

The Nature of the Relationship Between Childhood Sexual Abuse,
Adult Attachment Style, and Current Psychological Functioning in Women

by

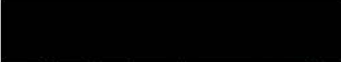
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We accept this thesis as conforming
to the required standard




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ABSTRACT

This study investigated the nature of the relationship between childhood sexual abuse (CSA), adult attachment style as measured by the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991), and current psychological functioning as measured by the Trauma Symptom Inventory (TSI; Briere, 1991) and the Rosenberg Self-Esteem Inventory (Rosenberg, 1965). Participants were 333 female university students, including 85 women with a history of CSA. Results indicated that CSA predicted both current psychological functioning and adult attachment style. In addition, adult attachment style predicted current psychological functioning. A mediational model, in which attachment is considered a mediator between CSA and current psychological functioning was suggested. Results are discussed in terms of implications for conducting therapy with CSA survivors.


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Introduction

The study of childhood sexual abuse (CSA) is a relatively new research area. For the most part, empirical investigations of CSA date back only to the late 1970's (e.g., Finkelhor, 1979). In fact, the bulk of research in this area has been conducted only since the early to mid 1980's (e.g., Bagley & Ramsay, 1986; Briere, 1984; Russell, 1983). Consequently, although research produced since that time has been voluminous, most studies have focused only on the prevalence of CSA (e.g., Peters, Wyatt, & Finkelhor, 1986; Russell, 1983) and on the short- and long-term sequelae of CSA (e.g., Bagley & Ramsay, 1986; Briere & Runtz, 1987, 1988a, 1988b, 1993; Finkelhor, Hotaling, Lewis, & Smith, 1989; Peters, 1988). This research has informed us a great deal; we know now that although there is not a discrete set of symptoms which can be considered definitively characteristic of CSA, CSA is invariably associated with a wide range of subsequent problems in a large proportion of victims (Browne & Finkelhor, 1986; Finkelhor, 1986). However, although work focusing on prevalence and symptomatology has been of central importance, it is also important to move beyond the objectives of determining how often CSA occurs and what the long-term sequelae are to a consideration of *why* CSA seems to lead to long-term difficulties. Little research to date has focused on explaining the long-term sequelae of CSA via mediational factors (see Conte & Schuerman, 1987 for a notable exception).

It is known that CSA has been endured by a large proportion of women, and that the experience of CSA is often related to later psychological difficulties (Browne & Finkelhor, 1986; Finkelhor, 1990). Moreover, women's CSA status is not amenable to change. However, if mediational variables that explain the relationship between CSA and psychological difficulties can be discovered, and these mediators are amenable to change, results from research in this area will be useful to women who are seeking to improve their current psychological functioning. By focusing on these mediational

factors, women can be helped or can help themselves to achieve higher levels of psychological functioning.

This study was an attempt to identify one possible mediator of the relationship between women's CSA status (non-abused, extrafamilially abused, or intrafamilially abused) and later psychological functioning. More specifically, the purpose of this study was to examine the relationship between women's CSA status, their adult attachment style, and their current psychological functioning. Adult attachment style is considered a potential mediator between CSA status and current psychological functioning. Other possible mediators might include attachment relationships in childhood, mentor relationships in childhood (for example, with a particular teacher or school counsellor), or one's attributional style. The following research questions were addressed in this study:

1. To what extent is CSA status related to psychological functioning in adulthood?
2. To what extent is CSA status related to adult attachment style?
3. To what extent is adult attachment style related to psychological functioning in adulthood?
4. Does adult attachment style mediate the relationship between CSA status and psychological functioning in adulthood?

Literature Review

Given that up to one third of women in our culture have experienced sexual contact with someone substantially older than themselves by their mid-teens (Briere, 1989; Finkelhor, 1979; Finkelhor, Hotaling, Lewis, & Smith, 1989; Peters, Wyatt, & Finkelhor, 1986; Russell, 1983, 1986; Wyatt, 1986), research examining the links between childhood sexual abuse and later symptomatology or distress has considerable implications for clinical intervention and social policy (Briere, 1992a). Further, family and relationship variables are important to consider when investigating CSA, given that the relational context may mediate the long-term impact of CSA. For example, a body of literature exists suggesting that the severity of the long-term effects of CSA appears to be mediated by support received from the non-abusive parent (e.g., Conte & Schuerman, 1987; Everson, Hunter, Runyon, Edelsohn, & Coulter, 1989; Gold, 1986; Wyatt & Mickey, 1987). In addition, some investigators have suggested that family variables explain many long-term effects, such as behaviour problems, psychological problems, and social maladjustment and isolation, beyond the effects explained by abuse variables (e.g., Edwards & Alexander, 1992; Friedrich, Beilke, & Urquiza, 1988; Harter, Alexander, & Neimeyer, 1988; Peters, 1988). It is important to investigate potential explanations for *why* CSA victims experience symptoms, and why some victims might experience less severe symptoms (e.g., less depression, less intrusive experiences) than their peers (see also Kendall-Tackett, Williams, & Finkelhor, 1993; Lyons, 1991). In sum, it is important to uncover mediational factors that might account in part for the sequelae following CSA. The effect of CSA on the victim's relationships with significant others, and the impact of those relationships on psychological functioning might provide part of the explanation for the link between CSA and later difficulties in psychological functioning.

There are many ways to conceptualize and understand relationship experiences. The approach taken here is an attachment framework. Attachment theory provides a useful theoretical perspective for conceptualizing relationship variables, such as one's models of self and others, and understanding how they are related to the long-term sequelae of CSA (Alexander, 1992; 1993). In the future, attachment theory might also prove valuable for understanding the absence of long-term symptoms in some women who have experienced CSA, although the data in this study do not specifically address this question. Perhaps women who exhibit fewer symptoms are those who have experienced an intervening experience that has altered their attachment style, and therefore, their level of psychological functioning.

A focus on mediational factors that explain one's response to CSA implies that a change in a mediator might allow an individual to cope successfully with a difficult early history. For example, if adult attachment style mediates the relationship between CSA and psychological functioning, and if one's adult attachment style is, at least in part, influenced by experiences in adulthood, a woman who has experienced CSA has the capacity to create for herself new experiences leading to a more secure attachment style. She therefore has one means for overcoming an otherwise damaging history of CSA and for enhancing her psychological well-being. These general notions are informed by the literature on resilience and protective mechanisms. This literature is the first area reviewed below.

In order to understand how adult attachment might be impacted by CSA and might impact on psychological functioning, it is important to consider both the origins of attachment theory and research, and the current theory and research regarding attachment in adulthood. Attachment literature both in the areas of childhood and adulthood is reviewed below. Following this discussion of attachment theory and

research, research investigating the long-term sequelae of CSA is outlined in order to provide an overview of the psychological difficulties that may follow the experience of CSA. Finally, the links between CSA and attachment which form the basis for this study are explored.

Resilience and Protective Mechanisms

Resilience research is concerned with the study of individual differences in response to stress or adversity. According to Masten, Best, and Garmezy (1990), "*resilience* refers to the process of, the capacity for, or outcome of successful adaptation despite challenging or threatening circumstances. Psychological resilience is concerned with behavioral adaptation, usually defined in terms of internal states of well-being or effective functioning in the environment or both" (p. 426). Resilience has been used to describe a variety of phenomena: good outcomes notwithstanding high-risk status; enduring capability under threat; and, most applicable to the current study, recovery from trauma. Protective mechanisms moderate the effects of individual vulnerabilities or environmental hazards so that one's adaptation is better than it would be without the presence of protective mechanisms (Masten, et al., 1990).

Numerous organismic and environmental factors influence the nature of a trauma survivor's adjustment (Lyons, 1991). For example, the survivor's health, her cognitive appraisal of the traumatic event, the available financial resources, and the existence or non-existence of a supportive network of significant others all can be expected to influence the ease with which a trauma survivor adjusts (Lyons, 1991). Werner's studies of "at risk" children in Kauai as they reached adolescence and adulthood suggested that supportive relationships promoted self-esteem and self-efficacy (Werner, 1992). Werner concluded that competence, confidence and caring

could prosper, even under adverse circumstances, if children encountered people who could provide them with the secure base necessary for the development of trust, autonomy, and initiative. Children and adolescents could exhibit resilience, even in the worst of situations.

When considering resilience or adaptability, it is important to look at both protective mechanisms and vulnerability processes (Lyons, 1991). As Shinn, Lehnmann and Wong (1984) describe, although resilience research often focuses on the interaction between supportive relationships and risk factors, in some instances, negative relationships may also be important for explaining the variance in adjustment levels following stress. In addition, the context in which a proposed protective mechanism or vulnerability process operates must be considered; it is important to avoid implicating a particular variable as invariably protective or disadvantageous (Rutter, 1987). For example, adult attachment style might serve either a positive or negative function, depending upon the quality of the particular attachment relationship.

In the context of trauma, the impact of close relationships has been investigated. It appears that maltreated children are made more vulnerable by abuse in part because the organization and development of the attachment relationship and the self is interrupted (Cicchetti, 1988). However, when maltreated children's caregiving environment improves, emotional and social adjustment may improve (Masten & O'Connor, 1989). Further, a body of literature exists suggesting that the severity of the long-term effects of CSA appears to be moderated by support received from the non-abusive parent (e.g., Conte & Schuerman, 1987; Everson, Hunter, Runyon, Edelsohn, & Coulter, 1989; Gold, 1986; Wyatt & Mickey, 1987). Lyons submits that emotional support may come from many sources, but is likely to be most valued when it comes from family and friends (Lyons, 1991). As Shumaker and Brownell (1984)

discuss, it is theoretically unclear how social support influences coping; however, one possibility suggested by Wortman (1984) is that support might moderate adjustment via an influence on one's cognitive appraisal of the traumatic event. Internal models of self and other, which probably are impacted by CSA, might influence a survivor's appraisal of the abuse and thus, her later adjustment.

Attachment Theory

Attachment in Childhood

The concept of attachment has been most fully explored in relation to infant behaviour (Feeney & Noller, 1990). Attachment theory is concerned with the attachment of a child to his or her caregiver, and the consequences this has for the child's emerging self-concept and for his or her view of social relationships. Bowlby's work (1969/1982, 1973, 1980) was the first formal statement of attachment theory.

According to Bowlby (1969/1982), infant attachment behaviours are controlled by a behavioural system which has the "set-goal" of maintaining proximity to the caregiver. In light of appraisals of danger or stress and of the proximity of the caregiver, the child feels, for example, uneasy, insecure, anxious, or afraid.

Therefore, action to increase the proximity of the caregiver is called for; the child then chooses the particular behaviours applicable to the current situation. More recently, attachment researchers have suggested that the set goal of the attachment system is not only physical proximity, but also the maintenance of "felt security" (e.g., Bretherton, 1985; Sroufe & Waters, 1977).

The attachment system draws on symbolic representations, or working models of the attachment figure, the general environment, and the self. It is through these cognitive structures of the attachment system that a child's experiences with attachment

figures come to influence the patterns of attachment the child develops (Bowlby, 1969/1982). Bowlby (1973, 1969/1982) argued that the attachment relationship has a profound impact on the child's developing personality, and that the child's experience of an encouraging, supportive, and co-operative mother, and a little later, father, gives the child a sense of worth, a belief in the helpfulness of others, a favourable model on which to build future relationships, and a sense of competence. Through continuing interactions, he or she develops internal "working models" containing beliefs and expectations about whether the caretaker is someone who is caring and responsive, and about whether the self is worthy of care and attention. These working models, according to Bowlby (1973), are then carried forward into new relationships where they guide expectations, perceptions, and behaviour.

Ainsworth, Blehar, Walters, and Wall (1978)'s exploration of the individual differences in attachment relationships was an important addition to attachment theory. Based on observations of infants and their caregivers, three distinct styles of attachment were described. The three patterns were labeled Secure, Anxious-Avoidant, and Anxious-Resistant or Ambivalent. As Bowlby's (1969/1982) theory would suggest, these patterns of attachment are found to be closely related to differences in caregiver warmth and responsiveness (Ainsworth et al., 1978; Egeland & Farber, 1984).

Ainsworth et al. (1978), using the *strange situation paradigm* to investigate mother-child attachment, found that securely attached children either actively sought physical contact with the mother or greeted her after a separation. The mothers of this group of infants were supportive and responsive to their infants' needs in the children's first few months of life. In contrast to the response of securely attached children, avoidantly attached children snubbed or avoided the mother upon her return after a separation. In addition, they showed little preference for her over a stranger and they

displayed episodes of spontaneous aggression toward her at home. Mothers of this group of infants were insensitive, expressed little emotion, and avoided physical contact with their infants. Anxious-resistant children showed yet another pattern of responding that was a combination of contact-seeking and angry tantrums toward the mother upon her return. Their mothers were characterized by reversal of parent and child roles in their interactions with their children and by inconsistent responding.

These various attachment patterns are seen by Main and Weston (1982) as strategies for achieving "felt security". The secure child actively seeks comfort from the attachment figure and uses the attachment figure as a secure base; the avoidant child diverts attention from the attachment figure in an attempt to avoid potential rejection; and the resistant child exhibits extreme dependence on the parent in an attempt to gain the caregiver's attention. Main and Solomon (1986) recently identified criteria for an additional insecure attachment pattern called Disorganized/Disoriented. The Disorganized child, whose parent is presumed to be characterized by unresolved trauma such as loss or sexual abuse in childhood (Main & Cassidy, 1988), exhibits no single coherent strategy for dealing with the separation of the attachment figure; the attachment figure is simultaneously the source of and the solution to the child's anxiety. When the attachment figure returns after separation, the disorganized child displays a wide range of behaviour patterns, including contradictory ones.

Main, Kaplan, & Cassidy (1985) have suggested that individual differences in attachment styles can be viewed as "differences in the mental representation of the self in relation to attachment; the secure versus various types of insecure attachment organizations can best be understood as terms referring to particular types of internal working models of relationships, models that direct not only feelings and behaviour, but also attention, memory, and cognition" (p. 67).

Although working models formed during childhood tend to be self-perpetuating over time, they can also be expected to be open to revision based on new experiences that contradict established models (Bartholomew, 1993). Bowlby (1973) did not believe that early infant caregiver interaction *determines* the pattern of an infant's attachment for all time; rather, he suggested that events occurring throughout childhood may have an effect on the security of relationships experienced with attachment figures. In addition, the low concordance found by Main and Weston (1981) between infant attachment patterns with each parent suggests that these early attachment styles may be relationship specific.

As Collins and Read (1990) discuss, attachment theory's emphasis on enduring cognitive models that are carried forward into new relationships is consistent with more general theories of personality that view social, emotional, and personality development as linked to early social relationships. Empirical support for these ideas is now being provided as a growing body of empirical research finds attachment style to be an important predictor of the quality of children's peer relationships through the early elementary school years (see Cohn, Patterson & Christopoulos, 1991 for a recent summary of this literature). Although longitudinal data are not yet available, attachment behaviour and the influence of early relationships is likely to be central to social functioning well beyond the childhood years. Bowlby (1969/1982) argued that the nature of the early relationship becomes a model for later relationships, leading to expectations and beliefs about oneself and others that influence social competence and well-being throughout the lifespan.

Attachment in Adulthood

One's attachment to one's parents is presumed to continue into adulthood (Ainsworth, 1989). As Cicirelli (1991) points out, parents may continue to nurture

their adult children, and under stress, the adult child may still seek a parent's advice, understanding and emotional support. Although the child's attachment to the parent may be somewhat attenuated and qualitatively different than the early attachment, it does seem to persist into adulthood and throughout life (Cicirelli, 1991). In addition, certain adult relationships show similar attachment characteristics to those ascribed to parent-child attachments (Bowlby, 1980). Researchers who study attachment in adulthood make the assumption that the internal working model developed and established in childhood provides the basis for continuity in these attachment patterns from childhood into adulthood (Alexander, 1992).

As indicated above, research examining the continuity of attachment patterns is in progress, with the longest longitudinal study following infants up to six years of age (Main & Cassidy, 1988). For the most part, researchers have studied attachment in adulthood and have inferred continuity by demonstrating the relationship between one's attachment style and one's parenting behaviour or other patterns of behaviour (Alexander, 1992). Questions about continuity will not be addressed in this study; nonetheless, the unresolved nature of this issue is important to keep in mind. Aside from the issue of continuity between childhood and adulthood attachment patterns, however, attachment theory may provide a useful framework for understanding adult relationships (Bartholomew, 1993).

Research using the attachment framework to understand adult relationships has been conducted from a variety of perspectives. George, Kaplan, & Main (1984; cited in Bartholomew, 1990) developed the Adult Attachment Inventory (AAI) to study adults' representations of their own childhood relationships. Adults are assigned to groups that correspond to the three original patterns (Secure, Anxious-resistant, Anxious-avoidant) identified by Ainsworth et al. (1978). Participants who were labeled

Secure were found by George et al. to be characterized by generally positive memories of parental treatment, ease in recalling childhood experiences, and a valuing of attachment relationships. The Preoccupied/Enmeshed group (corresponding to Ainsworth et al.'s Anxious-resistant group) described a mix of both closeness with parents and frustration caused by unsuccessful attempts to gain parental support. The Detached/Dismissing group (corresponding to Ainsworth et al.'s Anxious-avoidant group) tended to downplay the importance of attachment relationships and the influence of childhood experiences on present functioning. The AAI, as Bartholomew (1990) indicates, is limited by its focus only on representations of childhood attachment to define adult attachment style. Presumably one's style of relating in adult relationships is also important.

Hazan and Shaver (1987) developed a self-report measure designed to explore the extent to which adult love is an attachment process. Participants were asked to choose the most descriptive of three brief paragraphs describing attachment styles analogous to Ainsworth et al.'s (1978) classifications. The Secure description involved ease of trusting and getting close to others; the Ambivalent description was characterized by a desire to merge with a partner, coupled with fear of insufficient love; the Avoidant description focused on a fear of closeness and a lack of trust in others. As Bartholomew (1990; 1993) points out, while Hazan and Shaver's (1987) measure results in findings consistent with the predictions of attachment theory, it departs from the previous work by George et al. (1984, cited in Bartholomew, 1990) with regard to the description of the Avoidant style. While George et al.'s concept of avoidance resembles Bowlby's (1969/1982) concept of compulsive self-reliance (i.e., the defensive exclusion from awareness of negative feelings or attachment needs) or emotional detachment, Hazan and Shaver's concept of avoidance appears to consist of

active conscious avoidance based on a fear of closeness rather than a detached approach to relationships (see also Brennan, Shaver, & Tobey, 1991).

Bartholomew (1990, 1993; Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994a, 1994b) has proposed an expanded model of adult attachment patterns that builds on previous work and attempts to account for discrepancies between previous studies. Bartholomew (1993) relates that during the course of a series of intensive interviews with young adults about their close relationships, it became evident to her that the domains of family relations and peer relations should be assessed separately, and that at least two distinct patterns of avoidance in adults could be identified, corresponding roughly to George et al.'s (1984) Dismissing style and Hazan & Shaver's (1987) Avoidant style.

Bartholomew (1990, 1993; Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994a, 1994b) emphasizes the importance of focusing on Bowlby's (1969/1982) conception of internal working models. Bartholomew organizes the different patterns of attachment in terms of one's models of self and other, which are built interactionally. As she describes, models of the self can be dichotomized as either positive (positive self-concept, the self as worthy of love and attention) or negative (negative self-concept, the self as unworthy). Similarly, models of the other can be viewed as positive (the other as trustworthy, caring and available) or negative (the other as rejecting, uncaring and distant). Figure 1 displays Bartholomew's (1990) four category model of attachment.

The degree of positivity of self models is described by Bartholomew as associated with the degree of emotional dependence on others for self-validation; a positive self model can be understood as an internalized sense of self-worth that is not dependent on others for validation. A positive other model is reflective of expectations

of others' availability and supportiveness; a positive other model facilitates actively

	Positive Model of Self (Low Dependence)	Negative Model of Self (High Dependence)
Positive Model of Other (Low Avoidance)	SECURE Comfortable with intimacy & autonomy	PREOCCUPIED with relationships
Negative Model of Other (High Avoidance)	DISMISSING Dismissing of intimacy Counter-dependent	FEARFUL Fearful of intimacy Socially avoidant

Figure 1. Bartholomew's (1990) four category model of attachment.

seeking out intimacy and support in close relationships while negative other models lead to avoidance of intimacy and support. Bartholomew's model departs from earlier work by defining two patterns of avoidance. The first is a Fearful style, characterized by a desire for social contact that is inhibited by fears of rejection. The second is a Dismissing style that is characterized by a defensive denial of the need or desire for intimacy. The Fearful attachment pattern is similar to the identification by Main and Solomon (1986) of a fourth pattern in infancy which combines elements of both the anxious and ambivalent childhood styles (Brennan et al., 1991).

Each working model of the self in combination with each working model of the other is hypothesized to define an adult attachment style. Each of the four types is

considered to represent a prototype, whereby members who fall into each category differ in the extent to which they represent the ideal. In contrast to the implicit assumption of previous attachment work, not all individuals are expected to exhibit only one attachment style. People may show differing degrees of similarity to two or more attachment styles. Bartholomew (1990) suggests that her model allows for more complexity, when compared to traditional grouping approaches, in describing the attachment styles likely to characterize adults who have had numerous heterogeneous experiences over their lifetimes.

Warm and responsive parenting, according to this model, is expected to result in positive models of both the self and others, and to result in secure and fulfilling adult relationships. Secure individuals are likely to display high self-esteem and are unlikely to experience serious interpersonal problems. In contrast, children who experience inconsistent and insensitive parenting, especially if coupled with messages of parental devotion, may conclude that their own unworthiness explains any lack of love on their caregiver's part. As Bartholomew describes, the result is an overly dependent style that includes an insatiable desire to gain others' approval, and a profound sense of unworthiness. This pattern corresponds to George et al.'s (1984; cited in Bartholomew, 1990) Preoccupied style, and to Hazan and Shaver's (1987) Ambivalent style.

Both forms of avoidance identified by Bartholomew (1990) are presumed to result from a history of rejecting parenting or psychologically unavailable attachment figures. Rejected children would tend to conclude that others are uncaring and unavailable. In addition, given the interactive nature of the development of models of self and others, they may, perhaps, conclude that they themselves are unlovable. Fearful individuals conclude exactly that; the result is subjective distress and problems

in social relationships characterized by hypersensitivity to social approval. Dismissing individuals utilize a more complex strategy whereby attachment needs are denied. Distancing oneself from others and developing a model of the self as fully adequate and invulnerable to negative feelings is a way of maintaining a positive self-image in the face of rejection by attachment figures. Dismissing individuals passively avoid close relationships and place much value on independence. They gain autonomy and self-worth at the expense of intimacy, whereas fearful individuals have difficulties with both intimacy and autonomy.

Bartholomew's argument for the existence of two dimensions (resulting in four attachment styles) that underlie attachment style was supported in three studies using five different methods of assessment (Griffin & Bartholomew, 1994b). Griffin and Bartholomew found strong support for the construct validity of the self and other models underlying attachment dimensions. Across studies, the two attachment dimensions showed both discriminant validity and convergent validity. Furthermore, Brennan et al. (1991) suggest that the same two dimensions may actually underlie Hazan and Shaver's (1987) three-category measure. However, Hazan and Shaver's measure may unintentionally mask differences in avoidance behaviour, some of which may be determined by gender differences - dismissing avoidants may be mostly males and fearful avoidants may be mostly females. Brennan et al. (1991) suggest that the lack of a fearful alternative in the Hazan and Shaver measure may force some fearful participants to categorize themselves misleadingly as anxious-ambivalent. Similarly, some avoidant participants with high self-esteem may be forced by the three category measure to misclassify themselves as secure, even though they are unlikely to exhibit secure behaviour in close relationships.

Griffin and Bartholomew (1994b) are careful to point out that attachment styles

are more than simply the sum of the underlying dimensions. Instead, the styles have meaning in terms of interpersonal functioning - secure individuals function qualitatively differently than dismissing individuals in a way not predicted by a simple combination of the self and other dimensions. In addition, while representations of familial and close peer relationships tend to converge, they are moderately correlated, and do not necessarily bear the same relationship with outcome variables (Bartholomew, 1993).

Insecure attachment has been observed to a much greater degree in cases of physical abuse and neglect than in cases where such abuse is absent (Carlson, Cicchetti, Barnett, & Braunwald, 1989; Egeland & Sroufe, 1981) and to a greater extent in incestuously abused women than in Bartholomew and Horowitz's (1991) normative sample (Alexander, 1993). Attachment theory may therefore be important for understanding some of the long-term sequelae of CSA reviewed below.

The Long-Term Sequelae of Childhood Sexual Abuse

As Browne and Finkelhor (1986) describe, two overlapping but separable types of interaction are included in definitions of childhood sexual abuse. The first is forced or coerced sexual behaviour imposed on a child; the second is sexual activity between a child and a much older person, whether or not obvious coercion is involved.

Researchers may include one or both of these dimensions in their definitions of abuse, choosing to focus on a particular subset of childhood sexual abuse cases. In addition, there are differences between researchers with regard to the nature of the sexual act; that is, some researchers include only contact forms of sexual abuse (e.g., fondling, oral-genital contact, intercourse), while others include both contact and non-contact forms (e.g., exhibitionism) of sexual abuse in their definitions. Furthermore, there is a range with regard to what researchers consider "childhood", with upper age limits of

anywhere from 14 to 18 (see also Wyatt & Peters, 1986).

For the purposes of this study, a relatively conservative approach to the definition of abuse was taken. Childhood sexual abuse was defined as either a) sexual contact (fondling, oral-genital contact, intercourse) between a child (age 15 or younger) and an older person (5 or more years older), regardless of the existence of force or coercion, or b) sexual contact between a child and a perpetrator who is not 5 or more years older than the victim, but who uses force or coercion to ensure the victim's compliance. Consensual peer relations and non-contact forms of unwanted sexual behaviour were not considered sexual abuse for the purposes of this study both because it was less clear under what circumstances these situations could be considered abusive and because a conservative definition was desired.

There is no discrete set of symptoms that can be considered characteristic of childhood sexual abuse victims given that victims often manifest such a large variety of difficulties (Finkelhor, 1990). Nonetheless, Browne and Finkelhor's (1986) review of the evidence suggests that sexual abuse is a serious mental health problem, invariably associated with a wide range of subsequent problems in a large proportion of victims. Long-term sequelae of sexual abuse cited in the literature include depression (e.g., Peters, 1988), self-destructive behaviour or suicidal ideation (e.g., Briere, 1984; Briere & Runtz, 1986; Bagley & Ramsay, 1986), anxiety or tension (e.g., Briere & Runtz, 1988b), dissociation (e.g., Briere & Runtz, 1990), post traumatic stress symptomatology (e.g., Briere, Elliott & Smiljanich, 1994; Goodwin, 1984), feelings of isolation or stigmatization (e.g., Harter, Alexander, & Neimeyer, 1988), negative self-concept (e.g., Cole & Putnam, 1992; Courtois, 1988), difficulty trusting others and a variety of other problems in interpersonal relationships, including those with one's friends, one's romantic partners, one's parents and one's children (e.g., Browne

& Finkelhor, 1986; Jehu, 1989), later revictimization (e.g., Fromuth, 1986), sexual difficulties (e.g., Briere & Runtz, 1989; Herman, 1981; James & Meyerding, 1977), substance abuse (e.g., Briere & Runtz, 1987), and physical complaints (e.g., Cunningham, Pearce & Pearce, 1988).

Although almost all studies, including those investigating functioning in only victims not receiving clinical service, have found long-term difficulties in psychological functioning, almost every study of sexual abuse has also found a substantial group of victims with little or no symptomatology (Finkelhor, 1990). As Finkelhor indicates, this may be due in part to the inadequacy of measurement techniques, but it is also likely due to the fact that asymptomatic victims are mostly those who have suffered less serious abuse and/or who have adequate psychological and social resources to deal with the abuse (or alternatively, may have participated in successful therapy). Research with children shows that asymptomatic children are more likely to have been abused without force or penetration, by someone who was not a father-figure, for a shorter period of time, and to have received support from parents in the context of a relatively well-functioning family (Finkelhor, 1990).

Finkelhor (1990) suggests that sexual abuse has a variety of effects, depending on the nature of the abuse, on four main areas of children's development. The areas most affected are sexuality, ability to trust in personal relationships, self-esteem, and a sense of one's ability to affect the world. He submits that, as a result of being abused, children get distorted cognitive maps about sex, family, their worth, and how to get what they need from the world.

One of the methodologies used most frequently to identify ways in which CSA is related to psychological functioning in adulthood is the retrospective study of adults victimized as children. Participants are questioned both about current functioning and

about CSA that occurred, in some cases, many years ago. Cicchetti and Rizley (1981) suggest that recollection of abuse in childhood may be affected by the "influence of contemporary adaptation on recall" (p. 40). In other words, how an adult is currently functioning might affect the nature of his or her interpretations of childhood events. Clearly, the retrospective approach has inherent difficulties. However, given the difficulties involved in conducting longitudinal research with sexual abuse victims (Briere, 1992a), it may be a reality that we have to live with.

In any case, recent evidence suggests that adults asked to recall salient factual details of their own childhoods are generally accurate, especially concerning the experiences that were unique, unexpected, and consequential (Brewin, Andrews, & Gotlib, 1993). Adults do not necessarily recall all of the non-essential details associated with these experiences, but their recollections of the central features of the event are accurate and reasonably stable over time (Brewin, et al., 1993). Nevertheless, it is important to recognize that, by virtue of the retrospective and correlational nature of the designs used to study long-term sequelae of sexual abuse, the nature of possible cause and effect relationships cannot be fully investigated*.

* During the past two years, there has been substantial debate regarding the veracity of adults' memories of childhood abuse, especially in the case where memories have recently been recovered (Kristiansen, 1994). As Kristiansen describes this issue, people who believe that recovered memories are often false have coined the term, "False Memory Syndrome (FMS)" to refer to a hypothesized process whereby people enter therapy with a problem, and as a result of the therapist's suggestion, conclude therapy believing that they were abused in childhood when in fact they were not. However, Kristiansen's review of the evidence with regard to the hypotheses put forth by Elizabeth Loftus (1993; see also Loftus, Polonsky & Fullilove, 1994), a primary supporter of the FMS position, indicates that evidence for the existence of false memories, or FMS, is not as strong as Loftus presents (See Kristiansen, 1994 for details). In addition, recent research indicates that survivors of CSA are more likely to minimize than embellish their abuse experiences (e.g., Famina, Yeager & Lewis, 1990). Further, a prospective study by Williams (Williams, 1994) found that 38% of women known to have been abused 17 years earlier did not recall their abuse. Hence, although there is no definitive answer available with regard to the question of recovered memories (Kristiansen, 1994), it seems at least as likely, if not more likely, that some women *not* reporting a history of CSA have indeed experienced CSA, as it is that women reporting a history of CSA have not actually experienced it. Any study of the differences between the two groups is likely to *underestimate* the effects of CSA.

Attachment Theory and Childhood Sexual Abuse

Any attempt to predict the long-term effects of abuse must include a consideration of the family and relationship dynamics that might moderate or mediate the experience of abuse (Alexander, 1992). In this regard, a body of literature has emerged suggesting that the severity of the long-term effects of CSA appears to be moderated by support received from the non-abusive parent (Conte & Schuerman, 1987; Everson et al., 1989; Gold, 1986; Wyatt & Mickey, 1987). Similarly, longitudinal studies of vulnerable children (e.g., Rutter, 1972) find that emotional support, especially from parents, serves an important protective mechanism in general. Another protective mechanism, perhaps mediating a child's successful coping, is high self-esteem, which is enhanced by positive and secure attachments (Everson et al., 1989).

Conte and Schuerman (1987) found that the victim's support system plays a powerful role in reducing the impact of sexual abuse. Victims who have supportive relationships with siblings or non-offending adults are less affected than those who do not. Conte and Schuerman indicate that the largest amount of variance in child functioning was accounted for by variables reflecting supportive relations with others and aspects of general functioning of the victim's family. Similarly, Wyatt and Mickey (1988) argue that some of the harmful effects of abuse might be greatly attenuated by the support of nonabusing parents and others.

Wyatt and Mickey (1988) point out that therapists can offer support which sexually abused women did not receive earlier in their lives, either because they did not disclose the sexual abuse or because adults did not provide support. By extension, romantic partners and current friends should also be able to provide support. In fact, a close supportive relationship with a sexual partner has been found to protect against the

impact of adverse life events (Brown, Brolchain, & Harris, 1975) and may even, according to Rutter (1988), play a role in obviating the effects of difficult early attachment relationships. In addition, it is equally interesting to consider whether relationships from which an individual is unable to receive support (especially multiple bad relationships) might make an individual more vulnerable to adverse life events.

Alexander (1992; 1993) is a strong voice for considering the family context in any conceptualization of the impact of abuse. A number of researchers, as she describes, have found that family variables explain many long-term sequelae of abuse above and beyond abuse variables. Briere (1988; Briere & Elliott, 1993) issues a word of caution here. Many researchers have attempted to "control" for family characteristics at the time of abuse by using procedures that partial them out of the effects for abuse. Since family characteristics at the time of the abuse and abuse variables are both associated with outcome variables, but are correlated with each other, it is difficult to determine the unique contribution of either to the variance in measures of psychological functioning. In addition, it is questionable whether removing family dysfunction variance from symptoms associated with intrafamilial sexual abuse is the same as removing it from symptoms related to extrafamilial abuse. Briere is quick to point out that this does not mean that family characteristics do not mediate between sexual abuse and abuse-related symptomatology, only that causal hypotheses about the role of family environment cannot be easily assessed. However, this issue probably is not as central in the context of this study because adult attachment clearly follows CSA in time. Hence, although it may be *related* to the abuse, it is probably not *a part of* the abuse.

Notwithstanding Briere's methodological note, it does seem that the effects of family variables are important to investigate, even if those effects can not be entirely

disentangled from the sequelae of abuse. There are many ways to understand family characteristics; as indicated above, attachment theory is the perspective adopted here. Alexander (1992) contends that the long-term sequelae of abuse are best understood according to the classification of important attachment relationships concurrent with the abuse. However, we can never really know whether attachment patterns assessed retrospectively are those that developed prior to, concurrent with or subsequent to childhood sexual abuse. Although long-term sequelae are clearly related to the specific nature of the abuse, the actual relationship context should, according to Alexander, determine the nature of the long-term sequelae seen in the adult survivor. In addition, the relationship context in the years intervening between the abuse and the assessment of functioning should also determine the nature of the sequelae seen in the adult survivor.

Insecure attachment has been observed to a much greater degree in cases of physical abuse and neglect than in cases where abuse and neglect is absent (Carlson, Cicchetti, Barnett, & Braunwald, 1989; Egeland & Sroufe, 1981), although there have been no studies of attachment in sexually abused children to date (Alexander, 1993). In addition, Alexander (1993) has found a much higher proportion of insecurely attached women in a group of participants who were intrafamilially abused than was found in Bartholomew & Horowitz's (1991) normative sample.

According to Alexander (1992), attachment history appears to exert a direct influence on subsequent intimate relationships. However, difficulties in interpersonal relationships may be mitigated if there has been another intervening relationship (such as with a supportive partner or therapist) to clarify and counteract the effects of an insecure attachment in childhood (Egeland, Jacobvitz, & Sroufe, 1988). Most research to date has tended to focus on variables that are a part of the childhood abuse

experience. Although a focus on such factors as the frequency of abuse and the relationship between the victim and the offender may be helpful in understanding the impact of abuse, Conte & Schuerman (1987) point out that variables such as these do little to direct the therapy of victims, given that they are unchangeable aspects of the abuse.

With its focus on the relational context of abuse, attachment theory is very pertinent to conducting therapy with abuse survivors (Alexander, 1993). As Bretherton (1992) describes, a major goal in psychotherapy might be the reappraisal of deficient models of self in relation to others, especially attachment figures. The therapist can be most helpful by serving as a reliable, secure base from which an individual can attempt to explore and rework her internal working models. Gelinas (1988) has pointed out that the cessation of intrafamilial abuse does not automatically change the relational imbalances within the family. Similarly, attachment theory would suggest that cessation of the abuse does not necessarily change the abuse survivor's internal models of self and other. The survivor may need new experiences to alter these models.

The fact that internal models are not simply determined by past relationships but also interact with current relationships (Kobak & Hazan, 1991) implies that current attachment relationships offer CSA survivors an opportunity to modify implicit expectations about the self, others, and relationships. In addition to providing a secure base, therapy can focus on current attachments and intervene in important relationships as a means of altering the CSA survivor's working model of relationships (Alexander, 1992). In sum, it seems that one's experience of interpersonal relationships is important for understanding the long-term functioning of CSA survivors. Although the focus of this research to date has been on interpersonal relationships within the family, especially in childhood, I would add that current close relationships outside the family

may also serve a mediating function, especially to the extent that they mitigate or amplify difficult early attachment relationships.

Summary

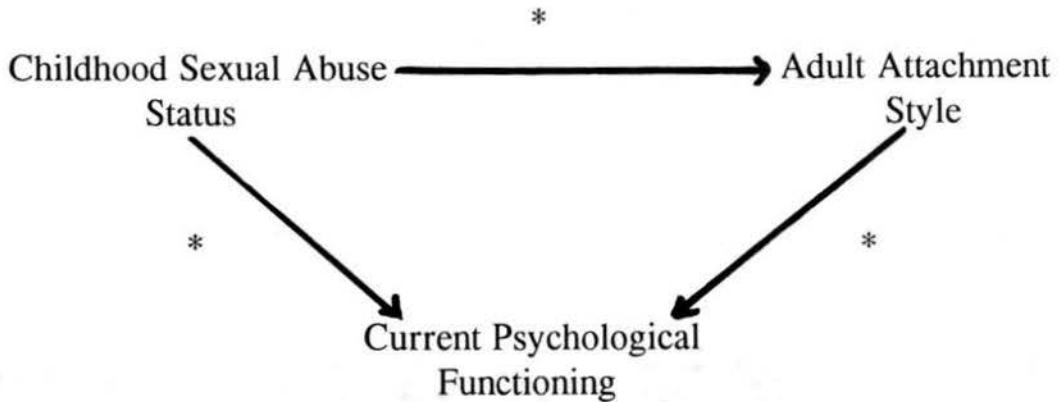
This study is an attempt to understand the relationship between CSA, attachment, and current psychological functioning. Adult attachment style is conceived of as a crucial link in the prediction of current psychological functioning. The hypothesized model for this study, shown as Model 2 in Figure 2, is that adult attachment style mediates the relationship between CSA and attachment. That is, although CSA is expected to predict poorer psychological functioning, this relationship is expected to be significantly reduced when adult attachment style is included in the model. If this is so, attachment can be seen as a way to explain how or why CSA is related to long-term sequelae.

Research in the area of CSA has focused sometimes on adults who have experienced intrafamilial abuse, sometimes on adults who have experienced extrafamilial abuse, and sometimes on an ad hoc mixture of the two. Because it is unclear how important this distinction is for predicting psychological functioning, and because the two forms of CSA might have different implications for later attachments, CSA survivors in this study will be divided into those who have experienced intrafamilial CSA and those who have experienced extrafamilial CSA.

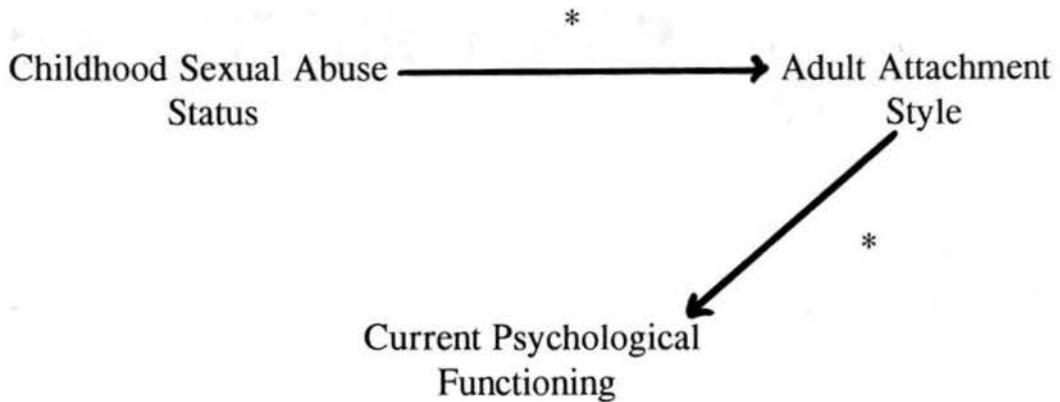
Hypotheses

1. Current psychological functioning was expected to vary depending on CSA status. In particular, women who had been sexually abused in childhood were expected to report more difficulties in the areas measured by the 10 Trauma Symptom Inventory (TSI) scales: Anxious Arousal, Anger/Irritability,

Model 1: Non-mediational relationship



Model 2: Mediatonal relationship



* $p < .05$

Figure 2. Two alternative models representing the relationship between childhood sexual abuse status (non-abused, intrafamilially abused, or extrafamilially abused), adult attachment style and current psychological functioning.

- Defensive Avoidance, Depression, Dissociation, Dysfunctional Sexual Experiences, Intrusive Experiences, Impaired Self Reference, Sexual Concerns, and Tension Reduction Behaviour than women who had not been abused. In addition, women who had been sexually abused in childhood were expected to report lower self-esteem on the Rosenberg Self-Esteem Inventory (RSE) than women who have not been abused. This hypothesis was expected to hold most strongly for women who had experienced intrafamilial abuse.
2. Adult attachment style was expected to vary depending on CSA status, with women who were sexually abused in childhood reporting a more insecure attachment style on the Relationship Questionnaire (RQ) than women who were not abused. In particular, women who experienced CSA were expected to be less Secure and more Fearful. This hypothesis was expected to hold most strongly for women who had experienced intrafamilial abuse.
 3. Adult attachment style (Secure, Fearful, Preoccupied, Dismissing), as measured by the RQ, was expected to predict differences in current psychological functioning for all women in the study, including those who were not sexually abused in childhood.
 4. Adult attachment style was expected to mediate the relationship between CSA and current psychological functioning as measured by the TSI and RSE. That is, it was expected that the relationship between CSA and current psychological functioning would be dramatically reduced or eliminated when adult attachment style was accounted for.

Method

Participants

Participants are 333 female undergraduate students from the University of Victoria. They were recruited from three sources: the Psychology 100 Subject Pool, upper level psychology classes, or the Psychology Volunteer Subject Pool which consists of upper level students who have volunteered to participate in psychology studies. The average participant was approximately 22 years of age, a second year arts student, single, and Canadian, with no other ethnic or cultural ties. Pearson correlations between CSA and demographic and family variables tapped by the questionnaire were run in order to determine the variables on which it might be necessary to compare groups. Only age was significantly correlated with CSA status, with older women being more likely to report a history of CSA, $r = -.232$, $p = .001$. Results for the variables most frequently reported in other studies investigating group differences between abused and non-abused women are reported in Table 1. Women who report the experience of CSA are on average slightly older than women who do not report such a history, $\chi^2(6) = 24.7$, $p = .000$. They are not simply further along in their university career; there is no significant difference in year of university among the three groups. Perhaps women with a history of CSA experienced more difficulties and therefore did not start university as early as other women. Similarly, women reporting a history of CSA are more likely than women who have not experienced CSA to have been married or divorced, $\chi^2(4) = 9.3$, $p = .054$, perhaps because they are older, and have had more life experiences of all kinds. As expected from a university student sample, the modal annual family income* of this sample was less than \$10,000. Eighty-seven participants (26%) reported a history of CSA, according to the Sexual Experiences Inventory

* Family income was defined as individual income if the participant lived alone, and was defined as the income of self and others in the home if the participant lived with a partner or with her parents.

Table 1
Demographic Characteristics of Intrafamilially Abused (IA), Extrafamilially Abused (EA), and Non-Abused (NA) Women

	IA (%)	EA (%)	NA (%)	Statistic
Age				
17-19	22.6	35.2	52.9	$\chi^2(6) = 24.7^{**}$
20-25	45.2	42.6	38.0	
26-35	16.1	16.7	5.4	
>35	16.1	5.6	3.6	
Ethnicity				
Canadian only	63.3	66.7	68.7	$\chi^2(14) = 9.0^{\wedge}$
French Canadian	0.0	1.9	1.0	
Native Canadian	6.7	1.9	1.0	
W. Europ./E. Europ./Scand.	20.0	13.0	16.1	
Asian	6.7	7.4	7.6	
Indian	3.3	3.7	2.8	
African	0.0	3.7	1.4	
Jewish	0.0	1.9	1.4	
University Major				
Arts/Humanities	80.7	68.5	62.4	$\chi^2(4) = 5.9^{\wedge}$
Science/Math	6.5	9.3	17.2	
"Other" or Unknown	12.9	22.2	20.4	
Year of University Program				
1	45.2	48.2	51.4	$\chi^2(6) = 4.2^{\wedge}$
2	16.1	20.4	22.0	
3	16.1	20.4	15.1	
4	22.6	11.1	11.5	
Marital Status				
Single	71.0	79.6	86.9	$\chi^2(4) = 9.3^*$
Married or Living as Married	16.1	13.0	10.4	
Separated/Divorced/Remarried	12.9	7.4	2.7	
Current Family Income				
< \$10,000	46.7	53.1	44.8	$\chi^2(6) = 3.2^{\wedge}$
\$10,000 - \$24,999	23.3	14.3	17.9	
\$25,000 - 49,999	16.7	12.2	17.9	
\$50,000 +	13.3	20.4	21.2	

** $p = .000$ * $p = .054$ \wedge ns, $p > .20$

(described below); 222 participants (67%) did not report a history of CSA. Thirty-one participants' reports (9%) indicated a history of intrafamilial CSA, 54 participants' reports (16%) indicated a history of extrafamilial CSA, and two participants' reports (< 1%) indicated a history of CSA but it was impossible to determine whether it was intrafamilial or extrafamilial. For this reason these two subjects were excluded from analyses. Because participants with a history of potentially abusive sexual experiences in peer romantic relationships prior to age 15 neither met objective criteria for having experienced CSA (given the age difference or the fact that some coercion was involved) but did not seem equivalent to most participants in the CSA group, 20 participants (6%) were excluded from analyses on this basis. In addition, 3 participants (1%) were excluded because their responses were unclear and it was not possible to determine the existence or non-existence of a history of CSA. Finally, 1 participant was excluded because she spoke little English and did not understand the questionnaire.

Procedure

The proposed research was approved by the University of Victoria Committee on Research and Other Activities Involving Human Subjects and the Psychology 100 Subject Pool Committee.

Upon arrival at the research session, groups of participants heard a brief description of the study (including the sensitive nature of some questions), were given the opportunity to ask questions, and were asked to read and sign the consent form (see Appendix A) which included written assurance of both participants' anonymity and the confidential nature of the data as well as information regarding participants' right to withdraw participation. Before completing the questionnaire, participants placed their consent forms into an envelope which contained all of the consent forms from the

session.

Once participants gave informed consent, they completed a questionnaire that gathered information about demographics, family of origin characteristics, early sexual experiences (including any occurrence of CSA), adult attachment relationships, and current psychological adjustment. Upon completion of the questionnaire, each participant sealed it in an unlabeled envelope, and received written debriefing (see Appendix B). This included information about the purpose of the study, and about the procedures to follow in the event that the questions asked caused them distress or discomfort. In addition, the researcher was available after the session had ended to answer any questions participants had at that time. In general, participants responded favorably to the study and had no difficulty completing the questionnaire in the allotted time (1 hour); a number of participants commented that they enjoyed the experience.

Participants' anonymity was protected by administering questionnaires only in groups, by assigning code numbers to each unidentifiable questionnaire, and by asking participants specifically *not* to put their names on the questionnaires. Consent forms were not stored with the questionnaires.

Measures

Measures of Demographics and Childhood History

The Demographics Questionnaire. This questionnaire (see Appendix C), created for this study and based in part on recommendations by the Social Sciences and Humanities Research Council of Canada (1976), includes typical questions about demographic information (e.g., age, marital status, income), as well as questions about the participant's family situation when she was a child (e.g., marital status of her parents, which parent she resided with).

The Sexual Experiences Inventory. This questionnaire (see Appendix D) is a modified version of Finkelhor's (1979) Survey of Childhood Experiences. It includes questions about the participant's sexual experiences as a child, who the experiences were with, and how often the experiences occurred. Although Finkelhor did not provide data on the reliability and validity of the measure, he indicated that 19% of a female college student sample reported experiences of CSA on this questionnaire. In addition, Runtz (1987, 1991) has investigated the internal consistency of the modified version of the measure used in this study, finding coefficient alphas (Cronbach, 1951) of .90 and .94 in samples of 291 female university students and 653 (415 female, 236 male) university students, respectively.

Based on Runtz's (Briere & Runtz, 1985, Runtz, 1987) experiences, wherein the three experience format proved more cumbersome and difficult for participants to follow than informative and useful for the researcher, only the "most significant" early sexual experience was inquired about in this study. Finkelhor's questionnaire is designed to answer the question of whether or not the participant was sexually abused as a child. He defined CSA as contact with a person at least five years older before the participant was 12 years of age, or with a person at least 10 years older when the subject was between 12 and 16 years of age. For this study, the judgment regarding the occurrence of CSA was made by the researcher according to the following definition: childhood sexual abuse was defined as either a) sexual contact (fondling, oral-genital contact, intercourse) between a child (age 15 or younger) and an older person (5 or more years older), regardless of the existence of force or coercion, or b) sexual contact between a child and a perpetrator who is not 5 or more years older than the victim, but who used force or coercion to ensure the victim's compliance.

Consensual peer relations and non-contact forms of unwanted sexual behaviour

were not considered sexual abuse. In cases where women indicated that the experience they had as a child constituted CSA, they were included in the sexual abuse group. This was, therefore, unrelated to whether or not force was involved and to whether or not the perpetrator was 5 or more years older than the participant. In cases where a participant did not define her experience as CSA, the researcher determined in which group she belonged by considering the age difference between the participant and perpetrator, and whether or not force or coercion was involved. That is, if the perpetrator was more than 5 years older, and the participant was 15 or younger at the time, she was placed in the abuse group. If coercion was involved and the participant was 15 or younger at the time, she was placed in the abuse group regardless of the age of the perpetrator. Women who reported an incident that met either the age or force criteria above, but that occurred in the context of a romantic relationship were excluded from both groups, as indicated in the *Participants* section.

Measures of Psychological Functioning

The Trauma Symptom Inventory (TSI, Briere, 1991). The TSI (see Appendix E) is a 119 item self-report measure that employs a four point scale, from never to often, to measure posttraumatic symptoms. It represents a major revision and expansion of the Trauma Symptom Checklist -33 (TSC-33) and the subsequent TSC-40 (Briere & Runtz, 1989). The TSC-40 is a 40 item abuse oriented instrument that measures the long-term impact of events, particularly in the area of child abuse. It has been found to be reliable, and to discriminate between sexually abused and non-abused participants (Elliott & Briere, 1992). However, the number of items comprising each of the six subscales is relatively small.

A methodological problem for abuse researchers has been the use of general measures of psychological dysfunction. Because most instruments were developed

without reference to trauma or abuse, they may be less sensitive to abuse-specific symptoms than measures explicitly designed to measure the sequelae of trauma or abuse (Elliott & Briere, 1991). Clearly, it is important to use abuse-specific measures to accurately identify post-abuse disturbance, as opposed to using generic measures that may miss abuse victims' distress.

The TSI is intended to measure various forms of posttraumatic distress and to have sufficient psychometric properties to justify its use both as a clinical assessment tool and for research purposes. The TSI was designed to tap both the specific symptoms of post-traumatic stress disorder, such as intrusive experiences and avoidance of events or stimuli that remind one of the trauma, and other more chronic posttraumatic sequelae, such as dissociation, anger, and disturbance in self functions. The TSI consists of ten clinical scales and two validity scales. The clinical scales are as follows: Anxious Arousal (AA), Anger/Irritability (AI), Depression (D), Defensive Avoidance (DA), Dissociation (DISS), Dysfunctional Sexual Behaviour (DSB), Intrusive Experiences (IE), Impaired Self-reference (ISR), Sexual Concerns (SC), and Tension Reduction Behaviour (TR). The two validity scales, Atypical Responses (ATR) and Response Level (RL) are intended to tap especially deviant responses (resulting either from general over-endorsement or from psychotic experiences) and respondents' willingness to endorse items describing events that most other individuals would report.

Briere, Elliott, & Smiljanich (1994) conducted a study designed to test the reliability and validity of the TSI in clinical and non-clinical groups. Data from that study indicate that the TSI exhibits reasonable internal consistency and predictive validity in both university and clinical samples. Coefficient alphas for the individual TSI scales range from .78 to .91 with a mean of .87 for university students and from

.87 to .92 with a mean of .90 for women from the clinical sample. Across general population, clinical, and university samples, the mean coefficient alpha for the clinical scales is .89.

The occurrence of child abuse in the lives of women from a clinical sample was found by Briere et al. to be related to elevated scores on all TSI scales, demonstrating predictive validity. Mean scores for the women in the clinical sample ranged from a low of 4.3 for Dysfunctional Sexual Behaviour to a high of 18.0 for Anxious Arousal. Except for the Dysfunctional Sexual Behaviour scale, all means were between 13.5 and 18.0 for the women in the clinical sample. Concurrent and incremental validity were also demonstrated. The three sets of scales most equivalent between the TSI and the Brief Symptom Inventory (BSI; Derogatis, 1975), a more general assessment measure, shared high correlations (between .80 and .86). Individual TSI scales predicted various trauma types (e.g., sexual abuse, physical abuse, or adult non-interpersonal trauma such as an auto accident, fire, or earthquake) beyond that predicted by the BSI; there were four scales that tapped trauma variance for women not accounted for by the BSI (SC, AA, DA, and ISR).

The Rosenberg Self-Esteem Scale (Rosenberg, 1965). The Rosenberg scale (see Appendix F), designed to measure global self-esteem, contains 10 items, scored on a 4-point scale from strongly agree to strongly disagree. The items are grouped into six categories, and scored on the basis of a participant's response being consistent with high self-esteem (Silber & Tippett, 1965). The scale was originally developed for use with adolescents (Rosenberg, 1965), but has since been used with a wider range of participants (e.g. see Silber & Tippett, 1965). Test-retest reliability over a two week period is demonstrated with a reliability coefficient of .85 (Silber & Tippett, 1965). Silber & Tippett demonstrated convergent validity with significant correlations from

.56 to .83 between the Rosenberg scale and other measures of self-esteem.

Measure of Adult Attachment Style

The Relationship Questionnaire (RQ, Bartholomew & Horowitz, 1991). The RQ (see Appendix G) is an adaptation of the attachment measure developed by Hazan and Shaver (1987). The measure consists of four short paragraphs describing the four attachment styles (Secure, Preoccupied, Dismissing, Fearful). Each participant is asked both to choose the style that is most like her and to make ratings on a seven-point scale of the degree to which she resembles each of the four styles.

Bartholomew and Horowitz's (1991) examination of the intercorrelations of attachment ratings indicated that the observed patterns were consistent with the proposed four-category model of attachment. Attachment ratings in the opposing positions (i.e., secure vs. fearful, preoccupied vs. dismissing) were significantly negatively correlated, and in general, attachment ratings in adjacent positions showed nonsignificant or negative correlations with one another. The authors concluded, after performing multidimensional scalings, that the dimensional structure underlying the correlations roughly corresponds to the proposed two-dimensional structure based on models of self and other described above.

Counterbalancing of the Questionnaire

Two versions of the questionnaire were administered, with measures counterbalanced (see Appendix H). Symptom measures follow abuse and attachment measures in the first version, and precede abuse and attachment measures in the second version. In addition, care was taken to avoid presenting the abuse measure at either the start or the end of the questionnaire because of the sensitive nature of the questions. As part of a larger study of childhood sexual abuse in women, some measures not covered here were included in the questionnaire administered to participants. Where the abuse

measure described herein would otherwise have been the first or last measure administered, a measure included in the larger study preceded or followed it. This was done in order to avoid presenting sensitive questions too early or too late in the questionnaire, and thus, avoid the possibility of causing some participants to feel uncomfortable.

Results

Relationships among CSA, adult attachment style, and current psychological functioning were examined using profile analysis, multivariate multiple regression, and set correlation. Results indicated that CSA predicted both attachment style and current psychological functioning as measured by the TSI and that adult attachment style predicted current psychological functioning. In addition, evidence was found for adult attachment style mediating the relationship between CSA and current psychological functioning.

Preliminary Analyses

Preliminary analyses were conducted to examine possible between group differences in socioeconomic characteristics. In order to minimize the chance of overlooking group differences on demographic variables, an alpha level of .20 was established. Table 1 summarizes demographic characteristics of the sample. Group differences failed to reach significance across ethnicity, university major, year of university program, and current family income. However, significant differences in the distributions of age and marital status emerged. Accordingly, it was decided that subsequent planned analyses of variance (ANOVAs) would be reexamined with age and marital status as covariates.

An attempt was made to replicate the factor structure of the TSI described by Briere, Elliott, and Smiljanich (1994). Because the matrix of items on the full TSI was too large for factor analysis using SYSTAT (Wilkinson, 1990), each of the scales was factor analyzed using a principal components analysis. In general, the structure suggested by Briere et al. was replicated. Considering both the eigenvalue greater than one criterion and scree tests, it was determined that six scales (AA, AI, DA, D, DSB,

ISR) showed a 1 factor solution. Of the remaining scales, three (DISS, SC, IE) showed a 2 factor solution and one (TR) showed a 3 factor solution. Given that only one scale (TR) showed a structure which seemed to seriously differ from that suggested by Briere et al., and considering the limitations with regard to the interpretation of results based on a slightly modified structure, it was decided that the factor structure proposed by Briere et al. was acceptable for the analyses in this study.

Childhood Sexual Abuse and Current Psychological Functioning

In order to investigate differences between abused and non-abused women on self-esteem, a multivariate analysis of variance (MANOVA) on the 10 self-esteem items was used; no group differences in self-esteem were found. The MANOVA assessed differences between subjects who had not experienced CSA, subjects who had experienced extrafamilial CSA, and subjects who had experienced intrafamilial CSA on the items from the Rosenberg Self-Esteem Inventory. Subjects did not differ significantly on the multivariate test of significance, $F(10, 297) = .698, p = .726$. Therefore, this measure was dropped from subsequent analyses.

In order to analyze whether sexual abuse status predicted psychological functioning, a profile analysis was performed on the ten scales of the TSI: Anxious Arousal (AA), Anger/Irritability (AI), Defensive Avoidance (DA), Depression (D), Dissociation (DISS), Dysfunctional Sexual Behaviour (DSB), Intrusive Experiences (IE), Impaired Self-Reference (ISR), Sexual Concerns (SC), and Tension Reduction Behaviour (TR). The grouping variable was CSA, divided into women who (1) had not experienced abuse (NA), (2) had experienced extrafamilial abuse (EA), and (3) had experienced intrafamilial abuse (IA). Profiles of mean scores on the TSI for the three groups of women are presented in Figure 3. Using Wilks' criterion, the profiles were

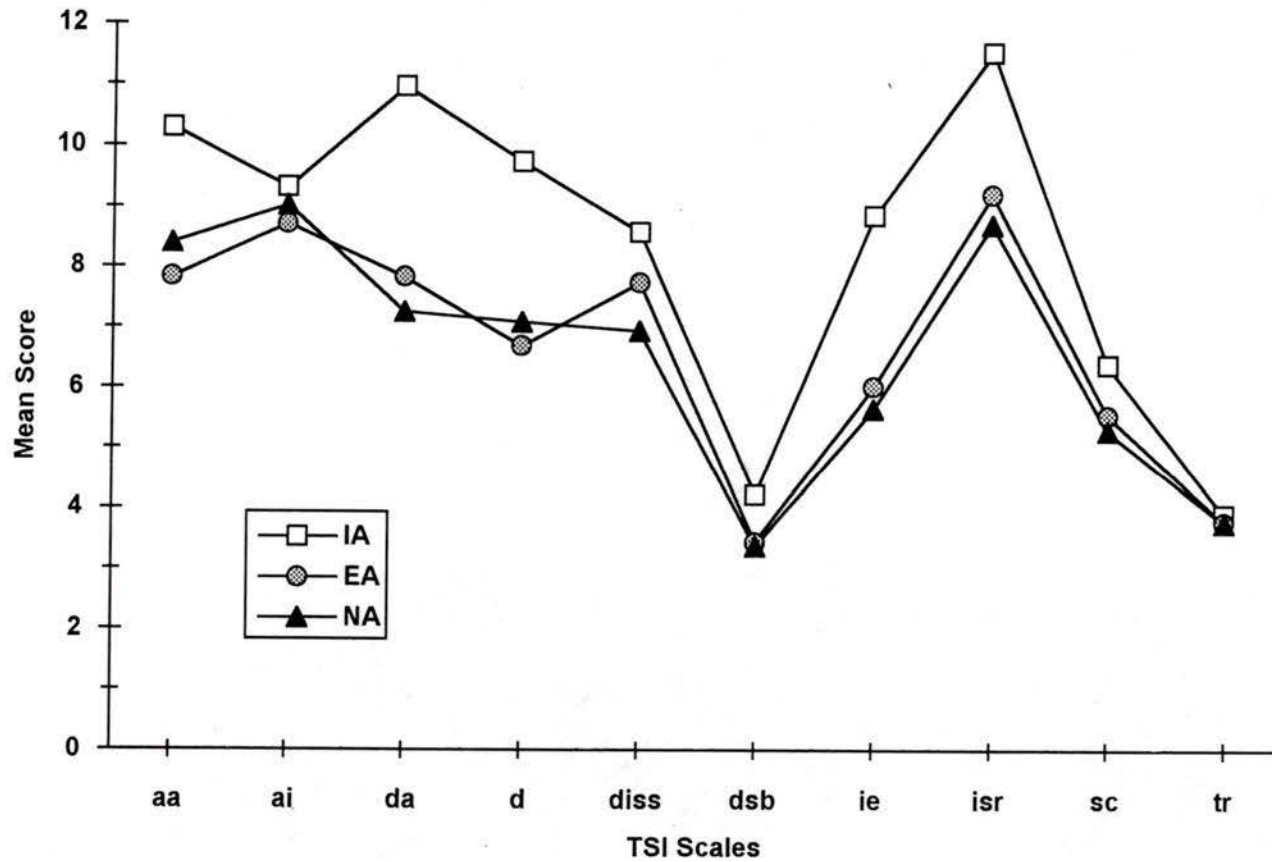


Figure 3. Trauma Symptom Inventory (TSI) profiles for intrafamiliarily abused (IA), extrafamiliarily abused (EA), and non-abused (NA) women. (aa = anxious arousal, ai = anger/irritability, da = defensive avoidance, d = depression, dsb = dysfunctional sexual behaviour, ie = intrusive experiences, isr = impaired self-reference, sc = sexual concerns, tr = tension reduction behaviour.)

found to be significantly non-parallel, $F(18, 592) = 1.74, p = .029, \eta^2 = .098$, which indicated an interaction between responses to the TSI and CSA history. With regard to the levels test, significant differences were found among groups when TSI scores were averaged over all scales, $F(2, 304) = 3.69, p = .026, \eta^2 = .024$, which indicated that the groups differed with regard to their overall level of psychological functioning as measured by the TSI. When averaged over groups, the flatness test showed significant differences among the means of the different subscales using Wilks' criterion, $F(9, 296) = 57.82, p = .000, \eta^2 = .637$, which indicated that participants experienced varied levels of distress depending upon the particular scale.

The significant interaction between groups and TSI scales was probed by performing one-way ANOVAs separately on each of the TSI scales. Group means are presented in Table 2. Orthogonal comparisons between the NA group and the two abuse groups and between the IA group and the EA group were performed following significant ANOVAs. In addition, analyses of covariance (ANCOVAs) were conducted to determine whether controlling for age and marital status changed the results. ANCOVA results are reported only where they differed from ANOVA results. Results indicated that significant differences between the IA group and the EA group existed on the Depression, Intrusive Experiences, Impaired Self Reference, Anxious Arousal, and Defensive Avoidance scales. In addition, significant differences between the NA group and the two abuse groups were found on the Defensive Avoidance, Impaired Self Reference, Intrusive Experiences, and Dissociation Scales. In all cases, where comparisons between the NA group and the EA and IA groups led to a significant result, it was because the abused groups scored higher than the NA group. In addition, where comparisons between the EA group and the IA group led to a significant result, it was because the IA group scored higher than the EA group.

Table 2
Group Means for Intrafamilially Abused (IA), Extrafamilially Abused (EA) and Non-Abused (NA) Women on the Trauma Symptom Inventory (TSI)

TSI Scale	NA	EA	IA
AA	8.405	7.833	10.290 **
AI	9.027	8.722	9.323
DA	7.252 *	7.833	10.968 **
D	7.086	6.685	9.742 **
DISS	6.932 *	7.741	8.581
DSB	3.374	3.444	4.226
IE	5.644 *	6.019	8.871 **
ISR	8.716 *	9.222	11.548 **
SC	5.297	5.556	6.387
TR	3.766	3.778	3.903

* NA group significantly different from the IA and EA groups combined, $p < .05$.

** IA group significantly different from the EA group, $p < .05$.

A significant group difference was found for the Anxious Arousal scale, $F(2, 304) = 2.986, p = .052$. Results from comparisons indicated a significant difference between the IA group and the EA group, $F(1, 304) = 5.665, p = .018$, and no significant difference between the NA group and the two abuse groups combined, $F(1, 304) = 1.194, p = .275$. A significant group difference was found for the defensive avoidance scale, $F(2, 304) = 5.577, p = .004$. Results from comparisons indicated significant differences between both the IA group and the EA group, $F(1, 304) = 5.736, p = .017$, and the NA group and the two abuse groups, $F(1, 304) = 7.955, p = .005$. A significant group difference was found for the Depression scale, $F(2, 304) = 4.877, p = .008$. Results from comparisons indicated a significant difference between the IA group and the EA group, $F(1, 304) = 8.333, p = .004$, and no significant difference between the NA group and the two abuse groups, $F(1, 304) = 3.350, p = .068$. However, when age and marital status were used as covariates in an ANCOVA, a significant difference between the NA group and the two abuse groups emerged (adjusted means = 7.034, 6.703, 9.824 for the NA, EA and IA groups, respectively), $F(1, 301) = 3.757, p = .054$. A significant group difference was found for the Intrusive Experiences scale, $F(2, 304) = 5.816, p = .003$. Results from comparisons indicated significant differences between both the IA group and the EA group, $F(1, 304) = 6.580, p = .011$, and the NA group and the two abuse groups, $F(1, 304) = 7.741, p = .006$. A significant difference was found for the Impaired Self Reference scale, $F(2, 304) = 4.029, p = .019$. Results from comparisons indicated significant differences between both the IA group and the EA group, $F(1, 304) = 3.915, p = .049$, and the NA group and the two abuse groups, $F(1, 304) = 5.951, p = .015$. No significant group differences were found for the Anger/Irritability, Dissociation, Dysfunctional Sexual Behaviour, Sexual Concerns, and Tension Reduction scales.

However, when age and marital status were used as covariates in an ANCOVA, a significant difference emerged (adjusted means = 6.839, 7.864, 8.902 for the NA, EA, and IA groups, respectively) on the Dissociation scale, $F(2, 301) = 3.630, p = .028$. Results from comparisons indicated no significant difference between the IA group and the EA group, $F(1, 301) = 1.142, p = .286$, and a significant difference between the NA group and the two abuse groups, $F(1, 301) = 7.083, p = .008$.

Childhood Sexual Abuse and Adult Attachment Style

A profile analysis was performed on the four attachment styles from the Relationship Questionnaire (RQ): Secure, Fearful, Preoccupied and Dismissing. The grouping variable was CSA, divided into (1) NA women, (2) EA women, and (3) IA women. Profiles of mean scores on the RQ for the three groups of women are presented in Figure 4. Using Wilks' criterion, the profiles were found to be significantly non-parallel, $F(6, 594) = 3.481, p = .002, \eta^2 = .067$, which indicated an interaction between responses to the RQ and CSA history. Significant differences were found among groups when RQ scores were averaged over all styles, $F(2, 299) = 3.565, p = .029, \eta^2 = .023$, which indicated that the groups differed with regard to their mean level of endorsement of the attachment styles on the RQ. When averaged over groups, the flatness test showed significant differences among the means of the attachment styles using Wilks' criterion, $F(9, 296) = 57.82, p = .000, \eta^2 = .156$, which indicated that, on average, participants endorsed the four styles differentially.

Following the profile analysis, ANOVAs were conducted to investigate the relationship between CSA history and the four attachment styles. Orthogonal comparisons between the NA group and the two abuse groups and between the IA group and the EA group were performed following significant ANOVAs. In addition,

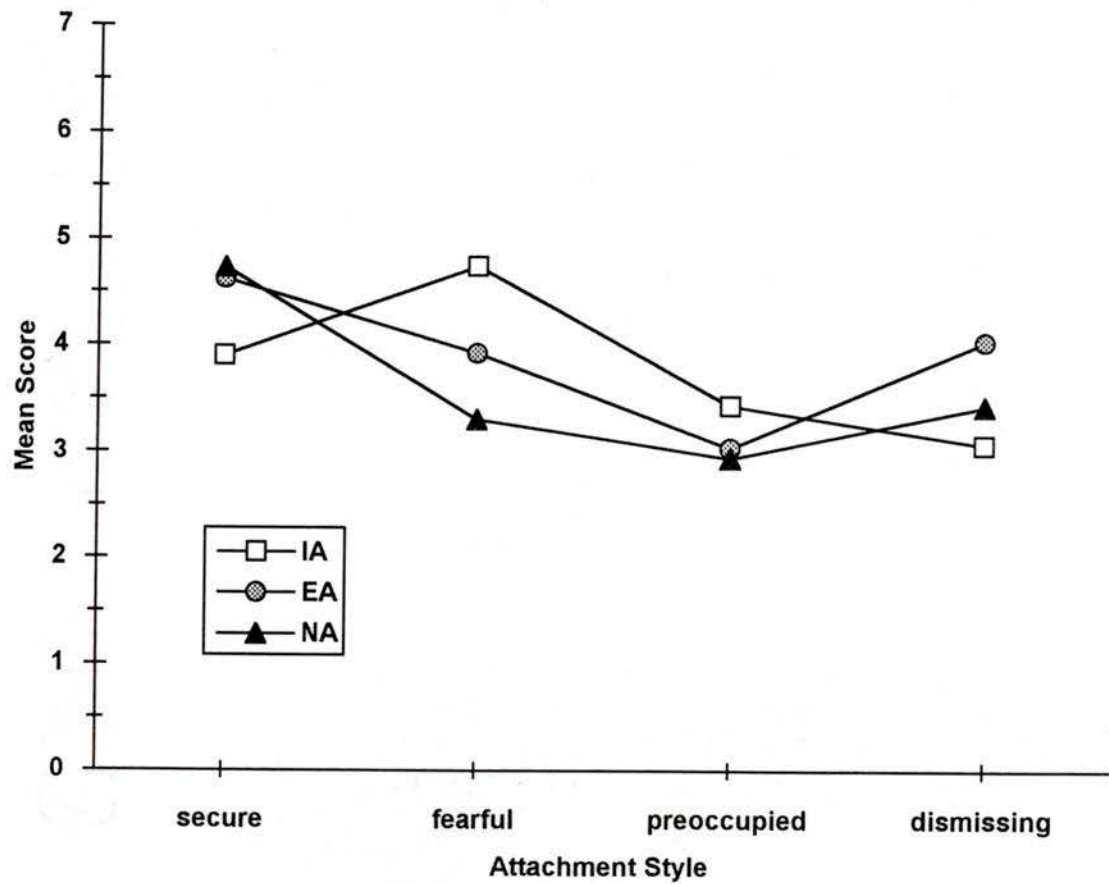


Figure 4. Relationship Questionnaire attachment style profiles for intrafamily abused (IA), extrafamily abused (EA), and non-abused (NA) women.

ANCOVAs were conducted to determine whether controlling for age and marital status changed the results. In all cases, ANCOVA results did not differ from ANOVA results. Results indicated that the IA group differed from the EA group on the Secure, Fearful, and Dismissing attachment styles; they were less Secure, more Fearful, and less Dismissing than the EA group. The NA group differed from the two abuse groups on the Secure and Fearful attachment styles; they were more Secure and less Fearful than the EA and IA groups.

A significant group difference was found for the Secure attachment style, $F(2, 302) = 3.448, p = .033$. Results from comparisons indicated a significant difference between both the IA group and the EA group, $F(1, 302) = 3.791, p = .052$, and between the NA group and the two abuse groups combined, $F(1, 302) = 4.736, p = .030$. These differences were due to the abused women scoring lower than the non-abused women, and the IA group scoring lower than the EA group. A significant group difference was found for the Fearful attachment style, $F(2, 300) = 9.628, p = .000$. Results from comparisons indicated significant differences between both the IA group and the EA group, $F(1, 300) = 3.741, p = .054$, and the NA group and the two abuse groups, $F(1, 300) = 17.430, p = .000$. These differences were due to abused women scoring higher than non-abused women, and the IA group scoring higher than the EA group. No significant group difference was found for the Preoccupied attachment style, $F(2, 299) = .900, p = .408$. A significant group difference was found for the Dismissing attachment style, $F(2, 301) = 3.553, p = .030$. Results from comparisons indicated a significant difference between the IA group and the EA group, $F(1, 301) = 5.822, p = .016$, and no significant difference between the NA group and the two abuse groups, $F(1, 301) = .274, p = .601$. These results were due to women in the IA group scoring lower than women in the EA group, and women in

the EA group scoring higher than both women in the IA group and women in the NA group.

Adult Attachment Style and Current Psychological Functioning

A multivariate multiple regression was conducted to explore the relationship between the four attachment styles measured by the RQ and the ten domains of psychological functioning measured by the TSI. Using Wilks' criterion, the multivariate test was significant, $F(40, 1101) = 4.298, p = .000$, adjusted multivariate $R^2 = .415$, suggesting a significant overlap between the two sets of variables. All TSI variables were significantly predicted ($p < .001$) by the set of attachment variables. Subsequent univariate analyses investigating the relationship of each of the attachment styles with each of the TSI scales were conducted using an alpha level of .01 in order to balance controlling only for type I or type II error. Regression weights show that the Fearful attachment style is a significant predictor for all scales, being Preoccupied is a significant predictor for all scales except Dissociation and Intrusive Experiences, the Secure attachment style is a significant predictor for Anxious Arousal and Depression, and the Dismissing attachment style is a significant predictor for Anxious Arousal and Anger Irritability. Univariate significance tests are presented in Table 3.

Interpreting the unique contribution of each attachment style with the other styles partialled out is problematic. In this context, the significance of each attachment style as a predictor is difficult to make sense of given that it is conceptually unworkable to consider an attachment style with the other three styles removed. Consequently, what is of considerably more importance is the sign and pattern of the beta weights. It is useful to reflect on what the beta weights indicate about how attachment variables are optimally combined to form the linear combination that best predicts scores on the TSI.

Table 3
Univariate Tests on Regression Weights for Regression Analysis Predicting TSI Scale Scores from RQ Scales.

<u>TSI scale</u>	<u>RQ Attachment Style</u>			
	<u>secure</u>	<u>fearful</u>	<u>preoccupied</u>	<u>dismissing</u>
	<i>F</i> (1, 299)			
AA	7.560*	10.602*	6.191*	13.384*
AI	1.163	9.672*	13.946*	4.562*
DA	2.540	26.088*	11.963*	0.096
D	9.135*	17.987*	15.809*	2.780
DISS	1.623	12.728*	4.115	0.460
DSB	0.201	6.880*	19.786*	0.894
IE	1.223	31.403*	2.459	0.745
ISR	5.733	22.237*	15.122*	2.798
SC	0.830	8.387*	14.803*	0.690
TR	0.785	6.844*	25.767*	1.632

* $p < .01$

For example, for the Anxious Arousal scale, the weights $-.499$, $.497$, $.332$, and $-.525$ (for Secure, Fearful, Preoccupied, and Dismissing, respectively) suggested that to best predict Anxious Arousal we should add the Fearful and Preoccupied styles and subtract the Secure and Dismissing styles. Similarly, for the Impaired Self Reference scale, the weights $-.480$, $.795$, $.573$, and $-.265$ suggested a similar approach to linearly combining the attachment styles. This pattern held for eight of ten TSI scales and suggested that psychological functioning is best predicted by the difference between negative (Fearful, Preoccupied) and positive (Secure, Dismissing) models of self.

Adult Attachment Style as a Mediator Between CSA and Current Psychological Functioning

In order to investigate the possibility that adult attachment style mediates between CSA and current psychological functioning, a series of set correlations was conducted. First, set correlations were conducted to investigate to what extent 1) CSA predicted adult attachment style, 2) CSA predicted current psychological functioning, and 3) attachment predicted current psychological functioning. Second, partial set correlations were conducted to investigate to what extent 1) CSA predicted current psychological functioning after the variance attributable to attachment style was partialled out of both CSA and psychological functioning, and 2) attachment predicted current psychological functioning after the variance attributable to CSA was partialled out of both attachment and psychological functioning. The two models were then compared in an attempt to understand whether adult attachment style mediates between CSA and current psychological functioning. The two possible models are presented in Figure 2. Results indicated that alone, both CSA and adult attachment predicted psychological functioning; however, adult attachment mediated the relationship

between CSA and psychological functioning, with CSA becoming a less useful predictor after adult attachment style was taken into account.

Set correlations indicated that CSA was a significant predictor of both adult attachment style, $F(8, 592) = 3.211, p = .001$, adjusted multivariate $R^2 = .075$ and current psychological functioning as measured by the TSI, $F(20, 590) = 1.664, p = .035$, adjusted multivariate $R^2 = .098$. In addition, adult attachment style was a significant predictor of current psychological functioning $F(40, 1001) = 4.298, p = .000$, adjusted multivariate $R^2 = .415$. However, partial set correlations indicated that although attachment remained a significant predictor when CSA was partialled out of both attachment and psychological functioning, $F(36.0, 1077.3) = 4.274, p = .000$, adjusted multivariate $R^2 = .314$, the relationship between CSA and current psychological functioning became non-significant when adult attachment style was partialled out of both CSA and psychological functioning, $F(18, 574) = 1.384, p = .133$, adjusted multivariate $R^2 = .023$. Thus, a mediational model, in which attachment is understood as a mediator between CSA and current psychological functioning is suggested.

Discussion

The first hypothesis, that psychological functioning would vary depending on CSA history was, in general, supported. This upholds previous research in this area (e.g., Bagley & Ramsay, 1986; Briere & Runtz, 1987, 1988a, 1988b, 1989, 1993; Browne & Finkelhor, 1986, Finkelhor, 1990). Women who have been abused within the family exhibit poorer psychological functioning than women who have been abused outside the family. In particular, they are more depressed, report more intrusive thoughts and feelings, exhibit greater impaired self-reference, are more prone to anxious arousal, and are more likely to cope with unpleasant thoughts, feelings, or situations by using defensive avoidance. When women who have been abused are compared with women who have not been abused, differences appear in the areas of defensive avoidance, dissociation, impaired self-reference, and intrusive experiences. However, upon examination of the TSI profiles for the three groups it is apparent that, in most cases, this effect is due to the higher scores obtained by the intrafamilially abused group. It seems that, with regard to current psychological functioning, women in this sample who were abused outside the family are more like women who were not abused than like women who were abused within the family.

No difference in self-esteem was found between abused and non-abused women. However, it seems likely that this result is determined more by the method of measurement than by a true absence of differences between groups given that reduced self-esteem in sexually abused women has been found in past research (e.g., Bagley & Ramsay, 1986). The Rosenberg Self-Esteem Inventory produced very little variability, and seemed to have a significant ceiling effect in this sample. Given that one's evaluation of self is likely a critical components of a full understanding of the impact of CSA (e.g., Alexander, 1992; Bagley & Ramsay, 1986; Briere, 1992b, Cole & Putnam,

1992, Gold, 1986), and this study's findings with regard to the importance of attachment discussed below, it will be important in the future to develop a reliable and valid measure of various dimensions of self-esteem that is appropriate for a non-clinical, adult population.

Support for the second hypothesis, that adult attachment style would vary as a function of CSA history, was found. Women who had experienced CSA were less Secure and more Fearful than women who had not experienced CSA. Women who had experienced intrafamilial CSA were less Secure, more Fearful, and less Dismissing than women who had experienced extrafamilial CSA. Although results for the Preoccupied attachment style did not reach significance, the general pattern of results shows intrafamilially abused women rating themselves lower than the other two groups on the styles involving a positive model of self (Secure, Dismissing), and higher than the other two groups on the styles involving a negative model of self (Fearful, Preoccupied).

Although causation cannot be definitively determined from the data in this study, results provide suggestions for possible causal interpretations. The results across attachment styles may indicate that women who were abused within their family as children might have sustained considerable damage to their model of self and that this negative model of self might have followed them into adult relationships. The most important impact of CSA, especially of intrafamilial abuse, seems to be its impact on one's view of oneself as undeserving of the love and support of others. This interpretation fits with Cole and Putnam's (1992) theory that the effect of intrafamilial abuse is most pronounced in the domains of self functioning; intrafamilial abuse violates the child's basic beliefs about safety and trust in relationships, disturbing his or her sense of self. This development of a sense of self is likely to continue to be an

important task throughout infancy, childhood, adolescence, and early adulthood (e.g., Ainsworth, Bell, & Stayton, 1981; Harter, 1983, Marcia, 1980). Unfortunately, intrafamilial abuse, even that which has ceased, may continue to impact on one's creation of a model of self at each stage of development, and therefore may have a cumulative effect on the intrafamilial abuse survivor's ability to sustain satisfying adult relationships (Cole & Putnam, 1992). It is important to note that women who were abused outside the family may also have sustained some damage to their model of self, although perhaps not as severe. However, the pattern of results for the group of women abused outside the family is less clear in this study. Although women who have been abused outside their families are more fearful than the non-abused group, they are equally as secure, and are more dismissing. It could be that women abused outside the family were more likely to have had both abuse experiences that affected their internal working models and supportive attachment relationships in the family that led to a more positive model of self. Again, although the cause and effect relationship between variables is not clear, we can at least assume that adult attachment style does not lead to abuse, given that it follows abuse in time. However, it is important to remember that the results from this study alone do not allow strong causal inferences.

Findings from this study lent strong support for the third hypothesis, that adult attachment style would predict differences in current psychological functioning for all women. In fact, adult attachment style predicted all areas of functioning on the TSI and was found to account for approximately 40% of the variance in current overall psychological functioning in anxious arousal, anger/irritability, defensive avoidance, depression, dissociation, dysfunctional sexual behaviour, intrusive experiences, impaired self-reference, sexual concerns, and tension reduction behaviour. Therefore, contrary to Alexander's (1993) results which suggested that attachment predicted basic

personality structure but not symptoms associated with post traumatic stress disorder (such as intrusive thoughts, avoidance, and depression), results from this study suggest that attachment is also of central importance in predicting such symptoms. The most important element of attachment for predicting the severity of symptoms on the TSI seemed to be one's model of self. To best predict psychological functioning, ratings of the four attachment styles can be combined according to the valence of one's model of self. This provides at least partial support for Bartholomew's (1990) conceptualization of attachment and the implication of Bowlby's theory that the intersection of underlying models of self and other is the basis for four attachment styles. Further research in this area might use more sophisticated statistical techniques to further investigate the structure of the Relationship Questionnaire in an attempt to clarify whether one's model of self and other are indeed the key dimensions for predicting psychological functioning.

It appears from these results that adult attachment style mediates the relationship between childhood sexual abuse and current psychological functioning, and that the mediational model in Figure 2 more accurately represents the nature of the relationship between CSA, adult attachment style, and current psychological functioning than does a non-mediational model. When the relationship between adult attachment style and current psychological functioning is taken into account, the relationship between CSA and current psychological functioning becomes significantly less important. This suggests that attachment style, or one's models of self and others, may be the mechanism through which the impact of CSA (especially intrafamilial CSA) operates on later psychological functioning. It may be, either as Alexander (1992) suggests that insecure attachment precedes CSA, or as Cole and Putnam (1992) hypothesize that CSA undermines earlier gains in one's development of a sense of self. In any event, it

appears that CSA victims develop a less secure and more fearful attachment style either before, concurrent with, or subsequent to the abuse. This attachment style is then central to psychological well-being in adulthood.

Contrary to recent theorizing (e.g., Briere, 1992b; Friedrich, 1990) that suggests that distinguishing between sexual abuse which occurs within the family and that which occurs outside the family is not of central importance, results from this study point to the fact that it may indeed be important to distinguish between women who have experienced these two forms of abuse. At the very least, researchers should endeavor to be especially clear in detailing who the participants in their studies are, and should not refer to intrafamilial abuse victims simply as "child sexual abuse victims" without distinguishing them from the more general population of victims. Results from this study suggest that abuse within the family is significantly more damaging than abuse occurring outside the family, both with regard to later psychological functioning and with regard to later attachment relationships.

This study is limited somewhat by the use of a university student sample, and by its retrospective nature. This sample was relatively well-functioning (for example, compared to Briere et al.'s 1994 clinical sample), so the apparent similarity of the non-abused group and the extrafamilially abused group could be due to the nature of the sample. However, given that results supported as hypotheses even with a less heterogeneous sample than would exist if a clinical population were included, it is likely that results would be found, and possibly would be stronger, in a sample that included more variability.

It is possible that the mediational relationship suggested here would not apply equally as well to a population exhibiting more severe disturbance or to participants in a longitudinal study not influenced by the "contemporary adaptation on recall"

(Cicchetti & Rizley, 1981). However, as Brewin, et al. (1993) presented, adults' recollections of the central features of an event are accurate and reasonably stable over time. When they are asked to recall salient factual details of their own childhoods, they are generally accurate, especially concerning the experiences that were unique, unexpected, and consequential (Brewin, Andrews, & Gotlib, 1993). It is, therefore, unlikely that the results here are unduly influenced by incorrect reporting of abuse experiences.

The results of this study have important implications for therapy with women who have experienced CSA; attachment theory can provide valuable insights into the therapy process that might be most helpful for sexual abuse survivors. If attachment to significant others is of central importance in determining psychological functioning, and if the effect of CSA is mediated by one's adult attachment style, ample opportunity for intervention exists. Although the client's CSA experience is not subject to alteration, it is probably possible to introduce new experiences that modify implicit expectations about self, other, and relationships and to thereby alter her attachment style, and thus, improve her psychological functioning. Although for some women the experiences that mitigate the effects of a difficult attachment history may be, for example, in the context of an intervening attachment with a supportive parent in childhood, a trusted adult in adolescence, or a romantic partner in adulthood (Egeland, Jacobvitz, & Sroufe, 1988), for others a relationship with a therapist may serve this role. The therapy experience might not occur until adulthood, but conceivably it could also occur in childhood or adolescence. Presumably, the earlier a positive model of self were developed, the larger protective effect it could have.

The results from this study support Briere's (1992b) contention that therapy with sexual abuse survivors should focus first on resolving "self" problems before focusing

in the childhood trauma directly. For example, the client might be helped with developing a sense of identity, with learning how to call upon inner resources in times of stress or anxiety, and with understanding her part in relationships with others. As Briere points out, although all psychotherapy clients probably benefit from a stable, positive environment in therapy, women who have experienced sexual abuse may require this to an even greater extent. Results from this study suggest that this may be especially true for women who have experienced abuse within the family. Moreover, Briere emphasizes that the survivor's initial dependence on the therapist is a healthy process rather than a pathological one. The therapist, according to Briere, is likely to be most helpful if he or she can provide appropriate levels of support that allow the client to move at her own pace toward a more self-reliant position (see also Bretherton, 1992). If women could first be aided by the therapist with the development of a positive model of self, despite a history of CSA, perhaps much of the subsequent abuse specific work necessary in therapy would be more manageable. If the results of this study are any indication, the client will likely experience considerable relief from "self" work alone. For example, work on identity issues, boundary issues, and the differentiation of self from others is not limited to work with CSA survivors. As with other problems, work in these areas might provide some relief from psychological difficulties independent of a woman's CSA status. Clearly, of course, when working with CSA survivors, some work in the area of "self" will involve talking about the abuse, the client's lack of responsibility, and other abuse related issues. It is unlikely that the two foci are entirely separable.

Future research on the nature of the relationship between CSA and attachment should investigate what the factors are that allow women to overcome such a difficult history. Who are the resilient women who are functioning well, despite such a history?

How do high functioning women with a history of CSA see themselves as different from women who have also been abused but are experiencing much greater levels of distress? If these women exhibit a secure attachment style in adulthood, how did they achieve that? For example, did they have intervening experiences between the time they were sexually abused and adulthood that served to modify their models of self and others? In addition, it would be useful to discover how much intraindividual variability in attachment styles exists across relationships for women who have experienced CSA. Is it only the overall attachment style, regardless of the specific relationship (similar to that investigated in this study), that is important for predicting functioning, or does a particular relationship (for example, with a long-term romantic partner) carry particular weight in the prediction of psychological functioning? Clearly, attachment is a central construct in our understanding of the long-term sequelae of childhood sexual abuse, especially intrafamilial abuse. It is important that sexual abuse research continues to move away from simple investigations only of the particular psychological difficulties correlated with abuse toward more complex designs that include the aim of discovering mediational and moderational factors. Given that complete success with primary prevention efforts is unlikely in the near future, intervention will continue to focus on what women can do within their current circumstances to help themselves function better. The discovery, understanding, and utilization of mediators such as attachment might help us to better direct our intervention efforts and to help women to help themselves.

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Appendix A

Informed Consent Form

Dear Participant:

This research project is being conducted by Diane Roche and Dr. Marsha Runtz of the Department of Psychology at the University of Victoria. We would like you to participate in a study of women's relationships and psychological well-being by completing the following questionnaire. Some of the questions are very personal or sexual in nature, and therefore are not frequently used in social science research. However, each question has been carefully chosen for its association to the issues we are studying. For this reason, all of the questions are crucial for furthering our understanding of women's relationships and psychological well-being.

We hope that with this in mind, and the knowledge that *everything you report here is completely anonymous*, that you will decide to participate in this study. Please keep in mind that while we would like your cooperation, you are under no obligation to participate; you are free to stop filling out the questionnaire at any point if you decide you no longer wish to participate. Simply turn in your questionnaire in the unmarked envelope provided, along with the other participants in your group; no one will know that your questionnaire is incomplete. If you choose to leave the session, you will not lose your experimental credit. Participation or non-participation has no effect upon grades or standing in any course, apart from the course credit specifically associated with participation.

Again, all questionnaires are completely anonymous, filed by code number only. We do not ask for your name anywhere on the questionnaire, and we have avoided asking questions that might identify you, even indirectly. All questionnaires will be kept in a secure place, and only the research team will have access to them. Consent forms will *not* be stored with the questionnaires.

Now that you have read the above, you can see how seriously we view both this research and your right to have your responses held in utmost confidence. If you believe that you are willing to proceed with this questionnaire, please sign on the line below indicating your consent. If you would rather avoid participating in this study at the present time, just check the line below indicating that you do not wish to participate at this time, turn in a blank questionnaire, and accept our thanks for your time.

Thank you for your cooperation.

I have read the above, and I agree to participate _____

I have read the above, and I do not wish to participate _____

If you have chosen to complete the questionnaire, please begin the questionnaire. Please read instructions fully, and answer all questions as honestly as you can.

Appendix B

Debriefing Sheet

Dear Participant:

We would like to thank you for participating in this study about women's relationships and psychological well-being.

We are specifically interested in looking at the effect of child sexual abuse on women's lives. While sexual abuse can have adverse long-term effects in many cases, we hope to also find that there are variables which serve to moderate this impact. Our focus here is on the moderating effect of attachment relationships on well-being in sexually abused and non-abused women. We believe that women who have been sexually abused in childhood but who experience supportive, secure attachment relationships in childhood or adulthood might suffer less psychological distress than women who were similarly abused, but who have not experienced such relationships.

We hope in the future to place emphasis not only on the long-term difficulties experienced by many women, but on what women can do now to enhance their own psychological well-being. Our belief is that much can be gained by understanding the impact current relationships have on women's functioning. This study is our first attempt at determining the impact of these attachment relationships on well-being.

If you have questions about the study that have not been answered here or at the research session, please contact Diane Roche at the "Families in Motion Research and Information Center" (721-6356). You may also contact Dr. Marsha Runtz at 721-7546. Either of us will be happy to return your call.

If any of the questions you answered here made you uncomfortable in any way, or if participating in this study has brought up issues that are distressing for you, some resources which might be of assistance are provided below. Further referrals can be obtained either from the agencies listed here, or from the researchers.

Need Crisis and Referral Line

386-6323 (24 hours)

(anonymous and confidential telephone counselling by trained volunteers)

University of Victoria Counselling Services

721-8341

(a wide range of services; free for all UVic students)

Sincerely,

Diane Roche
Graduate Student
Clinical Psychology

Dr. Marsha Runtz
Assistant Professor
Department of Psychology

Appendix C

Demographics Questionnaire

- 1) How old are you? _____
- 2) To what racial, ethnic or cultural group/groups do you see yourself as belonging to?

- 3) Marital Status:
single _____ living as married _____ married _____
separated/divorced _____ remarried _____ widowed _____
- 4) If you are not married (or living as married), what is your current dating status?
not dating _____
dating more than one person _____
steady relationship with one person _____
engaged but not living together _____
- 5) If you are involved in a relationship, how long have you been involved in that relationship?
_____ years (if less than 1 year, _____ months)
- 6) Do you have children? yes _____ no _____ (if yes, how many) _____
- 7) What are your living arrangements?
with parents _____ alone _____ with friends _____
with spouse/partner _____ other (specify) _____
- 8) If you are not living with your parents, how old were you when you moved away from home?
_____ years old
- 9) Year in program at university _____
- 10) If you have declared a major, or plan to declare a major, what is it/will it be? _____

- 11) What would you estimate your current yearly family income (that is, your individual income if you are single and living on your own or with friends, the income of you and your parents if you live with them, and the income of you and your partner if you are married or living as married), before tax, including all sources, to be?

less than \$10,000	_____	\$30,000 - \$39,999	_____
\$10,000 - \$14,999	_____	\$40,000 - \$49,000	_____
\$15,000 - \$19,999	_____	\$50,000 - \$59,999	_____
\$20,000 - \$24,999	_____	\$60,000 or more	_____
\$25,000 - \$29,999	_____		

- 12) What would you estimate the current yearly income of your family of origin (the family you grew up in), before tax, including all sources, to be?

less than \$10,000	_____	\$30,000 - \$39,999	_____
\$10,000 - \$14,999	_____	\$40,000 - \$49,000	_____
\$15,000 - \$19,999	_____	\$50,000 - \$59,999	_____
\$20,000 - \$24,999	_____	\$60,000 or more	_____
\$25,000 - \$29,999	_____		

- 13) What was your father's occupation when you were a child (age 15 or younger)?

- 14) What was your mother's occupation when you were a child (age 15 or younger)?

- 15) Was there any time during your childhood (age 15 or younger) when either of your parents were away from home for an extended period due to a serious illness or to other circumstances?

yes _____ no _____

If your parent was away for an extended period, please specify which parent, the reason for his or her absence, and the length of time he/she was away from home. Please also indicate how old you were at the time:

Did either of your parents die during your childhood (age 15 or younger)?

yes _____ no _____

if yes, which parent? _____ how old were you when he/she died? _____

- 16) How many children, including you, were in the family you grew up in? _____
- 17) How many brothers do you have? _____
- 18) How many sisters do you have? _____
- 19) Of the brothers and sisters you identified in questions 17 and 18, how many are:
- full brothers or sisters _____
- half brothers or sisters _____
- step brothers or sisters _____
- 20) What position in your family do you occupy?
- I am: the oldest child _____
- the youngest child _____
- a middle child _____
- an only child _____
- 21) If you are a middle or youngest child, how many older siblings (brothers or sisters) do you have? _____
- 22) In what kind of place did you spend most of your time when you were a child (age 15 or younger)?
- on a farm or in the country _____
- in a village (1,000 - 4,999 inhabitants) _____
- in a town (5,000 - 29,999 inhabitants) _____
- in a city of 30,000 - 99,999 _____
- in a city of 100,000 - 499,999 _____
- in a city of 500,000 or more _____

23) Did you live with both parents for at least a portion of your childhood (age 15 or younger)?

yes _____ no _____

24) Were your parents separated and/or divorced when you were a child (age 15 or younger)?

yes _____ no _____

IF YOU ANSWERED NO TO QUESTION #24, PLEASE GO TO THE NEXT SECTION OF THE QUESTIONNAIRE (PART B); IF YOU ANSWERED YES, PLEASE CONTINUE WITH QUESTION #25.

25) If your parents did separate and/or divorce when you were a child (age 15 or younger), how old were you at the time they separated?

_____ years old

26) Did you spend any portion of your childhood (age 15 or younger) as a member of a single parent family?

yes _____ no _____

Which parent did you live with?

my mother _____ my father _____

spent some time living with each of my parents _____

27) If your parents divorced when you were a child (age 15 or younger), did either of them remarry?

yes _____ no _____

If yes, which parent(s) remarried?

my father _____ my mother _____ both parents _____

28) Did either of your parents remarry more than once while you were a child (age 15 or younger)?

yes _____ (which parent(s)? _____) no _____

29) Did you spend any portion of your childhood (age 15 or younger) as a member of a blended (that is, with a stepfather or stepmother) family?

yes _____ no _____

- 30) If you did spend a portion of your childhood as a member of a blended family, please briefly describe the structure of your family, and the changes that occurred in it (e.g., my mother and father divorced when I was 5, I lived with my mother from 5 to 10, then my mother remarried and I lived with my dad, who did not remarry), when you were a child (age 15 or younger).

PRINCE STAR BRAND
SOUTHVILLE, OH, USA
25% COTTON FIBER

Appendix D

Sexual Experiences Inventory

It is now generally realized that most people have sexual experiences as children and while they are growing up. Some of these are with friends and playmates, and some with relatives and family members. Some are very upsetting and painful, and some are not. Some influence people's later lives and sexual experiences, and some are practically forgotten. Although these may be important events, little is actually known about them.

We would like you to try to remember the sexual experiences you had while growing up. By "sexual" we mean a broad range of things, anything from playing "doctor" to sexual intercourse - in fact, anything that might have seemed "sexual" to you. Please indicate "yes" or "no" for the following questions with regard to any sexual experiences you had when you were age *15 or younger*.

yes = 1 no = 2

- 1) An invitation or request to do something sexual _____
- 2) Kissing and hugging in a sexual way _____
- 3) Another person showing his/her sex organs to you _____
- 4) You showing your sex organs to another person _____
- 5) Another person fondling you in a sexual way _____
- 6) You fondling another person in a sexual way _____
- 7) Another person touching your sex organs _____
- 8) You touching another person's sex organs _____
- 9) Oral-genital contact _____
- 10) Attempted intercourse _____
- 11) Intercourse _____
- 12) Other (please specify): _____

IF YOU ANSWERED YES TO ANY OF QUESTIONS 1 to 12, PLEASE CONTINUE WITH QUESTION #13. IF YOU ANSWERED NO TO ALL OF QUESTIONS 1 to 12, SKIP AHEAD TO QUESTION #31.

If you had more than one experience where any of the above behaviors (questions 1 -12) occurred, answer the following questions for the experience that seems most significant to you. (If you had only one experience where any of the above behaviors occurred, answer for that experience.)

- 13) How old were you, the first time it happened? _____
- 14) How old were you, the last time it happened? _____
- 15) How old was the other person, the first time it happened? _____
- 16) Was the other person:
- | | | | |
|----------------------------------|-------|------------------------|-------|
| a) a stranger | _____ | b) an acquaintance | _____ |
| c) a boyfriend/girlfriend | _____ | d) a friend of yours | _____ |
| e) a friend of your parents | _____ | f) a teacher | _____ |
| g) a neighbour | _____ | h) a baby-sitter | _____ |
| i) your cousin | _____ | j) your uncle/aunt | _____ |
| k) your grandmother/grandfather | _____ | l) your brother/sister | _____ |
| m) your stepfather/stepmother | _____ | n) your mother/father | _____ |
| o) other (please specify) _____ | | | |
- 17) Was the other person:
- male _____ female _____
- 18) For approximately how long would you estimate that this sexual behavior continued?

Choose the most appropriate category:

- happened over one day or a few days _____
- happened over a period of a few weeks _____
- happened over a period of a few months _____
- happened over a period of a few years _____
- happened over a period of many years _____

19) How many times would you estimate that this sexual behavior occurred?

Choose the most appropriate category:

once or twice _____

from 3-10 times _____

from 11-25 times _____

from 26-50 times _____

For questions 20 - 23, use the following scale:

a lot = 1 a little = 2 not at all = 3

Did the person ever:

20) threaten you _____

21) force you _____

22) hurt you physically _____

23) convince you to participate _____

24) Which of the following would best describe your reaction *at the time of the experience*?

fear _____ shock _____ surprise _____ interest _____ pleasure _____

25) Looking back at the experience now, would you say the experience was:

1 2 3 4 5

mainly negative

mainly positive

26) How confident do you feel about your memory of the experience?

1 2 3 4 5

not very confident

very confident

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

no one _____ mother _____ father _____

other adult _____ brother/sister _____ friend _____

28) If you told your *mother*, how did she respond to you? (If you did not tell your mother, how do you think she would have reacted?)

a) 1 2 3 4
 very angry mildly angry a little angry not at all angry

b) 1 2 3 4
 very supportive mildly supportive a little supportive not at all supportive

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

a) 1 2 3 4
 very angry mildly angry a little angry not at all angry

b) 1 2 3 4
 very supportive mildly supportive a little supportive not at all supportive

30) If you told someone about your experience, how old were you when you first did so?

_____ years old

31) Do you feel that you were ever sexually abused as a child?

yes = 1 no = 2

32) Do you feel that the experience you have described above was sexual abuse?

yes = 1 no = 2

33) Do you feel that you were ever physically abused as a child?

yes = 1 no = 2

33) If any of questions 1 - 32 do not accurately describe your experience, or if you would like to add more information to your answers, please elaborate here:

Appendix E

Trauma Symptom Inventory

Please indicate how often each of the following experiences have happened to you in the *last six months*.
Use the following scale:

	0 never	1	2	3 often	
1)	Heart pounding or beating too fast				_____
2)	Nightmares or bad dreams				_____
3)	Trying to forget about a bad time in your life				_____
4)	Unwanted sexual thoughts				_____
5)	Irritability				_____
6)	Stopping yourself from thinking about the past				_____
7)	Getting angry about something that wasn't very important				_____
8)	Feeling empty inside				_____
9)	Sadness				_____
10)	"Flashbacks" (sudden memories or images of upsetting things)				_____
11)	Not being satisfied with your sex life				_____
12)	Not being able to say "no" when someone wanted to have sex with you, but you didn't want sex				_____
13)	Feeling like you were outside of your body				_____
14)	Lower back pain				_____
15)	Sudden disturbing memories when you were not expecting them				_____
16)	Wanting to cry				_____
17)	Bad feelings about sex				_____
18)	Not feeling happy				_____
19)	Becoming angry for little or no reason				_____
20)	Feeling like you don't know who you really are				_____

- 21) Feeling depressed _____
- 22) Being bothered by memories _____
- 23) Having sex with someone you hardly knew _____
- 24) Thoughts or fantasies about hurting someone _____
- 25) Your mind going blank _____
- 26) Fainting _____
- 27) Not enjoying things you used to enjoy _____
- 28) Periods of trembling or shaking _____
- 29) Pushing painful memories out of your mind _____
- 30) Not understanding why you did something _____
- 31) Threatening or attempting suicide _____
- 32) Feeling like you were watching yourself from far away _____
- 33) Feeling guilty _____
- 34) Feeling tense or "on edge" _____
- 35) Getting into trouble because of sex _____
- 36) Not feeling like your real self _____
- 37) Wishing you were dead _____
- 38) Worrying about things _____
- 39) Not being sure of what you want in life _____
- 40) Feeling like you weren't really yourself _____
- 41) Bad thoughts or feelings during sex _____
- 42) Being easily annoyed by other people _____
- 43) Starting arguments or picking fights to get your anger out _____
- 44) Suddenly feeling afraid for little or no reason _____
- 45) Having sex or being sexual to keep from feeling lonely or sad _____

- 46) Getting angry when you didn't want to _____
- 47) Not being able to feel your emotions _____
- 48) Confusion about your sexual feelings _____
- 49) Using drugs other than marijuana _____
- 50) Feeling jumpy _____
- 51) Absent-mindedness _____
- 52) Feeling paralyzed for minutes at a time _____
- 53) Needing other people to tell you what to do _____
- 54) Yelling or telling people off when you felt you shouldn't have _____
- 55) Flirting or "coming on" to someone to get attention _____
- 56) Sexual thoughts or feelings when you thought you shouldn't have them _____
- 57) Intentionally hurting yourself (for example, by scratching, cutting, or burning) even though you weren't trying to commit suicide _____
- 58) Aches and pains _____
- 59) Having a feeling that something bad was about to happen _____
- 60) Sexual fantasies about being dominated or overpowered _____
- 61) High anxiety _____
- 62) Problems in your sexual relations with another person _____
- 63) Wishing you had more money _____
- 64) Nervousness _____
- 65) Getting confused about what you thought or believed _____
- 66) Avoiding things that you knew would upset you _____
- 67) Feeling tired _____
- 68) Feeling mad or angry inside _____
- 69) Getting into trouble because of your drinking _____

- 70) Staying away from certain people or places because they reminded you of something _____
- 71) One side of your body going numb _____
- 72) Wishing you could stop thinking about sex _____
- 73) Suddenly remembering something upsetting from your past _____
- 74) Wanting to hit someone or something _____
- 75) Feeling hopeless _____
- 76) Hearing someone talk to you who wasn't really there _____
- 77) Suddenly being reminded of something bad _____
- 78) Getting into relationships that were bad for you _____
- 79) Sudden feelings of anger _____
- 80) Trying to block out certain memories _____
- 81) Sexual problems _____
- 82) Using sex to feel powerful or important _____
- 83) Violent dreams _____
- 84) Acting "sexy" even though you didn't really want sex _____
- 85) Just for a moment, seeing or hearing something upsetting that happened earlier in your life _____
- 86) Using sex to get love or attention _____
- 87) Frightening or upsetting thoughts popping into your mind _____
- 88) Getting your own feelings mixed up with someone else's _____
- 89) Wanting to have sex with someone you knew was bad for you _____
- 90) Feeling down and unhappy _____
- 91) Feeling ashamed about your sexual feelings or behaviour _____
- 92) Trying to keep from being alone _____
- 93) Losing your sense of taste _____

- 94) Trouble paying attention to people _____
- 95) Having the same (or nearly the same) bad dream over and over again _____
- 96) Your feelings or thoughts changing when you were with other people _____
- 97) Having sex that had to be kept a secret from other people _____
- 98) Worrying that someone is trying to steal your ideas _____
- 99) Taking drugs or alcohol to stop your feelings _____
- 100) Not letting yourself feel bad about the past _____
- 101) Feeling like things weren't real _____
- 102) Feeling like you were in a dream _____
- 103) Not eating or sleeping for two or more days _____
- 104) Drinking or taking drugs to stop certain thoughts or memories _____
- 105) Trying not to have any feelings about something that once hurt you _____
- 106) Painful or disturbing memories _____
- 107) Daydreaming _____
- 108) Trying not to think or talk about things in your life that were painful _____
- 109) Feeling like life wasn't worth living _____
- 110) Being startled or frightened by sudden noises _____
- 111) Seeing people from the spirit world _____
- 112) Trouble controlling your temper _____
- 113) Being easily influenced by others _____
- 114) Wishing you didn't have any sexual feelings _____
- 115) Wanting to set fire to a public building _____
- 116) Feeling afraid you might die or be injured _____
- 117) Feeling so depressed that you avoided people _____
- 118) Thinking that someone was reading your mind _____

119) Feeling worthless

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Appendix F

Rosenberg Self-Esteem Inventory

Please indicate the extent to which you agree or disagree with the following items.

strongly agree = 1 agree = 2 disagree = 3 strongly disagree = 4

- 1) I feel that I am a person of worth, at least on an equal plane with others. _____
- 2) I feel that I have a number of good qualities. _____
- 3) All in all, I am inclined to feel that I am a failure. _____
- 4) I am able to do most things as well as most other people. _____
- 5) I feel I do not have much to be proud of. _____
- 6) I take a positive attitude toward myself. _____
- 7) On the whole, I am satisfied with myself. _____
- 8) I wish I could have more respect for myself. _____
- 9) I certainly feel useless at times. _____
- 10) At times I think I am no good at all. _____

Appendix G

Relationship Questionnaire

Following are descriptions of four general relationship styles that people often report.

- 1) Please read each description and *circle the letter* corresponding to the style that *best* describes you or is *closest* to the way you generally are in your close relationships. Please read all four descriptions before making your choice.
 - A) **It is easy for me to become emotionally close to others. I am comfortable depending on others and having them depend on me. I don't worry about being alone or having others not accept me.**
 - B) **I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.**
 - C) **I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.**
 - D) **I am comfortable without close emotional relationships. It is important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.**

Please ensure that you have circled one of the choices above before going on to answer question # 2.

2) Please rate *each* of the relationship styles according to the *extent* to which you think each description corresponds to your relationship style.

A) **It is easy for me to become emotionally close to others. I am comfortable depending on others and having them depend on me. I don't worry about being alone or having others not accept me.**

1	2	3	4	5	6	7
not at all like me			somewhat like me			very much like me

B) **I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.**

1	2	3	4	5	6	7
not at all like me			somewhat like me			very much like me

C) **I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.**

1	2	3	4	5	6	7
not at all like me			somewhat like me			very much like me

D) **I am comfortable without close emotional relationships. It is important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.**

1	2	3	4	5	6	7
not at all like me			somewhat like me			very much like me

Appendix H

Counterbalancing of the Questionnaire

Questionnaire Version 1

Demographics Questionnaire
Sexual Experiences Inventory
Relationship Questionnaire
Rosenberg Self-Esteem Scale
Trauma Symptom Inventory

Questionnaire Version 2

Demographics Questionnaire
Trauma Symptom Inventory
Rosenberg Self-Esteem Scale
Relationship Questionnaire
Sexual Experiences Inventory

Additional measures were administered as part of a larger study.

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Freeman, R. J., Roche, D. N., Bush, A. J. and Gatowski, S. (1994). The fate of the mentally ill in federal prison. In S. Verdun-Jones and M. Layton (Eds.), *Proceedings from the XVIIIth International Congress on Law and Mental Health*. Burnaby, BC: Simon Fraser University.

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Title of Thesis: The Nature of the Relationship Between Attachment Style, Childhood Sexual Abuse, and Current Psychological Functioning in Women

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