microsystem variables of : 1) Emotional Needs Met score; 2) Relationship with Parents score; 3) Coping score; 4) Expectations of

Children score; 5) Acceptance of Child score; 6) Rejecting Parenting Style score; 7) Overprotective Parenting score; 8) Over-indulgent Parenting score; Mesosystem variables of: 9) Total Abusive Incidents/Severity of Conflict in Adult Male/Female Relationships; 10) Number of Conflicted Relationships; 11) Quantity of Social Support; 12) Quality of Social Support; and Macrosystem variables of: 13) Total Life Events; 14) Total Negative Impact; and 15) Socio-economic Status.

A series of discriminant function analyses were conducted to reveal significant relationships between the predictor variables and victimization, as well as between predictors and intra- and extra-familial abuse. Demographic data for each sample group of mothers was examined by comparison of frequency, range and mean statistics, and is presented in Table 1. Identified victim (child) data is contained in Table 2.

The initial fifteen variables were reduced to eight significant variables by a series of initial discriminant analyses performed upon each subset of variables, i.e., macrosystem variables of stress factors and socio-economic status. Total subjects included 92 mothers for each of the discriminant analyses performed: four control mothers of a different racial/ethnic background were excluded for these analyses pending further examination of their impact on the results. Probability level was set at .05 or less for a

variable to remain in the analysis as significant. The stepwise procedure selected an initial variable with the greatest ability to discriminate, then combined others to yield the best criterion value until significant increments were no longer produced.

Variable selection or removal criteria included: the minimization of Wilk's lambda (the likelihood ratio statistic for testing the hypothesis that the group means of each variable are equal in the population) with partial multivariate F to enter greater than unity; partial R**2 (the squared partial correlation); the F statistic; and the probablity level from a one-way analysis of covariance. A final stepwise discriminant analysis was performed on these eight variables to find the linear combination that would maximally discriminate between mothers of victims and control mothers. With a probability level set at .05, this analysis resulted in a model consisting of four variables: 1) MCRE rejecting parenting style; 2) social.

As well, an identical series of analyses was performed to find the linear combination that would best discriminate between parental incest, non-incest abuse, and non-abuse groups. With the probability level set at .05, these analyses resulted in a model consisting of three significant variables: 1) rejecting parenting style; 2) social support satisfaction; and 3) number/severity of adult male/female conflicts.

Table 1 Demographic Variables of Mothers and their Families (N = 96)

	Mothers of Incest Victims N=17		Mothers of Non-Incest Victims N=29		Mothers of Non-Victims (Controls) N=50	
	Freq./Range	Mean	Freq./Range	Mean	Freq./Range	Mean
Mother Age	--/25 - 40	31.9	--/23 - 45	32.5	--/23 - 46	33.6
# Children	--/ 1 - 5	2.3	--/ 1 - 6	2.2	--/ 1 - 5	1.8
Hrs. at Work	--/ 0 - 58	29	--/ 0 - 60	26.8	--/ 0 - 60	22.4
Marital Status						
Married	15/ --		23/ --		41/ --	
Single	2/ --		6/ --		9/ --	
Race						
Caucasian	17/ --		29/ --		46/ --	
African	0/ --		0/ --		4/ --	
Income	--/11 - 30K		--/11 - 30K		--/21 - 39K	
Education[1]	--/ 1 - 5	3.7	--/ 1 - 5	3.4	--/ 1 - 4	3
Class Status[2]	--/ 3 - 5		--/ 1 - 5		--/ 1 - 5	
Inc. X Educ.						

[1] Group differences not significant according to chi square analysis;graduate school (1) through junior high school (5). [2] Upper class (1) through lower class (5). support satisfaction level; 3) quantity/severity of adult male/female conflicts, and 4) household socioeconomic status.

Table 2

Target Child Data for Each Group (N=96)

	Incest Victims N = 17	Non-Incest Victims[1] N = 29	Combined Victim Group N = 46	Non-Victim Controls N = 50
Age:				
Preschool: 2-5	7	10	17	21
School-age: 6+	10	19	29	29
Mean Age/Range	7.29/2-13	7.13/2-13	7.21/2-13	6.33/2-14
Sex:				
Male	2	7	9	10
Female	15	22	37	40

[1] Perpetrators include 15% child's friend; 11% parents' friend; 9% uncle; 6% sibling/step-sibling; 6% babysitter/caretaker; 4% other; 1 each cousin, grandfather and stranger.

One discriminant function was derived from the first two-group optimal set of variables, and two were derived from the three-group analysis. These functions were interpreted by looking at group centroids, means for each group on their respective functions, standardized discriminant function coefficients, correlation matrices, and preliminary data for each variable.

Two-group Analyses: Victims' Mothers and Control Mothers.

Initially, the subjects were divided into mothers of abuse victims and mothers of non-victims in order to simplify the analysis and increase sample size. For these two groups, univariate comparisons of means resulted in a number of variables reaching significance. Results are presented in Table 3. An initial series of discriminant analyses also was performed on each group of factors within Bronfenbrenner's categories of the microsystem, mesosystem and macrosystem.

The following microsystem variables showed statistical significance: the three maternal personal variables of coping F (1,90)=7.39, p=.008, relationship with parents F(1,90)=6.96, p=.010, and emotional needs met F(1,90)=6.04, p=.016. Only the MSPP Expectations of Children scale failed to reach significance.

Significant differences between the two groups were also noted on the MCRE Rejection Scale F(1,90)=11.36, p=.001. None of the other childrearing attitude variables (Acceptance, Overprotection or Overindulgence) were significant.

On mesosystem variables of social support as measured by the Social Support Questionnaire, both social support quantity, F(1,90)=7.97, p=.006, and social support quality rating, F(1,90)=19.71, p=.0001, were significant.

Significant male-female relationship conflict variables, as measured by the CSR Abuse Index, included number/severity of conflictual experiences, F=36.86, p=.0001, and number of conflictual relationships, F=16.12, p=.0001. (The duration of mother's most important conflictual relationship was not significant.) A combined sample correlation matrix is shown in Table 4.

On macrosystem variables of life stress and socioeconomic status, year-long negative impact, (F=21.9, p=.0001), total impact (F=13.5, p=.0004), and number of life events for the year (F=13.3, p=.0004) were significant. Positive impact for the year was not significant. Scores on the Hollingshead Two-Factor Class Scale also differed significantly, F(1,90)=17.5, p=.0001. A component of this scale, head-of-household income, was significant at F=8.326, p=.0049, while head-of-household educational attainment was not significant.

Table 3

Means and Standard Deviations for (Combined) Victims' Mothers and Control Groups (N = 92)

	Combined Victim		Control	
Microsystem:	Group Mean	N = 46 SD	Group Mean	N =46 SD
MSPP Coping**	2.84	0.82	3.65	0.70
MSPP Relationship With Parents**	3.24	0.86	3.65	0.64
MSPP Emotional Needs Met*	1.89	1.14	2.46	1.46
MSPP Expectations of Children	3.20	0.78	2.85	0.87
MCRE Rejection**	49.13	9.74	42.83	7.21
MCRE Acceptance	60.76	10.46	60.35	9.34
MCRE Over-indulgence	51.00	11.32	50.12	9.48
MCRE Over-protection	48.59	10.16	46.24	9.89
Mesosystem:				
Social Support Quantity**	2.75	1.85	3.84	2.20
Social Support Satisfaction**	4.86	1.04	5.60	0.50
Male/Female Conflict Severity**	8.11	4.62	2.91	3.40
Number of Conflictual Relations**	1.80	1.20	0.93	0.83
Macrosystem:				
Negative Change Impact**	11.80	10.40	3.85	4.71
Total Impact: positive & negative	14.85	11.56	7.67	7.55
Number Events: positive & negative	6.28	3.89	3.71	3.08
Socio-economic Status**	49.02	14.60	35.43	17.20
(Income)**	(2.87)	(1.25)	(3.63)	(1.27)

* significant at probability level less than .02

** significant at probability level less than .01

Table 4

Combined Sample Correlation Matrix N=96

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. MSPP Coping	*	.02	.15	.15	.22	.25	-.21	-.24	-.09	-.10	-.04	-.29
2. MSPP Relationship with Parents		*	.22	.03	.28	.32	-.30	-.30	-.16	-.14	-.18	-.23
3. MSPP Emotional Needs Met			*	.12	.36	.06	-.34	-.35	-.06	-.10	-.08	-.41
4. MCRE Rejecting Parenting				*	.07	.19	-.20	-.09	-.17	-.17	-.14	-.17
5. Social Support Quantity					*	.61	-.18	-.30	-.19	-.22	-.20	-.21
6. Social Support Satisfaction						*	-.34	-.41	-.43	-.37	-.39	-.13
7. Male/Female Conflict Severity							*	-.47	.54	.53	.52	.43
8. Number of Conflictual Relations Mother Had								*	.27	.30	.28	.44
9. Negative Life Change (Impact)									*	.88	.84	.24
10. Total Positive & Negtive Impact										*	.92	.20
11. Total Pos/Neg Life Events											*	.15
12. Socio-economic Status												*

The significant variables from each grouping were then analyzed by a stepwise discriminate analysis, resulting in eight significant variables. Results are summarized in Table 5.

Table 5

Significant Variables Resulting from Stepwise Discriminant Analyses of Combined Victims' Mothers Versus Control Groups

	Partial R2	F Statistic	P Value
Microsystem:			
MSPP Coping	.09	8.29	.0117
MSPP RWP	.07	6.63	.0005
MCRE Rejection	.12	12.36	.0007
Mesosystem:			
M/F Conflict Severity	.29	36.86	.0001
Number Conflict Relations	.15	16.12	.0001
Social Support Satisfaction	.17	18.32	.0001
Macrosystem:			
Negative Change Impact	.20	22.25	.0001
Socio-economic Status	.16	16.44	.0001

A final stepwise discriminant analysis was performed on these eight variables. Four variables remained: one from the microsystem (rejecting parenting style), two from the mesosystem (social support satisfaction and number/severity of male/female conflict), and one from the macrosystem (socioeconomic status). Results are summarized in Table 6.

Table 6

Significant Variables Resulting from Final Stepwise Discriminant Analysis with Combined Victims' Mothers and Control Groups

	Partial R2	Wilks Lambda	P Value	F Statistic	P Value
M/F Conflict	.29	.71	.0001	36.86	.0001
Social Support Satisfaction	.12	.62	.0001	12.09	.0001
Rejection Scale	.10	.56	.0001	9.81	.002
Socio-economic status	.04	.53	.0001	3.97	.049

The primary data analyses were performed with SAS programs (SAS, 1985), including discriminant analyses with stepwise selection of variables, linear or quadratic discriminant functions for classifying observations into groups, canonical discriminant analyses, a dimension-reduction method similar to principal component analyses, and canonical correlations. Canonical correlation analysis derives linear combinations of predictor canonical variables that summarize between-class variation in much the same way that principal components summarize total variation.

For the two groups, four variables were entered in a canonical discriminant analysis. These were: 1) life change negative impact; 2) ; male/female conflict severity; 3) social support quality; and head-of-household SES. Only cases with complete data for all variables were accepted into the final analysis. A statistically significant discriminant function was obtained, Wilk's Lambda = .5291, F(4,87) = .93539, p = .0001.

The eigenvalue revealed that the canonical function accounted for 88.98% of the total discriminatory power of the variables. The canonical correlation, the association between the function and these variables, was .686, while the squared canonical correlation was .471.

The discriminant function revealed the total-sample standardized canonical coefficients listed in Table 7. These coefficients show male/female conflict severity to predominate, followed by poorer quality social support, rejecting parenting style, and socio-economic status, in order of importance.

For comparison purposes, all eight significant variables' coefficients were examined. Results are summarized in Table 8. Results show coefficients of variables not reaching significance and their relative association with victimization.

Table 7

Standardized Discriminant Function Canonical Coefficients for Combined Victims' Mothers and Control Groups

Variable	Canonical Coefficient
Male/Female Conflict Severity	.748
Social Support Satisfaction	-.580
MCRE Rejection Scale Parenting Attitudes	.432
Socio-economic Status	.341

Table 8

Standardized Discriminant Function Canonical Coefficients for Victims' Mothers and Control Groups

Variable	Canonical Coefficient
Negative Change Impact	.238
Male/Female Conflict Severity	.610
Mother's Number of Conflictual Relationships	.003
Social Support Satisfaction	-.499
MCRE Rejection Scale Parenting Attitudes	.401
MSPP Relationship with Parents	-.035
MSPP Coping	-.142
Socio-economic Status	.307

To assess the value of the discriminant analysis, classification functions based on the optimal set of four variables were used to reclassify the sample. A total of 82% of all 92 cases from the two groups were reclassified correctly. Results are summarized in Table 9. In the mothers of victims group, 80.43% were classified correctly, while 19.57% were misclassified by the specified variables into the non-victimized group. In the control group, mothers were correctly classified 82.61% of the time. Similarly, 17.39% (about one-fifth of the sample) of the control group was misclassified as the mother of a victimized child. Overall, the error rate was 18.48%.

A classification procedure was tried with all eight significant variables to assess the additional contribution the four remaining variables would make. Results indicate that the four additional variables of number of conflictual relationships, relationship with parents, negative life changes, and coping, improved classification more for control mothers. From the abuse group, 82.22% were correctly classified, with 17.78% misclassified. However, from the control group, 89.13% were correctly classified, with 10.87% misclassified. The addition of these four variables improved classification into the victim group only 1.79%, while classification into the control group improved 6.52%.

Overall, the error rate for the eight variables was 14.32%.

Table 9

Comparisons of Error Rates Using Eight and Four Variables to Correctly Classify into Combined Victims' Mothers and Control Groups

	Number of Observations	Percent Classified Correctly	Error Rate
EIGHT VARIABLES			
Abuse Group	37	82.22	0.18
Controls	41	89.13	0.11
		Average Error Rate	0.14
FOUR VARIABLES			
Abuse Group	37	80.43	0.2
Controls	38	82.61	0.17
		Average Error Rate	0.18

Three-group Analyses: Incest, Non-incest and Control Victims' Mothers

Sample statistics for the three groups of mothers of incest victims, non-incest victims, and non-victims are provided in Tables 1 and 2.

Differences between the three group means on each of the eight significant variables and Tukey analyses for each of the three groups are summarized in Table 10. On most variables, control mothers reported the highest positive amount of the variable, while incest mothers reported the least positive amount. Non-incest mothers reported amounts in between those two groups. Two exceptions to this trend occur: one with the microsystem factors

of coping and rejecting parenting style, and the other with number of conflictual adult male-female relationships.

With the coping variable, control mothers reported the highest positive perception of coping skills, incest mothers in the mid-range, and non-incest mothers the least positive perceptions of their coping skills. With the rejection variable, control mothers reported the least rejecting parenting style, with incest mothers in the mid-range, and non-incest mothers reporting the most rejecting parenting style. Post-hoc Tukey comparisons indicated that only the differences between means of the non-incest group and the control group were significant (probability less than .05).

On the number of conflictual relationships variable, control mothers reported the fewest such relationships, with incest mothers in the mid-range and non-incest victims' mothers reporting the most such relationships. Again, only the difference between means of the non-incest abuse group and the control group were significant (probability less than .05).

Variables with significant differences between means of non-incest and control groups included coping, rejecting parenting style, male-female conflict severity, number of conflictual relationships, social support quality, negative life events and socio-economic status. However, means of incest versus control groups were only signficant for conflict severity, social support quality,

Table 10

Means, Standard Deviations, and Post-hoc Tukey Comparisons of the Three Groups

Variable	Incest Victim Group Mean / SD	Non-Incest Victim Group Mean / SD	Control Group Mean / SD	Significant Group / Mean Differences	Difference Between Means
Microsystem:					
Coping	3.06 .90	2.76 .79	3.30 .70	non-incest vs control	.55
RWP	3.18 .88	3.28 .84	3.65 .64	---	---
REJ	46.71 8.01	50.14 10.63	42.83 7.21	non-incest vs control	7.31
Mesosystem:					
M/F Conflict Severity	9.94 5.04	7.24 4.17	2.91 3.48	incest vs control	7.03
				non-incest vs control	4.33
Number of Conflictual Relations	1.56 .81	1.93 1.36	.93 .83	non-incest vs control	1.00
Social Support Satisfaction	4.72 1.09	4.88 1.04	5.60 .57	incest vs control	.89
				non-incest vs control	.72

Macrosystem:								
Negative Impact of Past Year Life Events	15.12	11.2	9.66	9.37	3.85	4.71	incest vs control	11.27
							non-incest vs control	5.81
SES	49.41	11.3	49.34	16.43	35.43	17.23	incest vs control	13.98
							non-incest vs control	13.91

[2] significant at $p < .05$.

Note: ? = 3.14 inest; 3.29 non-incest; 2.85 controls.

negative life events, and socio-economic status, with no microsystem factors included.

Correlatational data is provided in Table 4.

When dividing the same sample into three groups of mothers of father-figure incest victims, mothers of non-parent sexual abuse victims, and mothers of non-victims, some of the same variables reached significance as in the two-group analysis. The eight variables were examined by stepwise discriminant analysis; three variables remained significant. The results, listed in Table 11, indicate that significant variables were the microsystem variable of rejecting parenting style, and the two mesosystem variables of male-female conflict severity and social support quality. The macrosystem variable of socio-economic status, significant in the two-group analysis, failed to contribute sufficient individual variability in the three-group analysis.

Table 11

Significant Variables Resulting From Stepwise Discriminant Analyses with Three Groups: Mothers of Incest Victims, Mothers of Non-incest Victims, and Control Mothers

Class	Variable	Partial R2	Wilk's Lambda	P Value	F Statistic	P Value
Microsystem	MCRE Rejecting Parenting Attitude	11	.53	.0001	5.40	.006
Mesosystem	Male / Female Conflict Severity	.32	.68	.0001	20.92	.0001
Macrosystem	Social Support Satisfaction	.12	.60	.0001	6.01	.004

The original eight significant variables revealed a first and statistically significant discriminant function, Wilks' Lambda=.4503, F(16,162)=4.964, probability less than .0001. The second function was not significant. Canonical correlations were .698 and .348 for first and second functions, respectively. Results are summarized in Table 12.

Table 12

Standardized Discriminant Function Canonical Coefficients for the Eight Significant Variables in the Three-Group Analysis

Variable	Function	
	1	2
MSPP Coping	-0.10	-0.39
MSPP Relationship with parents	-0.04	0.03
MCRE Rejecting Parenting Style	0.35	0.48
Social Support Satisfaction	-0.51	0.06
Male/Female Conflict Severity	0.67	-0.50
Number of Conflictual Relations	-0.08	0.71
Negative Life Change (Impact)	0.29	-0.45
Socio-economic Status	0.31	-0.01

In addition, the three significant variables (conflict, social support quality and rejecting parenting style) revealed a first significant discriminant function, Wilks' Lambda=.5145, F(6,174)=11.429, probability less than .0001. The second function was not significant. Results are summarized in Table 13. Canonical correlations were .677 and .223 for first and second functions, respectively, while squared canonical correlations were .458 and .05.

Table 13

Standardized Discriminant Function Canonical Coefficients for the Three Significant Variables in the Three-Group Analysis

Variable	Function	
	1	2
MCRE Rejecting Parenting Style	0.45	0.91
Male-Female Conflict Severity	0.92	-0.61
Social Support Satisfaction	-0.58	-0.16

For comparison purposes, all eight significant variables were included in a discriminant function analysis (see Table 14). Coefficients for the first function showed male/female conflict severity to predominate, with poorer quality of social support contributing secondarily. The second function seems to be more uniquely defined by coping, rejecting parenting style, and negative life changes. The canonical correlations for factor one is .698, R squared = .488. The canonical correlation for the second function = .34, R squared = .12.

The discriminant analysis for these three groups as a whole, therefore, revealed a dimension separating groups on the basis of male/female conflict and social support quality; and another lesser, non-significant dimension related

to a rejecting parenting style, stress and coping. The most important discriminating variable between the three groups was adult male/female conflict severity, followed by social support quality, and lastly, by a rejecting parenting style.

To assess the value of the discriminant analysis, classification functions based on the optimal sets of three and eight variables were used to reclassify the subjects into the three groups. Using three variables of conflict, support quality and parenting style, a total of 77.4% of all cases were reclassified correctly. In the mothers of incest group, only

Table 14

Standardized discriminant Function Canonical Coefficients

Discriminating Among the Three Groups with Eight Variables

Variable	Function	
	1	2
MSPP Coping	- .10	-0.39
MSPP Relationship with Parents	-0.04	0.03
MCRE Rejecting Parenting Style	0.35	0.48
Number Conflictual Male-Female Relationships	-0.51	0.71
Male-Female Conflict Severity	0.67	-0.5
Social Support Satisfaction	-0.51	0.06
Negative Life Changes/Impact	0.29	-0.45
Socio-Economic Status	0.31	-0.01

41.18% were correctly classified. In the mothers of non-incest abuse group, 51.72% were classified correctly. In the control group, 86.96% were correctly classified using these three variables. Overall, the error rate was 32.61%, with almost chance classification into either abuse group, but an error rate of only 13.04% in the control group.

In an attempt to improve classification into these three groups, all eight optimal significant factors were analyzed. Results indicate that the five additional variables improved classification considerably. From the incest group, 56.25% were classified correctly. From the non-incest abuse group, 65.52% of mothers were correctly classified. Finally, 91.30% of the control mothers were correctly reclassified. The overall error rate was 23.08%, about a 10% reduction in misclassification. Classification into the incest group improved 15%, 14% into the non-incest group, and 4% into the control group. These comparisons are outlined in Table 15.

Overall, the results indicate that mesosystem variables of, first, male/female relationship conflict (violence and severity), and, second, social support quality, offer the greatest contribution toward victimization. The microsystem variable of rejecting parenting style was the next greatest contributor. Lastly, the macrosystem factor of socioeconomic status (and for some subgroups, negative impact of life changes) added significant contribution

to the explanation of victimization in general, but was non-significant in discriminating parent-child versus non-family abuse.

Table 15

Comparisons of Error Rates Using eight and Three Variables to Correctly Classify Subjects Into Incest, Non-Incest and Control Mothers Groups

Group	Number of Observations	Percent Classified Correctly	Error Rate
EIGHT VARIABLES:			
Incest	9	56.25	0.44
Non-incest	19	65.52	0.34
Control	42	91.3	0.09
		Average Error Rate:	0.23
THREE VARIABLES:			
Incest	7	41.18	0.59
Non-incest	15	51.72	0.48
Control	40	86.96	0.13
		Average Error Rate:	0.33

Post-hoc Comparisons

Means for the eight significant variables for both the two and three groups

are listed in Table 3 and 10, respectively. Tukey post-hoc analyses were conducted on the variables for the three-group classification to pinpoint group differences (see Table 10). Differences between means are also listed in Table 10. A summary of these findings follows.

Macrosystem variables:

With negative impact and change, the incest and control mothers differed significantly at the .05 level, with a difference between means of 11.27. Mothers of non-incest abuse and control mothers were also significantly different, but moderately so with a difference of 5.807 between means. Mothers of non-incest abuse victims and incest mothers did not report significantly different negative impact in the past year.

Head-of-household class status was significantly different between mothers of incest victims and control mothers, as well as between mothers of non-incest victims and controls. The significant differences between means were very similar for both groups. Again, incest mothers and non-incest victims did not report significantly different socio-economic status.

Mesosystem variables:

Quantity of social support scores significantly differed only between incest and control mothers, with a .997 difference between means (approximately one social-support figure).

Social support satisfaction rating significantly differed between the control group and both incest and non-incest groups. This difference represented approximately one rating interval on the social support satisfaction questionnaire. Once again, the non-incest and incest mothers were more alike with respect to social support satisfaction, and did not differ significantly.

On male-female conflict severity, control mothers differed significantly from the abuse groups, with a mean difference of 4.33. The difference between incest and non-incest groups of victims' mothers was not significant. The number of conflictual relationships a mother experienced was significant only between controls and the non-incest group.

Microsystem variables:

Group means on rejecting parenting style were significant only between the control and incest mothers groups. Other group differences were not significant As well, coping was significantly different only between non-incest abuse and control groups. Other group differences were not significant.

Gender.

Ideally, same-gender subjects would have been utilized in this study. However, combining genders should not have been a major issue in this study, as studies of male child sexual abuse victims seem to indicate similar family environment factors as those identified with female child sexual abuse victims

(Genuis et al, 1991). However, being a female creates greater risk of child sexual abuse (Finkelhor, 1993).

Results of a stepwise discriminant analysis including only the 77 girls in the study (N=37 combined victims' group, with 15 incest and 22 non-incest cases and 40 controls) were very similar to the combined sample analyses.

For the two-group analysis, the most significant variables were the mesosystem variables of male/female relationship conflict (F=23.58, p=.0001) and social support satisfaction (F=13.87, p=.0004). The microsystem variable of rejecting parenting style was the only other significant variable (F=6.73, p=.012). Socio-economic status just missed significance, with p=.059.

A discriminant function analysis with these three variables classified 78.38% of the thirty-seven victims' mothers correctly; 83.78% of the forty control mothers were correctly classified. (See Table 16). Overall there was a 19% error rate for classification. These results are nearly identical to the full sample analyses, with an improvement of only 1% in classification when controlling for victim gender.

Using the females in the study, a three-group stepwise analysis was conducted. Results of this analysis indicate, again, that the most significant predictors of sexual victimization were the mesosystem variables of a mother's male/female relationship conflict (F=13.58, p=.0001), followed by a mother's

social support satisfaction (F=6.93, p=.0018). The microsystem variable of rejecting parenting was next most important (F=3.897, p=.025), followed by the macrosystem variable of negative life changes in the past year (F=3.239, p=.0454). The borderline significance of negative changes is much like the earlier significance of the macrosystem variable of socio-economic status in the mixed-gender sample; however, with this all-female sample, maternal negative stress seems to play a unique role in the risk of victimization of girls. Discriminant function analysis with these four variables classified correctly 66.67% of the incest group, 68.18% of the third party abuse group, and 83.78% of the non-victim group. Overall error rate was 27%. Compared with the discriminant function analysis with three factors and including male and female victims, these four factors improved classification by 25% improvement in incest classification, and 17% in non-incest classification.

However, there was a decline in correct classification with the control group. Error rate displayed a 6% reduction with these four variables and limiting to female-only victims. Thus, in discriminating among the three groups for females only, the marginallysignificant macrosystem variable of negative stress was a predictor of sexual victimization.

Using only the mothers of the eighteen boys, a stepwise classification procedure was attempted. Only a mother's conflict in male/female

Table 16

Discriminant Classification Error Rates for Two- and Three-Groups Using Female Subjects Only (N = 77)

	Number of Observations	Percent Classified Correctly	Overall Error Rate	Variables Included
Groups (2)				
Combined Mothers of Victims	37	78.38	19%	Rejecting Parenting Style
Controls	40	83.78		M/F Conflict Severity
				Social Support Satisfaction
Groups (3)				
Mothers of Incest Victims	15	66.67		Rejecting Parenting Style
Mothers of Non-incest Victims	22	68.18	27%	M/F Conflict Severity
Controls	40	83.78		Social Support Satisfaction
				Negative Impact Over Past Year

relationships (p=.0005) and rejecting parenting style (p=.027) were significant. However, these were considered consistent with the findings of the population in general, although social support satisfaction and macrosystem variables did not reach significance with this small sample.

Race.

Originally, 4 individuals interviewed as participants for the control group of this sample were African-American, while all others (92) were Caucasian. Including these non-Caucasian individuals in the majority of statistical analyses appeared inappropriate, since no non-Caucasian subjects were included in the victims' groups. Their inclusion added the dimensions of race and cultural issues, which, as predicted, can affect parenting styles and other variables under examination in this study. Thus, in order to identify any skewing of the data due to race, a series of separate analyses were run including the 4 control subjects of another race.

In this analysis of discriminating variables between mothers of victims and control mothers, all eleven variables significant in prior analyses were significant. However, a stepwise discriminant analysis with these variables left only three variables significantly contributing to the variability of the groups: conflict in male/female relationships ($F(1, 91)= 33.343$, $p=.0001$); rejecting parenting style ($F(1,91)=9.482$, $p=.0027$); and social support satisfaction

($F(1,91)= 5.41$, $p=.0222$). The inclusion of these four individuals in the control group removed the impact of social class as a significant risk factor in victimization. Results are summarized in Table 17.

The inclusion of racial differences in a three-group analysis changed the discriminating variables to male-female conflict ($F(1,91)=18.947$, $p=.0001$); rejecting parenting style ($F(1,91)=5.148$, $p=.0076$); and negative impact of changes in the past year ($F(1,91)=3.693$, $p=.0288$). In contrast to analyses including caucasian subjects only, social support satisfaction was not a critical factor. Further, mother's negative impact of changes over the past year showed significant influence upon a child's risk for victimization when the four non-caucasian individuals were added. As well, rejecting parenting style was somewhat less significant.

Discriminant function analyses were performed with the two classification groupings to assess the value of including race as a contributory variable. Results are summarized in Table 18.

As expected, the function for the two groups showed poorer ability to classify than with the all-Caucasian sample. In the mothers of victims group, 71% were correctly classified, while 80% of the control mothers were correctly classified. The overall error rate was 24%: 28% for the abuse group and 20% for controls. Thus, it was deemed more appropriate not to include the four

Table 17

Stepwise Discriminant Analyses Including Four Non-caucasian Control Mothers (N=96)

Variable	Partial R2	F Statistic	Probability
(Three-Group Analysis)			
Microsystem:			
MCRE Rejection	0.10	5.15	.008
Mesosystem:			
Male-Female Conflict Severity	.29	18.95	.0001
Macrosystem:			
Negative Life Event Impact	.08	3.69	.029
(Two-Group Analysis)			
Microsystem:			
MCRE Rejection	0.09	9.48	.003
Mesosystem:			
Male-Female Conflict Severity	.26	33.34	.0001
Social Support Satisfaction	.06	5.41	.022
Macrosystem:	---	---	---

Table 18

Error Rate Comparisons in Correctly Classifying Subjects (Including Four Non-Caucasian Control Subjects) Into Two (Combined Victims' Mothers vs. Control) and Three (Incest, Non-Incest and Control) Groups

Group	Number of Observations	Percent Classified Correctly	Overall Error Rate	Variables Included
Combined Mothers of Victims	46	72%	24%	M/F Conflict Severity
Controls	50	80%		MCRE Rejecting Parenting
				Social Support Satisfaction
Mothers of Incest Victims	17	41%		M/F Conflict Severity
Mothers of Non-incest Victims	29	38%	36%	MCRE Rejecting Parenting
Controls	50	86%		Social Support Satisfaction

subjects in the control group who appeared to skew the data with less social support satisfaction, slightly more rejecting parenting style, lower socioeconomic status, and less negative impact of the year's stressors than other control mothers.

Age.

Because all ages were included in the initial statistical analyses, victim age was examined as a variable in stepwise analyses with both two- and three-group classifications. Both analyses found the same variables significant as in the general analyses.

ANOVAs were conducted with three age groups and compared across the three abuse groups, and included preschool (N=37), school-aged (N=47), and adolescent (N=8) subjects. Significant factors for the preschool group were macrosystem variables of negative and total (both positive and negative impact) changes for the year, number of stressful events for the year, mesosystem variables of conflict in male/female relationships, length of conflictual relationship, and social support satisfaction; and the microsystem variable of rejecting parenting style. The latency group showed similar results, with the added micrososystem variables of Emotional Needs Met and Coping reaching significance. The adolescent group did not have enough subjects to analyze the data with reliability, consistent with current findings that sexual abuse occurs at

younger ages than previously shown (Jones and McCurdy, 1992).

Rejecting Parenting Style.

Further analysis of rejecting parenting style was conducted. Of the twelve items comprising this scale, four significantly discriminated between mothers of victims and control mothers. These were, in order of significance: MCRE Item 10-"child does not get along well with other children," ($F(1,87)=11.796$, $p=.0009$; MCRE Item 8-"mother should overemphasize danger," ($F=4.536$, $p=.036$); MCRE Item 27-"mother should stop breastfeeding as soon as possible" ($F=4.132$, $p=.0451$); and MCRE Item 4- "it is good for a child to be separated from its mother from time to time" ($F=4.143$, $p=.045$). Only two items (8 and 10) significantly discriminated among the three groups. Means for each item are listed in Table 19.

Response frequencies are tabulated in Table 20. These frequencies indicate that more mothers of victims responded with indecision or believed that the child was not getting along with other children than control mothers (Item 10). More control mothers strongly disagreed with this statement. As well, many more mothers of abuse victims disagreed with over-emphasizing danger (Item 8), while many more control mothers believed in over-emphasizing danger when she disapproved of an activity of her child. More mothers of victims believed in halting breastfeeding as soon as possible

Table 19

Three-Group and Two-Group Means for Significant Mother-Child Relationship Evaluation Scale Rejection Items

Variable	Incest Group Mean / SD	Non-Incest Group Mean / SD	Control Group Mean / SD	F Statistic	P Value
MCRE Item 4: Good to Separate	4.24 / .44	4.31 / .47	4.02 / .75	---	---
*MCRE Item 8: Overemphasize Danger	2.12 / .78	2.62 / 1.21	2.85 / 1.19	3.41	0.04
*MCRE Item 10: Child Doesn't Get Along With Peers	2.88 / 1.41	2.28 / .84	1.76 / .95	7.99	0.00
MCRE Item 27: Stop Breastfeeding ASAP	2.06 / .97	2.31 / .97	1.85 / .94	2.48	0.09
	Combined Victims	Controls		F Statistic	P Value
*MCRE Item 4	4.18 / .46	4.02 / .75		4.13	0.05
*MCRE Item 8	2.43 / 1.09	2.85 / 1.19		4.54	0.04
*MCRE Item 10	2.50 / 1.11	1.76 / .95		11.8	0.00
*MCRE Item 27	2.22 / .96	1.85 / .94		4.26	0.04

* Range from 5 = Strongly Agree to 1 = Strongly Disagree.

or were undecided (Item 27), while more control mothers strongly disagreed with this statement. Lastly, all mothers of victims more often agreed or strongly agreed with occasional separation between mother and child (Item 4), while some control mothers disagreed or were undecided on this issue.

In summary, with respect to content of specific questions on the MCRE Rejection scale, the mothers who perceive (correctly or incorrectly) their children as demonstrating conflict with other children, and those mothers who do not over-emphasize danger to their children are the mothers of children most likely to become sexual abuse victims. The mothers less inclined to continue early physical contact with their infant by breastfeeding and believing more strongly in physical separation from the child were also those significantly more likely to have a child in the sexually victmized group.

Mother's Adult Male/Female Relationship Conflict.

Further analysis of male/female conflict severity was conducted. Frequencies of these items were examined for both two and three groups, and are summarized in Table 21. With subjects divided into the two groups of mothers of victims and controls, every item on the Conflict questionnaire was significant by chi square analysis. For each item, many more mothers of victims experienced the abusive incident than control mothers. Consistently more control mothers did not experience an abusive incident than mothers of

Table 20
Response Percentages By Group for Significant MCRE Rejection Scale Items

	Strongly Agree				Disagree				Undecided				Agree				Strongly Agree			
Item	4	8	10	27	4	8	10	27	4	8	10	27	4	8	10	27	4	8	10	27
Incest Victims Group	0	12	24	29	0	76	24	27	0	0	0	12	76	12	47	12	24	0	6	0
Non-Incest Group	0	14	14	21	0	48	55	41	0	7	21	24	69	24	10	14	31	7	0	0
Combined Victims Group	0	13	17	24	0	59	43	43	0	4	13	20	72	20	24	13	28	4	2	0
Control Group	0	11	46	43	7	39	43	37	7	11	2	11	65	33	7	9	22	7	2	0

the final and more severe conflict item (15- calling the police). More victims' mothers also acknowledged experiencing item 13- received visible injuries, item 12-threatened to kill you, and item 8-threw objects at you. Control mothers were more likely to answer "no" on these same items.

Further, the conflict items were divided into physical contact and non-contact items. Frequencies were then examined for differences between the two abuse groups. Chi square analyses revealed significant differences between groups (chi square = 9.638, p=.002). Of those mothers who acknowledged experiencing physical domestic violence, 87% had children who were sexually victimized. Of those who did not experience physical violence, 43% were victimized. Nearly half of the abuse victims' mothers acknowledged Twenty-eight percent of the abuse group had experienced contact episodes, while only 4% of the control mothers had such experiences. Of these mothers who experienced conflict with contact, 47% were incest mothers, 17% were non-incest victims' mothers, and 4% were controls.

With respect to the child victim witnessing a mother's conflict incidents, most of the incest mothers had children witnessing physical contact conflict (e.g., being hit, kicked, etc.). Sixty-one percent of incest mothers reported the child witnessing inappropriate physical contact incidents, compared to 16% of non-incest mothers and only 8% of control mothers. These results are Table 21

Table 21

Group Comparisons of Percentages of Endorsed Items on the Center for Social Research Abuse Index

Item Number	Incest Group	Non-Incest Group	Control Group
1	29.41	41.18	29.41
2	25.00	38.64	36.36
3	29.17	35.42	36.96
4	23.08	44.23	32.69
5	25.28	44.19	30.23
6	27.50	40.00	32.50
7	35.14	40.54	24.32
8	33.33	36.67	30.00
9	37.14	45.71	17.14
10	38.10	52.38	9.52
11	36.00	36.00	28.00
12	50.00	45.45	4.55
13	42.31	42.31	15.38
14	53.33	33.33	13.33
15	50.00	37.50	12.50

displayed in Table 22. A chi square analysis of the two groups by child witnessing was not significant, however.

Table 22

Frequencies of Victims Witnessing Mother's Conflict with an Adult Male Partner

	Incest Victims	Non-Incest Victims	Combined Victims	Control Group
Any Conflict	13 (76%)	18 (62%)	31 (69%)	12 (26%)
Child Did Not Witness Conflict	4 (24%)	11 (38%)	15 (31%)	43 (74%)
Child Witnessed Physical Contact	8	3	11	1
Child Witnessed Non-Physical Contact	5	15	20	11

Grouping items into two severity categories, more abuse mothers had children who witnessed more severe than less severe items (17 victims versus 14 controls), while more control mothers had children who witnessed the non-severe episodes (2 victims versus 10 controls). Of the sexual abuse victims who were witnesses of severe conflict between mother and her male partner, eleven were incest victims and six were non-incest victims.

Socio-economic status.

The Hollingshead class score, a composite score, was analyzed to pinpoint whether head-of-household's income, education, or both were significant risks toward child sexual victimization. Income, as previously mentioned, was not a significant factor in discriminating between groups. A chi square analysis of education ranking was significant, as well: chi square (5,75)=13.257, p=.021, with higher education more frequent in the non-victim group and lower education more frequent in the abuse group.

Life Experiences Survey.

Response frequencies were tabulated for each item on the Life Experiences Survey checked by the mother as occurring within the year prior to the child's victimization. Frequences are listed in Table 23.

When chi square analyses were applied to these items comparing mothers of victims versus mothers of non-victims' groups, nine survey items differed significantly between groups. In descending order of significance, these experiences were:

Item 16, mother experienced sexual difficulties (chi square = 33.59, p = .000);

Item 15, mother experienced serious illness or injury of close family member (chi square = 11.70, p = .003);

Table 23

Response Frequencies and Percentages on Significant ($p < .05$)

Life Experiences Survey Items

	Incest Victims		Non-Incest Victims		Non-Victim Controls	
	N = 17		N = 29		N = 46	
	Yes	No	Yes	No	Yes	No
Item 16**	11 (65%)	6	7 (24%)	22	0 (0%)	46
Item 15**	9 (53%)	8	11 (38%)	18	4 (13%)	40
Item 4**	5 (29%)	12	11 (38%)	18	5 (11%)	41
Item 19	9 (53%)	8	9 (31%)	20	8 (17%)	38
Item 6	5 (29%)	12	8 (28%)	21	5 (11%)	41
Item 43	2 (12%)	15	2 (7%)	27	0 (0%)	46
Item 1	2 (12%)	15	2 (7%)	27	0 (0%)	46
Item 35	5 (29%)	12	6 (21%)	23	4 (9%)	42
Item 10	2 (12%)	15	4 (14%)	25	1 (2%)	45
Item 20*	8 (47%)	9	7 (24%)	22	7 (15%)	39

* Item narrowly missed significance level, $p = .051$.

** Significant at $p < .01$.

Item 4, mother had a major change in sleep habits (chi square = 7.466, p = .006);__

Item 19, the family experienced a major change in financial status (chi square = 5.36, p =.02);

Item 6, mother experienced a major change in eating habits (chi square = 4.42, p = .036);

Item 43, mother experienced separation from spouse due to work, travel, etc. (chi square = 4.79, p = .041);

Item 1, mother married (chi square = 4.18, p = .041);

Item 35, mother experienced personal illness or injury, (chi square = 3.90, p = .048);

Item 10, mother experienced minor law violations (chi square = 3.87, p = .049);

Item 20, major change in closeness of family members (just missed significance at p = .051).

These results should be interpreted cautiously due to the repeated chi square analyses performed. The first three items are significant at probability less than .01, and suggest a connection between sexual victimization and a mother's own sexual difficulties (possibly because of her own child sexual

victimization, domestic violence issues, or involvement with a pedolphile); a mother's physical/emotional absence due to another family member's illness/injury; and a change in her sleep habits in the recent past. These results are in keeping with past research, and may be target areas for future research.

Discussion

The results of this study should be interpreted cautiously for several reasons. First, the sample size was not large, which limits generalizability. However, the results are consistent with the earlier findings of Paveza and Finkelhor. The similarity in findings from the Paveza study in Chicago indicates that these risk factors are not strictly representative of the southern United States. Second, the sample was quite heterogeneous: male and female victims of different ages were mixed. Unfortunately, the sample size did not allow for appropriate analysis of differences between these groups. Third, biased responding may have been evident with some groups, e.g., incest mothers fearful of social service involvement, control mothers reluctant to report domestic violence or other unpleasantries.

The results of this study, however, support a multifactor ecological model toward the understanding of a mother's importance in risk of child sexual victimization. The results from this study also have implications for theory and treatment practices. Viewed as "external inhibitors" (Finkelhor, 1984) which

could prevent an abuser's manifestation of his/her internal motivation to offend, these maternal factors can now be understood in terms of an ecological framework. Each hypothesis will be discussed individually.

Hypothesis I:

On the Michigan Screen Profile of Parenting, significant differences between the two groups were observed with the Coping, Emotional Needs Met, and Relationship with Parents scales. As expected, parents of non-victims reported more positive perceptions of themselves on these characteristics than did non-victims. Expectations of Children Scale was not significant, perhaps due to the overlap between this scale and the MCRE scale.

However, it is interesting to note that among the three groups, non-incest victims' mothers reported the most negative perceptions by a small margin over incest mothers on the Coping and Emotional Needs Met subscales. This trend may have been due to biased responding on the part of incest mothers, perhaps fearful of social services access to the questionnaire or an unwillingness to present themselves negatively. However, it is possible that coping and emotional neediness are more important in third-party victimization, perhaps via a perpetrator seeking out more vulnerable, stressed and needy mothers, while these mothers may be more prone to depending upon a non-family perpetrator for assistance, especially in childcare. These factors did not

significantly contribute toward discrimination of groups, however.

The social support questions may have adequately and better addressed coping and emotional neediness issues, and thus reduced the unique contribution of these MSPP scales toward victimization. As well, the failure of MSPP variables to contribute suggests that mothers of child sexual abuse victims do not demonstrate pronounced dysfunctional parenting or personal difficulties which significantly increase a child's risk. These personal qualities of the mother contributed minimally toward risk of child sexual victimization. As well, a mother's "authoritarian" childrearing attitudes appear to have no connection to child sexual victimization. However, the importance of domestic violence in child sexual abuse situations suggests that there is a strong hierarchical family structure maintained by a male figure occasionally using physical control.

Hypothesis 2:

On the Mother Child Relationship Evaluation Scale, only the Rejection Scale means differed significantly between groups, with victim's mothers scoring higher than controls. Among the three groups, mothers of non-incest victims scored higher than incest mothers, suggesting that "faking good" by incest mothers may have been a problem. However, this type of parenting may indeed be more important in third-party victimization than in incest.

"Rejection" is a misnomer here: further analysis of the significant items comprising this scale gives greater insight into the specific parenting behaviors that may put a child at risk for victimization. These items seem to fall more into the realm of more physical separation between mother and child, promotion of early independence from mother, and exaggeration of danger as a safety strategy.

These results indicate that childrearing patterns and attitudes do significantly affect risk of sexual victimization. Support for findings that physical separation is connected to risk (Finkelhor, 1984) are evident in the attitude that mother-child separation is promoted more often. This is an indication that any separation carries risks, and that separation need not be regular or extensive (e.g., maternal employment which was not significant, etc.) to provide opportunities for the offender. However, a maternal attitude such as this likely involves more frequent separation from a child, with a greater chance for abuse to occur.

As well, a pro response to this question would encompass mothers who are neglectful or are emotionally rejecting of their children. If indeed such mothers were in the sample, just a few of these mothers might be enough to skew the findings in the abuse groups. In addition, Cole and Woolger (1989) found that women who were sexually abused by their fathers and viewed their

mothers negatively endorsed autonomy in their own childrearing practices. When considering the intergenerationality of incest, this finding is generally consistent with the current research project's findings.

The question of termination of breastfeeding also suggests an attitude of pro-separation (and a very early separation at that). This question suggests maternal discomfort with closeness, perhaps sexuality issues, and a high expectation of children to become independent before they are ready. Scores may also reflect the greater stress a mother is under and how little time and energy she has for nursing.

Exaggerating danger appears to be a worthwhile prevention strategy, particularly in domestic abuse situations and with low socio-economic status mothers. Clearly, these situations present danger and, coupled with a mother's tendency to favor early and occasional separation from her child, mothers need to adequately prepare these children for the realities of their social environment-- and in a strong way. If there were a finding one might expect in mothers of recently sexual abused children, it might be a tendency toward overemphasizing danger. However, the opposite finding in this study bolsters its validity as measuring pre- rather than post-abuse parenting attitudes. As well, questions are raised as to why a general sensitivity to danger, as well as

difficulty separating from one's child, are not stronger findings in the victims' groups.

Not getting along with other children may well be an immediate result of, rather than a precursor of, child sexual victimization. Indeed, several studies do suggest that both intra- and extra-familial child sexual abuse victims have social skills difficulties (Mannarino et al, 1989). In addition, this ambiguous statement could have been interpreted by mothers as the child victim behaving disagreeably with peers, or that the child tends to remain socially isolated from peers. Both are suggested by existing research as risk factors and results of sexual victimization. Further research could clarify this issue. However, given the conflict these children often witness among adults in the home, conflicted peer relationships (another mesosystem factor) could be expected.

This style of parenting-- a child not getting along with peers, mothers agreeing with occasional separation from mother and as early as possible, coupled with not over-emphasizing danger-- appears to be a risky combination, and especially so when combined with a mother's relationship with a potentially violent partner and poor quality social supports.

It would appear that the victims' mothers were more similar than different on these variables. Thus, division into mothers of victims and non-victims was

deemed most appropriate. Non-parenting factors were better able to predict intrafamilial versus non-familial abuse.

Hypothesis 3:

On the Center for Social Research Abuse Index, mothers of victimized children (both incest and non-incest victims' mothers) did experience more conflictual events in significant adult male-female relationships. This factor significantly discriminated between both victim and non-victims group, as well as among the three groups of incest mothers, non-incest mothers, and control mothers.

With respect to the conflict questionnaire, domestic violence, as indicated by earlier research, is a serious problem intertwined with child sexual victimization, presenting risk for a woman and often her child, as well. Unfortunately, the present study did not ask if the violent adult male was also the child's offender. And, if the question were asked, it must be assumed that the women would answer honestly, despite intimidation from and fear of the offender. (In some of the interview situations for this study, the victims' mother's significant other remained in the home or interview room, attempted to review her questions, interviewed the interviewer, etc., and a high degree of control over the respondent was noted. While occasionally control mothers' significant others were present, the level of interest in and attempted control

over her responses was not noticeable.)

Overall, the study's results suggest that women who are enduring the greatest exposure to a significant adult male who is violent place their children at risk as well, whether from the same person, family or social contacts. Repeated involvement with abusive men places a child at risk, but this was not as significant a contributor to victimization as significant involvement with just one abusive male. A woman who is or has been physically intimidated by a male partner is not often able to prevent her child from being intimidated by him, his acquaintances, relatives, or sometimes any violent person. This observation is supportive of Finkelhor's external inhibition theory, whereby a mother can no longer serve as an effective inhibitor of an offender's tendency to abuse because he has emotionally and/or physically intimidated her.

Additionally, domestic violence has been documented as having resulted in psychological distress in the battered women, with those women reporting higher distress than non-abused women (Gelles and Harrop, 1989). Truesdell, McNeil and Deschner (1986) found a high incidence of domestic abuse in mothers of incest victims. Clearly, as James and MacKinnon (1990) point out in their theoretical analysis of incestuous families, the context of male domination and abusive behavior toward women in these families must be

considered as a primary risk factor before any other maternal factors can be added.

As well, the clinical observations suggesting that mothers know of the incest but do not intervene is easily understood in the context of domestic violence, where many women fear for their physical safety and some for their lives. Turning a blind eye to family victimization becomes a survival strategy, and coupled with lessened financial resources of low socio-economic status, many additional stressors and poor quality social supports, solutions such as leaving the home with the children are not easily considered or achieved. A study (Kuhl, 1984) has shown that abused women in a domestic violence shelter are cautious, avoid confrontation, and are hesitant to seek help (Goodstein, 1987). Such a finding must be considered when viewing the strong connection between child sexual victimization and abusive conflict between a mother and her significant male partner.

Domestic conflict is a tremendous stressor, and it is easy to see how these women feel much greater negative impact from their life stresses than control mothers. In fact, the presence of domestic violence may have so dominated as a stressor that other "life event" stressors were minimized, resulting in unreported negative stressful impact in mothers of victims. As well, research has shown that frequency of domestic abuse is a strong correlate of number

and severity of stress-related physical and emotional symptoms (Follingsted et al, 1991).

An important finding in this study is that a mother's adult male-female relationship(s) is the most critical risk factor in child sexual victimization, and, again, it is a mesosystem factor-- an interaction between mother and often a father-figure-- rather than a mother's personal characteristics which carry the greatest weight.

Witnessing family conflict is a risk factor by Finkelhor's (1993) evaluation likely because conflict (and often violent conflict) occurs more often in these families. Indeed, the children in the victims' groups did more often than not witness conflict between the mother and her partner.

Hypothesis 4:

On the Social Satisfaction Questionnaire, differences in social support quantity were significant, but only social support quality was significant as a substantial risk factor for abuse. Obviously, friends or contacts of quality can aid in protecting a child from sexual victimization, while contacts of poor quality may contribute to risk of victimization.

There are several possible explanations for this finding. First, incest mothers may be reporting supports such as family members, spouses, etc., who are abusive but do contribute some aspect of support, i.e., financial. Or these

mothers may be more likely to be incest victims themselves who rely on abusive family members for some type of support. Further, incest mothers may tolerate lower quality of support or expect less from social contacts in their circles, due to models they were exposed to early on. Whereas control mothers might eliminate such individuals from their support networks, incest mothers may continue to view them as supports.

In addition, the type of social "support" may be different for these groups, particularly because socio-economic status differed between groups. Whereas incest mothers may lean on an unsupportive person who could offer transportation or money in a given situation, higher income mothers look more toward the quality of emotional support delivered in the same situation.

It should be noted that overall unhappiness with her (often violent) marriage may have colored a mother's sense of overall social support, reducing her perception of quality of her remaining supports. This could not be determined from the social support information gathered, but might be a consideration in future research.

As well, an astute or domineering offender familiar with a child's maternal social network may recognize mothers with social supports who will be less likely to interfere with the victimization of a child, regardless of how many social supports there are available. Quality of social support may act as

an external inhibitor to an offender's propensity to abuse, whereas the number of social supports (especially those of lesser quality and including those who would fail to intervene and a number of potential perpetrators) is a risk for victimization.

Thus, given the presence of an offender, an attempt to sexually victimize a child will be most likely (successful) when a mother is emotionally or physically victimized by men herself, has poor quality social support, is of low socio-economic status, and endorses early mother-child separation in a child with poor social skills and without emphasizing danger.

Prevention issues could focus upon recognition of and problem-solving in violent situations, healthy male-female relationships, improving quality of social support, emphasizing danger to a child, and working on mother-child togetherness rather than separation, or separation under appropriate supervision only. Overall, poor and risky human relationships seem to surround these mothers , therefore placing their children at risk, as well.

Future research could delve further into parenting strategies, whether the abusive male in the mother's life was the child's offender, or explore types of social support and precisely how those social supports are of poor quality, e.g., emotionally or physically abusive, too.

Hypothesis 5:

The Life Experiences Survey indicated that negative changes discriminated significantly between groups. While the number of changes and negative impact significantly contributed to differences between groups, only the negative impact of stressful events significantly contributed to group discrimination. Negative impact, then, may be another reflection of the domestic conflict noted by so many mothers of victims, and may be a reflection of the pressure under which they live. Domestic violence is not an event noted on this scale, yet its presence or past presence in a mother's life may cause such stress that even minor events create more negative impact for them than for control mothers. Negative impact may also reduce a mother's ability to believe she can cope, and vica versa. An item by item examination offers some explanation for these findings.

Item 16, the experience of sexual difficulties, has been clearly linked to women who were child sexual abuse victims themselves (Briere and Runtz, 1987; 1990; Finkelhor et al, 1989). If living with a pedophile or an abusive individual, sexual difficulties may also be the result of living with a sexual partner whose primary interest is children or excessive control, thereby creating difficulty for the mother in their sexual relationship and creating the link to sexual victimization. Most women who discussed this issue with the

interviewer indicated that their own sexual victimization as children caused them to dislike or avoid sexual relations; however, this was a strictly clinical observation.

On Item 15, serious illness or injury of close family member, mothers were specifically asked not to include the child's victimization. Since more victims' mothers were involved with violent adult males, this same man may have been injurious to other family members as well as sexually abusive with the child victim. Or it may have been that the family illness/injury caused a physical or emotional distance between mother and child, during which the child was left alone with or generally in the care of the offender, possibly a temporary caretaker. (This seemed to be the most frequent explanation offered during interviews.) As well, offender drug addiction or mental health problems linked with pedophilia may fall within this category.

On Item 4, mothers' change in sleep habits, could have been due to other stressful circumstances, physical or mental illness (especially depression, which could also encompass earlier items), or staying out late while leaving the child victim in an offender's care. Similarly, a mother's shift change at work may have caused sleep disruption (e.g., a switch to working nights during the period preceding the abuse was a fairly common occurrence offered as an explanation among victims' mothers).

Item 19, change in financial status, may be prominent due to sample selection bias, i.e., control mothers were higher SES due to method of recruitment, while victims' mothers responded because they needed the additional income, especially incest mothers had recently separated from significant others. As well, divorce, re-marriage or living with a lover is hidden within this item. Still, it may be that the stress of a major financial blow is the final disinhibitor for the sexual offender in the home. Some mothers indicated that abuse began taking place in the home following business failure or unemployment by the offender, or, for non-incest mothers, when they took in a boarder. Clinically, some mothers offered that spouses from whom they had separated or divorced began molesting the children upon visitation. As well, the change in financial status may have occurred as part of a general deterioration of the offender's judgment.

SES may be important to victimization in that the lower SES environment may contain a greater number of pedophiles, or serve as the territory the pedophile searches for victims. The mother may also be unable to utilize standard or licensed childcare due to inadequate income, and therefore be susceptible to accepting an offender's offer of care. As well, low finances may mean great difficulty in escaping the most risky situation-- an abusive partner-- physically, geographically and financially.

Control mothers may have been newspaper readers, while others were not, and thus may have biased the sample, leading to the SES differences noted. However, other studies have shown income and socio-economic status differences, as well (Paveza, 1988; Finkelhor, 1984).

As well, a down-grade in neighborhood, change of schools and social circles may have brought children into contact with pedophiles searching for vulnerable mothers and children, ignorant of the offender's reputation or simply in need of childcare.

Item 6, major change in eating habits, may have been indicated due to general stress, financial changes, employment, physical or mental illness.

Item 43, mother experienced separation fom spouse, may have caused her to lean on unsavory social supports, utilize a temporary sitter, allow unfamiliar men in the home.

Item 1, mother married in the past year, indicates that remarriage is a risk factor, whether due to bringing an offender (or his unknown associates) into the home, abuse occurring during visitation with a former spouse, or simply spending less time with a child due to wedding planning, frequent dating, etc. This is consistent with past research (Edwall & Hoffman, 1988; Finkelhor, 1980; Miller, 1976; Gruber & Jones, 1983).

Item 35, mother experienced personal illness or injury, may be due to

general stress or domestic violence, and may have resulted in the physical and emotional separation between mother and child cited in past research. Indeed, many women reported being away from home extensively, or sending their children to live elsewhere, during this period.

Item 10, mother experienced minor law violations, was of borderline significance.

Item 20, major change in family closeness, just missed significance.

Hypothesis 6:

The Hollingshead Index was a significant predictor of sexual abuse, likely for the reasons noted above with changes in financial status. Note that low socio-economic status is not exclusive to sexual victimization, but it is a primary risk factor for incest victimization. Sample bias may have led to the significance of socio-economic status in this study, e.g., more low socio-economic status incest mothers responded to the survey, thus skewing results. However, it should be noted that Paveza (1988) found very similiar results in his study of mothers of incest victims.

Hypotheses 7 & 8:

The ecological model fits well with the statistical results. However, the hypothesis that maternal macrosystem variables contributed most to victimization was not substantiated. The influence of macrosystem variables

such as SES would likely be more apparent in interaction effects with the other variables, as this all-encompassing variable indirectly effects everything from mental health to parenting to presence of negative stressors.

Mesosystem (social system) variables contributed most, with microsystem (personal) variables following next, and the macrosystem variable of socio-economic status contributing with the least independent significance. The mesosystem (social system) variables of greater male/female (violent) conflict and poorer quality social support also encompass individual characteristics, such as mate selection, tolerance and social judgment, as well as significant life stressors of their own. A mother living with domestic violence, then, is experiencing a macrosystem of her own.

The results do not support a typical stress-coping model as has been supported in child physical abuse and neglect research. However, the quality of social support given a conflicted domestic situation appears to be of critical importance. Clearly, it is the mother's social network that carries the most weight in protecting a child from victimization, and especially if the closest member of that social system-- the parent or parent-figure of the child-- is "abusive" toward the mother. A mother who is a fearful victim of a significant other is likely to be unable to protect her child from the same man if she remains in the relationship. Of secondary importance in protecting a child is

the quality of the general social system, perhaps because these are the individuals upon whom mother must depend for childcare, etc., and even more so when the spouse is not a source of true support. As well, the mother's support system is the child's support system. The likelihood of an offender in her social circle increases with her spouse's "abusiveness," her own poorer quality support network, and her willingness to separate (early) from a child with social difficulties, while not over-emphasizing danger. The combination of these factors indicates maximal risk for child sexual victimization, and offers several points of intervention or prevention.

It appears that victims' mothers were more similar than different on the significant variables. This may have been due to the selected divisions between incest and non-incest groups, or multiple victimization of the child by both family and non-family members, or even the reluctance of the mother to reveal the true (parental) offender. However, the offender's relationship to the victim seems less important than the significant risk factors outlined here. It is possible that other variables may have better discriminated between the victim's groups.

It was noted that incest victims' mothers, having an offender living in the house, reported themselves as experiencing more risk factors external to themselves, e.g., negative life impact, etc., than did non-incest victims'

mothers. They seemed to minimize personal characteristics which may have contributed to victimization. This finding may have been due to small, non-representative sample size, mothers' greater denial or guilt related to the incest, the influence of fear of report to social service agencies, or simply the greater probability of domestic abuse (and thus probability of child victimization) in incestuous families.

Still, given the circumstances of a smaller sample size, division into mother's of victims and control mothers appeared to be the most appropriate categorization. Offender characteristics are obviously another study requiring more in-depth research, and likely more involve more categories than simply incest or non-incest.

Overall, a three-prong interactive model involving mother's social system quality (including spouse), personal/parenting factors, and over-riding environmental circumstances generally supports the data. The minimal involvement of SES and stress strongly suggests that the highest risk factors are less due to over-riding circumstance and hence may be more easily altered. For example, prevention may be addressed through teaching mothers to better judge quality social supports (and particularly quality child caretakers), addressing mate selection and domestic violence issues by lessening tolerance for violence and introducing 'exit' options, helping an abused mother to

recognize that she may not be the only victim in the family and avoid having an abusive partner act as caretaker for the child, increasing mothers information about and opportunity for parent-child interaction, prevention discussions about high-risk opportunities for sexual abuse, strangers, etc.

These findings fit into Finkelhor's theory of internal/external inhibitions to sexual offending in several ways. First, it would appear that primary importance is placed on overcoming the power of, or dominating, the mother of a child, or finding a mother who is accustomed to allowing a male more power because of her experience with abusive men, and thus reducing the potential a mother has for acting as external inhibitor, regardless of her personal qualities. Secondly, quality social support that might bolster a woman's power in a relationship and her ability to act as external inhibitor (or by itself act as a secondary external inhibitor) is also absent. Thirdly, mothering allowing for greater physical separation between mother and a socially awkward child, as early as possible and without over-emphasis of danger, reduces external inhibitors by allowing more physical access to a child by poor quality social contacts. As well, the research describes a somewhat trusting (as opposed to suspicious) maternal attitude toward the world, which also reduces the likelihood that a woman will be viewed as an external inhibitor to sexual offending.

These findings also mesh strongly with Paveza's findings that maternal social factors are the primary risk (or protection) factors in child sexual abuse. However, what Paveza terms an unhappy marriage is probably better articulated here as an emotionally and/or physically abusive relationship, or a past involvement with such a relationship. It should be noted that the parenting items and SES/stress items are largely social factors in their own right, rather that strictly personality or external happenings. In this sense, a combination of mesosystem (or social system) factors appears to be largely responsible for vulnerability to child sexual abuse, although these levels are nested in ecological fashion, (mother-child socialization, mother-spouse social interaction, and mother-support network and overall social status).

It would appear that Bronfenbrenner's mesosystem factors are of primary importance in risk of sexual victimization. Once a mother is prone to, or becomes involved in a social system (male-female relationships in the home) whereby she loses some power to protect herself emotionally and/or physically, her child is in jeopardy as well. Additionally, when she loses quality in her social supports (in the home as well as out of the home), she loses additional power and protection capabilities. As well, the social supports may be caring for the child, and are of questionable quality themselves. Microsystem factors are relevant in that they relate to social contact, as well:

conflict with peers, early separation from mother, and non-emphasis of danger, suggesting that a child is out of the boundaries of mother's physical observation, with questionable social skills and a propensity to trust rather than suspect a potentially dangerous individual. Macrosystem variables again relate to a social support network via socio-economic status, for this status places a family in a specific neighborhood with lesser financial resources (e.g., perhaps less police protection, less quality daycare, etc.), and more individuals who have experienced downward drift (e.g., criminal elements, etc.). Social factors, then, should be a major area of attention in both sexual abuse prevention and identification of potentially risky situations.

Other than potential domestic violence in the home, those factors closest to the child are not the most risky factors: it is the mothers' social networks combined with her transmission of social information which causes greatest risk of sexual victimization to the child.

In summary, the riskiest maternal environment begins with an environment of high-risk people (low money and power to escape, possibly greater exposure to high-risk disinhibited individuals, such as drug addicts/alcoholics, criminals, etc.), adds mother's involvement with a violent or potentially violent partner (likely including the offender), poorer quality social support (perhaps risky people and none "supportive" enough to intervene), and,

finally, a mother believing in early independence or some physical separation from her without a concomitant over-emphasis of danger in a socially awkward child. These risk factors do not overlap, but combine to create the greatest risk for a child's sexual victimization, although it should be noted that no factor can be used to exclude the chance that child sexual abuse will occur (Finkelhor, 1993).

In future research, the hit rate of the combined characteristics could be improved by greater refinement of the socially-oriented variables in a child victim's microsystem and macrosystem. Examination of the child's own social skills is also in order. The findings also indicate that a coping, stress and parenting model appears more applicable to third-party sexual abuse, and may be a small sub-category of risk for victimization only in some extra-familial abuse. Still, the ecological approach remains a useful theoretical structure for understanding how maternal characteristics create vulnerabilities or offer protection against child sexual abuse.

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Appendix A

Invitation Letter

Dear Mother:

I am a University of Manitoba (Canada) doctoral student in psychology researching mother/child experiences. I am especially interested in the prevention of child sexual abuse. If you are the natural mother of a child aged 14 years or less, I am offering you payment to complete my questionnaire. This written survey will take about one hour. Your answers may help us better understand and protect our children from victimization; please help.

If you'd like to participate in this project, contact me by returning the bottom portion of this letter in the enclosed envelope. I will then call you to arrange a time to complete the survey, at your home or any location you choose (restaurant, shopping center, etc.). You will be paid $5.00 for starting the questionnaire, and may stop at any time. I am offering you an additional $10 for completing the survey, however. You will not contacted again, unless you wish a summary of the study results.

Be aware that some mothers may find a few questions to be a bit personal (age, income, etc.). However, there will NOT be a name on your questionnaire. Also, be assured that you may discontinue the survey at any time, receive five dollars, and not be contacted again, if you wish.

If you participate, thank you! You are one of many mothers contributing to the study of child victimization in the hope of finding answers.

Sincerely,

Karen Campbell
510 Antoinette Drive
Wilmington, NC 28412-7913

Yes, I want to help!

FIRST NAME ONLY:

CITY:

COUNTY:

TELEPHONE NUMBER:

Appendix B

Agreement of Confidentiality

I understand that this questionnaire will ask questions about parenting, my beliefs and personal relationships, recent life events, and some of my child's experiences, such as sexual abuse. I volunteer to complete this survey, which may be discontinued at any time.

The primary researcher, Karen Campbell, agrees to keep your responses confidential, and your name will not be used to contact you. Only a number will appear on the answer sheets and NOT your name.

It is assumed that any abuse you disclose about your child has been reported to Child Protection Officials. If this is not the case, PLEASE REPORT CHILD ABUSE to your local Department of Social Services.

I have a copy of this agreement.

Karen L.M. Campbell, Researcher

Subject's Signature

Appendix C

Questionnaire

Dear Mother:

I would like you to contribute to a study of mother-child experiences by answering this questionnaire. Some questions are personal and may be upsetting. But your honest answers can help researchers better understand some children's experiences, such as sexual abuse. Your answers will be combined with those of many other mothers and will not be review on an individual basis. However, you and other mothers can receive group results when the study is complete; just fill out the bottom portion of this letter.

DO NOT PUT YOUR NAME ON THIS PART OF THE FORM. You will remain anonymous. However, you must sign the attached consent form in order to participate in the study.

This survey will take you about 50 minutes to answer. To show appreciation, I am offering $15.00 for your completed questionnaire: $5.00 to start, and $10 following completion of the survey.

I hope you will participate, but you do not have to do so. At any time, just return the questionnaire and tell me you do not

wish to answer it, and you will not be contacted again.

Please feel free to talk with me about any issue raised by this survey, particularly if you are upset by the material. The purpose of this project is to aid in the e understanding and prevention of child sexual abuse, not to upset parents!

Thanks for your help.

Karen Campbell

Primary Researcher & Graduate Student

University of Manitoba, Canada

If you would like to receive a summary of the results of this study, print your name and address here. When the research is complete, I will send you a brief review of the findings. I will not be reviewing questionnaires on an individual basis; therefore, individual results are not available.

---

1) Your age--------

ID#---------

(If your child has disclosed sexual abuse in the past year, please answer the following questions about your family BEFORE the disclosure, e.g., while the incident was taking place).

2) Marital status: Single--- Separated/divorced---

Widowed--- Living as Married---

Married----

3) Last grade you completed in school:___

4) If married/living together, last grade he completed in school:---

5) Racial/cultural background:___

6) I am employed outside the home --- hours per week.

7) My occupation:----------

8) Male head-of-household's occupation:----------

9) Approximate family income per year:

---Less than $10,000 ---$31,000 to 40,000

---$10,000 to $20,000 ---Over 40,000

---$21,000 to 30,000

10) I live in the County of ----------, a:

---rural area

---town/small city

---large city

11) I have ----- children.

ONE of your children is aged 14 years or younger. Please answer the following questions about that ONE child.

12) Current age of child:------

13) Child is: Male --- Female---

14) IN THE PAST YEAR, has your child described any of the following experiences with a person at least 5 years older when s/he was 14 or younger? Circle your response for each to the best of your knowledge:

a) Invitation or request to do something sexual

Yes No

b) Kissing and hugging in a sexual way

Yes No

c) Another person showing sex organs to child

Yes No

d) Child showing sex organs to another person

Yes No

e) Another person fondling child in a sexual way

Yes No

f) Another person touching child's sex organs

Yes No

g) Child touching another person's sex organs

Yes No

h) Attempted intercourse with child

Yes No

i) Intercourse

Yes No

j) Any other activity not listed (specify)

Yes No

k) Unknown

Yes No

l) Physical abuse (non-sexual) OUTSIDE family

Yes No

m) Physical abuse (non-sexual) WITHIN family

Yes No

PLEASE NOTE: IF YOU ARE AWARE OF A CHILD WHO IS BEING ABUSED, CONTACT YOUR LOCAL DEPARTMENT OF SOCIAL SERVICES CHILD PROTECTION CENTER.

15) Was the offender(s) in this incident (check as many as apply):

A stranger---

Child's cousin---

An acquaintance---

Stepparent---

A friend of child---

Teacher---

A friend of you/your husband---

Babysitter---

Child's parent---

Unknown---

Child's grandparent---

Other---

Child's uncle/aunt---

Child's brother/sister---

16) Offender was approximately --- years old and

a: Male--- Female---

17) To the best of your knowledge, has child experienced a

similar but separate episode with another person in an unrelated incident?

Yes--- No---

18) To whom did your child first report the incident?

---

19) Who was caring for your child at the time s/he experienced the incident?----------

20) Has child received treatment for problems stemming from the sexual encounter you described?

Individual therapy____

Group therapy____

No treatment____

Listed below are a number of events which sometimes bring about change in the lives of those who experience them and which necessitate social readjustment. Please circle those events which you have experienced in the recent past. Indicate the time period during which you have experienced each event. Circle "A1" if the event occurred within the past year (or, for those with a child experiencing sexual abuse, AFTER THE INCIDENT WAS DISCLOSED AND STOPPED). Circle "B2" if the event occurred in the year beyond the last (or, for those with a child experiencing sexual abuse, if the event occurred in the year BEFORE THE DISCLOSURE,

e.g., these events took place prior to and/or while your child was being victimized).

For each item you check, please indicate the extent to which you viewed the event as having either a positive or negative impact on your life AT THE TIME THE EVENT OCCURRED. (That is, indicate the type and extent of impact that the event had. A rating of -3 would indicate an extremely negative impact. A rating of 0 suggests no impact. A rating of +3 would indicate an extremely positive impact.)

LIFE EVENT	IMPACT	TIME	PERIOD
1. Marriage	-3 -2 -1 0 +1 +2 +3	A1	B2
2. Detention in jail/comparable institution	-3 -2 -1 0 +1 +2 +3	A1	B2
3. Death of spouse	-3 -2 -1 0 +1 +2 +3	A1	B2
4. Major change in sleeping habits	-3 -2 -1 0 +1 +2 +3	A1	B2
5. Death of close family member:			
a. mother	-3 -2 -1 0 +1 +2 +3	A1	B2
b. father	-3 -2 -1 0 +1 +2 +3	A1	B2
c. brother			

-3 -2 -1 0 +1 +2 +3 A1 B2

d. sister

-3 -2 -1 0 +1 +2 +3 A1 B2

e. grandmother

-3 -2 -1 0 +1 +2 +3 A1 B2

f. grandfather

-3 -2 -1 0 +1 +2 +3 A1 B2

g. other (specify)

-3 -2 -1 0 +1 +2 +3 A1 B2

6. Major change in eating habits (much more or less food intake)

-3 -2 -1 0 +1 +2 +3 A1 B2

7. Foreclosure on mortgage or loan

-3 -2 -1 0 +1 +2 +3 A1 B2

8. Death of close friend

-3 -2 -1 0 +1 +2 +3 A1 B2

9. Outstanding personal achievement

-3 -2 -1 0 +1 +2 +3 A1 B2

10. Minor law violations (traffic ticket, disturbing the peace, etc.)

-3 -2 -1 0 +1 +2 +3 A1 B2

11. ----------

12. Pregnancy

-3 -2 -1 0 +1 +2 +3 A1 B2

13. Changed work situation (different work responsibility, major change in working conditions, hours, etc.)

-3 -2 -1 0 +1 +2 +3 A1 B2

14. New job

-3 -2 -1 0 +1 +2 +3 A1 B2

15. Serious illness or injury of close family member:

a. father

-3 -2 -1 0 +1 +2 +3 A1 B2

b. mother

-3 -2 -1 0 +1 +2 +3 A1 B2

c. sister

-3 -2 -1 0 +1 +2 +3 A1 B2

d. brother

-3 -2 -1 0 +1 +2 +3 A1 B2

e. grandmother

-3 -2 -1 0 +1 +2 +3 A1 B2

f. grandfather

-3 -2 -1 0 +1 +2 +3 A1 B2

g. spouse

-3 -2 -1 0 +1 +2 +3 A1 B2

h. other (specify)

-3 -2 -1 0 +1 +2 +3 A1 B2

16. Sexual difficulties

-3 -2 -1 0 +1 +2 +3 A1 B2

17. Trouble with employer (in danger of losing job, being suspended, demoted, etc.)

-3 -2 -1 0 +1 +2 +3 A1 B2

18. Trouble with in-laws

-3 -2 -1 0 +1 +2 +3 A1 B2

19. Major change in financial status

-3 -2 -1 0 +1 +2 +3 A1 B2

20. Major change in closeness of family members (increased/decreased closeness)

-3 -2 -1 0 +1 +2 +3 A1 B2

21. Gaining a new family member (through birth, adoption, family member moving in, etc.)

-3 -2 -1 0 +1 +2 +3 A1 B2

22. Change of residence

-3 -2 -1 0 +1 +2 +3 A1 B2

23. Marital separation from mate (due to conflict)

-3 -2 -1 0 +1 +2 +3 A1 B2

24. Major change in church activities (increased/decreased attendance)

-3 -2 -1 0 +1 +2 +3 A1 B2

25. Marital reconciliation with mate

-3 -2 -1 0 +1 +2 +3 A1 B2

26. Major change in number of arguments with spouse (a lot more or less)

-3 -2 -1 0 +1 +2 +3 A1 B2

27. --------

28. Change in husband's work (loss of job, new job, retirement, etc.)

-3 -2 -1 0 +1 +2 +3 A1 B2

29. Major change in usual type and/or amount of recreation

-3 -2 -1 0 +1 +2 +3 A1 B2

30. Borrowing more than $10,000

-3 -2 -1 0 +1 +2 +3 A1 B2

31. Borrowing less than $10,000

-3 -2 -1 0 +1 +2 +3 A1 B2

32. Being fired from a job

-3 -2 -1 0 +1 +2 +3 A1 B2

33. --------

34. Having an abortion.

-3 -2 -1 0 +1 +2 +3 A1 B2

35. Major personal illness or injury

-3 -2 -1 0 +1 +2 +3 A1 B2

36. Major change in social activities (parties, movies, visits -- increased or decreased participation)

-3 -2 -1 0 +1 +2 +3 A1 B2

37. Major change in living conditions of family (building new home, remodeling, deterioration of home/neighborhood, etc)

-3 -2 -1 0 +1 +2 +3 A1 B2

38. Divorce

-3 -2 -1 0 +1 +2 +3 A1 B2

39. Serious injury or illness of close friend

-3 -2 -1 0 +1 +2 +3 A1 B2

40. Retirement from work

-3 -2 -1 0 +1 +2 +3 A1 B2

41. Son or daughter leaving home (due to marriage, college, etc.)

-3 -2 -1 0 +1 +2 +3 A1 B2

42. Ending of formal schooling

-3 -2 -1 0 +1 +2 +3 A1 B2

43. Separation from spouse (due to work, travel, etc.)

-3 -2 -1 0 +1 +2 +3 A1 B2

44. Engagement

-3 -2 -1 0 +1 +2 +3 A1 B2

45. Breaking up with boyfriend (not mate)

-3 -2 -1 0 +1 +2 +3 A1 B2

46. Leaving home for the first time

-3 -2 -1 0 +1 +2 +3 A1 B2

47. Reconciliation with boyfriend (not mate)

-3 -2 -1 0 +1 +2 +3 A1 B2

48. Anything else?----------

-3 -2 -1 0 +1 +2 +3 A1 B2

* * *

It is common in dating or marital relationships for people to have disagreements with each other. Different people handle conflict in different ways. We are particularly interested in how you have experienced conflict in your romantic/sexual relationships with men, for example, with men you have dated, steady boyfriends, spouses, or "live-in" boyfriends. HAVE YOU EVER BEEN SUBJECTED TO ANY OF THE FOLLOWING BY A DATE, BOYFRIEND OR SPOUSE?

1. Been accused of having affairs with other men

YES NO

2. Had your time monitored and be made to account for every minute (where you were, who you were with, etc.)

YES NO

3. Be criticized over daily things such as your clothes, cooking or appearance

YES NO

4. Experienced his moods to change radically from very calm to very angry or vica versa

YES NO

5. Be pressured to have sex more often than you'd like

YES NO

6. He became angry if you didn't want to go along with his requests for sex

YES NO

7. He threatened to hit you

YES No

8. He threw objects at you

YES NO

9. He hit you (e.g., slapped, punched, kicked)

YES NO

10. He hit you with an object

YES NO

11. He threatened you with an object

YES NO

12. He threatened to kill you

YES NO

13. He caused you visible injuries (e.g., welts, bruises, cuts, bumps on the head, etc.)

YES NO

14. You required first aid treatment for such injuries received

YES NO

15. You called the police or tried to because of feeling endangered by him

YES NO

16. Estimate the TOTAL number of relationships in which ANY of these behaviors occurred: -------

If you answered "yes" to any of the preceding questions 1-15, try to choose the ONE relationship wherein these behaviors seemed most significant to you and answer the following questions with that person or situation in mind.

17. What was your relationship with this person?

Date--- Steady boyfriend---

Spouse/Live-in---

18. Estimate the length of time you were in a romantic/sexual relationship with this person (i.e., number of days, months or years)----------

19. Did your child see or hear any of the conflicts in your relationships described in questions 1-15?

YES NO

20. Do you feel that you have ever been physically abused in a relationship with a date, boyfriend or spouse?

YES NO

21. Do you feel that you have ever been sexually abused as a child?

YES NO

22. Do you feel that you have ever been sexually abused as an adult?

YES NO

* * *

INSERT MICHIGAN SCREENING PROFILE OF PARENTING (MSPP) HERE.

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INSERT MOTHER-CHILD RELATIONSHIP EVALUATION SCALE HERE.

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The following questions ask about people in your environment who provide you with help or support. Each question has two parts. For the first part, list all the PEOPLE you know, excluding yourself, whom you can count on for help or support in the manner described. (If your child has been victimized in the past year, please answer about your support system AROUND THE TIME OF YOUR CHILD'S INCIDENT, NOT AFTER THE INCIDENT WAS DISCLOSED.) Give the person's initials and their relationship to you (see example). Do not list more than one person next to each of the letters beneath the question, and do not list more than nine people per question.

For the second part, circle the number indicating how satisfied you are with the overall support you have (or had at

the time of your child's victimization). (See example). If you have no support for a question, check the words "NO ONE," but still rate your level of satisfaction.

EXAMPLE: Whom do you know that you can trust with information that could get you into trouble?

---NO ONE	a)	f)
	b)	g)
	c)	h)
	d)	i)
	e)	

How satisfied?

VERY SATISFIED	6
FAIRLY SATISFIED	5
A LITTLE SATISFIED	4
A LITTLE DISSATISFIED	3
FAIRLY DISSATISFIED	2
VERY DISSATISFIED	1

---

1. Whom can you really count on to listen to you when you need to talk?

---NO ONE

a)	f)
b)	g)
c)	h)
d)	i)
e)	

How satisfied? 6 5 4 3 2 1

---

2. Whom could you really count on to help you if a person whom you though was a good friend insulted you and told you that s/he didn't want to see you again?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

3. Whose lives do you feel you are an important part of?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

4. Whom do you feel would help you if you were married and just separated from your spouse?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

5. Whom could you really count on to help you out in a crisis situation, even though they would have to go out of their way to do so?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

6. Whom can you talk with frankly, without having to watch what you say?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

7. Who helps you feel that you truly have something positive to contribute to others?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

8. Whom can you really count on to distract you from your worries when you feel under stress?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

9. Whom can you really count on to be dependable when you need help?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

10. Whom could you really count on to help you out if you had just been fired from your job or expelled from school?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

11. With whom can be yourself totally?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

12. Whom do you feel really appreciates you as a person?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

13. Whom can you really count on to give you useful suggestions that help you to avoid making mistakes?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

14. Whom can you count on to listen openly and uncritically to your innermost feelings?

---NO ONE

a) f)
b) g)
c) h)
d) i)

e)

How satisfied? 6 5 4 3 2 1

---

15. Who will comfort you when you need it by holding you in their arms?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

16. Whom do you feel would help if a good friend of yours had been in a car accident and was hospitalized in serious condition?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

17. Whom can you really count on to help you feel more relaxed when you are under pressure or tense?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

18. Whom do you feel would help if a family member very close to you died?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

19. Who accepts you totally, including both your worst and your best points?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

20. Whom can you really count on to care about you, regardless of what is happening to you?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

21. Whom can you really count on to listen to you when you are very angry at someone else?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

22. Whom can you really count on to tell you, in a thoughtful manner, when you need to improve in some way?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

23. Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

24. Whom do you feel truly loves you deeply?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

25. Whom can you count on to console you when you are very upset?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied? 6 5 4 3 2 1

---

26. Whom can you really count on to support you in major decisions that you make?

---NO ONE

a) f)
b) g)
c) h)
d) i)
e)

How satisfied?

6 5 4 3 2 1

---

27. Whom can you really count on to help you feel better when you are irritable and ready to get angry at almost anything?

---NO ONE

a) f)

b) g)

c) h)

d) i)

e)

How satisfied?

6 5 4 3 2 1

THANK YOU FOR YOUR PARTICIPATION.

Appendix D

Measures

Demographics

Assessment of demographic information included questions on race/ethnicity, income and educational levels, marital status, parent's age, child's age, number of children in the family, and number of hours per week employed.

Although there are no documented differences between African-American and Caucasion racial groups in incidence of sexual abuse (Russell, 1986; Wyatt, 1985; Finkelhor, 1979), there do appear to be differences in incidence with other ethnic and cultural groups, such as Hispanics (Kercher and McShane, 1984), Jews (Russell, 1986) and Asians (Russell, 1986). As well, racial and cultural background has been linked with significant differences in parenting styles (Gray and Cosgrove, 1985).

As previously discussed, class status was assessed with the Hollingshead Scale, which combines education and income to arrive at a socio-economic status rating.

While family size does not appear related to occurrence of all types of child sexual abuse (Finkelhor, 1979), it does positively correlate with incest (Herman, 1981; Julian and Mohr, 1980) and with child physical abuse and neglect (Ellevestein, 1980; Groothuis, 1982).

Most investigators have noted that maternal employment is connected with child sexual abuse (Fromuth, 1983; Landis, 1956; Peters, 1984; Russell, 1986), although some have not (Finkelhor,

1984; Paveza, 1988). Perhaps the issue at hand is physical availability of the mother to the child. The current study, then, assessed the hours of maternal employment per week, but found this factor non-significant in occurrence of child sexual victimization.

Some of these factors may also affect parenting styles. For example, Herrenkohl et al (1984) found that low income was strongly associated with rejecting maternal behavioral ratings, while high income was associated with accepting maternal ratings. Furthermore, lower socio-economic status may coincide with other factors, such as less job autonomy and satisfaction, which have been associated with greater aggression in childrearing (Strauss, 1980).

Because of the potential impact upon parenting and maternal stress, family size and income were assessed in this study.

Childhood Sexual Abuse History Questionnaire

The Childhood Sexual Abuse History Questionnaire is an abbreviated version of Finkelhor's (1979) sexual victimization questionnaire. The selected questions ask about the type of sexual victimization the child experienced, the child's age at first offense, and the offender's age, sex and relationship to the child. No reliability or validity data currently exists on these questions, which were originally developed to assess childhood abuse histories of university students. This questionnaire has been used extensively in the literature on child abuse. However, given the incidence of child sexual abuse

reports in surveys utilizing this questionnaire (Finkelhor, 1984; Runtz, 1987), the measure appears adequate. The questions were brief and appear easily understood by people of all educational levels.

In addition, two questions about the child's caretaker at the time of the offense and to whom the child first disclosed were included.

Michigan Screening Profile of Parenting

The Michigan Screening Profile of Parenting (MSPP), devised by Helfer, Hoffmeister and Schneider (1978), evaluates parental perceptions hypothetically relevant to positive parent-child interactions. Its original intent was to identify parents at risk for parenting difficulties, including child maltreatment, although that was not the intent of the current study). The scale examines childhood and current relationships which may impact upon the mother's ability to successfully interact with others.

The MSPP has four sections, but only Section B was included in the analyses. Its thirty items required approximately fifteen minutes to rate on a seven-point scale. Scoring generated four subscales: Emotional Needs Met; Relationship with Parents; Expectations of Children; and Coping. High subscale or summary scores (or nonconvergence of items within a subscale) suggest parent-child interaction difficulties.

Reliability, reported as score agreement over time (Hoffmeister, 1977), ranges from 62% on the Expectations of

Children subscale to 85% on the Emotional Needs Met subscale. Support for discriminant and concurrent validity is also reported by the authors. The MSPP accurately identifies 83% of mothers with known parenting problems and 77% of those without obvious difficulties in parent-child interaction (Helfer et al, 1978).

Mother-Child Relationship Evaluation Scale

The Mother-Child Relationship Evaluation scale (MCRE) developed by Robert Roth (1980) is a 48-item self-report instrument assessing maternal attitudes and parenting practices. Its four subscales-- Acceptance, Rejection, Overprotection and Overindulgence-- were based upon Symond's (1949) definitions of maternal attitudes.

In general, the MCRE scale assesses qualities of the mother-child relationship along an acceptance-rejection dimension. Acceptance was defined as a high score on the Acceptance subscale and the mother's sincerity of affect, genuine interest and positive perceptions of the child, according to Roth (1980). Nonacceptance was defined by high scores on any or all of the three remaining subscales: Rejection, Overprotection and Overindulgence. Roth's MCRE scale profile indicates T-score ranges from 43 to 57 (25th-75th percentiles) are average, and these correspond to scores of 38-44 on the Acceptance scale; 29-36 on the Overprotection scale; 29-34 on the Overindulgence scale, and 29-36 on the Rejection Scale. The content of these subscales has been described previously, these four subscale scores represented the four variables of maternal childrearing

attitudes and practices in this study.

The MCRE was easy to read and required about fifteen minutes to complete. Items were rated on a five-point scale. Scoring was accomplished by totalling items for each of the four subscales and converting them to standardized T-scores, comparable to their percentiles. Higher scores and percentiles equated with greater amounts of the scale characteristic in the parent.

Reported split-half reliabilities are modest (.41 to .57), but based upon only six item half-scores (Roth, 1984). Additionally, a correlation of -.55 between Acceptance and "Non-acceptance" scales of the MCRE suggests theoretical validity. Studies utilizing this scale indicate good construct validity and the distinction of each subscale, further supporting a sound theoretical foundation (Handford, Mayes, Bagnato and Bixler, 1986). For example, Young (1986) found that scores on the Acceptance scale were negatively correlated with scores on Overindulgence, Overprotection and Rejection scales. As well, this same study has provided additional construct validity in that mothers referred for infant care or parenting skills scored significant higher on the MCRE Rejection scale than did nonreferred mothers.

Center for Social Research (CSR) Abuse Index

The Center for Social Research (CSR) Abuse Index was originated by Stacey and Shupe (1983) to assess the degree of violence and danger in a domestic relationship. The index

addressed a woman's perceptions of her partner's behavior within their relationship. The questions look at control, sexual coerciveness, physical abuse, threats and assault resulting in physical harm. Runtz (1986) reported a Chronbach's aplpha of .8 for this scale. As well, the CSR clearly has face validity.

The CSR Index was altered to include all of the respondents' romantic relationships, as well as the "parental" relationship alone, for two reasons. First, maternal victimization may have occurred within any relationship the child witnessed, not just the spousal relationship. Second, some research suggests no relationship between a child's sexual victimization and abusiveness between the victim's parents (Finkelhor and Hotaling, 1983; Finkelhor, 1984). However, these studies fail to address other conflict-ridden significant maternal relationships the child has witnessed.

Social Support Questionnaire

Social support was measured with the Sarason et al (1983) Social Support Questionnaire. This questionnaire presented a series of hypothetical situations which require social support. For each of the twenty-seven items, subjects listed the initials of support sources and degree of satisfaction with them. Degree of satisfaction ranged from very dissatisfied to very satisfied on a six-point scale. Validity data are not available for either number of or satisfaction with social supports. However, internal reliability scores of .97 and .94 were found for the number of supports and satisfaction with supports, respectively

(Sarason et al, 1983). Test-retest reliability is .90 and .83, respectively, for the two factors.

Life Experiences Survey

The Life Experiences Survey (LES), developed by Irwin Sarason, James Johnson and Judith Siegel (1978) asked respondents to indicate which of 47 life events they have experienced in the past year. Respondents were also asked to rate how desirable or undesirable they perceived the event to be on a 7-point Likert scale of impact. Total values were summed to indicate positive changes, negative changes and a total change score.

Many life event scales have been used successfully in the study of stress and physical child abuse. Studies of child maltreatment found significant positive associations between the Recent Living Changes Questionnaire and child maltreatment (Justice and Justice, 1976; Justice, Calvert and Justice, 1985). While Gaines et al (1978) used the Holmes and Rahe (1967) Social Readjustment Rating Scale (SRRS) with "marginal" results, stronger correlations were obtained with the Family Life Form stress measurement. However, the Family Life Form Scale appears to be strongly tied to income, and socioeconomic status was not well-controlled in the study. Further, the Gaines et al study was strongly retrospective, with respondents tested as long as four to sixty-eight months from the date of suspected abuse. Respondents were also asked to evaluate stress over a three-year period prior to that date, leaving much room for response error.

Justice, Calvert and Justice improved upon the Gaines et al

study by matching physically-abusive and non-abusing mothers on age and occupational status, and administering the Recent Life Changes Questionnaire (Rahe, 1975), a variant of the SRRS, immediately after report of abuse.

Some difficulties exist with these instruments, however. The SRRS, for example, tends to underrepresent common events experienced by women and the poor and is biased toward evaluation of only negative events. The LES was designed to alleviate these difficulties.

Test-retest reliabilities range from .19-.53 for positive change scores, .56-.88 for negative change scores, and .63-.64 for total change scores (Sarason, Johnson and Seigel, 1978). Further, the LES is easily self-administered, and requires about 15 minutes for completion.