ABSTRACT

LATER PARENTING IN MOTHERS WITH A HISTORY OF CHILDHOOD SEXUAL ABUSE: AN EXPLORATION OF POSSIBLE RISK AND PROTECTIVE FACTORS

by Larissa Atkins Seltmann

This study explored how mothers with a history of childhood sexual abuse (CSA) bond with their children, promote their children’s autonomy, and set effective limits. Adverse childhood experiences and current depressive symptoms were examined as risk factors negatively affecting parenting outcomes and partner support was explored as a protective factor. A community sample of 60 CSA mothers completed a questionnaire assessing severity of childhood abuse, bond with their mothers, current depressive symptoms, partner support, the survivor-child bond, and key parenting behaviors. Severity of abuse indirectly impacted all parenting dimensions through depressive symptoms The degree of maternal control experienced by the survivor influenced her bond with her child and promotion of her child’s autonomy. The survivor’s current depressive symptoms enhanced the risk for problems in all three parenting dimensions. Partner support predicted her bond with her child and her ability to set limits. Implications for the treatment of CSA are discussed.
LATER PARENTING IN MOTHERS WITH A HISTORY OF CHILDHOOD SEXUAL ABUSE: AN EXPLORATION OF POSSIBLE RISK AND PROTECTIVE FACTORS

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Later Parenting in Mothers with a History of Childhood Sexual Abuse: 
An Exploration of Possible Risk and Protective Factors

A large number of empirical studies have provided compelling evidence of a link between the experience of childhood sexual abuse (CSA) and negative outcomes in adulthood. However, much of the existing research has taken a “symptom” approach to studying CSA, focused on listing numerous adverse sequela of CSA in adulthood (Briere, 1992; Polusny & Follette, 1995; Schreiber & Lyddon, 1998). While this research increases knowledge about the impact of CSA, it does not provide an explanation for why some survivors do not suffer from these negative outcomes (Liem, James, O’Toole, & Boudewyn, 1997; Masten & Wright, 1998; Merrill, Thomsen, Sinclair, Gold, & Milner, 2001; Schreiber & Lyddon, 1998; Wright, Fopma-Loy, & Fischer, 2005; Wright & Masten, 2005). Furthermore, only limited attention has been paid to the survivor’s experiences as a parent, the potential impact of her CSA history on her interactions with her child, and the factors that might heighten or buffer the risk for problems for the survivor in the parenting role (Banyard, 1997; Banyard, Williams, & Siegel, 2003; DiLillo & Damashek, 2003; Ruscio, 2001; Zuravin & Fontanella, 1999). Further study of such factors may shed light on why some survivors of CSA are resilient and have fewer difficulties in their role as parents in comparison to their less fortunate peers.

This paper reviews the preexisting literature on the CSA survivor’s bond to her child, followed by an examination of factors that might influence the CSA survivor’s navigation of her role as a parent. Two risk factors thought to be of critical importance in predicting the survivor’s parental effectiveness are the severity and duration of her experience of childhood physical and sexual abuse and the quality of the bond with her own mother in childhood (i.e., her receipt of adequate maternal care and appropriate maternal control). Thus, this study explores how these childhood experiences impact the survivor’s current bond to her child and her ability to manage important parental tasks in adulthood. In addition, two key factors will be examined for their potential role in either enhancing risk or attenuating risk: 1) the mother’s current level of depressive symptomatology, a potential mediator; and 2) the mother’s current perception of partner support, a potential moderator.

The Survivor’s Interactions with Her Child

As DiLillo, Tremblay, and Peterson (2000) point out, parenting can be an emotionally difficult experience, even without having a history of CSA. Having a warm, caring bond with one’s child while simultaneously promoting the child’s age-appropriate autonomy and adequately enforcing behavioral rules (i.e., characteristics of good parenting within the dominant Caucasian culture within the United States; Maccoby & Martin, 1983) may be especially challenging for mothers who have been sexually abused in childhood. Some CSA survivors may feel more stressed and view themselves more negatively than nonabused women do (Banyard, 1997; Cole et al., 1992; Douglas, 2000; Fitzgerald et al., 2005), while other survivors may feel competent in their parental role (Wright et al., 2005). Nonetheless, there is limited research on how CSA mothers interact with their children.

The few studies on CSA and parenting suggest that many survivors of CSA may have difficulty forming a secure and healthy bond with their children, including conveying love and nurturance to their children. Burkett (1991) compared their observations of parent-child interactions of CSA mothers and of mothers who had not been abused. She noted that mothers who had a history of CSA were more self-focused than child-focused relative to non-CSA
mothers. These survivors also did not communicate confirmation or understanding of the child’s actions as often as the non-CSA mothers did. Lyons-Ruth and Block (1996) found similar results in their observational study of parent-child interactions. Mothers who had a history of CSA spent less time with their children and exhibited less sensitivity, warmth, verbal communication, and reassuring physical contact to their children than did nonabused mothers (Lyons-Ruth & Block, 1996). In another study, Roberts, O’Conner, Dunn, Golding, and The ALSPAC Study Team (2004) found that mothers with a history of CSA reported greater negativity and less positivity in their relationship with their child, even after researchers accounted for the mother’s own history of childhood emotional and physical abuse.

In contrast, however, not all research studies have documented this lack of closeness between survivors of CSA and their children. Some studies found that women who had a history of CSA reported as much caring and nurturance for their children as mothers without such a history (Cole, Woolger, Power, & Smith, 1992; DiLillo et al., 2000). In an observational study, Fitzgerald, Shipman, Jackson, McMahon, and Hanley (2005) found that incest survivors were able to offer supportive assistance to their children in a confident manner, similar to nonabused mothers. The conflicting findings of current research suggest that some mothers may be resilient to the negative impact of CSA on their ability to convey love and nurturance.

The research on the survivor’s ability to promote her child’s autonomy has been inconclusive thus far. In one study by Krekelwetz and Piotrowski (1998), interviews were conducted with sixteen incest survivors to explore their attitudes and behaviors related to raising their prepubescent daughter. Many of the participants expressed apprehension over the possibility of their child being sexually abused. These women engaged in “monitoring behaviors” of their daughters, characterized by wariness of their peers, their siblings, and even their father (i.e., the survivor’s partner). For instance, one participant refused to leave her daughter and her newly married husband alone together for a year. In a qualitative study, Cross (2001) found that CSA survivors had difficulties in trusting others and in allowing their child to be independent. Additionally, they expressed confusion about age-appropriate expectations for their child, related to a self-expressed lack of understanding of what is “normal.” Cole and Woolger (1989) identified that mothers with a history of incest were more likely to promote premature autonomy in their children than mothers who experienced extrafamilial abuse. Cole and colleagues (1992) later hypothesized that this may be due to their desire for their children to be self-sufficient as soon as possible. Thus, survivors of CSA may have dysfunctional beliefs and parenting behaviors related to their children’s autonomy, due to concerns about their children’s safety or desires for their children to grow up quickly.

CSA survivors may also struggle with setting limits and engaging in proper discipline with their children. Mothers with a history of CSA reported using permissive parenting practices more often than nonabused mothers in the community, even after accounting for socioeconomic status (SES), experiences of childhood physical abuse (CPA), and childhood experiences with an alcoholic parent (Rusco, 2001). Rusco suggested that this lack of control might be related to the mothers’ difficulties in providing structure and imposing appropriate discipline as a parent, which is supported by other research findings. One study found that even after taking family-of-origin experiences into consideration, survivors of CSA are still more likely to use physical punishment with their children than nonabused mothers (Banyard, 1997). Although Cole et al. (1992) found that CSA mothers did not differ in self-report measures assessing attitudes about discipline, compared to mothers who were not abused and mothers who are adult children of
alcoholics (ACOA’s), the researchers were alarmed by the CSA mothers’ casual, qualitative descriptions of their harsh punishment behaviors. DiLillo and colleagues (2000) also found that mothers who were sexually victimized as children were more likely to physically abuse their own children, after accounting for survivors’ own experiences of CPA. These authors posited that this relationship is mediated by maternal anger (DiLillo et al., 2000), which may be elevated in survivors of CSA (Aspelmeier, Elliott, & Smith, 2007). Related to this may be CSA survivors’ tendency to feel less emotionally controlled in their parental role compared to nonabused and ACOA mothers (Cole et al., 1992). Nonetheless, the exact pathway between CSA and struggling with appropriate discipline and limit setting is unclear.

Severity of CSA and its Impact on Parenting

One factor that may affect how survivors interact with their children is the severity of their experience of CSA. Research has frequently shown that more severe forms of CSA are linked with poorer outcomes in adulthood. The severity of the abusive act, total number of abusers, physical force, frequency, and duration of abuse are all aspects of CSA that could amplify the survivor’s risk of negative outcomes (Boudewyn & Liem, 1995; Briere & Runtz, 1988; Liem et al., 1997; Trickett, Reiffman, Horowitz, & Putnam, 1997). Studies have found that women who had experienced more severe forms of CSA (e.g., penetration) reported more depressive symptoms than women who experienced less severe abuse (Banyard, 1999; Liem et al., 1997). This increase in psychological distress might indirectly impact the survivor-child relationship. In addition, a few studies have identified a direct effect of severity of CSA on parenting behaviors. Ruscio (2001) found that survivors who had experienced penetration were more likely to have low confidence in parenting abilities, engage in role reversal with their child, inappropriately promote their child’s early autonomy, have concerns about their child’s safety, and have anxiety about their child’s sexual behavior, than survivors who experienced less severe forms of abuse. Furthermore, this study identified that survivors who experienced penetration were less satisfied with their social support network and consequently less likely to use authoritative parenting practices than survivors who did not experience penetration. Lyons-Ruth and Block (1996) observed that mothers with more severe experiences of childhood trauma were less responsive to their children than mothers with less severe traumatic experiences in childhood. However, it is important to note that severity of abuse does not consistently predict negative adult outcomes (Fassler, Amodeo, Griffin, Clay, & Ellis, 2005; Merrill et al., 2001), although these studies focused on the survivor’s intrapsychic symptomatology, not their parental role. Nevertheless, more research is needed to reach any substantive conclusions about the severity of CSA and its impact on parenting.

The Co-occurrence of CSA and Other Forms of Childhood Maltreatment

One identifiable methodological issue with the field of CSA and parenting practices is the lack of incorporation of multiple forms of childhood abuse (DiLillo & Damashek, 2003). Sexual abuse in childhood is commonly associated with other childhood risk factors, such as physical abuse, psychological maltreatment, and neglect (Higgins & McCabe, 2000). Research indicates that CSA survivors are at least twice as likely to be physically abused in childhood than are nonabused women (Banyard et al., 2003; Barrett, 2009; Chu & Dill, 1990; DiLillo et al., 2000; Westen, Ludolph, Misle, Ruffins, & Block, 1990). In addition, Claussen and Crittenden (1991) found that psychological maltreatment almost always coincided in cases of physical
maltreatment in childhood. Studies that have focused on partialling out the effects of CSA from other forms of childhood maltreatment and dysfunction have had mixed results (Banyard, 1997; Barrett, 2009; DiLillo & Damashek, 2003; Zuravin & Fontanella, 1999). However, several researchers suggest that the impact of CSA cannot be fully explained by these other childhood traumas (Alexander, Teti, & Anderson, 2000; Banyard, 1997; DiLillo et al., 2000; Ruscio, 2001). Thus, it may be more clinically appropriate to examine the interactive effects of sexual abuse and other forms of childhood abuse when exploring CSA survivors’ parental role.

The Survivor’s Bond in Childhood with Her Parents

Sadly, research suggests that the majority of survivors of CSA have had less than optimal relationships with their parents in childhood (Alexander, 1992; Barnett, Miller-Perrin, & Perrin, 2005). Multiple studies have found that CSA survivors perceive their parents as less caring than do nonabused women (Cosden & Cortez-Ison, 1999; Douglas, 2000; Fergusson et al., 1996a; Fitzgerald et al., 2005). Aspelmeier et al. (2007) found that female, undergraduate students who were sexually abused in childhood reported less trust, communication, and closeness in their parental relationships than students without a history of CSA. While many CSA survivors received less love and nurturance from their parents, they also reported that their parents were more controlling than their nonabused peers (Fergusson et al., 1996a). Although the research is sparse, Cosden & Cortez-Ison (1999) found that survivors who perceived their mothers as uncaring and hostile also identified their mothers as controlling. Incest survivors tend to have even more problems in their relationships with their mothers than survivors of extrafamilial abuse, as evidenced by reports of less maternal involvement, more maternal control, and overall more negative perceptions of their mothers in childhood (Cole & Woolger, 1989).

Since these early caregiving bonds form the foundation for future adult relationships, negative parent-child interactions can impact how survivors view themselves, others, and the world (Bowlby, 1988; Styron & Janoff-Bulman, 1997, Zayas, Mischel, Shoda, & Aber, 2010). Researchers have found robust empirical support for this, such that children who have poor relationships with their parents are more likely to have poor relationships with others in adulthood (Main & Cassidy, 1988; Putallaz, Costanzo, Grimes, & Sherman, 1998; Riggs, 2010). Hence, it is possible that survivors who had negative relationships with their parents in childhood also struggle in their own parental role in adulthood. In support of this, Douglas (2000) found that CSA survivors who identified their relationship with their mother as less caring than other survivors also indicated more parental stress. In addition, relative to other CSA survivors, those women who were sexually abused as children and who reported lower levels of maternal care and higher levels of maternal control in childhood tended to have less satisfying adult relationships (Cosden & Cortez-Ison, 1999; Styron & Janoff-Bulman, 1997). In total, these studies suggest that the lack of a positive parental bond in childhood may hinder survivors’ ability to navigate their role as mothers.

Current Depression as a Potential Mediator

Research suggests that there is a correlation between poor bonding with one’s parents and later psychological distress among CSA survivors. Women with a history of CSA were found to be resilient against psychological distress when they reported having supportive and loving parents (Fromuth, 1986; Schreider & Lyddon, 1998). Additionally, CSA survivors who had higher levels of maternal unavailability also reported higher levels of psychological distress than
survivors who had available mothers (Zinzow, Seth, Jackson, Niehaus, & Fitzgerald, 2010). In general, individuals whose parents, especially mothers, were cold and controlling report higher depressive symptomatology than individuals who received appropriate levels of care and control (Collishaw et al., 2007; Mackinnon, Henderson, & Andrews, 1993; Parker, 1983; Parker, Hadzi-Pavlovic, Greenwald, & Weissman, 1995; Sakado et al., 2000; Sato et al., 1998). Therefore, survivors of CSA who bonded poorly with their parents may have higher levels of depressive symptoms than survivors who bonded well.

The limited, preexisting research on the survivor’s experience of CSA and her later difficulties in parenting may be partially explained by the effects of adult psychological correlates of CSA (e.g., depression) on parenting (DiLillo & Damashek, 2003). It is well established that survivors of CSA have higher rates of depression than nonabused women (Aspelmeier et al., 2007; Boudewyn & Liem, 1995; Briere & Runtz, 1988; Fergusson, Horwood, & Lynskey, 1996b; Mapp, 2006; Roberts et al., 2004; Schuetze & Das Eiden, 2005; Zuravin & Fontanella, 1999). In addition, survivors who experienced more severe forms of abuse tend to report more depressive symptoms than survivors who experienced less severe abuse (Schoedl et al., 2010). Research on maternal depression and parental effectiveness suggests that this psychological distress likely hinders the survivor-child relationship. Studies have found that depressed mothers tend to be less responsive to their children, interact with their children in a more detached manner, have more difficulty in setting appropriate limits, and show less warmth to their child when compared to mothers who are not depressed (Cohn, Matias, Tronick, Connell, & Lyons-Ruth, 1986; Cox, Puckering, Pound, & Mills, 1987; Foster et al., 2008; Goodman, 2007). More specifically, CSA survivors’ depressive symptomatology is associated with decreased parental warmth, perceived parental competency, and parental satisfaction, as well as an increased usage of severe physical discipline and an increased risk for the survivor’s child to be abused or neglected (Banyard et al., 2003; Barrett, 2010; Mapp, 2006; Zuravin & Fontanella, 1999). Furthermore, much research has found depression to be a mediator of CSA and negative parenting outcomes (e.g., Banyard et al., 2003; Barrett, 2010; Schuetze & Das Eiden, 2005).

Thus, CSA mothers who are struggling with depression may have more difficulties in developing a strong bond with their child and engaging in effective parenting behaviors than nonabused mothers.

**Current Partner Support as a Potential Moderator**

While studies suggest that survivors of CSA have more problems in adult interpersonal relationships, including being less satisfied, having poorer communication with their partners, and being more likely to be physically or sexually abused in adulthood (Aspelmeier et al., 2007; DiLillo, 2001; Messman-Moore & Long, 2003; Roberts et al., 2004; Schuetze & Das Eiden, 2005), having a supportive partner may serve as a protective factor against negative parenting outcomes. This may be especially important for survivors who had poor relationships with their mothers in childhood and have thus developed maladaptive internal working models. While these models are generally stable over time, they are also influenced by current relationships (Alexander, 1992; Van Ijzendoorn & Bakermans-Kranenburg, 1997). More specifically, women who were sexually victimized and bonded poorly with their parents in childhood may be able to alter negative internal working models through strong, positive relationships with a significant other.
Studies support the hypothesis that social or partner support can protect women from severe sequelae of CSA. Without this support, survivors who feel emotionally overwhelmed as parents may cope by distancing themselves from their children or by relying inappropriately on their children for emotional support (Alexander et al., 2000; Burkett, 1991; Douglas, 2000). Survivors who feel well supported by other adults tend to navigate their parental role more adeptly, including having higher self-perceived parenting competence and satisfaction (Banyard et al., 2003; Cole et al., 1992; Zuravin & Fontanella, 1999), lower depressive symptoms (Banyard, 1999), decreased parenting stress (Alexander et al., 2000), and higher use of authoritative parenting practices (Ruscio, 2001), compared to survivors with little social support. Mothers who can rely on their partner or close friends may feel less overwhelmed and more emotionally available to their children than mothers without positive social networks (Crockenberg, 1981). Similarly, Wright et al. (2005) found that partner support buffered the relationship between the survivor’s depressive symptoms and her perceived parenting competency. Mothers who have a supportive partner are also less likely to engage in severe physical discipline and tend to make more age-appropriate demands on their child than mothers who have little support (Banyard et al., 2003; Cole et al., 1992). Partner support, therefore, could help survivors of CSA form a strong and positive bond with their children.

**Aims of the Study**

To date, there has been limited prior research that has explored how risk and protective factors affect the quality and strength of the CSA survivor’s bond with her child and her ability to parent effectively. The current study addresses this gap in understanding by examining the role of these factors in either strengthening or diminishing the survivor’s perceived attachment to her child, promotion of her child’s autonomy, and ability to set limits for her child. Specifically, this study will explore how the severity of childhood sexual and physical abuse and the survivor’s bonding with her own mother (i.e., childhood risk factors) negatively impact the survivor’s later parenting outcomes. The survivor’s current degree of depressive symptoms will be explored as a potential mediator of the relationship between the severity of childhood sexual and physical abuse experienced by the survivor and her current parenting practices. Depressive symptoms will also be explored as a mediator between the early maternal care and control received by the survivor and her current parenting behaviors with her own child. Partner support will be examined as a potential buffer (moderator) of each of these relationships as well.

The study will examine the following hypotheses:

1. The severity of childhood sexual and physical abuse experienced by the survivor will predict her perceived strength of her attachment to her child, her appropriate promotion of her child’s autonomy, and her ability to set limits with her child.
2. Current depressive symptoms will mediate the relationship between the survivor’s severity of sexual and physical abuse experienced in childhood and her ability to bond with her child, promote her child’s autonomy, and effectively set limits for her child.
3. Higher levels of current, positive partner support are expected to moderate the relationship between the survivor’s severity of childhood sexual and physical abuse experiences and her later parenting outcomes. In the presence of higher levels of abuse, those survivors who report strong partner support will be more likely to have a
positive attachment with their child, promote their child’s autonomy, and effectively set limits for their child.

4. The survivor’s perception of her own receipt of maternal care will predict her perceived attachment to her child.

5. The survivor’s perception of the degree of control she has experienced from her own mother will predict the survivor’s promotion of her child’s autonomy and her ability to set limits with her child.

6. Current depressive symptoms will mediate the relationship between the survivor’s perception of maternal care and control in childhood and her current ability to bond with her child, promote her child’s autonomy, and effectively set limits for her child.

7. Higher levels of positive partner support are expected to moderate the relationship between the survivor’s bond with her mother and the survivor’s ability to effectively parent her child. In the presence of low care from the survivor’s mother, those survivors who report strong partner support will have a positive attachment with their child. In the presence of high control from the survivor’s mother, those survivors with strong partner support will be more likely to promote their child’s autonomy and to effectively set limits for their child.

**Methods**

**Participants**

The current study is based on an archival data set. The collection of this data has been approved by Miami University’s institutional review board. Participants for this study were recruited through multimedia publicity across the United States, requesting mothers who had been sexually abused as children to voluntarily complete an anonymous, mail-in questionnaire. The researchers posted flyers in pediatricians’ offices, grocery stores, laundromats, libraries, bookstores, and other community settings. Announcements of the study were also made in local newspapers and on Internet listservs. In response, 80 women requested the questionnaire and the researchers deemed 79 of them eligible for this study. To be eligible, participants had to be 18 years or older, have one or more children, and self-identify as a female survivor of CSA. One woman was unsure about her experience of CSA, and thus was deemed ineligible. Researchers then mailed questionnaires to the remaining eligible women. Sixty women completed it and mailed it back, representing a 75.9% return rate. The sample was predominantly Caucasian (91.7%) and had a mean age of 38.83 years (SD = 8.60). The majority of the sample was married (66.7%), while 13.3% were divorced, 6.7% were separated, 3.3% were living with a partner, 8.3% were single, and 1.7% was widowed. Additionally, participants had an average of 2.2 children and the mean age of their children was 11.8 years old. The educational attainment of the sample ranged from partial middle school to graduate school, with a mean of partial college.

Participants’ SES were calculated according to the revised version of Duncan’s (1961) Socioeconomic Index (SEI; Nakao & Treas, 1992). Nakao and Treas used reports of educational attainment and occupational income to assign ratings of SES to the list of 503 occupations from the 1980 United States Census. The ratings, ranging from 15 to 100, vary slightly when applying the index to a solely male-based sample or a male- and female-based sample. Therefore, in this study, male- and female-based SEI ratings were assigned to the participants, while male-based SEI ratings were assigned to the participants’ spouses. The highest SES score from either the
participant or her spouse, if applicable, was used to represent the household SES. Based on the present sample’s occupations, household SES ranged from 15 (unemployed) to 92.30 (physician). The average household SES was 63.15 ($SD = 19.74$), indicating a career in the managerial or technical field.

**Procedure**

After responding to the research announcement, participants were sent a 24-page questionnaire that included demographic questions; questions about their sexually and physically abusive experiences; a measure of the perception of maternal care and control in childhood; a standardized assessment of perceived parenting stress, attachment, and partner support; an assessment of the parent-child relationship, promotion of the child’s autonomy, and ability to set limits; and a depression symptom rating form. The mothers sent the questionnaire back anonymously and the returned questionnaire implied consent. A copy of the recruitment letter is shown in Appendix A in Figure A1. The questionnaires themselves are described below.

**Assessment Measures**

**Childhood sexual abuse characteristics.** The initial assessment of this variable was the self-identification by the participants as survivors of CSA. Researchers then applied their own definition of CSA to each of the participants to determine if the participant met the criteria for this study. CSA was defined as any experience of unwanted sexual activity, noncontact or contact, which occurred before the participant was 16 years old. This definition is consistent with past research on CSA (Barnett et al., 2005; Berliner & Elliott, 2002; Fergusson et al., 1996a, 1996b). The questionnaire used both structured and semistructured items to determine specific characteristics of each survivor’s abuse history, including age of participant when abuse first occurred, types of sexual abuse (i.e., kissing, touching, masturbation, digital penetration, oral sex, and vaginal and/or anal intercourse), frequency of sexually abusive experiences, number of perpetrators, relationship to perpetrator(s), and presence of force. Participants were also given room to describe any other type of sexual activity that occurred, including any noncontact experiences such as exposure to exhibitionism or pornography. All of the eligible participants identified at least one contact experience, were under the age of sixteen when the sexual abuse began, and thus, fit our definition of CSA.

A CSA severity rating was created, comprised of four characteristics of the sexually abusive experiences: frequency, number of perpetrators, presence of force, and presence of penetration. Frequency of sexually abusive experiences ranged from 1 (indicating that the abuse occurred one time) to 5 (indicating that the abuse occurred almost every day). Number of perpetrators was complied into four categories, ranging from a score of 1 for experiences with one perpetrator to a score of 4 for experiences with four or more perpetrators. Presence of force was labeled as either 1 (no force used) or 2 (force used). Additionally, presence of penetration (i.e., digital penetration, oral sex, vaginal intercourse, and/or anal intercourse) experienced by the participant was scored such that a score of 1 indicated that the participant had no experiences of penetration and a score of 2 indicated that the participant had experienced at least one type of penetration. The severity rating was the summation of these four variables. The range of possible severity scores was 4 (mild sexual abuse) to 13 (severe sexual abuse).

**Childhood physical abuse characteristics.** The assessment of CPA was based on two questions. In the first question, participants were asked if they ever experienced physical abuse
as a child, including, but not limited to: being slapped, struck, punched, pulled by the hair, kicked, or hit with an object. Responses were limited to “yes” (scored as 1) or “no” (scored as 0). In the second question, participants who answered “yes” to the previous question identified how often the physical abuse occurred, ranging from seldom (scored as 0) to multiple times a day (scored as 4). A composite severity rating was created by summing the scores from both questions, in order to represent both the presence and frequency of CPA reported by participants. Thus, this variable ranged from 0 (no experience of physical abuse in childhood) to 5 (severe physical abuse).

**Severity of abuse composite.** In order to best assess the overall severity of abuse (i.e., sexual and physical) participants experienced in childhood, an additional composite measure was created. This measure is the summation of the CSA severity rating and the CPA severity rating. Thus, scores ranged from 4 (mild sexual abuse and no physical abuse) to 18 (severe sexual and physical abuse).

**Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979).** The PBI is a 25-item self-report instrument used to assess participants’ perception of the way they were parented before the age of sixteen. Respondents were asked to answer the questions with respect to their relationship with their mother. Participants responded to each item on a Likert scale ranging from 0 (very unlike) to 3 (very like). The PBI measures two dimensions of parenting: care (twelve items; e.g., “My mother frequently smiled at me”) and control (thirteen items; e.g., “My mother tried to control everything I did”). Higher scores of maternal care indicate higher levels of nurturance and warmth from one’s mother in childhood, while higher scores of maternal control indicate higher levels of autonomy restriction from one’s mother.

Recent factor analyses of the PBI suggest that there are three dimensions of the scale: care, protectiveness, and authoritarianism (Cox, Enns, & Clara, 2000; Heider et al., 2005; Kendler, 1996; Murphy, Brewin, & Silka, 1997; Sato et al., 1999). However, the specific items that are included in each of these three factors are not consistent across studies (Cox et al., 2000). Upon closer examination, several of these studies used a modified version of the PBI. This included eliminating, rewording, or combining particular items (e.g., Cox et al., 2000; Heider et al., 2005). Unfortunately, due to this study’s small sample size, it was not statistically feasible to complete a factor analysis on the PBI. For this reason, the researchers of this study decided to use the traditional two-factor PBI for this study. Data analyses using the three-factor PBI are included in Appendix A and do not differ significantly from the two-factor findings.

In the original non-clinical sample, test-retest reliability was .76 for the care scale and .63 for the control scale, and split-half reliability was .88 and .74 respectively (Parker et al., 1979). A later study found alpha coefficients ranging from .83 to .95 for both scales (Parker, 1989). The alpha coefficient for this sample was .92 for the care dimension and .91 for the control dimension. Studies suggest that there is long-term stability of the PBI over a 20-year period (Wilhelm, Niven, Parker, & Hadzi-Pavlovic, 2005) and that the measurement is not biased by the participants’ depressive mood state (Lizardi & Klein, 2005; Parker, 1989).

**Attachment subscale of the Parenting Stress Index (PSI; Abidin, 1995).** This subscale consists of seven items that measure a parent’s perceived attachment to his or her child. Earlier in the questionnaire, participants were asked to answer questions in relation to the child that they perceive is the most difficult to parent, if they have more than one child. Each item was rated on a five-point scale according to the participant’s response to the statement, ranging from strongly agree (scored as 1) to strongly disagree (scored as 5). An example of a reverse-coded item from
this subscale is “I expected to have closer and warmer feelings for my child than I do and this bothers me.” The participants’ scores from this subscale have been reversed in order to maintain consistency and clarity in terminology across multiple parenting measures. Therefore, in this study, low scores on this measurement indicate dysfunction in the emotional bond between parent and child. Overall, the PSI has demonstrated excellent test-retest reliability and internal consistency (Abidin, 1995). The alpha coefficient for this subscale as reported in the manual for the normative sample was .75. In this sample, the alpha coefficient was .71.

Validity indicators were also examined for the participants’ responses across the entire PSI questionnaire. Only three participants answered in ways that suggested defensive responding. However, Abidin reported that this might also be indicative of participants who feel very competent in their parental role, have a strong supportive network, and/or are economically advantaged.

**Autonomy subscale of the Parent-Child Relationship Inventory (PCRI; Gerald, 1994).** This 10-item scale is a self-report measure that assesses the parent’s ability to promote the child’s independence. Respondents rated how much they agree with each of the items, ranging from 1 (strongly agree) to 4 (strongly disagree). One statement from this measure is, “I can’t stand the thought of my child growing up.” Low scores on this scale suggest that the parent may not be willing to accept their child’s age-appropriate independence. The PCRI has been used in a wide range of settings and has demonstrated acceptable internal consistency, test-retest reliability, and construct validity (Gerald, 1994). While the alpha coefficient for the normative sample was .80, it was found to be .56 in the present study. The highest alpha coefficient found by consecutively dropping items from the subscale was only .62. A recent literature search for studies using the Autonomy subscale of the PCRI revealed alpha coefficients ranging from .48 to .66, including studies examining parental depressive symptomatology (Middleton, Scott, & Renk, 2009), maternal substance abuse (Suchman, Rounsaville, DeCoste, & Luthar, 2007), and caregivers’ HIV status (Elkington et al., 2011). Thus, the original subscale was used in the analyses.

Throughout the PCRI questionnaire, eight participants had significant inconsistencies in their answers. Nonetheless, none of these participants answered in ways that suggested that they were attempting to respond in a socially desirable manner.

**Limit Setting subscale of the PCRI (Gerald, 1994).** The limit setting subscale consists of 12 items that are used to measure the effectiveness of the parent’s disciplinary techniques to establish behavioral limits for the child. Each item was scored from 1 (strongly agree) to 4 (strongly disagree), depending on the participant’s response to the statement. One statement from this subscale is “I have trouble disciplining my child.” Low scores on the subscale indicate that the parent may perceive difficulties in creating and maintaining consistent guidelines for the child to follow. The alpha coefficient for this scale as reported for the normative sample was .88, and for this sample, the alpha coefficient was .82.

**Center for Epidemiologic Studies–Depression Scale (CES-D; Radloff, 1977).** The CES-D is a 20-item self-report instrument that is used to assess participants’ depressive symptomatology. Participants indicated how often they had experienced each item in the past week, ranging from 0 (rarely or none, less than one day) to 3 (most or all days, five to seven days). One item from this measure is “I felt that I could not shake off the blues even with the help from my family and friends.” Higher scores on the CES-D are representative of higher degrees of current depressive symptomatology. The CES-D has been applied to community
samples and has demonstrated adequate internal consistency, test-retest reliability, and construct validity (Radloff, 1977). In the original study, the alpha coefficient was about .85 across four samples and the test-retest coefficient was about .57 over an eight-week period. In this sample, the alpha coefficient was .94.

**Spousal Support subscale of the PSI (Abidin, 1995).** This subscale consists of 7 questions and measures the parent’s emotional and physical support from the other parent or close friend. Respondents indicated how they felt about each item, ranging from strongly agree (scored as 1) to strongly disagree (scored as 5). An example of a reverse-coded statement from this subscale is “Since having my child, my spouse (or male/female friend) has not given me as much help and support as I expected.” Similar to the Attachment subscale of the PSI, the Spousal Support subscale has been reversed from the traditional scoring direction for clarity. Thus, low scores on the spousal support scale suggest that the respondent does not feel well supported in their parental responsibilities by the other parent or close friend. The alpha coefficient for the normative sample was .81 and the alpha coefficient for this sample was .77.

**Results**

**Severity of Childhood Sexual and Physical Abuse Experiences**

The first set of data analyses explored the participants’ experiences of sexual and physical abuse in childhood. On average, participants reported that the sexual abuse began before their sixth birthday and ended after they turned thirteen. Thus, the mean duration of abuse was 7.19 years. The sample predominantly reported being sexually abused in childhood occasionally (31.7%) or frequently (40%). The percentage of mothers reporting each type of sexual activity is as follows: kissing (45%), touching (92%), masturbation (67%), fingers or objects inserted in vagina or anus (68%), oral sex (53%), and anal or vaginal intercourse (50%). Digital or genital penetration was reported by 78.3% of the sample, while force was reported by 51.7% of the sample. The median number of perpetrators was 1 and ranged from 1 to 12. The percentage of participants indicating the relationship to the perpetrator is as follows: father (40%), brother (22%), neighbor (18%), family friend (18%), uncle (15%), step-father (13%), mother (13%)², cousin (13%), grandfather (12%), stranger (12%), sister (3%), brother-in-law (3%), step-grandfather (2%), teacher (2%), minister (2%), and other (17%). In particular, 71.7% of the sample reported being abused by an immediate family member (i.e., father, step-father, mother, brother, sister), and 91.7% by an immediate or extended family member. The composite CSA severity scores ranged from 4 (mild abuse) to a 13 (severe abuse) and are displayed in Figure 1. The mean CSA severity was 8.86 (SD = 1.87), indicating moderate abuse.

Participants were also asked about their experiences of physical abuse. Overall, 80% of the sample reported being physically abused as a child. On average, participants were subjected to physical abuse either occasionally (30%) or frequently (30%). These findings are displayed in Figure 2. The mean severity of CSA and CPA was 11.05 (SD = 2.81), suggesting that most participants experienced a combination of moderate sexual and physical abuse in childhood. These scores ranged from 6 (relatively mild sexual abuse and no physical abuse) to 17 (severe sexual abuse and physical abuse). These findings are displayed in Figure 3.

**Distributions of Study Variables**
Distributions of each of the study variables were examined to illustrate the variability within the sample. Participants’ perceptions of maternal care and control in childhood were plotted along the axes given by the PBI and are shown in Figure 4 (Parker et al., 1979). Researchers have established cutoff scores of 27.0 for maternal care and 13.5 for maternal control as a way to divide the plot into four quadrants for nonclinical populations (Parker, 1983; Parker & Hadzi-Pavlovic, 1992). Utilizing these cut-points, the sample tended to report lower maternal care ($M = 11.74, SD = 9.20$) and higher maternal control ($M = 18.37, SD = 10.31$) than the nonclinical sample from Parker’s study. In total, 65% of our sample identified their mothers as low on the care dimension and high on the control dimension of the PBI, suggesting that these mothers would be classified as the “affectionless control” group, according to Parker. Another 28% of survivors indicated that their mothers were both low on care and control measures, placing these mothers in the “neglectful” group. Only 3% of participants reported that their mothers were both caring and controlling, or in the “affectionate constraint” quadrant. Finally, 3% of survivors indicated that their mothers were in the final quadrant, higher on care and lower on control. Parker labeled this quadrant as the “optimal bonding” section of the graph. As these percentages suggest, this sample’s distribution of maternal care scores was positively skewed. Nine participants (15%) reported a maternal care score of 0, indicating that they did not perceive their mothers as caring at all in childhood.

Second, the participants’ reports of current parenting practices were explored. For the subscales of the PSI, scores falling above the 85th percentile suggest dysfunction (Abidin, 1995). In this sample, 30.51% of the participants indicated having problems attaching to their child. In the PCRI subscales, T-scores below 40 suggest dysfunction (Gerald, 1994). As for autonomy, 10.71% of the sample reported having problems promoting their child’s independence. Additionally, 8.93% of the participants believe that they struggle with setting appropriate limits for their child.

Lastly, participants’ scores on the depression and partner support measures were examined. For the CES-D, scores at and above 16 suggest significant depressive symptoms (Radloff, 1977). In this sample, scores ranged from 0 to 55. Using the cutoff point, 68.33% of the sample reported clinically significant depressive symptoms. Furthermore, 55.17% of the survivors indicated that they did not feel well supported in their parental role by their partner. Of those reporting dysfunction in the partner support subscale, 28.13% of the group scored above the 99th percentile, suggesting that these participants felt little to no support from their partners.

**Mediational Analyses Regarding Severity of Abuse**

Intercorrelations among all of the variables were examined and are shown in Table 1. An analysis examining current depressive symptoms as a mediator of the relationship between the severity of abuse experienced by the participant and her perceived attachment to her child was conducted. The steps of mediation outlined by MacKinnon (2008) were examined. In order for mediation to occur, the following conditions must be met: (1) the independent variable (severity of abuse) must be significantly related to the mediator (current depressive symptoms); (2) the mediator must be significantly related to the dependent variable (perception of attachment to child) in the presence of the independent variable; and (3) the mediated effect of the independent variable on the dependent variable through the mediator must be significant. These steps differ from the traditional Baron and Kenny (1986) steps, such that the independent variable does not need to significantly predict the dependent variable. Requiring such a relationship is
controversial, because it ignores the possibility of suppressor models (also known as inconsistent mediation; MacKinnon, Fairchild, & Fritz, 2007; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). This occurs when there exists at least one mediated effect that has a different sign than the other mediated or direct effect in that model. Thus, the relationship between the independent and dependent variable may actually increase when the mediator is included in the model. In suppression models, the effect of the independent variable on the dependent variable through the mediator is called an “indirect effect,” rather than a mediated effect.

In addition, while traditional regression analyses indicate that the overall model must be significant before exploring individual predictors, MacKinnon (2008) argues that the omnibus model is not as important as the individual predictors. In this analysis, we utilized MacKinnon’s model of mediation and focused on the relationship of individual predictors to the outcome, rather than the significance of the overall model.

When the first two aforementioned conditions of mediation were met, bias-corrected bootstrapping techniques were employed to determine the strength of the mediated or indirect effect. Preacher and Hayes (2004, 2008) stated that bootstrapping is a more accurate way of testing a mediated or indirect effect than the Sobel test, particularly in small samples. The Sobel test assumes a normal distribution of the mediated or indirect effect, but this distribution tends to be skewed in small samples (i.e., less than one hundred). Therefore, bootstrapping involves the creation of a sampling distribution specific to the dataset. This is done by resampling the data (with replacement) 5,000 times to construct a sampling distribution directly from the data. Then, confidence intervals are identified, using an alpha value of .05, to indicate the likelihood of the strength of the indirect effect. Thus, a bootstrapping approach is a preferable alternative to the Sobel test, although the results of the Sobel test are also reported in the Appendix B for the reader’s interest. These analyses were conducted using an SPSS macro made available by Preacher and Hayes (2008).

Severity of abuse did not significantly predict the survivor’s perception of her attachment to her child, ($\beta = .02, t = .18, p > .05$). However, severity of abuse did significantly predict the survivor’s current depressive symptoms, ($\beta = .33, t = 2.62, p < .05$). Survivors who experienced more severe sexual and physical abuse in childhood also reported higher levels of depressive symptoms. Current depressive symptoms emerged as a significant predictor of attachment in the presence of severity of abuse, ($\beta = -.33, t = -2.44, p < .05$). Thus, survivors who indicated a high level of depressive symptoms also reported having trouble attaching to their child. In the presence of current depressive symptoms, severity of abuse did not predict attachment ($\beta = 0.13, t = 0.97, p > .05$). These findings suggest a suppression effect, as evidenced by the negative relationship between depressive symptoms and attachment and by the positive relationship with all other effects in the model. In addition, the overall effect of severity of abuse ($\beta = 0.02$) is much smaller than the residual direct effect of severity of abuse ($\beta = 0.13$), indicating that severity of abuse becomes a stronger predictor (although not significant) after removing the effects of the mediator. Using bias-corrected bootstrapping techniques, the indirect effect of severity of childhood abuse on the survivor’s perception of attachment to her child through current depressive symptoms was found to be significant (indirect effect = -.17, 95% CI [-.41, -.003]). These findings are displayed in Figure 5.

The second mediational analysis examined the role of current depressive symptoms on the relationship between severity of abuse and the survivor’s promotion of her child’s autonomy. Severity of abuse did not significantly predict the survivor’s promotion of autonomy, ($\beta = 0.06, t
As stated earlier, severity of abuse significantly predicted the survivor’s current depressive symptoms. Current depressive symptoms emerged as a significant predictor of the survivor’s promotion of autonomy, in the presence of severity of abuse ($\beta = -.41, t = -3.02, p < .01$). Thus, survivors who struggled with a high level of current depressive symptoms also reported more trouble in promoting their child’s age-appropriate autonomy. Severity of abuse did not predict autonomy in the presence of current depressive symptoms ($\beta = .19, t = 1.42, p > .05$).

Considering the negative relationship between current depressive symptoms and autonomy in the presence of other positive relationships, this model is also a suppression model. The indirect effect of severity of childhood abuse on the survivor’s perceived promotion of her child’s autonomy through current depressive symptoms was found to be significant, using bias-corrected bootstrapping techniques (indirect effect = -.15, 95% CI [-.36, -.01]). These findings are shown in Figure 6.

Current depressive symptoms were also thought to mediate the relationship between severity of abuse and the survivor’s ability to effectively set limits for her child. Severity of abuse did not significantly predict the survivor’s limit setting abilities ($\beta = .11, t = 0.81, p > .05$). It is already known that severity of abuse significantly predicted the survivor’s current depressive symptoms. In addition, current depressive symptoms emerged as a significant predictor of the survivor’s ability to set limits, in the presence of severity of abuse ($\beta = -0.35, t = -2.59, p < .05$). Survivors who indicated a high level of depressive symptoms also reported difficulties in effectively setting limits for their child. However, severity of abuse did not significantly predict limit setting in the presence of current depressive symptoms ($\beta = .22, t = 1.62, p > .05$). Based on the inverse relationship between current depressive symptoms and the survivor’s ability to effectively set limits, this is also a suppression model. The indirect effect of the severity of abuse experienced by the survivor in childhood on the survivor’s ability to set limits, through current depressive symptoms, was found to be significant (indirect effect = -.21, 95% CI [-.55, -.01]). This mediational model is displayed in Figure 7.

**Moderational Analyses Regarding Severity of Abuse**

Moderational analyses of partner support on each of these three relationships between the survivor’s severity of childhood sexual and physical abuse and her current parenting practices (i.e., perception of attachment to child, promotion of child’s autonomy, and ability to effectively set limits for her child) were performed. These analyses consisted of: (1) centering the independent (severity of abuse) and mediator (partner support) variables; (2) creating an interaction term between these two measures; (3) conducting a regression model with the centered independent variable, centered mediator, and interaction term; and (4) evaluating the significance of the regression coefficient of the interaction term. Although the omnibus F test was examined to determine if the overall model was significant, it was not a necessary condition to exploring the significance of individual predictors (Frazier, Tix, & Barron, 2004). Collinearity was also assessed to determine the stability of the model. Allison (1999) noted that problems with collinearity within multiple regression models exist when VIFs (variance inflation factors) are greater than 2.5; therefore, collinearity was examined for each model under this condition.

Partner support was expected to moderate the relationship between severity of abuse and the survivor’s perception of her attachment to her child. The overall model was significant [$F(3, 53) = 5.40, p < .01$] and accounted for 23.4% of the variance. There was a significant main effect of partner support in predicting attachment over and above severity of abuse and the interaction
term ($\beta = .49$, $t = 3.94$, $p < .001$). Thus, survivors who were well supported by their partners were more likely to report a strong emotional bond to their child. The interaction term did not significantly contribute to the prediction of attachment ($\beta = -.20$, $t = -1.59$, $p > .05$). This finding indicates that partner support did not serve as a buffer in the relationship between severity of abuse and the survivor’s attachment to her child.

Partner support was hypothesized to moderate the relationship between severity of abuse and the survivor’s promotion of her child’s autonomy. However, the overall model was not significant [$F(3, 49) = .61$, $p > .05$], and there were no significant predictors. Thus, moderation of the relationship between severity of abuse and autonomy promotion by partner support did not occur.

The role of partner support was also examined within the relationship between severity of abuse and the survivor’s ability to effectively set limits for her child. There was a nonsignificant trend for the overall model [$F(3, 49) = 2.63$, $p < .10$]. Nonetheless, partner support emerged as a significant predictor of the survivor’s limit-setting abilities, above and beyond severity of abuse and the interaction term ($\beta = .37$, $t = 2.69$, $p = .01$). Partner support did not serve as a moderator, though ($\beta = -.09$, $t = -.66$, $p > .05$). There were no identifiable problems with collinearity in these three moderational models, as suggested by VIFs of 1.08 and smaller.

**Mediational Analyses Regarding the Survivor’s Relationship with Her Mother**

Next, the relationship between the survivor’s experience of maternal care in childhood and the survivor’s current perception of attachment to her child was explored, and an analysis examining depressive symptoms as a mediator of this relationship was conducted. There was a nonsignificant trend for maternal care to predict the survivor’s attachment to her child ($\beta = .22$, $t = 1.68$, $p < .10$). Maternal care did not significantly predict current depressive symptoms ($\beta = -.18$, $t = -1.37$, $p > .05$). Depressive symptoms emerged as a significant predictor of the survivor’s perception of attachment with her child, in the presence of the amount of maternal care received by the survivor in childhood ($\beta = -.26$, $t = -2.01$, $p < .05$). Thus, survivors who reported more depressive symptoms also tended to report difficulties in the survivor-child attachment. Since maternal care did not significantly predict current depressive symptoms, the conditions to explore mediation were not met (MacKinnon, 2008).

A mediational analysis was also conducted for the relationship between the survivor’s childhood experience of maternal control and her promotion of her child’s autonomy. Maternal control significantly predicted the survivor’s ability to promote her child’s autonomy ($\beta = -.27$, $t = -2.05$, $p < .05$). Participants who reported high maternal control in childhood also tended to have difficulty in promoting their child’s autonomy. There was a nonsignificant trend for maternal control to predict depressive symptoms ($\beta = .22$, $t = 1.69$, $p < .10$). Current depressive symptoms significantly predicted the survivor’s promotion of her child’s autonomy over and above the survivor’s experience of maternal control in childhood ($\beta = -.30$, $t = -2.32$, $p < .05$). Participants who indicated high levels of depressive symptoms also struggled in encouraging their child’s age-appropriate independence. Since maternal control did not significantly predict depressive symptoms, mediation could not occur.

Depressive symptoms were expected to mediate the relationship between the survivor’s experience of maternal control and her ability to set limits for her child. However, maternal control did not predict the participant’s limit setting ability ($\beta = -.03$, $t = -.19$, $p > .05$). As reported earlier, there was a nonsignificant trend for maternal control to predict depressive symptoms.
symptoms. Depressive symptoms were found to be a significant predictor of the survivor’s ability to effectively set limits for her child, above and beyond the survivor’s receipt of maternal control in childhood ($\beta = -0.28$, $t = -2.10$, $p < 0.05$). Survivors struggling with depressive symptoms also tended to have difficulty in setting limits for their child. Since maternal control did not significantly predict current depressive symptoms, no mediation of depressive symptoms could occur.

**Moderational Analyses Regarding the Survivor’s Relationship with Her Mother**

It was hypothesized that partner support would buffer against negative parenting practices, particularly when survivors reported troublesome relationships with their own mothers in childhood. Specifically, partner support was expected to moderate the survivor’s attachment to her child, following childhood experiences of low maternal care. The overall model was significant and accounted for 22.7% of the variance [$F(3, 54) = 5.29$, $p < 0.01$]. There was a significant main effect of partner support in predicting attachment in the presence of maternal care and the interaction term ($\beta = 0.43$, $t = 3.54$, $p = 0.001$). In this model, participants who indicated feeling well supported by their partner also noted fewer problems in their attachment to their child when compared to participants who felt poorly supported. However, the interaction term did not significantly contribute to the prediction of attachment ($\beta < -0.01$, $t = -0.08$, $p > 0.05$). Thus, partner support did not moderate the relationship between maternal care and the survivor’s perception of her attachment to her child.

The survivor’s perception of her partner’s support was believed to buffer the survivor’s promotion of her child’s autonomy, after childhood experiences of high maternal control. This model predicting autonomy was not significant, $F(3, 50) = 2.03$, $p > 0.05$. Interestingly, the survivor’s experience of maternal control did significantly predict her ability to encourage her child’s age-appropriate independence, over and above the presence of partner support and the interaction term ($\beta = -0.28$, $t = -2.05$, $p < 0.05$). Participants who reported having a controlling mother were also more likely to struggle to promote their child’s autonomy. However, partner support did not serve as a moderator ($\beta < -0.01$, $t = -0.04$, $p > 0.05$).

Partner support was also hypothesized to buffer the survivor’s ability to effectively set limits for her child, following childhood experiences of high maternal control. The overall model was significant and accounted for 14.2% of the variance, [$F(3, 50) = 2.77$, $p = 0.05$]. There was a significant main effect of partner support in the presence of maternal control and the interaction term ($\beta = 0.38$, $t = 2.86$, $p < 0.01$). Survivors who reported strong support by their partners also indicated little difficulty in setting limits for their child. However, the interaction term did not significantly contribute to the prediction of limit setting ($\beta < -0.01$, $t = -0.04$, $p > 0.05$), and thus, partner support did not serve as a buffer between survivors’ experiences of high maternal control and their ability to set limits with their child. There were no problems with collinearity for these three models, since all VIFs were less than 1.03.

**Post Hoc Analyses**

Since the variability of the maternal care scale was limited in this sample, it was hypothesized that maternal control, instead of maternal care, might predict the survivor’s emotional bond to her child. Furthermore, partner support might serve as a buffer for attachment, following experiences of high maternal control. After analyzing the data, it was found that maternal control did significantly predict attachment ($\beta = -0.28$, $t = -2.18$, $p < 0.05$). The overall
moderational model predicting attachment from maternal control and partner support was significant and accounted for 24.1% of the variance \[F(3, 54) = 5.72, p < .01\]. There was also a significant main effect of partner support (\(\beta = .42, t = 3.46, p = .001\)) and a nonsignificant trend of a main effect of maternal control (\(\beta = -.21, t = -1.76, p < .10\)) in the presence of each other and the interaction term. Survivors who reported having strong support from their partner also reported having fewer difficulties in their attachment to their child. Partner support was not found to moderate this relationship, as the interaction term was nonsignificant, (\(\beta = .06, t = .47, p > .05\)). There were no problems with collinearity in this model, since all VIFs were less than 1.05.

Discussion

Since data regarding CSA survivors and their children is limited, and at times conflicting, this study hoped to provide further clarification of past findings. The present study examined the CSA survivor’s perception of her emotional bond with her child, her ability to promote her child’s age-appropriate autonomy, and her ability to effectively set limits for her child. More specifically, this study focused on how the survivor’s parental role might be negatively influenced by her experiences of sexual and physical abuse in childhood, as well as the nature of her bond with her own mother. Finally, current risk (depressive symptoms) and protective (partner support) factors were also examined as potential mediators and moderators of the relationship between the survivor’s negative childhood experiences and her current functioning in her parental role.

Inspection of the bivariate correlations between the study variables yielded several interesting findings. The survivor’s experience of sexual and physical abuse in childhood correlated negatively with her memory of maternal care and positively with her memory of maternal control. This suggests that survivors who were severely sexually and physically abused as children also tended to have cold, controlling mothers. This is consistent with literature regarding the co-occurrence of childhood maltreatment and family dysfunction (DiLillo & Damashek, 2003). As Boudewyn and Liem stated, “CSA does not occur in a vacuum” (1995, p. 446). Parallel to findings of other research on CSA (e.g., Schoedl et al., 2010), the survivor’s severity of abuse correlated with her report of current depressive symptoms.

The survivor’s experience of maternal control was found to negatively correlate with the survivor’s ability to promote her child’s autonomy. In other words, survivors of CSA who experienced high levels of control from their mothers in childhood also reported difficulty in accepting their child’s age-appropriate independence. This is consistent with past research, which suggests that there is relative continuity of authoritarian parenting practices (Campbell & Gilmore, 2007). Surprisingly, no relationship between the survivor’s perception of maternal control and her ability to appropriately set limits for her child emerged, but maternal control and the survivor’s perceived attachment with her child were negatively correlated. Finally, relationships were found between all three of the survivor’s parenting dimensions (i.e., attachment, autonomy, and limit setting), such that survivors who were struggling with one dimension were more likely to report problems in the other two dimensions as well. For example, survivors who become frustrated by their frequent failed attempts to set appropriate limits for their child may have problems with maintaining a positive parent-child relationship and respecting their child’s independence.
Severity of Sexual and Physical Abuse and Later Outcome

Of concern in this sample was the severity and chronicity of CSA experienced by these mothers. Typically, nonclinical samples have less severe experiences of CSA than clinical samples (Barnett et al., 2005). However, in this community sample, many of the survivors were forced to have intercourse frequently for several years, starting in their early elementary school years. Additionally, 92% of these mothers had been abused by a member of their immediate or extended family. In comparison, studies of the general population have found that approximately 47% of the perpetrators of CSA are members of the victim’s immediate or extended family (Briere & Elliott, 2003). Thus, the findings from this study pertain most to survivors of intrafamilial sexual abuse. As past findings suggest, the abuse tends to be more severe and frequent when the perpetrator is a family member (Fergusson et al., 1996a). In addition to the moderate sexual abuse, most participants (80%) also were physically abused. This is not surprising, since CSA tends to co-occur with other forms of childhood maltreatment (Banyard et al., 2003; Barrett, 2009; Chu & Dill, 1990; DiLillo et al., 2000; Westen, Ludolph, Misle, Ruffins, & Block, 1990).

Interestingly, for this sample, severity of sexual and physical abuse indirectly impacted parenting behaviors through current depressive symptoms. This pathway may provide an important explanation about past, conflicting literature on the role of severity of abuse on later adult functioning. Akin to this study’s findings, a number of researchers (e.g., Banyard, 1999; Liem et al., 1997) have found that CSA survivors who reported more severe abuse also tended to indicate more depressive symptoms. While some studies have not found a link between severity of abuse and negative adult psychosocial outcomes (e.g., Fassler et al., 2005; Merrill et al., 2001), it is possible that depressive symptoms mask the true relationship. In addition, this study did not find a direct relationship between severity of abuse and later parenting practices. This is contradictory to prior research done by Ruscio (2001) and Lyons-Ruth and Block (1996), which both found that survivors who reported more severe CSA also tended to struggle more in their parental role.

The Survivor’s Current Depressive Symptomatology as a Risk Factor

Similar to previous findings, the CSA survivor’s current depressive symptoms did emerge as a risk factor for problems in the parental bond and in specific parenting behaviors (Banyard et al., 2003; Cohn et al., 1986; Cox et al., 1987; Goodman, 2007). As the research on maternal depression and diminished parental effectiveness suggests, depressed survivors perceive a multitude of problems in their interactions with their child (Goodman, 2007). Studies have found that mothers struggling with depression are less warm and engaged with their children and have more trouble setting behavioral rules than mothers without this psychological distress (Cohn, Matias, Tronick, Connell, & Lyons-Ruth, 1986; Cox, Puckering, Pound, & Mills, 1987; Foster et al., 2008; Goodman, 2007). This perception could be indicative of actual struggles in the survivor-child relationship, of the survivor’s feeling of incompetence in her parental role (as supported by Banyard et al., 2003; Mapp, 2006), and/or the survivor’s current depressive state. In any case, CSA survivors who are depressed do not feel confident about the strength of their bond with their child, their ability to promote their child’s autonomy, or their ability to set limits for their child. This association appears to be more influential than the survivor’s perception of maternal care or control, particularly with respect to the survivor’s
emotional closeness and ability to enforce behavioral restrictions with her child. Therefore, this may be a point of intervention for clinicians working with depressed mothers with histories of CSA. More research is needed to determine specifically how depression affects CSA survivors and their interactions with their child.

**The Survivor’s Receipt of Low Maternal Care As a Risk Factor**

One disturbing finding of this study is that the overwhelming majority of participants (93%) in this sample identified receiving little to no care from their mothers in childhood. Since only two participants reported that their mothers were “optimally bonded” to them (i.e., high care, low control), it is clear that most of these survivors had quite negative relationships with their mothers. This finding is congruent with past research on CSA survivors’ perceptions of their mothers (Alexander, 1992; Aspelmeier et al., 2007; Barnett et al., 2005; Cosden & Cortez-Ison, 1999; Fergusson et al., 1996a; Fitzgerald et al., 2005). This limited variability may also shed light on why there were no significant correlations between maternal care and the other study variables, excluding severity of abuse. Since there were few individuals who indicated receiving an adequate amount of care from their mothers, it was difficult to find significant results using linear analyses such as regression to determine how their experiences of care from their own mothers impacted their current child interactions.

This study found a nonsignificant trend for the survivor’s memory of maternal care to predict her ability to emotionally bond with her child. This finding is noteworthy when considering the limited range of the maternal care variable in addition to the relatively small sample size. It is possible that a significant pattern of intergenerational transmission of emotional closeness would emerge with a larger sample. Previous studies have found that survivors of CSA who identify their mother as loving feel less parental stress (Douglas, 2000). Survivors who are less overwhelmed as parents due to having a loving mother may be able to attend to their child’s needs more and develop a stronger bond with their child more than survivors with cold, distant mothers. However, the survivor’s perception of maternal care was not found to predict her current depressive symptoms, as expected. This result was not supported by prior research (Collishaw et al., 2007; Mackinnon et al., 1993; Parker, 1983; Parker et al., 1995; Sakado et al., 2000; Sato et al., 1998). However, only one of these studies (i.e., Collishaw et al.) examined depression and maternal care within the context of CSA survivors. Hence, the survivor’s depressive symptoms might be better explained by the survivor’s experience of CSA or the extreme severity of the abusive episodes, rather than the lack of maternal care received. It is important to note that a very high percentage (68.33%) of these mothers did report clinically significant levels of depressive symptoms, which is consistent with a high abuse exposure and poor maternal care. However, since maternal care did not predict depressive symptoms, depression was not examined as a mediator of the relationship between the survivor’s perception of maternal care and her ability to bond with her child.

**The Survivor’s Receipt of High Maternal Control as a Risk Factor**

The majority of participants also indicated that their mothers tended to be controlling in childhood, which is consistent with the study by Fergusson et al. (1996a). Survivors’ perception of maternal control in childhood predicted their ability to promote their child’s autonomy, such that survivors of controlling mothers struggled more in encouraging their child’s independence. This result was not unexpected based on prior research (Campbell & Gilmore, 2007). In addition,
an association between the survivor’s experience of maternal control in childhood and her perception of problems in attaching to her child was identified, in that survivors who had controlling mothers reported lacking an emotional closeness to their child. This is consistent with prior literature which found that children who had authoritarian mothers were more likely to develop insecure attachment styles and engage in more authoritarian parenting practices in adulthood than children with authoritative mothers (Campbell & Gilmore, 2007; Karavasilis, Doyle, & Markiewicz, 2003).

The hypothesis that the survivor’s experience of maternal control would predict her ability to effectively set limits was not supported. However, it is likely that this relationship is not linear. Baumrind (1966, 1967) has argued that effective parenting included utilizing a moderate level of behavioral control over the child’s actions. Nonetheless, mothers employing parenting styles from either extreme of the maternal control continuum (i.e., authoritarian or permissive) would not be appropriately setting limits for their child. Additionally, a nonsignificant trend for the survivor’s memories of maternal control in childhood to predict her current depressive symptoms was found. As mentioned previously, due to reduced statistical power, this finding might become significant with a larger sample size. Several studies have demonstrated a connection between experiences of high maternal control and later depressive symptoms (Parker, 1983; Parker et al., 1995), but not all (Mackinnon et al., 1993; Sato et al., 1998; Sakado et al., 2000). It is important to note that none of these studies focused on survivors of CSA. Since maternal control did not predict depressive symptoms, depression could not serve as a mediator of the relationship between the survivor’s experience of maternal control and her ability to engage in appropriate control of her child.

**The Survivor’s Partner Support as a Protective Factor**

As expected, partner support was found to be a strong promotive factor that served to strengthen the survivor’s bond with her child and was associated with more appropriate limit setting. This promotive effect was illustrated by the strong main effects of partner support in the moderational models. This is consistent with past studies, suggesting that well-supported survivors feel less stressed, feel more capable as a parent, and are more likely to use an authoritative parenting style, even when the survivor reports high depressive symptoms (Alexander et al., 2000; Banyard et al., 2003; Cole et al., 1992; Ruscio, 2001; Wright et al., 2005; Zuravin & Fontanella, 1999). These survivors are likely to have a better relationship with their child, as well as feel more able to set appropriate limits, as found in earlier research (Banyard et al., 2003; Cole et al., 1992).

However, partner support was not found to be a promotive factor in the survivor’s reported difficulties in encouraging her child’s age-appropriate autonomy. Although CSA survivors with strong social network may feel more competent in their parental role (Zuravin & Fontanella, 1999), their ability to encourage their child to make autonomous choices may not be heavily influenced by the support of others. In addition, it is important to note that the Autonomy measure of the PCRI had a low alpha coefficient (.56), indicating that there were problems with the internal consistency of this subscale for this sample. As previous studies implied, survivors of CSA may have dysfunctional beliefs about autonomy (Cole & Woolger, 1989; Cole et al., 1992; Cross, 2001; Krekelwetz & Piotrowski, 1998). Cole and Woolger (1989) found that incest survivors tend to promote their child’s premature autonomy, while Krekelwetz & Piotrowski (1998) and Cross (2001) identified that CSA survivors were overprotective of their children and
had difficulties encouraging their child’s independence for fear of victimization. Therefore, this discrepancy may have been important on items on the Autonomy subscale such as, “Teenagers are not old enough to decide most things for themselves.” Additionally, low alpha coefficients for Autonomy were found in other recent studies exploring parental depressive symptomatology (Middleton et al., 2009), maternal substance abuse (Suchman et al., 2007), and caregivers’ HIV status (Elkington et al., 2011). This suggests that there may be problems with the construct of autonomy within certain clinical samples, which warrants further investigation.

Partner support did not serve as a buffer (moderator) for any of the three domains of parenting examined, following the survivor’s high abuse exposure or poor maternal bond, as originally hypothesized. However, as McClelland and Judd (1993) point out, moderator effects are difficult to find in field studies, particularly when the statistical power of a study is limited because of a small sample size. Further research using a larger sample is needed to validate these findings.

Limitations of the Study

Despite the study’s advantages over other studies on survivors of CSA, there are several limitations. The sample collected was one of convenience, and thus, it is possible that participants who strongly self-identified as CSA survivors self-selected into the study and differ in unknown ways from the typical female CSA survivor. This sample may not be representative of survivors of CSA as a group. In addition, since the sample is predominantly Caucasian, the study may not be easily generalized to other cultural groups. There was no control group of nonabused mothers from the community to which the present sample could be compared, so the results could be applicable to all nonclinical women, rather than specific to survivors of CSA. Therefore, it would be best if this study were considered to be exploratory until larger, more diverse populations are examined. Due to the high rates of co-occurring sexual abuse and physical abuse, it may have been interesting to collect information on the survivor’s experience of emotional abuse in childhood, as well as focusing more specifically on the perpetrator(s) of physical or emotional abuse. The analysis of the data was also limited to exploring linear relationships. This was done in order to retain statistical power with a relatively small sample size. However, a more definitive analysis, utilizing more complex statistical approaches, would be possible given a larger sample size. Additionally, the assessments from this study were comprised solely of self-report data taken at the same point in time. It would have been preferable to have external corroboration of the survivors’ reports of parenting effectiveness with observational data or children and partner reports. The cross-sectional nature of the data also limits our ability to draw causal inferences, which can only be done using a longitudinal research design. Lastly, it may have been beneficial to collect the survivor’s perception of her interaction with her father in childhood, in addition to her mother. Some studies have found that the father-daughter relationship may be important to analyze with respect to subsequent adaptation and long-term outcomes (Fergusson, Boden, & Horwood, 2008; Sato et al., 1998; Sakado et al., 2000). This may be especially so for CSA survivors who have been abused by father figures.

Strengths of the Study

Nonetheless, the present study has several noteworthy advantages over other studies. It highlighted the impact of the survivor’s depressive symptoms and the importance of partner support in her interactions with her child as respective risk and promotive factors. Past research
on survivors of CSA have used primarily clinical populations (e.g., Douglas, 2000; Ruscio, 2001), college students (e.g., Aspelmeier et al., 2007) or very low-income mothers (e.g., Banyard et al., 2003; Banyard, 1999; Barrett, 2009; Schuetze & Das Eiden, 2005; Zuravin & Fontanella, 1999). This study recruited participants from communities across the United States in a variety of different settings. Participants had a wide range of age, SES, and educational attainment. For the most part, outcome measures had high internal consistency and were applicable to community samples. The CSA survivors were not convinced to participate for financial gain, nor did they have concerns about their confidentiality. Although all of the participants indicated sexual contact in childhood, the definition of CSA included participants who were exposed to noncontact forms of sexual abuse, such as exhibitionism and child pornography. While the study relied heavily on the survivors’ self-report data, it was assumed that participants were providing honest beliefs about their abuse history, their current mental health, and their interactions with their mothers, their children, and their partners.

Clinical Implications

Despite the numerous parenting problems perceived by survivors of CSA, there are several clinical implications that might serve to ameliorate these difficulties. Clinicians need to recognize the potential for female adult survivors of CSA to be struggling in motherhood (Cross, 2001). Parent counseling may be useful in teaching survivors new skills for interacting with their child and may increase their parental confidence. Mothers with a history of CSA and who struggle with depression may benefit from a combination of psychotherapy and antidepressant medication to decrease their psychological distress and subsequently improve parent-child interactions. Marital or partner counseling may strengthen the survivor-partner relationship and diminish problems in motherhood. Additionally, books, therapists, spouses, and friends may serve as useful sources of information about “normal” child development (Cross, 2001).

In general, further research is needed to clarify the complex nature of the survivor-child relationship and the role of depression and partner support. While some survivors are functioning well in motherhood, it is important to assist those struggling with psychological distress and interpersonal problems, as previous researchers have noted (Cross, 2001). Hopefully, future research will lead to more specific intervention programs to help survivors of CSA and their children lead more fulfilling lives.
References


Lynskey, M. T., & Fergusson, D. M. (1997). Factors protecting against the development of


Footnotes

1In this study, Parker’s control/overprotective dimension will simply be referred to as the control dimension, since the term “overprotective” denotes one end of a continuum.

2Eight participants reported that their mother was one of the perpetrators of sexual abuse in childhood. Analyses were conducted to determine if participants who had been sexually abused in childhood by their mother differed from participants who had not. No group differences were found for any of the study variables. Therefore, to retain statistical power, these participants were included in the data analyses.

3Additional data analyses were conducted to explore the Parental Bonding Instrument (PBI) as a two-dimensional space. The results were similar to the regression analyses and are reported in Appendix B.

4When using the three-factor approach to the Parental Bonding Instrument (PBI) in Appendix A, the researchers explored how maternal authoritarianism predicts the survivor’s ability to set limits, instead of maternal control. This holds true for the mediational and moderational hypotheses as well.
Table 1
Bivariate Correlations Among the Study Variables

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<tr>
<th>Study variables</th>
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<tr>
<td>5. Maternal care</td>
<td>0.017</td>
<td>0.068</td>
<td>0.012</td>
<td>-0.331***</td>
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<td>6. Maternal control</td>
<td>0.085</td>
<td>-0.042</td>
<td>0.118</td>
<td>0.342**</td>
<td>-0.177</td>
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<td></td>
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<td>7. Attachment</td>
<td>-0.014</td>
<td>0.096</td>
<td>0.151</td>
<td>0.024</td>
<td>0.217</td>
<td>-0.277*</td>
<td>-</td>
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<td>8. Promotion of autonomy</td>
<td>0.183</td>
<td>0.422**</td>
<td>0.459***</td>
<td>0.064</td>
<td>0.048</td>
<td>-0.268*</td>
<td>0.277*</td>
<td>-</td>
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<tr>
<td>9. Ability to set limits</td>
<td>0.043</td>
<td>0.137</td>
<td>0.381**</td>
<td>0.110</td>
<td>-0.066</td>
<td>-0.026</td>
<td>0.592***</td>
<td>0.416***</td>
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<td>10. Depressive symptoms</td>
<td>-0.171</td>
<td>-0.135</td>
<td>-0.263*</td>
<td>0.328*</td>
<td>-0.177</td>
<td>0.216</td>
<td>-0.286*</td>
<td>-0.346**</td>
<td>-0.276*</td>
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<tr>
<td>11. Partner support</td>
<td>-0.094</td>
<td>0.045</td>
<td>-0.093</td>
<td>0.000</td>
<td>0.073</td>
<td>-0.152</td>
<td>0.444***</td>
<td>0.182</td>
<td>0.377**</td>
<td>-0.240</td>
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</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
Figure 1. Distribution of participants’ severity of sexually abusive experiences in childhood. This composite variable consisted of the summation of the frequency, number of perpetrators (compiled into four categories ranging from one to four or more), presence of force, and presence of penetration as reported by the participant. Possible severity scores ranged from 4 (mild abuse) to 13 (severe abuse).
Figure 2. Distribution of participants’ frequency of physical abusive experiences in childhood.
Figure 3. Distribution of participants’ severity of sexually abusive and frequency of physically abusive experiences in childhood. This composite variable consisted of the summation of the severity of sexual abuse and the frequency of physical abuse experienced by the survivor. Possible severity scores ranged from 4 (mild sexual abuse and no physical abuse) to 18 (severe sexual abuse and physical abuse).
Figure 4. Participants’ perceptions of maternal care and control in childhood from the Parental Bonding Instrument (PBI; Parker et al., 1979). The dichotomizing scores for each axis were graphed, in order to create four quadrants (Parker, 1983; Parker & Hadzi-Pavlovic, 1992). For participants who rated the PBI with respect to their mothers, the dichotomizing scores for community samples are 27.0 for care and 13.5 for control. The four quadrants are labeled as such: affectionate constraint (high care-high control), optimal bonding (high care-low control), affectionless control (low care-high control), and neglectful bonding (low care-low control).
Figure 5. Diagram of a mediational analysis, illustrating the indirect effect of severity of childhood sexual and physical abuse experienced by the survivor on her perception of attachment to her child through her current depressive symptoms.
*p < .05
Figure 6. Diagram of a mediational analysis, illustrating the indirect effect of severity of childhood sexual and physical abuse experienced by the survivor on her perception of her ability to promote her child’s autonomy through her current depressive symptoms. *p < .01.
Figure 7. Diagram of a mediational analysis, illustrating the indirect effect of severity of childhood sexual and physical abuse experienced by the survivor on her perception of her ability to effectively set limits for her child through her current depressive symptoms.
*p < .05.
Appendix A

Kendler’s (1996) Three-Factor Analysis of the Parental Bonding Instrument

As noted earlier, there are several three-factor models of the Parental Bonding Instrument (PBI) that have emerged since it was created by Parker, Tupling, and Brown in 1979. Many researchers argue that Kendler’s three-factor model is superior to the other models, as it provides the best fit for their data (Cox et al., 2000; Sato et al., 1999). Kendler’s study examined the role of genetic and environmental factors in determining later parenting behaviors. He administered the PBI to adult monozygotic and dizygotic twins, as well as their parents, and identified three factors of care, protectiveness, and authoritarianism. Examples of items from Kendler’s model include: “My mother spoke in a friendly voice” (care); “My mother did not want me to grow up” (protectiveness); and “My mother let me decide things for myself” (authoritarianism). For a comparison of the factor loadings of items from the original two-factor analysis of the PBI and those from Kendler’s three-factor analysis, see Table A2. While Kendler does not make significant changes to the question’s wording from the original PBI, unlike other studies (e.g. Cox et al., 2000; Heider et al., 2005), he does eliminate nine of the original twenty-five items. Since Kendler was adapting the PBI to administer to parents as well as their adult children, he discarded items that were difficult to answer from a parent’s perspective (e.g., “My mother felt I could not look after myself unless she was around,” “My mother invaded my privacy.”) or that seemed redundant to him. Thus, Kendler’s factor analysis is based on a 16-item PBI, rather than the full measure. For this sample, the alpha coefficients for care, protectiveness, and authoritarianism of the three-factor PBI are .91, .81, and .85 respectively.

Results of the Three-Factor PBI Analyses

Mediational Analyses

Intercorrelations between the three-factor PBI and the remaining study variables were examined and are displayed in Table A1. Maternal care did not significantly predict the survivor’s perception of attachment to her child ($\beta = .20, t = 1.55, p > .05$) or her current depressive symptoms ($\beta = -.16, t = -1.19, p > .05$). However, depressive symptoms significantly predicted the survivor’s emotional bond with her child, in the presence of maternal care ($\beta = -.26, t = -2.06, p < .05$). Nonetheless, since the survivor’s recollection of maternal care did not significantly predict depressive symptoms, no mediation could occur.

There was a nonsignificant trend for maternal protectiveness to predict the survivor’s ability to promote her child’s autonomy ($\beta = -.25, t = -1.90, p < .10$). Maternal protectiveness did not significantly predict current depressive symptoms ($\beta = .14, t = 1.09, p > .05$). Depressive symptoms emerged as a significant predictor of the survivor’s ability to promote her child’s autonomy, in the presence of maternal protectiveness ($\beta = -.32, t = -2.51, p < .05$). However, since maternal protectiveness did not significantly predict the survivor’s current depressive symptoms, depressive symptoms could not mediate the relationship between maternal protectiveness and her ability to promote her child’s autonomy.

Maternal authoritarianism did not predict the survivor’s ability to set limits for her child ($\beta = .04, t = .26, p > .05$) nor did it predict the survivor’s depressive symptoms ($\beta = .19, t = 1.47, p > .05$). In the presence of maternal authoritarianism, current depressive symptoms endorsed by the survivor did significantly predict her limit setting abilities ($\beta = -.30, t = -2.20, p < .05$).
Nonetheless, since maternal authoritarianism did not significantly predict the survivor’s current depressive symptoms, the latter could not serve as a mediator.

Moderational Analyses

Partner support was expected to buffer the survivor’s attachment to her child, following childhood experiences of low maternal care. The overall model was significant and accounted for 22.9% of the variance \( F(3, 54) = 5.36, p < .01 \). There was a significant main effect of partner support in predicting attachment while in the presence of maternal care and the interaction term \( (β = .44, t = 3.64, p = .001) \). However, the interaction term did not significantly contribute to the prediction of attachment \( (β < -.01, t = -0.08, p > .05) \), and thus, partner support did not moderate the relationship between the survivor’s experience of low maternal care and her perception of the attachment to her child.

Partner support was also predicted to buffer the survivor’s promotion of her child’s autonomy, after childhood experiences of high maternal protectiveness. This model predicting autonomy was not significant, \( F(3, 50) = 1.78, p > .05 \). Nonetheless, there was a nonsignificant trend for maternal overprotection to predict autonomy \( (β = -.26, t = -1.86, p < .10) \). The interaction term was not found to be significant \( (β < -.01, t = -0.07, p > .05) \), indicating that partner support did not moderate the relationship between the survivor’s experience of maternal overprotection and her perception of the attachment to her child.

Lastly, partner support was hypothesized to buffer the survivor’s ability to effectively set limits for her child, following childhood experiences of low maternal authoritarianism. The overall model was significant and accounted for 14.3% of the variance \( F(3, 50) = 2.79, p = .05 \). There was also a significant main effect of partner support in the presence of maternal authoritarianism and the interaction term \( (β = .38, t = 2.86, p < .01) \). The interaction term did not significantly contribute to the prediction of limit setting \( (β = .02, t = 0.18, p > .05) \), indicating that partner support did not moderate the relationship between the survivor’s experience of maternal authoritarianism and her ability to set limits. The VIFs of 1.07 and smaller suggest that there are no problems with collinearity in any of these three models.

Post Hoc Analyses

Since the variability of the maternal care scale was limited in this sample, it was hypothesized that maternal protectiveness and authoritarianism, instead of maternal care, may predict the survivor’s attachment to her child. Additionally, partner support may serve as a buffer for attachment, following experiences of high maternal protectiveness or low maternal authoritarianism.

Maternal protectiveness did significantly predict attachment \( (β = -.28, t = -2.17, p < .05) \). Partner support was hypothesized to moderate the relationship between maternal protectiveness and attachment. The overall model was significant and accounted for 22.9% of the variance \( F(3, 54) = 5.34, p < .01 \). There was also a significant main effect of partner support in the presence of maternal control and the interaction term \( (β = .40, t = 3.26, p < .01) \). Partner support did not serve as a moderator though, as the interaction term was nonsignificant \( (β = -.03, t = -0.22, p > .05) \). There were no problems with collinearity, since all VIFs were less than 1.07.

There was a nonsignificant trend for maternal authoritarianism to predict attachment as well \( (β = -.22, t = -1.73, p < .10) \). Partner support was expected to moderate the relationship between maternal authoritarianism and attachment. The overall model was significant and accounted for 23.5% of the variance \( F(3, 54) = 5.53, p < .01 \). There was a significant main effect of partner support \( (β = .42, t = 3.52, p < .01) \). Nonetheless, partner support was not a
moderator of this relationship, since the interaction term was nonsignificant ($\beta = .09, t = 0.75, p > .05$). There were also no problems with collinearity for this model, as suggested by VIFs less than or equal to 1.10.
Table A1
*Bivariate Correlations Among the Three-Factor Parental Bonding Instrument and the Other Study Variables*

<table>
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<tr>
<th>Study variables</th>
<th>1</th>
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<td>4. Severity of CSA and CPA</td>
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<td>5. Maternal care</td>
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<td>7. Maternal authoritarianism</td>
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<td>-.097</td>
<td>.083</td>
<td>.442***</td>
<td>-.239</td>
<td>.622***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Attachment</td>
<td>-.014</td>
<td>.096</td>
<td>.151</td>
<td>.024</td>
<td>.202</td>
<td>-.277*</td>
<td>-.224</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Promotion of autonomy</td>
<td>.183</td>
<td>.422**</td>
<td>.459***</td>
<td>.064</td>
<td>.021</td>
<td>-.250</td>
<td>-.242</td>
<td>.277*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Ability to set limits</td>
<td>.043</td>
<td>.137</td>
<td>.381**</td>
<td>.110</td>
<td>-.047</td>
<td>-.082</td>
<td>.035</td>
<td>.592***</td>
<td>.416***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Depressive symptoms</td>
<td>-.171</td>
<td>-.135</td>
<td>-.263*</td>
<td>.328*</td>
<td>-.155</td>
<td>.142</td>
<td>.189</td>
<td>-.286*</td>
<td>-.346**</td>
<td>-.276*</td>
<td></td>
</tr>
<tr>
<td>12. Partner support</td>
<td>-.094</td>
<td>.045</td>
<td>-.093</td>
<td>.000</td>
<td>.023</td>
<td>-.214</td>
<td>-.095</td>
<td>.444***</td>
<td>.182</td>
<td>.377**</td>
<td>-.240</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
Table A2
*A Comparison of the Factor Loadings of Items from the Original Two-Factor Analysis of the Parental Bonding Instrument and Those from the Three-Factor Analysis*

<table>
<thead>
<tr>
<th>My mother:</th>
<th>Two-factor(^a)</th>
<th>Three-factor(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spoke to me with a warm and friendly voice</td>
<td>Care</td>
<td>Care</td>
</tr>
<tr>
<td>2. Did not help me as much as I needed(^c)</td>
<td>Care</td>
<td></td>
</tr>
<tr>
<td>3. Let me do those things I liked doing(^c)</td>
<td>Control</td>
<td></td>
</tr>
<tr>
<td>4. Seemed emotionally cold to me(^c)</td>
<td>Care</td>
<td>Care</td>
</tr>
<tr>
<td>5. Appeared to understand my problems and worries</td>
<td>Care</td>
<td>Care</td>
</tr>
<tr>
<td>6. Was affectionate to me</td>
<td>Care</td>
<td></td>
</tr>
<tr>
<td>7. Liked me to make my own decisions(^c)</td>
<td>Control</td>
<td>Authoritarianism</td>
</tr>
<tr>
<td>8. Did not want me to grow up</td>
<td>Control</td>
<td>Protectiveness</td>
</tr>
<tr>
<td>9. Tried to control everything I did</td>
<td>Control</td>
<td>Protectiveness</td>
</tr>
<tr>
<td>10. Invaded my privacy</td>
<td>Control</td>
<td></td>
</tr>
<tr>
<td>11. Enjoyed talking things over with me</td>
<td>Care</td>
<td>Care</td>
</tr>
<tr>
<td>12. Frequently smiled at me</td>
<td>Care</td>
<td>Care</td>
</tr>
<tr>
<td>13. Tended to baby me</td>
<td>Control</td>
<td>Protectiveness</td>
</tr>
<tr>
<td>14. Did not seem to understand what I needed or wanted(^c)</td>
<td>Care</td>
<td>Authoritarianism</td>
</tr>
<tr>
<td>15. Let me decide things for myself(^c)</td>
<td>Control</td>
<td></td>
</tr>
<tr>
<td>16. Made me feel I wasn’t wanted(^c)</td>
<td>Care</td>
<td></td>
</tr>
<tr>
<td>17. Could make me feel better when I was upset</td>
<td>Care</td>
<td>Care</td>
</tr>
<tr>
<td>18. Did not talk with me very much(^c)</td>
<td>Care</td>
<td>Care</td>
</tr>
<tr>
<td>19. Tried to make me dependent on her</td>
<td>Control</td>
<td>Protectiveness</td>
</tr>
<tr>
<td>20. Felt I could not look after myself unless she was around</td>
<td>Control</td>
<td>Authoritarianism</td>
</tr>
<tr>
<td>21. Gave me as much freedom as I wanted(^c)</td>
<td>Control</td>
<td></td>
</tr>
<tr>
<td>22. Let me go out as often as I wanted(^c)</td>
<td>Control</td>
<td></td>
</tr>
<tr>
<td>23. Was overprotective of me</td>
<td>Control</td>
<td>Protectiveness</td>
</tr>
<tr>
<td>24. Did not praise me(^c)</td>
<td>Care</td>
<td></td>
</tr>
<tr>
<td>25. Let me dress in any way I pleased</td>
<td>Control</td>
<td>Authoritarianism</td>
</tr>
</tbody>
</table>

*Note.* The twenty-five items of the Parental Bonding Instrument (PBI) is from Parker et al. (1979).
The two-factor analysis of the PBI is from Parker et al. (1979). The dimensions are care and control. The three-factor analysis of the PBI is from Kendler (1996). The dimensions are care, protectiveness, and authoritarianism. Blank spaces indicate questions that were excluded before Kendler conducted a factor analysis on the data. When scoring the PBI, item is reverse-coded.
Dear Interested Mothers:

Thank you for your interest in the research study which we are conducting. The purpose of this study is to learn more about the relationship and parenting experiences of female adult survivors of childhood sexual abuse who have at least one child under the age of 18. While being a mother is rewarding, it is also challenging and physically and emotionally demanding. What are the unique strengths and particular concerns of mothers who are survivors of childhood sexual abuse? Do mothers who have been sexually abused as children experience different stressors from mothers who have not experienced this childhood trauma? What coping strategies have been most successful? We are interested in discovering answers to these questions.

You are invited to participate in this research study, entitled Relationship and Parenting Experiences of Adult Women Sexually Abused as Children. Participation in this research is completely voluntary and women who are asked to participate may refuse to do so. If you decide to participate you will complete several paper and pencil questionnaires. Questionnaires are identified only with a number. You will not put your name on any questionnaire. This will ensure that your responses will be anonymous. It will take about one and a half hours to complete these questionnaires.

While the majority of questions focus on parenting and coping, there are some questions related to your childhood experiences. It is possible that this might bring up distressing feelings for some people. Women who participate may skip any questions found to be disturbing, and can also discontinue participation at any time. If you want to talk about any of these concerns, you may contact either one of us. A potential benefit to participation in the study is knowing that the information gained from the study may help others like you, as well as professionals who work with adult survivors of childhood sexual abuse.

If you decide to participate, please return the completed questionnaires in the large envelope provided. Return postage is included, so there will be no cost to participants. The returned questionnaires will be filed in a locked file only accessible to our research team.

The analysis and summary of our results is likely to take about one year. If you would like a summary of the study results please complete the enclosed postcard. Please mail the postcard separately; do not place the postcard in your envelope with your questionnaires. If you would like further information or an update prior to that time, please feel free to contact either one of us.

If you would like any questions answered prior to making a decision about participating in this study, please contact one of us; our numbers are listed below. If you would like information about your rights as a research participant please contact the Office for the Advancement of Scholarship and Teaching at 513-529-3734 or humanstudies@muohio.edu.

Thank you very much for your interest. Information gained from this study may help others like you in their process toward health.

Sincerely,

Margaret Wright
Associate Professor of Psychology
110C Benton Hall
Miami University
Oxford, Ohio
513-529-2406
wrightmo@muohio.edu

Dr. Joan Fopma-Loy
Professor of Nursing
574 Mosler Hall
Miami University
Hamilton, Ohio
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Fopmalj@muohio.edu

Figure A1. Recruitment letter sent to individuals who expressed interest in participating.
Appendix B

Additional Alternative Analyses

Group Comparisons using the Graph of Parental Bonding Instrument (PBI)

After examining the sample’s range of PBI scores, the researchers of this study hypothesized that the relationship between the survivor and her mother in childhood may be better represented in a two-dimensional format, rather than the traditional, linear regression models. Thus, comparisons of attachment, autonomy, limit setting, depressive symptoms, and partner support could be made between various quadrants of the PBI graph rather than being constricted to individual continuums (i.e., care or control). However, since the variability of the care dimension was limited in this sample, it was not feasible to use the traditional PBI cutoff points for the quadrants, due to the small group size in some quadrants. Instead, after identifying a clear gap in maternal care scores between 19.0 and 23.0, the cutoff point for the care dimension was changed from 27.0 to 22.0. In addition, the affectionate constraint and optimal bonding groups were combined to form an “adequate care” group. The new graph is showed as Figure B1.

According to these new cutoff points, 60% of the sample was in the affectionless control group and 23% of the sample was in the neglectful category. Finally, the third group was composed of participants who reported receiving relatively adequate care and various levels of control from their mothers in childhood and was comprised of 17% of the sample. An ANOVA was conducted to determine if there were any significant differences between the three groups in attachment, autonomy, limit setting, depressive symptoms, and partner support. Group differences within attachment emerged, $F(2, 56) = 3.35, p < .05$. After conducting a series of contrasts, it was found that the affectionless control group ($M = 19.83, SD = 4.75$) tended to perceive more problems in attaching to their child than the neglectful group ($M = 22.71, SD = 3.12, t = -2.50, p < .05$) or the adequate care group ($M = 22.78, SD = 2.99, t = -2.31, p < .05$).

Thus, survivors who experienced low maternal care and high maternal control in childhood felt that they were struggling in attaching to their child more than participants who experienced low care and control or participants who experienced adequate care. There were no significant group differences within the three quadrants for autonomy, limit setting, depressive symptoms, or partner support.

Results of the Sobel Tests for Indirect Effects

As opposed to using a bias-corrected bootstrapping technique to test the strength of an indirect effect in a suppressor model, researchers can conduct a Sobel test using an online calculation tool by Preacher & Leonardelli (2001; based on Sobel, 1982). For this study, three Sobel tests were conducted to examine the strength of the indirect effect of severity of abuse on attachment, promotion of autonomy, and ability to set limits through current depressive symptoms. For attachment, a nonsignificant trend for the indirect effect was found ($z = -1.78, p = .07$). With regards to promotion of autonomy, there was a significant indirect effect of severity of abuse on promotion of autonomy through depressive symptoms ($z = -1.98, p < .05$). Lastly, a nonsignificant trend for the indirect effect of severity of abuse on limit setting through depressive symptoms ($z = -1.84, p < .10$).
Figure B1. Revised graph of participants’ perceptions of maternal care and control in childhood from the Parental Bonding Instrument (PBI; Parker et al., 1979). Due to a limited numbers of participants indicating average or high levels of care, a new group labeled “adequate care” was created, consisting of participants who reported a score of 22 or higher on the maternal care dimension. The cutoff point between the affectionless control and neglectful groups continued to be 13.5 (Parker, 1983; Parker & Hadzi-Pavlovic, 1992).