# The Pennsylvania State University

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# EVERYTHING IN MODERATION: EMOTIONAL DISTANCE IN THE PARENT-CHILD RELATIONSHIP AND CHILD MALTREATMENT RISK

A Thesis in

Psychology

by

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#### **ABSTRACT**

One's risk for perpetrating child maltreatment is believed to be affected by the parent-child relationship in one's family of origin. Drawing from literatures on parenting and child maltreatment, the current study examined whether growing up in an enmeshed or disengaged relationship with one's mother, hence a relationship characterized by extreme amounts of emotional distance, increased one's risk of child maltreatment perpetration.

As hypothesized, both low and high emotional distance predicted child abuse potential and unrealistic expectations of children. In addition, emotional reactivity was found to mediate the relationship between extreme emotional distance and child abuse potential and directly predict unrealistic expectations of children, whereas empathy was not found to be a mediator. In addition, the study found that extreme amounts of emotional distance had an impact on child abuse potential over and above a history of childhood maltreatment, and history of childhood maltreatment predicted unrealistic expectations of children.

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Everything in Moderation: Emotional Distance in the Parent-Child Relationship and
Child Maltreatment Risk

#### Introduction

Child maltreatment is a major risk factor for psychopathology and a major societal problem, affecting an estimated 899,000 children in the U.S. in 2005 alone (U.S. Department of Health and Human Services, 2007). Child maltreatment, which may include physical, sexual, emotional, and verbal abuse and neglect, is considered a major risk factor for the long-term functioning of the victim. Child maltreatment has been found to be associated with both internalizing and externalizing disorders, problems with peers, increased risk of substance abuse, decreased academic performance, and adult psychopathology (Azar & Bober, 1999; Collinshaw et al., 2007; Johnson et al., 2002; Lansford et al., 2002; Stevenson, 1999; Trickett & McBride-Chang, 1995). Hence, prevention of child maltreatment is a crucial task facing psychologists and topic of interest in intervention research (Azar & Wolfe, 1998; Guterman, 1997; Whitaker, Lutzker, & Shelley, 2005).

In order to prevent child maltreatment, it is important to understand the etiological factors that give rise to its occurrence, so that targets of intervention can be identified. In particular, identifying mechanisms that raise the risk of child maltreatment perpetration is crucial for its prevention. The present study examined whether growing up in a relationship with one's mother that is characterized by extreme amounts of emotional distance increases one's risk of perpetrating child maltreatment, child abuse in particular. Further, the project examined whether increased emotional reactivity and lowered empathy in the offspring are the mechanisms by which the risk of child maltreatment

perpetration by the offspring is increased. The study focused on mother-child relationships in the family of origin because more is known about this dyad, whereas much less is currently known about the nature and impact of the father-child relationship on child risk (Azar, Okado, & Robinson, 2008).

The risk for perpetration of child maltreatment is thought to be influenced by a variety of factors, including individual characteristics of the parent or the child, the nature of interactions within the parent-child dyad, and societal contexts in which the family is embedded (Azar & Wolfe, 1998; Parke & Collmer, 1975). Although such factors as maternal depression, difficult temperament of the child, negative affect expressed in parent-child interactions, and community violence are considered important in the etiology of child maltreatment (for review, see Belsky, 1993; Black, Heyman, & Slep, 2001a & 2001b; Black, Slep, & Heyman, 2001), the upbringing of the perpetrator has received special attention as a potential source of risk. Parenting practices and behavior are often thought to be transmitted across generations, particularly for females (Belsky, Jaffee, Sligo, Woodward, & Silva, 2005; Serbin & Karp, 2003), through such mechanisms as socialization and modeling (i.e., social learning; Azar, Goslin, & Okado, 2008; Bandura, 1986; Maccoby, 2007). Child maltreatment itself is thought to be transmitted across generations in about 25 to 35% of parent-child dyads (Kaufman & Zigler, 1987), and survivors of childhood abuse are four times more likely than those without a history of childhood abuse to abuse their children in the first thirteen months of the child's life (Dixon, Browne, & Hamilton-Giachritsis, 2005). These figures suggest

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<sup>&</sup>lt;sup>1</sup> Various mechanisms for this transmission have been proposed, including modeling of abusive behavior (Bandura, 1986; Herzberger, 1983), identification with the abusive or rejecting parent (Green, 1976; Morton & Browne, 1998), and failure to recognize certain parenting strategies as abusive (Bower & Knutson, 1996; Bower-Russa, Knutson, & Winebarger, 2001).

the significance of parenting experienced in the family of origin in influencing the risk of child maltreatment perpetration.

An aspect of the parent-child relationship that may affect the child's future parenting and potential to maltreat is the emotional distance between the parent and the child. One's relationship with parents is thought to provide the forum in which individuals first develop the capacities and skills necessary for healthy interpersonal relations and care giving, including emotion regulation and empathy (Eisenberg, Cumberland, & Spinrad, 1998; Kiang, Moreno, & Robinson, 2004; Shipman & Zeman, 2001; Valiente et al., 2004; Zeanah, Boris, Heller, & Hinshaw-Fuselier, 1997). Such capacities best develop in a parent-child relationship that is supportive, responsive, and warm (Siegelman, 1966), that is, a relationship characterized by adequate closeness but not so much as to suffocate the child. Moderate amounts of emotional distance are necessary for parenting that facilitates the development of child emotion regulation and empathy.

On the other hand, when the parent-child relationship is overly enmeshed or disengaged, reflecting too little or too much emotional distance, there would be an increased risk for the child to develop difficulties with emotions and potentially maltreat his/her children as a parent. As will be discussed below, in an enmeshed or disengaged relationship with parents, the child is less likely to develop capacities and skills necessary for healthy parenting, such as emotion regulation and empathy. As Azar, Barnes, and Twentyman (1988) argue, the absence of fine-tuned positive and contingent parenting in maltreating families, not just the occurrence of child maltreatment alone, reflects a breakdown in care giving and accounts for psychosocial difficulties seen in children such

as deficits in interpersonal skills and aggressive behavior (see also Azar, 1986, 1989). In addition, earlier researchers of abusive parents have suggested that the family environment in which these parents grew up were often characterized by marked emotional distance, with rejection, loneliness, and/or hostility (for review, see Spinetta & Rigler, 1972). Indeed, as will be discussed below, various theoretical approaches, including those in family systems, social cognitive, and attachment literatures, have referred to enmeshed or disengaged parent-child relationships as maladaptive and creating risk for the child. Hence, emotional distance in the relationship with a parental figure might be a crucial factor that affects one's parenting.

The present study examined the link between the amount of emotional distance experienced with parents in one's family of origin and the risk of perpetrating child maltreatment. Moderate amounts of emotional distance with one's parents were expected to promote healthy emotional development. In contrast, extremely low or high amounts of emotional distance with parents were expected to interfere with the development of emotion regulation and empathy. Adults who grew up in parent-child relationships characterized by extremely low or high amounts of emotional distance were therefore expected to be at an increased risk of dysregulation in their parenting of offspring, including maltreatment of his/her own children, compared to those who grew up in parent-child relationships characterized by moderate amounts of emotional distance.

To make the argument that maladaptive amounts of emotional distance in the parent-child relationship increase the risk that the child would later maltreat the next generation, the nature of the parent-child relationship with *moderate or healthy amounts* of emotional distance will be first described. Then, it will be argued that both extremely

low and high amounts of emotional distance are maladaptive and likely to interfere with the emotional and social development of the child, leading to high levels of emotional reactivity and low levels of empathy. When these characteristics persist into adulthood, they are expected to increase the risk of maltreatment of the next generation. In addition, it will be argued that extremes in emotional distance may explain more of an increased risk of child maltreatment perpetration than the child's own maltreatment history. The discussion below will focus primarily on the characteristics that emerge from transactions with one's parents that predict one's risk for perpetrating child maltreatment. Although it is the case that other factors such as relationships with other close figures and ecological characteristics also contribute to the risk of child maltreatment (Azar, 1986; Belsky, 1993), they were beyond the scope of this study.

#### Emotional Distance and Child Outcomes

Moderate Amount of Emotional Distance and Its Role in Child Development

As mentioned above, existing research suggests the importance of sensitive and supportive parenting that provides a developmentally appropriate amount of autonomy for the child.<sup>2</sup> It is reasonable to assume that such parenting is possible only when there is neither extremely low nor extremely high, but instead moderate, amounts of emotional distance between the parent and the child. Parent-child relationships characterized by moderate amounts of emotional distance are thought to permit parental responses to the child that are calm and collected as well as recognize the child as a separate human being with his/her own needs. Family systems theorists have considered these relationships to

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<sup>&</sup>lt;sup>2</sup> Olson et al. (1979) propose adaptability as another dimension in which family relationships vary; this idea of adaptability corresponds to the idea of being able to adjust relationships in order to accommodate different needs that may arise as family members transition into different developmental periods.

be optimal, in that they are characterized by psychological boundaries that are clear but not rigid (Minuchin, 1974) and the ability to differentiate one's self from another (Bowen, 1978). Olson, Sprenkle, and Russell (1979) conceptualized such relationships as having an appropriate amount of family cohesion, entailing moderate amounts of emotional bonding and individual autonomy. Social cognitive theorists have characterized this in terms of having realistic expectations, such as not believing in mindreading (e.g., the idea that young children know what you are thinking and feeling, Azar & Weinzierl, 2005) and recognizing developmentally appropriate or normative behavior (e.g., understanding that infants may cry despite parents' efforts to soothe them; Azar & Rohrbeck, 1986). This type of relationship has also been characterized in the attachment literature as fostering secure attachment, in that the parent provides a secure base from which to explore the world without overprotecting or neglecting the child (Ainsworth, 1979), thereby supporting healthy psychosocial development (for review, see Levy, 2005).

Under this condition of moderate emotional distance, parents can demonstrate contingent responsivity (Tronick, 1989), which is considered crucial for the child's emotional development. Contingent responsivity plays an important role during the child's infancy, when affective communication with a parent helps infants to manage emotional experiences and achieve goals. When the parent responds contingently, that is, by recognizing the infant's affect, helping him/her modulate affect, and allowing him/her to employ self-regulatory strategies as needed, infants develop a greater sense of self-efficacy and positive interpersonal relationships (Tronick, 1989). Sensitivity and contingency of parental response are thought to help the child develop emotion regulation

capacities (for review, see Cole, Martin, & Dennis, 2004). In addition, empirical evidence suggests that maternal support, measured in terms of responsivity and warmth, and maternal sympathy are positively related to child empathy in adolescence (Soenens, Duriez, Vansteenkiste, & Goossens, 2007). The amount of emotional distance is important because a moderate, rather than extreme, amount of emotional distance is necessary for the parent to be able to exhibit contingent and sensitive parenting. When there is an extreme amount of emotional distance, the parent is much less likely to be able to notice cues from the child and respond to them accordingly. Thus, parent-child relationships characterized by moderate amounts of emotional distance are most likely to encourage healthy social and emotional functioning in children, including the development of emotion regulation and empathy.

Extreme Amounts of Emotional Distance in the Parent-Child Relationship

In contrast, maladaptive amounts of emotional distance, either too low or too high, in the parent-child relationship could pose a risk for the child. At extremely low levels of emotional distance, there is a lack of proper emotional boundaries between the parent and the child. Minuchin (1974) termed this type of relationship as "enmeshed," in that the parent lacks a differentiated representation of the "self" in relation to the child, and Bowen (1978) characterized such dynamics as emotional "fusion." Such fusion may manifest in different ways, including overprotection, intrusiveness, role reversal, mindreading, overindulgence, and exaggerated emotional reactions to one another. Minuchin (1974) suggests that, in an enmeshed relationship, individuals react to emotional disturbance in the relationship "with excessive speed and intensity" (p. 55). In a different line of argument, Sebald (1976) uses the concept of "Momism" to illustrate how a parent

may impinge on the child's development and individuation, generally out of the parent's own needs. Such a parent may engage in the overindulgence of the child, play the role of a martyr to manipulate the child's feelings, seek domination over the child, or overprotect the child. These behaviors are all considered to be maladaptive and detrimental to the child's emotional development.

There is some empirical evidence suggesting that low emotional distance in the parent-child relationship has a detrimental impact on the child's psychological and psychosocial functioning. Parenting that is intrusive or controlling has been shown to be associated with anxiety disorders in children (for review, see Berg-Nielsen, Vikan, & Dahl, 2002; Siqueland, Kendall, & Steinberg, 1996; Wood, McLeod, Sigman, Hwang, & Chu, 2003) as well as the development of Attention Deficit Hyperactivity Disorder (ADHD) symptoms (Carlson, Jacobvitz, & Sroufe, 1995). Perception of overprotection by the parent, as measured by the Parental Bonding Instrument, has been found to be associated with a diagnosis of bulimia and its severity (Calam, Waller, Slade, & Newton, 1990; Meyer & Gillings, 2004) and with schizoaffective disorder (Willinger, Heiden, Meszaros, Formann, & Aschauer, 2002). Furthermore, Jones and Wells (1996) found that parentification, which occurs in a parent-child relationship in which the child is expected to assume the role of the caregiver, is associated with narcissistic and masochistic personality features. Hence, low emotional distance in the parent-child relationship can negatively impact the child's psychological well-being and give rise to a wide range of psychopathology and dysregulation in the child's emotional and social functioning.

On the other hand, there may be extremely high emotional distance in the parentchild relationship, which is likely to lack adequate emotional nurturance, sensitivity, and empathy towards the child. The emotional dynamics of such a relationship have been characterized by Bowen (1978) as "emotional cutoff," which manifests in behaviors that involve psychological and physical distancing, including "running away or flight, isolation, withdrawal, and collapse" (Titelman, 2003, p. 22). As described by Azar (1989), high emotional distance in the parent-child relationship may also have a transactional dynamic. Parents who have difficulty in parenting may fail to manage the child's behavior and encounter many other failures in their role as parents. These repeated failures lead a parent to experience the child as an aversive stimulus, which causes the parents to disengage from the child and become more distant. A family environment characterized by high emotional distance is likely to hamper the emotional development of the child by depriving the child of the support necessary for healthy psychosocial development.

High emotional distance with parents has also been shown empirically to negatively affect the child's psychological and psychosocial functioning. In a study comparing the adjustment of adolescent siblings, Daniels, Dunn, Furstenberg, and Plomin (1985) found that the sibling experiencing less maternal closeness was found to have greater emotional distress, and less satisfaction with self, suggesting the importance of maternal closeness to the adolescent psychological functioning. Furthermore, research suggests that the lack of responsivity of the mother, for instance in mothers with depression, is linked to problems with the child's emotion regulation (Silk, Shaw, Skuban, Oland, & Kovacs, 2006). Similarly, Edwards, Shipman, and Brown (2005) show that neglectful mothers tend to provide less support in response to anger and sadness, and that their children are, in turn, less skilled at identifying and responding to emotions in

self and others. The negative impact of high emotional distance on children is thought to persist into adulthood, though existing research has relied on retrospective reports to measure emotional distance in the parent-child relationship. For instance, a study by Enns, Cox, and Clara (2002) shows that low parental care as measured by the Parental Bonding Instrument is associated with adult psychopathology, including depression, Post-Traumatic Stress Disorder (PTSD), drug abuse and dependence, and Antisocial Personality Disorder, among participants in the U.S. National Comorbidity Survey. Another study using a college sample also found a link between low parental care and adult psychopathology, including anxiety, depression, and alcohol abuse (Kimbrel, Nelson-Gray, & Mitchell, 2007).

Implications of Extremely Low or High Emotional Distance

Both extremely low and extremely high amounts of emotional distance in the parent-child relationship have been described as maladaptive and dysfunctional in different theoretical traditions. In the family systems literature, Minuchin (1974) describes these relationships as enmeshed or disengaged, whereas Bowen (1978) attributes to them emotional fusion or emotional divorce/cutoff. Both scholars argue that these extremes in emotional distance pose higher risk and conflict than in relationships characterized by a moderate amount of emotional distance, which is thought to be healthy and balanced (Olson et al., 1979).

Researchers in the social cognitive and attachment perspectives also provide similar descriptions of maladaptive parenting. For instance, in the social cognitive perspective, parents who are highly anxious are thought to have enmeshed parenting styles, whereas those who repress anxiety are thought to have disengaged parenting styles

(Rudy & Grusec, 2006). Parents who tend to be highly anxious are thought to have difficulty separating their own perspectives from their children's, be preoccupied with the possibility of encountering problems, and be emotionally less warm or available for the child. On the other hand, parents who repress anxiety are thought to avoid anxiety-provoking stimuli, therefore being slow to respond to negative affect of their children, lacking flexibility in coming up with solutions to problems, and lacking perspective-taking abilities. Both of these styles correspond to parent-child relationships characterized by low or high, rather than moderate, amounts of emotional distance.

Similar arguments are made in the attachment perspective. For example, Crittenden (2006) contends that perceived threats to attachment activate a "dispositional [mental] representation" that had been previously developed by an individual to address such threats. Crittenden identifies two types of representations that result in maladaptive parenting, including child abuse and neglect, which are based on defended or disengaged representations (Type A) or coercive or enmeshed representations (Type C). Parents with defended (Type A) representations tend to respond to threatening situations with overprotection of the child, whereas those with coercive representations (Type C) tend to respond to threatening situations by neglecting others and being emotionally preoccupied. One might expect parents with Type A representations to maintain low emotional distance with their children and those with Type C representations to maintain high emotional distance. Other attachment scholars have also described maladaptive parenting in terms of intrusive or withdrawn parental states, characterized by "hostile / helpless" (Lyons-Ruth & Spielman, 2004) or "frightening / frightened" (Hesse & Main, 2006)

parenting behavior. Both of these characterizations allude to low or high emotional distance between the parent and the child.

In summary, various theoretical perspectives have suggested that there are two types, generally polar opposites, of maladaptive parenting in which the parent may be overly emotionally involved or distant in the parent-child dyad. One or both of these types can occur in a parent-child relationship and are expected to pose risk for the child's psychological and psychosocial development, especially the development of emotion regulation and empathy. This is expected to be the case due to the absence of parental responsivity and warmth, which are thought to foster capacities for emotion regulation and empathy (for review, see Soenens et al., 2007; Zhou et al., 2002).

However, aside from the absence of these ingredients for the child's emotional and social development, there may also be certain dynamics within the parent-child relationships characterized by extreme amounts of emotional distance that are particularly detrimental to the development of emotion regulation and empathy in the child. In an enmeshed relationship, individuals react to emotional disturbance in the relationship "with excessive speed and intensity" (Minuchin, 1974, p. 55). Hence, the parent may neither model nor provide contingent and modulated emotional responses to stressors. In other words, the parent is failing to assist the child in the development of emotion regulation, which occurs best with responsive rather than overcontrolling parenting (Morris, Silk, Steinberg, Myers, & Robinson, 2007). On the other hand, in a disengaged parent-child relationship, the child fails to be exposed to the affective communication necessary to practice and develop strong emotion regulation skills. In a study on maternal depression and parenting, Hoffman, Crnic, and Baker (2006) found that depressed

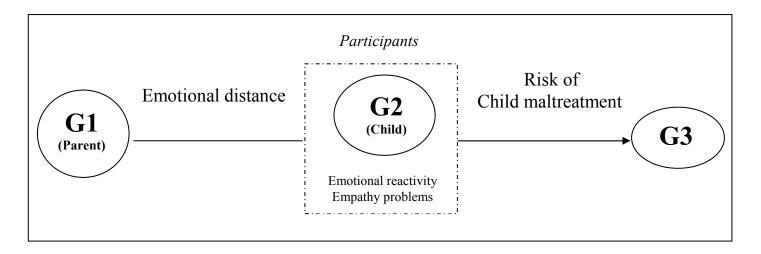
mothers were less likely than non-depressed mothers to provide emotional scaffolding to their children and that children of depressed mothers tended to show more emotional dysregulation while completing tasks. These parents likely failed to engage in responses necessary for the development of empathy, namely discriminating affective cues in others, assuming the perspective and role of another person, in this case the child, and being emotionally responsive (Feshbach, 1989, p. 352).

Empirical data also suggests that extremes in emotional distance with one's parents are associated with psychopathology that is marked by emotional dysregulation and interpersonal problems, often persisting into adulthood. For instance, intrusive, noncontingent, or withdrawn parental behavior is seen in the family of origin of individuals with Borderline Personality Disorder (BPD), a disorder characterized by affect dysregulation and difficulty forming stable interpersonal relationships (Levy, 2005). Individuals with BPD have reported less caring and greater controlling behavior by their parents while growing up, as measured by the Parental Bonding Instrument (Zweig-Frank & Paris, 1991). Such parenting is also shown to be associated with schizoaffective disorder (Willinger, et al., 2002). Moreover, mood disorders have been shown to be associated with parental behavior that is low in caring, implying that high emotional distance in the parent-child relationship poses a risk (Heider et al. 2006). In sum, existing research has suggested that maladaptive amounts of emotional distance in the parentchild relationships have profound and potentially lasting implications for the child's longterm emotional and social functioning.

## Emotional Distance and Child Maltreatment

Above, it was argued that extreme amounts of emotional distance in the parent-child relationship increases the risk of problems in the child's psychosocial functioning, even into adulthood. Those problems may be expected to negatively affect the grown child's interpersonal functioning, including in parenting. There is some evidence indicating that emotional reactivity and deficits in empathy, both of which may emerge in individuals that grow up in an engaged or disengaged relationship with a parent, increase the risk for parenting problems. As will be discussed below, emotional reactivity and lack of empathy are both associated with coercive or hostile parenting and potentially with an increased risk of child maltreatment.

The general argument is illustrated in the diagram below. The present study focused on the offspring (generation two – G2) of a parent (generation one — G1) whose parent-child relationship was characterized by emotional distance difficulties (both high and low). Participants in this study were treated as G2. Emotional distance in G2's relationship with G1 was assessed retrospectively through G2's report. The relationship between emotional distance and G2's emotional reactivity and level of empathy as well as G2's risk of perpetrating child maltreatment were examined. Terms G1 and G2 are used throughout the remainder of the paper to refer to the individuals in the parent and child generations, respectively.



It was argued above that extremely low or high emotional distance in the parent-child relationship could impede the development of G2's ability to regulate emotion and be empathic towards others. Deficits in such skills are shown to be detrimental to one's social functioning and may be linked to parenting problems (Gross & John, 2003; Miller & Eisenberg, 1988). The risk of child maltreatment perpetration may arise from such problems in emotion regulation and empathy, which are necessary for effective parenting. Below, these deficits will be discussed as potential mediators linking maladaptive amounts of emotional distance between G1 and G2 and perpetration of child maltreatment by G2 in adulthood.

Emotion regulation and empathy are both necessary for adequate parenting, given that the parent needs to be able to respond in a sensitive manner to the child's needs even when they are incongruent with the parent's. As will be discussed below, deficits in emotion regulation and empathy create risk for parenting problems, the most serious of which may be child maltreatment. Both of these deficits have been associated with maltreating parents as well as risk of child maltreatment in individuals who are not yet parents.

The capacity to regulate emotion is necessary in parenting, since parenting is often a stressful and demanding task. In order to be able to respond to the child in spite of heightened stress and intense and/or negative affect, the parent needs to be able to regulate his/her own emotions and use them effectively in interacting with the child (Dix, 1991). Failure to do so creates risk for the child as well. Research suggests that maternal distress, in particular anger, produces anger in the child through negative parenting behavior that are coercive or critical (Downey, Purdie, & Schaffer-Neitz, 1999), thereby threatening the child's psychological well-being.

Emotional dysregulation in the parent, reactivity in particular, may also increase the risk of child maltreatment perpetration, and existing research shows an association between parental emotional reactivity and the perpetration of child maltreatment. For instance, Trickett and Kuczynski (1986) compared physically abusive parents to nonabusive ones and found that abusive parents reacted to their children's transgressions with anger more often than non-abusive parents. There have also been studies showing that individuals identified as being at high risk for child abuse have greater emotional reactivity compared to controls. Milner, Halsey, and Fultz (1995) studied mothers considered at high risk for abuse based on their scores on the Child Abuse Potential Inventory (CAPI) and found that, compared to low-risk mothers, the high-risk mothers demonstrate greater emotional reactivity and greater emotional contagion, reporting greater hostility and distress when exposed to tapes of crying infants. Furthermore, Skowron and Platt (2005) have found that college students with higher risk of child maltreatment perpetration, also as measured by the CAPI, exhibit greater emotional reactivity. As argued previously, those growing up in a family environment characterized by extreme amounts of emotional distance are more likely to be emotionally reactive. In turn, those who are emotionally reactive are found to be at greater risk for maltreating their children. The present study sought to link these two arguments by examining whether emotional reactivity mediates the relationship between extreme amounts of emotional distance and an increased risk of child maltreatment perpetration by the G2.

In addition to emotion regulation capacities, empathy also plays an important role in parenting. Empathy may be conceptualized in terms of affective sensitivity to others' experience (affective empathy) or perspective-taking (cognitive empathy) (Chlopan, McCain, Carbonell, & Hagen, 1985; Duan & Hill, 1996). Both would be necessary for adequate parenting, in that the parent needs to be able to recognize and help the child modulate affect, which requires affective empathy, as well as take the child's perspective and provide feedback that is understandable and sensitive to the child's abilities and needs, which requires cognitive empathy. Low parental empathy is found to be associated with the selection of negative parenting strategies, such as confronting the child in an angry fashion (Brems & Sohl, 1995, p. 191).

Deficits in empathy are also thought to contribute to the perpetration of child maltreatment by G2. One explanation for why G2 may do so is provided by Weinberger and his colleagues (1979), in their conceptualization of the repressive coping style. Individuals who have a repressive coping style avoid anxiety-provoking stimuli and prioritize self-control, which may result in parenting that minimizes the child's emotional states (Rudy & Grusec, 2006). Minimizing or not attending to the child's emotional states and needs may be reflected in emotional or even physical neglect. Also, lack of empathy may remove some inhibition against abusing the child, especially if the parent has other

risk traits such as impulsivity (Feshbach, 1989, p. 355-356). Hence, in relationships characterized by extremely high emotional distance, child abuse may be perpetrated more often by parents with high emotional reactivity, just as in relationships characterized by extremely low emotional distance. It may be that the combination of lack of empathy and emotional reactivity would produce an even higher risk of child maltreatment.

There is some empirical evidence that lack of empathy is associated with aggression (Miller & Eisenberg, 1988) or antisocial behavior (Ellis, 1982), though there is inconclusive evidence that lack of empathy contributes specifically to child maltreatment.<sup>3</sup> Research on both criminal and non-criminal samples has shown that empathy is correlated negatively with measures of risk of violence and aggression (Mehrabian, 1997). Low empathy is also associated with abusive parents. In a study comparing self-reported abusive parents and non-abusive parents, Frodi and Lamb (1980) found that abusive parents were more likely to report feeling less sympathetic and more annoyed by a videotape showing a crying baby. Moreover, abusive parents expressed more indifference toward a videotape of a smiling baby but demonstrated an increase in blood pressure and skin conductance (p. 239), similar to their response to a crying baby. Both findings suggest that abusive parents are less likely to show concern for or identify with the affective experience of their child. Letourneau (1981) also compared physically abusive mothers with non-abusive mothers and found that non-abusive mothers scored significantly higher on measures of empathy. In addition, Perez-Albeniz and de Paul (2003) found that parents considered at high-risk for physical abuse had lower scores on self-report measures of empathy compared to low-risk parents.

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<sup>&</sup>lt;sup>3</sup> See review in Wiehe (2003). For meta-analysis on the negative association between empathy and criminality, see Jolliffe & Farrington (2004).

Although there is some evidence indicating an association between lower empathy and child maltreatment perpetration, this finding is not always supported, potentially due to the difficulty of measuring empathy (Kilpatrick, 2005). The present study used two different measures to measure empathy (Hogan Empathy Scale-Modified and the Questionnaire Measures of Emotional Empathy) and sought to add some more information by examining whether empathy is associated with risk of child maltreatment in future parents. More specifically, the study examined how G2's relationship with G1 affects the development of empathy in G2, and whether G2's empathy is associated with the risk of child maltreatment perpetration.

Intergenerational transmission and emotional distance. As mentioned earlier, a history of childhood maltreatment is thought to increase the risk for the child (G2) to later maltreat the next generation (G3). If extreme amounts of emotional distance between G1 and G2 occur in high density among maltreating families, the mechanism advanced in this study may provide an explanation for transmission of maltreatment. More importantly, given that extreme amounts of emotional distance could occur in non-maltreating families, the mechanism being examined in this study might explain the risk for child maltreatment perpetration by G2 over and above the effect of a history of maltreatment occurring between G1 and G2. To explore the idea that extremes in emotional distance have an effect over and above a history of childhood maltreatment, the study examined whether extreme amounts of emotional distance in the relationship between G1 and G2 explains the risk of child maltreatment perpetration beyond a history of child maltreatment occurring between G1 and G2.

## Present Study

The present study sought to add to existing research on the etiology of child maltreatment by examining the amount of emotional distance in the parent-child (G1-G2) relationship in the family of origin as a potential risk factor for child maltreatment perpetration by G2. It was hypothesized that extreme amounts of emotional distance in the G1-G2 relationship increase the risk of child maltreatment perpetration by G2 and that emotional reactivity and lower empathy mediate the relationship between extreme amounts of emotional distance in the G1-G2 relationship and the risk of child maltreatment perpetration by G2. In addition, extreme amounts of emotional distance in the G1-G2 relationship were hypothesized to explain child maltreatment perpetration by G2 over and above a history of child maltreatment occurring in the relationship between G1 and G2.

The present study tested the following hypotheses:

Hypothesis 1. G2 individuals whose relationship with their parents (G1) was characterized by extremely low emotional distance will be at a higher risk for perpetrating child maltreatment than those whose relationship with G1 was characterized by moderate amounts of emotional distance.

Hypothesis 2. G2 individuals whose relationship with their parents (G1) was characterized by extremely high emotional distance will be at a higher risk for perpetrating child maltreatment than those whose relationship with G1 was characterized by moderate amounts of emotional distance.

In addition, the following mediational hypotheses were tested:

Hypothesis 3. Emotional reactivity of G2 mediates the relationship between

extreme amounts of emotional distance in G2's relationship with G1 and the risk of child maltreatment perpetration by G2.

Hypothesis 4. Level of empathy of G2 mediates the relationship between extreme amounts of emotional distance in G2's relationship with G1 and the risk of child maltreatment perpetration by G2.

Finally, one hypothesis regarding intergenerational transmission of child maltreatment was also tested:

Hypothesis 5. Extremes in emotional distance between G1 and G2 explain additional variance in G2's risk of child maltreatment perpetration after accounting for the history of child maltreatment perpetrated by G1 against G2.

As mentioned previously, existing research has shown the importance of the mother-child relationship in child development and more is known about the mother-child relationship. As such, the hypotheses in this study were tested with measures of emotional distance with the mother of the respondent.

#### Method

## Participants

Two hundred and eight college students above the age of 18 were recruited from introductory-level psychology courses at the Pennsylvania State University. Individuals who are already parents were excluded from the study. Demographic information on the sample is provided in Table 1. It should be noted that 24.5% of the sample had invalid scores on the Child Abuse Potential Inventory (CAPI), one of the two main dependent measures. Analyses involving the CAPI excluded these participants. See Results for a discussion of the impact on findings for this measure and Appendix M for the

demographics for the sample with these participants excluded. The sample with and without these participants did not differ on demographic characteristics.

#### Procedure

Participants accessed the study online on PsychData, a host website specializing in survey research, through a link provided by the psychology department subject pool. Participants logged onto the study website from their own computers and completed the measures in a single session scheduled at their own convenience. The participants first completed a Background Information Sheet (Appendix A), through which information such as participants' age, gender, relationship status, race, parental marital status, age, and education, family income, significance of either parent, sibling status, and past history of psychological treatment was obtained. The participants then completed the measures in the following order: Background Information Sheet, Child Abuse Potential Inventory, Parent Opinion Questionnaire, Parental Bonding Instrument, Relationship with Parents Scale, Differentiation of Self Inventory-Revised, Affect Dysregulation Subscale of the Inventory of Altered Self-Capacities, Hogan Empathy Scale-Modified, Questionnaire Measures of Emotional Empathy, Assessing Environments III-Adaptation. Participants received research credit for participation.

#### Measures

### Dependent Variable: Risk of Child Maltreatment Perpetration

Child Abuse Potential Inventory (CAPI; Milner, 1986) is a 160-item self-report measure that assesses the risk of perpetrating child physical abuse and is one of the most widely used measures in the literature for this purpose. Respondents indicate whether they agree or disagree with such statements as, "Children are pests" or "Children should"

be seen and not heard." Although there are several items in the CAPI referring to one's children, e.g., "I usually punish my child when it is crying," the full measure with these questions has been administered to undergraduate samples without omitting those items (e.g., Skowron & Platt, 2005) and was also administered in this study. This measure was scored using CAPSCORE, version 4.1, a computer program designed specifically for this purpose. The CAPSCORE program calculates the Abuse Scale score, which indicates the degree to which the respondent matches the characteristics found in abusive parents, and this score was used as a measure of risk of child maltreatment perpetration. The Abuse Scale score can be used continuously or discretely. This study used the continuous score for the CAPI and confirmed the results using the cutoff score of 166, which was based on signal detection theory for detecting abusers (Milner, 1986), to predict whether or not respondents have high abuse potential.

The CAPI also has three validity scales for detecting random responses, inconsistency, and responses designed to satisfy social desirability. Individuals who had elevated scores on these Random, Fake Bad, and Fake Good index scores, which are scores that fall above designated cut-off scores and indicate a response that is inconsistent (see Milner, 1986, for further details), were excluded from analyses using the CAPI. The internal consistency of the CAPI Abuse Scale has been reported to range between .92-.96 for the general population and between .91-.98 for maltreating parents; furthermore, the CAPI has been validated against measures of associated factors such as negative parenting, later physical abuse, and life stress (Milner, 1994). Validation studies (Milner, 1986; Milner & Wimberley, 1980) have shown that CAPI has high sensitivity and

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<sup>&</sup>lt;sup>4</sup> I thank Joel S. Milner for giving permission to use the CAPI and providing a copy of CAPSCORE in support of this research.

specificity in classifying parents who are physically abusive or non-abusive, with rates ranging from 90.2-92.3% sensitivity and 100% specificity. Although the CAPI does not assess for risk of other types of abuse, it has been found to be significantly correlated with later reports of neglect (Milner, Gold, Ayoub, & Jacewitz, 1984). Higher scores on the CAPI have also been found among mothers who had been involved with Child Protection Services chiefly for child maltreatment other than physical abuse, compared to control mothers (Haapasalo & Aaltonen, 1999). In addition, given the considerable overlap between the occurrence of physical abuse and other types of child maltreatment (Higgins & McCabe, 2000, 2001), risk of physical abuse as assessed by CAPI may indicate risk for other types of child maltreatment and is discussed as such in this paper.

Parent Opinion Questionnaire (POQ; Twentyman et al., 1981; Appendix B) is an 80-item questionnaire that assesses for unrealistic expectations regarding children. This measure was used to assess for risk of child maltreatment perpetration as characterized by unrealistic expectancies regarding children. Respondents indicated whether they agree or disagree with age-specific statements regarding children and parenting, such as "If a baby really loved her mother and father, the baby would be well behaved," "Parents can expect even a child as young as 2 ½ to be able to comfort them when they are sad and crying," or "Generally, it would be all right to leave kids alone for a few days if they are as old as 12 or 13." The total score for this measure was used as an indicator of risk in parenting, and the Cronbach's alpha for the measure in this sample was .91. The 12-week test-retest reliability for the instrument has been shown to be .85 (Azar & Rohrbeck, 1986). The POQ has good discriminant validity, correctly identifying 83% of mothers who are abusive or whose partners are abusive towards their children (Azar & Rohrbeck, 1986).

Scores on the POQ have also been shown to be correlated with negative attributions toward children and greater usage of punishment and discipline in the parent (Haskett, Scott, Willoughby, Ahern, & Nears, 2006). Moreover, among at-risk adolescents who are not yet parents, the scores on the POQ have been negatively correlated with a measure of empathy and positively correlated with the rating of the amount of punishment assigned to hypothetical child behavior (Azar, 1990; Azar, Okado, & Robinson, 2008). Independent variable: Emotional distance in the family of origin

Because there are no existing measures of emotional distance, emotional distance needed to be assessed using existing measures of constructs that reflect low or high emotional distance. Measures that examine both low and high emotional distance simultaneously were not found. After reviewing measures concerning parent-child relationships and their psychological qualities, four measures were selected to measure

low and high emotional distance separately. Two measures (RPSM and PBI) were used to assess for low emotional distance, and two measures (AE-III and PBI) were used to assess for high emotional distance.

Relationship with Parents Scale (RPSF/RPSM; Alexander, 2003; Appendix C) is a 42-item measure assessing role reversal in one's relationship with fathers and mothers, with 21 identical questions being posed for each parental figure. This measure was used to assess for low emotional distance. The items, which are rated on a Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree), refer both to child's observations of the parent (e.g., "My mother relied on me for advice") as well as their reactions toward the parent (e.g., "I felt responsible for how my mother felt"). Although the items were initially designed to capture role reversal, they focus on the lack of emotional distance

between parent and child and thus measure enmeshment more generally, with such questions as "I was often preoccupied with understanding my mother's moods," indicating a relationship characterized by low emotional distance, or "My mother expected me to know what she was feeling," which entails mind-reading, another way in which enmeshment might manifest. The measure has been validated with measures of constructs associated with role reversal, including family alliance patterns, unresolved/fearful attachment, and dissociation (Alexander, 2003). In a psychometric study of RPSF/RPSM using an undergraduate student population, the measure had Cronbach's alphas of .87 on the father-child items and .86 for the mother-child items. In the present study, the Cronbach's alpha was .93. The test-retest reliability of the measure ranged from .70-.88, depending on the sex of the respondent and the parental figure involved.

The Parent Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979; Appendix G) is a 25-item self-report scale that assesses parental behavior and attitude towards the child, reported retrospectively by the child. Items in the overprotection subscale (e.g., "Did not want me to grow up," "Tried to control everything I did") were used to measure low emotional distance in the parent-child relationship, and items in the care subscale (e.g., "Did not seem to understand what I needed or wanted," "Made me feel I wasn't wanted") were used to measure high emotional distance. The items for each subscale are listed in Appendix H. Items in the care subscale were reverse scored so that higher scores reflected high emotional distance, characterized by fewer caring behaviors. The PBI has been validated in both clinical and non-clinical samples as a predictor of psychopathology, depression in particular, and the "care" scale of the PBI has been

shown to be associated with childhood neglect as measured by the Childhood Experiences of Care and Abuse Interview (Lancaster, Rollinson, & Hill, 2007). The reliability estimates for the PBI in an undergraduate sample has ranged from .78-.90 for responses regarding mothers and .78-.92 for fathers (Murphy, Brewin, & Silka, 1997). In this study, the alpha for the Overprotection subscale was .83, and the alpha for the Care subscale was .92. The PBI has high test-retest reliability, ranging from .89-.93 in a clinical sample (Plantes, Prusoff, Brennan, & Parker, 1988).

Assessing Environments III-Adaptation (AE-III-A; Berger & Knutson, 1984; Gauthier, Stollak, Messé, & Aronoff, 1996; Appendix D) is a 75-item questionnaire that assesses for child maltreatment, adapted from the original version to include childhood neglect. Items measuring parental rejection (7 items) and non-responsiveness (11 items) were used to assess for high emotional distance in the parent-child relationship (Appendix E). Items contain statements such as "I felt rejected by my mother," and "My mother was unresponsive to me." Respondents rate each item on a 4-point Likert scale, ranging from 1 (never occurred or strongly disagree) to 4 (frequently occurred or strongly agree), completing items separately on male and female parental figures. Previous studies using this revised measure have shown that it has acceptable psychometric properties, with subscale alphas ranging from .79-.85 in a study on neglect and physical abuse (Gauthier et al., 1996). In the present study, the alpha for the parental rejection subscale was .86, and the alpha for the non-responsiveness subscale was .90. The measure has been used in previous studies on emotional neglect conducted in our laboratory and has been found to be associated with relational anger, self-complexity, and aggression (Grande, 2004; Olsen, 2000).

# Independent Variable: History of Childhood Maltreatment

Assessing Environments III-Adaptation (AE-III-A; Berger & Knutson, 1984; Gauthier, Stollak, Messé, & Aronoff, 1996; Appendix D) is a 75-item questionnaire that assesses for child maltreatment, adapted from the original version to include neglect. Respondents rate each item on a 4-point Likert scale, ranging from 1 (never occurred or strongly disagree) to 4 (frequently occurred or strongly agree), completing items separately on male and female parental figures. Scores on physical punishment, neglect, age-inappropriate demands, perception of discipline, negative family atmosphere, and verbal abuse subscales (Appendix F) were summed to create a continuous score indicating the degree to which maltreatment was perpetrated by the mother towards the respondent. In this study, the alpha for the measure was .91. Previous studies using this revised measure has shown that it has acceptable psychometric properties, with subscale alphas ranging from .79-.85 in a study on neglect and physical abuse (Gauthier et al., 1996) and .58-.94 for male respondents and .85-.97 for female respondents in a study on emotional neglect (Olsen, 2000).

## Mediational Variables: Emotional Reactivity and Empathy

Differentiation of Self Inventory-Revised (DSI-R; Skowron & Schmitt, 2003; Skowron & Friedlander, 1998; Appendix I) is a 46-item, self-report instrument that measures emotional reactivity as a component of the respondent's level of self-differentiation. Respondents endorse items on a 6-point Likert scale ranging from 1 ("Not at all true of me") to 6 ("Very true of me"), indicating how well each item describes the respondent in general. The items associated with the emotional reactivity subscale of the instrument (Appendix J; e.g., "At times my feelings get the best of me and I have trouble

thinking clearly," "If someone is upset with me, I can't seem to let it go easily") were used to assess the respondent's emotional reactivity. Factor analysis of the original instrument indicated the existence of four factors, which were conceptualized as emotional reactivity, the ability to take an "I" position, emotional cutoff, and fusion with others (Skowron & Friedlander, 1998). The fusion with others subscale was revised in order to improve its psychometric properties, leading to the revised version. The internal consistency for the four subscales, as measured by Cronbach's alpha, are .89 for emotional reactivity, .81 for the ability to take an "I" position, .84 for emotional cutoff, and .86 for emotional fusion; the Cronbach's alpha for the full scale is .92 (Skowron & Schmitt, 2003). The alpha for the emotional reactivity subscale in this study was also .90. The use of DSI-R will allow a replication of the study by Skowron and Platt (2005) linking differentiation of self to child abuse potential, in which emotional reactivity and emotional cutoff were found to be significantly related to the potential for perpetrating physical abuse.

The Inventory of Altered Self-Capacities (IASC; Briere & Runtz, 2002) is a 63item measure that assesses for disturbances in affect regulation, identity, and
interpersonal relations. The scale has seven subscales, and the nine items from the Affect
Dysregulation subscale were used in this study to measure emotional reactivity. The
items name problems that one may experience, and respondents rate the frequency at
which these problems occurred within the last half year, using a 5-point Likert scale
ranging from 1 (has never happened in the last six months) to 5 (has happened very often
in the last six months). Items for the Affect Dysregulation scale include questions on
affect regulation skill deficits, such as "Not being able to calm yourself down," as well as

questions on affect instability, such as "Having many ups and downs in your feelings." Validity studies for the IASC have been conducted with college, clinical, and community samples (Briere & Runtz, 2002). For the college sample, the reliability for the Affect Dysregulation subscale was reported to be .93, and the alpha for the current sample was also .93. The IASC has been shown to be strongly correlated with self-report measures of depression, suicidality, substance abuse, and dysfunctional sexual behavior.

Hogan Empathy Scale-Modified (HES-M; Hogan, 1969; Appendix K) is a 64item, self-report measure that assesses for empathetic personal characteristics and is widely used in studies on empathy and aggressive behavior. The scale is comprised of true-false items from the California Psychological Inventory (CPI) and the Minnesota Multiphasic Personality Inventory (MMPI) and is thought to measure perspective-taking abilities and social functioning (Chlopan et al., 1985). A factor analysis by Greif and Hogan (1973) has shown the HES to have three factors, characterized as: 1. Patient and forbearing nature, 2. Affiliative but socially ascendant tendencies, and 3. Liberal and humanistic political and religious attitudes (p. 284). For the present study, items that load the highest on each of these three factors were used in a 16-item measure of empathy. Respondents indicate agreement with items on a true or false scale, rating such statements as "I easily become impatient with people" and "I have a natural talent for influencing people." Each true/false response reflecting an empathic stance was given 1 point, and these points were summed to obtain a total score of empathy, with possible total points ranging from 0-16. Internal consistency for the full measure has ranged from .61-.71 and the test-retest reliability has been estimated at .84 (Johnson, Cheek, & Smither, 1983). Scores on the HES have been shown to be associated with delinquency and interpersonal

skills across in a number of studies (for review, see Chlopan et al., 1985). Of particular interest to the present study is the association between scores on the HES and child abuse. A study by Letourneau (1981) showed that scores on the HES were significantly lower for abusive mothers compared to controls and classified 80% of abusive mothers correctly, more than an alternate measure of empathy. In this study, the alpha for this measure was .65.

The Questionnaire Measures of Emotional Empathy (QMEE; Mehrabian & Epstein, 1972; Appendix L) is a 33-item self-report measure that assesses for recognition and sharing of others' feelings and was used to measure empathy. Respondents rate items (e.g., "It makes me sad to see a lonely stranger in a group," "Seeing people cry upsets me") on a 9-point Likert scale ranging from -4 "Very strong disagreement" to 4 "Very strong agreement." The measure has a split-half reliability of .84 (Mehrabian & Epstein, 1972). The measure has also been validated with a number of studies on aggression, helping behavior, and personality (for review, see Chlopan et al., 1985) and has been shown to have discriminant validity with regards to social desirability, with a correlation of .06 with the social desirability scale by Crowne and Marlowe (1960). In this study, the alpha for the QMEE was .80.

### Results

Prior to testing the hypotheses, relationships among demographic variables (gender, age, level of education, parental level of education, and family income) and the study variables were explored. Demographic information of the current sample is summarized in Table 1. There was no variability in the marital status of participants, as they all reported being single. Demographic variables were not significantly associated

with study variables, with the exception of gender.<sup>5</sup> ANOVAs showed that mediator and dependent variables differed by gender. Because the hypotheses were not gender-specific, and gender was not expected *a priori* to be a moderator of the relationship between emotional distance and risk of child maltreatment perpetration, analyses controlled for gender. Results from secondary analyses assessing for gender differences are also noted in footnotes for each hypothesis.

The descriptive statistics on study variables are reported in Table 2. Bivariate correlations for the full sample are reported in Table 3, followed by correlations for male participants (Table 4) and for female participants (Table 5). Generally, bivariate correlations were stronger in magnitude for female participants than for male participants, although the direction of the correlations was similar overall.

The hypotheses were tested separately for the two dependent variable measures, the continuous CAPI abuse score (indicating child abuse potential) and the POQ total score (indicating unrealistic expectations regarding children). Findings for the non-mediational hypotheses were also confirmed using the dichotomous dependent variable, the CAPI abuse classification (at high risk of abuse versus not at high risk), which was based on the published cutoff score of 166 on the CAPI abuse scale that has been used to differentiate abusers from controls (Milner, 1986). In this sample, 34 individuals (21.9% of the sample) had a CAPI abuse score above this cutoff.

*Hypothesis 1*: Low emotional distance is associated with higher risk of child maltreatment perpetration.

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<sup>&</sup>lt;sup>5</sup> Maternal education was also found to be correlated with Parent Opinion Questionnaire but did not affect any of the findings.

To test this hypothesis, CAPI abuse score was regressed on measures of low emotional distance (the RPSM and the overprotection subscale of the PBI) entered as a block, controlling for gender. Low emotional distance was a significant predictor of risk (see Table 6). Scores on the RPSM, the measure of role reversal, significantly predicted CAPI abuse scores,  $\beta = .34$ , t(132) = 4.29, p < .001. In addition, scores on the PBI overprotection subscale approached statistical significance. Together, low emotional distance explained a significant portion of the variance in CAPI abuse scores,  $R^2 = .23$ , F(3, 132) = 12.93, p < .001, controlling for gender.

When the hypothesis was tested with CAPI abuse score classification, scores on the RPSM again significantly predicted CAPI classification (B = .04, Wald statistic = 7.11, p < .01) after controlling for gender. Scores on the PBI overprotection subscale did not significantly predict abuse risk status. With both RPSM and the PBI overprotection subscale entered as a block and after controlling for gender, the model significantly predicted CAPI abuse classification,  $\chi^2(3, N = 136) = 18.21, p < .001$ .

The results being reported are for the part of the sample that had valid CAPI scores. Secondary analyses were run to determine whether the exclusion of participants with invalid CAPI scores had an impact on the findings. These analyses showed that the findings with and without the participants with invalid CAPI scores remain consistent. For the whole sample, including those participants, both RPSM and PBI overprotection were found to significantly predict CAPI abuse score and CAPI abuse risk classification.

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<sup>&</sup>lt;sup>6</sup> Results remained similar when the analyses were run separately by gender. For females, the RPSM significantly predicted CAPI abuse score,  $\beta$  = .32, t(80) = 3.10, p < .01, as did PBI overprotection,  $\beta$  = .29, t(80) = 2.81, p < .01. For males, only RPSM significantly predicted CAPI abuse score,  $\beta$  = .36, t(50) = 2.75, p < .01.

The hypothesis was also tested with the POO score (see Table 7). Again controlling for gender, scores on the PBI overprotection significantly predicted the total POQ score,  $\beta = .19$ , t(158) = 2.57, p < .05, as did the RPSM scores,  $\beta = .22$ , t(158) =2.90, p < .01. Entered as a block, low emotional distance explained a significant portion of the variance in POO scores,  $R^2 = .21$ , F(3, 158) = 13.80, p < .001, controlling for gender.7

Hence, there was support for the hypothesis that low emotional distance as measured by the RPSM and the PBI overprotection subscale predicts child abuse potential, with RPSM significantly predicting child abuse potential and the PBI overprotection score approaching statistical significance. Both the RPSM and the PBI overprotection subscale also predicted unrealistic expectations of children as measured by the POQ.

Hypothesis 2: High emotional distance is associated with higher risk of child maltreatment perpetration.

The CAPI abuse score was regressed on measures of high emotional distance (subscales from AE-III and the reverse-scored care subscale of the PBI), controlling for gender. The scores on the two measures were highly collinear, with a Variance Inflation Factor of 2.53 for AE-III and 2.55 for the care subscale of the PBI, suggesting that both measures are explaining the same variance in CAPI abuse score. Furthermore, the coefficient for the AE-III scores did not reach statistical significance, suggesting that AE-III scores were not explaining a unique variance of the CAPI abuse score. As such, AE-

the RPSM significantly predicted the total POQ score,  $\beta = .33$ , t(92) = 3.21, p < .01, and PBI overprotection approached significance,  $\beta = .18$ , t(92) = 1.73, p < .10. For males, only PBI overprotection significantly predicted the total POQ score,  $\beta = .24$ , t(64) = 2.04, p < .05.

<sup>&</sup>lt;sup>7</sup> When analyses were run separately by gender, low emotional distance significantly predicted POQ scores, but there were differences in which measure of low emotional distance was more powerful. For females,

III was removed from analysis in order to reduce redundancy in predictors and improve the specification of the regression model. Hence, this hypothesis was tested using only the PBI scores.

As hypothesized, after controlling for gender, higher emotional distance (as measured by the reverse-scored PBI care subscale) predicted CAPI abuse score,  $\beta = .39$ , t(141) = .39, p < .001. Higher emotional distance also explained a significant portion of the variance in CAPI abuse scores,  $R^2 = .19$ , F(2, 141) = 16.69, p < .001 (see Table 8).

Scores on the PBI care subscale also significantly predicted CAPI abuse classification (B = .11, Wald statistic = 9.05, p < .01). The model significantly predicted CAPI abuse classification,  $\chi^2(2, N = 144) = 14.21$ , p < .01.

Secondary analyses showed that, for this hypothesis as well, the exclusion of participants with invalid CAPI scores did not alter the findings. PBI care subscale significantly predicted both CAPI abuse score and CAPI abuse risk classification for the whole sample before these participants were excluded from analysis.

Similarly, scores on the PBI care subscale also significantly predicted total score on the POQ,  $\beta = .39$ , t(170) = 5.91, p < .001, after controlling for gender (see Table 9). High emotional distance explained a significant portion of the variance in POQ scores after controlling for gender,  $R^2 = .25$ , F(2, 170) = 28.22, p < .001. In sum, high emotional distance as measured by the PBI care subscale significantly predicted child abuse potential and unrealistic expectancies of children.

<sup>&</sup>lt;sup>8</sup> Results remained similar when analyses were run separately by gender. For both genders, scores on PBI care subscale significantly predicted CAPI abuse score (for females,  $\beta = .38$ , t(86) = 3.83, p < .001; for males,  $\beta = .43$ , t(54) = 3.49, p < .01).

<sup>&</sup>lt;sup>9</sup> Results remained the same when analyses were run separately by gender, with PBI care subscale predicting POQ score for both females ( $\beta = .31$ , t(97) = 3.25, p < .01) and males ( $\beta = .55$ , t(72) = 5.63, p < .01) .001).

*Hypothesis 3:* Emotional reactivity mediates the relationship between extreme amounts of emotional distance and risk of child maltreatment perpetration.

Emotional distance was coded as extreme if the score on any of the measures of emotional distance was more than one standard deviation from the mean. Under this coding system, 39% of the sample (n = 61) had experienced extreme amounts of emotional distance with their mothers, and 61% of the sample (n = 94) had experienced moderate amounts of emotional distance. On the whole, both measures of low emotional distance and those of high emotional distance contributed to the classification of extreme emotional distance at similar rates. Roughly half of the individuals who had experienced extreme amounts of emotional distance were classified in the extreme category on more than one measure (n = 32).

This hypothesis was tested using the Baron and Kenny (1986) method and the Sobel test (see Figures 1-3). Controlling for gender, extreme emotional distance was shown to significantly predict CAPI abuse score (for individuals with valid DSI scores,  $\beta$  = .32, t(139) = 4.04, p < .001, and for individuals with valid IASC scores,  $\beta$  = .30, t(146) = 3.86, p < .001). Emotional distance also significantly predicted emotional reactivity as measured by the DSI score,  $\beta$  = .31, t(139) = 4.25, p < .001, and the IASC score,  $\beta$  = .27, t(146) = 3.59, p < .001. In turn, both measures of emotional reactivity significantly predicted CAPI Abuse Scale scores (for DSI,  $\beta$  = .71, t(139) = 10.67, p < .001; for IASC,  $\beta$  = .76, t(146) = 12.94, p < .001). When CAPI abuse scores were regressed on both emotional distance and emotional reactivity, emotional distance dropped out of significance, while emotional reactivity significantly predicted CAPI abuse scores (for

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<sup>&</sup>lt;sup>10</sup> Twenty-three individuals on the PBI overprotection subscale, 28 on the RPSM, 19 on the AE-III, and 23 on the PBI care subscale were classified as having experienced extreme emotional distance.

DSI,  $\beta$  = .67, t(138) = 9.54, p < .001; for IASC,  $\beta$  = .72, t(145) = 11.99, p < .001). The Sobel test showed a statistically significant effect of both the DSI score, z = 3.90, p < .001, and IASC score, z = 3.45, p < .001, as mediators of the relationship between emotional distance and CAPI abuse score. <sup>11</sup>

Secondary analyses showed that the exclusion of participants with invalid CAPI scores made a difference as to whether there was partial or full mediation by emotional reactivity. For the whole sample, including those participants with invalid CAPI scores, the Sobel test of mediation showed that emotional reactivity (as measured by both the DSI and the IASC) significantly mediated the relationship between extreme emotional distance and CAPI abuse score. However, extreme emotional distance remained a significant predictor of CAPI abuse score, thus showing a partial rather than full mediation by emotional reactivity.

The hypothesis was again tested with the POQ score (see Figure 3). Controlling for gender, emotional distance was shown to significantly predict the total POQ score (for individuals with valid DSI scores,  $\beta$  = .33, t(175) = 4.80, p < .001, and for individuals with valid IASC scores,  $\beta$  = .33, t(170) = 4.73, p < .001). Emotional distance also significantly predicted emotional reactivity as measured by the DSI score,  $\beta$  = .26, t(175) = 3.84, p < .001, and the IASC score,  $\beta$  = .34, t(170) = 4.87, p < .001, after controlling for gender. However, emotional reactivity as measured by the DSI did not predict POQ score, and thus mediation could not be tested using the DSI. In contrast, emotional

<sup>&</sup>lt;sup>11</sup> However, mediation was only statistically significant for females when analyses were run separately by gender. For females, there was a significant mediation (indirect effect) by both the DSI score, z = 3.30, p < .01, and the IASC score, z = 2.94, p < .01. For males, both the DSI score and the IASC score only approached statistical significance (.05 ). Bootstrapping estimates of the indirect effect were also statistically significant for females but not for males, suggesting that smaller sample size (and hence decreased power) does not wholly account for the weak findings for male participants.

reactivity as measured by the IASC significantly predicted the POQ score after controlling for gender,  $\beta$  = .26, t(170) = 3.60, p < .001. When the POQ score was regressed on both emotional distance and emotional reactivity as measured by the IASC, emotional distance continued to significantly predict POQ score,  $\beta$  = .27, t(169) = 3.71, p < .001, as did emotional reactivity as measured by the IASC,  $\beta$  = .16, t(169) = 2.20, p < .05. The Sobel test did not show a statistically significant effect of the IASC score as a mediator of the relationship between emotional distance and POQ score. <sup>12</sup> These results suggest that emotional reactivity does not mediate the relationship between emotional distance and unrealistic expectations of children as measured by the POQ. Instead, emotional distance and emotional reactivity (as measured by the IASC) both uniquely predicted the POQ score in this sample.

In sum, emotional reactivity was found to mediate the relationship between emotional distance and child abuse potential, controlling for gender. In addition, both emotional distance and emotional reactivity (as measured by the IASC) uniquely predicted the POQ score, with no mediation by emotional reactivity.

Hypothesis 4: Empathy mediates the relationship between extreme amounts of emotional distance and risk of child maltreatment perpetration.

This hypothesis was again tested using the method proposed by Baron and Kenny (1986) and the Sobel test. Because the HES-M did not show an acceptable level of internal consistency ( $\alpha = .65$ ), the hypothesis was tested using only the QMEE as the measure of empathy. As reported previously, after controlling for gender, emotional distance significantly predicted CAPI abuse score,  $\beta = .27$ , t(135) = 3.38, p < .01.

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<sup>&</sup>lt;sup>12</sup> Results remained similar when analyses were run separately by gender, and emotional reactivity was not found to mediate the relationship between emotional distance and POQ score.

However, emotional distance did not significantly predict empathy as measured by the QMEE, and hence mediation could not be tested. These results were the same whether or not participants with invalid CAPI scores were excluded from analysis.

Similarly, emotional distance significantly predicted the total POQ score after controlling for gender,  $\beta = .33$ , t(175) = 4.80, p < .001. However, mediation could not be tested because emotional distance did not predict the QMEE score. <sup>13</sup> In sum, empathy was not found to be a mediator of the relationship between emotional distance and child abuse potential or unrealistic expectations in parenting.

*Hypothesis 5:* Emotional distance predicts risk of child maltreatment perpetration over and above one's history of childhood maltreatment.

CAPI abuse score was regressed on the history of childhood maltreatment as measured by the AE-III, controlling for gender (see Table 10). After controlling for gender, history of childhood maltreatment significantly predicted CAPI abuse score,  $\beta$  = .27, t(140) = 3.46, p < .01. Adding emotional distance as a predictor to this regression improved the prediction of CAPI abuse score ( $\Delta R^2$  = .03, F(1, 139) = 4.08, p < .05). When both history of abuse and emotional distance were entered into the regression, history of childhood maltreatment no longer had a statistically significant effect on CAPI abuse scores, whereas emotional distance had a statistically significant effect,  $\beta$  = .19, t(139) = 2.02, p < .05. This regression model explained a significant portion of the variance in CAPI abuse score,  $R^2$  = .16, F(3, 139) = 8.59, p < .001.  $R^2$ 

In contrast to these findings, neither history of childhood maltreatment nor extreme emotional distance predicted the CAPI abuse risk classification after controlling

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<sup>&</sup>lt;sup>13</sup> All of these results remained the same when analyses were run separately by gender.

<sup>&</sup>lt;sup>14</sup> However, when analyses were run separately by gender, neither history of childhood maltreatment nor extreme emotional distance predicted CAPI abuse score.

for gender. Furthermore, controlling for gender, history of childhood maltreatment significantly predicted total POQ score,  $\beta$  = .36, t(168) = 5.18, p < .001. Adding extreme emotional distance as a predictor still resulted in history of childhood maltreatment significantly predicting POQ score,  $\beta$  = .26, t(167) = 3.02, p < .01, whereas extreme emotional distance only approached statistical significance ( $\beta$  = .17, t(167) = 1.97, p < .10). The final model with extreme emotional distance and history of childhood maltreatment accounted for 23.4% of the variance,  $R^2$  = .23, F(3, 167) = 16.96, p < .001 (see Table 11).

Secondary analyses exploring the impact of excluding participants with invalid CAPI scores showed that, for the whole sample including these participants, both history of childhood maltreatment and extreme emotional distance predicted CAPI abuse score and CAPI abuse risk classification. Hence, excluding the participants with invalid CAPI scores resulted in history of childhood maltreatment not significantly predicting child abuse potential when extreme emotional distance was entered as a predictor.

In sum, emotional distance has been found to predict child abuse potential over and above childhood maltreatment in the full sample, controlling for gender. However, neither emotional distance nor childhood maltreatment predicted CAPI abuse risk classification. Extreme emotional distance did not have an effect on unrealistic expectations regarding children as measured by the POQ over and above the effect of childhood maltreatment history.

<sup>&</sup>lt;sup>15</sup> Results for the CAPI abuse risk classification remained the same when analyses were run separately by gender

<sup>&</sup>lt;sup>16</sup> When analyses were run separately by gender, the results remained the same for males, with history of childhood maltreatment significantly predicting POQ score,  $\beta = .37$ , t(70) = 2.70, p < .01. However, for females, neither history of childhood maltreatment nor emotional distance predicted POQ score.

Exploratory Analyses to Clarify Findings for Hypothesis 5. The finding that neither history of childhood maltreatment nor extreme amounts of emotional distance predicted CAPI abuse risk classification was unexpected, given that findings for other hypotheses showed similar results for both the continuous CAPI abuse score and the dichotomous CAPI abuse risk classification. As such, exploratory analyses were conducted to examine why this might have been the case. One possible explanation was that CAPI abuse risk classification is predicted differently by different measures of emotional distance. In order to examine this possibility, a variable indicating whether or not a score fell into the extreme range (above one standard deviation above the mean) was created for each of the four measures of emotional distance. These variables were entered as a block into a logistic regression after controlling for gender and for history of childhood maltreatment. Results showed that one measure of high emotional distance predicted CAPI abuse risk classification (for the PBI care subscale, B = 1.81, Wald statistic = 6.94, p < .01), and one measure of low emotional distance marginally predicted CAPI abuse risk classification (for the RPSM, B = 1.00, Wald statistic = 3.67, p < .10). The other two measures (the PBI overprotection subscale and the AE-III) were not found to significantly predict CAPI abuse risk classification. As such, aggregating multiple measures of emotional distance, which varied in their prediction of CAPI abuse risk classification, into one indicator of extreme emotional distance may have resulted in the lack of findings.

Furthermore, the possibility that other variables might better predict CAPI abuse risk classification was considered. Because emotional reactivity was found to be a particularly powerful predictor of risk in this study, it was included as an explanatory

variable in addition to history of childhood maltreatment and extreme emotional distance, controlling for gender. Emotional reactivity was found to be the only significant predictor of the CAPI abuse risk classification (as measured by the DSI, B = 2.05, Wald statistic = 23.43, p < .001; as measured by the IASC, B = .30, Wald statistic = 27.13, p < .001). Gender, childhood maltreatment, and extreme emotional distance were not significant predictors of CAPI abuse risk classification. Hence, history of childhood maltreatment and extreme emotional distance were not found to significantly predict CAPI abuse risk classification, and other factors such as emotional reactivity are likely to be more powerful predictors of CAPI abuse risk classification.

## Discussion

The present study examined whether extreme amounts of emotional distance in the mother-child relationship increased the risk that the child would become a maltreating parent in adulthood. Borrowing from literatures on family systems (Bowen 1978; Minuchin, 1974; Titelman, 2003), social cognition (Rudy & Grusec, 2006), and attachment (Crittenden, 2006), the study examined whether low emotional distance (enmeshment) and high emotional distance (disengagement) increased the risk of child maltreatment perpetration.

As hypothesized, both low and high amounts of emotional distance with one's mother, compared to moderate amounts of emotional distance, were associated with higher child abuse potential and higher unrealistic expectations of children. Consistent with prior research that views enmeshment and disengagement as increasing risk for the

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<sup>&</sup>lt;sup>17</sup> The results were similar when the continuous CAPI abuse score was the criterion. For emotional reactivity as measured by the DSI,  $\beta = .67$ , t(130) = 9.26, p < .001; for emotional reactivity as measured by the IASC,  $\beta = .71$ , t(137) = 11.52, p < .001. Gender, childhood maltreatment, and extreme emotional distance were not significant predictors.

child, for instance by contributing to the development of child psychopathology (Heider et al., 2006; Levy, 2005; Willinger et al., 2002; Zweig-Frank & Paris, 1991), the findings in this study suggest that extreme amounts of emotional distance within the parent-child relationship create long-term risk for the child. Future research using a longitudinal design is needed to verify this study's findings and examine emotional distance and its impact on child development over time. It would also be interesting to examine whether extreme amounts of emotional distance has differential impact on child development depending on the child's developmental stage. Additionally, future work might assess the stability of emotional distance in the parent-child relationship, to see if the amount of emotional distance in the relationship remains similar and is expressed in a qualitatively similar fashion over time.

Increased emotional reactivity was found to be a mechanism by which extreme amounts of emotional distance increased child abuse potential. This finding supports the arguments made in the child maltreatment literature that greater emotional reactivity is associated with increased risk of perpetrating child maltreatment (Milner, Halsey, & Fultz, 1995; Skowron & Platt, 2005; Trickett & Kuczynski, 1986). However, emotional reactivity was not a mediator of the relationship between extreme emotional distance and unrealistic expectations of children. Rather, both emotional distance and emotional reactivity independently predicted unrealistic expectations. This may reflect the idea that parent-child relationships characterized by extreme emotional distance model and socialize unrealistic expectations of children, and that this process is separate from one by which emotional reactivity increases unrealistic expectations of children (for instance,

high emotional reactivity may lead to higher frustration and impatience with others, entailing unrealistic expectations of others).

It is also interesting that emotional reactivity as measured by the IASC was associated with unrealistic expectations, whereas emotional reactivity as measured by the DSI was not. The IASC was developed to study the sequelae of trauma, whereas the DSI was developed to study family systems dysfunction. It is possible that the findings in this study reflect a process by which traumatic childhood experiences (including child maltreatment) are contributing to interpersonal problems such as borderline psychopathology. There is some support for this possibility, as Rogosch and Cicchetti (2005) found links between child maltreatment and precursors to Borderline Personality Disorder, which is often associated with splitting (e.g., idealization versus devaluation) and hence difficulty developing a realistic and integrated sense of others. This might be partially captured by the POQ, which assesses unrealistic expectations of children.

However, as previously noted when findings were examined separately by gender, the extent to which emotional reactivity mediated the relationship between extreme emotional distance and child abuse potential differed by gender, with the mediation being statistically significant for female participants and only approaching statistical significance for male participants. This gender difference may be a result of differences in self-reported emotional reactivity and child abuse potential, with male participants reporting significantly lower emotional reactivity and child abuse potential and exhibiting less variability in both than female participants. In addition, because the study focused on emotional distance in the mother-child relationship, the impact of emotional distance may have been stronger for female participants than for male participants, since fathers may

be more influential than mothers for male participants (Azar, Okado, & Robinson, 2008; Nagashima, 2008).

Future studies might compare the impact of fathers and mothers on participants by gender and examine the interaction between parent gender and child gender. Future research might also examine the potential sources of gender differences in emotional reactivity and child abuse potential by examining factors that affect sex differences in the experience of emotion, for instance in expressivity (which has been shown to be higher in women but does not reflect the intensity of emotional experience reported and manifested as physiological reactivity, which are not necessarily higher in women than men), the type of emotion being experienced (e.g., anger, sadness, happiness may be experienced and expressed differently by sex), or gender roles (with androgyny rather than strong femininity or masculinity being associated with greater emotional expressivity) (Kring & Gordon, 1998).

In contrast to emotional reactivity, empathy was not found to mediate the relationship between emotional distance and risk of child maltreatment perpetration.

Although lower empathy is found to be associated with child maltreatment (Frodi & Lamb, 1980; Letourneau, 1981; Perez-Albeniz & de Paul, 2003), empathy was not found to significantly predict child abuse risk in this study. The lack of findings could be due partially to the difficulties of measuring empathy, which has been an ongoing problem in child maltreatment research (Kilpatrick, 2005). Indeed, one of the measures of empathy that is based on the work of Hogan (1969) did not show satisfactory internal consistency. The QMEE, the other measure of empathy used in this study and a measure for affective empathy, was not associated with extreme emotional distance. Cognitive empathy or

perspective-taking, which was not adequately measured in this study, may still be associated with extreme emotional distance and need to be examined in future studies. However, it may also be the case that empathy is not affected by emotional distance. Instead, other factors such as socialization of moral reasoning by the parent or the child's tendencies to feel more socially oriented emotions such as guilt and shame may account for the development of empathy (for review, see Eisenberg, 2000). These factors might also be examined in a future study and compared to the impact of emotional distance on child empathy.

There was limited support for the argument that extreme amounts of emotional distance experienced in one's relationship with the mother increases risk for perpetrating child maltreatment over and above the impact of a history of childhood maltreatment. Emotional distance was found to affect child abuse potential after controlling for gender and history of childhood maltreatment when the continuous measure of child abuse potential was assessed. However, neither history of childhood maltreatment nor extreme amounts of emotional distance significantly predicted child abuse risk classification. Subsequent exploratory analyses showed that this lack of finding may have been due to the aggregation of measures of emotional distance, as well as the weakness of childhood maltreatment and emotional distance in predicting child abuse risk classification, especially compared to other variables such as emotional reactivity.

In addition, history of childhood maltreatment, but not extreme emotional distance, significantly predicted unrealistic expectations of children. This suggests that extreme emotional distance does not predict unrealistic expectations after accounting for the effect of childhood maltreatment, and that the degree to which maltreatment occurs in

the mother-child relationship has a significant effect on unrealistic expectations regarding children. It may be that the history of childhood maltreatment reflects some of the worst parenting that the participants had experienced as children, and that more subtle problems in the parent-child relationships characterized by extreme amounts of emotional distance are not as impactful on unrealistic expectations. Future research might examine potential factors that explain these processes. For instance, individual factors such as executive functioning deficits and negative intent attributions have been shown to be associated with unrealistic expectations in creating risk of child maltreatment, as posited by Sandra Azar's social information processing model (e.g., Azar, Okado, & Robinson, 2008; Azar & Robinson, 2008), and research has shown that childhood maltreatment can adversely affect cognitive functioning (including executive functioning; for review, see Watts-English, Fortson, Gibler, Hooper, & De Bellis, 2006) as well as contribute to negative cognitive styles (Gibb, 2002). These mechanisms are likely more powerful in explaining the development of unrealistic expectations than processes arising from extreme emotional distance.

Additionally, contextual variables such as poverty (Drake & Pandy, 1996) are thought to create risk in parenting and might also contribute to the emergence of unrealistic expectations. In the current sample, maternal education was negatively associated with unrealistic expectations, possibly reflecting a process by which poorer households place greater pressures on children to behave in a more mature fashion than would be age-appropriate. Also, unrealistic expectations regarding children may be affected by an individual's developmental stage and entrance into parenthood, which entails a new set of developmental tasks and experiences (Azar, 2003). It may be that

studying individuals who are already parents would produce different results, as their experience with their own parents, including emotional distance, might become more salient and influence expectations towards children. The impact of contextual factors and developmental stage of the individual should be examined in future work.

Overall, the findings in this study suggest that examining the nature of the parent-child relationship and its impact on child development more globally, particularly in terms of emotional distance experienced in that relationship, might be useful in assessing the relative degree to which an individual is at risk for perpetrating child maltreatment, though not necessarily whether or not an individual is at high risk, per se. One strength of assessing risk by examining emotional distance rather than a history of childhood maltreatment is that emotional distance could explain risk in individuals who do not have a history of childhood maltreatment, not just in individuals who had experienced childhood maltreatment (of which roughly one-third perpetrate maltreatment toward their own children; Kaufman & Zigler, 1987). That is, emotional distance can be used to assess risk in any individual, whereas assessing the history of childhood maltreatment does not allow risk to be screened in individuals who were not maltreated as a child but are nonetheless at risk for perpetrating child maltreatment.

Furthermore, increased emotional reactivity may be the mechanism by which childhood maltreatment is transmitted across generations and might be important to examine as such in future research. Evidence exists that child maltreatment increases the risk of emotional dysregulation in the child (Maughan & Cicchetti, 2002; Shipman & Zeman, 2001), possibly increasing the risk that child maltreatment would be transmitted to the next generation. There is also the possibility that emotional reactivity itself is being

transmitted across generations and giving rise to child maltreatment. Future studies might measure parental emotional reactivity in addition to emotional distance, in order to clarify the extent to which emotional reactivity is being transmitted by the parent or is increased in the child through extreme amounts of emotional distance. In addition, other factors that influence emotional reactivity in the child might be examined, including reinforcement by the parent of emotional reactions and expressions, cultural norms on emotion regulation, or instruction by the parent on emotion regulation strategies (for review, see Thompson, 1991).

Some interesting additional findings emerged from the study. Enmeshment and disengagement were found to be positively correlated in this sample, suggesting that the extremes in emotional distance may occur in the same relationship. This is consistent with the work of attachment researchers who argue that parents can experience intense and contradictory states in parenting such as those that are "hostile/helpless" (Lyons-Ruth & Spielman, 2004) or "frightened/frightening" (Hesse & Main, 2006). As such, it may not be as meaningful to conceptualize low and high emotional distance as opposite ends of a spectrum that are mutually exclusive. Rather, both low and high amounts of emotional distance likely reflect dysfunction in the parent-child relationship more generally.

Additionally, gender was found to have a statistically significant effect on abuse potential and unrealistic expectations of children in most analyses, suggesting that gender has a unique effect on the risk of perpetrating child maltreatment. This did not necessarily mean that findings were different by gender, but rather, findings were similar for both genders in many analyses. Both low and high emotional distance experienced with the

mother increased child abuse potential and unrealistic expectancies in males and females alike. Furthermore, when comparing the effects of emotional distance and of childhood maltreatment on child abuse potential, neither variable predicted child abuse potential when males and females were examined separately. These results suggest that emotional distance and childhood maltreatment influence child abuse potential only after accounting for the direct effect of gender on child abuse potential, and that gender does not change the nature of this relationship. It is likely that gender differences in child abuse potential are instead driven by other variables, including emotional reactivity, that are more powerful in predicting child abuse potential than emotional distance or childhood maltreatment. Given that the effect of gender on child abuse potential disappears after accounting for emotional reactivity, extreme emotional distance, and history of childhood maltreatment, there is some initial support for this possibility.

In contrast, there were two findings for which different results emerged for females and for males. Emotional reactivity significantly mediated the relationship between extreme emotional distance and child abuse potential for females, whereas it had a weaker effect for males. In addition, history of childhood maltreatment predicted unrealistic expectations of children for the entire sample and among males but not among females when they were studied separately. As suggested previously, these gender differences may reflect the characteristics of this sample, with female participants exhibiting greater emotional reactivity and child abuse potential than male participants, and male participants exhibiting higher unrealistic expectations regarding children than female participants (see Table 2).

These differences may reflect socialization and reporting (e.g., male participants may be more socialized to suppress emotional reactions, leading to low reports of emotional reactivity, or may be less willing to endorse having strong emotional experiences). In addition, male participants may have less experience taking care of children, for instance as a babysitter, and may thereby have more unrealistic expectations of children than female participants (Azar, Okado, & Robinson, 2008). Furthermore, there is also the possibility that mother-child relationships would have a greater impact on females than on males, since children might be influenced or socialized more strongly by a same-sex parent. They might identify the same-sex parent as a more salient model for social behavior (Bandura, 1986), or parents might socialize their children's behavior differently by sex (e.g., Langlois & Downs, 1980), giving rise to the observed differences in emotional reactivity, child abuse potential, and unrealistic expectations regarding children between female and male participants. Future work might examine such mechanisms by which gender differences in emotional reactivity and unrealistic expectations might emerge.

# Clinical Implications

Findings from the study have a few clinical implications. First, the results from the study suggest that emotional distance in the parent-child relationship may have a lasting impact on the child's psychosocial functioning, including increased emotional reactivity, which may in turn raise the risk that the child would later perpetrate child abuse as an adult. This also points to the importance of monitoring the amount of emotional distance in parent-child relationships in clinical practice. At least two points of caution for clinicians emerged from this study. First, there is such a thing as too much

closeness. Enmeshment can be just as damaging as disengagement, which is likely understood by clinicians but may not seem as intuitive as disengagement being harmful, since the parent may be providing basic resources for the child and may show considerable concern for the child's well-being, such as in the case of overprotection. Second, extreme amounts of emotional distance may pose long-term risk for the child, at times more so than the occurrence of child maltreatment itself. It is important for clinicians to monitor emotional distance such that the child is receiving an adequate amount of warmth and support and is allowed a developmentally appropriate amount of autonomy, in addition to monitoring any possibility of child maltreatment. Clinicians should also monitor the child's emotional reactivity.

Second, the findings suggest that risk of child maltreatment perpetration may be produced through a developmental process, providing ample opportunities for prevention. Preventive efforts may be directed at parent-child relationships, children, and/or parents, for instance by promoting moderate amounts of emotional distance in parenting interventions or monitoring the emotional reactivity of children in interventions for individuals who may at some point become a parent. Interventions such as the Circle of Security Intervention for insecure attachment (Hoffman, Marvin, Cooper, & Powell, 2006) or Family-Focused Therapy for bipolar disorder (Miklowitz, 2007) already address issues related to emotional distance by promoting relationships that are supportive without being overprotective. Emotional distance might receive greater focus in these types of interventions that address relational problems in parent-child relationships so that child maltreatment could be prevented. In addition, parenting interventions, such as

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<sup>&</sup>lt;sup>18</sup> Similar findings have been found in romantic relationships, where overprovision of care has been found to decrease relationship satisfaction as much as underprovision (Brock & Lawrence, 2008).

the Family-Nurse Partnership Program (Olds et al., 1998) and the Triple P Parenting Program (Sanders, 1999), can enhance parental understanding of child development and reduce unrealistic expectations towards children, thereby reducing risk of child maltreatment perpetration as individuals enter parenthood.

Also, given the strong impact of emotional reactivity that was found in this study, interventions to reduce emotional reactivity may significantly reduce the risk of child maltreatment perpetration. A wide range of interventions already target emotion regulation. For children, attachment-oriented interventions such as the toddler-parent psychotherapy (Toth, Rogosch, Manly, & Cicchetti, 2006) may address precursors of emotional reactivity early in life, and interventions such as the Turtle Technique for children (Schneider & Robin, 1978) teach emotion regulation skills that may prevent future emotional reactivity and parenting risk. For adults, cognitive-behavioral therapy that teaches anger management skills (Deffenbacher & McKay, 2000; Novaco, 1978) may help reduce the ill effects of emotional reactivity, and interventions targeting anger management in parents have been shown to reduce aversive parenting behavior in abusive parents (Nomellini & Katz, 1983) and potentially reduce violence and aggression in a community sample of parents (Fetsch, Schultz, & Wahler, 1999). Other types of adult psychotherapy, such as Emotion-Focused Psychotherapy (Elliott, Watson, Goldman, & Greenberg, 2003) or Transference-Focused Psychotherapy (Clarkin, Yeomans, & Kernberg, 2006), can also improve emotion regulation in adults. These types of interventions that reduce emotional reactivity may also serve to prevent risk of child maltreatment perpetration.

#### *Limitations and Future Directions*

The study has several limitations. Because emotional distance was measured retrospectively using child report only, the study has measured the grown child's perception of emotional distance in the parent-child relationship without corroboration by the parent. Longitudinal research with multiple reporters on emotional distance is needed to more clearly establish the impact of emotional distance on child emotional reactivity and later parenting. In addition, participant reports of their history of childhood maltreatment may not necessarily have been accurate. Although some research suggests that retrospective self-reports adequately capture aversive childhood events such as abuse (Brewin, Andrews, & Gottlib, 1993; McGee, Wolfe, Yuen, & Wilson, 1995) and are often better predictors of psychological symptoms (Briere & Runtz, 1988; McGee et al., 1995; Wind & Silvern, 1992), the experience of child maltreatment is often underreported by its victim, as abusive experiences are not recognized as such (Berger, Knutson, Mehm, & Perkins, 1988; Hemenway, Solnick, & Carter, 1994; Rausch & Knutson, 1991). Moreover, the mood of the reporter is also thought to contribute to the report of childhood maltreatment (Prescott et al., 2000). Hence, it is difficult to know how accurately the participants' history of childhood maltreatment was assessed, and replication of this study's findings using a longitudinal design capturing actual incidence of child maltreatment is recommended.

In addition, close to 25% of the sample were shown to have invalid scores in the CAPI. Excluding this portion of the sample did not change the main findings that extreme amounts of emotional distance predict child abuse potential and unrealistic expectations of children, though this portion of the sample affected whether emotional reactivity

partially or fully mediated the relationship between extreme emotional distance and risk of child maltreatment perpetration, as well as whether history of childhood maltreatment predicted unrealistic expectations of children. This portion of the sample did not affect the internal consistency of the measures in the study. The source of the invalid scores is unclear, though the format of the measure administration (online in a private setting) and the sample being part of the subject pool may have contributed to the problem. Future studies might administer the CAPI in a paper format in a proctored setting and recruit a sample not part of the subject pool to determine whether these improve the data.

Furthermore, this study focused on the mother-child relationship. Father-child relationship would also be important to examine in future work. Fathers are understood to have relationships with children that differ from mothers, such as in emotion regulation strategies and attachment (Diener, Mangelsdorf, McHale, & Frosch, 2002), as well as have a particular impact on their sons, such as socializing sex-role expectations (Emihovich, Gaier, & Cronin, 1984) or father-son aggression (Nagashima, 2008). In addition, future studies might examine the role of other significant individuals in the child's life, such as grandparents, siblings, or peers. Especially during times of high stress or transition, these individuals may provide important social support (Goslin, 2007), and in the case of grandparents, may be called to provide kin care if the parents are unable to provide adequate care (Azar & Hill, 2006).

In addition, the measurement of emotional distance posed some challenges. For instance, as mentioned earlier, extreme amounts of emotional distance can manifest in different ways. This is especially true for low emotional distance, which has been described not only as role reversal or overprotection but also as intrusion, expectation of

mind-reading, and possibly other characteristics. This study focused on role reversal and overprotection, but there may be other aspects of low emotional distance that were not captured in this study that would also influence risk. Furthermore, these aspects of low emotional distance may have differential impact on risk, which might be investigated in future research. Also, some of the hypotheses were tested by grouping participants into those reporting extreme amounts of emotional distance versus those reporting moderate amounts of emotional distance, since extreme amounts of emotional distance were conceptualized as qualitatively distinct from moderate amounts of emotional distance. Some information was lost by grouping participants into discrete categories, though exploratory analyses treating emotional distance as a continuous variable produced results similar to those reported here.

It would also be important to see what factors may contribute to sustained risk or resilience from growing up in a dysfunctional parent-child relationship. Although the results from this study suggests that risk is increased by extreme amounts of emotional distance in one's relationship with parents, individuals may respond differently to such an environment and may not experience increased emotional reactivity or increased risk of perpetrating child maltreatment. For instance, Ellis and Boyce (2008) discuss how stress reactivity can be increased by conditions of either high stress with low support or high support with low stress and point out that low stress reactivity is psychologically protective under any environmental condition. In addition, such factors as high cognitive functioning, strong self-esteem, internal locus of control, and access to a supportive adult are thought to help buffer individuals from the negative effects of child maltreatment (for review, see Heller, Larrieu, D'Imperio, & Boris, 1999). These factors may also contribute

to resilience from extreme amounts of emotional distance and might be investigated in a future study.

Also, there is a possibility that child characteristics affect emotional distance between the parent and the child. For instance, a child may be born with a more reactive temperament (Rothbart & Bates, 2004), which may be associated with a parent that is also reactive and lead to controlling or withdrawn parenting, thereby sustaining risk. Negative emotionality in the child has been found to have effects on parenting, potentially in interaction with maternal personality (Clark, Kochanska, & Ready, 2000) or in a bidirectional fashion (Lengua & Kovacs, 2004). Further studies with longitudinal research designs that examine stability and change in both child characteristics and parenting would be helpful in understanding the child's influence on emotional distance.

Finally, it is important to stress that the argument presented in this paper is far from being exhaustive in exploring the risk of child maltreatment perpetration at the parental level, and other factors that affect parenting should continue to be examined. For instance, social information processing capacities of the parent, including expectancies regarding parenting, attribution style, and executive function, have been shown to differ between maltreating and non-maltreating parents (Azar, 1986, 2002, 2003; Azar & Robinson, 2008; Azar & Weinzierl, 2005). Additionally, there are contextual factors that are known to affect risk of child maltreatment (for review, see Belsky, 1993; Black, Heyman, & Slep, 2001a & 2001b; Black, Slep, & Heyman, 2001). For instance, there is evidence suggesting that maltreating mothers tend to have or seek out less social support than controls (Coohey, 2001; Salzinger, Kaplan, & Artemyeff, 1983). There may also be cultural influences that affect attitudes, behaviors, and norms in parenting (Ferrari, 2002),

and further attention to ethnic and cultural differences in child maltreatment research is needed (Behl, Crouch, May, Valente, & Conyngham, 2001; Korbin, 2002).

#### Conclusions

Literatures from various theoretical traditions have pointed to the risk that is created by parent-child relationships that are either too close or too distant. However, despite the acknowledgement in existing research of the importance of the family of origin in shaping one's parenting (Bandura, 1986; Belsky, Jaffee, Sligo, Woodward, & Silva, 2005; Serbin & Karp, 2003), there is a dearth of empirical research on the impact of growing up in an enmeshed or disengaged relationship with one's parent and its relationship to risk for perpetrating child maltreatment. This study sought to address this gap and found initial support for the argument that extreme amounts of emotional distance within the parent-child relationship increase the child's risk of perpetrating child maltreatment in adulthood, with emotional reactivity as a mediator. Moreover, there was limited support for the argument that emotional distance within the parent-child relationship in which one grew up is a stronger predictor of one's abuse potential than history of childhood maltreatment. The emotional distance of the parent-child relationship in one's family of origin may be important to assess in future studies on risk of child maltreatment, and use of multiple informants, longitudinal data, and refined measurement of emotional distance and the potential mediators of emotional reactivity and empathy are encouraged in future research.

## References

- Ainsworth, M. D. S. (1979). Infant-mother attachment. *American Psychologist*, *34*(10), 932-937.
- Alexander, P. C. (2003). Parent-child role reversal: Development of a measure and test of an attachment theory model. *Journal of Systemic Therapies*, 22(2), 31-44.
- Azar, S. T. (1986). A framework for understanding child maltreatment: An integration of cognitive behavioral and developmental perspectives. *Canadian Journal of Behavioral Science*, *18*, 340-355.
- Azar, S. T. (1989). Training parents of abused children. In C. E. Schaefer & J. M.

  Briesmeister (Eds.), *Handbook of parent training: Parents as co-therapists for children's behavior problems* (pp. 414-441). New York: Wiley.
- Azar, S. T. (1990, November). "Parenting risk" in adolescents with a history of abuse.

  Paper presented at the annual meeting of the Association for the Advancement of Behavior Therapy, San Francisco.
- Azar, S. T. (2002). Child abuse. In M. Bornstein (Vol. Ed.), *Handbook of parenting* (Vol. 4, pp. 361-388). New York: Erlbaum.
- Azar, S. T. (2003). Adult development and parenthood: A social-cognitive perspective. In J. Demick & C. Andreoletti (Eds.), *Handbook of adult development* (pp. 391-415). New York: Kluwer.
- Azar, S. T., Barnes, K. T. & Twentyman, C. T. (1988). Developmental outcomes in abused children: Consequences of parental abuse or a more general breakdown in caregiver behavior. *Behavior Therapist*, 11, 27-32.

- Azar, S. T., & Bober, S. L. (1999). Children of abusive parents. In W. K. Silverman & T.H. Ollendick, (Eds.), *Developmental issues in the clinical treatment of children* (pp. 371-392). Boston: Allyn & Bacon.
- Azar, S. T., Goslin, M. C., & Okado, Y. (2008). Achieving peace in the family. In J. de Rivera, (Ed.), *Handbook on Building Cultures of Peace* (pp. 319-332). New York: Springer.
- Azar, S. T., & Hill, L. (2006). Adoption and foster care in minority families. In K. Wegar (Ed.), *Adoptive families in a diverse society* (pp. 190-209). NJ: Rutgers University Press.
- Azar, S. T., Okado, Y., & Robinson, L. R. (2008). Social information processing and adolescent male's risk for child maltreatment. Manuscript submitted for publication.
- Azar, S. T., & Robinson, L. R. (2008). A social information processing model of maternal risk: A preliminary test of model validity and an examination of risk in mothers with intellectual challenges. Manuscript submitted for publication.
- Azar, S. T., Robinson, D. R., Hekimian, E., & Twentyman, C. T. (1984). Unrealistic expectations and problem-solving ability in maltreating and comparison mothers. *Journal of Consulting and Clinical Psychology*, 52(4), 687-691.
- Azar, S. T., & Rohrbeck, C.A. (1986). Child abuse and unrealistic expectations: Further validation of the Parent Opinion Questionnaire. *Journal of Consulting and Clinical Psychology*, *54*(6), 867-868.

- Azar, S. T., & Weinzierl, K. M. (2005). Child maltreatment and childhood injury research: A cognitive behavioral approach. *Journal of Pediatric Psychology*, 30(7), 598-614.
- Azar, S. T., & Wolfe, D. A. (1998). Child physical abuse and neglect. In E. J. Mash, & R. A. Barkley (Eds.), *Treatment of childhood disorders* (2nd ed.) (pp. 501-544). New York: Guilford.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory.

  Englewood Cliffs, NJ: Prentice Hall.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations.

  \*Journal of Personality and Social Psychology, 51, 1173-1182.
- Behl, L. E., Crouch, J. L., May, P. F., Valente, A. L., & Conyngham, H. A. (2001).Ethnicity in child maltreatment research: A content analysis. *Child Maltreatment*, 6(2), 143-147.
- Belsky, J. (1993). Etiology of child maltreatment: A developmental-ecological analysis. *Psychological Bulletin*, 114(3), 413-434.
- Belsky, J., Jaffee, S. R., Sligo, J., Woodward, L., & Silva, P. A. (2005). Intergenerational transmission of warm-sensitive-stimulating parenting: A prospective study of mothers and fathers of 3-year-olds. *Child development*, 76(2), 384-396.
- Berg-Nielsen, T. S., Vikan, A., & Dahl, A. A. (2002). Parenting related to child and parental psychopathology: A descriptive review of the literature. *Clinical Child Psychology and Psychiatry*, 7(4), 529-552.

- Berger, A. M., & Knutson, J. F. (1984). *The Assessing Environments III: A questionnaire* for assessing punitive and abuse-related childhood histories. Iowa City, IA:

  University of Iowa, Department of Psychology.
- Berger, A. M., Knutson, J. F., Mehm, J. G., & Perkins, K. A. (1988). The self-report of punitive childhood experiences of young adults and adolescents. *Child Abuse & Neglect*, 12(2), 251-262.
- Black, D. A., Heyman, R. E., & Slep, A. M. S. (2001a). Risk factors for child physical abuse. *Aggression and Violent Behavior. Special Issue: Risk factors for family violence*, 6(2), 121-188.
- Black, D. A., Heyman, R. E., & Slep, A. M. S. (2001b). Risk factors for child sexual abuse. *Aggression and Violent Behavior. Special Issue: Risk factors for family violence*, 6(2), 203-229.
- Black, D. A., Slep, A. M. S., & Heyman, R. E. (2001). Risk factors for child psychological abuse. *Aggression and Violent Behavior. Special Issue: Risk factors for family violence*, 6(2), 189-201.
- Bowen, M. (1978). Family Therapy in Clinical Practice. New York, NY: Jason Aronson.
- Bower, M. E., & Knutson, J. F. (1996). Attitudes toward physical discipline as a function of disciplinary history and self-labeling as physically abused. *Child abuse & neglect*, 20(8), 689-699.
- Bower-Russa, M. E., Knutson, J. F., & Winebarger, A. (2001). Disciplinary history, adult disciplinary attitudes, and risk for abusive parenting. *Journal of Community Psychology*, 29(3), 219-240.

- Brems, C., & Sohl, M.A. (1995). The role of empathy in parenting strategy choices. *Family Relations*, 44(2), 189-194.
- Brewin, C. R., Andrews, B., & Gotlib, I. H. (1993). Psychopathology and early experience: A reappraisal of retrospective reports. *Psychological Bulletin*, *113*(1), 82-98.
- Briere, J., & Runtz, M. (1988). Multivariate correlates of childhood psychological and physical maltreatment among university women. *Child Abuse & Neglect*, *12*, 331-341.
- Briere, J., & Runtz, M. (2002). The Inventory of Altered Self-Capacities (IASC): A standardized measure of identity, affect regulation, and relationship disturbance.

  \*Assessment\*, 9, 3, 230-239.
- Brock, R. L., & Lawrence, E. (2008, November). *Too much of a good thing:*Overprovision vs. Underprovision of Partner Support. Poster session presented at the annual meeting of the Association for Behavioral and Cognitive Therapies,
  Orlando, FL.
- Budd, K. S., Heilman, N. E., & Kane, D. (2000). Psychosocial correlates of child abuse potential in multiply disadvantaged adolescent mothers. *Child Abuse & Neglect*, 24, 611–625.
- Calam, R., Waller, G., Slade, P., & Newton, T. (1990). Eating disorders and perceived relationships with parents. *International Journal of Eating Disorders*, 9, 479-485.
- Carlson, E. A., Jacobvitz, D., & Sroufe, L. A. (1995). A developmental investigation of inattentiveness and hyperactivity. *Child Development*, 66, 37-54.

- Chlopan, B. E., McCain, M. L., Carbonell, J. L., & Hagen, R. L. (1985). Empathy:

  Review of available measures. *Journal of Personality and Social Psychology*, 48, 635–653.
- Clark, L. A., Kochanska, G., & Ready, R. (2000). Mothers' personality and its interaction with child temperament as predictors of parenting behavior. *Journal of Personality and Social Psychology*, 79(2), 274-285.
- Clarkin, J. F., Yeomans, F. E., & Kernberg, O. F. (2006). *Psychotherapy for Borderline Personality: Focusing on Object Relations*. Arlington, VA: American Psychiatric Publishing.
- Cohen, J., Cohen, P., Aiken, L. S., & West, S. G. (2002). *Applied multiple regression correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion regulation as a scientific construct: Methodological challenges and directions for child development research. *Child Development*, 75(2), 317-333.
- Collinshaw, S., Pickles, A., Messer, J., Rutter, M., Shearer, C., & Maughan, B. (2007).

  Resilience to adult psychopathology following childhood maltreatment: Evidence from a community sample. *Child Abuse & Neglect*, *31*, 211-229.
- Coohey, C. (2001). The relationship between familism and child maltreatment in Latino and Anglo families. *Child Maltreatment*, *6*(2), 130-142.
- Crittenden, P. M. (2006). Why do inadequate parents do what they do? In O. Mayseless (Ed.), *Parenting Representations: Theory, Research, and Clinical Implications*. (pp. 388-433). New York, NY: Cambridge University Press.

- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 60, 20-30.
- Daniels, D., Dunn, J., Furstenberg, F. F., Jr., & Plomin, R. (1985). Environmental differences within the family and adjustment differences within pairs of adolescent siblings. *Child Development*, *56*, 764-774.
- Deffenbacher, J. L., & McKay, M. (2000). Overcoming situational and general anger: A protocol for the treatment of anger based on relaxation, cognitive restructuring, and coping skills training. Oakland, CA: New Harbinger Publications.
- Diener, M. L., Mangelsdorf, S. C., McHale, J. L., & Frosch, C. A. (2002). Infants' behavioral strategies for emotion regulation with fathers and mothers:

  Associations with emotional expressions and attachment quality. *Infancy*, *3*(2), 153-174.
- DiLillo, D., Tremblay, G. C., & Peterson, L. (2000). Linking childhood sexual abuse and abusive parenting: the mediating role of maternal anger. *Child Abuse & Neglect*, 24(6), 767-779.
- Dix, T. (1991). The affective organization of parenting: Adaptive and maladaptive processes. *Psychological Bulletin*, *110*(1), 3-25.
- Dixon, L., Browne, K., & Hamilton-Giachritsis, C. (2005). Risk factors of parents abused as children: A mediational analysis of the intergenerational continuity of child maltreatment (part I). *Journal of Child Psychology and Psychiatry*, 46(1), 47-57.
- Downey, G., Purdie, V., & Schaffer-Neitz, R. (1999). Anger transmission from mother to child: A comparison of mothers in chronic pain and well mothers. *Journal of Marriage and the Family*, 61, 62-73.

- Drake, B., & Pandey, S. (1996). Understanding the relationship between neighborhood poverty and specific types of child maltreatment. *Child Abuse & Neglect*, 20(11), 1003-1018.
- Duan, C., & Hill, C. E. (1996). The current state of empathy research. *Journal of Counseling Psychology*, 43(3), 261-274.
- Edwards, A., Shipman, K., & Brown, A. (2005). The socialization of emotional understanding: A comparison of neglectful and nonneglectful mothers and their children. *Child maltreatment*, 10(3), 293-304.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology*, *51*, 665-697.
- Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry*, *9*(4), 241-273.
- Elliott, R., Watson, J., Goldman, R. N., Greenberg, L. S. (2003). *Learning Emotion-Focused Therapy: The Process-Experiential Approach to Change*. Washington, DC: American Psychological Association.
- Ellis, B. J., & Boyce, W. T. (2008). Biological sensitivity to context. *Current Directions* in *Psychological Science*, 17(3), 183-187.
- Ellis, P. L. (1982). Empathy: A factor in antisocial behavior. *Journal of Abnormal Child Psychology*, 10(1), 123-134.
- Emihovich, C. A., Gaier, E. L., & Cronin, N. C. (1984). Sex-role expectations changes by fathers for their sons. *Sex Roles, 11*, 861-868.

- Enns, M. W., Cox, B. J., & Clara, I. (2002). Parental bonding and adult psychopathology:

  Results from the US National Comorbidity Survey. *Psychological Medicine*, *32*, 997-1008.
- Fetsch, R. J., Schultz, C. J., & Wahler, J. J. (1999). A preliminary evaluation of the Colorado rethink parenting and anger management program. *Child Abuse & Neglect*, 23(4), 353-360.
- Ferrari, A. M. (2002). The impact of culture upon child rearing practices and definitions of maltreatment. *Child Abuse & Neglect*, *26*, 793-813.
- Feshbach, N. D. (1989). The construct of empathy and the phenomenon of physical maltreatment of children. In D. Cicchetti & V. Carlson (Eds.), *Child Maltreatment: Theory and Research on the Causes and Consequences of Child Abuse and Neglect.* (pp. 349-373). Cambridge: Cambridge University Press.
- Frodi, A., & Lamb, M. (1980). Child abusers' responses to infant smiles. *Child Development*, *51*, 238–241.
- Gauthier, L., Stollak, G., Messé, L., & Aronoff, J. (1996). Recall of childhood neglect and physical abuse as differential predictors of current psychological functioning. *Child abuse & neglect*, 20(7), 549-559.
- Gibb, B. E. (2002). Childhood maltreatment and negative cognitive styles: A quantitative and qualitative review. *Clinical Psychology Review*, 22(2), 223-246.
- Goslin, M. G. (2007). The role of social support and co-rumination in child adjustment to divorce during middle childhood. Unpublished master's thesis, the Pennsylvania State University, University Park, Pennsylvania, United States.

- Grande, V. P. (2004). *The role of self-complexity in emotional neglect's relationship with anger and aggression* Unpublished master's thesis, The Pennsylvania State University, State College, PA.
- Greif, E. B., & Hogan, R. (1973). The theory and measurement of empathy. *Journal of Counseling Psychology*, 20(3), 280-284.
- Green, A. H. (1976). A psychodynamic approach to the study and treatment of childabusing parents. *Journal of the American Academy of Child Psychiatry*, 15(3), 414-429.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of personality and social psychology*, 85(2), 348-362.
- Guterman, N. B. (1997). Early prevention of physical child abuse and neglect: Existing evidence and future directions. *Child Maltreatment*, *2*(1), 12-34.
- Haapasalo, J., & Aaltonen, T. (1999). Child abuse potential: How persistent? *Journal of Interpersonal Violence*, 14(6), 571-585.
- Haskett, M. E., Scott, S. S., Willioughby, M., Ahern, L., & Nears, K. (2006). Use of the
  Parent Opinion Questionnaire and Child Vignettes with abusive parents:
  Assessment of psychometric properties. *Journal of Family Violence*, 21(2), 137-151.
- Heider, D., Matschinger, H., Bernert, S., Alonso, J., Angermeyer, M. C., & ESEMeD/MHEDEA 2000 investigators. (2006). Relationship between parental bonding and mood disorder in six European countries. *Psychiatry research*, 143(1), 89-98.

- Heller, S. S., Larrieu, J. A., D'Imperio, R., & Boris, N. W. (1999). Research on resilience to child maltreatment: Empirical considerations. *Child Abuse & Neglect*, 23(4), 321-338.
- Hemenway, D., Solnick, S., & Carter, J. (1994). Child-rearing violence. *Child Abuse & Neglect*, 18(12), 1011-1020.
- Herzberger, S. D. (1983). Social cognition and the transmission of abuse. In D.
   Finkelhor, R.J. Gelles, G.T. Hotaling, & M.A. Straus, (Eds.), The *Dark Side of Families: Current Family Violence Research* (pp. 317-329). Beverly Hills: Sage Publications.
- Hesse, E., & Main, M. (2006). Frightened, threatening, and dissociative parental behavior in low-risk samples: Description, discussion, and interpretations. *Development and psychopathology*, 18(2), 309-343.
- Higgins, D. J. & McCabe, M. P. (2000). Multi-type maltreatment and the long-term adjustment of adults. *Child Abuse Review*, *9*, 6-18.
- Higgins, D. J. & McCabe, M. P. (2001). Multiple forms of child abuse and neglect: Adult retrospective reports. *Aggression and Violent Behavior*, 6(6), 547-578.
- Hoffman, C., Crnic, K. A., & Baker, J. K. (2006). Maternal depression and parenting: Implications for children's emergent emotion regulation and behavioral functioning. *Parenting: Science and Practice*, *6*(4), 271-295.
- Hoffman, K. T., Marvin, R. S., Cooper, G., & Powell, B. (2006). Changing toddlers' and preschoolers' attachment classifications: The Circle of Security intervention.

  \*Journal of Consulting and Clinical Psychology, 74(6), 1017-1026.

- Hogan, R. (1969). Development of an empathy scale. *Journal of consulting and clinical psychology*, 33(3), 307-316.
- Johnson, J. A., Cheek, J. M., & Smither, R. (1983). The structure of empathy. *Journal of Personality and Social Psychology*, 45, 1299–1312.
- Johnson, R. M., Kotch, J. B., Catellier, D. J., Winsor, J. R., Dufort, V., Hunter, W., et al. (2002). Adverse behavioral and emotional outcomes from child abuse and witnessed violence. *Child Maltreatment*, 7(3), 179-186.
- Jolliffe, D., & Farrington, D. P. (2004). Empathy and offending: A systematic review and meta-analysis. *Aggression and Violent Behavior*, *9*(5), 441-476.
- Jones, R. A., & Wells, M. (1996). An empirical study of parentification and personality. *The American Journal of Family Therapy*, 24(2), 145-152.
- Kaufman, J., & Zigler, E. (1987). Do abused children become abusive parents? *American Journal of Orthopsychiatry*, *57*(2), 186-192.
- Kiang, L., Moreno, A. J., & Robinson, J. L. (2004). Maternal preconceptions about parenting predict child temperament, maternal sensitivity, and children's empathy. *Developmental Psychology*, 40(6), 1081-1092.
- Kilpatrick, K. L. (2005). The Parental Empathy Measure: A new approach to assessing child maltreatment risk. *American Journal of Orthopsychiatry*, 75(4), 608-620.
- Kimbrel, N. A., Nelson-Gray, R. O., & Mitchell, J. T. (2007). Reinforcement sensitivity and maternal style as predictors of psychopathology. *Personality and Individual Differences*, 42(6), 1139-1149.
- Korbin, J. E. (2002). Culture and child maltreatment: Cultural competence and beyond. *Child Abuse & Neglect*, 26, 637-644.

- Kring, A. M., & Gordon, A. H. (1998). Sex differences in emotion: Expression, experience, and physiology. *Journal of Personality and Social Psychology*, 74(3), 686-703.
- Lancaster, G., Rollinson, L., & Hill, J. (2007). The measurement of a major childhood risk for depression: Comparison of the parental bonding instrument (PBI) 'parental care' and the childhood experience of care and abuse (CECA) 'parental neglect.'. *Journal of affective disorders*, *101*(1-3), 263-267.
- Langlois, J. H., & Downs, A. C. (1980). Mothers, fathers, and peers as socialization agents of sex-typed play behaviors in young children. *Child Development*, *51*, 1237-1247.
- Lansford, J. E., Dodge, K. A., Pettit, G. S., Bates, J. E., Crozier, J., & Kaplow, J. (2002).

  A 12-year prospective study of the long-term effects of early child physical maltreatment on psychological, behavioral, and academic problems in adolescence. *Archives of Pediatrics & Adolescent Medicine*, 156, 824–830.
- Lengua, L. J., & Kovacs, E. A. (2005). Bidirectional associations between temperament and parenting and the prediction of adjustment problems in middle childhood. *Journal of Applied Developmental Psychology*, 26(1), 21-38.
- Letourneau, C. (1981). Empathy and stress: How they affect parental aggression. *Social Work*, 26(5), 383-389.
- Levy, K. N. (2005). The implications of attachment theory and research for understanding borderline personality disorder. *Development and Psychopathology*, *17*, 959-986.

- Lyons-Ruth, K., & Spielman, E. (2004). Disorganized infant attachment strategies and helpless-fearful profiles of parenting: Integrating attachment research with clinical intervention. *Infant Mental Health Journal. Special Issue: The Added Value of Attachment Theory and Research for Clinical Work, 25*(4), 318-335.
- Maccoby, E. E. (2007). Historical overview of socialization research and theory. In J. Grusec & P. Hastings (Eds.), *Handbook of socialization* (pp. 13–41). New York: Guilford.
- Maughan, A. & Cicchetti, D. (2002). Impact of child maltreatment and interadult violence on children's emotion regulation abilities and socioemotional adjustment. *Child Development*, 73(5), 1525-1542.
- McGee, R. A., Wolfe, D. A., Yuen, S. A., & Wilson, S. K. (1995). The measurement of maltreatment: A comparison of approaches. *Child Abuse & Neglect*, *19*(2), 233-249.
- Mehrabian, A. (1997). Relations among personality scales of aggression, violence, and empathy: Validational evidence bearing on the risk of eruptive violence scale.

  \*Aggressive Behavior, 23, 433-445.
- Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality*, 40, 525-543.
- Meyer, C., & Gillings, K. (2004). Parental bonding and bulimic psychopathology: The mediating role of mistrust/abuse beliefs. *International Journal of Eating Disorders*, 35(2), 229-233.
- Miklowitz, D. J. (2007). The role of the family in the course and treatment of bipolar disorder. *Current Directions in Psychological Science*, *16*(4), 192-196.

- Miller, P. A., & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological bulletin*, *103*(3), 324-344.
- Milner, J.S. (1986). *The Child Abuse Potential Inventory Manual* (2<sup>nd</sup> ed.). DeKalb, IL: Psytec.
- Milner, J. S. (1994). Assessing physical child abuse risk: The child abuse potential inventory. Clinical psychology review, *14*(6), 547-583.
- Milner, J. S., Gold, R. G., Ayoub, C., & Jacewitz, M. M. (1984). Predictive validity of the Child Abuse Potential Inventory. *Journal of Consulting and Clinical Psychology*, 52(5), 879-884.
- Milner, J.S., Halsey, L.B., & Fultz, J. (1995). Empathic responsiveness and affective reactivity to infant stimuli in high- and low-risk for physical child abuse mothers. *Child Abuse & Neglect*, *19*(6), 767-780.
- Milner, J. S. & Wimberley, R. C. (1980). Prediction and explanation of child abuse. *Journal of Clinical Psychology*, *36*, 875-884.
- Minuchin, S. (1974). Families & family therapy. Oxford, England: Harvard U. Press.
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development*, 16(2), 361-388.
- Murphy, E., Brewin, C. R. & Silka, L. (1997). The assessment of parenting using the Parental Bonding Instrument: two or three factors. *Psychological Medicine*, *27*, 333-342.
- Nagashima, C. K. (2008). Building theory on adolescent aggression toward parents: Do neuropsychological factors and symptom patterns matter? Unpublished master's

- thesis, the Pennsylvania State University, University Park, Pennsylvania, United States.
- Nomellini, S., & Katz, R. C. (1983). Effects of anger control training on abusive parents.

  Cognitive Therapy and Research, 7(1), 57-68.
- Novaco, R. W. (1978). Anger and coping with stress. In J. P. Forey & D. P. Rathjen (Eds.), *Cognitive behavior therapy* (pp. 121-139). New York: Plenum.
- Olds, D., Henderson, C., Eckenrode, J., Petit, L., Kitzman, J., Cole, R. et al. (1998).

  Reducing risks for antisocial behavior with a program of prenatal and early childhood visitation. *Journal of Community Psychology*, *26*, 65-83.
- Olsen, N. (2000). *Emotional neglect, inequity, and relational anger*. Unpublished master's thesis, The Pennsylvania State University, State College, PA
- Olson, D. H., Sprenkle, D. H., & Russell, C. S. (1979). Circumplex model of marital and family systems: I. Cohesion and adaptability dimensions, family types, and clinical applications. *Family Process*, *18*(1), 3-28.
- Parke, R. D., & Collmer, C. W. (1975). Child abuse: An interdisciplinary analysis. In E.
  M. Hetherington (Ed.), *Review of child development research* (Vol. 5, pp. 509-590). Chicago: University of Chicago Press.
- Parker, G. (1983). Parental Overprotection: A Risk Factor in Psychosocial Development.

  New York: Grune & Stratton, Inc.
- Parker, G., Tupling, H., & Brown, L. B. (1979). A parental bonding instrument. *British Journal of Medical Psychology*, 52(1), 1-10.
- Perez-Albeniz, A., & de Paul, J. (2003). Dispositional empathy in high- and low-risk parents for child physical abuse. *Child Abuse & Neglect*, *27*(7), 769-780.

- Plantes, M.M., Prusoff, B.A., Brennan, J., and Parker, G. (1988). Parental representations of depressed outpatients from a U.S.A. sample. *Journal of Affective Disorders*, 15, 149–155.
- Prescott, A., Bank, L., Reid, J. B., Knutson, J. F., Burraston, B. O., & Eddy, J. M. (2000).

  The veridicality of punitive childhood experiences reported by adolescents and young adults. *Child Abuse & Neglect*, *24*(3), 411-423.
- Rausch, K., & Knutson, J. F. (1991). The self-report of personal punitive childhood experiences and those of siblings. *Child Abuse & Neglect*, *15*(1-2), 29-36.
- Rogosch, F. A., & Cicchetti, D. (2005). Child maltreatment, attention networks, and potential precursors to borderline personality disorder. *Development and Psychopathology*, *17*(4), 1071-1089.
- Rothbart, M.K., & Bates, J.E. (2006). Temperament. In W. Damon, R. Lerner, & N. Eisenberg (Eds.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (6th ed., pp. 99–166). New York: Wiley.
- Rudy, D. & Grusec, J. E. (2006). Social cognitive approaches to parenting representations. In O. Mayseless (Ed.), *Parenting Representations: Theory, Research, and Clinical Implications*. (pp. 79-106). New York, NY: Cambridge University Press.
- Salzinger, S., Kaplan, S., & Artemyeff, C. (1983). Mothers' personal social networks and child maltreatment. *Journal of Abnormal Psychology*, 92(1), 68-76.
- Sanders, M. R. (1999). Triple P-positive parenting program. *Clinical Child and Family Psychology Review*, 2, 71-90.

- Sattler, J. M. (2001). *Assessment of Children: Cognitive Applications* (4<sup>th</sup> ed.). La Mesa: Jerome M. Sattler.
- Schneider, M., & Robin, A. L. (1978). *Manual for the Turtle Technique*. Unpublished manual, Department of Psychology, State University of New York at Stony Brook.
- Sebald, H. (1976). Momism: The Silent Disease of America. Chicago, IL: Nelson Hall.
- Serbin, L., & Karp, J. (2003). Intergenerational studies of parenting and the transfer of risk from parent to child. *Current Directions in Psychological Science*, 12(4), 138-142.
- Shipman, K. L., & Zeman, J. (2001). Socialization of children's emotion regulation in mother-child dyads: A developmental psychopathology perspective. *Development and Psychopathology*, *13*, 317-336.
- Skowron, E. A., & Friedlander, M. L. (1998). The differentiation of self inventory:

  Development and initial validation. *Journal of Counseling Psychology*, 45(3), 235-246.
- Skowron, E. A., & Platt, L. F. (2005). Differentiation of self and child abuse potential in young adulthood. *Family Journal: Counseling and Therapy for Couples and Families*, 13(3), 281-290.
- Skowron, E. A., & Schmitt, T. A. (2003). Assessing interpersonal fusion: Reliability and validity of a new DSI fusion with others subscale. *Journal of Marital & Family Therapy*, 29(2), 209-222.
- Siegelman, M. (1966). Loving and punishing parental behavior and introversion tendencies in sons. *Child Development*, *37*(4), 985-992.

- Silk, J. S., Shaw, D. S., Skuban, E. M., Oland, A. A., & Kovacs, M. (2006). Emotion regulation strategies in offspring of childhood-onset depressed mothers. *Journal* of Child Psychology and Psychiatry, 47(1), 69-78.
- Silvern, L., Karyl, J., Waelde, L., Hodges, W. F., Starek, J., Heidt, E., & Min, K. (1995).

  Retrospective reports of parental partner abuse: Relationships to depression, trauma symptoms, and self-esteem among college students. *Journal of Family Violence*, 10(2), 177-202.
- Siqueland, L., Kendall, P. C., & Steinberg, L. (1996). Anxiety in children: Perceived family environments and observed family interaction. *Journal of Clinical Child Psychology*, 25(2), 225-237.
- Soenens, B., Duriez, B., Vansteenkiste, M., & Goossens, L. (2007). The intergenerational transmission of empathy-related responding in adolescence: The role of maternal support. *Personality and Social Psychology Bulletin*, *33*(3), 299-311.
- Spinetta, J. J., & Rigler, D. (1972). The child-abusing parent: A psychological review. *Psychological Bulletin*, 77(4), 296-304.
- Steinberg, L. (1988). Reciprocal relation between parent-child distance and pubertal maturation. *Developmental Psychology*, *24*(1), 122-128.
- Stevenson, J. (1999). The treatment of the long-term sequelae of child abuse. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 40*(1), 89-111.
- Thompson, R. A. (1991). Emotional regulation and emotional development. *Educational Psychology Review*, *3*(4), 269-307.

- Titelman, P. (2003). Emotional cutoff in Bowen family systems theory: An overview. In P. Titelman (Ed.), *Emotional cutoff: Bowen family systems theory perspectives*. (pp. 9-66). New York, NY, US: Haworth Press.
- Toth, S. L., Rogosch, F. A., Manly, J. T., & Cicchetti, D. (2006). The efficacy of toddler-parent psychotherapy to reorganize attachment in the young offspring of mothers with Major Depressive Disorder: A randomized preventive trial. *Journal of Consulting and Clinical Psychology*, 74(6), 1006-1016.
- Trickett, P. K., & Kuczynski, L. (1986). Children's misbehaviors and parental discipline strategies in abusive and nonabusive families. *Developmental psychology*, 22(1), 115-123.
- Trickett, P. K., & McBridge-Chang, C. (1995). The developmental impact of different forms of child abuse and neglect. *Developmental Review*, *15*(3), 311-337.
- Tronick, E. Z. (1989). Emotions and emotional communication in infants. *American Psychologist. Special Issue: Children and their development: Knowledge base, research agenda, and social policy application, 44*(2), 112-119.
- Twentyman, C. T, Plotkin, R., Dodge, D., & Rohrbeck, C. A. (1981, November).

  Inappropriate expectations of parents who maltreat their children. Paper presented at the 15th Annual Convention of the Association for the Advancement of Behavior Therapy, Toronto, Ontario, Canada.
- U.S. Department of Health and Human Services. (2007). *Child Maltreatment 2005*.Administration on Children, Youth, and Families. Washington, D.C.: U.S.Government Printing Office.

- Valiente, C., Eisenberg, N., Fabes, R. A., Shepard, S. A., Cumberland, A., & Losoya, S.
  H. (2004). Prediction of children's empathy-related responding from their effortful control and parents' expressivity. *Developmental Psychology*, 40(6), 911-926.
- Watts-English, T., Fortson, B. L., Gibler, N., Hooper, S. R., & De Bellis, M. D. (2006).

  The psychobiology of maltreatment in childhood. *Journal of Social Issues*, 62(4), 717-736.
- Weinberger, D. A., Schwartz, G. E., & Davidson, R. J. (1979). Low-anxious, high-anxious, and repressive coping styles: Psychometric patterns and behavioral and physiological responses to stress. *Journal of Abnormal Psychology*, 88(4), 369-380.
- Whitaker, D. J., Lutzker, J. R., & Shelley, G. A. (2005). Child maltreatment prevention priorities at the Centers for Disease Control and Prevention. *Child Maltreatment*, 10(3), 245-259.
- Wiehe, V. R. (2003). Empathy and narcissism in a sample of child abuse perpetrators and a comparison sample of foster parents. *Child Abuse & Neglect*, *27*(5), 541-555.
- Willinger, U., Heiden, A. M., Meszaros, K., Formann, A. K., & Aschauer, H. N. (2002).
  Maternal bonding behaviour in schizophrenia and schizoaffective disorder,
  considering premorbid personality traits. *Australian and New Zealand Journal of Psychiatry*, 36(5), 663-668.
- Wind, T. W., & Silvern, L. (1992). Type and extent of child abuse as predictors of adult functioning. *Journal of Family Violence*, 7(4), 261-281.

- Wiseman, H., Mayseless, O., & Sharabany, R. (2006). Why are they lonely? perceived quality of early relationships with parents, attachment, personality predispositions and loneliness in first-year university students. *Personality and Individual Differences*, 40(2), 237-248.
- Wood, J. M. (1997). Risk predictors for re-abuse or re-neglect in a predominantly Hispanic population. *Child Abuse & Neglect*, *21*(4), 379-389.
- Wood, J. J., McLeod, B. D., Sigman, M., Hwang, W., & Chu, B. C. (2003). Parenting and childhood anxiety: Theory, empirical findings, and future directions. *Journal of Child Psychology and Psychiatry*, 44(1), 134-151.
- Zeanah, C. H., Boris, N. W., Heller, S. S., & Hinshaw-Fuselier, S. (1997). Relationship assessment in infant mental health. *Infant Mental Health Journal*, 18(2), 182-197.
- Zhou, Q., Eisenberg, N., Losoya, S. H., Fabes, R. A., Reiser, M., & Guthrie, I. K. et al. (2002). The relations of parental warmth and positive expressiveness to children's empathy-related responding and social functioning: A longitudinal study. *Child Development*, 73(3), 893-915.
- Zweig-Frank, H., & Paris, J. (1991). Parents' emotional neglect and overprotection according to the recollections of patients with borderline personality disorder.

  \*American Journal of Psychiatry, 148(5), 648-651.

# Appendix A

#### BACKGROUND INFORMATION FORM

Age
Sex: Male (0) Female (1)
Relationship status: Single (0) Married (1) Separated (2) Divorced (3) Other:
Education (Last grade completed):
Race/ethnicity (check all that apply): Caucasian (0) African-American (1) Hispanic (2) Asian-American (3) Native American (4) Other (5)
Are both your parents alive? Yes (1)No (0)  If no, who is not?
How old were you when they died?
Parents' current marital status: Single (0) Married (1) Separated (2) Divorced (3) Remarried (4) Other:
If divorced or separated, how long ago was the separation?
If parents are remarried, how many times?
Do you have contact with your parents? Both (0) Mother only (1) Father only (2) Neither (3)
Mother's education level (last grade completed): Age:
Father's education level (last grade completed): Age:
Family annual income:
Which parent were you closest to as a child?
Which parent did you spend the most time with as a child?
Which parent was the most influential to you as you were growing up?
How many siblings do you have?
What is your birth order?
Have you ever been in any kind of psychological counseling? Yes (1) No (0)

#### Appendix B

#### Parent Opinion Questionnaire

INSTRUCTIONS: The following questionnaire includes a series of statements that have to do with parents and children. Read each of the statements and determine if you AGREE or DISAGREE with the statement. If you agree with a statement, circle A for agree. If you disagree with a statement, circle DA for disagree. Remember to read each statement; it is important not to skip any statement.

1. 2.	In most cases, a 6 year old can get up, wash, dress, and go to school unassisted		
3.	at a corner store		
4.	drinking and smoking		
5.	keep them in	A A	DA DA
6.	It's good for a parent to set a 4 year old on the toilet for an hour after the child messed up his pants	٨	DA
7.	In most cases, a 12 year old would not be able to stay at home alone for even a few hours without getting into trouble.		
8.	A 9 year old should usually be able to get himself and brothers and sisters off to school, keep rooms in order, and prepare coffee for his or her parents		
9. 10.	It's natural for a parent to be upset if a child breaks something expensive		
10.	get him or herself off to school.	A	DA
11. 12.	A 15 year old should be expected to help "patch up" his or her parents' marital problems  Usually, a 2 year old can sit and play quietly alone in a room for several hours		
13.	It's fine to go shopping and leave the children with a babysitter to supervise		
14.	I don't think older children should ever do household chores		
15.	A 3-4 year old can be expected to behave and not cry when mother is upset		
16.	There is nothing wrong in punishing a nine month old child for crying too much		
17.	A 1 year old usually can feed him or herself.		
18. 19.	It's not a good idea to take away a privilege because it can be bad for children		
20	and sisters.	Α	DA
20.	It is alright for a parent to ask a 13 year old to stay home from school in order to help a grandparent even if this happens somewhat frequently	A	DA
21. 22.	A 7 year old is old enough to set his or her own curfew and meal times	A	DA
22.	stay out of the way at these times	Α	DA
23.	A 9 year old child would probably be saddened by a death in the immediate family		
24.	It's usually a good idea to physically punish a 6 year old with a belt for acting out on the school bus because the child will learn how to behave next time		
25.	Children ages 8-10 are usually old enough to wash their own clothes and also earn money		
26.	for most of their personal supplies.  An 8 year old probably can get a 2 year old brother dressed and off to day care before going to	А	DΑ
۷٥.	school	A	DA

27.	It's OK to punish a child once in a while if he really misbehaves	A	DA
28.	A 13 year old should be expected to stay home and rarely go out with friends in order		
	to keep a parent company if the parent is feeling down about things	Α	DA
29.	A 6 year old is probably old enough to be able to use a stove without parental supervision		
30.	Most often a 3 year old will know how to play quietly for longer periods of time when	11	Dii
50.	his or her mother is not feeling well.	٨	DΛ
	ins of the mother is not reening wen	A	DA
2.1	A 16 command is not all assemble to do his on how area larged.		DA
31.	A 16 year old is not old enough to do his or her own laundry	А	DA
32.	When a 4 year old rudely grabs something that belongs to his or her mother,		
	it is probably a good lesson for the child if the mother bends back the child's thumb		
33.	A 2 year old child can be expected to toilet train him or herself with little help from parents	A	DA
34.	Parents should have older children participate in household chores	A	DA
35.	Parents can expect even a child as young as 2 ½ to be able to comfort them when		
	they are sad and crying.	A	DA
2.6			Б.
36.	Generally 10:00 pm is not too late for a 7 year old to remain outside in the neighborhood		
37.	A 13 year old is not old enough to go to the corner store and buy groceries	A	DA
38.	Talking in front of children (5 to 7 years old) about problems in the family is OK		
	because they can't understand	Α	DA
39.	When a 2 year old bites his or her mother, it's all right for the mother to bite the child back		
	to teach the child that biting mother isn't allowed	A	DA
40.	A 5 year old can be expected to help by feeding, dressing, and changing diapers		
	for an infant.	Α	DA
41.	If an infant or young child sucked his thumb a lot, and kept doing this even when told not to,		
	it would be good to spank him once to teach him to stop.	Α	DA
42.	Even a 3 month old would miss a brother or sister if they were separated		
43.	I think the sign of a good parent is approving of everything a child does.		
44.	If a parent had to work nights, older children (8 to 10) would take the responsibility	Л	DΛ
44.		٨	DA
4.5		А	DA
45.	Most 12 year olds are old enough to be able to listen to their mother's problems and		
	give advice	A	DA
46.	A 6 year old should be expected to keep his or her room clean and pick up toys after playing	Α	DA
47.	A 2 year old can sometimes take a bath without the parent being in the room		
48.	Generally, it's a good idea to physically punish (slapping the hand, etc.) a 2 year old	11	DI
40.		٨	DA
40		А	DA
49.	A 2 to 3 year old boy can be expected to "act like a little man," that is, not cry when		ъ.
	his mother leaves home to go shopping.		
50.	A 12 year old can take a bath without help.	A	DA
51.	It's OK to leave a 3 year old, who is soundly sleeping in a bed, alone in the house or		
51.	apartment while the parent walks a friend to the corner bus stop	٨	DΛ
52.			
	It won't hurt a 10 year old to stay home from school occasionally when a parent feels sad or ill	А	DA
53.	School age children can stay home on weekdays sometimes in order to clean house and		ъ.
	do the laundry		
54.	A 3 year old can usually be expected to button shirts and tie shoe laces		
55.	I don't think kids should ever get punished	A	DA
56.	If a 6 year old disobeys, it's all right to occasionally use a stick to physically punish him or her	٨	D٨
57.	Even small infants have mean tempers and disobey when mad		
58.	It's not fine for a 15 year old to take a bus without parental supervision.		
59.	A 12 year old can be expected to get up, pick out his or her clothes, and get to school		
60.	Generally, it would be all right to leave kids alone for a few days if they are as old as 12 or 13	Α	DA
61.	Parents can expect infants to always show them love and affection.	A	DA
			~ 1 1

62.	Occasionally, even a 10 year old should be expected to do his or her part for the family	
	by staying home from school to help run a business like a family store	DA
63.	It's a good idea to take away children's privileges if they misbehave	DA
64.	A 1 year old can usually feed him or herself without spilling food	
65.	If a young child continues to disobey, it is the parent's right to sternly use a belt for discipline A	
66.	A parent should not be upset if a child breaks something expensive, because it's normal	
	for children to do things like that	DA
67.	Generally, one could expect a 4 year old to understand why his or her brother, who suffered	
	a birth defect, gets extra love and attention	DA
68.	It's all right for a parent to leave a 6 year old alone for the day if taking time off from work	
	would be very costly	DA
69.	Even preschool kids have feelings	
70.	It's probably not too much to expect a 4 year old to behave in front of others so not to	
	embarrass the parent	DA
71.	Parents do not need to approve of everything a child does	DA
72.	A 7 year old is old enough to be expected to do the laundry for the family	DA
73.	A young child (7 years old) will not be bothered much by moving 3-4 times a year A	DA
74.	A parent can expect a young child (3 to 4) to know enough to behave in a supermarket	
	so that the parent won't look foolish in front of others	DA
75.	If a child is misbehaving, it's appropriate for a parent to physically punish the child	
	with a board or stick	DA
76.	A 5 year old should be mature enough not to be bothered when he or she doesn't get candy	
	or praise from his/her parents	
77.	It's all right to leave an 8 month old infant on a bed or couch for a while	DA
78.	In most cases a 10 year old can be expected to care for an elderly grandparent, which	
	includes giving pills each day	DA
79.	A 15 year old is not old enough to help with the cooking	DA
80.	A 2 year old can be expected to go to his or her room and get dressed when told	DA

### Appendix C

# RELATIONSHIP WITH PARENTS SCALE (RPSF/RPSM)

The following questions concern your relationship with each of your parents when you were a child and adolescent. Using the scale that follows, circle the number which best answers each question.

	1	2	. 3	4				5	
Stre	ongly	Somewhat	Uncertain	Somewhat			Str	ong	ly.
disa	igree	disagree		agree			a	gree	:
	en I was y								
	-	r seemed overwhelm			Ţ	2	3	4	5
	-	r seemed overwhelm		th a family.	1	2	3	4	5
	-	r relied on me to tell			1	2	3	4	5
	_	r relied on me for ad			1	2	3	4	5
5)		r didn't think I loved			1	2	3	4	5
		r expected me to tak			1	2	3	4	5
7)		l about leaving my fa		with friends.	1 .	2	3	4	5
8)		r was jealous when l			1	2	3	4	5
		r depended on me fo		t.	1	2	3	4	5
		protect my father fr			1	2	3	4	5
11)	I felt resp	ponsible for how my	father felt.		1	2	3	4	5
12)	if I hurt n	nyself, I worried mo	re about my father	's reaction than					
	about mys	self,			1	2	3	4	. 5
13)	my father	confided in me mor	re than he did in ar	nyone else.	1.	2	3	4	5
14)	my father	kept me up at night	when he wanted o	company or					
		meone to talk to.			1	2	3	4	5
15)	my father	expected me to kee	p him company.		1	2	3.	4	5
16)	my father	acted more my age	than his.		1	2	3	4	5
17)	my father	enjoyed my friends	more than his own	n.	1	2	3	4	5
18)	I was ofte	n preoccupied with	understanding my	father's moods.	1	2	3	4	5
19)	my father	expected me to kno	w what he was fee	ling.	1	2	3	4	5
20)	I knew wi	hat my father wante	d better than he die	l himself.	1	2	3	4	5
21)	I seemed	to be able to read m	y father's mind.		1	2	3	4	5

Whe	en I was young,					
1)	my mother seemed overwhelmed with taking care of the house.	1.	2	3	4	5
2)	my mother seemed overwhelmed with dealing with a family.	1	2	3	4	5
3)	my mother relied on me to tell her what to do.	1	2	3	4	5
4)	my mother relied on me for advice.	1	2	3	4	5
5)	my mother didn't think I loved her enough.	1	2	3	4	5
6)	my mother expected me to take her side in an argument.	1	2	3	4	5
7)	I felt bad about leaving my mother to go and play with friends.	1	2	3	4	5
8)	my mother was jealous when I began to date.	1	2	3	4	5
9)	my mother depended on me for emotional support.	1	2	3	4	5
10)	I tried to protect my mother from my father.	1	2	3	4	5
11)	I felt responsible for how my mother felt.	1	2	3	4	5
12)	if I hurt myself, I worried more about my mother's reaction					
	than about myself.	1	2	3	4	5
13)	my mother confided in me more than she did in anyone else.	1	2	3	4	5
14)	my mother kept me up at night when she wanted company or					
	needed someone to talk to.	1	2	3	4	5
15)	my mother expected me to keep her company.	1	2	. 3	4	5
16)	my mother acted more my age than hers.	1	2	3	4	5
17)	my mother enjoyed my friends more than her own.	1	2	3	4	5
18)	I was often preoccupied with understanding my mother's					
	moods.	1	2	3	4	5
19)	my mother expected me to know what she was feeling.	1	2	3	4	5
	I knew what my mother wanted better than she did herself.	1	2	3	4	5
21)	I seemed to be able to read my mother's mind.	1	2	3	4	5

Source: Alexander (2003), Appendix 1.

#### Appendix D

#### AE-III-A

This is a questionnaire about your childhood environment. Most of the questions refer to experiences that occurred during your childhood (before age 18, or before you left your parents' house — whichever came first), in particular involving your mother/step-mother and father/step-father. Many of the questions refer to your perception of events or people so they have no right or wrong answers. Please answer the questions as accurately and honestly as you can, but bear in mind that some of the questions ask for your opinion as opposed to fact. Remember, your answers to this questionnaire are anonymous and confidential.

Use the following guide when responding to each statement:

1	2	3	4
NEVER	RARELY	OCCASIONALLY	FREQUENTLY
or	or	or	or
Strongly	Moderately	Moderately	Strongly
Disagree	Disagree	Agree	Agree

1	My family often did things together.
2	I shared a lot of activities with my mother.
3	When I was a child, if my mother had a problem, she would talk to me about it.
4	My mother was too strict with me.
5	My mother used physical discipline with me.
6	My mother used to hug me when I was a child.
7	My mother used to give me piggyback rides when I was small.
8	My mother expected more from me than I was capable of doing.
9	I required medical attention for injuries caused by my mother.
	At night, our family did things together such as playing cards or a game,
10	working on a project together, etc.
	My mother was inconsistent in her discipline of me. I did not know whether or
11	not I would be punished for a particular behavior.
12	My mother did a good job of raising me.
13	My mother used to spank me.
14	My mother used to kiss me when I was a child.
15	My mother used to hold me on her lap.
	My mother used to hit on me with something other than her hands when I did
16	something wrong.
17	My mother used harsh discipline with me between the ages of five and ten.
18	When I was a child, my mother often found time to play with me.

19	My mother was very harsh with me.
	When I was a young child, my mother used to leave me (and my young brothers
20	and sisters) alone when she went out.
	When my mother was angry, she sometimes grabbed me by the throat and
21	started to choke me.
22	I never felt that my mother really loved me.
23	My mother's use of discipline was very reasonable.
24	I would describe my relationship with my mother as very close.
25	My mother was a very strict disciplinarian.
26	I received injuries from the discipline used by my mother.
27	Our family almost always ate supper together.
28	My mother took me along with her to visit friends or relatives.
29	I was punished when I was a child.
30	My mother used to punch me when she got angry with me.
31	My mother would complain to me about my father.
	My mother attempted to obtain information from me about schoolwork, friends,
32	activities in a genuinely caring manner.
33	My mother used to hit me with her hands (other than spanking).
34	I felt rejected by my mother.
35	My parents were always very supportive of me.
36	My mother used harsh discipline with me before the age of five.
37	My parents seemed to agree on when I needed to be disciplined.
38	I was rejected by my mother when I was a child.
39	My mother was competent in managing day-to-day child care activities.
40	When I did something wrong, my mother sometimes tied me up.
41	I was mistreated by my mother.
42	My mother used harsh discipline with me during adolescence.
	My mother touched me with warmth, caring, and affection. Her touches were
43	soothing and relaxing to me.
44	My mother would completely ignore me at times.
	My mother communicated her feelings and thoughts to me in a non-threatening
45	way.
46	My mother yelled at me.
47	My mother smiled at me with warmth, caring, and affection.
48	My mother insulted me.
49	Our family got along very well.
50	I was severely beaten by my mother.
51	My mother ridiculed and humiliated me.
52	My mother respected my opinions and encouraged me to express them.
53	My mother embarrassed me in front of others.
54	My mother was easy going and relaxed with me, yet interested and committed to

	my welfare and development.
55	When I was bad, my mother used to lock me in a closet.
56	My mother was unresponsive to me.
57	My mother really did not take care of me.
58	I got along pretty well with my mother.
	My mother threatened me and told me I would get into trouble if I did
59	something wrong.
60	My mother encouraged me to talk about my problems.
	My mother seemed to demand a lot of emotional support from me when I was a
61	child.
62	My mother seemed to interact with me only when it was necessary.
63	When I was a young child, my mother provided consistent supervision for me.
64	My mother used harsh discipline with me.
65	As a child, I could rely on my mother to meet my needs.
	My mother was inconsistent in her responsiveness to me (i.e., sometimes she
66	would listen to me and other times she would not).
	My mother seemed uninterested and bored when I talked to her or asked her
67	questions.
68	We had lots of arguments in our family.
69	I did not feel safe around my mother.
70	My family was pretty easy going.
	My parents used to call me bad names and/or they used to insult me, tell me I
71	was a bad child, and so forth.
72	My mother used to kick me when she got angry with me.
73	My mother criticized me.
74	I have very few quarrels with members of my family.
75	My mother was accessible and was available to me (i.e., she was there for me).

1	My family often did things together.
2	I shared a lot of activities with my father.
3	When I was a child, if my father had a problem, he would talk to me about it.
4	My father was too strict with me.
5	My father used physical discipline with me.
6	My father used to hug me when I was a child.
7	My father used to give me piggyback rides when I was small.
8	My father expected more from me than I was capable of doing.
9	I required medical attention for injuries caused by my father.
	At night, our family did things together such as playing cards or a game, working
10	on a project together, etc.
	My father was inconsistent in his discipline of me. I did not know whether or not
11	I would be punished for a particular behavior.

12	My father did a good job of raising me.
13	My father used to spank me.
14	My father used to kiss me when I was a child.
15	My father used to hold me on his lap.
	My father used to hit on me with something other than his hands when I did
16	something wrong.
17	My father used harsh discipline with me between the ages of five and ten.
18	When I was a child, my father often found time to play with me.
19	My father was very harsh with me.
	When I was a young child, my father used to leave me (and my young brothers
20	and sisters) alone when he went out.
	When my father was angry, he sometimes grabbed me by the throat and started
21	to choke me.
22	I never felt that my father really loved me.
23	My father's use of discipline was very reasonable.
24	I would describe my relationship with my father as very close.
25	My father was a very strict disciplinarian.
26	I received injuries from the discipline used by my father.
27	Our family almost always ate supper together.
28	My father took me along with him to visit friends or relatives.
29	I was punished when I was a child.
30	My father used to punch me when he got angry with me.
31	My father would complain to me about my father.
	My father attempted to obtain information from me about schoolwork, friends,
32	activities in a genuinely caring manner.
33	My father used to hit me with his hands (other than spanking).
34	I felt rejected by my father.
35	My parents were always very supportive of me.
36	My father used harsh discipline with me before the age of five.
37	My parents seemed to agree on when I needed to be disciplined.
38	I was rejected by my father when I was a child.
39	My father was competent in managing day-to-day child care activities.
40	When I did something wrong, my father sometimes tied me up.
41	I was mistreated by my father.
42	My father used harsh discipline with me during adolescence.
	My father touched me with warmth, caring, and affection. His touches were
43	soothing and relaxing to me.
44	My father would completely ignore me at times.
	My father communicated his feelings and thoughts to me in a non-threatening
45	way.
46	My father yelled at me.

47	My father smiled at me with warmth, caring, and affection.
48	My father insulted me.
49	Our family got along very well.
50	I was severely beaten by my father.
51	My father ridiculed and humiliated me.
52	My father respected my opinions and encouraged me to express them.
53	My father embarrassed me in front of others.
54	My father was easy going and relaxed with me, yet interested and committed to my welfare and development.
55	When I was bad, my father used to lock me in a closet.
56	My father was unresponsive to me.
57	My father really did not take care of me.
58	I got along pretty well with my father.
	My father threatened me and told me I would get into trouble if I did something
59	wrong.
60	My father encouraged me to talk about my problems.
	My father seemed to demand a lot of emotional support from me when I was a
61	child.
62	My father seemed to interact with me only when it was necessary.
63	When I was a young child, my father provided consistent supervision for me.
64	My father used harsh discipline with me.
65	As a child, I could rely on my father to meet my needs.
66	My father was inconsistent in her responsiveness to me (i.e., sometimes he would listen to me and other times he would not).
00	My father seemed uninterested and bored when I talked to him or asked him
67	questions.
68	We had lots of arguments in our family.
69	I did not feel safe around my father.
70	My family was pretty easy going.
	My parents used to call me bad names and/or they used to insult me, tell me I
71	was a bad child, and so forth.
72	My father used to kick me when he got angry with me.
73	My father criticized me.
74	I have very few quarrels with members of my family.
75	My father was accessible and was available to me (i.e., he was there for me).

# Appendix E

# Subscales of the AE-III-A Measuring High Emotional Distance

# Parental Rejection Subscale

6*	My mother used to hug me when I was a child.
	My mother was inconsistent in her discipline of me. I did not know whether or
11	not I would be punished for a particular behavior.
14*	My mother used to kiss me when I was a child.
15*	My mother used to hold me on her lap.
22	I never felt that my mother really loved me.
34	I felt rejected by my mother.
38	I was rejected by my mother when I was a child.

### Non-Responsiveness Subscale

	My mother attempted to obtain information from me about schoolwork, friends,
32*	activities in a genuinely caring manner.
	My mother touched me with warmth, caring, and affection. Her touches were
43*	soothing and relaxing to me.
44	My mother would completely ignore me at times.
47*	My mother smiled at me with warmth, caring, and affection.
52*	My mother respected my opinions and encouraged me to express them.
56	My mother was unresponsive to me.
60*	My mother encouraged me to talk about my problems.
62	My mother seemed to interact with me only when it was necessary.
	My mother was inconsistent in her responsiveness to me (i.e., sometimes she
66	would listen to me and other times she would not).
	My mother seemed uninterested and bored when I talked to her or asked her
67	questions.
75*	My mother was accessible and was available to me (i.e., she was there for me).

<sup>\*</sup> Reverse-scored

# Appendix F

# Subscales of the AE-III-A Measuring Child Maltreatment History

# Physical Punishment Subscale

5	My mother used physical discipline with me.
9	I required medical attention for injuries caused by my mother.
13	My mother used to spank me.
	My mother used to hit on me with something other than her hands when I did
16	something wrong.
	When my mother was angry, she sometimes grabbed me by the throat and started
21	to choke me.
26	I received injuries from the discipline used by my mother.
30	My mother used to punch me when she got angry with me.
33	My mother used to hit me with her hands (other than spanking).
40	When I did something wrong, my mother sometimes tied me up.
50	I was severely beaten by my mother.
55	When I was bad, my mother used to lock me in a closet.
72	My mother used to kick me when she got angry with me.

# Neglect Subscale

18*	When I was a child, my mother often found time to play with me.
	When I was a young child, my mother used to leave me (and my young brothers
20	and sisters) alone when she went out.
39*	My mother was competent in managing day-to-day child care activities.
	My mother was easy going and relaxed with me, yet interested and committed
54*	to my welfare and development.
55	When I was bad, my mother used to lock me in a closet.
57	My mother really did not take care of me.
63*	When I was a young child, my mother provided consistent supervision for me.
65*	As a child, I could rely on my mother to meet my needs.
69	I did not feel safe around my mother.

<sup>\*</sup>Reverse-scored

### Age-Inappropriate Demands Subscale

3	When I was a child, if my mother had a problem, she would talk to me about it.					
8	My mother expected more from me than I was capable of doing.					
	When I was a young child, my mother used to leave me (and my young brothers					
20	and sisters) alone when she went out.					
31	My mother would complain to me about my father.					
	My mother seemed to demand a lot of emotional support from me when I was a					
61	child.					

# Perception of Discipline Subscale

4	My mother was too strict with me.
12*	My mother did a good job of raising me.
17	My mother used harsh discipline with me between the ages of five and ten.
19	My mother was very harsh with me.
23*	My mother's use of discipline was very reasonable.
25	My mother was a very strict disciplinarian.
29	I was punished when I was a child.
36	My mother used harsh discipline with me before the age of five.
37*	My parents seemed to agree on when I needed to be disciplined.
41	I was mistreated by my mother.
42	My mother used harsh discipline with me during adolescence.
64	My mother used harsh discipline with me.

### Negative Family Atmosphere Subscale

27*	Our family almost always ate supper together.
35*	My parents were always very supportive of me.
49*	Our family got along very well.
58*	I got along pretty well with my mother.
68	We had lots of arguments in our family.
70*	My family was pretty easy going.
	My parents used to call me bad names and/or they used to insult me, tell me I
71	was a bad child, and so forth.
74*	I have very few quarrels with members of my family.

<sup>\*</sup>Reverse-scored

# Verbal Abuse Subscale

	My mother communicated her feelings and thoughts to me in a non-
45*	threatening way.
46	My mother yelled at me.
48	My mother insulted me.
51	My mother ridiculed and humiliated me.
53	My mother embarrassed me in front of others.
	My mother threatened me and told me I would get into trouble if I did
59	something wrong.
73	My mother criticized me.

<sup>\*</sup>Reverse-scored

### Appendix G

#### PBI

This questionnaire lists various attitudes and behaviors of parents. As you remember your mother your first 16 years would you place a tick in the most appropriate brackets next to each question.

		Very like	Moderately like	Moderately unlike	Very unlike
1.	Spoke to me with a warm and friendly voice	( )	( )	( )	( )
2.	Did not help me as much as I needed	(	( )	( )	( )
3.	Let me do those things I liked doing	( )	( )	( )	( )
4.	Seemed emotionally cold to me	(	( )	( )	( )
5.	Appeared to understand my problems and worries	(	( )	( )	( )
6.	Was affectionate to me	(	( )	( )	( )
7.	Liked me to make my own decisions	(	( )	( )	(
8.	Did not want me to grow up	( )	( )	( )	( )
9.	Tried to control everything I did	( )	( )	( )	( )
10.	Invaded my privacy	( )	( )	( )	( )
11.	Enjoyed talking things over with me	( )	( )	( )	( )
12.	Frequently smiled at me	( )	( )	( )	( )
13.	Tended to baby me	( )	( )	( )	( )
14.	Did not seem to understand what I needed or	( )	( )	( )	( )
	wanted				
15.	Let me decide things for myself	( )	( )	( )	( )
16.	Made me feel I wasn't wanted	( )	( )	( )	( )
17.	Could make me feel better when I was upset	( )	( )	( )	( )
18.	Did not talk with me very much	( )	( )	( )	( )
19.	Tried to make me dependent on her/him	( )	( )	( )	( )
20.	Felt I could not look after myself unless s/he was around	( )	( )	( )	( )
21.	Gave me as much freedom as I wanted	( )	( )	( )	( )
22.	Let me go out as often as I wanted	( )	( )	( )	( )
	Was overprotective of me	(	( )	( )	( )
	Did not praise me	( )	( )	( )	
25.	Let me dress in any way I pleased	( )	( )	( )	( )

As you remember your father your first 16 years would you place a tick in the most appropriate brackets next to each question.

	Very	Moderately	Moderately	Very
	like	like	unlike	unlike
26. Spoke to me with a warm and friendly voice	( )	( )	( )	( )
27. Did not help me as much as I needed	( )	( )	( )	( )
28. Let me do those things I liked doing	( )	( )	( )	( )
29. Seemed emotionally cold to me	( )	( )	( )	( )
30. Appeared to understand my problems and worries	( )	( )	( )	( )
31. Was affectionate to me	( )	( )	( )	( )
32. Liked me to make my own decisions	( )	( )	( )	( )
33. Did not want me to grow up	( )	( )	( )	( )
34. Tried to control everything I did	( )	( )	( )	( )
35. Invaded my privacy	( )	( )	( )	( )
36. Enjoyed talking things over with me	( )	( )	( )	( )
37. Frequently smiled at me	( )	( )	( )	( )
38. Tended to baby me	( )	( )	( )	( )
39. Did not seem to understand what I needed or	( )	( )	( )	( )
wanted				
40. Let me decide things for myself	( )	( )	( )	( )
41. Made me feel I wasn't wanted	( )	( )	( )	( )
42. Could make me feel better when I was upset	( )	( )	( )	( )
43. Did not talk with me very much	( )	( )	( )	( )
44. Tried to make me dependent on her/him	( )	( )	( )	( )
45. Felt I could not look after myself unless s/he was	( )	( )	( )	( )
around				
46. Gave me as much freedom as I wanted	( )	( )	( )	( )
47. Let me go out as often as I wanted	( )	( )	( )	( )
48. Was overprotective of me	( )	( )	( )	( )
49. Did not praise me		( )	( )	
50. Let me dress in any way I pleased	( )	( )	( )	( )

#### Appendix H

#### Subscale Membership of the PBI Items

#### Overprotection Subscale

- 3. Let me do those things I liked doing\*
- 7. Liked me to make my own decisions\*
- 8. Did not want me to grow up
- 9. Tried to control everything I did
- 10. Invaded my privacy
- 13. Tended to baby me
- 15. Let me decide things for myself\*
- 19. Tried to make me dependent on her/him
- 20. Felt I could not look after myself unless s/he was around
- 21. Gave me as much freedom as I wanted\*
- 22. Let me go out as often as I wanted\*
- 23. Was overprotective of me
- 25. Let me dress in any way I pleased\*

#### Care Subscale

- 1. Spoke to me with a warm and friendly voice
- 2. Did not help me as much as I needed\*
- 4. Seemed emotionally cold to me\*
- 5. Appeared to understand my problems and worries
- 6. Was affectionate to me
- 11. Enjoyed talking things over with me
- 12. Frequently smiled at me
- 14. Did not seem to understand what I needed or wanted\*
- 16. Made me feel I wasn't wanted\*
- 17. Could make me feel better when I was upset
- 18. Did not talk with me very much\*
- 24. Did not praise me\*

<sup>\*</sup> Reverse-scored

### Appendix I

#### DSI-R

These are questions concerning your thoughts and feelings about yourself and relationships with others. Please read each statement carefully and decide how much the statement is *generally true* of you on a 1 (not at all) to 6 (very) scale. If you believe that an item does not pertain to you (e.g., you are not currently married or in a committed relationship, or one or both of your parents are deceased), please answer the item according to your best guess about what your thoughts and feelings would be in that situation. Be sure to answer every item and try to be as honest and accurate as possible in your responses.

		NOT AT A	ALL				VERY TRUE OF ME
1.	People have remarked that I'm overly emotional.	1	2	3	4	5	6
2.	I have difficulty expressing my feelings to people I care for.	1	2	3	1	5	6
3.	I often feel inhibited around my family.	1	2	3	4	5	6
4.	I tend to remain pretty calm even under stress.	1	2	3	1	5	6
5.	I usually need a lot of encouragement from others when starting a big job or task.	1	2	3	1	5	6
6.	When someone close to me disappoints me, I withdraw from him/her for a time.	1	2	3	1	5	6
7.	No matter what happens in my life, I know that I'll never lose my sense of who I am.	1	2	3	4	5	6
8.	I tend to distance myself when people get too close to me.	1	2	3	4	5	6
9.	I want to live up to my parents? expectations of me.	1	2	3	4	5	6
10.	I wish that I weren't so emotional.	1	2	3	4	5	6
11.	I usually do not change my behavior simply to please another person.	1	2	3	4	5	6
12.	My spouse/partner could not tolerate it if I were to express to him/her my true feelings about some things.	1	2	3	1	5	6
13.	When my sponse/partner criticizes me, it bothers me for days.	1	2	3	1	5	6
14.	At times my feelings get the best of me and I have trouble thinking clearly.	1	2	3	4	5	6
15.	When I am having an argument with someone, I can separate my thoughts about the issue from my feelings about the person.	1	2	3	4	5	6
16.	I'm often uncomfortable when people get too close to me.	1	2	3	1	5	6
17.	I feel a need for approval from virtually everyone in my life.	1	2	3	4	5	6

		NOT AT TRUE OF ME				VERY TRUE OF MB	
18.	At times I feel as if I'm riding an emotional roller- coaster.	1	2	3	4	5	6
19.	There's no point in getting upset about things I cannot change.	1	2	3	4	5	6
20.	I'm concerned about losing my independence in intimate relationships.	1	2	3	4	5	6
21.	I'm overly sensitive to criticism.	1	2	3	4	5	6
22.	I try to live up to my parents' expectations.	1	2	3	4	5	6
23.	I'm fairly self-accepting.	1	2	3	4	5	6
21.	I often feel that my spouse/partner wants too much from me.	1	2	3	4	5	6
25.	I often agree with others just to appease them.	1	2	3	4	5	6
26.	If I have had an argument with my spouse/partner, I tend to think about it all day.	1	2	3	4	5	6
27.	I am able to say "no" to others even when I feel pressured by them.	1	2	3	4	5	6
28.	When one of my relationships becomes very intense, I feel the urge to run away from it.	1	2	3	4	5	6
29.	Arguments with my parent(s) or sibling(s) can still make me feel awful.	1	2	3	4	5	6
30.	If someone is upset with me, I can't seem to let it go easily.	1	2	3	4	5	6
31.	I'm less concerned that others approve of me than I am in doing what I think is right.	1	2	3	4	5	6
32.	I would never consider turning to any of my family members for emotional support.	1	2	3	4	5	6
33.	I often feel unsure when others are not around to help me make a decision.	1	2	3	4	5	6
34.	I'm very sensitive to being hurt by others.	1	2	3	4	5	6
35.	My self-esteem really depends on how others think of me.	1	2	3	4	5	6
36.	When I'm with my spouse/partner, I often feel smothered.	1	2	3	4	5	6
37.	When making decisions, I seldom worry about what others will think.	1	2	3	4	5	6
38	Loften wonder about the kind of impression Lereate	1	?	3	4	ñ	6

		NOT AT TRUE OF ME				VERY TRUE OF ME	
39.	When things go wrong, talking about them usually makes it worse.	1	2	3	4	5	6
40.	I feel things more intensely than others do.	1	2	3	4	5	6
41.	I usually do what I believe is right regardless of what others say.	1	2	3	4	5	6
42.	Our relationship might be better if my spouse/partner would give me the space I need.	1	2	3	4	5	6
43.	I tend to feel pretty stable under stress	1	2	3	4	5	6
44.	Sometimes I feel sick after arguing with my spouse/partner.	1	2	3	4	5	6
45.	I feel it's important to hear my parents' opinions before making decisions.	1	2	3	4	5	6
46.	I worry about people close to me getting sick, hurt, or upset.	1	2	3	4	5	6

## Appendix J

## Emotional Reactivity Subscale of the DSI-R

- 1. People have remarked that I'm overly emotional.
- 6. When someone close to me disappoints me, I withdraw from him/her for a time.
- 10. I wish that I weren't so emotional.
- 14. At times my feelings get the best of me and I have trouble thinking clearly.
- 18. At times I feel as if I'm riding an emotional rollercoaster.
- 21. I'm overly sensitive to criticism.
- 26. If I have had an argument with my spouse/partner, I tend to think about it all day.
- 30. If someone is upset with me, I can't seem to let it go easily.
- 34. I'm very sensitive to being hurt by others.
- 38. I often wonder about the kind of impression I create.
- 40. I feel things more intensely than others do.

### Appendix K

#### HES - M

Please answer the following questions by indicating whether they are generally true or false:

- 1. I easily become impatient with people. T F
- 2. I am not easily angered. T
- 3. I am usually short-tempered with people who come around and bother me with foolish questions. T F
- 4. People have often misunderstood my intentions when I was trying to put them right and be helpful. T
- 5. I must admit I often try to get my own way regardless of what others may want. T
- 6. I like to talk before groups of people. T
- 7. I think I am usually a leader in my group. T
- 8. I usually don't like to talk much unless I am with people I know well. T
- 9. I am a good mixer. T
- 10. I usually take an active part in the entertainment at parties. T
- 11. I have a natural talent for influencing people. T
- 12. It is the duty of a citizen to support his country, right or wrong. T
- 13. Disobedience to the government is never justified. T
- 14. People today have forgotten how to feel properly ashamed of themselves. T
- 15. I feel sure there is only one true religion. T
- 16. I don't like to work on a problem unless there is the possibility of coming out with a clear-cut and unambiguous answer. T F

# Appendix L

# QMEE

	1	Very Strong Disagre		ıt					S	Very trong eement
1.	It makes me sad to see a lonely stranger in a group		-3		-1	0	1	2	3	4
2.	People make too much of the feelings and sensitivity of animals.	-4	-3	-2	-1	0	1	2	3	4
3.	I often find public displays of affection annoying	g -4	-3	-2	-1	0	1	2	3	4
4.	I am annoyed by unhappy people who are just sorry for themselves	-4	-3	-2	-1	0	1	2	3	4
5.	I become nervous if others around me seem to b nervous	e -4	-3	-2	-1	0	1	2	3	4
6.	I find it silly for people to cry out of happiness	-4	-3	-2	-1	0	1	2	3	4
7.	I tend to get emotionally involved with a friend' problems	s -4	-3	-2	-1	0	1	2	3	4
8.	Sometimes the words of a love song can move me deeply	-4	-3	-2	-1	0	1	2	3	4
9.	I tend to lose control when I am bringing bad news to people	-4	-3	-2	-1	0	1	2	3	4
10.	The people around me have a great influence on my moods	-4	-3	-2	-1	0	1	2	3	4
11.	Most foreigners I have met seemed cool and unemotional	-4	-3	-2	-1	0	1	2	3	4
12.	I would rather be a social worker than work in a job training program	-4	-3	-2	-1	0	1	2	3	4
13.	I don't get upset just because a friend is getting upset	-4	-3	-2	-1	0	1	2	3	4
14.	I like to watch people open presents	-4	-3	-2	-1	0	1	2	3	4
15.	Lonely people are probably unfriendly	-4	-3	-2	-1	0	1	2	3	4
16.	Seeing people cry upsets me	-4	-3	-2	-1	0	1	2	3	4

17.	Some songs make me happy		Very Stron sagre -4	g		-1	0	1	aş 2	Ver Stro green 3	ng
18.	I really get involved with the feelings of the character in a novel		-4	-3	-2	-1	0	1	2	3	4
19.	I get very angry when I see someone being ill-treated		-4	-3	-2	-1	0	1	2	3	4
20.	I am able to remain calm even though those around me worry		-4	-3	-2	-1	0	1	2	3	4
21.	When a friend starts to talk about his problems, try to steer the conversation to something else	, I	-4	-3	-2	-1	0	1	2	3	4
22.	Another's laughter is not catching for me		-4	-3	-2	-1	0	1	2	3	4
23.	Sometimes at the movies I am amused by the amount of crying and sniffling around me		-4	-3	-2	-1	0	1	2	3	4
24.	I am able to make decisions without being influenced by people's feelings		-4	-3	-2	-1	0	1	2	3	4
25.	I cannot continue to feel OK if people around n are depressed	ne	-4	-3	-2	-1	0	1	2	3	4
26.	It is hard for me to see how some things upset people so much		-4	-3	-2	-1	0	1	2	3	4
27.	I am very upset when I see an animal in pain		-4	-3	-2	-1	0	1	2	3	4
28.	Becoming involved in books or movies is a little silly	le	-4	-3	-2	-1	0	1	2	3	4
29.	It upsets me to see helpless old people		-4	-3	-2	-1	0	1	2	3	4
30.	I become more irritated than sympathetic when see someone's tears	I	-4	-3	-2	-1	0	1	2	3	4
31.	I become very involved when I watch a movie		-4	-3	-2	-1	0	1	2	3	4
32.	I often find that I can remain cool in spite of life excitement around me	e	-4	-3	-2	-1	0	1	2	3	4
33.	Little children sometimes cry for no apparent reason		-4	-3	-2	-1	0	1	2	3	4

Demographic Characteristics of Sample Excluding Individuals with Invalid CAPI Scores

Appendix M

Variable	Male (N = 62)	Female (N = 93)
_	Mean (SD)	Mean (SD)
<u>-</u>	. ,	. ,
Age <sup>1</sup>	19.53 (1.39)	19.06 (1.18)
Education (in years) <sup>2</sup>	12.49 (0.99)	12.34 (0.69)
Mother		
$Age^3$	49.30 (4.34)	48.66 (4.78)
Education (in years) <sup>4</sup>	14.53 (2.75)	14.93 (2.55)
Father		
$Age^5$	51.63 (6.43)	50.97 (6.12)
Education (in years) <sup>6</sup>	14.90 (2.93)	14.55 (2.54)
Family Income <sup>7</sup>	131,480 (98,857)	131,083 (134,562)
	Count (Column %)	Count (Column %)
Race <sup>8</sup>		
Caucasian	58 (95.1%)	73 (79.3%)
African-American	0	4 (4.3%)
Hispanic	1 (1.6%)	5 (5.4%)
Asian-American	1 (1.6%)	8 (8.7%)
Native American	0	1 (1.1%)
Other	1 (1.6%)	1 (1.1%)
Parent Marital Status <sup>9</sup>		
Single	1 (1.6%)	1 (1.1%)
Married	51 (82.3%)	69 (74.2%)
Separated	2 (3.2%)	4 (4.3%)
Divorced	6 (9.7%)	13 (14.0%)
Remarried	1 (1.6%)	4 (4.3%)
Other	1 (1.6%)	2 (2.2%)

 $<sup>{}^{1}</sup>F(1, 153) = 5.08, p < .05.$   ${}^{2}F(1, 146) = 1.25, p = ns.$   ${}^{3}F(1, 151) = 0.69, p = ns.$   ${}^{4}F(1, 141) = 0.81, p = ns.$   ${}^{5}F(1, 149) = 0.41, p = ns.$   ${}^{6}F(1, 139) = 0.55, p = ns.$   ${}^{7}F(1, 114) = 0.00, p = ns.$   ${}^{8}\chi^{2}(5, N = 153) = 8.91, p = ns.$   ${}^{9}\chi^{2}(5, N = 155) = 1.96, p = ns.$ 

Table 1 Comparison of Demographic Variables, by Gender

Variable	Male (N = 92)	Female (N = 116)
	Mean (SD)	Mean (SD)
$Age^1$	19.38 (1.62)	19.11 (1.13)
Education (in years) <sup>2</sup>	12.47 (0.89)	12.37 (0.70)
Mother	, ,	,
$Age^3$	49.26 (4.71)	48.74 (4.61)
Education (in years) <sup>4</sup>	14.41 (2.62)	14.60 (2.48)
Father		,
$Age^5$	51.31 (6.27)	50.97 (5.95)
Education (in years) <sup>6</sup>	15.09 (4.71)	14.42 (2.58)
Family Income <sup>7</sup>	119,605 (93,720)	127,512 (123,647)
	Count (Column %)	Count (Column %)
Race <sup>8</sup>		
Caucasian	84 (92.3%)	93 (80.9%)
African-American	2 (2.2%)	4 (3.5%)
Hispanic	1 (1.1%)	6 (5.2%)
Asian-American	2 (2.2%)	9 (7.8%)
Native American	0	2 (1.7%)
Other	2 (2.2%)	1 (0.9%)
Parent Marital Status <sup>9</sup>		
Single	2 (2.2%)	1 (0.9%)
Married	76 (82.6%)	86 (74.1%)
Separated	3 (3.3%)	5 (4.3%)
Divorced	9 (9.8%)	17 (14.7%)
Remarried	1 (1.1%)	5 (4.3%)
Other	1 (1.1%)	2 (1.7%)

<sup>&</sup>lt;sup>1</sup> F(1, 206) = 1.97, p = ns.<sup>2</sup> F(1, 197) = 0.77, p = ns.<sup>3</sup> F(1, 203) = 0.65, p = ns.<sup>4</sup> F(1, 191) = 0.27, p = ns.<sup>5</sup> F(1, 199) = 0.16, p = ns.<sup>6</sup> F(1, 189) = 1.61, p = ns.<sup>7</sup> F(1, 154) = 0.20, p = ns.<sup>8</sup>  $\chi^2(5, N = 206) = 8.81, p = ns.$ <sup>9</sup>  $\chi^2(5, N = 208) = 4.20, p = ns.$ 

Table 2 Means and Standard Deviations of the Study Variables

Variable	Ger	nder	- Full Sample	
variable	Male	Female	run Sample	
Overprotection (PBI) <sup>1</sup>	27.58 (6.03)	27.26 (6.47)	27.39 (6.27)	
Role Reversal (RPSM) <sup>2</sup>	39.68 (14.79)	39.29 (16.25)	39.45 (15.60)	
Lack of Care (PBI) <sup>3</sup>	18.82 (5.81)	18.69 (6.82)	18.75 (6.39)	
High Emotional Distance (AE-III) <sup>4</sup>	29.23 (9.38)	27.07 (9.51)	27.99 (9.49)	
CAPI Abuse Score <sup>5</sup>	106.74 (90.63)	128.32 (93.87)	118.79 (92.85)	
Unrealistic Expectations (POQ) <sup>6</sup>	10.89 (10.50)	5.91 (5.26)	8.04 (8.29)	
Empathy (HES-M) <sup>7</sup>	9.49 (2.91)	10.00 (3.12)	9.78 (3.04)	
Empathy (QMEE) <sup>8</sup>	16.46 (21.49)	39.61 (23.44)	29.32 (25.31)	
Emotional Reactivity (DSI) <sup>9</sup>	2.98 (0.85)	3.71 (1.01)	3.39 (1.01)	
Affective Dysregulation (IASC) <sup>10</sup>	17.21 (7.20)	20.34 (7.49)	19.00 (7.51)	
Maltreatment History <sup>11</sup>	83.24 (25.55)	79.41 (25.13)	81.09 (25.32)	

 $<sup>{}^{1}</sup>F(1, 193) = 0.12, p = ns.$   ${}^{2}F(1, 185) = 0.03, p = ns.$   ${}^{3}F(1, 193) = 0.02, p = ns.$   ${}^{4}F(1, 173) = 2.23, p = ns.$   ${}^{5}F(1, 204) = 2.80, p = ns.$   ${}^{6}F(1, 176) = 17.19, p < .001.$   ${}^{7}F(1, 196) = 1.35, p = ns.$   ${}^{8}F(1, 178) = 46.66, p < .001.$   ${}^{9}F(1, 200) = 30.12, p < .001.$   ${}^{10}F(1, 194) = 8.64, p < .01.$   ${}^{11}F(1, 192) = 1.09, p = ns.$ 

Table 3

Intercorrelations Between Study Variables for the Full Sample

Variable	1	2	3	4	5	9	7	8	6	10	11
1. Overprotection (PBI)		.29**	.43**	.39**	.32**	.26**	26**	17*	.19**	.19**	.37**
2. Role Reversal (RPSM)			.45**	.43**	.46**	.29**	20**	07	.37**	.46**	.42*
3. Lack of Care (PBI)				.81**	.48**	.39**	22**	14	.15*	.29**	**89.
4. High Emotional Distance (AE-III)				I	**54.	.46**	32**	34**	.10	.31**	.83**
5. CAPI Abuse Score						.48*	46**	.07	.57**	.72**	.39**
<ul><li>6. Unrealistic Expectations</li><li>(POQ)</li></ul>							25**	28**	08	.19*	.37**
7. Empathy (HES-M)								.17*	34**	34**	23**
8. Empathy (QMEE)								1	.37**	.12	23**
9. Emotional Reactivity (DSI)									1	.64**	41.
10. Affective Dysregulation (IASC)										I	.35**
11. Maltreatment History (AE-III)											
**************************************											

\* p < .05; \*\* p < .01.

Table 4

Intercorrelations Between Study Variables for Male Participants

Variable	1	2	3	4	5	9	7	8	6	10	11
1. Overprotection (PBI)		.21	.32**	.26*	.27*	.30*	18	17	.20	.15	.28*
2. Role Reversal (RPSM)			.53**	.38**	** **	.27*	16	08	.37**	.49**	.45**
3. Lack of Care (PBI)				**08	**89	.55**	30**	05	.13	.49**	**59.
4. High Emotional Distance (AE-III)					.53**	.56**	34**	27*	.03	**74.	**85.
5. CAPI Abuse Score						**02.	42**	.01	.43**	**0L	.49**
<ul><li>6. Unrealistic Expectations (POQ)</li></ul>						I	25*	20	.01	.39**	**77.
7. Empathy (HES-M)								.18	24*	28**	23*
8. Empathy (QMEE)									.29**	11.	20
9. Emotional Reactivity (DSI)										.53**	.16
10. Affective Dysregulation (IASC)											**95
11. Maltreatment History (AE-III)											
* $p < .05$ ; ** $p < .01$ .											

Table 5

Intercorrelations Between Study Variables for Female Participants

Variable	-	2	3	4	S	9	7	∞	6	10	11
1. Overprotection (PBI)		.34**	**05"	.48**	.36**	.28**	31**	15	.23*	.23*	.43**
2. Role Reversal (RPSM)			.40**	.46**	.48**	.39**	24*	90	.42*	.45**	.40**
3. Lack of Care (PBI)				.82**	.36**	.31**	18	19	.17	.18	.72**
4. High Emotional Distance (AE-III)					.42* **	.37**	29**	36**	.24*	.25*	.83**
5. CAPI Abuse Score						.35**	52**	90.	**19	.73**	.33**
6. Unrealistic Expectations (POQ)							25*	13	.07	.13	.28**
7. Empathy (HES-M)								.10	49**	42**	23*
8. Empathy (QMEE)									.22*	00	22*
9. Emotional Reactivity (DSI)									1	**19	.19*
10. Affective Dysregulation (IASC)											.23*
11. Maltreatment History (AE-III)											
$* n < 05 \cdot ** n < 01$											

<sup>\*</sup> p < .05; \*\* p < .01.

Table 6  $Summary\ of\ Hierarchical\ Regression\ Analysis\ for\ Low\ Emotional\ Distance\ Predicting\ Child\ Abuse\ Potential\ (N=136)$ 

Variable	В	SE B	β
Step 1			
Gender	45.50	14.50	.26**
Step 2			
Gender	45.60	13.31	.26**
Overprotection (PBI)	2.02	1.05	.15
Role Reversal (RPSM)	1.96	.46	.34**

*Note.*  $R^2 = .07$  for Step 1;  $\Delta R^2 = .16$  for Step 2 (p < .001).

<sup>\*\*</sup> *p* < .01.

Table 7  $Summary\ of\ Hierarchical\ Regression\ Analysis\ for\ Low\ Emotional\ Distance\ Predicting\ Unrealistic\ Expectations\ (N=162)$ 

Variable	В	SE B	β
Step 1			
Gender	-5.34	1.26	32**
Step 2			
Gender	-5.18	1.19	31**
Overprotection (PBI)	.25	.10	.19*
Role Reversal (RPSM)	.12	.04	.22**

*Note.*  $R^2 = .10$  for Step 1;  $\Delta R^2 = .11$  for Step 2 (p < .001).

<sup>\*</sup> *p* < .05. \*\* *p* < .01.

Table 8  $Summary\ of\ Hierarchical\ Regression\ Analysis\ for\ High\ Emotional\ Distance\ Predicting\ Child\ Abuse\ Potential\ (N=144)$ 

Variable	В	SE B	β
Step 1			
Gender	36.38	14.23	.21*
Step 2			
Gender	32.24	13.16	.19*
Lack of care (PBI)	6.18	1.22	.39**

*Note.*  $R^2 = .04$  for Step 1;  $\Delta R^2 = .15$  for Step 2 (p < .001).

<sup>\*</sup> *p* < .05. \*\* *p* < .01.

Table 9  $Summary\ of\ Hierarchical\ Regression\ Analysis\ for\ High\ Emotional\ Distance\ Predicting\ Unrealistic\ Expectations\ (N=170)$ 

Variable	В	SE B	β
Step 1			
Gender	-5.21	1.23	31**
Step 2			
Gender	-5.24	1.12	31**
Lack of care (PBI)	.52	.09	.39**

*Note.*  $R^2 = .10$  for Step 1;  $\Delta R^2 = .15$  for Step 2 (p < .001).

<sup>\*\*</sup> *p* < .01.

Table 10  $Summary\ of\ Hierarchical\ Regression\ Analysis\ for\ Maltreatment\ History\ and\ Extreme\ Emotional\ Distance\ Predicting\ Child\ Abuse\ Potential\ (N=143)$ 

Variable	В	SE B	β
Step 1			
Gender	41.51	14.18	.24**
Step 2			
Gender	40.75	13.66	.24**
Maltreatment History	1.08	.31	.27**
Step 3			
Gender	40.54	13.51	.23**
Maltreatment History	.69	.37	.17
Extreme Emotional Distance	32.02	15.85	.19*

*Note.*  $R^2 = .06$  for Step 1;  $\Delta R^2 = .07$  for Step 2 (p < .01);  $\Delta R^2 = .03$  for Step 3 (p < .05).

<sup>\*</sup> *p* < .05. \*\* *p* < .01.

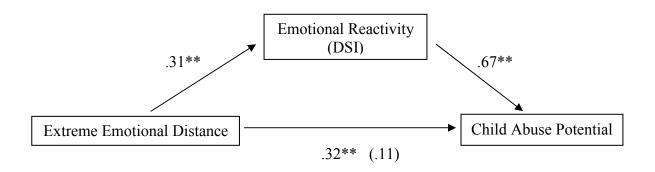
Table 11 Summary of Hierarchical Regression Analysis for Maltreatment History and Extreme Emotional Distance Predicting Unrealistic Expectations (N = 171)

Variable	В	SE B	β
Step 1			
Gender	-5.09	1.24	30**
Step 2			
Gender	-4.69	1.16	28**
Maltreatment History	.12	.02	.36**
Step 3			
Gender	-4.77	1.15	28**
Maltreatment History	.09	.03	.26**
Extreme Emotional Distance	2.83	1.44	.17

Note.  $R^2 = .09$  for Step 1;  $\Delta R^2 = .13$  for Step 2 (p < .001);  $\Delta R^2 = .02$  for Step 3 (p < .10). \*\* p < .01.

Figure 1

Mediation of the Relationship Between Extreme Emotional Distance and Child Abuse Potential by Emotional Reactivity, as Measured by the DSI (N = 142)

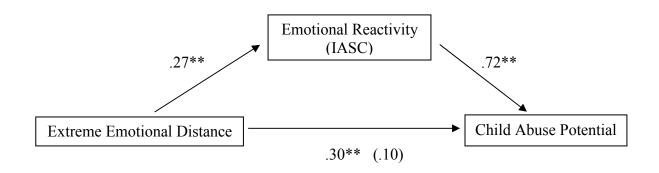


*Note.* Values represent standardized coefficients. Parentheses indicate the effect of Extreme Emotional Distance on Child Abuse Potential, after controlling for the mediator.

\*\* *p* < .01.

Figure 2

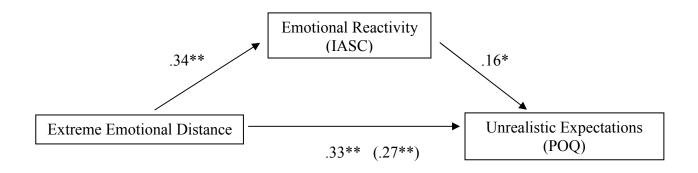
Mediation of the Relationship Between Extreme Emotional Distance and Child Abuse Potential by Emotional Reactivity, as Measured by the IASC (N = 149)



*Note.* Values represent standardized coefficients. Parentheses indicate the effect of Extreme Emotional Distance on Child Abuse Potential, after controlling for the mediator.

\*\* *p* < .01.

Figure 3  $\begin{tabular}{ll} Mediation of the Relationship Between Extreme Emotional Distance and Unrealistic Expectations by Emotional Reactivity, as Measured by the IASC (N = 173) \\ \end{tabular}$ 



*Note.* Values represent standardized coefficients. Parentheses indicate the effect of Extreme Emotional Distance on Unrealistic Expectations, after controlling for the mediator.

\* *p* < .05. \*\* *p* < .01.