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Differentiating Sexually Aggressive and Non-Sexually Aggressive Child Sexual  
Abuse Survivors: The Role of Adjustment, Emotions, and Cognitions

by

Wendy S. Manel

A Dissertation  
Submitted to the Faculty of Graduate Studies  
through the Department of Psychology  
in Partial Fulfillment of the Requirements for  
the Degree of Doctor of Philosophy at the  
University of Windsor

Windsor, Ontario, Canada

2009

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## ABSTRACT

The present study examined the adjustment, emotional, and cognitive differences between sexually aggressive child sexual abuse (CSA) survivors and non-sexually aggressive CSA survivors. Research suggests that children who have experienced sexual abuse may have high levels of shame and/or guilt (Deblinger & Runyon, 2005). In addition, a relation has been reported between adjustment difficulties following CSA and a pessimistic attribution style (Feiring, Taska, & Chen, 2002). It was hypothesized that compared to non-sexually aggressive CSA survivors, sexually aggressive CSA survivors would have more adjustment difficulties as evidenced by higher levels of internalizing, externalizing, and trauma-related symptomology; would be more prone to shame and maladaptive guilt; and would have a pessimistic attribution style.

Participants were 83 children (44 females and 39 males) ranging in age from 4-12 years. Participants were divided into 3 groups. The Sexually Aggressive group (SA) consisted of 32 children referred to a sexual assault crisis centre because of a history of CSA and were evidencing interpersonal sexual behaviour problems (SBP). The Non-Sexually Aggressive group (NSA) consisted of 26 children referred to a sexual assault crisis centre because of a history of CSA and were not reported to have been displaying interpersonal SBP. The Comparison group (COM) consisted of 25 children from the community, with no known history of CSA or SBP.

Scenario-based measures were used to assess participant's attribution style and shame- and guilt-proneness. Caregiver-report measures were used to

assess participant's response to trauma, internalizing and externalizing symptomology, and the presence and intensity of sexual behaviours.

Results indicated that children in the SA group evidenced more adjustment difficulties including both global and trauma-related symptomology. Although group differences were not found with respect to attribution style and shame- and guilt- proneness, a significant correlation was found between maladaptive guilt and SBP scores. The results highlight a pattern of risk factors associated with sexual aggression following CSA.



## DEDICATION

I would like to dedicate this manuscript to my parents, Nicky and Joe Manel. Words can not express how truly blessed I am to have such wonderful and supportive parents. I may not always express it, but I am eternally grateful and appreciative of how much you have sacrificed to help me accomplish my goal. Thank you for your unwavering encouragement and nurturance for all these years. I know that I extended the “cut-off” date by a few years, and I appreciate the support you have given me all this time without pressuring me (well, maybe a little at the end!). Thank you!

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## CHAPTER I

### Introduction

#### *Statement of the Problem and Objectives of the Present Study*

Although children represent 21% of the population, over 60% of sexual assaults reported to the police involve a child or youth (Statistics Canada, 2003). Over the past few decades, research has begun to examine the impact of sexual trauma on children and adults (Classen, Palesh, & Aggarwal, 2005; Kendall-Tackett, Williams, & Finkelhor, 1993; Simon & Feiring, 2008; Weille, 1997; Whiffen & MacIntosh, 2005). Research suggests that the trauma experienced by abused children can impact their biological, psychological, and interpersonal development (Cook et al., 2005; Ford, 2005; Tarren-Sweeney, 2008; Valle & Silovsky, 2002; Whiffen & MacIntosh, 2005). As such, child sexual abuse (CSA) is better conceptualized as a process rather than an event (Rasmussen, 2004). For example, associations have been found between CSA and posttraumatic stress disorder (PTSD), depression, self-harming behaviours, anxiety disorders, disruptive behaviour disorders, school difficulties, attachment difficulties, eating disorders, substance use disorders, personality disorders, poor self-esteem, and interpersonal difficulties (Berliner & Elliot, 2002; Cook et al., 2005; Feiring, Taska, & Lewis, 2002; Ford, 2005; Kendall-Tackett et al., 1993; Quas et al., 2005; Valle & Silovsky, 2002; Whiffen & MacIntosh, 2005). Of the numerous sequelae associated with CSA, one outcome that has received little empirical attention is sexual behaviour problems including sexual aggression (Leon, Ragsdale, Miller, & Spacarelli, 2008; Weille, 1997).



Studies have demonstrated an association between juvenile and adult sexual offending and previous victimization (Weille, 1997). However, little research has empirically investigated the factors that differentiate sexually aggressive CSA survivors and non-sexually aggressive CSA survivors (Weille, 1997). The majority of research examining the impact of CSA on future functioning has focused on adult survivors of CSA (Kendall-Tackett et al., 1993). Few studies have empirically investigated the traumagenic effects of CSA on children (Kendall-Tackett et al., 1993; Leon et al., 2008). Although all children who have been sexually abused are at risk for developing future difficulties, sexually aggressive children are particularly vulnerable to difficulties in multiple areas of functioning (Silovsky & Niec, 2002).

In fact, research suggests that inappropriate sexual behaviour is “one of the most problematic, and treatment resistant sequelae of child sexual abuse” (Hall, Mathews, & Pearce, 1998, p. 1047). In addition to the emotional problems associated with CSA, children who demonstrate inappropriate sexual behaviour, in particular sexual aggression, evoke stigmatizing responses from adults which may impede children’s developing self concept (Silovsky & Niec, 2002; Silovsky & Swisher, 2008). These children demonstrate poor impulse-control and emotion regulation, poor boundaries, are indiscriminately friendly, and display a number of sexualized behaviours which also increases their risk of further victimization (Friedrich, 2007; Silovsky & Niec, 2002; Silovsky & Swisher, 2008). Finally, sexually aggressive children are not only victims of sexual abuse, they are also

victims. As such, they place other children at risk for being victimized (Friedrich et al., 2005).

Despite the fact that children who demonstrate inappropriate sexual behaviour are vulnerable to multiple difficulties in all areas of functioning, little research has investigated why some victims of CSA become sexually aggressive (Hall et al., 1998; Tarren-Sweeney, 2008). Research investigating the differences between sexually aggressive CSA survivors and non-sexually aggressive CSA survivors may help with the predictions of which CSA survivors are at risk for developing sexual aggression. Such knowledge is imperative for the development of effective prevention and intervention efforts.

The objectives of the present study are to examine the cognitive, emotional, and adjustment differences between a group of sexually aggressive CSA survivors and a group of non-sexually aggressive CSA survivors. Specifically, with respect to cognitive factors, research suggests that symptom variability in CSA survivors may be related to their attributions about the abuse, as well as their general attributional style (Feiring, Taska, & Chen, 2002; Feiring, Taska, & Lewis, 2002; Runyon & Kenny, 2002; Valle & Silovsky, 2002). Thus, one objective of the present study is to compare the attributional styles of these two groups of children.

With respect to emotional factors, research has found that victims of abuse may experience high levels of shame and/or guilt (Bennett, Sullivan, & Lewis, 2005; Classen et al., 2005; Deblinger & Runyon, 2005; Feiring & Taska, 2005; Negrao, Bonanno, Noll, Putnam, & Trickett, 2005; Weille, 1997). These

two emotions exert differential effects on behavior (Tangney & Dearing, 2002). Specifically, shame-prone individuals tend to focus on the self and are motivated to hide their shame experience from others. As such, they tend to be less empathic (Tangney & Dearing, 2002). Guilt-prone individuals on the other hand, are able to separate the guilt experience from their sense of self and as such, are motivated to take reparative actions (Tangney & Dearing, 2002). Thus, a second objective of this study is to examine whether there are differences in the shame-proneness and guilt-proneness between these two groups of children.

A third objective of the present study is to examine differences in adjustment and trauma symptoms between these two groups of children. Specifically, although both groups of children have experienced a trauma (i.e., CSA), the groups are reacting differently. This study seeks to examine other behavioural or emotional differences between the groups. In addition, given the limited research comparing sexually aggressive CSA survivors to non-sexually aggressive CSA survivors, a fourth objective of the present study is to explore the relations among the various variables in an effort to better understand sexually aggressive behaviour in CSA survivors.

The review of literature is divided into two sections. The first section is largely descriptive and focuses on familiarizing the reader with the available literature on CSA and sexual aggression. An overview of the CSA literature is presented, followed by a review of normative childhood sexual behaviour. Next, pathological childhood sexual behaviour, particularly sexual aggression, is discussed and a summary of the limitations of current theories of childhood

sexual aggression is presented. Finally, the section ends with a useful framework from which to conceptualize sexually aggressive CSA survivors.

The second section of the literature review focuses specifically on the emotion and cognition literature. In particular, the concepts of shame and guilt are reviewed. This is followed by a review of the relation between shame and attributional style. The review then focuses on the effects of shame, attributions and adjustment following CSA, including a model for conceptualizing these effects. The literature review ends with a discussion of the applicability of the model for accounting for sexually aggressive CSA survivors. Finally, the objectives and hypotheses for the present study are presented.

## Section I

### *Child Sexual Abuse*

A large literature exists examining both the short-term and the long-term consequences of CSA (e.g., Beitchman, Zucker, Hood, DaCosta, & Akman, 1991; Beitchman et al., 1992; Berliner & Elliot, 2002; Kendall-Tackett et al., 1993). The majority of research on sexual abuse during childhood and adolescence focuses on the impact of abuse on the individual's social and emotional adjustment (Feiring et al., 1996).

However, there are a number of methodological issues which compromise the findings from previous research (Beitchman et al., 1991). Much of the research on CSA has been unable to separate effects which are directly attributable to abuse from effects that can be attributed to preexisting difficulties (Beitchman et al., 1991). Moreover, many research studies exploring the impact

of CSA have not utilized appropriate control or comparison groups (Merrick, Litrownik, Everson, & Cox, 2008; Simon & Feiring, 2008). As such, it is difficult to draw firm conclusions with respect to the exact effects of CSA on future functioning. Another limitation of the CSA research concerns definitions of CSA. Studies vary according to their classification of CSA and as such, it is difficult to obtain exact prevalence rates (Putnam, 2003). For example, 'child sexual abuse' has been defined as including intercourse, attempted intercourse, oral-genital contact, fondling, exhibitionism, exposure to pornography, and the use of the child for prostitution or pornography (Putnam, 2003; Walker, Carey, Mohr, Stein, & Seedat, 2004). Given the number of behaviours included in definitions of CSA and the heterogeneity of sexually abused samples, there are undoubtedly going to be a range of outcomes reported (Putnam, 2003; Walker et al., 2004). Only a small number of studies have actually examined children (Beitchman et al., 1991; Kendall-Tackett et al., 1993). Instead, many studies explore adult survivors of childhood abuse. Although the long-term effects of CSA are important to document for both prevention and intervention efforts, these effects may manifest very differently from the short-term effects that are prevalent in childhood (Beitchman, 1991; Kendall-Tackett et al., 1993).

Studies utilizing a child sample differ from those assessing adult survivors of CSA on a number of important dimensions (Kendall-Tackett et al., 1993). For example, researchers studying sexually abused children often rely on parent or clinical reports as opposed to children's self-reports (Kendall-Tackett et al., 1993). In addition, the symptoms evaluated in childhood differ from those studied

in adults (Kendall-Tackett et al., 1993). Given the differences between the child literature and the adult literature, the proceeding review will focus on studies utilizing a child sample. Despite the limitations with the CSA literature, research has helped provide information concerning some risk factors associated with CSA victims and their families, as well as to direct attention to a host of difficulties associated with CSA.

#### *Risk Factors Associated with Child Sexual Abuse*

*Demographics.* Historically, there was a belief that young children and infants are rarely the victims of sexual abuse (Mannarino & Cohen, 1986). Although it is difficult to obtain prevalence data given the secretive nature of CSA, prevalence rates are estimated at 7% to 36% for females and 3% to 29% for males (Putnam, 2003). Data on reported cases suggest that 10% of sexually abused children are under 3 years of age, 28.4% of victims are aged 4 to 7 years, 25.5% are children aged 8 to 11 years, and children over 12 years of age represent 35.9% of CSA victims (Putnam, 2003). Given these figures, it appears that risk for CSA increases with age (Mannarino & Cohen, 1986; Putnam, 2003).

Research investigating the age of the victim at the time abuse began and the impact of the abuse on later functioning has produced mixed results (Beitchman et al., 1991; Quas et al., 2005). Some studies report that the younger the age of the child at the time of abuse, the more adverse the psychological effects (Beitchman et al., 1991; Quas et al., 2005). Other studies have found that CSA has more adverse psychological impact on older children (Beitchman et al., 1991; Quas et al., 2005). Still other research has found no age difference in

psychological adjustment (Beitchman et al., 1991; Quas et al., 2005). For example, early studies examining preschool age children suggested that compared to sexually abused school-age children and adolescents, sexually abused preschoolers display fewer behavioural difficulties (Beitchman et al., 1991; Feiring, Taska, & Lewis, 1999; Quas et al., 2005). However, other studies have reported increased psychopathology in preschool age children as well as worse long-term outcomes (Beitchman et al., 1991; Feiring et al., 1999; Quas et al., 2005). In a literature review examining the short-term effects of CSA, Beitchman et al. (1991) found some studies which reported that sexually abused preschoolers display more internalizing symptoms compared to sexually abused school-age children. Other studies however, did not find a relation between age and degree of internalizing or externalizing symptoms. One possible explanation for the inconsistency in the literature on age and the impact of CSA may be related to the fact that many studies do not control for the effect of duration of abuse, relationship of victim to perpetrator, or the severity of the molestation (Kendall-Tackett et al., 1993). These factors are thought to be related to age. Specifically, it is possible that older individuals at the time the abuse is discovered may have experienced a longer duration of abuse and the abuse may have increased in severity over time (Kendall-Tackett et al., 1993).

A more recent study by Feiring et al. (1999) found that compared to sexually abused children, adolescents who were sexually abused during adolescence reported higher levels of depressive symptoms, lower self-esteem and less social support. Feiring et al. attribute the differences in symptom

patterns between child and adolescent victims to stage of development. These authors propose that “the stresses of the abuse and the discovery process in combination with the normative stresses of adolescence make victims in this developmental period particularly vulnerable to experiencing psychological problems related to affect regulation...and self-evaluation” (p.122). However, this study did not include a comparison group of non-abused children. As such, it is difficult to know whether the adjustment difficulties and age differences reported are a function of sexual victimization. It appears that although age is a risk factor for victimization (i.e., victimization risk increases with age), the exact relation between age and impact of CSA remains unclear (Quas et al., 2005).

In addition to exploring age and CSA, research has also examined gender as a risk factor for CSA and subsequent adjustment. Results from both the child and adult literature suggest that girls are at a higher risk for victimization than boys (Beitchman et al., 1991; Berliner & Elliot, 2002; Mannarino & Cohen, 1986; Putnam, 2003; Walker et al., 2004). In fact, according to the literature, approximately 22% to 29% of CSA victims are male, suggesting that females are 2.5 to 3 times more likely to be victimized (Putnam, 2003). It is important to note that figures reported in the literature may underestimate the number of males who have been sexually abused, as research suggests that males may be more reluctant than females to disclose information concerning CSA (Feiring et al., 1999; Putnam, 2003; Walker et al., 2004). Research also suggests that the characteristics of the abuse differ between males and females (Feiring et al.,



1999). In particular, compared to boys, girls are more likely to be abused by a parent figure and to report penetration (Feiring et al., 1999).

In addition to differentially affecting risk for CSA, research suggests that gender also affects the impact of CSA, in particular, symptom expression (Beitchman, 1991; Berliner & Elliot, 2002; Kendall-Tackett et al., 1993; Putnam, 2003; Tarren-Sweeney, 2008; Walker et al., 2004). Some studies have suggested that sexually abused girls are more likely to display internalizing behaviours including depression, anxiety and PTSD (Beitchman, 1991; Berliner & Elliot, 2002; Kendall-Tackett et al., 1993; Putnam, 2003; Quas et al., 2005; Walker et al., 2004). In contrast, sexually abused boys are more likely to display externalizing behaviours including aggression, impulsivity, and oppositional behaviour (Beitchman, 1991; Berliner & Elliot, 2002; Kendall-Tackett et al., 1993; Putnam, 2003; Quas et al., 2005; Walker et al., 2004). However, these differences must be interpreted cautiously for a number of reasons. First, given the difference in the prevalence of CSA in males and females, the majority of research examining the sequelae of CSA typically involves a female sample (Feiring et al., 1999). Of the studies including a male sample, the sample size is typically much smaller than those studies utilizing a female sample. Second, as mentioned previously, there are differences in the type of sexual abuse experienced by males and females. As such, it is difficult to know whether differential symptom presentation is related to gender or instead to the nature of the abuse (Feiring et al., 1999). In fact, research suggests that for both males and females, CSA is associated with increased lifetime rates of a number of

psychiatric disorders including mood disorders, anxiety disorders, ADHD, eating disorders, and personality disorders (Walker et al., 2004). It is unclear whether or not sexually abused girls and boys differ in the degree or type of childhood psychopathology (Beitchman et al., 1991).

*Emotional and behavioural risk factors.* Research suggests that CSA can have a pervasive impact on a child's social and personality development (Wolfe, Sas, & Wekerle, 1994). Experiencing sexual abuse in childhood has been linked to increased risk of emotional and behavioural difficulties (Beitchman et al., 1991; Berliner & Elliot, 2002; Kendall-Tackett et al., 1993; Putnam, 2003; Quas et al., 2005; Walker et al., 2004). As mentioned previously, children and adolescents who have been sexually abused are at risk for developing depression, low self-esteem, substance abuse disorders, externalizing disorders, and PTSD (Beitchman et al., 1991; Berliner & Elliot, 2002; Kendall-Tackett et al., 1993; Leon et al., 2008; Putnam, 2003; Quas et al., 2005; Walker et al., 2004). For example, a study by Wolfe et al. (1994) found that 48.8% of their sample of children who had been sexually abused met DSM-III-R criteria for PTSD. The authors found that compared to CSA survivors who did not meet criteria for PTSD, those children with PTSD were more likely to have experienced a longer duration of abuse. They did not find any significant relations between PTSD and frequency or severity of the abuse, or the child's relationship to the offender. Significant relations were found between PTSD and abuse-related fears, anxiety, depression, and feelings of guilt about the abuse. The results indicated that the child's feelings of guilt about the abuse were a significant predictor of PTSD.

Based on their findings, the authors concluded that a child's psychological reaction to CSA (i.e., feelings of guilt) may mediate the impact of the trauma (Wolfe et al., 1994). However, a limitation of the study is that guilt was determined by the endorsement of one statement indicating that the child felt guilty about what happened to him or her. The authors did not define guilt or utilize a reliable measure to assess guilt. Despite this limitation, the study does suggest that the emotional and behavioural risk factors associated with CSA may be related in part, to the child's interpretation or attributions about the abuse (Wolfe et al., 1994).

Maladaptive levels of guilt and shame in CSA survivors have been reported in other studies investigating the impact of CSA (Berliner & Elliot, 2002). In fact, almost every general domain of psychological difficulties has been associated with CSA (Kendall-Tackett et al., 1993). Research suggests that CSA can actually alter children's cognitive attributional style, creating a self-blaming and pessimistic world view (Berliner & Elliot, 2002; Valle & Silovsky, 2002). Sexually abused children may perceive themselves as different from others, be less trusting of those in their immediate environment, and can exhibit disturbed object relations (Berliner & Elliot, 2002). However, after reviewing the literature on the impact of CSA on children, Beitchman et al. (1991) concluded that "with the exception of sexualized behaviour, most of the symptoms found in child and adolescent victims of sexual abuse were characteristic of clinical samples in general" (p. 546). Similarly, more recent research has reported that the two

outcomes most reliably associated with a history of sexual abuse include sexualized behaviors and PTSD (Merrick et al., 2008).

*Parental characteristics and family risk factors.* Research suggests that certain family constellations may increase a child's risk for sexual abuse. In particular, the absence of one or both parents places both boys and girls at an increased risk for CSA (Beitchman et al., 1991; Berliner & Elliot, 2002; Putnam, 2003). The presence of a stepfather in the home doubles the risk of CSA for girls (Putnam, 2003). Increased risk of CSA has been associated with a host of other family characteristics including parental mental illness, parental alcoholism and/or substance abuse, extended maternal absences, marital disturbance, parental history of CSA, and punitive parenting (Beitchman et al., 1991; Berliner & Elliot, 2002; Putnam, 2003; Quas et al., 2005). Although low socioeconomic status (SES) is a risk factor for physical abuse and neglect, findings suggest that it does not increase a child's risk for sexual abuse (Putnam, 2003). However, a disproportionate number of reported CSA cases are from lower SES groups, mainly because these families also present to child protection agencies or authorities for other difficulties (Putnam, 2003).

Family functioning not only affects risk for CSA, it has also been reported to affect adjustment following CSA (Beitchman et al., 1991; Berliner & Elliot, 2002; Friedrich, Davies, Feher, & Wright, 2003; Quas et al., 2005). For example, studies suggest that sexually abused children and adolescents from dysfunctional families have more adjustment difficulties than abused youth from functional families (Beitchman et al., 1991; Berliner & Elliot, 2002; Quas et al.,

2005; Wilcox, Richards, & O’Keeffe, 2004). However, it is important to note that family psychopathology and dysfunction are themselves risk factors for a number of psychological and adjustment difficulties (Beitchman et al., 1991; Berliner & Elliot, 2002; Quas et al., 2005).

### *Normative Childhood Sexual Behaviour*

Empirical information concerning child sexual development and knowledge is limited; however, sexuality in children is a normal part of development (Gil & Johnson, 1993; Merrick et al., 2008; Pithers, Gray, Cunningham, & Lane, 1993; Sandnabba, Santilla, Wannäs, & Krook, 2003; Silovsky & Swisher, 2008). In fact, research suggests that 40% to 85% of children under the age of 13 will engage in some type of sexual behaviour (Gil & Johnson, 1993; Sandnabba et al., 2003). The sexual behaviour of children tends to be an “information gathering process” in which children explore both their own and others’ bodies as well as gender roles and behaviours (Gil & Johnson, 1993; Sandnabba et al., 2003; Silovsky & Swisher, 2008).

Although there is great variability between children with respect to their sexual behaviours, healthy sexual development in children generally passes through a series of stages (Pithers et al., 1993; Sandnabba et al., 2003). From the ages of birth to five years, children demonstrate curiosity about their bodies. Beginning in infancy, and continuing over the course of development, sexual behaviours such as self-stimulation or masturbation appear (Gil & Johnson, 1993; Pithers et al., 1993; Sandnabba et al., 2003; Silovsky & Swisher, 2008; Tarren-Sweeney, 2008). These behaviours serve both a self-soothing and self-

excitation function. Children may masturbate both in private and public places (Gil & Johnson, 1993; Pithers et al., 1993; Sandnabba et al., 2003; Silovsky & Swisher, 2008). Children also demonstrate curiosity about others' bodies including exploration of others' genitalia (Gil & Johnson, 1993; Merrick et al., 2008; Pithers et al., 1993; Sandnabba et al., 2003; Silovsky & Swisher, 2008). Studies have found that by two years of age, children hug, cuddle, kiss, climb on top of each other, and look at each other's genitals (Sandnabba et al., 2003). This exploratory behaviour often includes giggling and amusement as opposed to coercion (Pithers et al., 1993). Sexual language is used frequently by children at this age (Gil & Johnson, 1993; Pithers et al., 1993; Sandnabba et al., 2003). However, it is uncommon for children under the age of five to discuss sexual acts or demonstrate adult-like sexual behaviours (Merrick et al., 2008; Sandnabba et al., 2003; Silovsky & Swisher, 2008).

From the ages of approximately 6 to 10 years, children continue to demonstrate exploratory behaviours of both their own and others' bodies (Gil & Johnson, 1993; Pithers et al., 1993; Sandnabba et al., 2003; Silovsky & Swisher, 2008). This exploration and curiosity about sexuality often takes the form of playing games with same-age peers (e.g., "doctor") and can include behaviours such as kissing, fondling, exhibitionism, and role-playing (Gil & Johnson, 1993; Pithers et al., 1993; Sandnabba et al., 2003; Silovsky & Swisher, 2008). At this stage, limited interest in the opposite sex is typical and children of this age demonstrate interest in words associated with sex (Pithers et al., 1993). School-age children continue to engage in masturbatory behaviours but such behaviour

occurs in the home or other private places as opposed to in public (Gil & Johnson, 1993; Merrick et al., 2008; Pithers et al., 1993; Sandnabba et al., 2003; Silovsky & Swisher, 2008). Although some children experience orgasm, orgasms are more commonly found in children entering puberty (Gil & Johnson, 1993).

During the preadolescent developmental period (ages 11 to 12), children continue to engage in self-stimulatory and masturbatory behaviours (Gil & Johnson, 1993; Pithers et al., 1993; Sandnabba et al., 2003; Silovsky & Swisher, 2008). Developmentally, peers take on an increasingly important role and as such, some children at this stage may engage in sexual activity with peers such as kissing and fondling (Gil & Johnson, 1993; Pithers et al., 1993; Sandnabba et al., 2003; Silovsky & Swisher, 2008). Preadolescent children may imitate sexual behaviours and may engage in these behaviours with both same-sex and opposite-sex peers (Gil & Johnson, 1993; Pithers et al., 1993; Sandnabba et al., 2003; Silovsky & Swisher, 2008).

The sexual interactions of children typically involve peers of similar age, size, and developmental level and are voluntary (Araji, 1997; Gil & Johnson, 1993; Sandnabba et al., 2003; Silovsky & Swisher, 2008). Although research has demonstrated that siblings engage in mutual sexual exploration, most sexual play between children involves peers (Gil & Johnson, 1993; Silovsky & Swisher, 2008). Childhood sexual behaviour tends to be limited in both type and frequency (Gil & Johnson, 1993; Sandnabba et al., 2003). Children display curiosity about many aspects of their life, sexuality being only one part (Gil & Johnson, 1993; Sandnabba et al., 2003; Silovsky & Swisher, 2008). The behaviours involved in

normative sexual development may result in feelings of embarrassment in children; however, they do not typically cause feelings of anger, shame, fear, or anxiety (Gil & Johnson, 1993; Silovsky & Swisher, 2008).

### *Sexually Aggressive Children*

The sexual behaviours of children can be placed along a continuum from the normative, age-appropriate behaviours reviewed above, to highly aggressive and coercive sexual behaviours (Araji, 1997; Bonner, Walker, & Berliner, 1999; Friedrich, 2007). Research has demonstrated that children as young as 2 ½ years of age can display sexually intrusive acts against other children (Araji, 1997; Gil & Johnson, 1993; Silovsky & Niec, 2002). However, the literature on sexual aggression in children is limited by two factors. First, empirical research on both normative and problematic sexual behaviour in children is of a recent origin (Araji, 1997; Bonner et al., 1999; Friedrich, 2007; Friedrich et al., 2003; Hall et al., 1998; Silovsky & Letourneau, 2008; Silovsky & Niec, 2002). In fact, the phenomenon of sexual aggression in children was only introduced into the literature in 1988 (Araji, 1997; Friedrich et al., 2003). It was not until the mid to late 1990s that empirical studies began to assess various facets of this phenomenon (Bonner et al., 1999; Silovsky & Niec, 2002; Vizard, Monck, & Misch, 1995).

Second, as of yet there is no agreed upon definition as to what constitutes problematic sexual behaviour in children (Araji, 1997; Friedrich, 2007; Hall et al., 1998). Children who demonstrate inappropriate sexual behaviours have been referred to in the literature as “sexually reactive”, “sexually aggressive”,



“sexualized”, “sexual offenders”, “children who molest”, “child perpetrators” and, more recently, “children with sexual behaviour problems” (Araji, 1997; Bonner et al., 1999; Gil & Johnson, 1993; Letourneau, Schoenwald, & Sheidow, 2004; Moore, Franey, & Geffner, 2004; Silovsky & Niec, 2002). These various labels are problematic because they typically refer to a heterogeneous group of children, some of whom demonstrate sexually inappropriate behaviour of an interpersonal nature (e.g., involving force or coercion) and some of whom demonstrate sexually inappropriate behaviour of an intrapersonal nature (e.g., excessive masturbation). Defining problematic sexual behaviour in children is difficult because little is known about normal psychosexual development in children (Araji, 1997; Chaffin et al., 2008; Hall et al., 1998; Merrick et al., 2008; Moore et al., 2004; Vizard et al., 1995). In addition, there is a tendency for individuals to be reluctant to view and label young children as sexually inappropriate and thus adults tend to rationalize, minimize, or deny the problematic sexual behaviours of children (Araji, 1997, Hall et al., 1998; Vizard et al., 1995).

For the purposes of the present study, the following review attempts to limit the discussion to children who demonstrate sexually aggressive behaviours, which are defined as sexual behaviours involving another individual and include the use of coercion, intimidation, or force. However, given the limitations in the literature, some of the review may focus on children with sexual behaviour problems (SBP) in general, and will be identified as such.

### *Definition, Incidence, and Prevalence*

SBP has been defined in the literature as sexual behaviour that occurs at a greater frequency or younger age than would be developmentally expected; interferes with development; is coercive or involves intimidation or force; is associated with emotional distress of either the child with the SBP or other children involved; and/or reoccurs after adult intervention (Chaffin et al., 2008; Friedrich, 2007; Letourneau et al., 2004; Silovsky & Niec, 2002). The precise prevalence of SBP, including sexual aggression, has not been established because such behaviour is often not reported (Hall et al., 1998). However, research suggests that each year in the United States, 70,000 boys and 110,000 girls are sexually abused by youth under the age of 18 (Rasmussen, 2004). Utilizing data from the United States Child Protection Services (CPS), one study reported that approximately 40% of all CSA is performed by youth under the age of 20 (Gray, Pithers, Busconi, & Houchens, 1999). In addition, the study indicated that children under the age of 13 perform 13% to 18% of all CSA. Utilizing juvenile court data, these authors reported that between 1980 and 1995, the juvenile arrest rate for children under 12 years of age increased by 24% for general crimes, 125% for sex offenses (excluding rape), and 190% for forcible rape (Gray et al., 1999). Moreover, "of all juvenile arrests for children under age 12, 18% are for sex offenses (excluding rape) and 11% are for forcible rape" (Gray et al., 1999, p. 602).

A more recent review suggests that in the United States during the year 2000, 16% of arrests for forcible rape and 19% of arrests for all other sex

offenses involved youths under the age of 18 years (Righthand & Welch, 2004). In the United States in 2001, more than 15,500 adolescent males and females were charged with a sexual offense, 7,300 of these youth were between the ages of 10 to 14 (Moore et al., 2004). In that same year, 462 children under the age of 10 were charged with a sexual offense (Moore et al., 2004). A recent report from the United States Office of Juvenile Justice indicated that, in 2006, 12% of arrests for forcible rapes were of juveniles under the age of 18 years. In that same year, there were 15,900 juvenile arrests for a sexual offense other than forcible rape (Snyder, 2008). Some authors suggest that such figures likely underestimate the prevalence of sexual offenses committed by children because in many countries children under a certain age are exempt from criminal liability and thus such behaviour goes unreported (Moore et al., 2004; Righthand & Welch, 2004; Vizard et al., 1995). Also, not all offences are discovered or disclosed by victims (Moore et al., 2004; Righthand & Welch, 2004; Vizard et al., 1995). Even when such behaviours are discovered, there is a tendency of parents, police, and professionals to deny and minimize the significance of the behaviours (Moore et al., 2004; Righthand & Welch, 2004; Vizard et al., 1995). Although specific prevalence rates are unknown, it is clear that such behaviours are increasingly becoming known to clinicians and those involved in protecting children (Chaffin et al., 2008).

### *Sexual Aggression and Child Sexual Abuse*

In addition to the difficulty establishing the prevalence of SBP, there is little consensus regarding the role of previous victimization in the development of SBP

and sexual aggression (Chaffin et al., 2008; Hall et al., 1998). Although there is a general belief that CSA survivors are at greater risk to offend, research has demonstrated that only a small number of children who have been sexually abused demonstrate SBP (Kendall-Tackett et al., 1993). Moreover, the majority of children who display SBP in childhood, do not become adolescent or adult sex offenders (Chaffin et al., 2008; Friedrich et al., 2003; Hall et al., 1998). However, studies have reported that between 50% to 100% of children who demonstrate interpersonal SBP are suspected to have experienced CSA (Hall et al., 1998). For example, a study by Gray et al. (1999) examining etiological characteristics of children with SBP, found that more than half (56%) of the children in their sample had been victims of abuse, with 84% of the abused children being CSA survivors. They reported that one of the most common outcomes of CSA is an increased frequency of sexual behaviours (Gray et al., 1999). These authors concluded that CSA is a “significant, but nonessential, etiological factor in the onset of problematic sexual behaviours in children” (Gray et al., 1999, p. 602).

Similarly, in a review of empirical studies examining the impact of sexual abuse on children, Kendall-Tackett et al. (1993) reported that compared to clinic referred non-abused children, children who had been sexually abused had higher rates of PTSD and sexualized behaviour. These were the only two symptoms that consistently discriminated abused and non-abused children (Kendall-Tackett et al., 1993). Thus, not all children with SBP have a history of CSA and not all children with a history of CSA develop SBP (Friedrich et al., 2003; Simon & Feiring, 2008; Tarren-Sweeney, 2008).

### *Characteristics and Risk factors Associated with Sexually Aggressive Children*

In order to determine which CSA survivors are at risk to develop serious SBP research has begun to examine characteristics of children with SBP and sexual aggression (Hall et al., 1998; Friedrich et al., 2003; Letourneau et al., 2004). Given the heterogeneity of this group of children, there are few characteristics that distinguish children with SBP from other children (Bonner et al., 1999; Chaffin et al., 2008; Letourneau et al., 2004).

*Demographics.* A number of individual characteristics have been examined in children with SBP but few of these help distinguish between children with and without SBP (Chaffin et al., 2008; Letourneau et al., 2004). For example, although the majority of adolescent sex offenders are males, gender fails to distinguish children with SBP (Chaffin et al., 2008; Friedrich et al., 2003; Letourneau et al., 2004; Silovsky & Niec, 2002; Vizard et al., 1995). A study from the adolescent and adult offender literature reported that only 1% of sexual offences by adolescents and adults are attributed to females (Vizard et al., 1995). In contrast, studies exploring SBP in young children utilize samples consisting of equal numbers of males and females (Silovsky & Niec, 2002). There is no current evidence of gender differences in the prevalence of intrapersonal or interpersonal SBP in children (Chaffin et al., 2008; Friedrich et al., 2003; Letourneau et al., 2004).

With respect to other demographic factors associated with SBP, the literature suggests that age may be negatively correlated with frequency of inappropriate sexual behaviours, with younger children displaying more frequent

inappropriate sexual behaviours than older children (Friedrich, 2007; Friedrich et al., 2003; Letourneau et al., 2004). However, Friedrich (2007) cautions interpretation of findings reporting age differences in inappropriate sexual behaviour. He suggests that younger children tend to be more closely monitored by parents and as such, their sexually inappropriate behaviour may be more likely to be detected than that of older children. In a review of the studies examining the demographics of sexually aggressive children, Araji (1997) reported that one study found the mean age at first perpetration by boys was 8.7 years (range, 4 to 12 years) and for girls 6.7 years (range, 4 to 9 years). However, across studies there were no significant differences between the average age of male and female sexually aggressive children (Araji, 1997).

*Emotional and behavioural characteristics and risk factors.* Sexually aggressive children have been described as impulsive, and lacking in self-control, empathy, and perspective taking abilities. (Araji, 1997). These children have been observed to demonstrate feelings of anger, rage, shame, and loneliness (Araji, 1997). Sexually aggressive children experience difficulties with peers and in school as evidenced by behavioural problems and poor social skills (Araji, 1997). SBP in children has been associated with high levels of distress as well as a "proneness to acting out" (Friedrich et al., 2003, p. 97). In addition, the research on SBP in children consistently demonstrates that children with SBP display a number of internalizing and externalizing symptomology (Araji, 1997; Cunningham & MacFarlane, 1996; Friedrich, 2002, 2007; Friedrich et al., 2003; Gil & Johnson, 1993; Johnson & Doonan, 2006; Letourneau et al., 2004; Rich,

2003; Silovsky & Niec, 2002). For example, one study characterized sexually abused children with SBP, especially those of an interpersonal nature, as displaying hopelessness/depression, lacking warmth/empathy, and demonstrating a restricted range of affective expression (Hall et al., 1998). Another study examining children in the child welfare system found that compared to children in foster care, SBP were more frequent in children in residential treatment centres, suggesting that SBP is most often found in highly disturbed or distressed children (Friedrich et al., 2005). A study examining children who evidenced sexually intrusive sexual behaviour (i.e., interpersonal SBP) found strong positive correlations between sexually intrusive behaviour and internalizing, externalizing, and PTSD symptomology (Friedrich et al., 2003).

Children with SBP are reported to display a high incidence of psychiatric diagnoses. One study found that 93% of their sample of children with SBP met the criteria for at least one psychiatric diagnosis (Gray, Busconi, Houchens, & Pithers, 1997). A second study reported that 123 of their 127 (96%) participants with SBP met the criteria for one or more psychiatric disorders (Gray et al., 1999). The diagnoses most commonly associated with these children include anxiety, Conduct Disorder (CD), Attention Deficit/Hyperactivity Disorder (ADHD), and Oppositional Defiant Disorder (ODD; Bonner et al., 1999; Gray et al., 1997; Gray et al., 1999). The relationship between psychiatric disorders and SBP may be moderated by the child's abuse history, with abused children displaying higher rates of both psychiatric diagnoses and SBP (Gray et al., 1999).

As mentioned previously, SBP in children has often been associated with PTSD (e.g., Bonner et al., 1999; Silovsky & Niec, 2002). One study reported that 54% of their sample of children with SBP evidenced symptoms of PTSD (Silovsky & Niec, 2002). A recent longitudinal study examined the relation between protective factors and trauma symptoms in children with SBP who are in foster care (Leon et al., 2008). In the study, trauma was assessed according to a factor analysis of an abridged version of a trauma symptom checklist. The three factors that emerged as indicative of trauma symptoms included: Negative Affect (e.g., feelings of sadness or fear), Sexually Ruminative Thoughts (e.g., thoughts about engaging in sexual acts), and Non-Sexual Ruminative Thoughts (e.g., remembering unpleasant events and fearful intrusive thoughts). The results of the study indicated that higher levels of sexual abuse (e.g., long duration, more intrusive) predicted higher levels of negative affect in children with SBP. In addition, higher levels of sexual abuse predicted higher levels of both sexually and non-sexually ruminative thoughts. However, children with SBP who had higher levels of interpersonal and emotional competence evidenced a decrease in non-sexually ruminative thoughts over time (Leon et al., 2008). Research has suggested that rumination produces and maintains negative affect (Leon et al., 2008). The authors suggest that social and emotional competence in children serves a protective function in that it decreases the likelihood of the child engaging in a maladaptive form of coping (i.e., rumination). Although this study did not include a comparison group, nor did it measure the relation between symptoms and stability of SBP, the results do suggest that children with SBP that



evidence lower levels of social and emotional competence tend to have more enduring trauma symptoms such as negative affect and ruminative thoughts.

Although the research on SBP is limited, the majority of research seems to suggest that SBP in children is associated with increased adjustment difficulties (e.g., internalizing, externalizing, and trauma symptomology) as well as limited social and emotional competence (Friedrich et al., 2003). In fact, a recent study examining predictors of SBP in children with a complex history of maltreatment found that almost all of the children in their study who evidenced SBP had clinically significant emotional and behavioural disturbances, as well as interpersonal and social problems (Tarren-Sweeney, 2008).

*Parental characteristics and family risk factors.* Differences have been reported in the characteristics of the parents of children with SBP (Friedrich, 2007). In one of the few studies to date specifically investigating the factors associated with SBP in sexually abused children, Hall et al. (1998) found that compared to mothers of children with no SBP and mothers of children who demonstrate intrapersonal SBP, the mothers of children with interpersonal SBP experienced a greater range of negative experiences in childhood and adulthood. The majority of mothers of children with interpersonal SBP reported a childhood history of neglect. These mothers reported more PTSD symptomology and exhibited difficulty maintaining their own boundaries and respecting the boundaries of others. This study also found that the permanent loss of a father and parent-child role reversal were more prevalent among sexually abused children with interpersonal SBP.

Other studies have found that the caregivers of children with SBP report high levels of parental stress and strained parent-child relationships (Bonner et al., 1999; Gray et al., 1999; Johnson & Doonan, 2006; Pithers, Gray, Busconi, & Houchens, 1998; Silovsky & Niec, 2002; Tarren-Sweeney, 2008). These parents also report a number of qualities they find disappointing in their child, and tend to be rejecting toward their child (Johnson & Doonan, 2006; Pithers et al., 1998). The literature also suggests that many children with SBP are exposed to parental domestic violence (Chaffin et al., 2008; Gray et al., 1999; Johnson & Doonan, 2006; Pithers et al., 1998; Tarren-Sweeney, 2008). Significant levels of psychopathology including substance abuse, antisocial behaviour, and characterological problems have been reported in the parents of children with SBP (Gray et al., 1999; Pithers et al., 1998; Tarren-Sweeney, 2008).

A host of other family difficulties have been identified in the backgrounds of children with SBP including family adversity, modeling of coercion, and modeling of sexuality (Chaffin et al., 2008; Friedrich, 2007; Friedrich et al., 2003; Johnson & Doonan, 2006; Merrick et al., 2008; Tarren-Sweeney, 2008). According to one study, one of the most robust family correlates of child SBP is family sexuality. Family sexuality is defined as family nudity and opportunities for children to view sexual intercourse (Letourneau et al., 2004). Poor boundaries and family chaos are also often associated with family sexuality (Merrick et al., 2008). Some children who live in homes with domestic violence and family sexuality, are exposed to the message that sex and aggression are complimentary (Johnson & Doonan, 2006). These children develop a distorted

template of sexual relationships (Johnson & Doonan, 2006). Thus, it appears that many children with SBP come from dysfunctional and chaotic environments where multiple forms of abuse, neglect, violence, and pathology are present (Araji, 1997; Friedrich et al., 2003; Johnson & Doonan, 2006; Merrick et al., 2008).

*Abuse history.* As mentioned previously, children who have experienced CSA are at risk for developing SBP (Chaffin et al., 2008; Gray et al., 1999; Silovsky & Niec, 2002). However, this increased risk appears to apply to other forms of maltreatment as well (Merrick et al., 2008). For example, a study by Bonner et al. (1999) found that 59% of children with SBP reported a history of maltreatment including physical abuse (32%), sexual abuse (48%), emotional abuse (35%), and/or neglect (16%). In fact, only 25% of the participants in their study of children with SBP reported no abuse history (Bonner et al., 1999).

Similarly, another study reported that 95% of their sample of children with SBP had a history of CSA, 48% of the children had been physically assaulted, 33% had been emotionally abused, and 11% had been neglected (Gray et al., 1997). Over 53% of the children in their study had experienced both sexual and physical abuse. A number of studies have reported similar findings. A study by Hall et al. (1998) found that compared to sexually abused children with no SBP and with intrapersonal SBP, children with interpersonal SBP reported nearly double the amount of multiple maltreatment experiences (i.e., physical and emotional abuse). These authors reported that, for their study sample, "physical and emotional abuse of the child are the key familial/caregiving variables

predicting interpersonal sexual behaviour problems” (p. 1055). They contend that ongoing abuse by the child’s family can legitimize the use of force as a way to control others and deal with one’s negative emotions. Abuse can also contribute to feelings of shame and anger which contribute to the child’s future abusive behaviours (Hall et al., 1998; Silovsky & Niec, 2002).

A recent study investigating the relation between physical and emotional abuse experiences and sexualized behaviour (interpersonal and intrapersonal) in children reported that both emotional and physical abuse were predictive of sexualized behaviour (Merrick et al., 2008). The authors suggested that any form of nonsexual maltreatment may result in increased anxiety and dysregulation in the child. A child who is experiencing increased emotional dysregulation might engage in sexualized behaviour in an effort to self-soothe, as well as to gain physical closeness and intimacy (Merrick et al., 2008).

In addition to a general history of abuse, specific elements of the abuse have been related to different types of sexual behaviour in children (Hall et al., 1998). Specifically, Hall et al. (1998) compared three groups of sexually abused children: children with developmentally expected sexual behaviour (Group 1), children with intrapersonal SBP (Group 2), and children with interpersonal SBP (Group 3). The data for the study were gathered from the clinical records of 100 sexually abused children between the ages of 3 and 7 years. The authors coded 350 variables related to the child and family’s history and functioning (e.g., social and physical environment quality and stability, child health history, child behaviour history) and details of the abuse (e.g., characteristics of the sexual

acts, perpetrator information). They found that sexually abused children who demonstrated developmentally expected sexual behaviours did not experience sexual arousal during the abuse, but did endure pain/discomfort and fear. Sadism was not involved in the abuse of these children and they tended to blame the perpetrator for the abuse. Sexually abused children who demonstrated intrapersonal SBP were more likely than the children in Group 1 to have experienced sexual arousal during the abuse, and experienced less fear and pain/discomfort than the children in Group 3. These children were exposed to “minimal” sadism. The results indicated that these children were either ambivalent with respect to blame or blamed themselves for the abuse. The children in Group 3 endured the most discomfort, pain, fear, and sadism but also experienced sexual arousal. The majority of these children were ambivalent about whom to blame for their abuse. Interestingly, this study found that abuse severity (i.e., the physical intrusiveness of the sexual acts, the duration of the abuse, and the child’s relationship to the perpetrator) was not related to SBP. The finding that abuse severity is not related to SBP has been reported in other studies as well (Araji, 1997; Simon & Feiring, 2008).

The study by Hall et al. (1998) suggests that arousal and discomfort are key factors in determining which CSA survivors are more likely to develop SBP and which children are more likely to internalize blame (Hall et al., 1999). However, the authors did not provide information concerning how level of arousal was determined or how discomfort was defined. The data for their study came from clinical records from various agencies and thus the reliability, validity, and

specificity of such records were not empirically established. A problem with applying these results to develop effective prevention and intervention efforts is that specific elements of the abuse are often unknown to those involved in treating these children. Although such information can contribute to explanatory theories of the development of SBP, it does not substantially inform intervention or prevention efforts.

### *Theories of Sexual Aggression in Children*

Based on the previous review, it appears that little is known about what differentiates sexually abused children who are sexually aggressive from sexually abused children who are not sexually aggressive (Chaffin et al., 2008; Hall et al., 1998). In fact, it appears as though both groups of children may possess similar characteristics including increased emotional and behavioural difficulties, problems with relationships, social skill difficulties, and family dysfunction (Chaffin et al., 2008; Hall et al., 1998).

A number of theories have been developed to attempt to explain the development of SBP in children (see Rich, 2003 and Ryan, 1997 for a review of the individual theories). However, a major criticism of the majority of theories of the etiology of sexual aggression in children is that they are not empirically derived and many lack any empirical validation (Rasmussen, 1999). In addition, the majority of models do not account for both the child's emotions and their cognitions, instead focusing on one or the other. For example, trauma models based on a psychodynamic framework do not focus on the processes through which PTSD impacts behaviour (i.e., the cognitions). Similarly, the problem with

trauma models based on a cognitive framework is that they do not adequately address the role of emotions (Rasmussen, 1999). This is unfortunate since children's mental representations of events include emotional information, which they use to anticipate the outcomes of future events and to guide their behaviour (Arsenio & Lover, 1995). Cognitive models are not always developmentally appropriate for explaining the effects of trauma on very young children whose cognitive abilities are not as well developed as those of older children (Rasmussen, 1999). Even integrative approaches which include both cognitive and emotional aspects in the conceptualization and treatment of sexual aggression in children (e.g., The Trauma Outcome Process model; Rasmussen, 1999, 2004) are limited in that they do not help predict or explain which children who have been exposed to trauma will develop sexual aggression and which children will not. As such, these models do little to help those who work with sexually abused children to predict and prevent SBP from developing.

*Developmental Psychopathology as a Framework for Conceptualizing Sexual Aggression in Child Sexual Abuse Survivors*

*Description of the framework.* Developmental Psychopathology (DP) is an integrative approach which views psychopathology as resulting from the interaction of multiple dynamic influences that change over the course of development (Cummings, Davies, & Campbell, 2000; Friedrich, 2002). Psychological disorders are not the result of a single causal chain of events, but instead reflect the individual's difficulty adapting to multiple situations over the course of development (Cummings et al., 2000; Friedrich, 2002). It is a comprehensive, multi-systemic, process-oriented framework from which to

conceptualize both typical and atypical development (Cummings et al., 2000; Friedrich, 2002). The DP perspective places emphasis on both risk and protective factors and is holistic in its consideration of these factors across multiple domains of functioning, and over the course of development (Cummings et al., 2000; Friedrich, 2002). The DP model attempts to explain an individual's current functioning through an understanding of the process through which the individual's developmental trajectory deviated toward pathological as opposed to typical functioning (Cummings et al., 2000; Friedrich, 2002).

This conceptualization is useful for the development of both prevention and intervention efforts. Specifically, if an individual's difficulties are conceptualized as deviations over the course of development, intervention can target specific areas where the individual can make alterations in order to change their trajectory toward a more healthy level of functioning (Landy & Menna, 2006).

Using DP as a guiding framework for conceptualization of an individual's current functioning, it is important to understand the individual on multiple levels and from various points in development (Cummings et al., 2000; Friedrich, 2002). For example, it is important to consider early childhood experiences and relationships and the impact they have on the individual's development and way of relating to others. Moreover, current cognitive processes are also important because people construct their knowledge on the basis of their perceptions of relations between their own actions and events, their previous experiences, and the meaning these events hold for their well-being (Cummings et al., 2000;



Friedrich, 2002). Therefore, an important component of conceptualization of the individual involves an understanding of the individual's thoughts of themselves, of others, and their overall world view. However, individuals can not be considered in isolation from their context; development is a complex interaction between the individual and their environment over time (Cummings et al., 2000; Friedrich, 2002). It is important to consider the risk factors that impinge on the individual, both from a macro and micro systems level (e.g., child characteristics, parent characteristics, culture). It is also important to consider the individual's protective factors and to capitalize on these strengths throughout treatment (Cummings et al., 2000; Friedrich, 2002). Although the present study is not designed to explicitly validate a DP model of sexual aggression, it has been adopted as a useful framework from which to conceptualize sexual aggression in CSA survivors.

*Developmental Psychopathology and sexually aggressive child sexual abuse survivors.* The DP framework adheres to the principles of equifinality and multifinality (Cummings et al., 2000). Equifinality refers to the notion that multiple causes can result in a single outcome (Cummings et al., 2000). Multifinality refers to the notion that a single cause can result in multiple endpoints (Cummings et al., 2000). The framework predicts that not all children who are sexually abused will develop SBP and not all children with SBP will have experienced CSA. Instead, the theory directs researchers to focus on which factors in the child's history negatively impacted his or her development.

With respect to sexually aggressive CSA survivors, it appears that these children developed a maladaptive pattern of behaviour that is derived from the children's ineffective ability to cope with their abuse (Merrick et al., 2008). As a result of coping deficits, compared to non-sexually aggressive CSA survivors, it is hypothesized that sexually aggressive children will demonstrate higher rates of adjustment difficulties including internalizing, externalizing, and PTSD symptomology. In addition, it is hypothesized that sexually aggressive children's emotional and cognitive responses to the abuse differ from non-sexually aggressive CSA survivors. For example, sexual abuse is associated with feelings of shame and guilt (Berliner & Elliot, 2002; Wolfe et al., 1994). It is possible that compared to non-sexually aggressive CSA survivors, sexually aggressive children are more prone to experience shame. Both the abuse and the experiences of shame could possibly have impacted sexually aggressive children's attributional style. It is hypothesized that the experiences of shame and negative attributions are two key processes which differentiate sexually aggressive CSA survivors from non-sexually aggressive CSA survivors.

## Section II

### *Shame, Guilt, and Attributions*

Shame and guilt are powerful emotions that impact both individual and interpersonal functioning (Ferguson, Stegge, Miller, & Olsen, 1999; Lewis, 1971; Mills, 2005; Tangney & Dearing, 2002; Tangney, Burggraf, & Wagner, 2007). They are considered to be "among our most private, intimate experiences" (Tangney & Dearing, 2002, p. 2). These emotions are related to evaluations of

the self by the self, and develop through interactions with others (Bennett et al., 2005; Deblinger & Runyon, 2005; Feiring et al., 1996; Negrao et al., 2005; Tangney & Dearing, 2002). They impact and influence individual behaviour in interpersonal interactions (Ferguson et al., 1999; Lewis, 1971; Mills, 2005; Tangney & Dearing, 2002). As such, these emotions are considered both “self-conscious” because they involve self judgment, and “moral” because they influence interpersonal interactions (Tangney & Dearing, 2002; Tangney et al., 2007). Given the self-conscious nature of these emotions, shame and guilt are often regarded as synonyms. However, there are important differences between shame and guilt which have profound implications for psychological and interpersonal functioning (Bennett et al., 2005; Deblinger & Runyon, 2005; Feiring et al., 1996; Ferguson et al., 1999; Lewis, 1971; Mills, 2005; Negrao et al., 2005; Tangney & Dearing, 2002; Tangney et al., 2007).

#### *The Difference between Shame and Guilt*

In her pioneering work on the distinctions between shame and guilt, Lewis (1971) proposed that a key difference between them involves the role of the self. She contends that although shame and guilt are both about the individual’s experience, shame is directly about the self and is related to a negative appraisal of the self (e.g., *I* did that). In contrast, guilt is related more to the behaviour or event and the emotional experience focuses on the thing that has been done (e.g., I did *that*). Although in the experience of guilt the self is negatively evaluated, it is negatively evaluated in connection with a behaviour or action; the self is not the primary focus of the negative evaluation. “Shame involves fairly

global and negative evaluations of the self [whereas] guilt involves a more articulated condemnation of a specific behavior” (Tangney & Dearing, 2002, p. 24).

Based on this distinction, Lewis (1971) believes that shame and guilt manifest themselves in different ways. She suggests that because guilt is related to external events (i.e., acts or failures to act), when guilt is evoked, the individual can approach the situation from a rational perspective and can take reparative action to solve the “problem”. The individual is motivated to make amends and the self is propelled towards this goal. In contrast, when experiencing shame the individual is focused inward. Shame involves an acute awareness that the self is flawed and unworthy. This self-focus is often irrational and the individual is motivated to avoid or escape this intensely painful feeling. However, given that there is no escape from the self and that no reparative action is possible, shamed individuals experience a sense of shrinking, fear of being exposed, and feelings of worthlessness, helplessness, and powerlessness. According to Lewis, shame is connected to a defense of hiding, running away, or denial.

Lewis' (1971) distinction between shame and guilt has received empirical support. For example, research suggests that shamed individuals feel observed and judged by others and are motivated to hide. In contrast, guilty individuals feel motivated to take reparative action (Bennett et al., 2005; Deblinger & Runyon, 2005; Feiring et al., 1996; Negrao et al., 2005; Tangney & Dearing, 2002). In addition, shame has been found to be associated with feelings of inferiority, smallness, and powerlessness (Feiring et al., 1996; Greenberg & Paivio, 1997;

Tangney & Dearing, 2002; Tangney et al., 2007). Research has also demonstrated that compared to experiences of guilt, adult experiences of shame were rated as more painful and more difficult to disclose (Tangney & Dearing, 2002).

According to Lewis' (1971) conceptualization then, two ways in which shame and guilt can be differentiated is by the individual's focus (i.e., behaviour versus self) and whether the situation is repairable. An individual who feels guilty is able to separate the self from the behaviour and can focus on amending the situation. A shamed person who feels that the self is flawed can not amend the situation. As such, the individual is focused on their negative self-evaluation as well as the perceived evaluation by others. This differentiation of shame and guilt implies that shame is a maladaptive emotion whereas guilt is adaptive (Dost & Yagmurlu, 2008; Ferguson & Stegge, 1998; Tangney & Dearing, 2002; Tangney et al., 2007). Using Lewis' conceptualization of shame and guilt, research has demonstrated that shame, but not guilt, is associated with psychological difficulties in both children and adults (Dost & Yagmurlu, 2008; Tangney & Dearing, 2002; Tangney et al., 2007). However, a noteworthy debate in the literature concerns research findings that associate guilt with psychological symptoms (Dost & Yagmurlu, 2008; Ferguson & Stegge, 1998; Tangney & Dearing, 2002; Tangney et al., 2007). In particular, some authors claim that research associating guilt with maladaptive outcomes does not adequately distinguish between shame and guilt (Tangney et al., 2007). These authors suggest that studies linking guilt to adjustment difficulties do not actually measure

guilt, but instead measure guilt fused with shame (Tangney et al., 2007). According to Tangney et al. (2007) shame-fused guilt (also referred to as “ruminative guilt”) occurs when guilty thoughts and feelings are “magnified and generalized to the self” (p.353). This magnification and generalization tends to occur when the individual’s initial thoughts or feelings of guilt (e.g., “I did *that*”) lead to more shame focused thoughts (e.g., “...and I am a horrible *person*”; Tangney et al., 2007). When an individual experiences shame or shame-fused guilt they do not see any way to redeem themselves. In contrast, when an individual experiences “shame-free guilt” they are able to alleviate the negative feeling by taking reparative actions (Tangney & Dearing, 2002; Tangney et al., 2007). Other authors have noted that guilt can be maladaptive when it “involves obsessive, exaggerated self-blame and rumination that focuses on self-condemnation and punishment” (Ferguson & Stegge, 1998, p. 25). An early version of a well-validated measure designed to assess shame- and guilt-proneness, included a subscale which attempted to measure chronic, ruminative, unresolvable guilt (see Tangney & Dearing, 2002). After using the measure in research studies, the authors concluded that the shame and maladaptive guilt scales were assessing identical constructs and they dropped the maladaptive guilt scale from revised versions of the measure (Tangney & Dearing, 2002). Based on this finding, the present study conceptualizes maladaptive guilt as being a similar construct to shame. As such the proceeding review will focus on shame and shame-free guilt.

### *Shame, Guilt, and Attributions*

Lewis' (1971) distinction between shame and guilt incorporates aspects of attribution theory. Attribution theory is based on the premise that individuals naturally attempt to explain events (Weiner, 1986). Over time, individuals tend to adopt attributional styles in which they ascribe similar causes to different events (Valle & Silovsky, 2002; Weiner, 1986). Events can be appraised on three dimensions including locus (internal vs. external), globality (global vs. specific), and stability (stable vs. unstable). Internal attributions involve the belief that an event was caused by one's own characteristics or behaviour, whereas external attributions involve the belief that the event was caused by something or someone else (Valle & Silovsky, 2002; Weiner, 1986). Global attributions involve the belief that the cause of the event will likely occur across situations, whereas specific attributions involve the belief that the cause of the event is specific to the situation (Valle & Silovsky, 2002; Weiner, 1986). Stable attributions involve the belief that the cause of the event is permanent, whereas unstable attributions involve the belief that the cause of the event is temporary (Valle & Silovsky, 2002; Weiner, 1986).

Self-conscious emotions such as shame and guilt are evoked when the individual perceives him or herself as responsible for an event (Feiring et al., 1996; Weiner, 1986). Therefore, both shame and guilt involve internal attributions (Tangney & Dearing, 2002; Valle & Silovsky, 2002). The two emotions differ however, in terms of the attributions of globality and stability. In particular, guilt has been associated with internal, specific and unstable attributions (Feiring et

al., 1996; Lewis, 1971; Mills, 2005; Tangney & Dearing, 2002; Valle & Silovsky, 2002; Weiner, 1986). Guilt focuses on a particular behaviour or event and the individual's guilt is a signal of distress over the behaviour. The individual knows they are responsible (internal attribution) but recognizes that the cause of the event is related to the specific behaviour as opposed to a personality characteristic (specific attribution). As stated previously, guilty individuals attempt to repair their behaviour which suggests that they view the behaviour as unstable; it is something that can be changed or prevented in the future (Feiring et al., 1996; Lewis, 1971; Mills, 2005; Tangney & Dearing, 2002; Valle & Silovsky, 2002; Weiner, 1986). Shame, on the other hand, is associated with internal, global, and stable attributions (Feiring et al., 1996; Lewis, 1971; Mills, 2005; Tangney & Dearing, 2002; Valle & Silovsky, 2002; Weiner, 1986). Shame evokes a judgment of the self as faulty and therefore the individual assumes the event occurred because of global, stable characteristics of the self (Lewis, 1971; Mills, 2005; Tangney & Dearing, 2002; Valle & Silovsky, 2002; Weiner, 1986). The individual knows they are responsible for the behaviour (internal attribution) and believes the event occurred because of the type of person they are (global attribution) and that their personal characteristics will remain over time (stable attribution).

#### *The Dispositional Aspects of Shame and Guilt: Shame-Proneness and Guilt Proneness*

Research investigating shame and guilt has focused on both the situational and dispositional aspects of these emotions. Several studies focus on the feelings of shame and guilt in the moment, whereas other studies focus on



the degree to which people are prone to experience shame and/or guilt (Tangney & Dearing, 2002). Given the self-deprecating nature of shame described above, a number of theories have been advanced to describe how a proneness to shame might develop. However, little empirical research has explicitly investigated the relation between shame-promoting factors and the development of an underlying disposition to shame. Despite limited evidence, it has been proposed that “proneness to shame is associated with early experiences of parental overcontrol, parentification, favoritism toward a sibling, overt shaming, and/or abuse” (Mills, 2005, p. 48).

The work of Tangney and her colleagues has provided evidence for a link between attribution style and the dispositional aspects of shame and guilt (Tangney & Dearing, 2002). For example, their research found that adults who tended to experience shame across a variety of situations (shame-prone individuals) also tended to make internal, stable, and global attributions for negative situations (Tangney & Dearing, 2002).

In addition to attributions, Tangney and her colleagues have investigated a host of other features or characteristics associated with an underlying disposition towards shame or guilt (Tangney & Dearing, 2002; Tangney et al., 2007). In particular, their research suggests that compared to guilt-prone individuals, shame-prone individuals are less likely to be empathic and instead tend to focus more on their own feelings, needs, and experiences. Shame-prone individuals have difficulty taking the other person’s perspective and experiencing other-oriented emotions. Guilt-prone individuals on the other hand, demonstrate higher

levels of empathy and lower levels of personal distress in response to negative situations involving others. This pattern has been demonstrated in both children and adults (Feiring et al., 1996; Tangney & Dearing, 2002; Tangney et al., 2007). For example, one study exploring guilt, shame, and psychological adjustment in 5 to 12 year old children found that guilt-proneness was associated with high expressions of wrongdoing, acceptance of responsibility for behaviour, demonstration of concern for the victim, and recognition of moral standards which guide behaviour (Ferguson et al., 1999). Shame-proneness was associated with self-oriented explanations for behaviour involving expressions of self-characteristics (e.g., "I am that type of person"; Ferguson et al., 1999).

A paradoxical finding in the adult shame/guilt literature is that some shame-prone individuals are more likely to externalize blame for events (Bennett et al., 2005; Deblinger & Runyon, 2005; Ferguson, 2005; Negrao et al., 2005; Tangney & Dearing, 2002). This tendency has also been explained by attribution theory. Specifically, although shame and guilt are initially associated with internal attributions, at times the experience of shame can be so aversive that the individual shifts the hostility and blame outward (Lewis, 1971; Tangney & Dearing, 2002; Thomaes, Stegge, & Olthof, 2007). The individual views themselves as flawed and feels helpless to fix the problem. On occasion they may attempt to cope with the feeling of shame by hiding, becoming withdrawn, and turning inward (Lewis, 1971; Greenberg & Paivio, 1997; Tangney & Dearing, 2002). Alternatively, some shamed individuals may defend against the painful feelings by shifting the blame outwards (Greenberg & Paivio, 1997; Thomaes et

al., 2007). Feelings of guilt do not evoke the same externalizing tendency as feelings of shame. Because feelings of guilt are judgments about an action and not a personality characteristic, guilty individuals can repair the behaviour and thereby dissipate their negative affective state (Dost & Yagmurlu, 2008; Tangney & Dearing, 2002; Tangney et al., 2007). As such, shame-prone, but not guilt-prone individuals, are more likely to direct anger and aggression toward the blamed "other". Some authors refer to this externalizing of anger as 'shame-rage' (Mills, 2005). These authors hypothesize that shame-rage is elicited in response to intense wounding of the self and can lead to aggressive behaviours which, although intended for the person who induced the shame, may be displaced onto safer targets (Bennett et al., 2005; Deblinger & Runyon, 2005; Ferguson, 2005; Mills, 2005). Shame-prone individuals may perceive interpersonal conflicts as an exposure of their perceived deficits which elicits anger and aggression toward the individuals they believe to be judging them (Bennett et al., 2005; Thomaes et al., 2007). The shame-rage theorists contend that individuals with a fragile sense of self-esteem may react in a hostile manner when they feel threatened because their shame is unacknowledged (Bennett et al., 2005; Deblinger & Runyon, 2005; Mills, 2005). Similarly, Greenberg and Paivio (1997) contend that "shame can be either acknowledged or unacknowledged" (p. 232). Acknowledged shame is associated with feelings of worthlessness, defectiveness, and inferiority. However, for some individuals, the feeling of shame is too threatening for their fragile ego or sense of self, that they do not acknowledge such feelings. Such individuals typically display more

defensive types of behaviours and may react with anger or rage in instances where they feel threatened.

Very few studies have explicitly examined the externalization of shame in children (Thomaes et al., 2007). One of the only studies to date, explored the relation between externalized shame responses and fragile positive self-esteem (i.e., narcissism). Using a combination of scenario-based and peer nomination measures, the authors found that children who are more narcissistic are more likely to externalize shame and respond aggressively in situations that result in public exposure of a negative aspect of themselves (Thomaes et al., 2007). The authors suggested that, because their self-esteem is fragile, narcissistic children are extremely sensitive to any threats to their self-esteem. As such, when a shame-eliciting event occurs, these children experience a “humiliated fury” (i.e., shame-rage) and externalize their shame responses (Thomaes et al., 2007).

Although numerous aspects of shame and guilt have not been empirically validated, a summary of the empirical literature suggests that shame-prone individuals lack empathy and perspective taking abilities, tend to externalize blame and can actually demonstrate aggressive interpersonal behaviour (Bennett et al., 2005; Tangney & Dearing, 2002; Tangney et al., 2007). In contrast, guilt-prone individuals are more empathic and are motivated to engage in constructive interpersonal behaviours (Tangney & Dearing, 2002; Tangney et al., 2007). It follows then that shame-prone individuals have difficulty functioning in everyday life because their emotional distress interferes with all aspects of functioning (Ferguson et al., 1999; Greenberg & Paivio, 1997; Mills, 2005).

Research suggests that shame-prone individuals are more likely to experience psychological difficulties (Mills, 2005). Shame-proneness in adults has been associated with a number of psychological symptoms including anxiety, social phobia, depression, anger, aggression, substance abuse, somatization, and eating disorder symptoms (Ferguson et al., 1999; Mills, 2005; Tangney & Dearing, 2002; Tangney et al., 2007). Internalizing and externalizing symptoms such as these have also been linked to shame-proneness in children and adolescents (Ferguson et al., 1999; Mills, 2005; Tangney & Dearing, 2002). Guilt-proneness on the other hand, has not been consistently linked with psychological difficulties (Tangney et al., 2007). As such, the proceeding review focuses on the development of shame and its relation to CSA.

### *Shame and Development*

Early conceptualizations of self-conscious emotions suggested that young children do not experience feelings of shame, guilt, embarrassment, pride, envy, or empathy (Mills, 2005). Based on a Piagetian framework, researchers believed that early cognitive experiences are egocentric in focus and it is not until middle childhood, with the emergence of symbolic thought, that children can experience thoughts and feelings about the self (Mills, 2005). However, empirical investigations have demonstrated that even preschool age children demonstrate an awareness of mental states in themselves and others and experience emotional reactions in response to both their own and others' evaluations about themselves (Alessandri & Lewis, 1996; Bennett et al., 2005; Feiring & Taska, 2005; Ferguson et al., 1999; Mills, 2005). Self-conscious emotions in children

have only recently begun to be empirically explored (Alessandri & Lewis, 1996; Ferguson et al., 1999; Mills, 2005). The majority of the research tends to focus on empathy and guilt and their implications for the development of conscience (Mills, 2005). Few studies have specifically examined children's experiences of shame. However, based on the limited data, research suggests that as early as 2 to 3 years of age, children may demonstrate differential proneness to shame and guilt (Alessandri & Lewis, 1996; Bennett et al., 2005; Feiring & Taska, 2005; Mills, 2005).

#### *Developmental Theories of Shame*

Despite the limited empirical research investigating shame in children, a number of theories have been advanced which attempt to explain the development of shame. The theories differ based on emphasis and can be grouped into three general categories: functionalist theories, object relations/attachment theories, and cognitive-attributional theories (Mills, 2005).

*Functionalist theories.* The main premise of functionalist perspectives is that emotions serve an adaptive function in that they increase chances of survival (Barrett, 1995; Barrett & Campos, 1987; Mills, 2005). Emotions are conceptualized as regulatory processes that serve an individual's goals (Barrett, 1995; Barrett & Campos, 1987; Mills, 2005). Emotions begin with the appraisal of an event as related to a goal. Once the event is appraised, emotions then influence cognitions and behaviour thereby serving to mobilize and organize the individual's response to the event (Barrett, 1995; Barrett & Campos, 1987; Mills, 2005). According to functionalist models, the emotion of shame is adaptive in that

it maintains the acceptance of others and preserves self-esteem (Barrett, 1995; Barrett & Campos, 1987; Mills, 2005). Specifically, shame serves a behaviour-regulatory function by prompting the individual to disengage thereby reducing exposure and evaluation by others. Shame is also thought to serve an internal-regulatory function by directing the individual's attention to social standards and self-attributions. Shame also serves a social-regulatory function by communicating deference to others (Barrett, 1995; Barrett & Campos, 1987; Mills, 2005). The shame emotion prompts the individual to withdraw, avoid others, and hide the self (Mills, 2005). From this perspective, shame develops out of children's increasing ability to appraise their experiences and form values, standards, and beliefs (Mills, 2005). In addition, children's ability to cope with shame increases over the course of development (Barrett, 1995; Barrett & Campos, 1987; Mills, 2005).

*Object relations/attachment theories.* From an object relations perspective, interpersonal relationships are a basic biological need and thus many emotions develop in the context of relationships (Mills, 2005; Nathanson, 1992). According to this perspective, shame is an emotion that occurs when relational or attachment bonds are disrupted (Mills, 2005; Nathanson, 1992). These theorists believe that shame can be experienced as early as infancy and does not necessarily require self-reflection. Instead, it is triggered solely by interruptions in the infant's sense of connectedness to others (Mills, 2005; Nathanson, 1992). As such, shame-inducing situations in childhood consist of experiences involving perceived violations of expected mutuality or expressions of negative affect in

others (Mills, 2005; Nathanson, 1992). Over time, shame becomes internalized and can become activated based on internal events such as other affects, needs, or drives that have become associated with shame in memory (Mills, 2005; Nathanson, 1992). Eventually, the experience of shame is expressed in feelings of defectiveness. In order to protect the self from these feelings of defectiveness, children may employ defensive strategies such as anger, rage, perfectionism, blaming, withdrawal, or denial (Mills, 2005; Nathanson, 1992).

*Cognitive-attributional theories.* Cognitive-attributional theories of shame focus on the cognitive processes that elicit shame, namely self-evaluation (Alessandri & Lewis, 1996; Lewis, 1971; Mills, 2005; Tangney & Dearing, 2002). Lewis (1971) and other researchers from a cognitive-behavioural framework conceptualize shame and guilt as developing from differential appraisals of events. Shame is elicited by negative attributions of events as being caused by internal, global, and stable factors (Lewis, 1971; Mills, 2005; Tangney & Dearing, 2002). Shame consists of blaming the entire self whereas guilt consists of blaming the specific action or behaviour (Lewis, 1971; Mills, 2005; Tangney & Dearing, 2002). According to this framework, the development of shame is related to the child's cognitive development. In order to experience shame, children must first possess self-awareness (i.e., the ability to reflect upon the self), as well as knowledge of cultural standards, rules, and goals (Alessandri & Lewis, 1996; Mills, 2005). These cognitive abilities and thereby the experience of shame, are thought to develop at approximately 2 ½ to 3 years of age (Alessandri & Lewis, 1996; Bennett et al., 2005; Feiring & Taska, 2005; Mills,



2005). The major emphasis of the model is that shame is elicited by the specific cognitive appraisal (i.e., attributions) of the event rather than the event itself (Lewis, 1971; Mills, 2005; Tangney & Dearing, 2002; Weiner, 1986). However, over time, shame may actually contribute to the development of a stable negative attributional style (Mills, 2005).

*Summary of theories.* Despite the differences in the developmental theories of shame, they have a number of commonalities. First, all of the theories conceptualize shame as evolving from a concern with how the self is regarded by others (Mills, 2005). Second, the theories are in agreement about some of the cognitive prerequisites of shame. For example, all of the theories propose that shame becomes more complex over the course of development. Third, there is a general consensus that temperament both influences the physiological processes that contribute to the child's reactivity to shame, and may actually be shaped by shame experiences (Mills, 2005). Because the acknowledgment of self-conscious emotions in children is of relatively recent origin, there is limited empirical data to support a specific model (Alessandri & Lewis, 1996; Mills, 2005). However, based on the limited data available, it appears that shame emerges with children's developing sense of self-awareness and adoption of the standards and norms of their culture (Alessandri & Lewis, 1996; Bennett et al., 2005; Feiring & Taska, 2005; Mills, 2005). These developmental precursors to shame seem to develop by 2 ½ to 3 years of age (Alessandri & Lewis, 1996; Bennett et al., 2005; Feiring & Taska, 2005; Mills, 2005).

*Shame, Attributions, and Child Sexual Abuse: The Model of Stigmatization*

Despite the limited empirical knowledge of the normative development of shame, a widely accepted belief in the literature is that sexual abuse can result in victim experiences of shame and guilt (Bennett et al., 2005; Berliner & Elliot, 2002; Deblinger & Runyon, 2005; Feiring & Taska, 2005; Feiring, Taska, & Chen, 2002; Feiring, Taska, & Lewis, 1996, 2002; Greenberg & Paivio, 1997; Negrao et al., 2005). As mentioned previously, there is an association between experiences of shame and an individual's attributional style (Lewis, 1971). In addition, the literature review thus far suggests that sexually abused children are at risk for a range of adjustment difficulties. However, few studies have actually empirically examined theories about what causes sexually abused children to be symptomatic (Feiring et al., 1996; Kendall-Tackett et al., 1993; Wolfe et al., 1994). Based on the literature review it appears that both shame and attributions are important components to any theory of the psychological impact of CSA. Grounded in the DP framework, a theory has been proposed which attempts to link together these two sequelae of CSA in order to explain victim adjustment. The model focuses on the psychological mechanisms related to the traumagenic dynamics of stigmatization (Feiring et al., 1996). The theory proposes that stigmatization is a process that incorporates both the cognitive and affective features associated with CSA.

The central premise of the model is that sexual abuse leads to victim experiences of shame and that these experiences of shame are mediated by the individual's attributions (Feiring et al., 1996). Accordingly, the more negative the

person's attributions (i.e., internal, stable, global attribution style), the more shame they will experience and consequently, the poorer their adjustment (Feiring et al., 1996). The model also proposes additional moderating factors including social support, gender, and developmental period.

#### *Child Sexual Abuse and Shame*

Stigmatization is defined in the model as “the negative feelings and thoughts about the self that may occur during and following sexual abuse...the extent to which a victim feels bad and blameworthy” (Feiring et al., 1996, p. 770). The model hypothesizes that sexual abuse is stigmatizing in that it deviates from accepted societal standards and distinguishes the individual as being deviant or flawed (Berliner & Elliot, 2002; Deblinger & Runyon, 2005; Feiring & Taska, 2005; Feiring et al., 1996; Mills, 2005). Shame is presented as a central mechanism related to stigmatization and subsequent adjustment difficulties. The model suggests that certain factors of the abuse may be related to increased feelings of shame. For example, it is hypothesized that if the perpetrator blames the victim for the abuse, they would experience more shame than someone who has not been blamed. Another aspect of abuse that is hypothesized to impact feelings of shame would be the victim's relation to the perpetrator. If the perpetrator is someone known to the victim, it is hypothesized that the victim would feel betrayed which would contribute to feelings of shame for originally trusting the perpetrator (Feiring et al., 1996; Finkelhor, 1988). Other abuse characteristics thought to increase feelings of shame include form of sexual contact, acceptance of bribery, and being discovered as opposed to purposeful

telling of the abuse. It is reasoned that all of these elements contribute to feelings of shame because they contribute to the victim feeling some responsibility for being involved in a taboo relationship (Feiring et al., 1996).

### *Attributions and Shame*

According to the model, it is not the characteristics of the abuse alone that result in shame but rather, it is the individual's cognitive evaluations or attributions that determine the extent to which shame will be experienced (Deblinger & Runyon, 2005; Feiring et al., 1996). Based on the literature, the model proposes that self-blaming attributions (i.e., internal, global, stable) will result in shame. The model hypothesizes that because sexual abuse is stigmatizing, the individual will make negative global self-attributions. Indeed, research suggests that the greater number of abuse events a child has experienced, the more likely they are to possess an internal, global, stable attributional style (Feiring et al., 1999). In addition, children's core beliefs and behavioural tendencies are typically formed during the first eight years of life (Quas et al., 2005). As such, experiencing sexual abuse in childhood could profoundly impact their developing belief system (Quas et al., 2005).

### *Empirical Support for the Model*

Limited research has been conducted on the role of shame in adjustment following sexual abuse in children. In fact, after a thorough review of the literature, only three studies have specifically investigated shame, attribution style, and adjustment in sexually abused children (Feiring, Taska, & Chen, 2002; Feiring, Taska, & Lewis, 1996, 2002). A study by Feiring, Taska, and Lewis

(2002) examined processes which could explain variations in children's adjustment to CSA. They examined differences in shame, attribution style, and adjustment in a sample of 83 sexually abused children and 64 sexually abused adolescents. After accounting for adjustment at abuse discovery, the results indicated that shame and attribution style explained additional variation in subsequent adjustment. Children who improved in shame and attribution risk over the year following the discovery of the abuse, also demonstrated improvements in adjustment. In contrast, children whose level of shame and pessimistic attributional style remained for the year following discovery, showed the poorest adjustment. In fact, in a follow up study exploring the persistence of shame following CSA, Feiring and Taska (2005) reported that individuals with high shame at one and six years after the abuse reported more PTSD symptoms at six years following disclosure of CSA. A study by Feiring, Taska, and Chen (2002) reported similar results. These authors investigated the relation between a self-blaming attributional style and symptoms of depression, PTSD, and poor self-esteem in a sample of 137 sexually abused children and adolescents. They found that abuse-specific attributions that were internal and trait-focused were related to lower self-esteem and higher symptom levels. In addition, a negative global attributional style was related to high levels of depressive symptomology. Shame for the abuse also accounted for additional variance in adjustment.

Although there have been few investigations assessing the role of shame in the adjustment of sexually abused children, further support for the model comes from studies investigating attributions and adjustment following CSA

(Valle & Silovsky, 2002; Whiffen & Macintosh, 2005). In a review of the literature on sexually and physically abused children's attributions and adjustment, Valle and Silovsky (2002) reported that no consistent results have been found with respect to abuse characteristics and attributions. However, relationships have been reported between attributions and adjustment. Researchers have found that internal attributions for sexual abuse are related to internalizing difficulties, whereas external attributions are related to externalizing difficulties (Feiring, Taska, & Lewis, 2002; Valle & Silovsky, 2002). With respect to global attributions, it is well documented in the literature that a pessimistic attribution style consisting of internal, stable, and global attributions for negative events and external, unstable, and specific attributions for positive events has been linked to both depression and PTSD (Feiring, Taska, & Chen, 2002; Feiring, Taska, & Lewis, 2002). In their review of literature, these authors found support for the relationship between a pessimistic attribution style and adjustment in sexually abused children. Specifically, sexually abused children who demonstrated a pessimistic attribution style tended to have higher levels of depression, anxiety, and lower self-esteem (Valle & Silovsky, 2002).

### *The Model of Stigmatization and Sexual Aggression*

#### *Shame, Attributions, and Sexual Behaviour Problems*

The Model of Stigmatization provides a specific set of emotional and cognitive processes that are implicated in children's adaptation to sexual abuse. Adhering to the DP framework, the model highlights specific processes (attributions and shame) as well as additional mediating and moderating factors

(e.g., family functioning, developmental period, etc.). Although this model has only been investigated with respect to global internalizing and externalizing symptomology, it is a useful framework from which to conceptualize sexually aggressive CSA survivors. As mentioned previously, the theories proposing to explain sexual aggression are limited because they do not identify specific processes that differentiate sexually aggressive from non-sexually aggressive CSA survivors. Given the empirical support of the Model of Stigmatization in accounting for children's adjustment to CSA, assumptions can be generated for extending the model to the sexually aggressive population.

In particular, according to the literature, sexual abuse can result in shame.

Based on the developmental theories of shame,

the repeated experience of a discrete emotion reinforces its organizing effects on cognition and behaviour, until it becomes a characteristic way of feeling and acting reflecting the development of a schema in which the emotion is perceived, experienced, and expressed more readily than other emotions (Mills, 2005, p. 40).

Therefore, it is not unreasonable to assume that the experiences of shame associated with sexual abuse impact the individual's general disposition toward experiencing shame (i.e., shame-proneness). Additionally, it can be proposed that the individual's experience of shame impacts their cognitions resulting in an attributional style which further impacts their experiences of shame. Finally, given that shame and attributions influence adjustment and impact behaviour, it is possible that sexually aggressive CSA survivors will differ from non-sexually

aggressive CSA survivors with respect to their proneness to shame and their attributional style. That is, because sexually aggressive CSA survivors' adjustment is associated with externalizing behaviours, it is possible that their processes of shame and attributions differ from non-sexually aggressive CSA survivors.

Although there are no empirical investigations which examine and compare sexually aggressive and non-sexually aggressive CSA survivors' attributions and emotions, there is some support in the literature for these contentions. For example, Cunningham and MacFarlane (1996) capture these ideas in their assertion that "victims' treatment group[s] can be problematic because there may be marked differences in the ways they have integrated their experiences as victims" (p. 21). They believe that a treatment goal with sexually aggressive children is to reduce their anger and aggression whereas a goal for many other victims of CSA is to encourage their expression of anger.

Similarly, Paivio and Laurent (2001) posit that child abuse and neglect represent a traumatic empathic failure that elicits intense negative emotions. For some children, these feelings and their needs are ignored or minimized and these children do not learn the appropriate skills necessary to manage their intense affect. As a result, these children can experience problems with emotional underregulation, overcontrol, or both. Indeed, as mentioned previously, some individuals' experience of shame is so aversive that the individual shifts their hostility outward (Bennett et al., 2005; Deblinger & Runyon, 2005; Feiring & Taska, 2005; Ferguson, 2005; Lewis, 1971; Tangney & Dearing, 2002; Weille,



1997). It is possible that sexually aggressive CSA survivors have defended against their painful feelings of shame by externalizing their experience thereby experiencing unacknowledged shame (Greenberg & Paivio, 1997) or 'shame-*rage*' (Bennett et al., 2005; Mills, 2005). Thus, in situations where the child feels threatened, anxious, or fearful, he or she may engage in sexually aggressive behaviours as a way to cope with their arousal (Cunningham & MacFarlane, 1996; Friedrich, 2002).

Evidence for this contention comes from the previously reported findings by Hall et al. (1998) which indicated that sexually abused children with interpersonal SBP endured high levels of discomfort, pain, fear, and sadness related to their abuse but also experienced sexual arousal. The majority of these children were ambivalent about whom to blame for their abuse. In relation to the Model of Stigmatization, it is possible that sexually aggressive children experience more shame than non-sexually aggressive CSA survivors because they experienced sexual arousal in association with their high levels of pain. In addition, their attributions may also be different given their high levels of shame and ambivalence about the cause of the abuse. Hall et al. allude to this conceptualization when they concluded that the relation between CSA and SBP is influenced by the meaning of the experience to the victim and not simply a cause-and-effect relationship between the physical characteristics of the abuse and the outcome. Mills (2005) proposes that shame may mediate the relation between abuse and the development of aggression. She proposes that particularly severe abuse may be likely to result in shame-*rage* and hostile

aggression. This shame-rage plays a role in steering the individual's developmental trajectory in which the "shame-rage-shame process fosters a hostile cognitive style, disinhibited acts of aggression, and undermines empathy and concern for others" (p. 50).

#### *Summary of the Problem and Objectives of the Present Study*

The preceding literature review addressed the limited information that is known about sexually aggressive children. To date, there is limited empirical examination of the processes which distinguish sexually aggressive from non-sexually aggressive CSA survivors. This information is imperative for the development of effective prevention and intervention efforts. Based on the literature examining adjustment to CSA, the Model of Stigmatization seems promising for elucidating differences between these two groups of children. The model focuses attention on the cognitive and emotional processes thought to impact adjustment after CSA discovery. Applied to sexually aggressive children, this model suggests that these children may differ from their non-sexually aggressive counterparts with respect to their proneness to shame and their attributional style. Thus, the objectives of the present study are to explicitly examine these differences. This study will examine the shame- and guilt-proneness and the global attributions of sexually aggressive CSA survivors and non-sexually aggressive CSA survivors.

#### *Objectives/Hypotheses*

##### *Objective 1:*

To examine whether there are differences in adjustment between sexually aggressive CSA survivors and non-sexually aggressive CSA survivors.

*Hypothesis 1:* In addition to evidencing sexual aggression, compared to non-sexually aggressive CSA survivors, sexually aggressive CSA survivors will have more adjustment difficulties as evidenced by higher levels of internalizing, externalizing, and PTSD symptomology.

*Objective 2:*

To examine whether there are differences in the attributional styles of sexually aggressive CSA survivors and non-sexually aggressive CSA survivors.

*Hypothesis 2:* Compared to non-sexually aggressive CSA survivors, sexually aggressive CSA survivors will have an attributional style characterized by external, global, and stable attributions for negative events.

*Objective 3:*

To examine whether there are differences in the shame-proneness of sexually aggressive CSA survivors and non-sexually aggressive CSA survivors.

*Hypothesis 3:* Compared to non-sexually aggressive CSA survivors, sexually aggressive CSA survivors will be more shame-prone.

*Objective 4:*

To explore the relations among the variables in an effort to better understand the differences between sexually aggressive and non-sexually aggressive CSA survivors.

## CHAPTER II

### Methodology

#### *Participants*

Participants were 83 children (44 females and 39 males) between 4 and 12 years of age ( $M = 8.13$ ,  $SD = 2.18$ ). The participants were recruited from the community and a sexual assault crisis centre in southwestern Ontario. The mean age of the females was 8.41 years ( $SD = 2.00$ ) and the mean age of the males was 7.82 years ( $SD = 2.35$ ). The majority of the children were Caucasian (90.4%) followed by 3.6% African-Canadian, 1.2% Native-Canadian, and 4.8% of mixed ethnicity. Additional demographic data indicated that the sample was primarily from working class to lower-middle class socioeconomic status. For the overall sample, 42.2% of participants lived with both biological parents, 34.9% lived in a single parent home, 10.8% lived in a blended home with one biological parent and one step-parent, and 12% were in foster care. Categorical demographic data are shown in Table 1. The participants were divided into 3 groups: the Sexually Aggressive CSA Survivor group (SA), the Non-Sexually Aggressive CSA Survivor group (NSA), and a Comparison group of children with no known history of CSA or problematic sexual behaviour (COM).

A limitation of published norm-based standardized measures of children's sexual behaviour is that none directly assess sexual aggression (Silovsky & Swisher, 2008). The Child Sexual Behaviour Inventory (CSBI; Friedrich, 1997) manual contains four behavioral items to assess sexual aggression; however, these items are not included as part of the questionnaire and are not normed.

Rather, these items are intended to be discussed with caregivers during an assessment process. As a result of ethical concerns and the protocol of the crisis centre, it was not possible for caregivers to be directly interviewed as part of this study. Therefore, children were placed in the SA group if they were specifically referred to the sexual assault crisis center because of a history of CSA and evidenced interpersonal SBP that involved the use of coercion, manipulation, intimidation, force, or violated another's rights, and met the criterion score on having a caregiver report CSBI Total score above the 84<sup>th</sup> percentile, indicating borderline clinical or clinically significant SBP. Children in the SA group consisted of 16 females and 16 males. These children were part of a study being conducted at the sexual assault crisis centre examining the effectiveness of a group psychotherapy treatment for children with interpersonal sexual behaviour problems (SBP). The mean age of participants in the SA group was 7.88 years ( $SD = 2.08$ ).

Seven exceptions were made with respect to the SA group. Specifically, seven children who were referred to the centre for interpersonal SBP that involved the use of coercion, manipulation, intimidation, force, or violated another's rights, received CSBI Total scores below the 84<sup>th</sup> percentile. For these children, despite being referred to the centre for extensive interpersonal SBP, their caregivers endorsed none, or very few items on the CSBI. Three of these children were recently placed in new foster homes and their foster parent was not able to accurately report on the child's sexual behaviour. The remaining children's caregivers were involved in legal proceedings involving their child and

therefore may not have accurately reported on their child's sexual behaviour. As such, it was determined the referral source (the children's counselor at the centre) was a more accurate source for confirming SA group placement<sup>1</sup>.

The NSA group consisted of 26 children (15 females, 11 males) referred to a sexual assault crisis centre because of a history of CSA and were not reported to have been displaying any interpersonal SBP. The mean age of the NSA group was 9.35 years ( $SD = 2.17$ ). As with the SA group, participants in the NSA group were recruited through the children's counselor at the centre. Children's caregivers were provided with an explanation of the study as well as the consent form and indicated whether they were interested in having their child participate in the study. Children were assigned to the NSA group if they received a CSBI Total score within the normal range. Three children in the NSA group received clinically significant scores on the CSBI Total score however, their SBP were intrapersonal in nature and it was therefore decided to include these children in the NSA group.

The COM group consisted of 25 children (13 females, 12 males) from the community, with no known history of CSA or SBP. The mean age of the COM group was 7.20 years ( $SD = 1.78$ ). Participants in the COM group were recruited from a day care centre or referred by the caregivers of other study participants. The children's scores on the CSBI Total score were all within the normal range.

An a priori power analysis revealed that, at 80% power, in order to detect medium to large effect sizes, approximately twenty participants were required per

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<sup>1</sup> For the three participants whose CSBI scores were determined to be inaccurate, the SA group mean on each of the CSBI subscales was substituted for the participant's score on that subscale.

group. In order to compensate for potential missing data, the present study sought to recruit as many participants as possible within the time frame of the study. Given the difficulties recruiting clinical populations, the total number of participants included in the study ( $N = 83$ ) is similar to studies published in developmental psychology journals (e.g., Alessandri & Lewis, 1996; Ferguson et al., 1999; Weems, Saltzman, Reiss, & Carrion, 2003).

Table 1

Categorical Demographic Characteristics of the SA group, NSA group, and COM group

Characteristic	Total Sample ( <i>N</i> =82) % ( <i>n</i> )	SA ( <i>n</i> =32) % ( <i>n</i> )	NSA ( <i>n</i> =25) % ( <i>n</i> )	COM ( <i>n</i> =25) % ( <i>n</i> )
<b>Gender</b>				
Male	47% (39)	50% (16)	42.3% (11)	48% (12)
Female	53% (44)	50% (16)	57.7% (15)	52% (13)
<b>Ethnicity</b>				
Caucasian	90.4% (5)	84.4% (27)	88.5% (23)	100% (25)
African-Canadian	3.6% (3)	3.1% (1)	7.7% (2)	0% (0)
Native-Canadian	1.2% (1)	3.1% (1)	0% (0)	0% (0)
Mixed Ethnicity	4.8% (4)	9.4% (3)	3.8% (1)	0% (0)
<b>Household</b>				
Both Parents	42.2% (35)	6.2% (2)	46.2% (12)	84% (21)
Single Parent	34.9% (29)	56.2% (18)	34.6% (9)	8% (2)
Blended Family	10.8% (9)	12.5% (4)	11.5% (3)	8% (2)
Foster Placement	12% (10)	25% (8)	7.7% (2)	0% (0)



## *Measures*

*Sexual behaviour.* In order to assess the presence and intensity of participant's sexual behaviours, the Child Sexual Behavior Inventory (CSBI; Friedrich, 1997) was administered to the participant's caregiver. The CSBI is a 38 item caregiver report which investigates the sexual behaviours of their child over the past 6 months. The measure was developed by adapting items from the Child Behavior Checklist (CBCL; Achenbach, 1991) and also includes items pertaining to sexual inhibition and gender behaviours. In particular, the items contained on the CSBI assess sexual behaviours from nine domains: Boundary problems (i.e., "developmentally or individually related difficulties with the maintenance of interpersonal distance", Friedrich, 1997, p.1), Exhibitionism (i.e., "revealing sexual parts to adults or children", Friedrich, 1997, p.1), Gender role behaviour (i.e., interest in acting like or being a member of the opposite sex", Friedrich, 1997, p.1); Self-stimulation (i.e., "touching oneself for the purpose of sexual pleasure", Friedrich, 1997, p.1); Sexual anxiety (i.e., "distress when witnessing adult sexuality", Friedrich, 1997, p.1); Sexual interest ("interest in the opposite sex and in sexual behaviours", Friedrich, 1997, p.1); Sexual intrusiveness (i.e., "violation of another person's sexual privacy"; Friedrich, 1997, p.1); Sexual knowledge (i.e., "awareness of sexual behaviour beyond typical age-level knowledge", Friedrich, 1997, p.1); and Voyeuristic behaviour (i.e., "an aspect of sexual interest reflected by efforts to observe the sexual parts of others", Friedrich, 1997, p.1). The domains on the CSBI are not psychometric scales, rather they are intended to describe the content included on the measure.

The CSBI contains three subscales: the CSBI Total Scale, the Developmental Related Sexual Behaviour Scale (DRSB), and the Sexual Abuse Specific Scale (SASI). The CSBI Total Scale assesses the nine domains of sexual behaviour and includes all 38 items. The DRSB Scale assesses level of age- and gender- appropriate behaviour and includes behaviours that were endorsed by 20% of the caregivers in the normative sample. The SASI Scale assesses behaviours that have been empirically associated with a history of CSA. Norms are provided for children aged 2 to 12. Raw scores on each subscale of the CSBI are calculated and converted to t-scores. High internal consistency has been reported with both clinical ( $\alpha = .93$ ) and non-clinical ( $\alpha = .82$ ) samples. For the purpose of the present study, only the CSBI Total score was used in analyses. Cronbach's alpha for the CSBI Total score for the present sample was high ( $\alpha = .93$ ).

*Symptomology.* In order to assess aggression and other symptomology, caregivers of the participants were asked to complete the well-validated parent report form of the CBCL (Achenbach, 1991). The CBCL was designed to assess children's competencies and problems as reported by their caregivers. The checklist consists of 118 items that describe a broad range of problems children may be experiencing. For each item, caregivers are asked to indicate on a 3-point scale how applicable the statement is to their child (e.g., 0 = *not true*, 1 = *somewhat or sometimes true*, 2 = *very true or often true*). These items are grouped together to form eight internally consistent subscales. Three of these subscales (*Withdrawn*, *Anxious/Depressed*, and *Somatic Complaints*) are

summed to generate the Internalizing scale, and two of the subscales (Delinquency, Aggression) are summed to generate the Externalizing scale. The Externalizing and Internalizing scales were derived via second-order factor analysis. Three additional subscales, not included in the calculation of Externalizing and Internalizing scales are: Social Problems, Thought Problems and Attention Problems. The Externalizing, Internalizing, Social Problems, Thought Problems, and Attention Problems scales, together with 33 items not contained in any of the subscale calculations ("Other Problems") are summed to create the Total Problems score. Each child receives a raw score on each subscale, which is then converted into a t-score. The following scales (with Cronbach's alpha levels for the present sample) were included in the analyses: Internalizing (alpha = .92), Externalizing (alpha = .93), Social Problems (alpha = .65), Thought Problems (alpha = .59), Attention Problems (alpha = .82), and Total Problems (alpha = .96).

*Trauma.* To assess the extent to which participants evidence symptomology consistent with posttraumatic stress (hereafter referred to as "trauma-related symptomology"), participant's caregivers completed the Trauma Symptom Checklist for Young Children (TSCYC; Briere, 2005). The TSCYC is a 90-item caregiver report measure which assesses the behavioural manifestations of complex trauma in children aged 3 to 12. The caregiver is asked to indicate, on a four-point scale (e.g., 1 = *not at all*, 2 = *sometimes*, 3 = *often*, 4 = *very often*), the frequency in which their child has behaved, felt, or experienced a certain item in the past month. The caregiver is not asked to relate the

behaviours to a specific trauma; instead, they are asked whether or not their child demonstrated the behaviour. As such, according to the measure's author, this measure can be used to assess children "who have or have not experienced a traumatic event" (Briere, 2005, p. 5). The measure contains eight clinical scales designed to measure the psychological consequences of exposure to trauma. The eight scales include: Posttraumatic Stress-Intrusion, Posttraumatic Stress-Avoidance, Posttraumatic Stress-Arousal, Posttraumatic Stress-Total, Sexual Concerns, Dissociation, Anxiety, Depression, and Anger/Aggression. Each child receives a raw score on each subscale, which is then converted into a t-score. Internal reliability has been reported with alphas ranging from .81 for Sexual Concerns to .93 for the Posttraumatic Stress-Total, with an average of .87 across all scales. Cronbach's alphas for the present study ranged from .83 for Posttraumatic Stress-Avoidance to .93 for Posttraumatic Stress-Total. For the present study, the Posttraumatic Stress-Total, Posttraumatic Stress-Avoidance, Posttraumatic Stress-Intrusion (alpha = .84), Posttraumatic Stress-Arousal (alpha = .86), Sexual Concerns (alpha = .84), Dissociation (alpha = .89), and Anger/Aggression (alpha = .84) subscale scores were included in the analyses.

*Attributions.* To assess children's attributional style, the Children's Attributional Style Interview (CASI; Conley, Hilt, Haines, & Metalsky, 2000) was administered. The CASI is an interactive interview designed to assess attributional style in children ages 5 and older<sup>2</sup>. The interview assesses participant's beliefs about the causes of events in their lives, and the degree to

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<sup>2</sup> Two study participants were 4 years of age; however, both were turning five within a few months of participating in the study and were of sufficient verbal ability to comprehend the task.

which these causes are internal or external, stable or unstable, and global or specific. The interview consists of 16 scenarios, divided into two domains: achievement and interpersonal. Each domain includes both positive and negative events. Examples of events from the interpersonal domain include: "You come home one day and your mom tells you she's proud of you" (positive event), and "You say something to some kids at school and they make fun of you" (negative event). Examples from the achievement domain include: "You are working on a project at school and you get a good grade on it" (positive event) and "You're painting a picture of a horse for your teacher, but it doesn't turn out" (negative event). After hearing the story and viewing the accompanying illustration, participants are prompted for their attribution for the event and then probed regarding the dimensions of internality, stability, and globality on continuous sliding scales. The internality, stability, and globality ratings for each of the 16 events yield a total of 48 items. The 48 items can be subdivided by attribution dimension (16 ratings each for internality, stability, and globality) and by event valence (8 of the events are positive and 8 are negative, yielding a total of 24 items for the positive and negative scales). Attribution scores are calculated separately for positive events and for negative events.

Internal reliability has been reported with alphas ranging from .75 for the Full Negative Scale (i.e., the sum of all internality, stability, and globality ratings for negative events) to .82 for the Full Positive Scale (i.e., the sum of all internality, stability, and globality ratings for positive events). Based on the hypotheses of the present study, namely that the SA group will have more

external, stable, global attributions for negative events, the following scales (with alpha levels for the present sample) were included in the analyses: Internality Negative (sum of all internality ratings for negative events;  $\alpha = .60$ ); Generality Negative (sum of all stability and globality ratings for negative events;  $\alpha = .74$ ); Full Positive ( $\alpha = .84$ ); Full Composite Subscale (the difference between the composite of positive events and the composite of negative events – the lower the score the more depressive the attributional style; Conley et al., 2000).

*Shame-proneness and guilt-proneness.* In order to assess participants' shame- and guilt-proneness, participants were administered the Self-Conscious Emotions: Maladaptive and Adaptive Scales (SCEMAS; Stegge & Ferguson, 1994). The SCEMAS is a scenario-based measure consisting of 13 stories in which the child is asked to imagine him- or herself as the main actor in the story. The SCEMAS scenarios are adapted from an earlier version of the measure, the Child-Child Attribution and Reaction Survey (C-CARS: see Ferguson & Stegge, 1998, for a description of the measure). The situations depicted in the C-CARS were derived from elementary school-aged children's descriptions of shame- and guilt- eliciting events. For each SCEMAS scenario, the child is provided with five to six ways of responding to the situation and they are asked to rate on a 5-point likert scale how likely they are to react in that way (e.g., 1 = *not at all*, 2 = *a little bit*, 3 = *somewhat*, 4 = *a lot*, 5 = *a whole lot*). The child is provided with a chart to graphically depict response options and aid in understanding. A total of 70 items are presented to the child and comprise six subscales: Shame, Non-Ruminative

Guilt (e.g., adaptive guilt), Ruminative Guilt (e.g., maladaptive guilt that is fused with shame and is “characterized by chronic self-blame and obsessive rumination over an objectionable behaviour”, Tangney & Dearing, 2002, p.122), Externalization (e.g., blaming others for negative outcomes), Pride, and Anger. For the present study, Cronbach’s alphas were calculated for proneness to shame (alpha = .72), non-ruminative guilt (alpha = .75), and ruminative guilt (alpha = .63). The alpha levels obtained for Shame and Non-Ruminative Guilt in the present study are comparable with levels obtained in previous studies using the C-CARS. Specifically, studies have reported Cronbach’s alphas for shame- and guilt-proneness as .73 and .70 respectively (Ferguson et al., 1999). For the present study, only the Shame, Guilt, and Non-Ruminative Guilt scores were included in analyses.

### *Procedure*

This study received approval from the University of Windsor and the sexual assault crisis centre ethics boards. Informed parental consent (see Appendixes A, B, and C for consent forms) was obtained for each participant and informed assent was obtained from each child (see Appendix D for assent script). For children in the two CSA groups, testing was conducted in a private room at the sexual assault crisis centre. For the COM group, testing was conducted in a room at the participant’s home. Each child was assured of the confidentiality of his or her responses. Both child measures (i.e., the shame/guilt measure and the attribution measure) were presented in interview format. The attribution measure was accompanied by illustrations, and both measures included charts to

graphically depict response options and aid in understanding. The order of the measures was counterbalanced. Children were presented with stickers or a small toy as a token of appreciation for their participation. While the child was being tested, his or her caregiver was seated in a separate room and was asked to complete the CBCL (Achenbach, 1991), CSBI (Friedrich, 1997), and the TSCYC (Briere, 2005). Some of the CSA participants were brought to the centre by their Children's Aid Society worker or a volunteer driver. In instances where the child's caregiver did not accompany the child to the centre, consent for participation was obtained from the caregiver at an earlier date (in person) by the child's counselor at the centre, and the questionnaires were sent home with the child to be returned at their next appointment<sup>3</sup>. The experimenter was aware of the child's group status prior to conducting the interviews; however, the response options on the interviews are quantitative (i.e., the child indicates a response on a likert scale) and do not involve any subjectivity or interpretation.

#### *Study Design and Analysis Plan*

The present study employed a quasi-experimental design. With respect to demographic variables, in order to determine whether the number of males and females in each group are comparable, a Chi-square analysis was used to compare groups on gender. To assess whether gender should be controlled for in subsequent analyses, a 2 (gender) x 3 (group) Analysis of Variance (ANOVA) was used to investigate whether there were gender differences in sexual behaviour (i.e., CSBI Total scores) within each group. Similarly, to determine

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<sup>3</sup> A number of caregivers did not return forms or returned incomplete forms, as such, there is missing data.



whether or not the groups are comparable in age, an ANOVA was conducted with age as the dependent variable and group as the fixed factor independent variable. To assess whether or not age influenced group differences in sexual behaviour (i.e., whether or not age should serve as a covariate in subsequent analyses), the ANOVA was followed up with an Analysis of Covariance (ANCOVA) with CSBI Total score as the dependent variable, group as the fixed factor independent variable, and age as the covariate. To confirm that the groups differ with respect to sexual behaviour, an ANOVA was conducted with CSBI Total score as the dependent variable and group as the fixed factor independent variable. As mentioned previously, the CSBI does not include a normed sexual aggression subscale. However, research conducted using the sexual aggression interview questions from the CSBI manual, found that for children aged 2-12 years, sexual aggression was significantly positively correlated with the Delinquency subscale from an earlier version of the CBCL (Friedrich, 1997, 2007). The measure's author suggested that sexually aggressive behaviour is associated with a pattern of rule-violating behaviour (Friedrich, 1997, 2007). Given that the present study did not have a specific measure of sexual aggression, in addition to comparing groups with respect to sexual behaviour, an ANOVA was conducted with CBCL Delinquency score as the dependent variable and group as the fixed factor independent variable.

In order to investigate the specific hypotheses of this study, several dependent variables (i.e., measure subscales) were used as indices of the constructs being assessed (i.e., adjustment, attributions, shame-proneness). As

such, in order to control for Type I errors and take into account the correlation between dependent variables (Field, 2005), Multivariate Analysis of Variances (MANOVA) were conducted to compare sexually aggressive CSA survivors (SA), non-sexually aggressive CSA survivors (NSA), and a comparison group of children with no known history of CSA or problematic sexual behaviour (COM) across the various caregiver-report and child measure variables. For each MANOVA, group membership served as the fixed factor independent variable and the caregiver-report or child measure variables served as the dependent variable. Separate MANOVAs were conducted for each study measure, yielding a total of five MANOVAs<sup>4</sup>. Significant MANOVAs were followed up with univariate ANOVAs and Tukey's Honestly Significant Difference (HSD) post-hoc pairwise comparisons.

Given that very little research has examined the differences between sexually aggressive CSA survivors, non-sexually aggressive CSA survivors, and children with no known history of CSA or problematic sexual behaviour, additional exploratory analyses were conducted. Pearson product moment correlations were conducted to explore the relations between problematic sexual behaviour (i.e. CSBI Total score) and the various caregiver-report and child measure variables. In addition, regression analyses were performed to determine whether problematic sexual behaviour or group membership could be predicted by the study variables.

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<sup>4</sup> For the Child Behaviour Checklist, based on the results of the first MANOVA, a second MANOVA was conducted (see Results section for explanation).

## CHAPTER III

### Results

Before conducting the ANOVAs or MANOVAs the data were examined to determine whether test assumptions were met. ANOVA is based on the assumptions that data is normally distributed, variances are homogenous, and observations are independent of one another (Field, 2005). For the present study, given that participants were seen individually, it is assumed that all observations are independent. The Levene's test was used to determine whether the assumption of homogeneity of variance was violated (Field, 2005). Visual inspections of histograms, as well as the Kolmogorov-Smirnov test were used to determine normality (Field, 2005). Research suggests that ANOVA is a "robust statistical procedure, and the assumptions frequently can be violated with relatively minor effects" (Howell, 1997, p.321). Thus, given that the sample sizes in the present study are relatively equal and for all variables the largest standard deviation is no more than four times the smallest standard deviation (Field, 2005), violations of assumptions were addressed in two ways. First, when an assumption was violated, a more conservative significance level of .01 was used. Second, the Games-Howell post-hoc test was used instead of Tukey's HSD. The Games-Howell is a post-hoc test which takes into consideration unequal variances (Field, 2005).

#### *Preliminary Analyses*

Means, standard deviations, and ranges of caregiver-report and child measure variable scores for the total sample are presented in Table 2. Table 3

presents the means, standard deviations, and ranges of caregiver-report and child measure variable scores for each group.

*Gender.* In order to test whether the groups differ with respect to gender, a Chi-square analysis was run between the three groups. No significant differences were found,  $\chi^2(2, N = 83) = .355, p > .10$ . In addition, to determine whether gender should serve as a covariate, a 2 (gender) X 3 (group) ANOVA was conducted with problematic sexual behaviour (i.e., CSBI Total score) as the dependent variable. The group X gender interaction was not significant,  $F(2,69) = .802, p > .10, \eta^2 = .02$ , which means there were no gender differences within each group on problematic sexual behaviour.

*Age.* A Univariate Analysis of Variance (ANOVA) was conducted to assess whether the groups differ in age. Results indicate that the NSA group is significantly older ( $M = 9.35, SD = 2.17$ ) than the SA group ( $M = 7.88, SD = 2.08$ ), and the COM group ( $M = 7.20, SD = 1.78$ ), with the latter two being of comparable age,  $F(2,80) = 7.59, p < .01, \eta^2 = .16$ . Given the group differences in age, an Analysis of Covariance (ANCOVA) was conducted with group as the independent variable, age as the covariate, and problematic sexual behaviour (i.e., CSBI Total score) as the dependent variable. The results of the ANCOVA indicated no significant main effect for age,  $F(1,71) = .469, p > .10, \eta^2 = .007$ . As such, age did not significantly contribute to problematic sexual behaviour above that of group, and was therefore excluded from subsequent analyses.

Table 2

*Mean, Standard Deviation, and Range of Caregiver-Report and Child Measure Variables for Total Sample*

	Total Sample ( <i>N</i> = 83)			
	<i>N</i>	<i>M</i> ( <i>SD</i> )	<i>Min</i>	<i>Max</i>
<i>Caregiver-Report Variables</i>				
CSBI				
Total	75	60.11 (21.33)	39	110
CBCL				
Externalizing	72	56.00 (13.71)	30	82
Internalizing	72	55.06 (12.46)	33	82
Total Problems	72	57.03 (13.25)	26	82
Social Problems	72	56.79 (8.54)	50	82
Thought Problems	72	57.99 (8.63)	50	79
Attention Problems	72	58.74 (9.24)	50	91
TSCYC				
PTS-Intrusion	67	58.06 (16.73)	43	110
PTS-Arousal	67	55.37 (14.35)	39	104
PTS-Avoidance	67	61.19 (18.93)	44	110
PTS-Total	67	58.97 (17.04)	40	110
Anger	67	58.18 (16.70)	41	99
Dissociation	67	53.18 (12.91)	43	110
Sexual Concerns	67	63.16 (21.05)	45	110

*Child Measure Variables*

## CASI

Internality Negative	79	47.63 (15.47)	0	75
Generality Negative	79	64.95 (26.65)	3	140
Full Positive	79	185.86 (33.67)	103	240
Full Composite	79	73.28 (51.10)	- 21	234

## SCEMAS

Shame	79	43.53 (9.34)	17	64
Non-Ruminative Guilt	79	48.54 (8.96)	25	65
Ruminative Guilt	79	43.77 (8.10)	24	64

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*Note.* CSBI = Child Sexual Behavior Inventory, CBCL = Child Behavior Checklist, TSCYC = Trauma Symptom Checklist for Young Children, PTS = Posttraumatic Stress, CASI = Children's Attributional Style Interview, SCEMAS = Self-Conscious Emotions: Maladaptive and Adaptive Scales.

Table 3

*Mean, Standard Deviation, and Range of Caregiver-Report and Child Measure Variables for Each Group*

	SA (n=32)		NSA (n=26)		COM (n=25)							
	<i>n</i>	<i>M (SD)</i>	<i>Min</i>	<i>Max</i>	<i>n</i>	<i>M (SD)</i>	<i>Min</i>	<i>Max</i>				
<i>Caregiver-Report Variables</i>												
CSBI												
Total	26	82.77 (19.52)	56	110	24	49.75 (10.78)	42	80	25	46.48 (60.07)	39	59
CBCL												
Externalizing	22	64.77 (13.27)	30	82	25	57.04 (13.18)	32	76	25	47.24 (8.75)	30	63
Internalizing	22	61.73 (13.20)	34	82	25	57.36 (9.84)	39	78	25	46.88 (9.68)	33	66
Total Problems	22	66.68 (11.70)	34	80	25	58.52 (11.62)	38	82	25	47.04 (8.56)	26	65
Social Problems	22	63.36 (10.52)	50	82	25	56.12 (6.46)	50	81	25	51.68 (3.13)	50	62
Thought Problems	22	65.18 (8.26)	50	79	25	57.24 (8.03)	50	73	25	52.40 (3.97)	50	64
Attention Problems	22	66.59 (9.38)	50	91	25	58.40 (7.98)	50	60	25	52.16 (3.13)	50	60

TSCYC

PTS-Intrusion	26	65.04 (18.69)	43	110	20	60.60 (16.73)	43	98	21	47.00 (4.81)	43	58
PTS-Arousal	26	64.19 (14.65)	39	104	20	54.45 (12.89)	39	94	21	45.33 (6.73)	39	67
PTS-Avoidance	26	66.23 (19.15)	44	110	20	68.10 (21.38)	44	110	21	48.38 (6.05)	44	65
PTS-Total	26	67.35 <sup>†</sup> (17.24)	40	110	20	61.75 <sup>†</sup> (16.75)	40	99	21	45.95 (6.55)	40	66
Anger	26	69.46 (18.58)	41	99	20	56.60 (11.97)	41	75	21	45.71 (4.66)	41	58
Dissociation	26	61.62 (14.73)	43	110	20	51.35 (9.50)	43	71	21	44.48 (4.15)	43	62
Sexual Concerns	26	78.69 (19.66)	46	110	20	59.15 (19.84)	45	109	21	47.76 (5.06)	46	67

*Child Measure Variables*

CASI

Internality Negative	30	48.13 (14.52)	0	75	24	46.04 (16.77)	0	71	25	48.56 (15.79)	10	66
Generality Negative	30	65.43 (22.85)	25	115	24	66.33 (28.41)	6	133	25	63.04 (29.97)	3	140

<sup>†</sup> Of the children whose caregivers completed the TSCYC, 61.5% of children in the SA group had PTS-total raw scores in the clinically significant range suggesting a possible diagnosis of PTSD.

<sup>‡</sup> Of the children whose caregivers completed the TSCYC, 40% of children in the NSA group had PTS-total raw scores in the clinically significant range suggesting a possible diagnosis of PTSD.



Full Positive	30	186.20 (34.62)	103	240	24	186.13 (34.76)	129	240	25	185.20 (32.82)	111	240
Full Composite	30	72.63 (48.16)	- 11	160	24	73.75 (56.42)	0	234	25	73.60 (51.31)	- 21	187
SCEMAS												
Shame	30	44.90 (10.08)	20	64	24	44.83 (7.17)	25	53	25	40.64 (9.95)	17	56
Non-Ruminative Guilt	30	50.07 (8.65)	36	65	24	49.33 (8.37)	32	62	25	45.96 (9.63)	25	61
Ruminative Guilt	30	45.50 (8.60)	28	64	24	43.54 (8.25)	24	55	25	41.92 (7.18)	25	56

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*Note.* CSBI = Child Sexual Behavior Inventory, CBCL = Child Behavior Checklist, TSCYC = Trauma Symptom Checklist for Young

Children, PTS = Posttraumatic Stress, CASI = Children's Attributional Style Interview, SCEMAS = Self-Conscious Emotions: Maladaptive and Adaptive Scales.

*Sexual behaviour.* In order to confirm that the groups differed with respect to problematic sexual behaviour, an ANOVA was conducted using problematic sexual behaviour (i.e., CSBI Total score) as the dependent variable and group as the independent variable. The results of the ANOVA revealed a significant difference between groups with respect to problematic sexual behaviour,  $F(2,72) = 56.60, p = .00, \eta^2 = .611$ . Planned comparison (Games-Howell) revealed that, as expected, the SA group had significantly higher problematic sexual behaviour scores than both the NSA group and the COM group, whereas the NSA and COM groups did not differ. Research has found an association between sexual aggression and CBCL Delinquency scores (Friedrich, 1997, 2007). As such, in addition to comparing groups with respect to sexual behaviour, an ANOVA was conducted with CBCL Delinquency score as the dependent variable and group as the fixed factor independent variable. The results of the ANOVA revealed a significant difference between groups with respect to delinquent behaviour scores (i.e., CBCL Delinquency score),  $F(2,72) = 18.46, p = .00, \eta^2 = .349$ . Planned comparison (Tukey's HSD) indicated that that all three groups had significantly different scores on the CBCL Delinquency scale. The SA group had the highest score, followed by the NSA group and the COM group. It is noteworthy that the SA group mean ( $M = 67.05, SD = 9.84$ ) was in the borderline clinical to clinically significant range (i.e., above the 84<sup>th</sup> percentile), whereas the NSA group ( $M = 58.76, SD = 9.62$ ) and COM group ( $M = 52.60, SD = 3.65$ ) means were both within the normal range.

### *Hypothesis Testing*

*Hypothesis 1: Compared to non-sexually aggressive CSA survivors, sexually aggressive CSA survivors will have more adjustment difficulties as evidenced by higher levels of internalizing, externalizing, and PTSD symptomology.*

*Symptomology.* A MANOVA examining group differences in symptomology (i.e., CBCL Internalizing, Externalizing, and Total Problems scores), was significant,  $F(6, 134) = 6.36, p = .00, \eta^2 = .222$ . Univariate ANOVAs were significant for the Child Behavior Checklist (CBCL) Internalizing scale, Externalizing scale, and Total Problems scale. *F*-tests and effect sizes for CBCL scores are presented in Table 4.

Planned comparisons (Tukey's HSD) revealed that, contrary to the hypothesis, the SA group did not significantly differ from the NSA group with respect to Internalizing or Externalizing symptomology. However, consistent with the hypothesis, children in the SA group had significantly higher global symptomology scores (i.e., CBCL Total Problems).

Although the SA group did not differ from the NSA group with respect to Internalizing or Externalizing symptomology, the results indicated that compared to children with no known history of CSA (the COM group), children with a history of CSA (i.e., the SA and NSA groups) had significantly higher CBCL Internalizing and Externalizing scores. In addition, all three groups of children differed with respect to global symptomology (i.e., CBCL Total Problems). Specifically, the SA group had the largest score, followed by the NSA group, and the COM group. As noted in the Method section, in addition to "Other Problems" not included in any

of the subscales, the CBCL Total Problems score is comprised of the Internalizing and Externalizing subscale scores, as well as three additional subscales which are not included in the Internalizing or Externalizing scale scores (e.g., Social Problems, Thought Problems, Attention Problems). As such, given that both the Internalizing and Externalizing scores are included in the Total Problems score, the difference in scores may be due to group differences on the Social Problems, Thought Problems, and Attention Problems subscales.

To investigate whether the groups differed on the Social Problems, Thought Problems, and Attention Problems subscales, a MANOVA was conducted with the subscale scores as the dependent variables and group as the fixed factor independent variable. The MANOVA indicated statistically significant group differences  $F(6, 134) = 8.47, p = .000, \eta^2 = .275$ . Univariate ANOVAs revealed significant group differences on all three subscales.

Planned comparisons (Games-Howell) indicated that all three groups had significantly different scores on each subscale. Consistent with the hypothesis, children in the SA group evidenced the most symptomatic behaviour on each subscale. As demonstrated in Table 4, the SA group had the highest score on the Social Problems, Thought Problems, and Attention Problems subscales, followed by the NSA group, and the COM group.

Table 4

## ANOVA Statistics for Caregiver-Report and Child Measure Variables

	SA (n=32) $\bar{n}$ $\underline{M(SD)}$	NSA (n=26) $\bar{n}$ $\underline{M(SD)}$	COM (n=25) $\bar{n}$ $\underline{M(SD)}$	F	$\eta^2$
<i>Caregiver-Report Variables</i>					
CBCL					
Externalizing	22 64.77 (13.27) <sup>A</sup>	25 57.04 (13.18) <sup>B</sup>	25 47.24 (8.75) <sup>AB</sup>	12.93***	.273
Internalizing	22 61.73 (13.20) <sup>A</sup>	25 57.36 (9.84) <sup>B</sup>	25 46.88 (9.68) <sup>AB</sup>	11.67***	.253
Total Problems	22 66.68 (11.70) <sup>AC</sup>	25 58.52 (11.62) <sup>AB</sup>	25 47.04 (8.56) <sup>BC</sup>	20.17***	.369
Attention Problems	22 66.59 (9.38) <sup>AC</sup>	25 58.40 (7.98) <sup>AB</sup>	25 52.16 (3.13) <sup>BC</sup>	23.30***	.403
Social Problems	22 63.36 (10.52) <sup>AC</sup>	25 56.12 (6.46) <sup>AB</sup>	25 51.68 (3.13) <sup>BC</sup>	15.63***	.312
Thought Problems	22 65.18 (8.26) <sup>AC</sup>	25 57.24 (8.03) <sup>AB</sup>	25 52.40 (3.97) <sup>BC</sup>	19.86***	.365
TSCYC					
PTS-Intrusion	26 65.04 (18.69) <sup>A</sup>	20 60.60 (16.73) <sup>B</sup>	21 47.00 (4.81) <sup>AB</sup>	8.74***	.215
PTS-Arousal	26 64.19 (14.65) <sup>A</sup>	20 54.45 (12.89) <sup>B</sup>	21 45.33 (6.73) <sup>AB</sup>	14.10***	.306
PTS-Avoidance	26 66.23 (19.15) <sup>A</sup>	20 68.10 (21.38) <sup>B</sup>	21 48.38 (6.05) <sup>AB</sup>	8.71***	.214
PTS-Total	26 67.35 (17.24) <sup>A</sup>	20 61.75 (16.75) <sup>B</sup>	21 45.95 (6.55) <sup>AB</sup>	13.01***	.289
Anger	26 69.46 (18.58) <sup>AC</sup>	20 56.60 (11.97) <sup>AB</sup>	21 45.71 (4.66) <sup>BC</sup>	17.98***	.360

Dissociation	26	61.62 (14.73) <sup>AC</sup>	20	51.35 (9.50) <sup>AB</sup>	21	44.48 (4.15) <sup>BC</sup>	15.00***	.319
Sexual Concerns	26	78.69 (19.66) <sup>AC</sup>	20	59.15 (19.84) <sup>A</sup>	21	47.76 (5.06) <sup>C</sup>	20.97***	.396
<i>Child Measure Variables</i>								
CASI								
Internality Negative	30	48.13 (14.52)	24	46.04 (16.77)	25	48.56 (15.79)	0.18	.005
Generality Negative	30	65.43 (22.85)	24	66.33 (28.41)	25	63.04 (29.97)	0.10	.003
Full Positive	30	186.20 (34.62)	24	186.13 (34.76)	25	185.20 (32.82)	0.01	.000
Full Composite	30	72.63 (48.16)	24	73.75 (56.42)	25	73.60 (51.31)	0.00	.000
SCEMAS								
Shame	30	44.90 (10.08)	24	44.83 (7.17)	25	40.64 (9.95)	1.79	.045
Non-Ruminative Guilt	30	50.07 (8.65)	24	49.33 (8.37)	25	45.96 (9.63)	1.59	.040
Ruminative Guilt	30	45.50 (8.60)	24	43.54 (8.25)	25	41.92 (7.18)	1.36	.034

*Note.* CSBI = Child Sexual Behavior Inventory, CBCL = Child Behavior Checklist, TSCYC = Trauma Symptom Checklist for Young Children, PTS = Posttraumatic Stress, CASI = Children's Attributional Style Interview, SCEMAS = Self-Conscious Emotions: Maladaptive and Adaptive Scales.

Superscripts denote significant pairwise comparisons (i.e., items with the same superscript are significantly different from one another).

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

*Trauma.* A MANOVA using Trauma Symptom Checklist for Young Children (TSCYC) posttraumatic stress (PTS) scores (i.e., PTS- Arousal, Avoidance, Intrusion and Total), as well as the Anger, Dissociation, and Sexual Concerns scores as the dependent variables and group as the fixed factor independent variable was significant,  $F(14, 116) = 5.02, p = .000, \eta^2 = .377$ . Univariate ANOVAs revealed significant differences between groups on all of the TSCYC subscales (see Table 4 for  $F$ -tests and effect sizes for TSCYC scores).

Planned comparisons (Games-Howell) revealed that, as would be expected, compared to children with no known history of CSA (i.e., the COM group), children in the two CSA groups (i.e., the SA and NSA groups) had significantly higher scores on all four PTS subscales. Contrary to the hypothesis, compared to children in the NSA group, children in the SA group did not have significantly higher PTS scores. However, for PTS-Arousal, using the Games-Howell post-hoc test statistic, there was a trend ( $p = .054$ ), with SA children having higher scores than the NSA group. This difference between the two groups was significant using Tukey's HSD ( $p = .024$ ). In addition, although the SA and NSA groups did not differ with respect to PTS scores, consistent with the hypothesis, the groups did differ with respect to trauma-related anger, dissociation and sexual concerns. As demonstrated in Table 4, on the Anger and Dissociation subscales, the SA group had the highest score, followed by the NSA group, and the COM group. On the Sexual Concerns subscale, the SA group had significantly higher scores than both the NSA group and the COM group, whose scores did not differ from one another.

*Hypothesis 2: Compared to non-sexually aggressive CSA survivors, sexually aggressive CSA survivors will have an attributional style characterized by external, global, and stable attributions for negative events.*

A MANOVA examining group differences on the Children's Attributional Style Interview (CASI) Internality Negative, Globality Negative, Full Positive, and Full Composite subscale scores was not significant,  $F(6, 148) = .994, p > .10, \eta^2 = .01$ . Contrary to the hypothesis, the groups did not differ with respect to their attributional style. Table 4 presents the  $F$ -tests and effect sizes for CASI scores.

*Hypothesis 3: Compared to non-sexually aggressive CSA survivors, sexually aggressive CSA survivors will be more shame-prone.*

A MANOVA conducted with the Shame, Ruminative Guilt, and Non-Ruminative Guilt subscales of the Self-Conscious Emotions: Maladaptive and Adaptive Scales (SCEMAS) as the dependent variables and group as the fixed factor independent variable was not significant,  $F(6, 148) = .890, p > .10, \eta^2 = .973$ . Contrary to the hypothesis, the groups did not differ with respect to their proneness to Shame, Ruminative Guilt, and Non-Ruminative Guilt (see Table 4 for  $F$ -tests and effect sizes for SCEMAS scores).

### *Exploratory Analyses*

One objective of the present study was to explore the relations among the variables in an effort to better understand the differences between sexually aggressive and non-sexually aggressive CSA survivors. Three different types of exploratory analyses were conducted. Specifically, correlations were conducted to examine whether problematic sexual behaviour was related to any of the study



variables. Correlations were also conducted to explore the relations among the variables. Linear and logistic regressions were conducted to examine whether study variables could predict problematic sexual behaviour or sexual aggression (i.e., CSBI Total score or categorical group membership).

### *Correlations*

Pearson product moment correlations were conducted to explore the relations between problematic sexual behaviour (i.e., CSBI Total score) and the caregiver-report and child measure variables. Significant correlations are reported in Table 5. In general, problematic sexual behaviour was significantly positively correlated with all of the symptomology scales (e.g., CBCL Internalizing, Externalizing, Total Problems, Social Problems, Thought Problems, and Attention Problems), all of the trauma-related scales (e.g., TSCYC PTS-Intrusion, PTS-Arousal, PTS-Avoidance, PTS-Total, Anger, Dissociation, and Sexual Concerns), and the SCEMAS Ruminative Guilt scale. Although not significant, there was a trend ( $p = .07$ ) between SCEMAS Shame scale and problematic sexual behaviour. These findings suggest that as severity of problematic sexual behaviour increases, adjustment difficulties and Ruminative Guilt increase as well. Problematic sexual behaviour was not significantly correlated with any of the attribution (i.e., CASI) scales suggesting that severity of problematic sexual behaviour is not directly related to general attributional style.

Pearson product moment correlations were also conducted to examine the relations among the variables. Intercorrelations among the variables are

presented in Table 6. The results of the analysis yielded significant positive correlations between all of the symptomology (i.e., CBCL) and trauma-related (i.e., TSCYC) scores. In addition, SCEMAS Ruminative Guilt scores were significantly positively correlated with CBCL Externalizing, Internalizing, Total Problems, Attention Problems, and Thought Problems scores, as well as TSCYC PTS-Arousal and PTS-Total scores. SCEMAS Shame and Non-Ruminative Guilt scores were correlated with one another and with Ruminative Guilt, but were not correlated with any other measures. The attribution (i.e., CASI) subscales were not significantly correlated with any other measures.

Table 5

*Correlations between Child Sexual Behavior Inventory Total Scores and Caregiver-Report and Child Measure Variables*

	CSBI Total
<i>Caregiver-Report Variables</i>	
CBCL	
Externalizing	.57***
Internalizing	.52***
Total Problems	.62***
Attention Problems	.60***
Social Problems	.46***
Thought Problems	.57***
TSCYC	
PTS-Intrusion	.47***
PTS-Arousal	.61**
PTS-Avoidance	.35**
PTS-Total	.52**
Anger	.60***
Dissociation	.57***
Sexual Concerns	.64***
<i>Child Measure Variables</i>	
CASI	
Internality Negative	.08
Generality Negative	.16
Full Positive	-.06
Full Composite	-.15
SCEMAS	
Shame	.22
Non-Ruminative	.13
Ruminative Guilt	.33**

*Note.* CSBI = Child Sexual Behavior Inventory, CBCL = Child Behavior Checklist, TSCYC = Trauma Symptom Checklist for Young Children, PTS = Posttraumatic Stress, CASI = Children's Attributional Style Interview, SCEMAS = Self-Conscious Emotions: Maladaptive and Adaptive Scales.

\*\*  $p < .01$ , \*\*\*  $p < .001$

Table 6

*Intercorrelations among Caregiver-Report and Child-Measure Variables*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
<i>Caregiver-Report Variables</i>																			
CBCL																			
1. Externalizing	--																		
2. Internalizing	.69***	--																	
3. Total Problems	.92***	.84***	--																
4. Attention Problems	.76***	.60***	.82***	--															
5. Social Problems	.64***	.45***	.67***	.73***	--														
6. Thought Problems	.63***	.66***	.74***	.69***	.53***	--													
TSCYC																			
7. PTS-Intrusion	.43***	.67***	.60***	.60***	.41**	.52***	--												
8. PTS-Arousal	.67***	.69***	.77***	.83***	.58***	.66***	.71***	--											
9. PTS-Avoidance	.41**	.51***	.52***	.46***	.38**	.39**	.77***	.59***	--										
10. PTS-Total	.56***	.69***	.70***	.71***	.51***	.59***	.91***	.87***	.89***	--									
11. Anger	.80***	.67***	.79***	.65***	.56***	.60***	.44***	.69***	.48***	.61***	--								
12. Dissociation	.53***	.52***	.63***	.82***	.54***	.62***	.56***	.74***	.41**	.65***	.40**	--							
13. Sexual Concerns	.54***	.54***	.62***	.65***	.56***	.62***	.68***	.73***	.59***	.75***	.66***	.56***	--						
<i>Child Measure Variables</i>																			
SCEMAS																			
14. Shame	.07	.20	.15	.11	.04	.08	.22	.15	.20	.20	.12	.09	.15	--					
15. Ruminative Guilt	.29*	.27*	.33**	.26*	.20	.28*	.21	.29*	.23	.28*	.23	.17	.29*	.72***	--				
16. Non-Ruminative Guilt	.06	.17	.15	.10	.13	.16	.15	.14	.19	.18	.16	.13	.09	.71***	.67***	--			

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	
CASI																				
17. Internality Negative	.04	.13	.06	.12	.13	.04	.03	.08	-.09	-.00	.01	.04	-.08	.14	.02	.09	--			
18. Generality Negative	.19	.11	.13	.12	.09	.08	.06	.02	.05	.04	.03	.14	.07	.04	.04	-.08	.19	--		
19. Full Positive	.15	.04	.11	.10	.12	.17	.06	.06	-.11	-.01	.00	.00	.11	-.01	-.03	-.07	.01	-.21	--	
20. Full Composite	-.02	-.08	-.02	-.04	-.01	.05	.00	.01	-.08	-.03	-.02	-.09	.06	-.07	-.05	-.03	-.40***	-.72***	.77***	

Note. CSBI = Child Sexual Behavior Inventory, CBCL = Child Behavior Checklist, TSCYC = Trauma Symptom Checklist for Young Children, PTS = Posttraumatic Stress, CASI = Children's Attributional Style Interview, SCEMAS = Self-Conscious Emotions: Maladaptive and Adaptive Scales.

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

*Multiple Regression: Predicting Child Sexual Behaviour Inventory Total Score*

A multiple regression was conducted to determine how well the caregiver-report and child-measure variables predicted problematic sexual behaviour (i.e., CSBI Total score). Predictor variables were determined based on the results of the Pearson product moment correlations. As a result of missing data, a total of 59 participants were included in the regression. As such, in order to limit the number of predictors, for both the symptomology (i.e., CBCL) and trauma (i.e., TSCYC) measures, only Total scores were included in the analysis. Thus, the three predictors included in the analysis were global symptomology (i.e., CBCL Total Problems), global PTSD symptomology (i.e., TSCYC PTS-Total), and ruminative guilt (i.e., SCEMAS Ruminative Guilt). The variables were entered in one block and a forced entry procedure was used. Results indicated that the model was a significant predictor of problematic sexual behaviour,  $R = .641$ ,  $F(3,55) = 12.77$ ,  $p = .000$ . However, an analysis of the regression coefficients indicated that only global symptomology was a significant predictor of problematic sexual behaviour,  $t(57) = 3.49$ ,  $p < .01$ . The regression equation statistics are presented in Table 7.

Given the magnitude of the unique variance predicted by global symptomology and that other predictor variables were not significant, the potential for multicollinearity was assessed. Assessing multicollinearity ensures that the strength of the association between global symptomology and problematic sexual behaviour was not the result of excessively high intercorrelations among the other predictor variables (Field, 2005). The following

criteria were used to determine multicollinearity: a) Pearson product moment correlation coefficients between variables larger than .8, b) variance inflation factor (VIF) equal to or larger than 10, and c) a Tolerance statistic score below .1 (Field, 2005). An examination of the results revealed no multicollinearity among the predictor variables.

Table 7

*Regression Equation Statistics for Predictor Variables on Child Sexual Behaviour Inventory Total Scores*

Predictor Variables	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>
(Constant)	-3.48	14.19		- 0.25
CBCL Total Problems	0.84	0.24	.53	3.49**
TSCYC PTS-Total	0.14	0.19	.12	0.76
SCEMAS Ruminative Guilt	0.18	0.31	.06	0.58

*Note.* CBCL = Child Behaviour Checklist, TSCYC = Trauma Symptom Checklist for Young Children, PTS = Posttraumatic Stress, SCEMAS = Self-Conscious Emotions: Maladaptive and Adaptive Scales.

*B* = unstandardized regression weight; *SE B* = standard error of unstandardized regression weight;  $\beta$  = standardized regression weights; *t* = t-statistic.

$R^2 = .41$ , \*\*  $p < .01$

Based on the results of the first regression, in order to determine how much of the variance in problematic sexual behaviour is accounted for when global symptomology is the only predictor, a second regression was conducted. A total of 71 cases were included in the analyses with global symptomology as

the predictor variable. The results suggest that global symptomology accounts for approximately 39% of the variance of problematic sexual behaviour ( $R^2 = .39$ ).

The regression equation statistics are presented in Table 8.

Table 8

*Regression Equation Statistics for Predictor Variable Child Behavior Checklist Total Problems on Child Sexual Behavior Inventory Total Scores*

Predictor Variables	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>
(Constant)	2.82	8.73		0.32
CBCL Total Problems	0.99	0.15	.62	6.63***

*Note.* CBCL = Child Behavior Checklist

*B* = unstandardized regression weight; *SE B* = standard error of unstandardized regression weight;  $\beta$  = standardized regression weights; *t* = t-statistic.

$R^2 = .39$ , \*\*\*  $p < .001$

*Logistic Regression: Predicting Sexually Aggressive or Non-Sexually Aggressive Group Membership*

The purpose of the present study was to differentiate sexually aggressive and non-sexually aggressive CSA survivors. As such, a stepwise binary logistic regression (Backward LR) was conducted to determine how well the caregiver-report and child measure variables predicted categorical group membership (SA or NSA group; COM group was excluded from the analyses). Data from 41 participants were available for analysis (21 SA, 20 NSA). Predictor variables were determined based on the results of the ANOVAs and MANOVAs. As a result of the small sample size, it was necessary to limit the number of predictors



included in the analysis. Specifically, only variables in which the two groups differed were included in the analysis. In addition, for the trauma measure (i.e., TSCYC), because the groups differed on multiple variables (e.g., Anger, Dissociation, Sexual Concerns, PTS-Arousal<sup>5</sup>) only the variable that was theoretically hypothesized to be related to problematic sexual behaviour, namely PTS-related arousal, was included in the analysis. Thus, the predictors included in the regression were global symptomology (i.e., CBCL Total Problems score) and PTS-related arousal (i.e., TSCYC PTS-Arousal score).

Results indicated that PTS-related arousal was significantly related to group membership ( $p < .05$ ). The PTS-Arousal odds ratio (*Exp b*) was .948. An odds ratio with a value  $>1$  suggests that as PTS-related arousal increases, the odds of being assigned to the NSA group decreases. Global symptomology was not considered a significant predictor of group membership when PTS-related arousal was included in the model (see Table 9 for logistic regression equation statistics). PTS-related arousal symptoms appeared to be the best predictor of sexual aggression group membership. The model consisting of PTS-Arousal score accurately predicted group membership for 68.3% of cases. When global symptomology was included, the accuracy for predicting group membership only increased to 70.7%, which was not a significant increase.

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<sup>5</sup> PTS-Arousal was included in the analyses because it was significant using Tukey's HSD.

Table 9

*Logistic Regression Equation Statistics for the Predictor of Child Sexual Abuse Group Membership*

Step	Predictor Variables	<i>B</i>	<i>SE B</i>	<i>Exp b</i>	95% CI	
					Lower	Upper
1	(Constant)	3.62	1.91	37.37		
	TSCYC PTS-Arousal	-0.04	0.04	0.96	0.89	1.04
	CBCL Total Problems	-0.02	0.04	0.98	0.90	1.06
2	(Constant)	3.09	1.59	22.01		
	TSCYC PTS-Arousal	-0.05*	0.03	0.95	0.90	1.00

*Note.* TSCYC = Trauma Symptom Checklist for Young Children, PTS = Posttraumatic Stress, CBCL = Child Behavior Checklist.

*B* = unstandardized regression weight; *SE B* = standard error of unstandardized regression weight; *Exp b* = odds ratio; CI = confidence interval

Step 1:  $R^2 = .12$  (Cox & Snell),  $.16$  (Nagerlkerke). Step 1: Model  $\chi^2(2) = 5.12, p > .05$ .

Step 2:  $R^2 = .11$  (Cox & Snell),  $.15$  (Nagerlkerke). Step 2: Model  $\chi^2(1) = 4.84, p < .05$ .

\*  $p < .05$ .

## CHAPTER IV

### Discussion

The main focus of this study was to compare the adjustment (i.e., symptomology and PTSD), attributional style, and shame-proneness of sexually aggressive and non-sexually aggressive CSA survivors. The findings suggest that, compared to non-sexually aggressive CSA survivors, sexually aggressive CSA survivors evidence more adjustment difficulties including symptomology (i.e., global symptomology, attention problems, thought problems, and social problems), as well as trauma-related symptoms (i.e., PTS-arousal, anger, dissociation and sexual concerns). Contrary to the study hypotheses, neither shame-proneness nor attributional style differentiated sexually aggressive from non-sexually aggressive CSA survivors. However, a form of maladaptive guilt (i.e., Ruminative Guilt) was significantly related to problematic sexual behaviour, suggesting that as problematic sexual behaviour increases, so too does ruminative guilt.

The present study examined the adjustment, cognitions, and emotions of sexually aggressive CSA survivors utilizing appropriate measures and appropriate control groups. In particular, by including a group of children with no known history of CSA, conclusions can be reached regarding whether group differences are attributable to CSA in general, or whether they can be attributed to differences between sexually aggressive and non-sexually aggressive CSA survivors. The discussion will first focus more generally on the differences between CSA survivors and a comparison group of children with no history of

CSA. Second, the discussion will focus specifically on sexually aggressive CSA survivors. In particular, the findings related to adjustment, attributional style, and proneness to shame and guilt will be discussed. This will be followed by the presentation of an integrative model rooted in the Developmental Psychopathology framework.

### *Child Sexual Abuse*

Consistent with the literature, the results of the present study indicate that, compared to children with no known history of CSA, children with a history of CSA had higher levels of adjustment difficulties including internalizing and externalizing symptomology, as well as PTS-related symptomology (Beitchman et al., 1991; Berliner & Elliot, 2002; Kendall-Tackett et al., 1993; Putnam, 2003; Quas et al., 2005; Walker et al., 2004). Also consistent with the literature, the present study did not find any specific patterns of symptoms (Kendall-Tackett et al., 1993). CSA survivors in the present study demonstrated a broad range of adjustment difficulties. In particular, approximately 47% of the CSA children had a caregiver-report internalizing score in the borderline clinical to clinically significant range (i.e., above the 84<sup>th</sup> percentile); 64% had an externalizing score above the 84<sup>th</sup> percentile; and 36% had scores on a PTSD scale indicative of severe posttraumatic stress disturbances.

The results revealed no significant gender differences in adjustment. Although some studies have reported gender differences in adjustment with females displaying more internalizing symptomology and males displaying more externalizing symptomology, this finding has not been consistently reported in the

literature (Kendall-Tackett et al., 1993). In fact, in a review of the literature on the impact of sexual abuse on children, Kendall-Tackett et. al (1993) concluded that gender differences in adjustment following sexual abuse have only been reported in a minority of studies. Consistent with the present findings, a number of studies have suggested that sexually abused males and females may not differ in the degree or type of childhood psychopathology (Beitchman et al., 1991).

In addition to symptomology, studies investigating the impact of CSA have reported maladaptive levels of guilt and shame in CSA survivors (Berliner & Elliot, 2002). Research also suggests that CSA can actually alter children's cognitive attributional style, creating a self-blaming and pessimistic world view (Berliner & Elliot, 2002; Valle & Silovsky, 2002). Results of the present study indicated no significant differences in shame, guilt, or attributional style between the CSA groups and the comparison group.

#### *Sexually Aggressive Child Sexual Abuse Survivors*

*Symptomology.* Based on the reviewed literature, one hypothesis of the present study was that compared to non-sexually aggressive CSA survivors, sexually aggressive CSA survivors would evidence poorer adjustment as indicated by higher levels of internalizing, externalizing, and PTSD symptomology. Results indicated that the two CSA groups did not differ from one another on global internalizing or global externalizing symptomology. However, consistent with the hypothesis, compared to both the non-sexually aggressive CSA survivor group and the comparison group of children with no known history of CSA or sexual behaviour problems (SBP), sexually aggressive CSA survivors

had significantly higher scores on an index of global symptomology (i.e., CBCL Total Problems score). The results also indicated significant differences between the non-sexually aggressive CSA survivor group and the comparison group on the index of global symptomology. This suggests that although children with a history of CSA evidence more global adjustment difficulties than children with no history of CSA, sexually aggressive CSA survivors seem to have the highest level of adjustment difficulties. This finding was further supported by the significant positive correlation between global symptomology and problematic sexual behaviour (i.e., CSBI Total score). Thus, children with the highest SBP scores had the highest level of adjustment difficulties. The finding that children with the most extreme SBP also evidenced the most adjustment difficulties has been consistently reported in the literature (Chaffin et al., 2008; Friedrich, 2007). For example, research comparing children with SBP in foster care to children in-care with no SBP, found that almost all of the children with SBP evidenced clinically significant mental health disturbances and difficulties (Tarren-Sweeney, 2008).

In addition, although compared to the comparison group both CSA groups had higher scores with respect to Social Problems, Thought Problems, and Attention Problems, the sexually aggressive CSA survivor group had significantly higher scores than the non-sexually aggressive CSA survivor group on all three scales. This suggests that sexually aggressive children evidence more impairment in these areas of functioning. With respect to social problems, research suggests that children with more intense SBP tend to have more

deficits in social functioning (Chaffin et al., 2008). For example, a study by Letourneau et. al (2004) investigating children and adolescents with SBP, compared children with high, low, and no SBP on the CBCL Social Problems scale. Consistent with the present findings, the authors found that children with the highest amount of SBP had the most severe social problems followed by children with a low amount of SBP, and children with no SBP.

Additional research has identified specific characteristics associated with children with SBP which could interfere with their social functioning or competence (Friedrich, 2007; Silovsky & Niec, 2002; Tarren-Sweeney, 2008). For example, research suggests that some children with SBP lack warmth or empathy; demonstrate a restricted range of affective expression; blame others or deny responsibility; and demonstrate nonsexual general boundary problems (Friedrich, 2007; Hall et al., 1998). It is important to note that the majority of studies investigating the social or interpersonal functioning of sexually aggressive children or children with SBP use measures such as the CBCL Social Problems scale, which provides only a global index of functioning. To date, no study has utilized measures specifically designed to assess social factors in order to examine the social competence of sexually aggressive children or children with SBP. Thus, it is unclear whether there are specific patterns of deficits in social functioning associated with sexual aggression in children.

With respect to attention and thought problems, based on the reviewed literature, no study has explicitly examined either of these areas in sexually aggressive children or children with SBP. There is some evidence to suggest that

ADHD is commonly associated with SBP (Gray et al., 1999). However, in the present study there is considerable overlap between checklist items comprising the TSCYC PTS scales and the items comprising the CBCL Attention Problems and Thought Problems subscales. In fact, all of the CBCL items were significantly positively correlated with all of the TSCYC items. In particular, there was a high correlation between the TSCYC PTS-Arousal scale and the CBCL Attention Problems scale. This relation suggests that the significant level of attention problems found in the sexually aggressive group might be indicative of trauma symptoms as opposed to ADHD-type attention difficulties. The relation between attention problems and trauma-related arousal is consistent with research which suggests that PTS symptoms in children such as inattention, increased arousal, and increased agitation are often misdiagnosed as ADHD (Friedrich, 2002; Haugaard, 2004; Putnam, 1997).

In addition to examining differences between groups with respect to adjustment, the present study also explored which study variables were the best predictors of problematic sexual behaviour. The results indicated that when global symptomology (i.e., CBCL Total Problems score), global PTSD symptomology (i.e., TSCYC PTS-Total score), and maladaptive guilt (i.e., SCEMAS Ruminative Guilt score) were included in the analyses, global symptomology was the only significant predictor of problematic sexual behaviour. It is important to note that, although global symptomology accounted for a significant proportion of the variance in problematic sexual behaviour (39%), a substantial amount of variance remained unexplained.



A study by Friedrich et al. (2003), utilizing a sample of over 2,300 children, investigated the factors associated with sexual intrusiveness. Sexual intrusiveness was characterized by three items from an early version of the CSBI. The results of the study suggested that, in addition to family characteristics and demographic variables, CBCL Internalizing, CBCL Externalizing, and CBCL PTSD (a scale created for the study), were significant predictors of sexual intrusiveness. Thus, consistent with the literature, the results of the present study suggest that sexually aggressive CSA survivors demonstrate significantly more adjustment difficulties than non-sexually aggressive CSA survivors or children with no known history of CSA.

*Trauma.* In addition to examining group differences in general symptomology, the present study also explored group differences in symptomology consistent with posttraumatic stress (i.e., trauma-related symptomology). The symptoms explored in the present study included: trauma-related intrusion (i.e., “intrusive reliving of posttraumatic memories”, Briere, 2005, p. 13); trauma-related avoidance (i.e., “cognitive, behavioural, and/or emotional avoidance strategies to avoid posttraumatic distress”, Briere, 2005, p. 14); trauma-related arousal (i.e., sympathetic nervous system hyperarousal – “fight or flight”; Briere, 2005, p. 14); anger (i.e., angry feelings or aggressive behaviours); dissociation (i.e., “a disruption in the usually integrated functions of consciousness, memory, identity, or perception”; American Psychiatric Association, 2000, p. 519); and sexual concerns (i.e., “sexual distress and preoccupation”, Briere, 2005, p. 15).

Consistent with the literature on CSA, the results suggest that children who have a history of CSA evidence higher rates of symptomology consistent with PTS (Beitchman et al., 1991; Briere, 2005; Cohen, Deblinger, Mannarino, & Steer, 2004; Kendall-Tackett et al., 1993; Sim et al., 2005). Compared to children with no known history of CSA, children in the two CSA groups had significantly higher scores on four PTS scales: (i.e., intrusion, arousal, avoidance, and a total score comprised of all three subscales). Contrary to the hypothesis, the results did not indicate significant differences between the two CSA groups with respect to PTS scores. However, there was a trend (which likely would have been significant with a larger sample size) for sexually aggressive CSA survivors to have higher trauma-related arousal scores. Consistent with the hypothesis, the results yielded significant group differences on scales assessing trauma-related anger, dissociation, and sexual concerns. Specifically, compared to children with no known history of CSA, both CSA groups had higher scores on the Anger and Dissociation subscales of the TSCYC. However, compared to the non-sexually aggressive CSA survivor group, the sexually aggressive CSA survivor group had the highest scores. The sexually aggressive CSA survivor group also differed from both the non-sexually aggressive CSA survivor group and the comparison group on the Sexual Concerns subscale.

With respect to trauma-related arousal, although for the two CSA groups there was only a trend suggesting group differences, trauma-related arousal was significantly correlated with problematic sexual behaviour. In addition, when only the sexually aggressive and non-sexually aggressive CSA survivor groups were

considered, trauma-related arousal was the best predictor of group membership. This finding is interesting because it suggests that sexually aggressive children have a global, more heightened level of arousal. This level of arousal would require increased levels of emotional or behavioural regulation (Freidrich, 2002; Weems et al., 2003), which these children are not evidencing. In fact, research has demonstrated that maltreatment-related trauma symptoms in children are associated with a number of central nervous system effects including smaller cerebral volumes, smaller corpus callosum areas, medial prefrontal cortical dysfunction, and hypothalamic-pituitary-adrenal axis dysfunction (Beers & De Bellis, 2002; Cohen et al., 2004; Putnam, 2003). Each of these effects places the child at risk for emotional and behavioural dysregulation.

With respect to trauma-related anger, the items that comprise the Anger subscale of the trauma measure (i.e., TSCYC) are similar to items contained on the Externalizing subscale of the symptomology measure (i.e., CBCL), and in fact these two scales were significantly positively correlated. The significantly higher Anger scores in the sexually aggressive CSA survivor group suggest that these children are demonstrating a high number of dysregulated emotions or behaviours. The Anger subscale was significantly positively correlated with the PTS-Arousal subscale. This suggests that caregivers who reported high levels of angry and aggressive behaviours in their child, also reported high levels of trauma-related arousal behaviours in their child. Research suggests that children who are in a state of arousal might also tend to appear more emotionally labile or agitated (Friedrich, 2002). Children who are unable to manage their level of

arousal may react in an externalizing manner as a way to cope with the arousal (Cook et al., 2005). In fact, research suggests that high levels of arousal can cue anger-related action tendencies; anger can help decrease high levels of arousal because it helps release muscle tension (Greenberg & Paivio, 1997). In addition, the experience and expression of anger can serve as a maladaptive form of coping in that it blocks the awareness of other painful emotions (Greenberg & Paivio, 1997).

A similar connection has been made between dissociation and arousal, both of which were significantly related to problematic sexual behaviour. For example, based on the findings from their study investigating the pathways to PTSD in sexually abused children, Kaplow, Dodge, Amaya-Jackson, and Saxe (2005), stated that dissociation is a “primitive response that occurs only after the fight-or-flight arousal system has been overwhelmed” (p. 1308). Other research has suggested that extended periods of hyperarousal in both children and adults can lead to the depletion of cognitive and emotional resources (Weems et al., 2003). Some authors conceptualize maladaptive dissociation as a coping method for avoiding integrating the physical, emotional, and cognitive aspects associated with the trauma (Haugaard, 2004). The use of dissociation as a coping strategy can actually increase the difficulties associated with increased arousal, in that it prevents the child from developing adaptive emotional or behavioural regulation strategies (Cook et al., 2005; Sim et al., 2005). In addition, the combination of being overwhelmed by their affect and disconnected from their cognitive

processes, makes these children more likely to act out impulsively without consideration of the consequences of their behaviour (Rasmussen, 1999).

Dissociation is often associated with automatic behaviours, which are conducted without conscious awareness (Putnam, 1997). It is possible that some sexually aggressive children are in a dissociative state when they are engaging in sexually aggressive behaviours. This might be especially true in instances where the child is reenacting the abuse they experienced. Another possibility is that sexually aggressive children are less able to inhibit their impulses or behaviour because, as a result of prolonged hyperarousal, their behavioural and cognitive resources are overtaxed.

A final difference in adjustment between sexually aggressive and non-sexually aggressive CSA survivors is with respect to sexual concerns. The Sexual Concerns subscale of the TSCYC assesses the child's level of sexual distress and/or preoccupation. A number of the items on this subscale overlap with items on the problematic sexual behaviour measure (i.e., CSBI). There is one item on the Sexual Concerns subscale which involves explicitly touching other children's or adults' private parts. The remainder of the items involve sexual preoccupation or knowledge (e.g., knowing more about sex than he or she should; talking about sex; drawing pictures containing sexual things) or sexual worries or anxiety (e.g., "worrying that someone might be sexual with him or her"; "worrying about sexual things"). Thus, it is not surprising that the sexually aggressive CSA survivor group had the highest scores on this subscale. However, it is interesting that the non-sexually aggressive CSA survivor group

scores did not significantly differ from those of the comparison group of children with no known history of CSA or SBP. Research suggests that children with a history of CSA evidence higher levels of sexual anxiety (Simon & Feiring, 2008) and sexually ruminative thoughts (Leon et al., 2008). In the present study, non-sexually aggressive CSA survivors had scores similar to that of the comparison group; it was only sexually aggressive CSA survivors that had the higher scores. This may be due to the overlap of items with the CSBI.

Overall, in addition to more general internalizing and externalizing symptomology, children with a history of CSA appear to be exhibiting trauma-related symptomology. Sexually aggressive CSA survivors in particular seem to have significantly more, or more intense, difficulties including increased levels of trauma-related arousal, dissociation, sexual anxiety, and increased anger/aggression.

*Attributions.* Based on the reviewed literature, the present study hypothesized that sexually aggressive CSA survivors would differ from non-sexually aggressive CSA survivors with respect to their attributions, particularly for negative events. Previous research has demonstrated that sexually abused children who evidence persistent shame and a pessimistic attributional style demonstrate poor adjustment over time (Feiring, Taska, & Lewis, 2002; Valle & Silovsky, 2002). Contrary to the hypothesis, the results did not reveal any differences between groups with respect to attributional style. Attributional style was not correlated with any of the study indices of adjustment.

Although the lack of significant findings with respect to attributions is surprising given the consistent findings reported in the literature, it can not be easily accounted for by the specific study sample. In particular, the means and standard deviations of the attribution measure (i.e., CASI) variables in the present sample were quite similar to those reported in previous research (Conley et al., 2000). The measure also demonstrated adequate levels of internal reliability. In addition, despite the large range in scores, previous research using the CASI to explore the diathesis-stress model of depression in children has demonstrated significant findings (Conley et al., 2000). However, previous studies investigating the attributions of sexually abused children, typically have utilized a forced choice attribution measure (e.g., Feiring, Taska, & Chen, 2002; Feiring, Taska, & Lewis, 2002). The measure typically used is the Children's Attributional Style Questionnaire-Revised (CASQ-R; Thompson, Kaslow, Weiss, & Nolen-Hoeksema, 1998), which is presented in a questionnaire format. Children are provided with event-scenarios and asked to choose between two attributions to explain why the event occurred. Some questions probe internality, others probe stability, and others probe globality. In contrast to the CASQ, the CASI, which was used in the present study, employs an open-ended format which was designed to elicit children's spontaneous attributions (Conley et al., 2000). It is possible that the open-ended format of the CASI pulled for different attributions than the forced-choice format of the CASQ, which could explain why present findings differed from previous research.

Another possible explanation for the null finding pertains to administration of the measure. Participants in this study were not screened for verbal ability. Although the CASI instructions are quite comprehensive and practice questions are provided to ensure comprehension, it is possible that some of the participants did not adequately comprehend the task.

Alternatively, the present results might accurately reflect participants' attributional style. It might be the case that, contrary to hypotheses, the three groups of children do not substantially differ from one another with respect to their global attributional style. In addition to global attributional style, studies investigating children's attributions and adjustment following sexual abuse have also examined abuse specific attributions (e.g., Feiring, Taska, & Chen, 2002; Feiring, Taska, & Lewis, 2002). It is possible that it is not a global attributional style that distinguishes sexually aggressive from non-sexually aggressive CSA survivors, but rather it is their attributions about the abuse that differentiates the two groups. However, the fact that attributions between the CSA groups and comparison group did not differ, and that attributional style was unrelated to adjustment is surprising. Given the robustness of the attribution-adjustment finding in the literature (Valle & Silovsky, 2002), the null finding in the present study should be interpreted cautiously. Previous studies investigating children's attributions following CSA discovery typically involve larger sample sizes than the one used in this study.

*Shame-proneness and guilt-proneness.* Research conducted both with children and adults has demonstrated an association between shame and a



history of CSA and between shame and psychological adjustment (e.g., Feiring, Taska, & Chen, 2002; Feiring, Taska, & Lewis, 2002; Whiffen & MacIntosh, 2005). Shame is thought to result when the individual's focus is on the self and the implications for his or her identity (Ferguson, 2005; Ferguson, Brugman, White, & Eyre, 2007). In contrast, guilt is thought to be elicited when an individual is focused on the violation of a standard of conduct and expresses concern over their behaviour (Ferguson, 2005; Ferguson et al., 2007). Research suggests that shame-prone individuals lack empathy and perspective taking abilities, tend to externalize blame, and can actually demonstrate aggressive interpersonal behaviour (Bennett et al., 2005; Tangney & Dearing, 2002; Tangney et al., 2007). Based on this finding, the present study predicted that compared to non-sexually aggressive CSA survivors, sexually aggressive CSA survivors would evidence more shame, or proneness to shame. Contrary to the hypothesis, neither shame-proneness nor guilt-proneness differentiated the CSA survivors. In addition, contrary to previous findings indicating a relation between shame and adjustment, shame was not significantly correlated with any of the indices of adjustment. However, there was a trend for a positive correlation between shame and problematic sexual behaviour which suggests that with a larger sample size, smaller effects of shame may be detected.

It is important to note that previous research assessing shame and its relation to CSA and adjustment have employed quite diverse methods of measuring shame (Berliner, 2005; Feiring, 2005). Some researchers assess shame through direct questions regarding subjective feelings (e.g., Feiring,

Taska, & Chen, 2002; Feiring, Taska, & Lewis, 2002; Stuewig & McCloskey, 2005), whereas other researchers assess shame through facial expressions or body postures (e.g., Alessandri & Lewis, 1996; Bennet et al., 2005; Negrao et al., 2005). Most researchers would agree that similar findings (e.g., the association between shame and adjustment) between studies employing different methods of assessment provide support for the finding (Feiring, 2005). However, as Negrao et al. (2005) suggest, one would not necessarily expect facial expressions of shame to yield the same finding as self-reports of shame because people often attempt to regulate the behavioural expression of their emotions. Thus, it is difficult to make conclusions about the relation of shame and adjustment across studies because findings may differ based on the method of assessment (Berliner, 2005; Feiring, 2005).

Studies differ not only in how shame has been assessed but also in the construct being assessed. Some researchers have assessed shame related specifically to the abuse (Feiring, Taska, & Chen, 2002; Feiring, Taska, & Lewis, 2002), whereas others have assessed a more general proneness to shame (e.g., Ferguson et al., 1999; Stuewig & McCloskey). A longitudinal study by Feiring and Taska (2005) assessed both abuse-related shame and shame-proneness in a sample of sexually abused children and adolescents. The findings of the study indicated a consistency in abuse-related shame across time, and a relation between abuse-related shame and PTSD symptomology. Interestingly, the authors found only a modest relation between abuse-related shame and a more general proneness to shame. Unfortunately, they did not report whether there

was a significant relation between shame-proneness and PTSD symptomology. However, the finding of only a small relation between abuse-related shame and shame-proneness has important implications for the present study. In particular, the finding raises the question of whether a proneness to shame results from the abuse, or whether it was a preexisting factor. If shame-proneness is a result of unabated feelings of abuse-related shame, one reason for the null findings might be that the duration of time between discovery of the abuse and participation in this study was not controlled for. For some of the participants enough time might have passed that a more general proneness to shame might have developed. For other participants, the time elapsed might not have been very long. Alternatively, it is possible that what differentiates sexually aggressive from non-sexually aggressive CSA survivors, is their abuse-specific shame as opposed to their proneness to shame. Thus, another possible reason for the null findings related to shame could be that the measure used to assess shame focused on a general proneness to shame as opposed to abuse-specific shame.

An additional consideration regarding the assessment of shame concerns the method used to measure the construct. The present study utilized a scenario-based measure of shame. As with all measures, scenario-based measures have their limitations (Bybee & Quiles, 1998; Dost & Yagmurlu, 2008; Ferguson et al., 2007; Tangney & Dearing, 2002; Tangney et al., 2007). For example, research suggests that the internal-consistency of scenario-based measures is often lower than other types of measurement (Tangney & Dearing, 2002). However, as Tangney and Dearing (2002) point out, in scenario-based measures the

constructs (e.g., shame-proneness, guilt-proneness) are being assessed across a variety of different situations, and therefore there is an additional level of variance introduced (situational variance). These authors contend that coefficient alpha underestimates reliability in a scenario-based measure because it does not take into account the variance introduced by the different situations themselves. Another limitation of scenario-based based measures concerns the situations themselves (Tangney & Dearing, 2002). Obviously, not every potential affect-eliciting situation can be included in the measures. As such, the measures contain a limited number of settings and scenarios. It is possible that responses to these scenarios are not representative of a consistent response style (Tangney & Dearing, 2002). Finally, scenario-based measures have been criticized for confounding shame-proneness and guilt-proneness with moral standards of conduct. Critics suggest that individuals may respond to scenario-based measures based on the response they believe is morally and socially appropriate (Bybee & Quiles, 1998; Ferguson et al., 2007; Ferguson, Stegge, Eyre, Vollmer, & Ashbaker, 2000). However, the morally or socially appropriate response (e.g., to apologize or feel concern for the victim a transgression) does not necessarily correspond to how the individual actually would feel or behave (Ferguson et al., 2007). Thus, some researchers suggest that scenario-based measures do not really differentiate between actual “feelings” as opposed to behaviours, thoughts, or knowledge of moral standards (Ferguson et al., 2007; Harder, 1995).

The authors of the measure used in the present study, (SCEMAS; Stegge & Ferguson, 1994) attempted to address the criticisms of scenario-based measures when creating the SCEMAS. First, the situations included in the SCEMAS were derived from elementary school-aged children's descriptions of shame and guilt-eliciting events (Ferguson & Stegge, 1998). Second, the authors included both unambiguous situations (i.e., situations in which the expected response would be guilt or shame), as well as more ambiguous situations in which the expected or socially desirable response is not clear (Ferguson & Stegge, 1998; Ferguson et al., 2007; Ferguson et al., 2000). Despite these considerations, it is possible that the null findings in the present study are reflective of the measure used as opposed to a lack of differences between groups; that is, SCEMAS may not have accurately assessed the construct of shame.

A final consideration regarding the finding that the groups did not differ with respect to shame-proneness could be related to the concept of unacknowledged shame (Greenberg & Paivio, 1997). As stated in the introduction, "shame can either be acknowledged or unacknowledged" (Greenberg & Paivio, 1997, p.232). Acknowledged shame is associated with feelings of worthlessness, defectiveness, and inferiority. However, for some individuals, the feeling of shame is too threatening for their fragile ego or sense of self, that they do not acknowledge such feelings. According to Greenberg and Paivio (1997), in cases of unacknowledged shame, the individual "fiercely defends against feelings of shame with anger and is unaware that it is the tacit

underlying sense of worthlessness that is generating his or her bad feelings and maladaptive behavior” (p. 232). The distinction between acknowledged and unacknowledged shame must be considered when explaining the null findings related to shame. It is possible that sexually aggressive CSA survivors might have defended against their painful feelings of shame by externalizing their experience, thereby experiencing unacknowledged shame. If this indeed is the case, it is possible that the sexually aggressive children did not endorse higher levels of shame on the SCEMAS because they are not aware of their shame. Thus, it still remains plausible that sexually aggressive CSA survivors differ from non-sexually aggressive CSA survivors with respect to their proneness to shame; however, their proneness to shame would not be detected by measures that require the individual to be aware of their feelings of shame.

Support for the finding that sexually aggressive CSA survivors may experience unacknowledged shame comes from the finding in the present study that sexually aggressive CSA survivors had higher levels of trauma-related anger. As stated previously, anger can serve as a maladaptive form of coping in that it blocks the awareness of other painful emotions, such as shame (Greenberg & Paivio, 1997). It is possible that because their feelings of shame are unacknowledged, sexually aggressive CSA survivors have higher levels of anger. The index of anger used in this study (i.e., TSCYC Anger subscale) was not a “pure” measure of the emotion because it included a number of general externalizing behaviours which, are thought to be associated with anger. As

such, more research is necessary to determine the relation between feelings of anger and sexual aggression.

Despite the null findings regarding group differences in shame, as well as the limitations of scenario-based measures, the present study did find a significant positive association between SCEMAS Ruminative Guilt scores and problematic sexual behaviour, Ruminative Guilt scores and symptomology (i.e., CBCL Externalizing, Internalizing, Total Problems, Attention Problems, and Thought Problems), and Ruminative Guilt scores and trauma-related difficulties (i.e., PTS-Arousal and PTS-Total). This suggests that caregivers who reported high levels of problematic sexual behaviour or adjustment difficulties in their child, had children who responded to hypothetical scenarios with high levels of ruminative guilt.

The positive association between guilt and adjustment difficulties is surprising given the finding in the literature of a positive association between shame and maladjustment, and guilt and adjustment (Tangney et al., 1995; Tangney & Dearing, 2002; Tangney et al., 2007). However, as mentioned in the introduction, there is a debate in the literature concerning the adaptive or maladaptive nature of guilt (Bybee & Quiles, 1998; Dost & Yagmurlu, 2008; Ferguson & Stegge, 1998; Ferguson et al., 2007; Ferguson et al., 2000; Tangney et al., 1995; Tangney & Dearing, 2002; Tangney et al., 2007). Researchers have noted that any emotion can become maladaptive when it becomes excessive and is poorly regulated (Zahn-Waxler & Robinson, 1995). Some authors argue that excessive, poorly regulated guilt leads to the fusion of guilt with shame (Tangney

et al., 1995;; Tangney & Dearing, 2002; Tangney et al., 2007). This shame-fused guilt (also referred to as “ruminative guilt”) occurs when guilty thoughts and feelings are exaggerated and become generalized to the self or lead to excessive ruminative thoughts regarding self-condemnation (Bybee & Quiles, 1998; Ferguson & Stegge, 1998; Ferguson et al., 2000; Tangney et al., 1995; Tangney & Dearing, 2002; Tangney et al., 2007). Like shame, shame-fused guilt offers no opportunity for reparation or redemption because at the core the self is flawed (Tangney et al., 1995). Some authors suggest that adaptive guilt results in an individual focusing on the other, whereas maladaptive guilt occurs when a person focuses on the ego, with the concern for the other taking a secondary (if any) role (Dost & Yagmurlu, 2008; Lindsay-Hartz, De Rivera, & Mascolo, 1995). These authors distinguish maladaptive from adaptive guilt by further highlighting that maladaptive guilt tends to be motivated by a fear of rejection or denial of the realization that certain events are beyond one’s control (Lindsay-Hartz et al., 1995). This conceptualization of maladaptive guilt is similar to shame in that shame is concerned more with the self than with the other. In fact, many researchers have often overlooked the construct of ruminative guilt, dismissing it as being the same as shame (Dost & Yagmurlu, 2008; Tangney et al., 2007). As such, the terms “ruminative guilt”, “maladaptive guilt”, or “shame-fused guilt” have been nebulously defined in the literature, and rarely assessed.

The SCEMAS (Stegge & Ferguson, 1994) measure used in the present study measured guilt-proneness through the endorsement across situations of regret, remorse, apology, and reparation (Ferguson & Stegge, 1998). Shame-



proneness was measured through the endorsement across situations of self-criticism or withdrawal (Ferguson & Stegge, 1998). On the SCEMAS, ruminative guilt was assessed through the endorsement of statements involving perseveration about the outcome of a situation, or catastrophizing others' reactions (e.g., "my mom will never forgive me"). The Ruminative Guilt scale reflects some aspects of guilt in that the individual is regretful for the outcome of the situation, however, the regret is excessive and chronic (e.g., "I would worry for a long, long time about how my friend feels). The scale also contains items reflective of some aspects of shame such as feeling judged by others or unable to make reparation (e.g., "My teammates will never let me live this down"). Thus, the ruminative guilt construct seems to reflect aspects of both shame and guilt.

As mentioned previously, the findings from the present study yielded significant relations between ruminative guilt and problematic sexual behaviour. This finding is interesting in light of research by Zahn-Waxler and colleagues (see Zahn-Waxler & Robinson, 1995 for a review) which suggests that maladaptive guilt results when an individual becomes overly responsible for situations which are beyond their control (Zahn-Waxler & Robinson, 1995). For example, a study by Zahn-Waxler, Kochanska, Krupnick, and McKnew (1990) assessed patterns of guilt in children of depressed and well mothers. The developmental literature indicates that young children are egocentric and lack self-other differentiation (Zahn-Waxler et al., 1990). As such, the authors hypothesized that young children would be more likely than older children to display overgeneralized patterns of responsibility. In addition, the authors

highlighted key aspects of depressed mothers' parenting which could influence their children's propensity to experience maladaptive guilt. In particular, a summary of the literature on parenting and depression suggested that depressed mothers tend to make negative attributions about their children; report use of guilt- and anxiety- inducing discipline techniques that focus on the child's accountability; place high maturity demands on the child or is judgmental as to the child's role in other's problems; and may sometimes engage in love-withdrawal or uninvolved parenting styles (Zahn-Waxler et al., 1990). The results of the study suggest that young children of depressed mothers displayed high levels of overinvolvement in interpersonal conflict and evidenced patterns of overarousal to hypothetical situations. Older children of depressed mothers actually showed low levels of guilt, which the authors interpreted as reflecting a defensive reaction against feelings of intense guilt. As noted by Ferguson and Stegge (1998) guilt can become maladaptive "because of a paradoxical, simultaneous tendency to feel powerless yet responsible for anything that goes wrong" (p. 25).

With respect to the present study, research has found that the mothers of children with interpersonal SBP exhibit difficulty maintaining their own boundaries and respecting the boundaries of others' (Hall et al., 1998). Caregivers of children with SBP have been found to report high levels of parental stress, strained parent-child relationships, negative attributions about their children, and a tendency to be rejecting toward their child (Bonner et al., 1999; Gray et al., 1999; Johnson & Doonan, 2006; Pithers et al., 1998; Silovsky & Niec, 2002;

Tarren-Sweeney, 2008). Parent-child role reversal has also been found to be more prevalent among sexually abused children with interpersonal SBP (Hall et al., 1998). Thus, both depressed mothers and caregivers of sexually aggressive children display many of the same maladaptive features of parenting. In addition, research suggests that children with interpersonal SBP display ambivalence about whom to blame for their abuse (Hall et al., 1998). These children may in part, feel responsible or blameworthy for the abuse which could lead to feelings of shame or guilt. It is possible that, as with children of depressed mothers, sexually aggressive children have developed a maladaptive form of guilt.

CSA can result in feelings of powerlessness (Kendall-Tackett et al., 1993). These feelings of powerlessness, together with dysfunctional familial patterns, can lead to ruminative-type guilt. It is not unreasonable to suggest that ruminative guilt is either an aspect of shame or a precursor to shame. Ferguson et al. (2000) note that shame is a prolonged, painfully immobilizing experience which results from the focus on the flawed self and the belief that the individual has an unwanted identity both in their own eyes and in the eyes' of others. The items comprising the SCEMAS Ruminative Guilt scale include prolonged feelings of regret (e.g., "I would worry for a long time"), immobilization (e.g., the statement "my mom will never forgive me" can be immobilizing because nothing can be done to repair the behaviour), and the belief that others view the individual as flawed (e.g., "my teammates will never let me live this down"). In addition, the maladaptive guilt displayed by the children in the Zahn-Waxler et al. (1990) study was self-focused (egocentric) and actually led to overarousal, hostility, tension,

and sometimes callousness. The idea is that the child feels overly responsible for events that were beyond their control. Although initially they might feel guilt for the situation, the guilt is so extreme and excessive it becomes painful. The pain is unresolvable because the child is unable to make reparations. As such, as with shame, the pain causes increased arousal and the focus becomes more on the discomfort the child is feeling and how to avoid that discomfort, than on the empathic feelings towards the other. In fact, the child might react aggressively toward the other out of sheer frustration of being unable to resolve the painful feeling (Ferguson et al., 2000).

Research has found that individuals with chronic guilt are more likely to describe themselves as angry and resentful (Bybee & Quiles, 1998). Moreover, when guilt is induced by others (e.g., through use of guilt inducing parenting strategies), the individual may feel chronic guilt but also anger, resentment and hostility (Bybee & Quiles, 1998). As such, ruminative guilt seems to be very closely linked to externalized-shame. As previously stated, some authors suggest that ruminative guilt (or shame-fused guilt) is really the same as shame (e.g., Tangney and Dearing, 2002). Other authors contend that chronic guilt and shame co-occur (e.g., Bybee & Quiles, 1998).

A noteworthy criticism of the shame vs. shame-fused-guilt debate, regards the simplification of the construct of shame and guilt (Dost & Yagmurlu, 2008; Ferguson & Crowley, 1997). Critics suggest that by attempting to dichotomize maladaptive-shame and adaptive-guilt, researchers are ignoring the multidimensional nature of the emotions (Dost & Yagmurlu, 2008; Ferguson &

Crowley, 1997). As Dost & Yagmurlu (2008) contend, any “emotion can be dysfunctional or functional depending on how effectively it is regulated” (p. 113). As such, it is not the emotion itself that is problematic, rather it is the way in which an individual copes or regulates their emotion that can lead to healthy or problematic adjustment (Ferguson & Crowley, 1997). Thus, although contrary to the hypothesis, the present study did not find any differences between groups with respect to shame, significant differences were found with respect to adjustment difficulties. It is possible that sexually aggressive children do not have higher levels of shame as predicted, but instead are not as effective as the non-sexually aggressive or comparison group at effectively managing their shame.

Support for sexually aggressive children having ineffective coping comes from the finding of the positive association between Ruminative Guilt and problematic sexual behaviour, as well as the positive relation between Ruminative Guilt and PTS-Arousal, PTS-Total, internalizing and externalizing symptomology, and global adjustment difficulties. Regardless of whether ruminative guilt is best considered an aspect of shame, guilt, or shame-fused guilt, research suggests that it is the ruminative quality of the emotion that has detrimental effects on well-being (Orth, Berking, & Burkhardt, 2006).

Rumination is defined in the literature as focused attention on the self's thoughts and feelings (Bushman, Bonacci, Pedersen, Vasquez, & Miller, 2005; Davis & Nolen-Hoeksema, 2000). Emotions are likely to persist and negatively impact adjustment (e.g., self-esteem, interpersonal relationships) when they can not be adequately resolved to the situation (Ferguson et al., 2000). Bybee &

Quiles (1998) suggest that chronic guilt develops when the situation is unsolvable or uncontrollable and the individual's coping skills are taxed or overwhelmed. It is possible that the reason emotions persist and negatively impact adjustment is because the individual ruminates on their experience. A study by Orth et al. (2006) found that shame had a direct effect on rumination, and rumination mediated the relation between shame and depression. Similarly, research has found a positive relation between affect intensity and rumination (Selby, Anestis, & Joiner, 2008). Rumination as a coping strategy actually precludes the development of or use of more adaptive strategies (Ferguson et al., 2000). Thus by failing to allow for the emotion to be regulated, rumination is maladaptive (Dost & Yagmurlu, 2008). In fact, research suggests that rumination actually increases negative affect which contributes to emotional and behavioural dysregulation (Selby et al., 2008). Selby et al. (2008) contend that a ruminative coping strategy leads to a dysregulation cycle in which the individual ruminates, which increases the intensity of their negative affect. As an attempt to distract oneself from the ruminative thoughts and negative affect, the individual engages in impulsive or dysregulated behaviours; however, because the behaviour is impulsive, the individual may engage in another ruminative cycle as a result of the shame or guilt they feel for engaging in the dysregulated behaviour. In a series of studies with university students, Selby et al. (2008) found a strong positive relation between rumination and behavioural dysregulation and between rumination and a deficit in adaptive emotion regulation strategies. Further evidence for the relation between rumination and behavioural dysregulation

comes from a series of studies indicating that rumination increases the likelihood of displaced aggression following a minor trigger (Bushman et al., 2005).

With respect to the present findings, sexually aggressive children clearly demonstrate emotional dysregulation as evidenced by their extremely high scores on indices of maladjustment. Moreover, they are evidencing behavioural dysregulation in that they are aggressing sexually on others. As Paivio and Laurent (2001) suggest, some children experience emotion regulation problems because they do not learn the appropriate skills necessary to manage the intense affect resulting from maltreatment. The results of the present study indicate that sexually aggressive children experience high levels of arousal as well as dissociative tendencies. Rumination increases arousal and negative affect. As such, it is possible that sexually aggressive children engage in sexually aggressive behaviours as a way to cope with their arousal and negative affect (Cunningham & MacFarlane, 1996; Friedrich, 2002). Support for this contention comes from the study by Leon et al. (2008) which found that children with SBP that evidence lower levels of social and emotional competence (indicators of emotion regulation) tended to have more enduring trauma symptoms such as negative affect and ruminative thoughts.

*Developmental Psychopathology and Sexually Aggressive Child Sexual Abuse Survivors: The Model of Stigmatization Revisited*

This study sought to differentiate sexually aggressive CSA survivors from non-sexually aggressive CSA survivors. Group differences were found with respect to indices of adjustment. However, there were a number of variables which failed to distinguish categorical group membership, but did show a relation

with problematic sexual behaviour. This finding is not surprising based on a thorough review of the literature which suggests that children with SBP, in particular sexual aggression, are a heterogeneous group (e.g., Bonner et al., 1999; Chaffin et al., 2008; Friedrich, 2007; Letourneau et al., 2004; St. Amand, Bard, & Silovsky, 2008). Attempts to classify or categorize children with SBP have been on the whole, unsuccessful (Chaffin et al., 2008). The only consistent finding is that children with more intense SBP have more comorbid adjustment, social, and family difficulties (Chaffin et al., 2008). Moreover, as dictated by the Developmental Psychopathology (DP) framework, psychopathology should not be viewed as an “outcome” but instead as a developmental process indicating a disturbance in a normative developmental trajectory (Cummings et al., 2000). Viewed in this way, instead of qualitatively classifying CSA survivors as sexually aggressive or not (i.e., an outcome), it is more fruitful to examine sexual aggression or SBP quantitatively across the population of CSA survivors. It is likely that sexually aggressive children are not a qualitatively distinct group of CSA survivors, but instead represent a group of children with the most deviant-from-typical developmental trajectories.

#### *The Model of Stigmatization*

As mentioned in the introduction, the Model of Stigmatization explains that adjustment following CSA is mediated by children’s experiences of shame and their attributional style (Feiring et al., 1996). Additional moderating factors include family functioning, social support, gender, and developmental period (Feiring et al., 1996). The present study applied this model to sexually aggressive CSA



survivors by hypothesizing that sexually aggressive children have maladaptive attributions and higher levels of externalized shame, and it is these factors that explain the children's poor adjustment. Although this study was not designed specifically to validate this model, the results do suggest that sexual aggression is related to cognitive and emotional disturbances (e.g., rumination, dissociation, arousal, internalizing and externalizing symptomology). In particular, the results suggest that although sexually aggressive children's level of shame-proneness and attributional style may be similar to non-sexually aggressive CSA survivors, they have not developed effective coping abilities to deal with their emotions and cognitions. As such, it is possible that children who have extreme deficits in emotion regulation and coping abilities, react to CSA and the resulting experiences of shame and pessimistic attributions, by engaging in sexually aggressive behaviours as a way to cope with their arousal (Cunningham & MacFarlane, 1996; Friedrich, 2002). Likewise, it is probable that the Model of Stigmatization's contention that shame and attributional style are associated with adjustment following CSA, is also related to emotion regulation and coping abilities.

A key principle of the DP framework is that risk factors are multiplicative in their effects such that the more risk factors a child experiences, the greater the intensity each factor is experienced (Cummings et al., 2000). Thus, it is possible that sexually aggressive children not only have poorer regulation and coping abilities, but they also have a larger number of risk factors impinging on them.

*A Developmental Psychopathology Conceptualization of Sexual Aggression*

The DP model encourages researchers to identify risk factors associated with the development of maladaptive trajectories. The findings of the present study highlight a pattern of risk factors which can help explain the developmental trajectory of sexually aggressive CSA survivors. This pattern of risk factors seems to present a picture of an overtaxed and poorly developed emotion regulation system.

Emotion regulation occurs in multiple interacting domains: the neurophysiological-biochemical domain (hereafter referred to as the biological domain), the cognitive-experiential domain, and the behavioural domain (Dodge & Garber, 1991). Failures in the emotion regulation system, termed *dysregulation*, occur when extraordinary pain persists unabated and attempts at regulating the pain are unsuccessful (Dodge & Garber, 1991). Failures in the system can occur in any or all of the domains (Dodge & Garber, 1991). The present findings suggest that sexual aggression in CSA survivors is associated with a number of risk factors which could lead to, or are representative of, dysregulation in all system domains. Although an in-depth review of the emotion regulation literature is beyond the scope of this study, a brief review of the risk factors identified in the present study will be discussed.

*Biological risk factors.* Temperament plays an important role in emotion regulation in that it involves both reactivity level and the tendency to express positive and negative emotions (Lewis, 2007). Although temperament was not assessed in this study, the findings suggest that children who have experienced

CSA and are reacting with sexual aggression, may have a different level of temperamental reactivity to stress than other CSA survivors. The findings indicated that sexual aggression was associated with higher levels of trauma-related arousal. This reaction to trauma could be seen, in part, as reflective of a temperamental reactivity to stress. Research has linked high levels of stress reactivity to internalizing and externalizing symptomology (El-Sheikh, Erath, Buckhalt, Granger, & Mize, 2008), greater levels of shame, an inability to block physiological signals, and greater attention to the self (Lewis, 2007). These associations suggest that reactivity to stress may be a risk factor for emotional or behavioural dysregulation.

As mentioned previously, research suggests that biological reactions to stress can actually affect central nervous system functioning (Beers & De Bellis, 2002). In children, PTSD symptoms that occur as a result of maltreatment are associated with a number of central nervous system effects including smaller cerebral volumes, smaller corpus callosum areas, medial prefrontal cortical dysfunction, and hypothalamic-pituitary-adrenal axis dysfunction (Beers & De Bellis, 2002; Cohen et al., 2004; Putnam, 2003). Each of these effects places the child at risk for emotional and behavioural dysregulation. For example, corpus callosum volume has been negatively correlated with symptoms of dissociation (Putnam, 1997). PTSD arousal in maltreated children has been associated with an overactive sympathetic nervous system (Diseth, 2005). Sympathetic nervous system difficulties have been related to impairments in self-regulation (Ford, 2005). Moreover, chronic overreactivity of the sympathetic nervous system can

actually lead to dissociation as a way to deactivate the system (Diseth, 2005). In the present study, sexual aggression was associated both with increased levels of arousal and increased levels of dissociation. These stress responses could be indicative of higher levels of brain abnormalities in sexually aggressive children. Thus temperament, particularly reactivity to stress, serves as a risk factor in sexual aggression; higher levels of stress reactivity are associated with biochemical and neurological changes in brain functioning in response to maltreatment, which in turn are related to emotional and behavioural dysregulation (i.e., sexual aggression).

*Cognitive risk factors.* The present findings revealed a number of cognitive factors associated with sexual aggression (e.g., attention problems, rumination, dissociation). Each of these cognitive factors has been associated with emotional and behavioural regulation impairments. In addition, each of these factors has also been associated with executive functioning impairments. Executive functions are those operations of the brain that enable effortful, or 'top-down' control of behavior and are involved in decision-making, planning, cognitive flexibility, inhibition of competing responses and monitoring one's own actions (Barkley, 1997). The brain region most strongly associated with executive functioning is the prefrontal cortex (Barkley, 1997).

With respect to attention problems, the regulation of attention is associated with executive functioning (Eisenberg, 2000). Attention regulation is involved in the modulation of emotional arousal (Eisenberg, 2000). Research has found an association between deficiencies with attentional regulation and

conduct disorders, low levels of moral judgment, and other externalizing behaviours (Eisenberg, 2000). Thus, the association between attention problems and sexual aggression found in the present study suggests that perhaps sexually aggressive children have executive functioning impairments, which place them at risk for a variety of adjustment difficulties, including sexual aggression.

Further evidence for executive functioning deficits in sexually aggressive children comes from research which links rumination (perseveration) to cognitive inflexibility (Davis & Nolen-Hoeksema, 2000). The present findings indicated that sexual aggression was associated with increased levels of ruminative guilt. Shame and guilt are thought to serve an internal-regulatory function by directing the individual's attention to social standards and self-attributions (Barrett, 1995; Barrett & Campos, 1987; Mills, 2005). However, an emotion can become maladaptive when the individual cannot effectively regulate the chronicity or intensity of the emotion (Dost & Yagmurlu, 2008). In the present study, the ruminative quality of the guilt associated with sexual aggression is indicative of executive functioning impairments and emotion dysregulation. It has been suggested that rumination depletes executive resources and is reflective of an inability to suppress or inhibit negative thoughts (Philippot & Brutoux, 2008).

Another finding which is indicative of a potential association between executive functioning impairments and sexual aggression is with respect to dissociation. Dissociation is a symptom of PTSD and can be conceptualized as a cognitive risk factor that involves disruptions in the integration of mental functions (American Psychiatric Association, 2000). Dissociation has been associated with

executive functioning in that it involves deficits in judgment, planning, and organized goal-directed behaviour (Cook et al., 2005). Interestingly, some of the previously mentioned central nervous system deficits associated with maltreatment-related PTSD symptoms are also related to executive functioning impairments (Beers & De Bellis, 2002). This finding provides further support for a link between sexual aggression and executive function impairments in that sexual aggression is also presumed to be related to central nervous system impairments.

It is important to note that all of the cognitive factors mentioned thus far, not only place a child at risk for emotional and behavioural regulation difficulties, but also contribute to exacerbating or maintaining difficulties (Kaplow et al., 2005; Sim et al., 2005). In particular, both rumination and dissociation prevent the child from developing more effective coping strategies. Dissociation prevents the child from integrating their experience thereby preventing the development of adaptive ways to cope. Similarly, rumination prevents the child from shifting his or her attention to more productive coping strategies, thus preventing the development of adaptive coping.

*Behavioural risk factors.* The present study found an association between sexual aggression and social difficulties. Research suggests that because CSA occurs in the context of interpersonal relationships, it can negatively impact the victim's interpersonal behaviours (Whiffen & MacIntosh, 2005). In addition to sexual aggression, sexually aggressive children have been found to demonstrate a number of interpersonal behavioural difficulties including boundary violations

and impulsive behaviour (Friedrich, 2007; Friedrich et al., 2005; Friedrich et al., 2003; Silovsky & Niec, 2002; Whiffen & MacIntosh, 2005). These behaviours cause negative reactions in others which in turn causes negative affect in the child. Shame and ruminative guilt are two emotions which are associated with social rejection because, by definition, they involve a negative evaluation of the self from the perspective of others (Orth et al., 2006). If the child is unable to regulate their negative affect, they may evidence further behavioural and emotional dysregulation, causing further social difficulties. As such, social skill deficits can be seen as a risk factor for behavioural dysregulation such as sexual aggression (Rasmussen, 2002).

*Familial risk factors.* The present study did not assess family characteristics. However, it is important to note that the development of effective coping and emotion regulation typically occurs in the context of early attachment relationships (Friedrich, 2007; Friedrich et al., 2003; Tarren-Sweeney, 2008). As mentioned previously, a multitude of parenting factors and family dysfunction including poor attachment relations have been associated with sexual aggression (Friedrich, 2007; Friedrich et al., 2005; Friedrich et al., 2003; Tarren-Sweeney, 2008). These family difficulties increase risk for sexual aggression not only by causing deficiencies in the development of emotion regulation abilities, but family dysfunction also increases stress which increases demands on the child's emotion regulation system (Friedrich, 2007).

As mentioned previously, risk factors have a multiplicative effect and are interdependent. The present study highlighted a number of risk factors which are

associated with sexual aggression. A child who is exposed to these risk factors is poorly equipped to regulate the intense affect and cognitions associated with maltreatment. The combination of risk factors (e.g., reactivity to stress, dissociation, social difficulties, family dysfunction) leads to impulsive behaviours such as sexual aggression. Thus, it is the combination and interaction of these risk factors that steers certain CSA survivors toward a maladaptive developmental trajectory, namely sexual aggression.

#### *Clinical Implications*

The results of the present study suggest that children who have been sexually abused evidence adjustment difficulties including internalizing and externalizing symptomology, as well as PTSD and other trauma-related symptomology. Sexually aggressive CSA survivors in particular seem to have the most impaired level of coping, as evidenced by higher levels of difficulties both with respect to global symptomology, as well as trauma-related symptoms (i.e., PTS-related arousal, anger, dissociation, and sexual concerns). These findings have implications for both the prevention and treatment of sexual aggression following CSA.

With respect to prevention, children who have experienced CSA are at risk for a number of adjustment difficulties. The present findings suggest that sexual aggression might be reflective of poor coping and emotion regulation abilities. As such, even asymptomatic children might benefit from interventions targeted at increasing the development and use of adaptive coping strategies. Involving caregivers in the process may be key to preventing the development of



adjustment difficulties, in that they can help facilitate the development and use of effective coping.

With respect to intervention, a number of treatment programs have been developed to address problematic sexual behaviour in children (St. Amand et al., 2008). These treatment programs vary widely on a number of variables including parental involvement, amount of trauma focus, modality of therapy (group vs. individual), and focus on SBP versus general behavioural problems (St. Amand et al., 2008). Many of the treatment programs also employ a cognitive-behavioural component. However, the results of the present study suggest that sexually aggressive children have a number of cognitive related difficulties which may make cognitive-behavioural interventions less effective. Overall, the results suggest that the treatment approach utilized with sexually aggressive CSA survivors should involve elements of social skills training, coping skills training, and address family issues which may be contributing to adjustment difficulties. The child's cognitive abilities including attention and concentration should be considered when selecting the treatment that will be best suited to the individual child's strengths and weaknesses. The finding of a significant association between ruminative guilt and problematic sexual behaviour suggests that treatment programs should include components that enable the child to develop an adaptive understanding of their responsibility and role in interpersonal behaviour.

### *Study Limitations and Strengths*

The present study had a number of limitations. First, none of the existing standardized measures of children's sexual behaviour include a norm-based assessment of sexual aggression. As such, the present study utilized a combination of referral information and sexual behaviour scores in an effort to accurately classify whether or not a participant was placed in the sexually aggressive group. Thus, a limitation of the present study is that the sexually aggressive group was heterogeneous with respect to the severity and intensity of sexually aggressive behaviours.

A second study limitation is that the CSA participants were recruited from a sexual assault crisis centre. The children were attending the centre for adjustment difficulties related to CSA. Thus, both CSA groups were symptomatic and are therefore not representative of the entire population of sexually abused children. In addition, it was not possible to control for the amount of treatment each child had received prior to participating in the study; the children were heterogeneous with respect to treatment history. As such, it is possible that the null findings with respect to shame, non-ruminative guilt and attributions might be related to the fact that some of the CSA participants already received some form of treatment addressing these factors.

Third, the present study did not control for participant's verbal ability. Although the children were trained on the study measures and illustrations and charts were utilized to aid with comprehension, it is possible that some of the participants did not adequately comprehend the tasks.

A fourth study limitation concerns the reliability of foster parent report. Research suggests that the reliability of foster parent's reports of children's adjustment is uncertain (Tarren-Sweeney, 2008). The present study did not control for how long the child had lived in the home or the reliability or validity of the caregiver's report. It is possible that some caregivers did not accurately respond to questions, either over- or under- reporting symptomology.

A fifth limitation concerns missing data. Given the fact that many of the families presenting to the sexual assault crisis centre were in crisis or having difficulties, it is not surprising that it was not always possible to obtain completed forms from the parents. In addition, because the children's caregivers did not always attend the centre with them, at times questionnaires were sent home and not returned. The majority of missing data was from the sexually aggressive group and therefore important information might have been lost as a result of missing data and a decreased sample size. In addition, it is not clear whether the overrepresentation of missing data in the sexually aggressive group is indicative of family factors (e.g., low parental involvement, family chaos), situational factors (e.g., transportation issues, single parent family where the parent is at work), or some other factor which might help elucidate the findings of the present study.

A final study limitation concerns information regarding the severity and duration of the abuse, as well as the child's relationship to the perpetrator. Based on ethical and procedural concerns, it was not possible to collect reliable and accurate information concerning details of the participants' abuse experiences. As stated in the introduction, inconsistent findings have been reported in the

literature with respect to severity of abuse (i.e., the physical intrusiveness of the sexual acts, the duration of the abuse, and the child's relationship to the perpetrator) and its relation to problematic sexual behaviour; some studies have reported a relation but other studies have concluded that severity of the abuse is not related to problematic sexual behaviour (Araji, 1997). Despite the inconsistency in the literature, information concerning the participants' abuse experiences might have helped elucidate the present findings.

Despite the limitations, the present study had a number of strengths. In particular, previous research on sexually aggressive children has been criticized for not including appropriate comparison groups (Merrick et al., 2008; Simon & Feiring, 2008). This limitation was addressed by including both a comparison group of non-sexually aggressive CSA survivors, and a group of children with no known history of CSA. In addition, many researchers have focused on the outcomes or effects associated with CSA but few have focused on the reason children become symptomatic (Kendall-Tackett et al., 1993). The present study, grounded in a DP framework, attempted to highlight the specific processes and risk factors associated with sexual aggression

#### *Directions for Future Research*

Future research is needed to help elucidate our understanding of sexually aggressive CSA survivors. First, research measures should be developed which enable a reliable and valid classification of an individual as "sexually aggressive"; without such measures, researchers are likely examining a very heterogeneous group of behaviours. In addition, researchers should explicitly examine the

relation between executive functioning and sexual aggression. Executive functioning deficits have important implications for prevention and intervention programs. Third, research should be conducted to examine the concept of unacknowledged shame in sexually aggressive CSA survivors. A component of this research should include an investigation of sexually aggressive children's experiences of anger as well as their level of self-esteem (i.e., fragile self-esteem is associated with unacknowledged shame). Fourth, a plethora of research has been conducted regarding the adjustment difficulties associated with SBP; however, research examining the relation between family dynamics and SBP is lacking. Although some research has identified family dysfunction associated with SBP, little research has examined the processes through which the various child and family risk factors interact to result in sexual aggression. Finally, future research should explore both symptomatic and non-symptomatic CSA survivors to better understand the factors associated with resilience (Putnam, 2003). As part of this research, efforts should be made to control for participant's treatment history including length of treatment, type of treatment, and response to treatment. Research exploring the protective factors associated with adaptive adjustment following CSA can help with the development of effective prevention programs. Prospective longitudinal studies are particularly valuable in highlighting the processes through which adaptation following CSA occurs.

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## Appendix A

*Sexually Aggressive Group Consent Form*

## CONSENT FOR THERAPY AND RESEARCH PARTICIPATION

Dear Parent,

We are asking for your cooperation in allowing your child to participate in a research study being conducted by the XXX.

The main purpose of the research is to examine the effectiveness of a group therapy treatment for children with Sexual Behaviour Problems. Your child will receive approximately 16 weekly sessions of group psychotherapy. The following outlines the things that will be requested of both you and your child:

1. You will be asked to complete some questionnaires about your child both at the beginning of treatment and upon completion. The questions will focus on your child's sexual behaviours, and other common problems your child might be experiencing.
2. Your child will be interviewed about the way in which he or she interprets both positive and negative situations. This interview is not a test of your child's knowledge, but is an opportunity to express his or her opinions concerning this topic. Children will hear short stories involving hypothetical situations in which children are involved in different situations. For some situations, your child will be asked why the situation occurred, and for other stories they will be asked how they would feel. This interview will be conducted both at the beginning of treatment and upon completion.

Potential benefits of participation in this study include reduced distress and decreased behaviour problems in your child. As well, the results of the study will help with the development of effective intervention and prevention programs for children with sexual behaviour problems.

Information disclosed in your child's therapy is strictly confidential. However, confidentiality will be broken in the event that your child discloses

current abuse. In addition, confidentiality will be broken if your child reports an intention to harm him or herself or someone else.

The questionnaires and interviews will be kept in strict confidence and used only for this research. Identifying information will not appear on the materials.

At any time you can withdraw your consent for use of any part or all of the materials. If you do not consent or choose to withdraw your consent, your child will still be able to receive treatment from the XXX. If you have any questions about yours or your child's rights as a research participant contact:

Research Ethics Coordinator  
University of Windsor  
Windsor, ON N9B 3P4

Phone: (519) 253-3000 ext. 3916  
Email: lbunn@uwindsor.ca

Some of the data from the study will be used by Wendy Manel, M.A., a graduate student in the Psychology Department at the University of Windsor as part of her doctoral dissertation. Her project is being conducted under the supervision of Dr. Rosanne Menna who is a faculty member in the Psychology Department at the University of Windsor and a Registered Psychologist in the Province of Ontario.

If you have any questions or concerns about the study, you can contact either XXX from the XXX or Wendy Manel from the University of Windsor at the numbers listed below.

If you would like your child to participate please indicate your consent by completing the form on the following page. Thank you for your cooperation.

Sincerely,

XXX  
Children's Program Social Worker  
XXX

Wendy Manel, M.A.  
Graduate Student in Clinical Psychology  
University of Windsor  
(519) 253-3000 ext 2219

## Consent Form

I have read the letter about the research project being conducted at the XXX and the University of Windsor. I understand that XXX or Wendy Manel will answer any questions I may have at any time about the project. XXX may be reached at XXX and Wendy may be reached at (519) 253-3000 ext. 2219. The interview with my child will take approximately one hour. I understand that I, or my child, may stop participation in this study at any time and will still receive treatment from XXX. My child is free to refuse participation, or to refrain from answering any question.

At this time, I (Parent/Guardian) do give consent to have my child participate in this study.

Date: \_\_\_\_\_

Child's Name: \_\_\_\_\_

Child's Date of Birth: \_\_\_\_\_

Signature of Parent/Guardian: \_\_\_\_\_

Child's Signature: \_\_\_\_\_

Phone: \_\_\_\_\_

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

\_\_\_\_\_  
Signature of Investigator

\_\_\_\_\_  
Date



## Appendix B

*Non-Sexually Aggressive Group Consent Form*

## CONSENT TO PARTICIPATE IN RESEARCH

Dear Parent,

We are asking for your cooperation in allowing your child to participate in a research study being conducted by the XXX and Wendy Manel, a graduate student in the Psychology Department at the University of Windsor, under the supervision of Dr. Rosanne Menna who is a faculty member in the Psychology Department at the University of Windsor and a Registered Psychologist in the province of Ontario.

The main purpose of the research is to examine the way children interpret both positive and negative situations. This interview is not a test of your child's knowledge, but is an opportunity to express his or her opinions concerning this topic. Children will hear short stories involving hypothetical situations in which children are involved in different situations. For some situations, your child will be asked why the situation occurred, and for other stories they will be asked how they would feel. Your child will be interviewed both at the beginning of treatment and upon completion.

We are also asking for your cooperation in answering some questions about your child. The questions will focus on common problems your child might be experiencing and questions concerning your child's behaviour. You will be asked to complete some questionnaires about your child both at the beginning of treatment and upon completion.

Potential benefits of participation in this study include reduced distress and decreased behaviour problems in your child. As well, the results of the study will help with the development of effective intervention and prevention programs for children who have been sexually abused.

Information disclosed in your child's therapy is strictly confidential. However, confidentiality will be broken in the event that your child discloses current abuse. In addition, confidentiality will be broken if your child reports an intention to harm him or herself or someone else.

The questionnaires and interviews will be kept in strict confidence and used only for this research. Identifying information will not appear on the materials.

At any time you can withdraw your consent for use of any part or all of the materials. If you do not consent or choose to withdraw your consent, your child will still be able to receive treatment from XXX. If you have any questions about your child's rights as a research participant contact:

Research Ethics Coordinator  
University of Windsor  
Windsor, ON N9B 3P4

Phone: (519) 253-3000 ext. 3916  
Email: lbunn@uwindsor.ca

If you have any questions or concerns about the study, you can contact either XXX or Wendy Manel at the numbers listed below.

If you would like your child to participate please indicate your consent by completing the form on the following page. Thank you for your cooperation.

Sincerely,

XXX  
Children's Program Social Worker  
XXX

Wendy Manel, M.A.  
Graduate Student in Clinical Psychology  
University of Windsor  
(519) 253-3000 ext 2219

Consent Form

I have read the letter about the research project being conducted at the XXX and the University of Windsor. I understand that XXX or Wendy Manel will answer any questions I may have at any time about the project. XXX may be reached at XXXXX and Wendy may be reached at (519) 253-3000 ext. 2219. The interview with my child will take approximately one hour. I understand that I, or my child, may stop participation in this study at any time and will still receive treatment from XXX. My child is free to refuse participation, or to refrain from answering any question.

At this time, I (Parent/Guardian) do give consent to have my child participate in this study.

Date: \_\_\_\_\_

Child's Name: \_\_\_\_\_

Child's Date of Birth: \_\_\_\_\_

Signature of Parent/Guardian: \_\_\_\_\_

Child's Signature: \_\_\_\_\_

Phone: \_\_\_\_\_

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

\_\_\_\_\_  
Signature of Investigator

\_\_\_\_\_  
Date

## Appendix C

*Comparison Group Consent Form*

## CONSENT TO PARTICIPATE IN RESEARCH

Dear Parent,

We are asking for your cooperation in allowing your child to participate in research comparing the thoughts and feelings of children who have experienced trauma and those who have not. We are asking children between the ages of 5-12 years and who have no history of abuse or trauma to participate. If you agree to allow your child to participate, he or she will be interviewed about the way in which he or she interprets situations. This interview is not a test of your child's knowledge, but is an opportunity to express his or her opinions concerning this topic. Children will hear short stories in which children are involved in different situations. For some situations, your child will be asked why the situation occurred, and for other stories they will be asked how they would feel.

We are also asking for your cooperation in answering some questions about your child. The questions will focus on common problems your child might be experiencing and questions concerning your child's behaviour, including sexual behaviour.

This research builds on previous research conducted in this field. This work has examined how children reason about the causes of different types of social situations and the emotions they attribute to the situations. The present study was designed to learn more about the way in which children who have experienced trauma and children who have not experienced trauma, think about situations involving both positive and negative events. We invite you to view the stories and questions, prior to making your decision about your child's participation.

Interviews will be conducted individually in one session that will last approximately one hour. Every child's answers and comments will be kept strictly confidential. We are not interested in any one child's answers, but in gaining an understanding of the general pattern of children's thinking. No individual's name or identifying information will be used.

Participation in this study is strictly voluntary. Your child's assent will be sought and respected and he or she will be clearly informed that he or she may discontinue the interview at any time. If your child becomes uncomfortable, the interviewer will stop the interview immediately. You may withdraw your consent at any time by contacting us at the numbers listed below. All information about this study, including answers to any questions you may have, may be obtained by contacting either one of us.

There may be certain benefits to individuals from participation in this study. Some children may benefit from the opportunity to explore their thinking about these issues and expressing their views to an interested adult. This study may provide valuable information about the way in which children understand and think about social information. This information may prove useful in the development of effective interventions with children who have emotional and behavioural difficulties.

If you have any questions about yours or your child's rights as a research participant contact:

Research Ethics Coordinator  
University of Windsor  
Windsor, ON N9B 3P4

Phone: (519) 253-3000 ext. 3916  
Email: lbunn@uwindsor.ca

If you would like your child to participate, please indicate your consent by completing the form on the following page. Thank you for your cooperation.

Sincerely,

Dr. Rosanne Menna  
Professor of Psychology  
University of Windsor  
(519) 253-3000 ext. 2300

Wendy Manel  
Graduate Student  
University of Windsor  
(519) 253-3000 ext. 2219

## Consent Form

I have read the letter about the research project being conducted at the University of Windsor. I understand that Dr. Rosanne Menna or Ms. Wendy Manel will answer any questions I may have at any time about the project. Dr. Menna may be reached at (519) 253-3000 ext. 2230 and Ms. Manel may be reached at (519) 253-3000 ext. 2219. The interview will take approximately one hour. I understand that I, or my child, may stop participation in this study at any time. My child is free to refuse participation, or to refrain from answering any question.

At this time, I (Parent/Guardian) do give consent to have my child participate in this study.

Date: \_\_\_\_\_

Child's Name: \_\_\_\_\_

Child's Date of Birth: \_\_\_\_\_

Signature of Parent/Guardian: \_\_\_\_\_

Child's Signature: \_\_\_\_\_

Phone: \_\_\_\_\_

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

\_\_\_\_\_  
Signature of Investigator

\_\_\_\_\_  
Date

## Appendix D

*Script for Obtaining Child Assent*

I am a student researcher, and I am doing a study about thoughts and feelings. I would like to read you some stories and ask you some questions about the stories. There are no right or wrong answers to the questions, I am just interested in getting kids opinions.

When I am finished talking with all the kids who agree to be in my study, I will write a report on what I have learned. My teachers will read it, and it might be put in a book, but no one will know who the kids are that answered my questions.

I want you to know that I will not be telling your teachers or parents or any other kids what you answer. The only exception is if you tell me that someone has been hurting you. If I think that you are being hurt or abused I will need to tell your parents or someone else who can help you. Otherwise, I promise to keep everything that you tell me private.

Your mom and/or dad have said it is okay for you to answer my questions on feelings. Do you think that you would like to answer them? You won't get into any trouble if you say no. If you decide to answer the questions you can stop answering them at any time, and you don't have to answer any question you do not want to answer. It is entirely up to you. Whether you decide to answer any questions or not, I will give you a small prize when you leave. Would you like to try answering the questions?

I understand what I am being asked to do to be in this study, and I agree to be in this study.

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Signature

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Date

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Witness

## VITA AUCTORIS

Name: Wendy Shannon Manel

Place of Birth: Montreal, Quebec

Year of Birth: 1976

Education:

- 1990 - 1995 Ontario Secondary School Diploma, Thornlea Secondary School, Thornhill, Ontario
- 1995 - 1999 Honours B.Sc., With Distinction, University of Toronto, Specialist: Psychology; Major: Criminology, Toronto Ontario
- 2000 - 2003 M.A., Clinical Psychology – Child Subspecialty (CPA & APA accredited), University of Windsor, Windsor, Ontario.
- 2003 - present Doctoral Candidate in Clinical Psychology - Child Subspecialty (CPA & APA accredited), University of Windsor, Windsor, Ontario.