# When Do We See Resilience: The Effects of Parent's History of Maltreatment on Parenting Behaviors and Children's Adjustment

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Keywords: parenting behaviors, childhood maltreatment, child maladjustment, intergenerational transmission

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### **Abstract**

Prior research has suggested that children are at a greater risk of maladjustment in cases where a parent has experienced childhood maltreatment. The purpose of this study is to explore the role of parent's childhood maltreatment in its effects on parenting behavior, parent characteristics, and child adjustment. The multiple pathways through which parent's childhood maltreatment can be both directly and indirectly linked to child maladjustment were explored. Further, risk and protective factors, such as early age of becoming a parent or high parent education, which may play a role were examined as both potential moderators and mediators of the relation between parent's childhood maltreatment and children's maladjustment. Overall, several of the hypothesized pathways were supported. In particular, parent depression and parent's sociodemographic factors were found to act as mediators and moderators of the relations between parent's childhood maltreatment and child maladjustment. There was lesser evidence of child maltreatment behaviors and parenting behaviors mediating or moderating the relations between parent's childhood maltreatment and child maladjustment. Recommendations for future research directions as well as directions for intervention and prevention efforts for at-risk families and children will be suggested.

Keywords: parenting behaviors, childhood maltreatment, child maladjustment, intergenerational transmission

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### 1.0 – Introduction

Decades of research have alluded to the negative effects of a parent's childhood maltreatment on their parenting behaviors and potential for child abuse. This relation has often been referred to as the "cycle of abuse hypothesis" (Kaufman & Zigler, 1986; Widom, 1989b). Research has also indicated that there is a strong relation between parenting behaviors and subsequent child adjustment and psychopathology (Ezzell, Swenson, & Brondino, 2000; Huth-Bocks & Hughes, 2008; Low & Stocker, 2005; Papp, Cummings, & Goeke-Morey, 2005; Toth, Cicchetti, & Kim, 2002). However, less is known about the exact pathways by which parent's childhood maltreatment may affect child adjustment or maladjustment either directly or through mechanisms such as the parent's adjustment and characteristics, the parenting behaviors, or the parent's abuse potential.

In order to gain a better understanding of the ways that parent's childhood maltreatment can both affect parents and their children through parenting behaviors and parent characteristics, it is essential that these relations be explored in a model which integrates what have often been separate lines of inquiry. While there has been a great deal of research on the effects of child maltreatment extending into adulthood, as well as research on how parenting behavior affects children, there is little research which explores the impact of parent's childhood maltreatment on parenting behaviors and subsequent child adjustment. Research such as this lends to a better understanding of risk and resilience in children, as well as in parents, and can aid in the development of intervention and prevention programs for at-risk families. In the current study the relations between parent's childhood maltreatment, parenting behaviors, parent characteristics following parent's childhood maltreatment (e.g., parent psychopathology, perceived social support, and perceived stress), child maltreatment, and child maladjustment will be examined to further understand those factors that act as protective or risk factors in the intergenerational transmission of maltreatment, both directly and indirectly.

An ecological-transactional analysis of the effects of parent's childhood maltreatment will be used throughout this study. The ecological-transactional model strives to understand the ways that a variety of nested ecological levels which vary in their proximity to the individual interact and transact to shape an individual's development. These transactions occur between

individuals and the various nested levels as well as between each of the levels over time, thereby creating potentials for adaptation and change (Cicchetti & Lynch, 1993; Lynch & Cicchetti, 1998).

I will briefly overview these levels of analysis as they are essential to understanding the context of both the parents and children at risk for maladjustment due to parent's childhood maltreatment. The macrosystem level includes cultural beliefs and values whereas the exosystem involves the neighborhood and community setting of the family. These two levels are minimally explored in the current study but include the socio-economic status of the family (e.g., income and education). The microsystem consists of the family environment of the parent and child (e.g. various aspects of the parent-child relationship), and finally, the ontogenic development level involves the individual and their own developmental adaptations. The microsystem level of the family and the ontogenic development of both the parent and child will be the primary focus of this study. Ontogenic development is essential to understanding how individuals interact with and shape their own environmental context. Parents and children interact with their environment and each other which creates potentials for continuity and discontinuity in development of at-risk families over time and across generations.

First, I will address some of the definitional issues prevalent in this area of inquiry. Continuity and discontinuity in at-risk families refers to those groups which are continuous (i.e. when those who were maltreated as children in turn maltreat their own children) and those who are discontinuous (i.e. those who were maltreated but have broken the maltreatment cycle) (Egeland, 1988; Egeland & Susman-Stillman, 1996). The idea of discontinuity and continuity will be used throughout this study as it fits within an overall model of risk and resilience. For the purposes of this paper, continuity will refer to those families from maltreatment backgrounds who continue to have negative effects of maltreatment in their own adulthood, parenting behaviors, and children's maladjustment (i.e. when the parent's childhood maltreatment continues to exert a negative effect) whereas discontinuity will refer to those families in which parent's childhood maltreatment does not have a negative effect on their parenting behaviors or their children's adjustment. Further, discontinuity and continuity address the importance of understanding those situations where parents show resilience which may inform prevention and intervention efforts just as well if not better than those cases where parents are not resilient

following childhood maltreatment. In other words, studying resilient parents can offer valuable insight into those factors that promote healthy adjustment following childhood maltreatment whereas researching those parents who are not resilient may yield information specific to those factors that increase risk. A full picture of both risk and protective factors is essential to prevention and intervention.

Many past research studies have solely addressed the intergenerational transmission of violence, or the idea that abused parents are in turn abusive to their own children (Ertem, Leventhal, & Dobbs, 2000; Kaufman & Zigler, 1987; Widom 1989a, 1989b). While this aspect will be addressed and is an integral component of the overall effects of parent's childhood maltreatment on children's adjustment, it is still but one piece of a much larger picture. It is also useful to understand that intergenerational transmission can extend beyond violence to also include overall parenting behaviors, i.e. parenting in one generation predicting parenting in a subsequent generation (Belsky, Conger, & Capaldi, 2009; Conger, Belsky, & Capaldi, 2009, Rutter, 1989). Therefore, other important factors within intergenerational transmission include parent's childhood maltreatment such as physical, emotional, or sexual abuse or neglect. Child maladjustment will focus on internalizing and externalizing behaviors. Finally, risk and protective factors will be examined throughout our analysis of the effects of parent's childhood maltreatment within an ecological-transactional model. Risk factors are those that increase the risk of a maladaptive outcome whereas protective factors decrease the risk for negative outcomes (Belsky, 1993).

The goals of this study are to the address the overall effects of parent's childhood maltreatment on parent characteristics, parenting behaviors, child maltreatment, and child maladjustment. I will examine the ways that parent's childhood maltreatment may affect each of these directly as well as the ways that it may affect child maladjustment indirectly (i.e. through parent characteristics, parenting behaviors, and child maltreatment). These pathways will be examined as both potential mediators and moderators of the relation between parent's childhood maltreatment and child maladjustment. This study attempts to clarify the mechanisms through which various parenting behaviors and parent characteristics are involved in the link between parent's childhood maltreatment and child maladjustment.

### 1.1 - The Effects of Parent's Childhood Maltreatment on Child Adjustment

There is some evidence that parent's childhood maltreatment may be positively related to child maladjustment, including internalizing and externalizing behaviors, or lower self esteem in children (Dubowitz et al., 2001; Koverola et al., 2005; Morrel, Dubowitz, Kerr, & Black, 2003; Oates, Tebbutt, Swanston, Lynch, & O'Toole, 1998; Widom, 1989a/b). Parent's childhood maltreatment may affect children's adjustment both through their parenting behavior and through mechanisms such as vicarious trauma. Vicarious trauma occurs when the trauma of the parent has effects on the child, or vice versa, despite the child never having been exposed to the trauma directly. Hilarski (2004), in a review of secondary trauma and posttraumatic stress disorder (PTSD), found that youth's exposure to family member's trauma and subsequent youth trauma response were strongly related to both posttraumatic stress disorder and likelihood of substance abuse. Exposure to a parent's trauma and a parent's maladaptive responses to trauma (such as PTSD and substance abuse) can have a dramatic effect on children's and adolescents' psychological adjustment. This effect can occur even in the absence of direct child exposure to trauma. For example, if the mother was sexually assaulted this experience would likely affect her parenting behaviors and likelihood of depression, which may affect the child, even if the child had little to no knowledge of the trauma.

Maternal victimization history (victimization experienced in childhood and/or adulthood) has been associated with mothers' reports of externalizing and internalizing symptomatology among their children though maternal victimization was not related to social competence or cognitive development as reported by children (Morrel et al., 2003). It may be that parent's childhood maltreatment may be more likely to affect certain domains of child adjustment in comparison to others. Parent trauma may affect child adjustment either directly or indirectly. In a longitudinal study of mothers and children, it was found that maternal victimization history was related to child internalizing and externalizing behavior problems and a lack of socialization skills. Further, child behavior problems persisted from age 4 to 8 years and maternal depression was found to act as a mediator of these relations (Koverola et al., 2005). Similarly, in a study of mothers and their 6-7 year-old children, mothers victimized during both childhood and adulthood had harsher parenting practices and their children showed higher externalizing and internalizing behavior problems than those cases where mothers were not victimized or were victimized only in childhood or adulthood (Dubowitz et al., 2001).

Some previous research suggested that parent's childhood maltreatment can negatively affect children's adjustment (Hilarski, 2004; Morrel et al., 2003). Pathways through which these negative effects can occur include mechanisms such as children's exposure to parent's childhood maltreatment and maltreatment response, parental substance abuse, parental depression, and other negative effects of childhood maltreatment on parents at the ontogenic level of development as well as on parenting behaviors and the parent-child relationship, i.e. the microsystem (Dubowitz et al., 2001; Hilarski, 2004). The current study plans to further explore the potentially far-reaching effects of parent's childhood maltreatment, extending to parenting behavior and child outcomes, specifically externalizing and internalizing problems.

In order to develop a better understanding of child adjustment in at-risk families, the effects of parent's childhood maltreatment on parenting behaviors and parents' well-being should be understood both in a context of their individual characteristics (e.g., self esteem and perceived stress) as well as in how they relate to parenting behaviors (e.g. harsh parenting and parental monitoring) and the parent-child relationship quality (e.g. parent-child warmth and negativity). Whereas children's exposure to trauma may be related to parent's trauma history and parenting behaviors, it is also likely the case that parenting behaviors play an important role in children's exposure to trauma and their adjustment, with or without the child being directly exposed to the trauma such as in those cases of vicarious trauma.

Child development and adjustment must be understood within the child's overall ecological context, including their parent-child relationship, exposure to trauma or vicarious trauma, and familial risk factors (Appleyard, Egeland, van Dulmen, & Sroufe, 2005). In assessing adolescent adjustment it is essential that adjustment be understood within a framework of development which occurs across the life of the individual and within a series of nested contexts, including one of the most prevalent influences, that of the parent-child relationship. Trauma may affect children's outcomes differently depending on whether the trauma involves direct abuse or neglect or increased familial risk factors such as low income or family and parental crises (e.g., death in the family).

Positive parenting may play a protective role in children's adjustment, particularly in the presence of traumatic experiences or vicarious trauma. In a study of youths ages 11-12 years, good perceived parenting, including appropriate discipline, control, and affective involvement, was found to act as a protective factor in children's psychological adjustment by reducing their

vulnerability to traumatic events (Punamaki, Quota, & Sarraj, 1997). When the impact of traumatic events was evident in children in the absence of positive parenting practices, children exhibited decreased intellectual and creative resources as well as increased psychological adjustment problems. Such findings indicate that positive parenting may potentially play a protective role in children's resources and adjustment. Similarly, Toth and associates (2002) found that perceptions of mothers by maltreated children acted as a mediator of the relation between maltreatment and internalizing/externalizing behavior problems, with positive perceptions of mothers' parenting behaviors being related to lower behavior problems.

It is still unclear which parenting behaviors are playing a role as mediator or moderators, and through what mechanisms, in the relationship between parent stress or parent's childhood maltreatment and child adjustment. In a study of battered women and their 4-12 year old children, Huth-Bocks and Hughes (2008) found that parenting stress directly affected children's behavioral and emotional problems but found no evidence that parenting behaviors (including permissiveness and irritability) acted as a mediating factor in the relation between parenting stress and child maladjustment. In addition, this study showed no mediated relationship between parenting trauma and child adjustment through parenting behaviors which may be due to the types of parenting behaviors that were examined. It may be that certain parenting behaviors, such as parent-child negativity, parental support, parent-child relationship quality, and monitoring are related to children's adjustment, whereas others such as permissiveness and irritability are not strongly associated with child adjustment. In a study of physically abused children, ages 6-14, perceived parental support was found to be significantly negatively associated with children's reported depression (Ezzell et al., 2000). In addition, Low and Stocker (2005) found a relation between both mothers' and fathers' parent-child hostility and their 10-year old children's internalizing problems in a non-maltreated sample. However, no relation with child externalizing problems was indicated.

Certain parenting behaviors have also been found to act as mediators of the relationship between parent characteristics and child outcomes. In a study of families with children ages 8-16 years, parental acceptance acted as a mediator between parental distress and child psychopathology but no association was found when using firm parental control as a mediator (Papp et al., 2005). The non-significant findings of Huth-Bocks and Hughes (2008) in relating the parenting behaviors of permissiveness and irritability to child adjustment illustrates the importance of

exploring diverse parenting behaviors when studying the relation between parenting behaviors and child adjustment as opposed to studying exclusively a certain aspect of parenting behaviors. In general, prior investigations highlight the role parenting behaviors may play both in directly influencing child adjustment and psychopathology as well as in mediating the relation between parent characteristics (such as trauma history and depression) and child outcomes.

Prior research has indicated that parent's trauma was mainly related to child adjustment indirectly through factors such as parenting behaviors or maternal depression (Hilarski, 2004; Dubowitz et al., 2001). For example, sexually abused mothers have higher rates of permissive parenting (Ruscio, 2001). Additionally, parent's childhood maltreatment has been related to higher verbal and physical abuse for mothers (Ferrari, 2002); poorer parenting (including lower acceptance and higher rejection) for mothers, and rejecting parenting practices for fathers (Newcomb & Locke, 2001). These findings suggest parents are influenced by their own experiences and, particularly in cases where parents do not recover following childhood maltreatment; this experience is likely to affect their parenting behaviors. It may be that the association between parent's childhood maltreatment and child symptomatology occurs primarily through other factors such as those mentioned earlier (i.e. parent characteristics, other parenting behaviors, or parent overall trauma type). The current study examines these indirect pathways as well as the ways that parenting behaviors influence child adjustment in the presence of increased familial risk, i.e. parent's childhood maltreatment.

### 1.2 - The Effects of Parent's Childhood Maltreatment on Child Maltreatment

The term intergenerational maltreatment pertains to the concept that there may be an intergenerational cycle of maltreatment wherein a parent's own childhood maltreatment may lead to the subsequent abuse of their own children. In other words, some research has shown that maltreatment may be present in new generations if it was present in the parent's childhood, especially in cases where the parent did not show positive adjustment following the trauma (Egeland, Jacobvitz, & Sroufe, 1988; Newcomb & Locke, 2001; Pears & Capaldi, 2001; Zuravin, McMillen, DePanfilis, & Risley-Curtiss, 1996). Other studies have shown a higher likelihood of abuse potential in parents or adults who have experienced childhood maltreatment (Cohen, Hien, & Batchelder, 2008; DiLillo, Tremblay, & Peterson, 2000).

Research findings on the intergenerational transmission of maltreatment are quite mixed and inconclusive as to whether intergenerational transmission does or does not occur. It seems evident from prior research that the transmission of trauma from parent to child is a complex pathway which does not necessarily occur, i.e. in some cases parent's childhood maltreatment does not lead to increased risk of child maltreatment. In the cases where intergenerational transmission of maltreatment does occur, it is frequently influenced by other protective and risk factors in the family environment (Belsky, Youngblade, & Pensky, 1989; Caliso & Milner, 1992; Coohey & Braun, 1997; Hilarski, 2004; Ferrari, 2002; Newcomb & Locke, 2001). Several early studies overstated the presence of intergenerational transmission of maltreatment, some even going so far as to state that it happens in a majority of cases, or even all cases of child maltreatment (Steele & Pollock, 1968). However, it is now acknowledged that the intergenerational transmission of maltreatment does not necessarily occur (Belsky, 1993; Dixon, Browne, & Hamilton-Giachritsis, 2009; Egeland, 1991; Ertem et al., 2000; Widom 1989a/b; Zigler & Hall, 1989). Studies to date on intergenerational transmission of maltreatment generally estimate a rate of transmission of around 30% (Kaufman & Zigler, 1987).

Some prior research has indicated that any type of parent maltreatment experience is predictive of the use of verbal and physical abuse (Ferrari, 2002), and neglect is related to poorer parenting (Newcomb & Locke, 2001). It has also been shown that physically abusive parents lack impulse control and are prone to overreact to stressful stimuli (Milner, 2000); which may make physically abused parents more vulnerable to poorer parenting behaviors through poor impulse control and reactions to stress. Physically abused parents may have lacked in opportunities to model positive parenting and therefore may suffer in parenting skills. The presence of intergenerational transmission of maltreatment has also been shown for parent experience of child sexual abuse (Goodwin, McCarthy, & DiVasto, 1981; Spieker, Bensley, McMahon, Fung, & Ossiander, 1996). It should be noted that majority of the studies on intergenerational transmission of maltreatment have been exclusive to physical or sexual abuse, with very little on whether this phenomenon exists for emotional abuse or neglect. One study has noted that psychologically abusive mothers were more likely to have experienced a negative childhood upbringing (Lesnik-Oberstein, Koers, & Cohen, 1995) while another has illustrated that intergenerational transmission may extend to views and practices of corporal punishment

(Muller, Hunter, & Stollak, 1995). The current study included multiple types of parent's childhood maltreatment in order to better understand how they may differentially predict maltreatment risk.

The outcome of child maltreatment is a multi-determined and complex product of several different risk and protective factors within a family including the ontogenic development of both the parent and the child as well as the parent-child relationship, or microsystem, of the family (Belsky 1980/1984, Zuravin & DiBlasio, 1992). However, the intergenerational transmission of maltreatment, and the risk and protective factors that help in determining its presence, is important to our understanding of the effects of parent's childhood maltreatment on children's psychological adjustment (Buist & Janson, 2001; Cross, 2001; Hall, Sachs, & Rayens, 1998; Paredes, Leifer, & Kilbane, 2001). This importance is made all the more evident by the vast literature illustrating the negative effects of child maltreatment on children's psychological adjustment both in childhood and extending into adulthood (Banyard, 1999; Briere & Runtz, 1988a; Browne & Finkelhor, 1986; Cicchetti & Toth, 2005; Douglas, 2000; Harmer, Sanderson, Mertin, 1999; Morton & Browne, 1998; Widom & White, 1997; Widom, DuMont, & Czaja, 2007).

Cases where intergenerational transmission of maltreatment occur only further illustrate the importance of understanding the pathways by which parent's childhood maltreatment affect children through the parent's ontogenic development as well as the parent-child relationship as it develops over time. Since we do know that abusive parents have frequently been abused as children, this information can be used to determine how this particular negative effect of parent's childhood maltreatment on children occurs, such as through poor parenting knowledge, parental impulse control, stress, poor parenting practices, or other mechanisms. It has also been noted that research on intergenerational transmission of maltreatment should be tempered by the understanding that abusive parents are not necessarily a homogeneous sample compared to a homogeneous control group as this is frequently not the reality, i.e. these groups are difficult to clearly differentiate (Friedrich & Wheeler, 1982). The current study examined the role of several types of child maltreatment including minor to severe assault, neglect, sexual maltreatment, and psychological aggression as mediators or moderators of the relation between parent's childhood maltreatment and child adjustment.

### 1.3 - The Effects of Parent's Childhood Maltreatment on Parenting Behaviors

In exploring parent-child relationships in at-risk families, the unique perspective and history that each parent brings to their parenting behaviors are often neglected (i.e. the parent's ontogenic development). A parent's experiences can have significant effects on their parenting behavior and their children's development. Parenting behavior has been shown to influence children's psychological adjustment, both with and without the presence of traumatic experiences. Parenting behavior has been linked to child adjustment through positive parenting behaviors, which act as a protective factor in child adjustment and resilience (Toth et al., 2002). The current study examined multiple parenting behaviors both in how they are influenced by various types of parent's childhood maltreatment and how they in turn are related to child adjustment and behavior problems.

Research on mothers who have experienced child sexual abuse has shown significant associations between childhood sexual abuse and several parenting behaviors, higher overall stress as a parent, more negative self-views of parenting, higher rates of permissive parenting, difficulty establishing boundaries, higher likelihood of using physical discipline, and higher risk of physically abusing one's children (Banyard, 1997; DiLillo et al., 2000; Douglas, 2000; Ruscio, 2001). Ruscio (2001) also found an association between mothers' childhood sexual abuse and higher rates of permissive parenting, over and above the rate of permissive parenting found among mothers with a history of childhood physical abuse. This research further points to the dramatic and long-term effects of child sexual abuse.

A variety of types of poor parenting are evidenced to contribute to the intergenerational continuity of maltreatment. Dixon, Hamilton-Giarchritsis, and Browne (2005) examined the parenting behaviors of two-parent families with newborns in which at least one of the parents had experienced sexual or physical abuse as a child. In their study, intergenerational continuity of child maltreatment was largely explained (62% of the total effect) by poor parenting behaviors being present. Parent's childhood maltreatment has also been linked to psychological aggression and physical discipline, early autonomy promotion, increased discussions of sexual development, and role reversal in cases of child sexual abuse (Burkett, 1991; Cohen, Hien, & Batchelder, 2008; Grocke, Smith, & Graham, 1995; Maker & Buttenheim, 2000). Finally, Cohen (1995) illustrated that mothers who had experienced incest tended to be less skillful on maternal functioning across several areas of parenting.

Despite these findings, little is known about the role that parenting behavior may play in mediating or moderating the relation between parent's childhood maltreatment and children's adjustment. Prevention of intergenerational transmission may be enhanced by promoting 'positive parenting'. However, the first step in this process is to determine those parenting behaviors that mediate or moderate the relations between parent's childhood maltreatment and child adjustment. While we know much about adaptive and maladaptive parenting behaviors, less is known about the exact ways that these parenting behaviors function in families at-risk due to the parent's childhood maltreatment. The current study examined several parenting behaviors, including parent-child relationship quality, child monitoring, and parent-child negativity as mediators and moderators of the relation between parent's childhood maltreatment and child maladjustment.

## 1.4 - The Role of Parent Characteristics in the Effects of Parent's Childhood Maltreatment on Children

Parent functioning may be impaired by parent's childhood maltreatment both due to psychopathology, post-traumatic stress disorder, and poor role models for learning adaptive parenting (Appleyard & Osofsky, 2003). Parent characteristics which may impair parent functioning or directly impact child adjustment will be examined including depression, self esteem, and parent's socio-demographic context. It may be that other factors are facilitating the effects of parent's childhood maltreatment on parenting behaviors and child adjustment such as parent adjustment after trauma, parent depression, or other aspects of the parent-child relationship such as attachment (Ezzel et al., 2000; Hilarski, 2004). Potential parent characteristics that may play an important mediating or moderating role in continuity and discontinuity of the negative effects of parent's childhood maltreatment include: self esteem and depression. The current study explored each of these parent characteristics for the ways they may be influenced by parent's childhood maltreatment and the ways they in turn may influence parenting behaviors and child adjustment.

Parent characteristics that may impact the effects of parent's childhood maltreatment on children are broad; however, this study will explore those that fall into the category of intrapersonal (i.e. within an individual) characteristics. The research is still somewhat unclear as to whether these characteristics act as potential risk or protective factors, and as potential mediators or moderators of the relations between parent's childhood maltreatment and child

maladjustment. Intrapersonal characteristics which may play a role in the effects of parent's childhood maltreatment include: self esteem and psychopathology. Intrapersonal characteristics largely operate at the level of the ontogenic development of the parent though they frequently extend to influence the microlevel, or the parent-child relationship.

Parenting under the age of 21 or young parental age, history of mental illness or depression, and current psychopathology, have all been associated with parent's abuse or potential risk for abusing their children following parent's childhood maltreatment (Brown, Cohen, Johnson, & Salzinger, 1998; DiLillo et al., 2000; Dixon, Browne, & Hamilton-Giachritsis, 2005; Dixon, Hamilton-Giachritsis et al., 2005). Further, paternal depressive symptoms have been associated with depressive symptoms in adolescent offspring indicating that these intrapersonal parent characteristics may directly affect child adjustment, with or without the presence of parent's childhood maltreatment (Reeb & Conger, 2009). Maternal depression has also been linked to externalizing and internalizing problems in children, in addition to increasing the use of harsh parenting, and has been found to mediate the link between maternal victimization and child internalizing behaviors (Dubowitz et al., 2001; Morrel et al., 2003). Negative views of self as parent have also been linked to poorer parenting behaviors and more physical strategies being used in parent-child conflicts (Banyard, 1997; Ruscio, 2001). This means intrapersonal characteristics, particularly parent psychopathology and parents' negative self view or low self esteem, are likely to act as risk factors in the transmission of the negative effects of parent's childhood maltreatment to children's maladjustment.

Personal characteristics may play a protective role as well as a risk role in at-risk families whose parents have experienced childhood maltreatment. Intrapersonal characteristics that have been related to better adjustment for both parents and children following parent's childhood maltreatment include receiving psychotherapy, a coherent view of self which integrates the abusive experience, working to parent differently and better than they were parented, and a less external locus of control (Banyard, 1999; Egeland, 1988; Egeland & Susman-Stillman, 1996; Kreklewetz & Piotrowski, 1998; Merrill, Thomsen, Sinclair, Gold, & Milner, 2001). While less seems to be known about those protective factors in individuals which promote resilience both individually and within families it is clear that many factors are likely to be present considering that a large percentage of individuals exhibit resilience following maltreatment experiences (DuMont, Widom, & Czaja, 2007).

It is unclear, for the most part, whether these parent characteristics would act as mediators or moderators of parents' outcomes following parent's childhood maltreatment considering the current lack of research on parent characteristics as risk factors in continuity of the negative effects of parent's childhood maltreatment. However, based on past research, it is clear that mediators have been explored further than the potential moderators of the intergenerational transmission of parenting and continuity/discontinuity of parent's childhood maltreatment. Reviews have indicated that currently there is a lack of research which illustrates moderators of these relations (Bailey, Hill, Oesterle, & Hawkins, 2009; Conger et al., 2009). The current study examined parental depression and self esteem, as potential mediators and/or moderators of the relation between parent's childhood maltreatment and child adjustment.

### 1.5 - The Role of Broader Contextual Factors

While much research has been dedicated to the ontogenic development level of the parent and the child as well as to the microsystem, through the family environment, it is also important to consider the macrosystem and exosystem when trying to understand the pathways through which parent's childhood maltreatment may affect parenting behaviors, parent characteristics, and subsequent child adjustment. The parent's childhood maltreatment may increase their contextual risk, such as living in a high risk neighborhood, through a variety of mechanisms including younger age of becoming a parent, lower education, and a history of low socioeconomic status (Garbarino & Sherman, 1980). This risk may be even higher in cases where the parent's childhood maltreatment involved sexual abuse (Boyer & Fine, 1992; Herman-Giddens et al., 1998; Zuravin & DiBlasio, 1992).

The more prevalent contextual factors that may play an important role in the relationship between parenting behaviors, parent characteristics and subsequent child adjustment include socio-economic status, education level, and race or ethnicity. Research indicates that it is likely that differences exist by ethnicity and culture in the continuity and discontinuity of the negative effects of parent's childhood maltreatment as well as in risk and protective factors. Further, these effects may in part be due to other demographic factors which often overlap with race in the United States, such as socioeconomic status or parent education; however, more research is needed to determine the roles demographics play (Campbell, 2009). As these variables are rarely examined separately and frequently overlap, the current study explored the roles of income, age

of becoming a parent, and education level in order to better tease apart which of these often concurrent risk factors may play a larger role in intergenerational transmission. The role of race will not be examined because there is insufficient racial diversity in the sample.

### 1.6 - The Role of Type of Parent's Childhood Maltreatment

Much of the research related to parent's childhood maltreatment and parenting behavior has been limited to mothers who have been sexually or physically abused. This focus on mothers leaves the current research limited in addressing the ways in which different types of parent's childhood maltreatment, including sexual abuse, physical or emotional abuse, or neglect, may lead to different outcomes for parents and different effects on parenting behaviors and child outcomes. Past studies have typically been limited to child sexual abuse, child physical abuse, or general child abuse and have for the most part failed to explore the potential differential effects of parent's childhood maltreatment type on parents, and in turn, their children. Further, there is a much larger body of literature on the negative effects of parent's experience of child sexual abuse than there is on any other type of parent's childhood maltreatment (i.e. physical abuse, neglect, or emotional abuse).

A few studies have shown that the influences of parent's maltreatment history on children differ according to the type of parent maltreatment (Dixon, Browne et al., 2005; Dixon, Hamilton-Giachritsis et al., 2005; Koverola et al., 2005; Lyons-Ruth & Block, 1996; Newcomb & Locke, 2001). However, less is known about why some types of parent's childhood maltreatment influence parenting behaviors and child adjustment whereas others do not, particularly because most parent maltreatment research has focused on abuse rather than neglect. For example, sexual abuse related to poor parenting though this relationship was not found for other types of abuse (Newcomb & Locke, 2001). However, physical abuse shows a strong relation to later violent criminal behavior (Widom, 1989a). As there is some evidence that different types of parent's childhood maltreatment may have differential effects on parents and children and involve different protective and risk factors, it would be beneficial for future research to explore these pathways while keeping in mind the ways that parent's childhood maltreatment may vary.

Unfortunately, several practical difficulties may have impeded this exploration and may continue to be a hurdle for researchers. The ability to explore the differential effects of type of maltreatment is impeded by two major issues: (1) one type of maltreatment rarely occurs in

isolation and (2) it is difficult to obtain samples of sufficient sizes to have enough power to explore maltreatment type as a variable (Belsky, 1993; Briere & Runtz, 1988b; Sheridan, 1995). These samples tend to be difficult to obtain due to a variety of factors including potential bias in officially reported child abuse cases toward low income and minority groups (Widom, 1989a), individuals who may not self identify as victims, and those individuals from low income backgrounds and high risk neighborhoods may be more resistant to participate in psychological research. Additionally, in those families where the intergenerational cycle of maltreatment is present, families tend to be isolated from social networks (Crittenden, 1985). The current study was drawn from a normative community sample, and included multiple types of parent's childhood maltreatment, as many individuals who may have been abused may not self identify as having been victimized. Through using a normative sample, the study hopes to reach a variety of parents as research indicates that there are differences in the effects of parent's childhood maltreatment by maltreatment type and there are also likely differences between those who do and do not identify as having been victimized.

### 1.7 - The Role of Feminist Theory

The current study is unique in its inclusion of mothers and fathers, however, it is not able to explore potential differences by parent sex in the effects of parent's childhood maltreatment on parents and children due to the low number of fathers in the sample. As majority of the research on intergenerational transmission or the negative effects of parent's childhood maltreatment is only on mothers, it is useful to examine both mothers and fathers for a variety of reasons. There is little in terms of feminist theory in developmental psychology and in relating developmental psychopathology to feminist theory. However, two theories that may be useful to understanding the roles of gender and sex in parenting are the social role and sex role hypotheses (Barnett & Baruch, 1987; Deater-Deckard & Scarr, 1996). The social role hypothesis indicates that the gender differences observed in family and work role occupation are caused by socialized sex roles. Accordingly, if women and men were to share more responsibilities in the home and child-rearing they should appear more similar in psychological adjustment and parenting behaviors. The sex role hypothesis on the other hand, states that gender moderates the relationship between role occupation and parenting, thus observed sex differences between mothers and fathers would be biological in nature not environmental or social.

Some differences that may help in understanding mothering and fathering include that fathers seem to spend less time with children, spend more time in leisure or play activities, and are less likely to transmit maltreatment experiences to their children directly (Renk et al., 2003; Thompson & Walker, 1989). Though no research has been done to explain why these differences exist, there are several possible explanations in keeping with the social role hypothesis that should be explored. In terms of the intergenerational transmission, it seems that mothers are more likely to directly transmit their negative parenting experience to their children and their own parenting, whereas fathers are less likely to transmit that, though they are more likely to become avoidant in parenting when they have experienced sexual abuse. Reasons these differences may exist include: time spent with children, type of time spent with children, and social expectations of mothering and fathering.

Though the methods of risk and resilience research and intergenerational transmission research in psychology have not been explored for their alignments with feminism, it is important that these research designs address the role of feminist theory and intersectionality (Crenshaw, 1989; Yuval-Davis, 2006). Research designs addressing mechanisms of continuity and discontinuity may be more effective in detecting the roles of gender, sex, and race/ethnicity due to their potential for greater accessibility to individuals with diverse outcomes. Research which has historically focused on continuity of negative effects runs the risk of a few fatal flaws.

First, they create an expectation of negative effects. If you were abused it is expected, by flawed antiquated research (Steele & Pollock, 1968) and subsequent societal stereotypes that you will abuse, the cycle of violence hypothesis. Therefore, we are perhaps creating a self-fulfilling prophecy wherein we expect abuse victims to become abusers and thus that is what they become, because they are given no other options, examples of change, or are labeled as abusers and thus adopt the label. By creating hypotheses that look for negative effects only we are neglecting the pathways wherein people exhibit healthy adjustment, or perhaps even positive effects (i.e. the phoenix rising).

Second, resilience and resilient individuals are made invisible by the lack of attention to those cases in which there is continuity. This is a situation made all the more tragic considering that majority of abuse victims do not go on to abuse (Kaufman & Zigler, 1987). By a historical focus on negative outcomes and continuity, there is a bias in research designs and hypotheses that sets up an expectation of flaw. Resilience must be made visible, apparent, for it is resilience

which allows individuals the freedom to change and break societal molds. It is resilience which ignores the hierarchical structures of society and allows individuals to strike out on their own path. These structures include those systems of class, race, and gender/sex which create a situation in which those who are poor are expected to stay poor, those who are minority are expected to stay minority, and those who are mother or father are expected to fulfill very narrowly prescribed roles (Yuval-Davis, 2006).

Finally, continuity and discontinuity in exclusion of one another, are both problematic. Without both we run the risk of reinforcing stereotypes and classism through hypotheses of the continuity, the inevitability of repeating negative patterns, and the rarity of resilience. This creates a form of indirect oppression which can trickle down and become even more narrowed and warped along the way as biased research turns in to even more biased reporting of that research by the mainstream news. Hypotheses that those who have had such negative and traumatic experiences will perpetuate in these patterns are only furthering the revictimization of those who have already been victimized and furthers their oppression. The current study aims to address the issues of some systems of hierarchical oppression and feminist theory through examining the roles of several socio-demographic factors that may reinforce classism and oppression, namely family income, parent education, and age of becoming a parent.

### 1.8 - Current Project

In exploring parent's childhood maltreatment's potential effects on child adjustment, it is essential that the roles of parenting behaviors and parent characteristics, as well as child maltreatment, be understood as often the effects on child adjustment are indirect and occur through other factors in the family's environmental context. Each of these pathways is important to creating a comprehensive picture of the relations among parent's childhood maltreatment, parenting behaviors, and child adjustment. It is clear from the literature that parent's childhood maltreatment represents an important factor in family dynamics and child development. Parenting and the determinants of parenting represent a complex interplay between several variables which parent's bring to the table, one of which is the parent's own history and developmental experience (Belsky et al., 2009).

The goals of the current study are to address the current gap in the literature in how child adjustment is influenced by an interplay between parent's childhood maltreatment, parenting behavior, and parent characteristics (such as psychopathology and self esteem). The current

study aims to clarify the relations between parent's childhood maltreatment, parenting behaviors, the potential for child abuse, and child maladjustment. Though there is evidence of parenting behaviors, parent's intrapersonal characteristics, and socio-demographic factors playing a role in the relations between parent's childhood maltreatment and child adjustment, there has not yet been a systematic analysis of these variables to determine the mechanisms by which they affect these relation. The goal of the current study is to clarify these mechanisms by testing parents' factors as both moderators and mediators of the relation between parent's childhood maltreatment and child maladjustment. Clarifying those mediators and moderators which act as protective and additive risk factors in the continuity of the negative effects of parent's childhood maltreatment in the parent's adulthood and future generations will be beneficial to intervention and prevention efforts.

Prior research examining parent trauma, particularly parent's maltreatment experiences, has been limited in several ways, illuminated by Newcomb & Locke (2001), including: "(1) using case status to define subjects; (2) adopting a dichotomous perspective that does not consider the reality of maltreatment on various continua; and (3) using operational definitions that fail to differentiate between maltreatment subtypes." Another issue has been ensuring that multiple informants are used in assessing these relations (Morrel et al., 2003) and research in this area often being limited to mothers, but not fathers. The current project addresses these limitations by including: a sample of both abused and non-abused parents, including mothers and fathers, children's reports of parenting behavior and parent's and children's reports of child adjustment, and the exploration of different subtypes of parent's childhood maltreatment on a continuum.

### 1.9 - Hypothesis

It is hypothesized that parenting behavior, parent intrapersonal characteristics, and parent's socio-demographic factors will mediate or moderate the relation between parent's childhood maltreatment and child maladjustment as evidenced by internalizing/externalizing symptomatology. Parent's childhood maltreatment is expected to differentially effect child adjustment by maltreatment type, including physical abuse, physical neglect, sexual abuse, emotional abuse, and emotional neglect. In this study, the proposed model hypothesizes that several parent characteristics and factors would act as risk or protective factors in the relation between parent's childhood maltreatment and child maladjustment. As there has not yet been a

detailed analysis of parenting behaviors, parent characteristics, and socio-demographic factors, the study through exploratory testing aims to systematically test each of these variables as both mediators and moderators of the relation between parent's childhood maltreatment and child maladjustment.

Parenting behaviors that are expected to play a role in the relation between parent's childhood maltreatment and child maladjustment include child monitoring, parent-child negativity, parent-child relationship quality, and psychological aggression, mild and severe physical assault, neglect, and sexual maltreatment. Parenting behaviors may be affected by a parent's childhood maltreatment, through lack of an appropriate parenting model, which may in turn affect child maladjustment. Alternately, parenting behaviors may develop independently of a parent's childhood maltreatment and may impact the relation between parent's childhood maltreatment and child maladjustment. In cases where parents exhibit healthy parenting behaviors, parenting behaviors may act as a protective factor or buffer in the relation between parent's childhood maltreatment and child maladjustment. However, in those cases where parents exhibit unhealthy parenting behaviors they may act as a risk factor in affecting child maladjustment.

Parent intrapersonal characteristics that are expected to play a role include depression and self esteem. Some of the ways that parent's characteristics may act as protective factors or buffers include high self esteem and healthy adjustment. In contrast, children of parents' with depression may be more likely to exhibit maladjustment particularly when those parents have been maltreated. Parent characteristics may be affected by a parent's childhood maltreatment, through development of depression, which may in turn affect child maladjustment. Alternately, parent characteristics may develop independently of a parent's childhood maltreatment, such as achieving healthy self esteem, and may influence the relation between parent's childhood maltreatment and child maladjustment.

Parent socio-demographic characteristics expected to act as mediators or moderators include parent education, age of becoming a parent, and income. Parents who have experienced childhood maltreatment and face financial adversity, low education, and a young age of becoming a parent are likely to be at an increased risk of having children with poor adjustment. However, when parents have a good education, comfortable income, and were older (such as over 21) when having their first child, these factors may buffer the negative effects of the

parent's childhood maltreatment. While parents' income and education may occur independently of their upbringing, it may also be that an upbringing in which there is significant adversity may impact an individuals ability to achieve a good education and the resources to be financially stable.

### **2.0 - Method**

### 2.1 - Participants

The current study included a longitudinal dataset which consisted of 358 children (191 boys and 167 girls) and a primary caregiver (48 fathers and 310 mothers) in Wave 1. In Wave 2, 220 families returned, consisting of 121 boys and 99 girls and a primary caregiver (32 fathers, 178 mothers, and 10 other). The children's ages ranged from 10 to 17 with an average age of 13 (SD = 1.92) at Wave 1 and the children returned at approximately two years later, with an age range of 11 to 18 with an average age of 15 (SD = 1.6). The data were drawn from participants from Southwestern Virginia. Of the 358 participants in Wave 1, 84.2% were Caucasian with the remaining 15.8% from a minority ethnic background (9% African American, 1.7% Hispanic, 0.8% Asian, and 3.1% mixed ethnicity). At Wave 2, 87.8% were Caucasian with the remaining 12.2% from a minority ethnic background (9% African American, 1.4% Hispanic, and 1.4% other). The mean total income of the families fell between \$35,000 and \$49,999 at both waves. APA guidelines for the ethical treatment of the human subjects were followed during data collection. The original study was also approved by the IRB at the participating university prior to data collection. Of the original participants, 138 participants did not return for Wave 2 with reasons including: child not invited back due to age or other issues (n = 32), too busy (n = 8), moved away (n = 12), unable to reach (n = 79), child not interested (n = 6), and child death (n = 1).

### 2.2 - Procedure

Participants were recruited through research recruitment letters mailed to individuals' addresses obtained through a mailing list which was purchased from a marketing company for Wave 1. Recruitment was further made possible through flyers that were posted at several locations and businesses in the areas of Blacksburg, Roanoke, and Salem. At Wave 2, participants were mailed letters inviting them back. All participants with children who had not yet entered college were invited to participate in Wave 2. Assent forms were signed by the child participants prior to the interview. In the case that a participant refused to sign the form, the

interview did not take place. Parental consent was also obtained prior to the interviews, as child participants were under age. Participants were interviewed at the Virginia Tech campus or the Roanoke Higher Education Center in Roanoke according to their proximity and/or preference. Parents and children /adolescents received monetary compensation for their participation in the study. Trained interviewers read the instructions to the participants and were present while participants filled out the questionnaires. Upon completion of the measures, participants were debriefed.

#### 2.3 - Measures

**Demographic Data.** This interview was completed by parents reporting on their children's age, sex, and ethnicity. In addition, parents completed demographic information pertaining to family characteristics including family income. Sex was coded as follows: "0" = female, "1" = male; ethnicity was coded as "0" for white and "1" for non white, and family income was coded as "0" = \$ 0 per month to "14" = \$16,667 or more per month. Additionally, parent education will be examined using the Hollingshead index, scored from 1 (less than seventh grade) to 7 (graduate degree) (Hollingshead, 1975). Age that the primary caregiver became a parent was examined as a continuous variable.

Childhood Trauma Questionnaire. Parent's childhood maltreatment was assessed using parent's report on the Childhood Trauma Questionnaire- Short Form. The CTQ-SF (Bernstein et al., 2003) was developed as a screening measure for maltreatment histories. It is a 28 item scale with retrospective questions regarding childhood and adolescent experiences rated on a 5-point, Likert type scale with response options ranging from 1 (Never True) to 5 (Very Often True). The CTQ-SF also includes five subscales: sexual, physical, and emotional abuse, and emotional and physical neglect. For purposes of the current study, these subscales were explored to assess the ways that various types of trauma/neglect can differentially affect parenting behavior and in turn child outcomes. Subscales are created by averaging questions related to each of the five subtypes of parent's childhood maltreatment. Each subscale is comprised of five questions. On these subscales a higher score indicates a higher likelihood of having experienced childhood maltreatment. Each item on the questionnaire begins with, "When I was growing up..." and include questions such as "My family was a source of strength and support" (reverse scored- emotional neglect); "People in my family hit me so hard it left me with

marks or bruises" (physical abuse); "I had to wear dirty clothes" (physical neglect); "People in my family said hurtful or insulting things to me" (emotional abuse); and "As a child someone tried to make me do sexual things or to watch sexual things" (sexual abuse).

The CTQ-SF has shown high levels of test-retest reliability with Cronbach's alphas ranging from .57 to .93 according to each of the five subscales: emotional neglect ( $\alpha$  = .68 to .93), emotional abuse ( $\alpha$  = .76 to .93), physical abuse ( $\alpha$  = .80 to .92), sexual abuse ( $\alpha$  = .88 to .97), and physical neglect ( $\alpha$  = .57 to .80) (Locke & Newcomb, 2008; Minnes et al., 2008; Frewen et al., 2008). In the current sample test-retest reliability was high for each of the five subscales for Wave 1 and 2: emotional neglect ( $\alpha$  = .90; .91), emotional abuse ( $\alpha$  = .88; .88), physical abuse ( $\alpha$  = .79; .78), sexual abuse ( $\alpha$  = .96; .95), and physical neglect ( $\alpha$  = .80; .69).

Conflict Tactics Scale-Parent-Child. The Conflict Tactics Scale (CTS) is a questionnaire designed to measure parent psychological aggression, mild and severe physical assault, neglect, and sexual maltreatment at their children (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). The psychological aggression scale consists of five items; a sample item from that scale is "in the past year how often your father or mother called you dumb or lazy or some other name like that?" The physical abuse scale consists of nine items; a sample item from the physical abuse scale is "in the past year how often your father or mother hit you with a fist or kicked you hard?" Children were asked to respond as to how often in the past year their mother or father has done any of the listed aggressive acts. Answers range from 0 (This has never happened) to 6 (More than 20 times in the past year). The CTS was examined both by overall presence in the home (i.e. both caregivers) and by examining only the aggression and maltreatment behavior of the parent who came with the child for the interview.

The CTS was be scored by adding the midpoints for the response categories chosen by the participant. The midpoints used are the same as the response category numbers for categories 0, 1, and 2. For category 3 (3–5 times) the midpoint is 4, for category 4 (6–10 times) it is 8, for category 5 (11–20 times) it is 15, and for category 6 (More than 20 times in the past year) 25 is used as the midpoint. The alpha coefficient was reported as .58 for the overall physical assault scale and .68 for the psychological aggression scale in the study by Straus and Hamby (1997). In Wave 2 of the current sample, the physical assault scales showed an alpha of

.58-.72 based on severity of assault and mother versus father. The psychological aggression scale had an alpha of .62 for mothers and .60 for fathers. Finally, neglect had an alpha of .77 overall and sexual maltreatment had an alpha of .47 overall.

Child Monitoring. Child monitoring was assessed using items on the adolescent version of the Assessment of Child Monitoring Scale (Hetherington & Clingempeel, 1992). This 13-item scale was answered by the child on a 5-point Likert type scale ranging from 1 (Always knows) to 5 (Never knows). The child monitoring scale measures the extent to which the parent is aware of their child's activities and friends. This scale was computed by reverse scoring all 13 questions and averaging responses to create an overall child monitoring score. On this scale a higher score indicates higher child monitoring. Sample items from the parent form include "your child's use of tobacco," "the extent of his/her sexual behavior," and "your child's intellectual interests, both in and out of school." Each item on the parent form begins with "How much you know..." whereas the child form is answered separately for each parent/step-parent and items begin with "How much your (step) Mother/Father knows...".

The Child Monitoring Scale has been used with children between the ages of 10 and 18 (Mekos, Hetherington, & Reiss, 1996). This measure has significantly correlated with other similar measures of parent-child interaction and has a test-retest reliability ranging from .68 to .81 (Getz & Bray, 2005). For the current sample, test-retest reliability was high for both parent and child reports for Wave 1 with Cronbach alpha's including: child report of mothers ( $\alpha$  = .91), child report of fathers ( $\alpha$  = .93), and parent report ( $\alpha$  = .91). For Wave 2 the Cronbach alpha's remained high including: child report of mothers ( $\alpha$  = .89), child report of fathers ( $\alpha$  = .92), and parent report ( $\alpha$  = .88).

Parent-Child Relationship. Parent-child negativity was assessed using children's reports on a 7-item questionnaire (Hetherington & Clingempeel, 1992). Children were asked to rate aspects of their parent-child relationship on a 5-point Likert type scale, ranging from 1 (extremely) to 5 (not at all). This scale was computed by reverse scoring and averaging responses to create an overall parent-child negativity score. On this scale a higher score indicates higher parent-child negativity. Sample items include: "How much do you yell at this child after you've had a bad day?", and "How much does this child criticize you?". This measure has been used with children between the ages of 10 and 18 (Mekos et al., 1996). For the

current sample test-retest reliability was high for both parent and child reports for Wave 1 and 2 with Cronbach alpha's including: child report of mothers ( $\alpha = .84$ ; .85) and child report of fathers ( $\alpha = .80$ ; .85)

Inventory of Parent and Peer Attachment-Short Form. The Inventory of Parent and Peer Attachment (IPPA) is utilized to determine the degree of perceived support from parents and peers (Raja, McGee, & Stanton, 1992). The IPPA includes three subscales: communication (quality of communication), trust (degree of mutual trust), and alienation (extent of anger and alienation). Parental support was assessed using 12 items rated by children on a 5-point Likert scale ranging from 1 (almost never/never true) to 5 (almost always/always true). A sample item is: "My parents respect my feelings." Average scores will be used in the analyses. Some items are reverse coded and higher scores indicate higher levels of support. Raja, McGee and Stanton, (1992) reported alphas as .82 for the parent scale. For the current sample test-retest reliability was good for child reports for Wave 1 and 2 with Cronbach alpha's including: communication ( $\alpha = .68$ ; .70), trust ( $\alpha = .78$ ; .73), and alienation ( $\alpha = .67$ ; .62).

**Rosenberg Self-Esteem Scale.** The Rosenberg Self-Esteem Scale (RSE) is a 10-item questionnaire that assesses global self-esteem (Rosenberg, 1965). The items assess one's perception of self worth (e.g., "On the whole, I am satisfied with myself"). Parents were asked to rate each statement from: 1 (strongly agree) to 5 (strongly disagree). Items are reverse scored as appropriate and averaged. Higher scores reflect higher self esteem. In a recent study internal consistency of the RSE was reported as .86 (Giletta, Scholte, Engels, & Larsen, 2010). In both Wave 1 and 2 of the current sample test-retest reliability was high: Wave 1 ( $\alpha$  = .88) and Wave 2 ( $\alpha$  = .87).

The Beck Depression Inventory. The Beck Depression Inventory (BDI-II) is primarily used to indicate the severity of major depression; however, it has also been used to indicate subclinical depression in general populations. The BDI\_II is reliable across genders and ethnicities and has strong construct validity in describing varying levels of self-reported depression ( $\alpha = .91$ ) (Beck, Steer, Ball, & Ranieri, 1996). Parents' reported on depression at both waves of data collection. The BDI-II consists of 21 questions, typically scored on a 4-point Likert scale from 0 (absence of symptoms) to 3 (high presence of symptoms), and averaged in

order to obtain a mean depression score. Sample items include assessing sadness, punishment feelings, loss of energy, and tiredness or fatigue. In the current sample a strong alpha was found at both waves ( $\alpha = .91$ ; .90).

Child Behavior Checklist & Youth Self Report. Child behavior problems were assessed using parent's and children's reports of child internalizing and externalizing symptomatology from the Child Behavior Checklist (CBCL) and Youth Self Report (YSR) (Achenbach & Rescorla, 2001). The CBCL is a 118-item questionnaire assessing caregiver perceptions of children's behavior problems and is typically used with children between 4 and 16. Problem behaviors are rated on a 3-point scale ranging from 0 (not true) to 2 (very true), these items then comprise a total score, an internalizing behaviors score, and finally an externalizing behaviors score. The internalizing scale includes withdrawn, anxious/depressed, and somatic complaints syndrome scales. The externalizing scale is comprised of aggressive and delinquent behavior scales. On these two scales a higher score indicates higher behavior problems. The YSR is a 102-item measure that is answered by child self-report in the same manner as the CBCL and has shown similar psychometric properties on both internalizing and externalizing behaviors ( $\alpha = .90$ ). The YSR has typically been used with children between 11 and 17. The CBCL has demonstrated strong psychometric properties on both internalizing ( $\alpha = .90$ ) and externalizing behaviors ( $\alpha = .94$ ) (Achenbach & Rescorla, 2001).

### 3.0 - Results

### 3.1 - Data Analytic Plan

Bivariate correlations were completed among all study variables. These correlations included the relations between parent's childhood maltreatment, parenting behaviors, parent characteristics, parent socio-demographic variables, and child maladjustment. Parent's childhood maltreatment was examined separately by the five subtypes, i.e., physical abuse, emotion abuse, sexual abuse, emotion neglect, and physical neglect. Parenting behaviors included psychological aggression, mild and severe physical assault, neglect, and sexual maltreatment, parent-child negativity, child monitoring, and parent-child relationship quality. Child maladjustment was be indicated by internalizing and externalizing symptomatology. In order to detect possible differences according to different informants, child maladjustment was explored separately for parent reports and child reports in the main analyses.

Table 1 shows the descriptive statistics of all study variables, and Table 2 shows the bivariate correlations of all study measures from Wave 1 to Wave 2. All study variables were significantly correlated (p < .01) from Wave 1 to Wave 2, indicating some stability in parenting behaviors, report of parent's childhood maltreatment, socio-demographic factors, parent intrapersonal factors as well as parent and child report of symptomatology. Tables 3-7 illustrate the bivariate correlations of all study variables within each of the overall models, including: (1) Parent Socio-Demographic Factors, (2) Parent Maltreatment Behaviors, (3) Parent Intrapersonal Characteristics, and (4) Parenting Behaviors. Tables 8-12 illustrate the model fits of each of the overall mediation models, while Tables 13-17 show the model fits of each of the overall moderation models (in the same order as shown above).

Analyses tested mediators/moderators at one time point and tested both time points for outcome variables whenever possible. Four mediation models (see Figures 1-5) were tested using Wave 1 mediators involving Wave 1 and Wave 2 outcomes. However, parent maltreatment behaviors were collected at Wave 2 thus the models involving parent maltreatment behaviors as mediators used only Wave 2 outcomes. These mediation models included: (1) Parent Socio-Demographic Factors: age became a parent, education, and income, (2) Parent Maltreatment Behaviors: parent psychological aggression, mild and severe physical assault, neglect, and sexual maltreatment, (3) Parent Intrapersonal Characteristics: depression and self esteem and (4) Parenting Behaviors: child monitoring, parent-child negativity, and parent-child relationship quality. In addition, child age was added as a covariate in order to assess potential age effects on the study variables.

Four structural equation models (SEM) analyses were run for each of the potential moderator sets and were run separately for each of the parent's childhood maltreatment types with both child internalizing and externalizing symptomatology as outcomes. The moderation models involved parent's childhood maltreatment and the moderators measured at one time point and the outcome variables measured at both time points (with the exception of parent maltreatment behaviors as these moderators were collected at Wave 2). The moderators included: (1) Parent Intrapersonal Characteristics: depression and self esteem (2) Parent Socio-Demographic Factors: age became a parent, education, and income, (3) Parent Maltreatment Behaviors: parent psychological aggression, mild and severe physical assault, neglect, and sexual

maltreatment, and (4) Parenting Behaviors: child monitoring, parent-child negativity, and parent-child relationship quality. In addition, child age was added as a covariate in order to assess potential age effects on the study variables.

SEM with maximum likelihood estimation using the Amos 16.0 program (Arbuckle, 2010) will be used to explore the moderation models presented in Figure 6-10. Models were tested separately for each subtype of parent trauma as they relate to the child outcomes of internalizing and externalizing symptomatology. SEM analyses to test the mediation hypotheses were conducted using the Mplus Version 5.21 statistical software package (Muthén & Muthén, 2010). Overall model fit indices were examined using the following measures: (1)  $\chi^2$  value, (2) degrees of freedom, (3) corresponding p-value, (4) Root Mean Square Error of Approximation (RMSEA), and (5) Confirmatory Fit Index (CFI). An RMSEA value less than .05 and a CFI value equal to or greater than .95 indicated a good fit (Hu & Bentler, 1999). The significance of mediation effects were tested using product-of-coefficients tests using Delta method standard errors for the two-path (single-mediator) or three-path (two mediators in series) mediated effects (Taylor, MacKinnon, & Tein, 2008).

The first two-path tests determined if the various mediators significantly mediated the relationship between the parent's childhood maltreatment and child internalizing and externalizing symptomatology at Wave 1. The second two-path tests determined if the various mediators significantly mediated the relationship between parent's childhood maltreatment and child symptomatology at Wave 2. Finally, the three-path mediation tests determined the significance of the effects of the parent's childhood maltreatment on child symptomatology at Wave 2 through the various mediators and child symptomatology at Wave 1.

In order to test the moderation models, statistical analyses were conducted using SEM, as well as regression analyses to probe significant interactions. Interaction terms were created by centering the independent variables (parent's childhood maltreatment) and moderators (parenting behaviors, parent characteristics, and socio-demographic factors) to prevent multicollinearity, and multiplying them together. In the SEMs, all three terms (main effects and interaction) were allowed to correlate. When paths between the interaction term and the dependent variable were significant, simple effects were examined in accordance with Holmbeck (2002) to see how the

effects of parent's childhood maltreatment on the outcome variables differed at one standard deviation above and below the mean for the moderators (intrapersonal factors, sociodemographic factors, parent maltreatment behaviors, and parenting behaviors).

Figures 1-17 illustrate the proposed mediation and moderation models of the relation between parent's childhood maltreatment and child maladjustment as tested at both one and two time points. Figures 1-5 show the overall hypothesized mediation models whereas Figures 6-10 show the overall hypothesized moderation models. Figures 11-17 show the final trimmed models for all of the moderation models. Figures 18-53 show all of the graphs of the simple effects tests for moderation testing. Additionally, possible effects of age on the outcome variables were controlled for in all analyses.

# 3.2 - Power Analysis

Using G power version 3 (Faul, Erdfelder, Lang, & Buchner, 2007), power was calculated for the most complex mediation and moderation models. Given that the study's sample is 220, for a large effect size (i.e.  $f^2 = .35$ ) the power is 1 for mediation. For a medium effect size (i.e.  $f^2 = 0.15$ ) the power is 0.99, and for a small effect size (i.e.  $f^2 = 0.02$ ) the power is 0.29 for mediation. For moderation, with a sample size of 220, for a large effect size (i.e.  $f^2 = .35$ ) the power is 1. For a medium effect size (i.e.  $f^2 = 0.15$ ) the power is 0.99, and for a small effect size (i.e.  $f^2 = 0.02$ ) the power is 0.24 for moderation.

## 3.3 - Parent Intrapersonal Characteristics

#### **Emotion Abuse.**

#### Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent depression and self esteem in mediating the relation between parent's emotion abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 10.40$ , df = 4, p = .03, CFI = .99, and RMSEA = .07, p = .23 indicating an adequate model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent depression significantly mediated the relations between parent's emotion abuse and child internalizing symptomatology at Wave 1 (b = .09, SE = .02, p < .05). Parent's emotion abuse was positively related to parent depression (b = .29, SE = .05, b\* = 6.09, p < .05) and parent depression was positively related to child internalizing symptomatology (b = .29, SE = .06, b\* = 4.74, p < .05). However, parent's emotion abuse was

not related to child internalizing symptomatology (b = .07, SE = .05, b\*=1.37, p = .17), indicating full mediation. Additionally, parent depression significantly mediated the relation between parent's emotion abuse and child internalizing symptomatology at Wave 2 through Wave 1 (b = .04, SE = .01, p < .05). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .41, SE = .05, b\*=7.59, p < .05).

Parent depression significantly mediated the relation between parent's emotion abuse and child externalizing symptomatology at Wave 1 (b = .07, SE = .02, p < .05). Parent's emotion abuse was positively related to parent depression (b = .30, SE = .05, b\* = 6.09, p < .05), and both parent depression and parent's emotion abuse were positively related to child externalizing symptomatology (b = .25, SE = .06, b\* = 3.93, p < .05; b = .16, SE = .05, b\* = 3.13, p < .05, respectively), indicating partial mediation. Finally, parent depression significantly mediated the relation between parent's emotion abuse and child externalizing symptomatology at Wave 2 through Wave 1 (b = .03, SE = .01, p < .05). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .46, SE = .05, b\* = 8.81, p < .05). No other hypothesized mediation pathways were significant.

Parent's emotion abuse was negatively related to parent self esteem (b = -.26, SE = .05,  $b^* = -5.31$ , p < .05), indicating that parent's emotion abuse was related to lower self esteem for parents. Additionally, child age was negatively related to child externalizing symptomatology at Wave 1 (b = -.14, SE = .07,  $b^* = -2.16$ , p < .05), indicating that younger children exhibited higher child externalizing symptomatology at Wave 1 though this did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

Overall, several of the hypothesized intrapersonal mediations were supported, namely parent's emotion abuse and higher depression were related to higher child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. There is some evidence that parent's emotion abuse, in the presence of parent depression, may increase risk of child internalizing symptomatology across time. The significant direct effects of parent's emotion abuse on child externalizing symptomatology may indicate that parent depression does not fully mediate the relation between parent's emotion abuse and child externalizing symptomatology. However, as

parent's emotion abuse was not directly related to child internalizing symptomatology, it appears that parent depression may be an important mediator in the relation between parent's emotion abuse and child internalizing symptomatology.

*Moderation.* The relations between parent's emotion abuse and child internalizing and externalizing symptomatology were not moderated by parent intrapersonal characteristics (i.e. depression and self esteem) in the original model. The original model showed poor model fit ( $\chi^2$  = 345.67, df = 9, p = .00, CFI = .57; RMSEA = .33, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths, and ultimately a non-significant moderator (self esteem). Similarly, self esteem was removed from all 10 of the trimmed models for moderation via intrapersonal characteristics. The final trimmed model had good fit (see Table 13) and showed evidence that parent depression significantly moderated the relations between parent's emotion abuse and child internalizing symptomatology at Wave 1 (b = -2.95, SE = 1.28, b\* = -.12, p < .05) and child externalizing symptomatology at Wave 1 (b = -2.91, SE = 1.31, b\* = -.12, p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent depression, emotion abuse was significantly related to child externalizing symptomatology. However, when parent's depression was low emotion abuse had a stronger effect on child externalizing symptomatology (b = 4.52, SE = 1.31, b\* = .42, p < .05) compared to those parent's with high depression (b = 2.25, SE = .60, b\* = .21, p < .05), indicating that depression was an additive risk factor for high emotion abuse (see Figure 18). Similarly, in both conditions of high and low parent depression, emotion abuse was significantly related to child internalizing symptomatology. Though, when parent's depression was low emotion abuse had a stronger effect on child internalizing symptomatology (b = 3.54, SE = 1.28, b\* = .33, p < .05) compared to those parent's with high depression (b = 1.28, SE = .59, b\* = .12, p < .05), indicating that depression was an additive risk factor for emotion abuse (Figure 19). Overall, this result indicates that parent depression may act as a moderator of the relation between parent's emotion abuse and child symptomatology. There was no significant moderation effect extending to Wave 2 child symptomatology.

In terms of main effects, parent's emotion abuse predicted higher child externalizing symptomatology at Wave 1 (b = 2.03, SE = .57, b\* = 3.54, p < .05) and was marginally significant in predicting higher child internalizing symptomatology at Wave 1 and Wave 2 (b = 0.05).

1.08, SE = .56,  $b^*$  = 1.92, p < .07; b = 1.21, SE = .66,  $b^*$  = 1.85, p < .07, respectively). Parent depression significantly predicted higher child internalizing and externalizing symptomatology at Wave 1 (b = 9.51, SE = 1.41,  $b^*$  = 6.76, p < .05; b = 7.10, SE = 1.43,  $b^*$  = 4.96, p < .05, respectively). As stated earlier, the original model showed no evidence of self esteem moderating the relations between parent's emotion abuse and child symptomatology. However, this may in part be due to the high level of multicollinearity between parent self esteem and depression (r = -.60, p < .01). The issue of the high correlation between parent's intrapersonal factors and moderation testing will be discussed further. Finally, child age was negatively related to only child externalizing symptomatology at Wave 1 (b = -.84, SE = .40,  $b^*$  = -.13, p < .05), indicating that younger children were more likely to exhibit higher child externalizing symptomatology though this effect did not extend to Wave 2.

# Youth Self Report.

Mediation. The overall mediation model examined the roles of parent depression and self esteem in mediating the relation between parent's emotion abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 7.21$ , df = 4, p = .13, CFI = .99, and RMSEA = .05, p = .45 indicating a good model fit. However, no hypothesized mediation pathways were significant. Parent depression was marginally positively significant in predicting child's internalizing symptomatology at Wave 2 (b = .15, SE = .08,  $b^* = 1.80$ , p < .07). As mediation was found for parent's report of child symptomatology (CBC) but not for children's report of child symptomatology (YSR), it may be that whether the parent or child reports on child functioning in at risk settings is important to understanding these relations. Potential reasons for this difference in parent versus child report will be discussed later.

*Moderation.* The relations between parent's emotion abuse and child internalizing and externalizing symptomatology were not moderated by parent intrapersonal characteristics (i.e. depression and self esteem) in the original model. The original model showed poor model fit ( $\chi^2$  = 344.98, df = 9, p = .00, CFI = .52; RMSEA = .33, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths as well as parent's self esteem. The final trimmed model had good fit (see Table 13) and showed evidence that parent depression significantly moderated the relations between parent's emotion abuse and child externalizing symptomatology at Wave 1 (b = 3.48, SE = 1.16, b\* = 3.00, p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent depression, emotion abuse was not related to child externalizing symptomatology. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at high or low parent depression. There was no significant moderation effect extending to Wave 2 child symptomatology for child internalizing symptomatology at Wave 1. In terms of main effects, parent depression significantly predicted higher child internalizing symptomatology at Wave 2 (b = 3.51, SE = 1.70, b\* = 2.07, p < .05). Child age was not related to child symptomatology. As moderation was found for parent's report of child symptomatology (CBC) but not for children's report of child symptomatology (YSR), it may be that whether the parent or child reports on child functioning in at risk settings is important to understanding these relations. Potential reasons for this difference in parent versus child report will be discussed.

#### Physical Abuse.

### Child Behavior Checklist.

*Mediation.* The overall mediation model examined the roles of parent depression and self esteem in mediating the relation between parent's physical abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 10.65$ , df = 4, p = .03, CFI = .99, and RMSEA = .07, p = .22 indicating an adequate model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent depression significantly mediated the relations between parent's physical abuse and child internalizing symptomatology at Wave 1 (b = .04, SE = .02, p < .05). Parent's physical abuse was positively related to parent depression (b = .15, SE = .05,  $b^*$  = 2.83, p < .05) and parent depression was positively related to child internalizing symptomatology (b = .31, SE = .06,  $b^* = 5.13$ , p < .05). However, parent's physical abuse was not related to child internalizing symptomatology (b = -.03, SE = .05,  $b^* = -.61$ , p = .54), indicating full mediation. Additionally, parent depression significantly mediated the relation between parent's physical abuse and child internalizing symptomatology at Wave 2 through Wave 1 (b = .02, SE = .01, p < .05). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .42, SE = .05, b\* = 7.87, p < .05).

Parent depression significantly mediated the relation between parent's physical abuse and child externalizing symptomatology at Wave 1 (b = .04, SE = .02, p < .05). Parent's physical abuse was positively related to parent depression (b = .15, SE = .05, b\* = 2.83, p < .05) and both parent depression and parent's physical abuse were positively related to child externalizing symptomatology (b = .27, SE = .06, b\* = 4.30, p < .05; b = .12, SE = .05, b\* = 2.32, p < .05, respectively), indicating partial mediation. Finally, parent depression significantly mediated the relation between parent's physical abuse and child externalizing symptomatology at Wave 2 through Wave 1 (b = .02, SE = .01, p < .05). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .46, SE = .05, b\* = 8.91, p < .05). No other hypothesized mediation pathways were significant.

Parent's physical abuse was negatively related to parent self esteem (b = -.11, SE = .05, b\*=-2.03, p<.05), indicating that parent's physical abuse was related to lower self esteem for parents. Additionally, child age was negatively related to child externalizing symptomatology at Wave 1 (b = -.14, SE = .07, b\*=-2.14, p<.05), indicating that younger children exhibited higher child externalizing symptomatology at Wave 1 though this did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

Similar to emotion abuse, several of the hypothesized intrapersonal mediations were supported, namely parent's physical abuse and higher depression were related to higher child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. There is some evidence that parent's physical abuse, in the presence of parent depression, may increase risk of child internalizing symptomatology across time. The significant direct effects of parent's physical abuse on child externalizing symptomatology may indicate that parent depression does not fully mediate the relation between parent's physical abuse and child externalizing symptomatology. However, as parent's physical abuse was not directly related to child internalizing symptomatology, it appears that parent depression may be an important mediator in the relation between parent's physical abuse and child internalizing symptomatology.

*Moderation*. The relations between parent's physical abuse and child internalizing and externalizing symptomatology were not moderated by parent intrapersonal characteristics (i.e. depression and self esteem) in the original model. The original model showed poor model fit ( $\chi^2$  = 351.18, df = 9, p = .00, CFI = .52; RMSEA = .33, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths. The

final trimmed model had good fit (see Table 13) and showed evidence that parent depression significantly moderated the relations between parent's physical abuse and child internalizing symptomatology at Wave 1 (b = -4.35, SE = 1.89,  $b^* = -2.30$ , p < .05) and child externalizing symptomatology at Wave 1 (b = -4.96, SE = 1.92,  $b^* = -2.58$ , p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent depression, physical abuse was significantly related to child externalizing symptomatology. However, when parent's depression was low emotion abuse had a stronger effect on child externalizing symptomatology (b = 6.05, SE = 1.83,  $b^* = .42$ , p < .05) compared to those parent's with high depression (b = 2.26, SE = .75,  $b^* = .16$ , p < .05), indicating that depression was an additive risk factor for parent's physical abuse (see Figure 20). In only the condition of low parent depression, parent's physical abuse was marginally significantly related to child internalizing symptomatology, indicating that when parent's depression was low physical abuse had a stronger effect on child internalizing symptomatology (b = 3.37, SE = 1.78,  $b^* = .24$ , p < .07) but was not found for high parent depression (b = -.07, SE = .74,  $b^* = .01$ , p = .93) (Figure 21). There was no significant moderation effect extending to Wave 2 child symptomatology.

In terms of main effects, parent's physical abuse predicted higher child externalizing symptomatology at Wave 1 (b = 1.94, SE = .72, b\* = 2.68, p < .05). Parent depression significantly predicted higher child internalizing and externalizing symptomatology at Wave 1 (b = 9.76, SE = 1.33, b\* = 7.37, p < .05; b = 7.53, SE = 1.35, b\* = 5.58, p < .05, respectively). Finally, child age was negatively related to only child externalizing symptomatology at Wave 1 (b = -.89, SE = .40, b\* = -2.19, p < .05), indicating that younger children were more likely to exhibit higher child externalizing symptomatology, though this effect did not extend to Wave 2.

# Youth Self Report.

*Mediation.* The overall mediation model examined the roles of parent depression and self esteem in mediating the relation between parent's physical abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 7.53$ , df = 4, p = .11, CFI = .99, and RMSEA = .05, p = .43 indicating a good model fit. However, no hypothesized mediation pathways were significant. Several direct effects were found. Parent's physical abuse was positively related to child's internalizing and externalizing symptomatology at Wave 1 (b = .15, SE = .05,  $b^* = 2.84$ , p < .05; b = .12, SE = .05,  $b^* = 2.26$ , p < .05,

respectively). Parent's depression was marginally positively related to children's internalizing symptomatology at Wave 2 (b = .15, SE = .09, b\* = 1.83, p < .07). As found for parent's emotion abuse, this result indicates that for parent's physical abuse mediation was found for parent's report of child symptomatology (CBC) but not for children's report of child symptomatology (YSR).

*Moderation.* The relations between parent's physical abuse and child internalizing and externalizing symptomatology were not moderated by parent intrapersonal characteristics (i.e. depression and self esteem) in the original model. The original model showed poor model fit ( $\chi^2$ = 350.84, df = 9, p = .00, CFI = .45; RMSEA = .33, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths. The final trimmed model had good fit (see Table 13) and showed evidence that parent depression significantly moderated the relations between parent's physical abuse and child externalizing symptomatology at Wave 1 (b = 5.61, SE = 1.70,  $b^* = 3.30$ , p < .05). Using simple effects tests in accordance with Holmbeck (2002), in only the condition of low parent depression, parent's physical abuse was significantly related to child externalizing symptomatology, indicating that when parent's depression was low physical abuse had a stronger effect on child externalizing symptomatology (b = -5.28, SE = 2.71,  $b^* = -.37$ , p = .05) but was not found for high parent depression (b = -1.23, SE = 1.08,  $b^* = -.09$ , p = .26) (see Figure 22). There was no significant moderation effect extending to Wave 2 child symptomatology. This indicates that for parent's physical abuse moderation was found for parent's and children's report of child symptomatology, however these findings differed by reporter.

In terms of main effects, parent's physical abuse predicted higher child externalizing symptomatology at Wave 1 and lower child externalizing symptomatology at Wave 2 after controlling for the autoregressive effects of child externalizing Wave 1 on child externalizing Wave 2 (b = 1.85, SE = .69, b\* = 2.68, p < .05; b = -1.48, SE = .65, b\* = -2.29, p < .05, respectively) as well as higher child internalizing symptomatology at Wave 1 (b = 2.21, SE = .75, b\* = 2.94, p < .05). Parent depression significantly predicted higher child internalizing symptomatology at Wave 2 (b = 3.90, SE = 1.63, b\* = 2.40, p < .05). Finally, child age was positively related to only child externalizing symptomatology at Wave 1 (b = 1.05, SE = .26, b\* = 4.09, p < .05), indicating that older children were more likely to exhibit higher child externalizing symptomatology though this effect did not extend to Wave 2.

#### Sexual Abuse.

#### Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent depression and self esteem in mediating the relation between parent's sexual abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 10.10$ , df = 4, p = .04, CFI = .99, and RMSEA = .07, p = .25 indicating an adequate model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent depression significantly mediated the relations between parent's sexual abuse and child internalizing symptomatology at Wave 1 (b = .06, SE = .02, p < .05). Parent's sexual abuse was positively related to parent depression (b = .20, SE = .05, b\* = 3.81, p < .05) and parent depression was positively related to child internalizing symptomatology (b = .30, SE = .06, b\* = 5.00, p < .05). However, parent's sexual abuse was not related to child internalizing symptomatology (b = .01, SE = .05, b\* = .19, p = .85), indicating full mediation. Additionally, parent depression significantly mediated the relation between parent's sexual abuse and child internalizing symptomatology at Wave 2 through Wave 1 (b = .02, SE = .01, p < .05). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .41, SE = .05, b\* = 7.57, p < .05).

Parent depression significantly mediated the relation between parent's sexual abuse and child externalizing symptomatology at Wave 1 (b = .05, SE = .02, p < .05). Parent's sexual abuse was positively related to parent depression (b = .20, SE = .05, b\* = 3.81, p < .05), and parent depression and parent's sexual abuse were positively related to child externalizing symptomatology (b = .26, SE = .06, b\* = 4.19, p < .05; b = .12, SE = .05, b\* = 2.39, p < .05, respectively), indicating partial mediation. Finally, parent depression significantly mediated the relation between parent's sexual abuse and child externalizing symptomatology at Wave 2 through Wave 1 (b = .02, SE = .01, p < .05). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .46, SE = .05, b\* = 8.81, p < .05). No other hypothesized mediation pathways were significant.

Parent's sexual abuse was negatively related to parent self esteem (b = -.15, SE = .05,  $b^* = -2.84$ , p < .05), indicating that parent's sexual abuse was related to lower self esteem for parents. Additionally, child age was negatively related to child externalizing symptomatology at

Wave 1 (b = -.14, SE = .07, b\* = -2.16, p < .05), indicating that younger children exhibited higher externalizing symptomatology at Wave 1 though this did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

Similar to physical and emotion abuse, several of the hypothesized intrapersonal mediations were supported, namely parent's sexual abuse and higher depression were related to higher child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. There is some evidence that parent's sexual abuse, in the presence of parent depression, may increase the risk of child internalizing symptomatology across time. The significant direct effects of parent's sexual abuse on child externalizing symptomatology may indicate that parent depression does not fully mediate the relation between parent's sexual abuse and child externalizing symptomatology. However, as parent's sexual abuse was not directly related to child internalizing symptomatology, it appears that parent depression may be an important mediator in the relation between parent's sexual abuse and child internalizing symptomatology.

*Moderation*. The relations between parent's sexual abuse and child internalizing and externalizing symptomatology were not moderated by parent intrapersonal characteristics (i.e. depression and self esteem) in the original model. The original model showed poor model fit ( $\chi^2$  = 289.53, df = 9, p = .00, CFI = .59; RMSEA = .30, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths. The final trimmed model had good fit (see Table 13) and showed evidence that parent depression significantly moderated the relations between parent's sexual abuse and child externalizing symptomatology at Wave 1 (b = -3.03, SE = 1.11, b\* = -2.73, p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent depression, sexual abuse was significantly related to child externalizing symptomatology. However, when parent's depression was low sexual abuse had a stronger effect on child externalizing symptomatology (b = 3.79, SE = 1.54, b\* = .41, p < .05) compared to those parent's with high depression (b = 1.76, SE = .69, b\* = .19, p < .05), indicating that depression was an additive risk factor for parent's physical abuse (see Figure 23). There was no significant moderation effect extending to Wave 2 child symptomatology.

In terms of main effects, parent's sexual abuse predicted higher child externalizing symptomatology at Waves 1 and 2 (b = 1.21, SE = .43, b\* = 2.84, p < .05; b = 1.48, SE = .54, b\* = 2.74, p < .05, respectively) as well as higher child internalizing symptomatology at Wave 2 (b

= 1.27, SE = .61,  $b^*$  = 2.07, p < .05). Parent depression significantly predicted higher child internalizing and externalizing symptomatology at Wave 1 (b = 9.25, SE = 1.31,  $b^*$  = 7.07, p < .05; b = 6.91, SE = 1.35,  $b^*$  = 5.11, p < .05, respectively). Finally, child age was negatively related to only child externalizing symptomatology at Wave 1 (b = -.84, SE = .41,  $b^*$  = -2.05, p < .05), indicating that younger children were more likely to exhibit higher child externalizing symptomatology though this effect did not extend to Wave 2.

## Youth Self Report.

Mediation. The overall mediation model examined the roles of parent depression and self esteem in mediating the relation between parent's sexual abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 7.25$ , df = 4, p = .12, CFI = .99, and RMSEA = .05, p = .49, indicating a good model fit. However, no hypothesized mediation pathways were significant. Several direct effects were found. Parent's sexual abuse was positively related to child's internalizing symptomatology at Wave 1 (b = .11, SE = .05,  $b^* = 2.08$ , p < .05). Parent's depression was marginally positively related to children's internalizing symptomatology at Wave 2 (b = .15, SE = .08,  $b^* = 1.85$ , p < .07). This indicates that parent's sexual abuse shows evidence of being related to child symptomatology regardless of whether the parent or child reports on child symptomatology, though there appears to be no evidence of parent intrapersonal factors mediating the relation between parent's sexual abuse and children's reports of child symptomatology.

*Moderation*. The relations between parent's sexual abuse and child internalizing and externalizing symptomatology were not moderated by parent intrapersonal characteristics (i.e. depression and self esteem) in the original model. The original model showed poor model fit ( $\chi^2$  = 288.90, df = 9, p = .00, CFI = .54; RMSEA = .30, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths. The final trimmed model had good fit (see Table 13) and showed evidence that parent depression significantly moderated the relations between parent's emotion abuse and child externalizing symptomatology at Wave 1 (b = 2.35, SE = 1.14, b\* = 2.06, p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent depression, sexual abuse was not related to child externalizing symptomatology. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at high or low parent depression. There was no significant

moderation effect extending to Wave 2 child symptomatology for child internalizing symptomatology at Wave 1. In terms of main effects, parent depression significantly predicted higher child internalizing symptomatology at Wave 2 (b = 3.92, SE = 1.63, b\* = 2.41, p < .05). Child age was not related to child symptomatology.

## **Emotion Neglect.**

#### Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent depression and self esteem in mediating the relation between parent's emotion neglect and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 10.31$ , df = 4, p = .04, CFI = .99, and RMSEA = .07, p = .24 indicating an adequate model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent depression significantly mediated the relations between parent's emotion neglect and child internalizing symptomatology at Wave 1 (b = .09, SE = .02, p < .05). Parent's emotion neglect was positively related to parent depression (b = .28, SE = .05,  $b^*$  = 5.72, p < .05) and parent depression was positively related to child internalizing symptomatology (b = .31, SE = .06, b\* = 5.08, p < .05). However, parent's emotion neglect was not related to child internalizing symptomatology (b = -.02, SE = .05,  $b^* = -.30$ , p = .76), indicating full mediation. Additionally, parent depression significantly mediated the relation between parent's emotion neglect and child internalizing symptomatology at Wave 2 through Wave 1 (b = .04, SE = .01, p < .05). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .42, SE = .05, b\* = 7.69, p < .05).

Parent depression significantly mediated the relation between parent's emotion neglect and child externalizing symptomatology at Wave 1 (b = .08, SE = .02, p < .05). Parent's emotion neglect was positively related to parent depression (b = .28, SE = .05, b\* = 5.72, p < .05), parent depression was positively related to child externalizing symptomatology (b = .27, SE = .06, b\* = 4.42, p < .05). However, parent's emotion neglect was not related to child externalizing symptomatology (b = .03, SE = .05, b\* = .56, p = .58), indicating full mediation. Finally, parent depression significantly mediated the relation between parent's emotion neglect and child externalizing symptomatology at Wave 2 through Wave 1 (b = .04, SE = .01, p < .05).

Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .46, SE = .05, b\* = 8.92, p < .05). No other hypothesized mediation pathways were significant.

Parent's emotion neglect was negatively related to parent self esteem (b = -.28, SE = .05,  $b^* = -5.68$ , p < .05), indicating that parent's emotion neglect was related to lower self esteem for parents. Additionally, child age was negatively related to child externalizing symptomatology at Wave 1 (b = -.15, SE = .07,  $b^* = -2.17$ , p < .05), indicating that younger children exhibited higher child externalizing symptomatology at Wave 1 though this did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

Similar to all three types of parent's abuse experience, several of the hypothesized intrapersonal mediations were supported, namely parent's emotion neglect and higher depression were related to higher child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. There is some evidence that parent's emotion neglect, in the presence of parent depression, may increase risk of child internalizing symptomatology across time. As parent's emotion neglect was not directly related to child symptomatology, it appears that parent depression may be an important mediator in the relation between parent's emotion neglect and child symptomatology.

*Moderation.* The relations between parent's emotion neglect and child internalizing and externalizing symptomatology were not moderated by parent intrapersonal characteristics (i.e. depression and self esteem) in the original model. The original model showed poor model fit ( $\chi^2$  = 310.83, df = 9, p = .00, CFI = .58; RMSEA = .31, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths. The final trimmed model had good fit (see Table 13) and showed evidence that parent depression significantly moderated the relations between parent's emotion neglect and child internalizing and externalizing symptomatology at Wave 1 (b = -2.75, SE = 1.48, b\* = -1.86, p < .07; b = -4.00, SE = 1.51, b\* = -2.65, p < .05, respectively).

Using simple effects tests in accordance with Holmbeck (2002), in only the condition of low parent depression, parent's emotion neglect was significantly related to child internalizing symptomatology, indicating that when parent's depression was low emotion neglect had a stronger effect on child internalizing symptomatology (b = 3.80, SE = 1.38, b\* = .34, p = .05) but was not found for high parent depression (b = .10, SE = .59, b\* = .01, p = .87) (see Figure 24).

Alternately, in both conditions of high and low parent depression, emotion neglect was not related to child externalizing symptomatology. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at high or low parent depression. There was no significant moderation effect extending to Wave 2 child symptomatology.

In terms of main effects, parent's emotion neglect predicted higher child externalizing symptomatology at Wave 1 and lower child externalizing symptomatology at Wave 2 (b = 1.85, SE = .69, b\* = 2.68, p < .05; b = -1.48, SE = .65, b\* = -2.29, p < .05, respectively) as well as higher child internalizing symptomatology at Wave 1 (b = 2.21, SE = .75, b\* = 2.94, p < .05). Parent depression significantly predicted higher child internalizing and externalizing symptomatology at Wave 1 (b = 10.13, SE = 1.43, b\* = 7.09, p < .05; b = 8.52, SE = 1.46, b\* = 5.83, p < .05, respectively). Finally, child age was negatively related to only child externalizing symptomatology at Wave 1 (b = -.83, SE = .41, b\* = -2.03, p < .05), indicating that younger children were more likely to exhibit higher child externalizing symptomatology though this effect did not extend to Wave 2.

# Youth Self Report.

Mediation. The overall mediation model examined the roles of parent depression and self esteem in mediating the relation between parent's emotion neglect and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 7.60$ , df = 4, p = .11, CFI = .99, and RMSEA = .05, p = .42, indicating a good model fit. Several significant direct effects and one mediation effect were found in the overall model. The bootstrapping significance test of mediation revealed that parent depression was marginally significant in mediating the relations between parent's emotion neglect and child internalizing symptomatology at Wave 2 (b = .05, SE = .03, p = .07). Parent's emotion neglect was positively related to parent depression (b = .28, SE = .05,  $b^* = 5.72$ , p < .05), parent depression was marginally positively related to child internalizing symptomatology (b = .16, SE = .08,  $b^* = 1.92$ , p < .07), though parent's emotion neglect was not related to child internalizing symptomatology (b = .01, SE = .07,  $b^* = .01$ , p = .91), indicating full mediation.

One of the hypothesized intrapersonal mediations was supported, in that, namely parent's emotion neglect and higher depression were related to higher child internalizing symptomatology at Wave 2. There is some evidence that parent's emotion neglect, in the presence of parent

depression, may increase risk of child internalizing symptomatology across time. As parent's emotion neglect was not directly related to child internalizing or externalizing symptomatology, it appears that parent depression may be an important mediator in the relation between parent's emotion neglect and child internalizing symptomatology. This indicates that parent's emotion neglect shows some evidence of being related to child symptomatology regardless of whether the parent or child reports on child symptomatology, though these effects were more evident when using parent's report on child symptomatology.

*Moderation.* The relations between parent's emotion neglect and child internalizing and externalizing symptomatology were not moderated by parent intrapersonal characteristics (i.e. depression and self esteem) in the original model. The original model showed poor model fit ( $\chi^2$  = 310.57, df = 9, p = .00, CFI = .53; RMSEA = .31, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths. The final trimmed model had good fit (see Table 13) and showed evidence that parent depression significantly moderated the relations between parent's emotion neglect and child externalizing symptomatology at Wave 2 (b = 2.85, SE = 1.33, b\* = 2.14, p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent depression, emotion neglect was not related to child externalizing symptomatology. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at high or low parent depression. There was no significant moderation effect extending to Wave 2 child symptomatology. As parent's depression significantly moderated the relations between parent's emotion neglect and child symptomatology for parent's reports of child symptomatology but not child report of child symptomatology, this may indicate some important differences between reporters in terms of detecting moderating effects. In terms of main effects, parent depression significantly predicted higher child internalizing symptomatology at Wave 2 (b = 3.92, SE = 1.64, b\* = 2.40, p < .05). Child age was not related to child symptomatology.

# Physical Neglect.

#### Child Behavior Checklist.

*Mediation*. The overall mediation model examined the roles of parent depression and self esteem in mediating the relation between parent's physical neglect and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 9.98$ , df = 4, p

= .04, CFI = .99, and RMSEA = .07, p = .26 indicating an adequate model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent depression significantly mediated the relations between parent's physical neglect and child internalizing symptomatology at Wave 1 (b = .04, SE = .02, p < .05). Parent's physical neglect was positively related to parent depression (b = .13, SE = .05, b\* = 2.46, p < .05) and parent depression was positively related to child internalizing symptomatology (b = .31, SE = .06, b\* = 5.14, p < .05). However, parent's physical neglect was not related to child internalizing symptomatology (b = -.05, SE = .05, b\* = -.99, p = .32), indicating full mediation. Additionally, parent depression significantly mediated the relation between parent's physical neglect and child internalizing symptomatology at Wave 2 through Wave 1 (b = .02, SE = .01, p < .05). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .42, SE = .05, b\* = 7.73, p < .05).

Parent depression significantly mediated the relation between parent's physical neglect and child externalizing symptomatology at Wave 1 (b = .04, SE = .02, p < .05). Parent's physical neglect was positively related to parent depression (b = .13, SE = .05, b\* = 2.46, p < .05), parent depression was positively related to child externalizing symptomatology (b = .27, SE = .06, b\* = 4.45, p < .05). However, parent's physical neglect was not related to child externalizing symptomatology (b = .09, SE = .05, b\* = 1.75, p = .08), indicating full mediation. Finally, parent depression significantly mediated the relation between parent's physical neglect and child externalizing symptomatology at Wave 2 through Wave 1 (b = .02, SE = .01, p < .05). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .46, SE = .05, b\* = 8.81, p < .05). No other hypothesized mediation pathways were significant.

Parent's physical neglect was negatively related to parent self esteem (b = -.14, SE = .05,  $b^* = -2.65$ , p < .05), indicating that parent's physical neglect was related to lower self esteem for parents. Additionally, child age was negatively related to child externalizing symptomatology at Wave 1 (b = -.14, SE = .07,  $b^* = -2.10$ , p < .05), indicating that younger children exhibited higher child externalizing symptomatology at Wave 1 though this did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

Similar to the other four types of abuse and neglect, several of the hypothesized intrapersonal mediations were supported, namely parent's physical neglect and higher depression were related to higher child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. There is some evidence that parent's physical neglect, in the presence of parent depression, may increase risk of child internalizing symptomatology across time. As parent's physical neglect was not directly related to child symptomatology, it appears that parent depression may be an important mediator in the relation between parent's physical neglect and child symptomatology.

*Moderation.* The relations between parent's physical neglect and child internalizing and externalizing symptomatology were not moderated by parent intrapersonal characteristics (i.e. depression and self esteem) in the original model. The original model showed poor model fit ( $\chi^2$  = 277.37, df = 9, p = .00, CFI = .59; RMSEA = .29, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths. The final trimmed model had good fit (see Table 13) and showed evidence that parent depression significantly moderated the relations between parent's physical neglect and child internalizing and externalizing symptomatology at Wave 2 (b = 7.26, SE = 2.93, b\* = 2.48, p < .05; b = 6.54, SE = 2.60, b\* = 2.51, p < .05, respectively).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent depression, physical neglect was not related to child internalizing or externalizing symptomatology. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at high or low parent depression. No other significant moderations were found.

In terms of main effects, parent depression significantly predicted higher child internalizing and externalizing symptomatology at Wave 1 (b = 9.25, SE = 1.31, b\* = 7.05, p < .05; b = 7.14, SE = 1.35, b\* = 5.29, p < .05, respectively). Parent's physical neglect was positively related to child externalizing symptomatology at Wave 1 (b = 2.15, SE = .77, b\* = 2.81, p < .05). Child age was negatively related to child externalizing symptomatology at Wave 1 (b = -.87, SE = .41, b\* = -2.13, p < .05) indicating that younger children exhibited higher child externalizing symptomatology, though this effect did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

### Youth Self Report.

Mediation. The overall mediation model examined the roles of parent depression and self esteem in mediating the relation between parent's physical neglect and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 6.89$ , df = 4, p = .14, CFI = .99, and RMSEA = .05, p = .48, indicating a good model fit. However, no hypothesized mediation pathways were significant. Several direct effects were found. Parent's physical neglect was positively related to child's externalizing symptomatology at Wave 1 (b = .11, SE = .05, b\*=1.99, p < .05). The bootstrapping significance test of mediation revealed that parent's depression was positively related to children's internalizing symptomatology at Wave 2 (b = .16, SE = .08, b\*=1.97, p < .05). This indicates that parent's physical neglect shows evidence of being related to child symptomatology regardless of whether the parent or child reports on child symptomatology, though there appears to be no evidence of parent intrapersonal factors mediating the relation between parent physical neglect and children's reports of child symptomatology.

Moderation. The relations between parent's physical neglect and child internalizing and externalizing symptomatology were not moderated by parent intrapersonal characteristics (i.e. depression and self esteem) in the original model. The original model showed poor model fit ( $\chi^2$  = 276.17, df = 9, p = .00, CFI = .53; RMSEA = .29, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths. The final trimmed model, though it had a good fit (see Table 13), revealed no significant moderations. Similar to other types of parent's childhood maltreatment, moderations were largely found for parent's report of child symptomatology but not for child's report of child symptomatology. In terms of main effects, parent's physical neglect predicted higher child externalizing symptomatology at Wave 1 (b = 1.46, SE = .72, b\* = 2.04, p < .05). Parent depression significantly predicted higher child internalizing symptomatology at Wave 1 (b = 3.92, SE = 1.63, b\* = 2.41, p < .05). Finally, child age was not related to child symptomatology.

# 3.4 - Parent Socio-Demographic Factors

#### **Emotion Abuse.**

## Child Behavior Checklist.

*Mediation*. The overall mediation model examined the roles of parent education, income, and age of becoming a parent in mediating the relation between parent's emotion abuse and child

internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 7.07$ , df = 5, p = .22, CFI = 1.00, and RMSEA = .03, p = .62 indicating a good model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent income significantly mediated the relations between parent's emotion abuse and child internalizing symptomatology at Wave 1 (b = .05, SE = .02, p < .05). Parent's emotion abuse was negatively related to parent income (b = -.25, SE = .05,  $b^* = -4.91$ , p < .05), parent income was negatively related to child internalizing (b = -.20, SE = .06,  $b^* = -3.36$ , p < .05), and parent's emotion abuse was positively related to child internalizing symptomatology (b = .15, SE = .05,  $b^* = 2.75$ , p < .05), indicating partial mediation. Further, parent income mediated the relations between parent's emotion abuse and child internalizing symptomatology through Wave 1 to Wave 2 (b = .02, SE = .01, p < .05). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .43, SE = .05,  $b^* = 8.10$ , p < .05).

Parent income significantly mediated the relation between parent's emotion abuse and child externalizing symptomatology at Wave 1 (b = .04, SE = .02, p < .05). Parent's emotion abuse was negatively related to parent income (b = -.25, SE = .05, b\* = -4.91, p < .05), parent income was negatively related to child externalizing symptomatology (b = -.16, SE = .06, b\* = -2.69, p < .05), and parent's emotion abuse was positively related to child externalizing symptomatology (b = .19, SE = .05, b\* = 3.66, p < .05), indicating partial mediation. Further, parent income mediated the relations between parent's emotion abuse and child internalizing symptomatology through Wave 1 to Wave 2 (b = .02, SE = .01, p < .05). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .45, SE = .05, b\* = 8.53, p < .05). No other hypothesized mediation pathways were significant.

Parent's emotion abuse was negatively related to parent education (b = -.15, SE = .05,  $b^* = -2.82$ , p < .05) and parent age (b = -.22, SE = .07,  $b^* = -3.19$ , p < .05) indicating that parent's emotion abuse was related to lower education for parents and a younger age of becoming a parent. However, there was no evidence of mediation for either parent education or age of becoming a parent. Child age was not related to child symptomatology.

Overall, some of the hypothesized socio-demographic mediations were supported, namely parent's emotion abuse and lower income were related to higher child internalizing and externalizing symptomatology at Wave 1 and 2. There is some evidence that parent's emotion abuse, in the presence of a low income family environment, may increase risk of child symptomatology across time. The significant direct effects of parent's emotion abuse on child internalizing symptomatology may indicate that parent income does not fully mediate the relation between parent's emotion abuse and child symptomatology. These findings indicate that parent income may play an important role in the relation between parent's emotion abuse and child symptomatology.

*Moderation.* The relations between parent's emotion abuse and child internalizing and externalizing symptomatology were not moderated by parent socio-demographic characteristics (i.e. age of becoming a parent, parent income, and parent education) in the original model (see Table 14). The original model showed poor model fit ( $\chi^2 = 268.85$ , df = 19, p = .00, CFI = .66; RMSEA = .19, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths, and ultimately both non-significant moderators (age of becoming a parent and parent income). The final trimmed model had good fit (see Table 14) and showed evidence that parent depression significantly moderated the relations between parent's emotion abuse and child externalizing symptomatology at Wave 2 (b = -1.31, SE = .40,  $b^* = -3.28$ , p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent education, emotion abuse was significantly related to child externalizing symptomatology. However, when parent's education was low emotion abuse had a stronger effect on child externalizing symptomatology (b = 11.27, SE = 4.16, b\* = 1.08, p < .05) compared to those parent's with high education (b = 7.80, SE = 2.76, b\* = .75, p < .05), indicating that low education acted as a risk factor and interacted with parent's emotion abuse (see Figure 25). No other significant moderations were found.

In terms of main effects, parent's emotion abuse predicted higher child internalizing symptomatology at Wave 1 and 2 (b = 2.05, SE = .59, b\* = 3.46, p < .05; b = 2.48, SE = .58, b\* = 4.24, p < .05, respectively) as well as higher child externalizing symptomatology at Wave 1 (b = 1.30, SE = .69, b\* = 1.89, p < .07). Parent education was negatively related to child externalizing symptomatology at Wave 1 and 2 (b = -.80, SE = .44, b\* = -1.81, p = .07; b = -.83,

SE = .45,  $b^*$  = -1.84, p < .07, respectively), indicating that lower parent education was related to higher child externalizing symptomatology. Finally, child age was negatively related to only child externalizing symptomatology at Wave 1 (b = -.97, SE = .42,  $b^*$  = -2.33, p < .05), indicating that younger children were more likely to exhibit higher child externalizing symptomatology though this effect did not extend to Wave 2.

### Youth Self Report.

*Mediation.* The overall mediation model examined the roles of parent education, income, and age of becoming a parent in mediating the relation between parent's emotion abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 3.59$ , df = 5, p = .61, CFI = 1.00, and RMSEA = .00, p = .89 indicating a good model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that age of becoming a parent significantly mediated the relations between parent's emotion abuse and child internalizing symptomatology at Wave 1 (b = .05, SE = .02, p < .05). Parent's emotion abuse was negatively related to age of becoming a parent (b = -.23, SE = .07,  $b^* = -3.35$ , p < .05), age of becoming a parent was negatively related to child internalizing (b = -.22, SE = .08, b\* = -2.77, p < .05), however parent's emotion abuse was not related to child internalizing symptomatology (b = .02, SE = .06,  $b^* = .39$ , p = .69), indicating full mediation. Further, age of becoming a parent was marginally significant in mediating the relations between parent's emotion abuse and child internalizing symptomatology through Wave 1 to Wave 2 (b = .01, SE = .01, p < .07). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .28, SE = .06, b\* = 4.89, p < .05).

Parent income was marginally significant in mediating the relation between parent's emotion abuse and child externalizing symptomatology at Wave 1 (b = .04, SE = .02, p < .07). Parent's emotion abuse was negatively related to income (b = -.23, SE = .07, b\* = -3.35, p < .05), income was negatively related to child externalizing symptomatology (b = -.18, SE = .08, b\* = -2.26, p < .05), however parent's emotion abuse was not related to child externalizing symptomatology (b = .10, SE = .07, b\* = 1.37, p = .17), indicating full mediation. No other hypothesized mediation pathways were significant.

Parent's emotion abuse was negatively related to parent education (b = -.15, SE = .05, b\* = -2.81, p < .05) and income (b = -.25, SE = .05, b\* = -4.95, p < .05) indicating that parent's emotion abuse was related to lower education and income for parents. However, there was no evidence of mediation for either parent education or income. Child age was not related to child symptomatology.

Overall, some of the hypothesized socio-demographic mediations were supported, namely parent's emotion abuse and younger age of becoming a parent were related to higher child internalizing symptomatology at Wave 1 and Wave 2 and child externalizing symptomatology at Wave 1. There is some evidence that parent's emotion abuse, in the presence of a younger parent, may increase the risk of child symptomatology across time. The lack of direct effects of parent's emotion abuse on child symptomatology may indicate that age of becoming a parent is an important mediator in the relation between parent's emotion abuse and child symptomatology. This indicates that parent's emotion abuse shows some evidence of being related to child symptomatology regardless of whether the parent or child reports on child symptomatology.

*Moderation.* The relations between parent's emotion abuse and child internalizing and externalizing symptomatology were not moderated by parent socio-demographic characteristics (i.e. age of becoming a parent, parent income, and parent education) in the original model. The original model showed poor model fit ( $\chi^2 = 272.17$ , df = 19, p = .00, CFI = .63; RMSEA = .19, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it had a good fit (see Table 14), revealed no significant moderations. This indicates that moderation effects were found for parent's report of child symptomatology but not for children's reports of child symptomatology. In terms of main effects, parent's emotion abuse predicted higher child externalizing symptomatology at Wave 1 (b = 1.31, SE = .57, b\* = 2.31, p < .05) and was marginally significant in predicting child internalizing symptomatology at Wave 2 (b = 1.29, SE = .70, b\* = 1.84, p < .07). Finally, child age was not related to child symptomatology.

# Physical Abuse.

#### Child Behavior Checklist.

*Mediation*. The overall mediation model examined the roles of parent education, income, and age of becoming a parent in mediating the relation between parent's physical abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a

 $\chi^2 = 7.10$ , df = 5, p = .21, CFI = 1.00, and RMSEA = .03, p = .62 indicating a good model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent income significantly mediated the relations between parent's physical abuse and child internalizing symptomatology at Wave 1 (b = .04, SE = .02, p < .05). Parent's physical abuse was negatively related to parent income (b = -.19, SE = .05,  $b^* = -3.68$ , p < .05), parent income was negatively related to child internalizing symptomatology (b = -.23, SE = .06,  $b^* = -3.98$ , p < .05), and parent's physical abuse was not related to child internalizing symptomatology (b = .01, SE = .05,  $b^* = .21$ , p = .83), indicating full mediation. Further, parent income mediated the relations between parent's physical abuse and child internalizing symptomatology through Wave 1 to Wave 2 (b = .02, SE = .01, p < .05). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .44, SE = .05,  $b^* = 8.55$ , p < .05).

Parent income significantly mediated the relation between parent's physical abuse and child externalizing symptomatology at Wave 1 (b = .04, SE = .01, p < .05). Parent's physical abuse was negatively related to parent income (b = -.19, SE = .05, b\* = -3.68, p < .05), parent income was negatively related to child externalizing symptomatology (b = -.19, SE = .06, b\* = -3.28, p < .05), and parent's physical abuse was positively related to child externalizing symptomatology (b = .12, SE = .05, b\* = 2.21, p < .05), indicating partial mediation. Further, parent income mediated the relations between parent's physical abuse and child internalizing symptomatology through Wave 1 to Wave 2 (b = .02, SE = .01, p < .05). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .45, SE = .05, b\* = 8.72, p < .05). No other hypothesized mediation pathways were significant.

Parent's physical abuse was negatively related to parent education (b = -.23, SE = .05,  $b^*$  = -4.61, p < .05) and parent age (b = -.28, SE = .07,  $b^* = -3.96$ , p < .05) indicating that parent's physical abuse was related to lower education for parents and a younger age of becoming a parent. However, there was no evidence of mediation for either parent education or age of becoming a parent. Child age was negatively related to child externalizing symptomatology at Wave 1 (b = -.15, SE = .07,  $b^* = -2.19$ , p < .05), indicating that younger children exhibited higher child externalizing symptomatology at Wave 1, though this did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

Overall, several of the hypothesized socio-demographic mediations were supported, namely parent's physical abuse was related to higher child internalizing and externalizing symptomatology at Wave 1 and 2 through lower income. There is some evidence that parent's physical abuse, in the presence of a low income family environment, may increase risk of child symptomatology across time. The significant direct effects of parent's physical abuse on child externalizing symptomatology may indicate that parent income does not fully mediate the relation between parent's physical abuse and child externalizing symptomatology. However, as parent's physical abuse was not directly related to child internalizing symptomatology after taking account for the mediation through family income, it may be that income represents an important role in mediating the relations between parent's physical abuse and child internalizing symptomatology.

*Moderation*. The relations between parent's physical abuse and child internalizing and externalizing symptomatology were not moderated by parent socio-demographic characteristics (i.e. age of becoming a parent, parent income, and parent education) in the original model. The original model showed poor model fit ( $\chi^2 = 314.95$ , df = 19, p = .00, CFI = .63; RMSEA = .21, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit (see Table 14) and showed evidence that parent education significantly moderated the relations between parent's physical abuse and child internalizing symptomatology at Wave 2 (b = .84, SE = .47, b\*=1.77, p = .07).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent education, physical abuse was not related to child internalizing symptomatology. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at high or low parent education. No other significant moderations were found. In terms of main effects, parent's physical abuse significantly predicted higher child externalizing symptomatology at Wave 1 (b = 1.97, SE = .76, b\* = 2.59, p < .05). Child age was negatively related to child externalizing symptomatology at Wave 1 (b = -1.01, SE = .42, b\* = -2.39, p < .05) indicating that younger children exhibited higher child externalizing symptomatology, though this effect did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

### Youth Self Report.

Mediation. The overall mediation model examined the roles of parent education, income, and age of becoming a parent in mediating the relation between parent's physical abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 3.96$ , df = 5, p = .56, CFI = 1.00, and RMSEA = .00, p = .87 indicating a good model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent education significantly mediated the relations between parent's physical abuse and child internalizing symptomatology at Wave 1 (b = -.04, SE = .02, p < .05). Parent's physical abuse was negatively related to parent education (b = -.23, SE = .05,  $b^* = -4.60$ , p < .05), parent education was positively related to child internalizing symptomatology (b = .16, SE = .06,  $b^* = 2.48$ , p < .05), and parent's physical abuse was positively related to child internalizing symptomatology (b = .11, SE = .06,  $b^* = 2.10$ , p < .05), indicating partial mediation. Further, parent education mediated the relations between parent's physical abuse and child internalizing symptomatology through Wave 1 to Wave 2 (b = .01, SE = .01, p < .05). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .28, SE = .06,  $b^* = 4.75$ , p < .05).

Age of becoming a parent significantly mediated the relations between parent's physical abuse and child internalizing symptomatology at Wave 1 (b = .06, SE = .03, p < .05). Parent's physical abuse was negatively related to age of becoming a parent (b = .28, SE = .07, b\* = -4.09, p < .05), age of becoming a parent was negatively related to child internalizing symptomatology (b = -.20, SE = .08, b\* = -2.55, p < .05), and parent's physical abuse was positively related to child internalizing symptomatology (b = .11, SE = .06, b\* = 2.10, p < .05), indicating partial mediation. Further, age of becoming a parent was marginally significant in mediating the relations between parent's physical abuse and child internalizing symptomatology at Wave 1 to Wave 2 (b = .02, SE = .01, p < .07). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 4 was positively related to child internalizing symptomatology at Wave 5 (b = .28, SE = .06, b\* = 4.75, p < .05).

Additionally, age of becoming a parent was marginally significant in mediating the relations between parent's physical abuse and child externalizing symptomatology at Wave 1 (b = .05, SE = .03, p < .07). Parent's physical abuse was negatively related to age of becoming a parent (b = .28, SE = .07, b\* = -4.09, p < .05), age of becoming a parent was negatively related

to child externalizing symptomatology (b = -.18, SE = .08,  $b^* = -2.23$ , p < .05). However, parent's physical abuse was not related to child externalizing symptomatology (b = .08, SE = .06,  $b^* = 1.42$ , p = .16), indicating full mediation. Further, age of becoming a parent was marginally significant in mediating the relations between parent's physical abuse and child externalizing symptomatology through Wave 1 to Wave 2 (b = .02, SE = .01, p = .07). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .35, SE = .06,  $b^* = 6.08$ , p < .05). No other hypothesized mediation pathways were significant.

In terms of direct effects, parent's physical abuse was negatively related to parent income (b = -.19, SE = .05, b\* = -3.68, p < .05), indicating that parent's physical abuse was related to lower income for parents. However, there was no evidence of mediation for income. Child age was not related to child symptomatology.

Overall, several of the hypothesized socio-demographic mediations were supported, namely parent's physical abuse, lower education, and age of becoming a parent were related to higher child internalizing symptomatology at Wave 1 and 2. Additionally, parent's physical abuse and age of becoming a parent were related to higher child externalizing symptomatology at Wave 1 and 2. There is some evidence that parent's physical abuse, through its relations to the young age of becoming a parent and lower levels of education, may increase risks of child symptomatology across time. The significant direct effects of parent's physical abuse on child internalizing symptomatology may indicate that socio-demographic factors do not fully mediate the relation between parent's physical abuse and child internalizing symptomatology. However, the lack of direct effects of parent's physical abuse on child externalizing symptomatology after taking account for the mediation effect of age of becoming a parent indicates that age of becoming a parent may be an important mediator in the relations between parent's physical abuse and child externalizing symptomatology.

These findings indicate that socio-demographic context may play an important role in the relation between parent's physical abuse and child symptomatology. This indicates that parent's physical abuse shows some evidence of being related to child symptomatology regardless of whether the parent or child reports on child symptomatology, though there were some differences in these effects. Parent income appeared to play a role in mediating these relations

when parents reported on child symptomatology, whereas age of becoming a parent and parent education acted as mediators in those cases where children reported on child symptomatology.

Moderation. The relations between parent's physical abuse and child internalizing and externalizing symptomatology were not moderated by parent socio-demographic characteristics (i.e. age of becoming a parent, parent income, and parent education) in the original model. The original model showed poor model fit ( $\chi^2 = 322.11$ , df = 19, p = .00, CFI = .60; RMSEA = .21, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it had a good fit (see Table 14), revealed no significant moderations. Similar to parent's report of child symptomatology, for parent's physical abuse and child symptomatology there was no evidence of socio-demographic factors moderating the relations between parent's physical abuse and child symptomatology. In terms of main effects, parent's physical abuse predicted higher child internalizing and externalizing symptomatology at Wave 1 (b = 2.91, SE = .84, b\* = 3.48, p < .05; b = 2.17, SE = .79, b\* = 2.75, p < .05, respectively). Finally, child age was not related to child symptomatology.

#### Sexual Abuse.

#### Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent education, income, and age of becoming a parent in mediating the relation between parent's sexual abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 6.12$ , df = 5, p = .29, CFI = 1.00, and RMSEA = .03, p = .62 indicating a good model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent income significantly mediated the relations between parent's sexual abuse and child internalizing symptomatology at Wave 1 (b = .06, SE = .02, p < .05). Parent's sexual abuse was negatively related to parent income (b = .26, SE = .05, b\* = -5.53, p < .05), parent income was negatively related to child internalizing symptomatology (b = .22, SE = .06, b\* = -3.75, p < .05), and parent's sexual abuse was not related to child internalizing symptomatology (b = .05, SE = .06, b\* = .87, p = .38), indicating full mediation. Further, parent income mediated the relations between parent's sexual abuse and child internalizing symptomatology through Wave 1 to Wave 2 (b = .03, SE = .01, p < .05). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .43, SE = .05, b\* = 8.22, p < .05).

Parent income significantly mediated the relation between parent's sexual abuse and child externalizing symptomatology at Wave 1 (b = .05, SE = .02, p < .05). Parent's sexual abuse was negatively related to parent income (b = -.26, SE = .05, b\* = -5.53, p < .05), parent income was negatively related to child externalizing symptomatology (b = -.17, SE = .06, b\* = -2.96, p < .05), and parent's sexual abuse was positively related to child externalizing symptomatology (b = .12, SE = .05, b\* = 2.22, p < .05), indicating partial mediation. Further, parent income mediated the relations between parent's sexual abuse and child internalizing symptomatology through Wave 1 to Wave 2 (b = .02, SE = .01, p < .05). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .45, SE = .05, b\* = 8.65, p < .05). No other hypothesized mediation pathways were significant.

Parent's sexual abuse was negatively related to parent education (b = -.19, SE = .05, b\* = -3.88, p < .05) and parent age (b = -.28, SE = .07, b\* = -4.45, p < .05) indicating that parent's sexual abuse was related to lower education for parents and a younger age of becoming a parent. However, there was no evidence of mediation for either parent education or age of becoming a parent. Child age was negatively related to child externalizing symptomatology at Wave 1 (b = -.10, SE = .04, b\* = -2.21, p < .05), indicating that younger children exhibited higher child externalizing symptomatology at Wave 1, though this did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

Overall, several of the hypothesized socio-demographic mediations were supported, namely parent's sexual abuse and lower income were related to higher child internalizing and externalizing symptomatology at Wave 1 and 2. There is some evidence that parent's sexual abuse, through its relations to a low income family environment, may increase risk of child symptomatology across time. The significant direct effects of parent's sexual abuse on child externalizing symptomatology may indicate that parent income does not fully mediate the relation between parent's sexual abuse and child externalizing symptomatology. However, as parent's sexual abuse was not related to child internalizing symptomatology after accounting for the mediation effect of income, it may be that income represents an important role in mediating the relations between parent's sexual abuse and child internalizing symptomatology.

*Moderation*. The relations between parent's sexual abuse and child internalizing and externalizing symptomatology were not moderated by parent socio-demographic characteristics (i.e. age of becoming a parent, parent income, and parent education) in the original model. The original model showed poor model fit ( $\chi^2 = 221.67$ , df = 19, p = .00, CFI = .74; RMSEA = .17, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit (see Table 14) and showed evidence that parent education significantly moderated the relations between parent's sexual abuse and child externalizing symptomatology at Wave 1 (b = -1.10, SE = .36, b\* = -3.09, p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent education, sexual abuse was significantly related to child externalizing symptomatology. However, when parent's education was low sexual abuse had a stronger effect on child externalizing symptomatology (b = 8.99, SE = 2.76, b\* = .92, p < .05) compared to those parent's with high education (b = 6.09, SE = 1.72, b\* = .62, p < .05), indicating that education was a risk factor which interacted with parent's sexual abuse (see Figure 26). No other significant moderations were found.

In terms of main effects, parent's sexual abuse predicted higher child internalizing and externalizing symptomatology at Wave 2 (b = 1.37, SE = .67, b\* = 2.06, p < .05; b = 1.11, SE = .62, b\* = 1.80, p = .07, respectively). Parent education was negatively related to child externalizing symptomatology at Wave 1 (b = -.86, SE = .35, b\* = -2.43, p < .05). Finally, child age was negatively related to only child externalizing symptomatology at Wave 1 (b = -1.04, SE = .39, b\* = -2.63, p < .05), indicating that younger children were more likely to exhibit higher child externalizing symptomatology though this effect did not extend to Wave 2.

## Youth Self Report.

*Mediation*. The overall mediation model examined the roles of parent education, income, and age of becoming a parent in mediating the relation between parent's sexual abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 3.60$ , df = 5, p = .61, CFI = 1.00, and RMSEA = .00, p = .89 indicating a good model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent education significantly mediated the relations between parent's sexual abuse and child internalizing symptomatology at Wave 1 (b = -.03, SE = .02, p = .05). Parent's sexual abuse was negatively related to parent education (b = .03).

-.20, SE = .05,  $b^*$  = -3.85, p < .05), parent education was positively related to child internalizing symptomatology (b = .15, SE = .06,  $b^*$  = 2.30, p < .05), and parent's sexual abuse was not related to child internalizing symptomatology (b = .06, SE = .06,  $b^*$  = 1.10, p = .15), indicating full mediation. Further, parent education was marginally significant in mediating the relations between parent's sexual abuse and child internalizing symptomatology through Wave 1 to Wave 2 (b = -.01, SE = .01, p = .07). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .29, SE = .06,  $b^*$  = 4.87, p < .05).

Age of becoming a parent significantly mediated the relations between parent's sexual abuse and child internalizing symptomatology at Wave 1 (b = .06, SE = .03, p < .05). Parent's sexual abuse was negatively related to age of becoming a parent (b = -.29, SE = .06, b\* = -4.64, p < .05), age of becoming a parent was negatively related to child internalizing symptomatology (b = -.21, SE = .08, b\* = -2.72, p < .05), and parent's sexual abuse was not related to child internalizing symptomatology (b = .06, SE = .06, b\* = 1.10, p = .27), indicating full mediation. Further, age of becoming a parent was marginally significant in mediating the relations between parent's sexual abuse and child internalizing symptomatology through Wave 1 to Wave 2 (b = .02, SE = .01, p = .07). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .29, SE = .06, b\* = 4.87, p < .05).

Additionally, age of becoming a parent significantly mediated the relations between parent's sexual abuse and child externalizing symptomatology at Wave 1 (b = .06, SE = .03, p < .05). Parent's sexual abuse was negatively related to age of becoming a parent (b = .29, SE = .06, b\* = -4.64, p < .05), age of becoming a parent was negatively related to child externalizing symptomatology (b = -.20, SE = .08, b\* = -2.49, p < .05). However, parent's sexual abuse was not related to child externalizing symptomatology (b = -.01, SE = .06, b\* = -.12, p = .91), indicating full mediation. Further, age of becoming a parent significantly mediated the relations between parent's sexual abuse and child externalizing symptomatology through Wave 1 to Wave 2 (b = .02, SE = .01, p < .05). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .35, SE = .06, b\* = 6.05, p < .05).

Income was marginally significant in mediating the relations between parent's sexual abuse and child externalizing symptomatology at Wave 1 (b = .03, SE = .02, p < .07). Parent's sexual abuse was negatively related to income (b = -.27, SE = .05, b\* = -5.43, p < .05), income was negatively related to child externalizing symptomatology (b = -.12, SE = .06, b\* = -1.99, p < .05)

.05). However, parent's sexual abuse was not related to child externalizing symptomatology (b = -.01, SE = .06,  $b^* = -1.12$ , p = .91), indicating full mediation. Further, income was marginally significant in mediating the relations between parent's sexual abuse and child externalizing symptomatology through Wave 1 to Wave 2 (b = .01, SE = .01, p = .07). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .35, SE = .06,  $b^* = 6.05$ , p < .05). No other hypothesized mediation pathways were significant. Child age was not related to child symptomatology.

Overall, several of the hypothesized socio-demographic mediations were supported, namely parent's sexual abuse and lower education and age of becoming a parent were related to higher child internalizing symptomatology at Wave 1 and 2. Additionally, parent's sexual abuse and age of becoming a parent and parent income were related to higher child externalizing symptomatology at Wave 1 and 2. There is some evidence that parent's sexual abuse, through its relations to the young age of becoming a parent, low income and lower parent education, may increase risks of child symptomatology across time. The lack of direct effects of parent's sexual abuse on child symptomatology, after accounting for the mediation effect of income and education, indicates that socio-demographic factors may be important mediators in the relations between parent's sexual abuse and child symptomatology. This indicates that parent's sexual abuse shows some evidence of being related to child symptomatology regardless of whether the parent or child reports on child symptomatology, though there were some differences in these effects. Parent income appeared to play a role in mediating these relations when parent's or children reported on child symptomatology, whereas age of becoming a parent and parent education acted as mediators in those cases where children reported on child symptomatology.

*Moderation*. The relations between parent's sexual abuse and child internalizing and externalizing symptomatology were not moderated by parent socio-demographic characteristics (i.e. age of becoming a parent, parent income, and parent education) in the original model. The original model showed poor model fit ( $\chi^2 = 224.40$ , df = 19, p = .00, CFI = .72; RMSEA = .18, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit (see Table 14) and showed evidence that age of becoming a parent significantly moderated the relations between parent's sexual abuse and child externalizing symptomatology at Wave 2 (b = .24, SE = .11, b\* = -2.22, p = .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of older and younger age of becoming a parent, sexual abuse was not related to child externalizing symptomatology. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at younger or older age of becoming a parent. No other significant moderations were found. Similar to other types of parent's childhood maltreatment, moderators were found for parent's report of child symptomatology but not for children's report of child symptomatology. In terms of main effects, younger age of becoming a parent significantly predicted higher child internalizing and externalizing symptomatology at Wave 1 (b = -.32, SE = .12, b\* = -2.74, p < .05; b = -.37, SE = .11, b\* = -3.42, p < .05, respectively). Child age was not related to child symptomatology.

## **Emotion Neglect.**

#### Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent education, income, and age of becoming a parent in mediating the relation between parent's emotion neglect and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 6.50$ , df = 5, p = .26, CFI = 1.00, and RMSEA = .03, p = .67 indicating a good model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent income significantly mediated the relations between parent's emotion neglect and child internalizing symptomatology at Wave 1 (b = .05, SE = .02, p < .05). Parent's emotion neglect was negatively related to parent income (b = -.22, SE = .05,  $b^* = -4.32$ , p < .05), parent income was negatively related to child internalizing symptomatology (b = -.22, SE = .06,  $b^* = -3.74$ , p < .05), and parent's emotion neglect was not related to child internalizing symptomatology (b = .07, SE = .05,  $b^* = 1.29$ , p = .20), indicating full mediation. Further, parent income mediated the relations between parent's emotion neglect and child internalizing symptomatology through Wave 1 to Wave 2 (b = .02, SE = .01, p < .05). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .43, SE = .05,  $b^* = 8.30$ , p < .05).

Parent income significantly mediated the relation between parent's emotion neglect and child externalizing symptomatology Wave 1 (b = .04, SE = .02, p < .05). Parent's emotion neglect was negatively related to parent income (b = -.22, SE = .05, b\* = -4.32, p < .05), parent income was negatively related to child externalizing symptomatology (b = -.19, SE = .06, b\* = -.19).

-3.23, p < .05), and parent's emotion neglect was not related to child externalizing symptomatology (b = .06, SE = .05, b\* = 1.12, p = .26), indicating full mediation. Further, parent income mediated the relations between parent's emotion neglect and child internalizing symptomatology through Wave 1 to Wave 2 (b = .02, SE = .01, p < .05). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .45, SE = .05, b\* = 8.71, p < .05). No other hypothesized mediation pathways were significant.

Parent's emotion neglect was negatively related to parent education (b = -.19, SE = .05, b\*=-3.63, p < .05) and parent age (b = -.22, SE = .07, b\*=-3.17, p < .05) indicating that parent's emotion neglect was related to lower education for parents and a younger age of becoming a parent. However, there was no evidence of mediation for either parent education or age of becoming a parent. Child age was negatively related to child externalizing symptomatology at Wave 1 (b = -.15, SE = .07, b\*=-2.21, p < .05), indicating that younger children exhibited higher child externalizing symptomatology at Wave 1, though this did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

Overall, several of the hypothesized socio-demographic mediations were supported, namely parent's emotion neglect and lower income were related to higher child internalizing and externalizing symptomatology at Wave 1 and 2. There is some evidence that parent's emotion neglect, through its relations to a low income family environment, may increase the risk of child symptomatology across time. The significant direct effects of parent's emotion neglect on child externalizing symptomatology may indicate that parent income does not fully mediate the relation between parent's emotion neglect and child externalizing symptomatology. However, as parent's emotion neglect was not related to child internalizing symptomatology after accounting for the mediation effect of income, it may be that income represents an important role in mediating the relations between parent's emotion neglect and child internalizing symptomatology.

*Moderation*. The relations between parent's emotion neglect and child internalizing and externalizing symptomatology were not moderated by parent socio-demographic characteristics (i.e. age of becoming a parent, parent income, and parent education) in the original model. The original model showed poor model fit ( $\chi^2 = 254.05$ , df = 19, p = .00, CFI = .65; RMSEA = .19, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it

had a good fit (see Table 14), revealed no significant moderations. In terms of main effects, parent's emotion neglect was marginally significant in predicted higher child internalizing symptomatology Wave 1 and child externalizing symptomatology at Wave 2 (b = 1.16, SE = .62, b\*=1.88, p < .07; b = 1.13, SE = .61, b\*=1.84, p < .07, respectively). Additionally, parent education was negatively related to child externalizing symptomatology at Wave 1 (b = -.88, SE = .45, b\*=-1.94, p = .05). Finally, child age was negatively related to child externalizing symptomatology at Wave 1 (b = -1.02, SE = .42, b\*=-2.41, p = .05), though these effects did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

## Youth Self Report.

Mediation. The overall mediation model examined the roles of parent education, income, and age of becoming a parent in mediating the relation between parent's emotion neglect and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 4.05$ , df = 5, p = .54, CFI = 1.00, and RMSEA = .00, p = .86 indicating a good model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent education was marginally significant in mediating the relations between parent's emotion neglect and child internalizing symptomatology at Wave 1 (b = -.03, SE = .02, p < .07). Parent's emotion neglect was negatively related to parent education (b = -.19, SE = .05, b\* = -3.63, p < .05), parent education was positively related to child internalizing symptomatology (b = .14, SE = .07, b\* = 2.16, p < .05), and parent's emotion neglect was not related to child internalizing symptomatology (b = .05), and parent's emotion neglect was not related to child internalizing symptomatology (b = .05), and parent's emotion neglect was not related to child internalizing symptomatology (b = .05), indicating full mediation.

Age of becoming a parent significantly mediated the relations between parent's emotion neglect and child internalizing symptomatology at Wave 1 (b = .04, SE = .02, p < .05). Parent's emotion neglect was negatively related to age of becoming a parent (b = -.21, SE = .07,  $b^* = -3.08$ , p < .05), age of becoming a parent was negatively related to child internalizing symptomatology (b = -.21, SE = .08,  $b^* = -2.68$ , p < .05), and parent's emotion neglect was not related to child internalizing symptomatology (b = -.01, SE = .06,  $b^* = -.20$ , p = .27), indicating full mediation. Further, age of becoming a parent was marginally significant in mediating the relations between parent's emotion neglect and child internalizing symptomatology through

Wave 1 to Wave 2 (b = .01, SE = .01, p < .07). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .29, SE = .06, b \* = 4.87, p < .05).

Additionally, age of becoming a parent was marginally significant in mediating relations between parent's emotion neglect and child externalizing symptomatology at Wave 1 (b = .04, SE = .02, p < .07). Parent's emotion neglect was negatively related to age of becoming a parent (b = -.21, SE = .07, b\* = -3.08, p < .05), age of becoming a parent was negatively related to child externalizing symptomatology (b = -.19, SE = .08, b\* = -2.37 p < .05). However, parent's emotion neglect was not related to child externalizing symptomatology (b = -.01, SE = .06, b\* = -.22, p = .83), indicating full mediation.

Income was marginally significant in mediating the relations between parent's emotion neglect and child externalizing symptomatology at Wave 1 (b = .03, SE = .02, p < .07). Parent's emotion neglect was negatively related to income (b = -.22, SE = .05, b\* = -4.35, p < .05), income was negatively related to child externalizing symptomatology (b = -.12, SE = .06, b\* = -2.04, p < .05). However, parent's emotion neglect was not related to child externalizing symptomatology (b = -.01, SE = .06, b\* = -.22, p = .83), indicating full mediation. No other hypothesized mediation pathways were significant. Child age was not related to child symptomatology.

Overall, several of the hypothesized socio-demographic mediations were supported, namely parent's emotion neglect and lower education were related to higher child internalizing symptomatology at Wave 1. Age of becoming a parent and parent's emotion neglect were related to higher child internalizing symptomatology at Wave 1 and 2. Additionally, parent's emotion neglect and age of becoming a parent and parent income were related to higher child externalizing symptomatology at Wave 1. There is some evidence that parent's emotion neglect, through its relations to the young age of becoming a parent, lower family income, and lower levels of education, may increase risks of child symptomatology across time. The lack of direct effects of parent's emotion neglect on child symptomatology after accounting for the mediation effects of socio-demographic factors indicates that socio-demographic factors may be important mediators in the relations between parent's emotion neglect and child symptomatology. This indicates that parent's emotion neglect shows some evidence of being related to child symptomatology regardless of whether the parent or child reports on child symptomatology,

though there were some differences in these effects (i.e. low income emerged for the parent report model whereas multiple socio-demographic factors emerged for the child reporter model). Parent income appeared to play a role in mediating these relations when parent's or children reported on child symptomatology whereas, age of becoming a parent and parent education acted as mediators in those cases where children reported on child symptomatology.

*Moderation*. The relations between parent's emotion neglect and child internalizing and externalizing symptomatology were not moderated by parent socio-demographic characteristics (i.e. age of becoming a parent, parent income, and parent education) in the original model. The original model showed poor model fit ( $\chi^2 = 257.85$ , df = 19, p = .00, CFI = .62; RMSEA = .19, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit (see Table 14) and showed evidence that age of becoming a parent significantly moderated the relations between parent's emotion neglect child internalizing symptomatology at Wave 2 (b = .32, SE = .13,  $b^* = -2.41$ , p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of younger and older age of becoming a parent, parent's emotion neglect was significantly related to child externalizing symptomatology. However, for those parents who reported a younger age of becoming a parent emotion neglect had a stronger effect on child internalizing symptomatology (b = 10.85, SE = 4.58, b\* = .91, p < .05) compared to those parents who reported an older age of becoming a parent (b = 7.26, SE = 3.00, b\* = .61, p < .05), indicating that younger age of becoming a parent was a risk factor which interacted with for parent's emotion neglect (see Figure 27). No other significant moderations were found. In terms of main effects, age of becoming a parent was negatively related to child internalizing and externalizing symptomatology at Wave 1 (b = -.32, SE = .11, b\* = -2.84, p < .05; b = -.31, SE = .11, b\* = -2.93, p < .05). Child age was not related to child symptomatology. Unlike other types of parent's childhood maltreatment, moderations were found for children's report of child symptomatology but not for parent's report of child symptomatology. This result may indicate that in cases of emotion neglect, the effects of parent's childhood maltreatment may differ in function, as will be discussed further.

# Physical Neglect.

#### Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent education, income, and age of becoming a parent in mediating the relation between parent's physical neglect and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 6.39$ , df = 5, p = .27, CFI = 1.00, and RMSEA = .03, p = .68 indicating a good model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent income significantly mediated the relations between parent's physical neglect and child internalizing symptomatology at Wave 1 (b = .06, SE = .02, p < .05). Parent's physical neglect was negatively related to parent income (b = -.25, SE = .05,  $b^* = -5.05$ , p < .05), parent income was negatively related to child internalizing symptomatology (b = -.23, SE = .06,  $b^* = -4.05$ , p < .05), and parent's physical neglect was not related to child internalizing symptomatology (b = -.04, SE = .06,  $b^* = -.63$ , p = .53), indicating full mediation. Further, parent income mediated the relations between parent's physical neglect and child internalizing symptomatology through Wave 1 to Wave 2 (b = .03, SE = .01, p < .05). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .44, SE = .05,  $b^* = 8.44$ , p < .05).

Parent income significantly mediated the relation between parent's physical neglect and child externalizing symptomatology at Wave 1 (b = .05, SE = .02, p < .05). Parent's physical neglect was negatively related to parent income (b = -.25, SE = .05, b\* = -5.05, p < .05), parent income was negatively related to child externalizing symptomatology (b = -.18, SE = .06, b\* = -3.18, p < .05), and parent's physical neglect was not related to child externalizing symptomatology (b = .07, SE = .06, b\* = 1.33, p = .18), indicating full mediation. Further, parent income mediated the relations between parent's physical neglect and child internalizing symptomatology through Wave 1 to Wave 2 (b = .02, SE = .01, p < .05). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .45, SE = .05, b\* = 8.63, p < .05). No other hypothesized mediation pathways were significant.

Parent's physical neglect was negatively related to parent education (b = -.19, SE = .05,  $b^* = -3.87$ , p < .05) and parent's age of becoming a parent (b = -.29, SE = .07,  $b^* = -3.85$ , p < .05) indicating that parent's physical neglect was related to lower education for parents and a

younger age of becoming a parent. However, there was no evidence of mediation for either parent education or age of becoming a parent. Child age was negatively related to child externalizing symptomatology at Wave 1 (b = -.15, SE = .07, b\* = -2.16, p < .05), indicating that younger children exhibited higher child externalizing symptomatology at Wave 1, though this did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

Overall, several of the hypothesized socio-demographic mediations were supported, namely parent's physical neglect and lower income were related to higher child internalizing and externalizing symptomatology at Wave 1 and 2. There is some evidence that parent's physical neglect, through its relations to a low income family environment, may increase risk of child symptomatology across time. As parent's physical neglect was not related to child symptomatology, after accounting for the mediation effect of income, it may be that income represents an important role in mediating the relations between parent's physical neglect and child symptomatology.

*Moderation.* The relations between parent's physical neglect and child internalizing and externalizing symptomatology were not moderated by parent socio-demographic characteristics (i.e. age of becoming a parent, parent income, and parent education) in the original model. The original model showed poor model fit ( $\chi^2 = 399.11$ , df = 19, p = .00, CFI = .60; RMSEA = .24, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit (see Table 14) and showed evidence that parent education significantly moderated the relations between parent's physical neglect and child externalizing symptomatology at Wave 2 (b = -1.78, SE = .65,  $b^* = -2.74$ , p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent education, parent's emotion neglect was significantly related to child externalizing symptomatology. However, for those parents who reported a lower education physical neglect had a stronger effect on child externalizing symptomatology (b = 20.04, SE = 7.65,  $b^* = 1.01$ , p < .05) compared to those who reported a higher education (b = 13.95, SE = 5.06,  $b^* = .70$ , p < .05), indicating that low parent education was a risk factor which interacted with parent's physical neglect (see Figure 28). No other significant moderations were found.

In terms of main effects, parent's physical neglect was positively related to child externalizing symptomatology at Wave 1 and 2 (b = 2.35, SE = .94, b\* = 2.52, p < .05; b = 2.25, SE = 1.09, b\* = 2.07, p < .05). Parent's education was negatively related to child externalizing

symptomatology at Wave 2 (b = -.89, SE = .45, b\* = -1.98, p < .05). Child age was negatively related to child externalizing symptomatology at Wave 1 (b = -.94, SE = .43, b\* = -2.21, p < .05), though these effects did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

# Youth Self Report.

Mediation. The overall mediation model examined the roles of parent education, income, and age of becoming a parent in mediating the relation between parent's physical neglect and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 3.24$ , df = 5, p = .66, CFI = 1.00, and RMSEA = .00, p = .91 indicating a good model fit. Several significant direct and mediation effects were found in the overall model. The bootstrapping significance test of mediation revealed that parent education was marginally significant in mediating the relations between parent's physical neglect and child internalizing symptomatology at Wave 1 (b = -.03, SE = .02, p < .07). Parent's physical neglect was negatively related to parent education (b = -.20, SE = .05, b\* = -3.87, p < .05), parent education was positively related to child internalizing symptomatology (b = .14, SE = .07, b\* = 2.18, p < .05), and parent's physical neglect was not related to child internalizing symptomatology (b = -.01, SE = .06, b\* = -.14, p = .89), indicating full mediation.

Age of becoming a parent significantly mediated the relations between parent's physical neglect and child internalizing symptomatology at Wave 1 (b = .06, SE = .03, p < .05). Parent's physical neglect was negatively related to age of becoming a parent (b = -.27, SE = .08, b\* = -3.68, p < .05), age of becoming a parent was negatively related to child internalizing symptomatology (b = -.21, SE = .08, b\* = -2.62, p < .05), and parent's physical neglect was not related to child internalizing symptomatology (b = -.01, SE = .06, b\* = -.14, p = .89), indicating full mediation. Further, age of becoming a parent was marginally significant in mediating the relations between parent's physical neglect and child internalizing symptomatology through Wave 1 to Wave 2 (b = .02, SE = .01, p < .07). Child internalizing symptomatology at Wave 1 was positively related to child internalizing symptomatology at Wave 2 (b = .29, SE = .06, b\* = 4.87, p < .05).

Additionally, age of becoming a parent was marginally significant in mediating relations between parent's physical neglect and child externalizing symptomatology at Wave 1 (b = .05, SE = .03, p < .07). Parent's physical neglect was negatively related to age of becoming a parent

 $(b = -.27, SE = .08, b^* = -3.68, p < .05)$ , age of becoming a parent was negatively related to child externalizing symptomatology  $(b = -.17, SE = .08, b^* = -2.05 p < .05)$ . However, parent's physical neglect was not related to child externalizing symptomatology  $(b = .06, SE = .06, b^* = 1.07, p = .29)$ , indicating full mediation. No other hypothesized mediation pathways were significant. Child age was not related to child symptomatology.

Overall, several of the hypothesized socio-demographic mediations were supported, namely parent's physical neglect and lower education were related to higher child internalizing symptomatology at Wave 1. Age of becoming a parent and parent's physical neglect were related to higher child internalizing symptomatology at Wave 1 and 2 as well as to higher child externalizing symptomatology at Wave 1. There is some evidence that parent's physical neglect, through its relations to the young age of becoming a parent and lower levels of education, may increase risks of child symptomatology across time. The lack of direct effects of parent's physical neglect on child symptomatology indicates that socio-demographic factors may be important mediators in the relations between parent's physical neglect and child symptomatology. This indicates that parent's physical neglect shows some evidence of being related to child symptomatology regardless of whether the parent or child reports on child symptomatology, though there were some differences in these effects (i.e. age of becoming a parent and lower parent education acted as mediators for the child report model whereas parent income acted as a mediator for the parent report model). Parent income appeared to play a role in mediating these relations when parent's reported on child symptomatology whereas, age of becoming a parent and parent education acted as mediators in those cases where children reported on child symptomatology.

*Moderation.* The relations between parent's physical neglect and child internalizing and externalizing symptomatology were not moderated by parent socio-demographic characteristics (i.e. age of becoming a parent, parent income, and parent education) in the original model. The original model showed poor model fit ( $\chi^2 = 404.55$ , df = 19, p = .00, CFI = .58; RMSEA = .24, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it had a good fit (see Table 14), revealed no significant moderations. In terms of main effects, age of becoming a parent was negatively related to higher child internalizing and externalizing symptomatology at Wave 1 (b = -.31, SE = .11, b\*= -2.71, p < .05; b = -.28, SE = .11, b\*= -2.57, p < .05, respectively). Child age was not related to child symptomatology.

#### 3.5 - Parent Maltreatment Behaviors

All parent maltreatment behavior models were examined in two different ways, one by the using the child's report of the maltreatment behaviors of the primary caregiver who had reported on their child maltreatment experience and the other by the child's report of their overall maltreatment experience in the household. Across all 10 mediation models involving the overall maltreatment experience in the household, i.e. by parent's childhood maltreatment type and by parent or child report on child symptomatology, there was a poor fit of the models and no evidence of mediation (see Table 10). Therefore, this study will focus on those parent maltreatment models which examined the maltreatment behaviors of the primary caregiver who reported on their own child maltreatment experience. Similarly, though moderation models were tested both by primary caregiver (see Tables 15 and 16) and overall household maltreatment experience, for consistency between mediation and moderation those moderations involving primary caregiver will be examined. Potential reasons for this difference between children's reports on primary caregiver versus overall maltreatment in the household will be discussed further.

#### **Emotion Abuse.**

## Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent psychological maltreatment, and minor and severe assault in mediating the relation between parent's emotion abuse and child internalizing and externalizing symptomatology at Wave 2. This model had a  $\chi^2 = 3.62$ , df = 3, p = .31, CFI = 1.00, and RMSEA = .02, p = .63, indicating a good model fit. However, no hypothesized mediation pathways were significant. Parent's emotion abuse was positively related to child internalizing symptomatology (b = .17, SE = .07, b\* = 2.38, p < .05). This indicates that parent's emotion abuse shows evidence of being related to child internalizing symptomatology, though there appears to be no evidence of parent maltreatment factors mediating the relation between parent's emotion abuse and child symptomatology.

*Moderation*. The relations between parent's emotion abuse and child internalizing and externalizing symptomatology were not moderated by primary caregiver maltreatment behaviors (i.e. psychological maltreatment, minor assault, and severe assault) in the original model (see Table 16). The original model showed poor model fit ( $\chi^2 = 196.94$ , df = 17, p = .00, CFI = .59; RMSEA = .17, p = .00) with little to no evidence of significant interactions. Therefore, the

model was trimmed to remove non-significant paths. The final trimmed model, though it had a good fit (see Table 16), revealed no significant moderations. In terms of main effects, parent's emotion abuse was related to higher child internalizing and externalizing symptomatology at Wave 1 (b = 1.95, SE = .70, b\* = 2.77, p < .05; b = 1.26, SE = .72, b\* = 2.03, p < .05, respectively). Child age was negatively related to child externalizing symptomatology (b = -.68, SE = .37, b\* = -1.83, p < .07). Finally, child age was not related to child internalizing symptomatology.

# Youth Self Report.

Mediation. The overall mediation model examined the roles of parent psychological maltreatment, and minor and severe assault in mediating the relation between parent's emotion abuse and child internalizing and externalizing symptomatology at Wave 2. This model had a  $\chi^2$  = 3.62, df = 3, p = .31, CFI = 1.00, and RMSEA = .02, p = .63, indicating a good model fit. However, no hypothesized mediation pathways were significant. Parent's psychological maltreatment of children was positively related to child's internalizing and externalizing symptomatology at Wave 1 (b = .22, SE = .08, b\* = 2.71, p < .05; b = .35, SE = .08, b\* = 4.61, p < .05, respectively). This indicates that parent's emotion abuse shows evidence of being related to child internalizing symptomatology for parent's report of child symptomatology only, whereas parent's psychological maltreatment of children shows evidence of directly being related to child symptomatology regardless of parent's emotion abuse. Potential reasons for these differences will be discussed further.

Moderation. The relations between parent's emotion abuse and child internalizing and externalizing symptomatology were not moderated by primary caregiver maltreatment behaviors (i.e. psychological maltreatment, minor assault, and severe assault) in the original model. The original model showed poor model fit ( $\chi^2 = 200.85$ , df = 17, p = .00, CFI = .60; RMSEA = .17, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it had a good fit (see Table 16), revealed no significant moderations. Similar to parent's report of child symptomatology, there was no evidence of primary caregiver maltreatment behaviors moderating the relations between parent emotion abuse and child report of child symptomatology. In terms of main effects, psychological maltreatment of children was related

to child internalizing and externalizing symptomatology (b = 1.56, SE = .44, b\* = 3.53, p < .05; b = 1.80, SE = .37, b\* = 4.84, p < .05). Finally, child age was not related to child symptomatology.

## Physical Abuse.

## Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent psychological maltreatment, and minor and severe assault in mediating the relation between parent's physical abuse and child internalizing and externalizing symptomatology at Wave 2. This model had a  $\chi^2$  = 3.40, df = 3, p = .33, CFI = 1.00, and RMSEA = .02, p = .65, indicating a good model fit. However, no hypothesized mediation pathways were significant. Parent's physical abuse was positively related to children's experience of minor and severe assault (b = .29, SE = .07, b\* = 4.03, p < .05; b = .17, SE = .08, b\* = 2.15, p < .05, respectively). This indicates that parent's physical abuse shows evidence of being related to parent's maltreatment of their own children, though there appears to be no evidence of parent maltreatment factors mediating the relation between parent's physical abuse and child symptomatology.

*Moderation*. The relations between parent's physical abuse and child internalizing and externalizing symptomatology were not moderated by parent primary caregiver maltreatment behaviors (i.e. psychological maltreatment, minor assault, and severe assault) in the original model. The original model showed poor model fit ( $\chi^2 = 215.85$ , df = 17, p = .00, CFI = .58; RMSEA = .18, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it had a good fit (see Table 16), revealed no significant moderations. Child age was negatively related to child externalizing symptomatology (b = -.76, SE = .37, b\* = -2.04, p < .05). Finally, child age was not related to child internalizing symptomatology.

# Youth Self Report.

Mediation. The overall mediation model examined the roles of parent psychological maltreatment, and minor and severe assault in mediating the relation between parent's physical abuse and child internalizing and externalizing symptomatology at Wave 2. This model had a  $\chi^2$  = 3.40, df = 3, p = .33, CFI = 1.00, and RMSEA = .02, p = .65, indicating a good model fit. However, no hypothesized mediation pathways were significant. Parent's psychological maltreatment of children was positively related to child's internalizing and externalizing symptomatology (b = .22, SE = .08, b\* = 2.82, p < .05; b = .35, SE = .08, b\* = 4.67, p < .05,

respectively). Parent's physical abuse was positively related to children's experience of minor and severe assault (b = .29, SE = .07, b\* = 4.04, p < .05; b = .17, SE = .08, b\* = 2.15, p < .05, respectively). This indicates that parent's psychological maltreatment of children shows evidence of directly being related to child symptomatology regardless of parent's physical abuse, for child report of child symptomatology only. Potential reasons for these differences will be discussed further.

Moderation. The relations between parent's physical abuse and child internalizing and externalizing symptomatology were not moderated by primary caregiver maltreatment behaviors (i.e. psychological maltreatment, minor assault, and severe assault) in the original model. The original model showed poor model fit ( $\chi^2 = 218.33$ , df = 17, p = .00, CFI = .60; RMSEA = .18, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it had a good fit (see Table 16), revealed no significant moderations. Similar to parent's report of child symptomatology, there was no evidence of primary caregiver maltreatment behaviors moderating the relations between parent physical abuse and child report of child symptomatology. In terms of main effects, psychological maltreatment of children was related to child internalizing and externalizing symptomatology (b = 1.63, SE = .41, b\* = 3.99, p < .05; b = 1.88, SE = .41, b\* = 4.62, p < .05). Finally, child age was not related to child symptomatology.

## Sexual Abuse.

### Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent psychological maltreatment, and minor and severe assault in mediating the relation between parent's sexual abuse and child internalizing and externalizing symptomatology at Wave 2. This model had a  $\chi^2$  = 3.99, df = 3, p = .26, CFI = 1.00, and RMSEA = .03, p = .59, indicating a good model fit. However, no hypothesized mediation pathways were significant. Parent's sexual abuse was positively related to children's experience of psychological maltreatment, minor and severe assault (b = .25, SE = .07, b\* = 3.58, p < .05; b = .17, SE = .07, b\* = 2.37, p < .05; b = .19, SE = .07, b\* = 2.73, p < .05, respectively). Additionally, sexual abuse was positively related to child internalizing and externalizing symptomatology (b = .18, SE = .07, b\* = 2.46, p < .05; b = .14, SE = .07, b\* = 1.86, p < .07, respectively). This indicates that parent's sexual abuse shows

evidence of being related to parent's maltreatment of their own children as well as to child symptomatology, though there appears to be no evidence of parent maltreatment factors mediating the relation between parent's sexual abuse and child symptomatology.

*Moderation.* The relations between parent's sexual abuse and child internalizing and externalizing symptomatology were not moderated by primary caregiver maltreatment behaviors (i.e. psychological maltreatment, minor assault, and severe assault) in the original model. The original model showed poor model fit ( $\chi^2 = 261.73$ , df = 17, p = .00, CFI = .60; RMSEA = .20, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit (see Table 16) and showed evidence that children's experience of severe assault significantly moderated the relations between parent's sexual neglect and child externalizing symptomatology at Wave 2 (b = -.99, SE = .32,  $b^* = -3.13$ , p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in only the condition of low severe assault, parent's sexual abuse was significantly related to child externalizing symptomatology, indicating that when children's experience of severe assault was low sexual abuse had a stronger effect on child externalizing symptomatology (b = 2.54, SE = .88, b\* = .27, p < .05) but was not found for high severe assault (b = .96, SE = .64, b\* = .10, p = .14) (see Figure 29). No other significant moderations were found. In terms of main effects, parent's sexual abuse predicted higher child internalizing and externalizing symptomatology at Wave 2 (b = 1.85, SE = .64, b\* = 2.91, p < .05; b = 1.77, SE = .58, b\* = 3.05, p < .05, respectively) as well as higher child internalizing symptomatology at Wave 1 (b = 2.21, SE = .75, b\* = 2.94, p < .05). Children's experience of severe assault significantly predicted higher child externalizing symptomatology at Wave 2 (b = 1.37, SE = .58, b\* = 2.36, p < .05). Child age was not related to child symptomatology.

# Youth Self Report.

*Mediation*. The overall mediation model examined the roles of parent psychological maltreatment, and minor and severe assault in mediating the relation between parent's sexual abuse and child internalizing and externalizing symptomatology at Wave 2. This model had a  $\chi^2$  = 3.99, df = 3, p = .26, CFI = 1.00, and RMSEA = .03, p = .59, indicating a good model fit. Two marginally significant mediations were found.

The bootstrapping significance test of mediation revealed that psychological maltreatment of children significantly mediated the relations between parent's sexual abuse and child internalizing and externalizing symptomatology (b = .05, SE = .03, p < .05; b = .09, SE = .03, p < .05, respectively). Parent's sexual abuse was positively related to psychological maltreatment of children (b = .25, SE = .07, b\* = 3.55, p < .05), psychological maltreatment was positively related to child internalizing and externalizing symptomatology (b = .22, SE = .08, b\* = 2.66, p < .05; b = .36, SE = .08, b\* = 4.68, p < .05, respectively), and parent's sexual abuse was not related to child internalizing or externalizing symptomatology (b = .04, SE = .08, b\* = .49, b = .63; b = -.03, SE = .07, b\* = -.37, b = .71, respectively), indicating full mediation.

Children's experience of minor and severe assault were positively related to parent's sexual abuse (b = .17, SE = .07, b\* = 2.36, p < .05; b = .20, SE = .07, b\* = 2.70, p < .05, respectively). There is some evidence indicating that psychological maltreatment may mediate the relations between parent's sexual abuse and child symptomatology, particularly when child symptomatology is assessed using child report, though this was not found for parent's reports of child symptomatology.

Moderation. The relations between parent's sexual abuse and child internalizing and externalizing symptomatology were not moderated by primary caregiver maltreatment behaviors (i.e. psychological maltreatment, minor assault, and severe assault) in the original model. The original model showed poor model fit ( $\chi^2 = 264.03$ , df = 17, p = .00, CFI = .60; RMSEA = .20, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it had a good fit (see Table 16), revealed no significant moderations. Similar to earlier findings, moderation was found for parent's report of child symptomatology but not for child report of child symptomatology. In terms of main effects, minor assault of children was related to child internalizing and externalizing symptomatology (b = 1.00, SE = .41, b\* = 2.42, p < .05; b = .83, SE = .37, b\* = 2.25, p < .05). Finally, child age was not related to child symptomatology.

## **Emotion Neglect.**

### Child Behavior Checklist.

*Mediation*. The overall mediation model examined the roles of parent psychological maltreatment, and minor and severe assault in mediating the relation between parent's emotion neglect and child internalizing and externalizing symptomatology at Wave 2. This model had a  $\chi^2 = 3.60$ , df = 3, p = .31, CFI = 1.00, and RMSEA = .03, p = .63, indicating a good model fit.

However, no hypothesized mediation pathways were significant. Parent's emotion neglect was positively related to children's experience of psychological maltreatment, and minor assault (b = .18, SE = .07, b\* = 2.52, p < .05; b = .13, SE = .07, b\* = 1.79, p = .07, respectively). Additionally, emotion neglect was marginally positively related to child internalizing symptomatology (b = .13, SE = .07, b\* = 1.82, p < .07). This indicates that parent's emotion neglect shows evidence of being related to parent's psychological maltreatment of their own children as well as to child symptomatology, though there appears to be no evidence of parent maltreatment factors mediating the relation between parent's emotion neglect and child symptomatology.

*Moderation.* The relations between parent's emotion neglect and child internalizing and externalizing symptomatology were not moderated by primary caregiver maltreatment behaviors (i.e. psychological maltreatment, minor assault, and severe assault) in the original model. The original model showed poor model fit ( $\chi^2 = 166.70$ , df = 17, p = .00, CFI = .61; RMSEA = .16, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it had a good fit (see Table 16), revealed no significant moderations. In terms of main effects, parent's emotion neglect was positively related to child internalizing and externalizing symptomatology (b = 1.60, SE = .74,  $b^* = 2.15$ , p < .05; b = 1.17, SE = .65,  $b^* = 1.80$ , p = .07, respectively). Child age was negatively related to child externalizing symptomatology (b = -.72, SE = .37,  $b^* = -1.96$ , p = .05). Finally, child age was not related to child internalizing symptomatology.

# Youth Self Report.

*Mediation*. The overall mediation model examined the roles of parent psychological maltreatment, and minor and severe assault in mediating the relation between parent's emotion neglect and child internalizing and externalizing symptomatology at Wave 2. This model had a  $\chi^2 = 3.60$ , df = 3, p = .31, CFI = 1.00, and RMSEA = .02, p = .63, indicating a good model fit. Two mediations were found.

The bootstrapping significance test of mediation revealed that psychological maltreatment of children was marginally significant in mediating the relations between parent's emotion neglect and child internalizing symptomatology (b = .04, SE = .02, p < .07). Parent's emotion neglect was negatively related to psychological maltreatment of children (b = .18, SE = .07, b\* = 2.51, p < .05), psychological maltreatment was positively related to child internalizing

symptomatology (b = .22, SE = .08,  $b^* = 2.71$ , p < .05), and parent's emotion neglect was not related to child internalizing symptomatology (b = .03, SE = .07,  $b^* = .40$ , p = .69), indicating full mediation.

Psychological maltreatment of children significantly mediated the relations between parent's emotion neglect and child externalizing symptomatology (b = .06, SE = .03, p < .05). Parent's emotion neglect was positively related to psychological maltreatment of children (b = .18, SE = .07, b\* = 2.51, p < .05), psychological maltreatment was positively related to child externalizing symptomatology (b = .35, SE = .08, b\* = 4.57, p < .05), and parent's emotion neglect was not related to child externalizing symptomatology (b = .05, SE = .07, b\* = .69, p = .49), indicating full mediation. No other mediations were found. Similar to parent's sexual abuse, there is some evidence indicating that psychological maltreatment may mediate the relations between parent's emotion neglect and child symptomatology, particularly when child symptomatology is assessed using child report, though this was not found for parent's reports of child symptomatology.

Moderation. The relations between parent's emotion neglect and child internalizing and externalizing symptomatology were not moderated by primary caregiver maltreatment behaviors (i.e. psychological maltreatment, minor assault, and severe assault) in the original model. The original model showed poor model fit ( $\chi^2 = 168.70$ , df = 17, p = .00, CFI = .64; RMSEA = .16, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it had a good fit (see Table 16), revealed no significant moderations. This indicates that for both parent and child report of child symptomatology, there was no evidence of primary caregiver maltreatment behaviors moderating the relations between parent's emotion neglect and child symptomatology. In terms of main effects, minor assault of children was related to child internalizing and externalizing symptomatology (b = 1.03, SE = .42, b\* = 2.47, p < .05; b = .75, SE = .36, b\* = 2.05, p < .05, respectively). Finally, child age was not related to child symptomatology.

## **Physical Neglect.**

## Child Behavior Checklist.

*Mediation*. The overall mediation model examined the roles of parent psychological maltreatment, and minor and severe assault in mediating the relation between parent's physical neglect and child internalizing and externalizing symptomatology at Wave 2. This model had a

 $\chi^2 = 4.18$ , df = 3, p = .24, CFI = 1.00, and RMSEA = .03, p = .56, indicating a good model fit. However, no hypothesized mediation pathways were significant. Parent's physical neglect was positively related to children's experience of psychological maltreatment (b = .24, SE = .08,  $b^* = 2.91$ , p < .05). This indicates that parent's physical neglect shows evidence of being related to parent's psychological maltreatment of their own children, though there is no evidence of parent maltreatment factors mediating the relation between parent's physical neglect and child symptomatology.

*Moderation.* The relations between parent's physical neglect and child internalizing and externalizing symptomatology were not moderated by primary caregiver maltreatment behaviors (i.e. psychological maltreatment, minor assault, and severe assault) in the original model. The original model showed poor model fit ( $\chi^2 = 74.05$ , df = 17, p = .00, CFI = .82; RMSEA = .10, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit (see Table 16) and showed evidence of children's experience of severe assault significantly moderating the relations between parent's physical neglect and child internalizing symptomatology at Wave 2 (b = 4.31, SE = 1.65,  $b^* = 2.62$ , p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of lower and higher severe assault of children, physical neglect was not related to child internalizing symptomatology. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at lower or higher severe assault of children. No other significant moderations were found. In terms of main effects, physical neglect significantly predicted higher child externalizing symptomatology at Wave 2 (b = 2.46, SE = 1.02,  $b^* = 2.40$ , p < .05). Child age was not related to child symptomatology.

# Youth Self Report.

*Mediation*. The overall mediation model examined the roles of parent psychological maltreatment, and minor and severe assault in mediating the relation between parent's physical neglect and child internalizing and externalizing symptomatology at Wave 2. This model had a  $\chi^2 = 4.19$ , df = 3, p = .24, CFI = 1.00, and RMSEA = .03, p = .56, indicating a good model fit. Two significant mediations were found.

The bootstrapping significance test of mediation revealed that psychological maltreatment of children significantly mediated the relations between parent's physical neglect and child internalizing symptomatology (b = .05, SE = .03, p < .05). Parent's physical neglect

was negatively related to psychological maltreatment of children (b = .24, SE = .08,  $b^* = 2.92$ , p < .05), psychological maltreatment was positively related to child internalizing symptomatology (b = .23, SE = .08,  $b^* = 2.78$ , p < .05), and parent's physical neglect was not related to child internalizing symptomatology (b = -.03, SE = .09,  $b^* = -.29$ , p = .77), indicating full mediation.

Psychological maltreatment of children significantly mediated the relations between parent's physical neglect and child externalizing symptomatology (b = .09, SE = .04, p < .05). Parent's physical neglect was negatively related to psychological maltreatment of children (b = .24, SE = .08, b\* = 2.92, p < .05), psychological maltreatment was positively related to child externalizing symptomatology (b = .36, SE = .08, b\* = 4.68, p < .05), and parent's physical neglect was not related to child externalizing symptomatology (b = -.02, SE = .08, b\* = -.29, p = .77), indicating full mediation. No other mediations were found. Similar to parent's sexual abuse and emotion neglect, there is at least some evidence indicating that psychological maltreatment may mediate the relations between parent's physical neglect and child symptomatology, particularly when child symptomatology is assessed using child report, though this was not found for parent's reports of child symptomatology.

*Moderation.* The relations between parent's physical neglect and child internalizing and externalizing symptomatology were not moderated by primary caregiver maltreatment behaviors (i.e. psychological maltreatment, minor assault, and severe assault) in the original model. The original model showed poor model fit ( $\chi^2 = 75.71$ , df = 17, p = .00, CFI = .83; RMSEA = .10, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit (see Table 16) and showed evidence that children's experience of severe assault significantly moderating the relations between parent's physical neglect and child internalizing symptomatology at Wave 2 (b = 3.19, SE = 1.55, b\* = 2.05, p < .05). Additionally, there was evidence that children's experience of minor assault significantly moderating the relations between parent's physical neglect and child internalizing and externalizing symptomatology at Wave 2 (b = -2.28, SE = .96, b\* = -2.37, p < .05; b = -1.72, SE = .84, b\* = -2.03, p < .05, respectively).

Using simple effects tests in accordance with Holmbeck (2002), in only the condition of low severe assault, parent's physical neglect was significantly related to child externalizing symptomatology, indicating that when children's experience of minor assault was low physical neglect had a stronger effect on child externalizing symptomatology (b = 5.61, SE = 2.82,  $b^* = 1.00$ 

.29, p < .05) but was not found for high minor assault (b = -.07, SE = 1.49, b\* = -.00, p = .96) (see Figure 30). However, in both conditions of lower and higher severe and minor assault of children, physical neglect was not related to child internalizing symptomatology. Therefore, although there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at lower or higher severe or minor assault of children. No other significant moderations were found. In terms of main effects, children's experience of severe assault predicted higher child internalizing and externalizing symptomatology at Wave 2 (b = 1.12, SE = .47, b\* = 2.41, p < .05; b = .77, SE = .36, b\* = 2.13, p < .05, respectively. Child age was not related to child symptomatology.

# 3.6 - Parenting Behaviors

## **Emotion Abuse.**

#### Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent-child negativity, parent-child relationship quality, and child monitoring in mediating the relation between parent's emotion abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 23.75$ , df = 5, p = .00, CFI = .97, and RMSEA = .10, p = .02 indicating a mediocre model fit. No hypothesized mediation pathways were significant. Parent-child negativity positively predicted child externalizing symptomatology at Wave 1 (b = .21, SE = .06,  $b^* = 3.69$ , p < .05) and parent-child negativity was positively related to parent's emotion abuse (b = .10, SE = .05,  $b^* = 1.97$ , p < .05). This may indicate that further research is needed to determine the possible role of parenting behaviors, particularly parent-child negativity, in its relations to emotion abuse and child outcomes.

*Moderation.* The relations between parent's emotion abuse and child internalizing and externalizing symptomatology were not moderated by parenting behaviors (i.e. parent-child negativity, parent-child relationship quality, and child monitoring) in the original model (see Table 17). The original model showed poor model fit ( $\chi^2 = 505.88$ , df = 22, p = .00, CFI = .40; RMSEA = .25, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths and moderators. The final trimmed model had good fit (see Table 17) and showed evidence that child monitoring significantly moderated

the relations between parent's emotion abuse and child internalizing symptomatology at Wave 1 and child externalizing symptomatology at Wave 2 (b = -1.91, SE = .94, b\* = -2.03, p < .05; b = 3.44, SE = .84, b\* = 4.10 p < .05, respectively).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low child monitoring, parent's emotion abuse was significantly related to child internalizing symptomatology at Wave 1. However, when child monitoring was low higher emotion abuse had a stronger effect on child internalizing symptomatology (b = 11.92, SE = 4.98, b\* = 1.11, p < .05) compared to those with higher child monitoring (b = 9.42, SE = 3.76, b\* = .88, p < .05), indicating that child monitoring was a protective factor for parent's emotion abuse (see Figure 31). In contrast, in both conditions of lower and higher child monitoring, emotion abuse was not related to child externalizing symptomatology at Wave 2. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at lower or higher child monitoring. No other significant moderations were found.

In terms of main effects, parent's emotion abuse was positively related to child internalizing and externalizing symptomatology at Wave 1 (b = 1.95, SE = .56, b\* = 3.50, p < .05; b = 2.59, SE = .55, b\* = 4.72, p < .05), as well as child internalizing symptomatology at Wave 2 (b = 1.24, SE = .66, b\* = 1.89, p < .07). Child monitoring was negatively related to child externalizing symptomatology at Wave 1 (b = -2.06, SE = .78, b\* = -2.63, p < .05). Child age was negatively related to child externalizing symptomatology at Wave 1 (b = -1.12, SE = .41, b\* = -2.73, p < .05), though these effects did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

## Youth Self Report.

*Mediation*. The overall mediation model examined the roles of parent-child negativity, parent-child relationship quality, and child monitoring in mediating the relation between parent's emotion abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 18.66$ , df = 5, p = .00, CFI = .98, and RMSEA = .09, p = .06 indicating a mediocre model fit. However, two marginally significant mediations were found.

The bootstrapping significance test of mediation revealed that parent-child negativity was marginally significant in mediating the relations between parent's emotion abuse and child externalizing symptomatology at Wave 1 (b = .04, SE = .02, p < .07). Parent's emotion abuse was positively related to parent-child negativity (b = .10, SE = .05, b\* = 1.97, p < .05), parent-

child negativity was positively related to child externalizing symptomatology (b = .37, SE = .05,  $b^* = 7.81$ , p < .05), and parent's emotion abuse was not related to child externalizing symptomatology (b = .06, SE = .04,  $b^* = 1.44$ , p = .15), indicating full mediation. Further, parent-child negativity was marginally significant in mediating the relations between parent's emotion abuse and child externalizing symptomatology through Wave 1 to Wave 2 (b = .01, SE = .01, p = .07). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .33, SE = .07,  $b^* = 4.86$ , p < .05).

Parent child relationship quality was negatively related to child externalizing and internalizing symptomatology (b = -.37, SE = .05, b\* = -7.81, p < .05; b = -.40, SE = .06, b\* = -6.27, p < .05, respectively). Though both parent and child report models showed a mediocre fit, there is at least some evidence indicating that parent-child negativity may mediate the relations between parent's emotion abuse and child symptomatology, particularly when child symptomatology is assessed using child report. Further research is needed to examine these potential relations.

*Moderation.* The relations between parent's emotion abuse and child internalizing and externalizing symptomatology were not moderated by parenting behaviors (i.e. parent-child negativity, parent-child relationship quality, and child monitoring) in the original model. The original model showed poor model fit ( $\chi^2 = 510.37$ , df = 22, p = .00, CFI = .46; RMSEA = .25, p = .00) with little to no evidence of significant interactions. Therefore, the model was trimmed to remove non-significant paths and moderators. The final trimmed model had good fit (see Table 17) and showed evidence that child monitoring significantly moderated the relations between parent's emotion abuse and child externalizing symptomatology at Wave 2 (b = 2.13, SE = .95, b\*=2.25, p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of lower and higher child monitoring, emotion abuse was not related to child externalizing symptomatology at Wave 2. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at lower or higher child monitoring. No other significant moderations were found. This indicates that moderation was found for parent's reports of child symptomatology but not fore child report of symptomatology. In terms of main effects, parent's emotion abuse was positively related to child externalizing symptomatology at Wave 1 (b = 1.12, SE = .50, b\* = 2.25, p < .05). Child monitoring was negatively related to

child internalizing and externalizing symptomatology at Wave 1 (b = -4.17, SE = .79, b\* = -5.27, p < .05; b = -5.74, SE = .71, b\* = -8.10, p < .05, respectively). Child age was not related to child symptomatology.

## Physical Abuse.

# Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent-child negativity, parent-child relationship quality, and child monitoring in mediating the relation between parent's physical abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 23.51$ , df = 5, p = .00, CFI = .97, and RMSEA = .10, p = .02 indicating a mediocre model fit. However, a marginally significant mediation was found. The bootstrapping significance test of mediation revealed that parent-child negativity was marginally significant in mediating the relations between parent's physical abuse and child externalizing symptomatology at Wave 1 (b = .03, SE = .01, p < .07). Parent's physical abuse was positively related to parent-child negativity (b = .11, SE = .05, b\* = 2.16, p < .05), parent-child negativity was positively related to child externalizing symptomatology (b = .22, SE = .06, b\* = 3.83, p < .05), and parent's physical abuse was positively related to child externalizing symptomatology (b = .13, SE = .05, b\* = 2.59, p < .05), indicating partial mediation.

Parent-child relationship quality was marginally negatively related to parent's physical abuse (b = -.01, SE = .05, b\* = -1.85, p < .07). Parent-child negativity was marginally positively related to child internalizing symptomatology (b = .12, SE = .06, b\* = 1.91, p < .07). Additionally, parent's physical abuse was positively related to child externalizing symptomatology (b = .13, SE = .05, b\* = 2.59, p < .05). This may indicate that further research is needed to determine the possible role of parenting behaviors, particularly parent-child negativity, in its relations to physical abuse and child outcomes.

*Moderation*. The relations between parent's physical abuse and child internalizing and externalizing symptomatology were not moderated by parenting behaviors (i.e. parent-child negativity, parent-child relationship quality, and child monitoring) in the original model. The original model showed poor model fit ( $\chi^2 = 544.35$ , df = 22, p = .00, CFI = .39; RMSEA = .26, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit

(see Table 17) and showed evidence that parent-child negativity significantly moderated the relations between parent's physical abuse and child externalizing symptomatology at Wave 1 (b = 2.99, SE = 1.05,  $b^* = 2.87$ , p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent-child negativity, parent's physical abuse was significantly related to child externalizing symptomatology at Wave 1. However, for those with higher parent-child negativity lower physical abuse had a stronger effect on child externalizing symptomatology (b = 11.52, SE = 4.92,  $b^* = .81$ , p < .05) compared to those with lower parent-child negativity (b = -7.18, SE = 3.38,  $b^* = -.50$ , p < .05), indicating that parent-child negativity was a risk factor which interacted with parent's physical abuse (see Figure 32). No other significant moderations were found.

In terms of main effects, parent's physical abuse was positively related to child externalizing symptomatology at Wave 1 (b = 2.45, SE = .75, b\* = 3.29, p < .05), as well as child internalizing symptomatology at Wave 2 (b = 1.24, SE = .66, b\* = 1.89, p < .07). Parentchild negativity was positively related to child internalizing and externalizing symptomatology at Wave 1 (b = 1.76, SE = .71, b\* = 2.48, p < .05; b = -3.07, SE = .69, b\* = -4.48, p < .05). Child age was negatively related to child externalizing symptomatology at Wave 1 (b = -1.11, SE = .40, b\* = -2.75, p < .05), though these effects did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

## Youth Self Report.

*Mediation*. The overall mediation model examined the roles of parent-child negativity, parent-child relationship quality, and child monitoring in mediating the relation between parent's physical abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 18.78$ , df = 5, p = .00, CFI = .98, and RMSEA = .09, p = .06 indicating a mediocre model fit thus the results should be interpreted with caution. However, two marginally significant mediations were found.

The bootstrapping significance test of mediation revealed that parent-child negativity significantly mediated the relations between parent's physical abuse and child externalizing symptomatology at Wave 1 (b = .04, SE = .02, p < .05). Parent's physical abuse was positively related to parent-child negativity (b = .11, SE = .05, b\* = 2.16, p < .05), parent-child negativity was positively related to child externalizing symptomatology (b = .37, SE = .05, b\* = 7.84, p < .05)

.05), and parent's physical abuse was not related to child externalizing symptomatology (b = .06, SE = .04, b\*=1.55, p=.12), indicating full mediation. Further, parent-child negativity was marginally significant in mediating the relations between parent's physical abuse and child externalizing symptomatology through Wave 1 to Wave 2 (b = .01, SE = .01, p < .07). Child externalizing symptomatology at Wave 1 was positively related to child externalizing symptomatology at Wave 2 (b = .33, SE = .07, b\*=4.84, p < .05).

Parent-child negativity, parent child relationship quality, and parent's physical abuse were related to child internalizing symptomatology (b = .11, SE = .05, b\* = 2.06, p < .05; b = -.39, SE = .06, b\* = -6.09, p < .05; b = .10, SE = .05, b\* = 2.15, p < .05 respectively). Parent-child relationship quality and child monitoring were negatively related to child externalizing symptomatology (b = -.22, SE = .06, b\* = -3.62, p < .05; b = -.15, SE = .05, b\* = -2.74, p < .05, respectively). Parent-child relationship quality was also marginally negatively related to parent's physical abuse (b = -.10, SE = .05, b\* = -1.85, p < .07). Though both parent and child report models showed a mediocre fit, there is at least some evidence indicating that parent-child negativity may mediate the relations between parent's physical abuse and child symptomatology across time, particularly when child symptomatology is assessed using child report. Further research is needed to examine these potential relations.

*Moderation*. The relations between parent's physical abuse and child internalizing and externalizing symptomatology were not moderated by parenting behaviors (i.e. parent-child negativity, parent-child relationship quality, and child monitoring) in the original model. The original model showed poor model fit ( $\chi^2 = 551.29$ , df = 22, p = .00, CFI = .46; RMSEA = .26, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit (see Table 17) and showed evidence that parent-child negativity significantly moderated the relations between parent's physical abuse and child externalizing symptomatology at Wave 1 (b = 2.80, SE = .87,  $b^* = 3.21$ , p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent-child negativity, parent's physical abuse was significantly related to child externalizing symptomatology at Wave 1. However, when parent-child negativity was high higher physical abuse had a stronger effect on child externalizing symptomatology (b = 11.95, SE = 4.06,  $b^* = .89$ , p < .05) compared to those with lower parent-child negativity (b = 7.79, SE = 2.79,  $b^* = .58$ , p < .05), indicating that parent-child negativity was a risk factor which

interacted with parent's physical abuse (see Figure 33). For parent's physical abuse, parent and child report of child symptomatology yielded similar results of parent-child negativity moderating the relation between parent's physical abuse and child externalizing symptomatology. No other significant moderations were found.

In terms of main effects, parent's physical abuse was positively related to child internalizing and externalizing symptomatology at Wave 1 (b = 2.03, SE = .74, b\* = 2.73, p < .05; b = 1.48, SE = .62, b\* = 2.37, p < .05, respectively). Parent-child negativity was positively related to child internalizing and externalizing symptomatology at Wave 1 (b = 4.07, SE = .68, b\* = 5.96, p < .05; b = 6.53, SE = .57, b\* = 11.43, p < .05). Child age was not related to child symptomatology.

## Sexual Abuse.

## Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent-child negativity, parent-child relationship quality, and child monitoring in mediating the relation between parent's sexual abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 23.01$ , df = 5, p = .00, CFI = .97, and RMSEA = .10, p = .06 indicating a mediocre model fit. No hypothesized mediation pathways were significant. Parent-child negativity positively predicted child internalizing and externalizing symptomatology at Wave 1 (b = .12, SE = .06,  $b^* = 1.93$ , p = .05; b = .23, SE = .06,  $b^* = 4.06$ , p < .05, respectively) and parent-child relationship quality was marginally negatively related to parent's sexual abuse (b = .09, SE = .05,  $b^* = -1.79$ , p = .07). Finally, sexual abuse was directly positively related to child internalizing and externalizing symptomatology at Wave 2 (b = .14, SE = .07,  $b^* = 2.14$ , p = .05; b = .13, SE = .06,  $b^* = 2.11$ , p = .05, respectively). This result may indicate that further research is needed to determine the possible role of parenting behaviors, particularly parent-child negativity, in its relations to sexual abuse and child outcomes, as well as the potential direct impact of parent's sexual abuse on child maladjustment.

*Moderation*. The relations between parent's sexual abuse and child internalizing and externalizing symptomatology were not moderated by parenting behaviors (i.e. parent-child negativity, parent-child relationship quality, and child monitoring) in the original model. The original model showed poor model fit ( $\chi^2 = 572.87$ , df = 22, p = .00, CFI = .36; RMSEA = .27, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it

had a good fit (see Table 17), revealed no significant moderations. In terms of main effects, parent's sexual abuse was positively related to higher child externalizing symptomatology at Wave 1 and 2 as well as higher child internalizing symptomatology at Wave 2 (b = 1.65, SE = .48, b\* = 3.46, p < .05; b = 1.13, SE = .61, b\* = 1.85, p < .07; b = 1.25, SE = .61, b\* = 2.04, p < .05, respectively). Additionally, parent-child negativity was positively related to child internalizing and externalizing symptomatology at Wave 1 (b = 1.79, SE = .66, b\* = 2.72, p = .05; b = 3.27, SE = .66, b\* = 4.95, p < .05, respectively). Finally, child age was negatively related to child externalizing symptomatology at Wave 1 (b = -1.07, SE = .39, b\* = -2.74, p < .05), though these effects did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

# Youth Self Report.

*Mediation*. The overall mediation model examined the roles of parent-child negativity, parent-child relationship quality, and child monitoring in mediating the relation between parent's sexual abuse and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2$  = 18.49, df = 5, p = .00, CFI = .98, and RMSEA = .09, p = .06 indicating a mediocre model fit. No hypothesized mediation pathways were significant. Parent-child negativity positively predicted child's internalizing and externalizing symptomatology at Wave 1 (b = .12, SE = .05, b\* = 2.22, p < .05; b = .37, SE = .05, b\* = 7.97, p < .05, respectively). Parent-child relationship quality was negatively related to child internalizing and externalizing symptomatology at Wave 1 (b = -.22, SE = .06, b\* = -3.72, p < .05; b = -.39, SE = .06, b\* = -6.14, p < .05, respectively). Finally, child monitoring was negatively related to child internalizing and externalizing symptomatology at Wave 1 (b = -.14, SE = .05, b\* = -2.63, p < .05). This result may indicate that further research is needed to determine the possible role of parenting behaviors in their relations to sexual abuse and child outcomes, as well as the potential direct impact of parent's sexual abuse on child maladjustment.

*Moderation.* The relations between parent's sexual abuse and child internalizing and externalizing symptomatology were not moderated by parenting behaviors (i.e. parent-child negativity, parent-child relationship quality, and child monitoring) in the original model. The original model showed poor model fit ( $\chi^2 = 577.73$ , df = 22, p = .00, CFI = .44; RMSEA = .27, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it had a good fit (see Table 17), revealed no significant moderations. In terms of main effects,

parent's sexual abuse was marginally positively related to higher child internalizing symptomatology at Wave 1 (b = .76, SE = .42, b\*=1.82, p < .07). For both parent and child report of child symptomatology, parenting behaviors did not moderate the relations between parent's sexual abuse and child symptomatology. Additionally, child monitoring was positively related to child internalizing and externalizing symptomatology at Wave 1 and externalizing symptomatology at Wave 2 (b = -4.20, SE = .79, b\*=-5.32, p < .05; b = -5.76, SE = .71, b\*=-8.08, p < .05; b = -2.07, SE = .86, b\*=-2.41, p < .05, respectively). Child age was not related to child symptomatology.

## **Emotion Neglect.**

## Child Behavior Checklist.

Mediation. The overall mediation model examined the roles of parent-child negativity, parent-child relationship quality, and child monitoring in mediating the relation between parent's emotion neglect and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 23.11$ , df = 5, p = .00, CFI = .97, and RMSEA = .10, p = .02 indicating a mediocre model fit. No hypothesized mediation pathways were significant. Parent-child negativity positively predicted child internalizing and externalizing symptomatology at Wave 1 (b = .12, SE = .06,  $b^* = 1.87$ , p < .07; b = .23, SE = .06,  $b^* = 3.95$ , p < .05, respectively). Finally, emotion neglect was directly marginally negatively related to parent-child relationship quality (b = -.10, SE = .05,  $b^* = -1.85$ , p < .07). This result may indicate that further research is needed to determine the possible role of parenting behaviors, particularly parent-child negativity, in its relations to emotion neglect and child outcomes, as well as the potential direct impact of parent's emotion neglect on child maladjustment.

*Moderation.* The relations between parent's emotion neglect and child internalizing and externalizing symptomatology were not moderated by parenting behaviors (i.e. parent-child negativity, parent-child relationship quality, and child monitoring) in the original model. The original model showed poor model fit ( $\chi^2 = 485.42$ , df = 22, p = .00, CFI = .40; RMSEA = .24, p = .00) with little to no evidence of significant interactions. The final trimmed model, though it had a good fit (see Table 17), revealed no significant moderations. In terms of main effects, parent's emotion neglect was marginally positively related to higher child externalizing symptomatology at Wave 1 (b = 1.10, SE = .58, b\*=1.89, p < .07). Additionally, parent-child negativity was positively related to child internalizing and externalizing symptomatology at

Wave 1 (b = 1.73, SE = .70,  $b^* = 2.45$ , p < .05; b = 3.30, SE = .69,  $b^* = 4.79$ , p < .05, respectively). Child age was negatively related to child externalizing symptomatology at Wave 2 (b = -1.09, SE = .41,  $b^* = -2.65$ , p < .05). Child age was not related to child internalizing symptomatology.

## Youth Self Report.

*Mediation.* The overall mediation model examined the roles of parent-child negativity, parent-child relationship quality, and child monitoring in mediating the relation between parent's emotion neglect and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 18.80$ , df = 5, p = .00, CFI = .98, and RMSEA = .09, p = .06indicating a mediocre model fit. No hypothesized mediation pathways were significant. Parentchild negativity positively predicted child's internalizing and externalizing symptomatology at Wave 1 (b = .12, SE = .06,  $b^* = -6.31$ , p < .05; b = .38, SE = .05,  $b^* = -7.98$ , p < .05, respectively). Parent-child relationship quality was negatively related to child internalizing and externalizing symptomatology while child monitoring was negatively related to child externalizing symptomatology at Wave 1 (b = -.40, SE = .05,  $b^* = -2.23$ , p < .05; b = -.23, SE =  $.06, b^* = -3.78, p < .05; b = -.14, SE = .06, b^* = -2.58, p < .05, respectively).$  Finally, emotion neglect was directly marginally negatively related to parent-child relationship quality (b = -.10, SE = .05,  $b^*$  = -1.85, p < .07). This may indicate that further research is needed to determine the possible role of parenting behaviors, particularly parent-child negativity, in its relations to emotion neglect and child outcomes, as well as the potential direct impact of parent's emotion neglect on child maladjustment.

*Moderation.* The relations between parent's emotion neglect and child internalizing and externalizing symptomatology were not moderated by parenting behaviors (i.e. parent-child negativity, parent-child relationship quality, and child monitoring) in the original model. The original model showed poor model fit ( $\chi^2 = 492.26$ , df = 22, p = .00, CFI = .47; RMSEA = .25, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit (see Table 17) and showed evidence that parent-child negativity significantly moderated the relations between parent's emotion neglect and child internalizing and externalizing symptomatology at Wave 1 (b = 1.35, SE = .73, b\* = 1.85, p < .07; b = 1.52, SE = .61, b\* = 2.49, p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of high and low parent-child negativity, parent's emotion neglect was significantly related to child externalizing symptomatology at Wave 1. However, higher parent-child negativity and lower emotion neglect had a stronger effect on child externalizing symptomatology (b = 7.14, SE = 2.91,  $b^* = .67$ , p < .05) compared to those with lower parent-child negativity (b = 4.90, SE = 2.02,  $b^* = .46$ , p < .05), indicating that parent-child negativity was an additive risk factor for parent's emotion neglect (see Figure 34). This finding indicates that for both parent's and child's report of child externalizing symptomatology, parent-child negativity acted as a moderator of the relation between parent's emotion neglect and child externalizing symptomatology.

In both conditions of lower and higher parent-child negativity, emotion neglect was not related to child internalizing symptomatology at Wave 1. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at lower or higher parent-child negativity. No other significant moderations were found. In terms of main effects, parent-child negativity was negatively related to child internalizing and externalizing symptomatology at Wave 1 (b = -4.32, SE = .68, b\* = -6.32, p < .05; b = -6.74, SE = .57, b\* = -11.80, p < .05). Child age was not related to child symptomatology.

# **Physical Neglect.**

## Child Behavior Checklist.

*Mediation.* The overall mediation model examined the roles of parent-child negativity, parent-child relationship quality, and child monitoring in mediating the relation between parent's physical neglect and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 23.60$ , df = 5, p = .00, CFI = .97, and RMSEA = .10, p = .02 indicating a mediocre model fit. No hypothesized mediation pathways were significant. Parent-child negativity positively predicted child internalizing and externalizing symptomatology at Wave 1 (b = .12, SE = .06,  $b^* = 1.93$ , p < .07; b = .23, SE = .06,  $b^* = 3.97$ , p < .05, respectively). Parent-child relationship quality was negatively related to parent's physical neglect (b = -.12, SE = .05,  $b^* = -2.36$ , p < .05). Finally, parent's physical neglect was directly negatively related to parent-child relationship quality (b = -.12, SE = .05,  $b^* = -2.36$ , p < .05). This result may indicate that further research is needed to determine the possible role of

parenting behaviors, particularly parent-child negativity, in its relations to physical neglect and child outcomes, as well as the potential direct impact of parent's physical neglect on child maladjustment.

*Moderation.* The relations between parent's physical neglect and child internalizing and externalizing symptomatology were not moderated by parenting behaviors (i.e. parent-child negativity, parent-child relationship quality, and child monitoring) in the original model. The original model showed poor model fit ( $\chi^2 = 400.64$ , df = 22, p = .00, CFI = .48; RMSEA = .22, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit (see Table 17) and showed evidence that parent-child negativity significantly moderated the relations between parent's physical neglect and child internalizing symptomatology at Wave 2 and child externalizing symptomatology at Waves 1 and 2 (b = -2.44, SE = 1.15, b\* = -2.11, p < .05; b = 2.27, SE = .98, b\* = 2.30, p < .05; b = -2.30, SE = 1.02, b\* = -2.24, p < .05, respectively).

Using simple effects tests in accordance with Holmbeck (2002), in only the condition of low parent-child negativity, parent's physical neglect was significantly related to child externalizing symptomatology at Wave 2, indicating that when children's experienced higher parent-child negativity, low physical neglect had a stronger effect on child externalizing symptomatology across time (b = -11.57, SE = 6.18, b\* = -.58, p < .07) but this was not found for low parent-child negativity (b = -15.86, SE = 8.97, b\* = -.80, p = .08) (see Figure 35). However, in both conditions of lower and higher parent-child negativity, physical neglect was not related to child internalizing symptomatology at Wave 2, nor child externalizing symptomatology at Wave 1. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at lower or higher parent-child negativity for both types of child symptomatology. No other significant moderations were found.

In terms of main effects, parent-child negativity was positively related to child internalizing and externalizing symptomatology at Wave 1 (b = 1.88, SE = .71, b\* = 2.66, p < .05; b = 3.35, SE = .68, b\* = 4.90, p < .05, respectively). Child age was negatively related to child externalizing symptomatology at Wave 1 (b = -1.08, SE = .41, b\* = -2.66, p < .05), though this did not extend to Wave 2. Child age was not related to child internalizing symptomatology.

# Youth Self Report.

*Mediation.* The overall mediation model examined the roles of parent-child negativity, parent-child relationship quality, and child monitoring in mediating the relation between parent's physical neglect and child internalizing and externalizing symptomatology at both Wave 1 and Wave 2. This model had a  $\chi^2 = 18.89$ , df = 5, p = .00, CFI = .98, and RMSEA = .09, p = .02indicating a mediocre model fit. No hypothesized mediation pathways were significant. Parentchild negativity positively predicted child internalizing and externalizing symptomatology at Wave 1 (b = .12, SE = .05,  $b^* = 2.23$ , p < .05; b = .37, SE = .05,  $b^* = 7.95$ , p < .05, respectively). Parent-child relationship quality was negatively related to child internalizing and externalizing symptomatology at Wave 1 (b = -.40, SE = .06,  $b^* = -6.30$ , p < .05; b = -.21, SE = .06,  $b^* = -3.63$ , p < .05, respectively). Child monitoring was negatively related to child externalizing symptomatology at Wave 1 (b = -.14, SE = .05,  $b^* = -2.65$ , p < .05). Finally, physical neglect was directly marginally negatively related to parent-child relationship quality (b = -.12, SE = .05,  $b^*$  = -2.36, p < .05). This may indicate that further research is needed to determine the possible role of parenting behaviors, particularly parent-child negativity, in its relations to physical neglect and child outcomes, as well as the potential direct impact of parent's physical neglect on child maladjustment.

*Moderation.* The relations between parent's physical neglect and child internalizing and externalizing symptomatology were not moderated by parenting behaviors (i.e. parent-child negativity, parent-child relationship quality, and child monitoring) in the original model. The original model showed poor model fit ( $\chi^2 = 408.34$ , df = 22, p = .00, CFI = .55; RMSEA = .22, p = .00) with little to no evidence of significant interactions. The final trimmed model had good fit (see Table 17) and showed evidence that child monitoring significantly moderated the relations between parent's physical neglect and child internalizing symptomatology at Wave 2 and child externalizing symptomatology at Wave 1 (b = -2.92, SE = 1.56,  $b^* = -1.88$ , p < .07; b = 3.01, SE = 1.11,  $b^* = 2.71$ , p < .05).

Using simple effects tests in accordance with Holmbeck (2002), in both conditions of lower and higher child monitoring, physical neglect was not related to child symptomatology. Though there was evidence of moderation, simple effects tests did not reveal any significant moderation effects at lower or higher child monitoring. No other significant moderations were found. This indicates that parenting behaviors were found to act as moderators when using

parent's report of child symptomatology but not child report of child symptomatology. In terms of main effects, child monitoring was negatively related to child internalizing symptomatology at Wave 1 and child externalizing symptomatology at Wave 1 and 2 (b = -4.25, SE = .80, b\* = -5.35, p < .05; b = -5.89, SE = .71, b\* = -8.30, p < .05; b = -1.56, SE = .86, b\* = -1.81, p = .07, respectively). Child age was not related to child symptomatology.

## 4.0 - Discussion

The purpose of the current study was to investigate the relations among parent's childhood maltreatment and child maladjustment via the potential mediators and moderators of parent depression, parent self-esteem, age of becoming a parent, parent income, parent education, parent maltreatment behaviors, parent-child negativity, parent-child relationship quality, and child monitoring. This research highlights the potential impact of parent's childhood maltreatment on children and the pathways through which this impact could occur. The goals of the current study were to address and clarify the current gap in the literature in how child adjustment is influenced by parent's childhood maltreatment, parent socio-demographic factors, parenting behavior, and parent characteristics. The study explored these mechanisms of transmission of the negative effects of parent's childhood maltreatment on children by examining their roles as mediators and moderators of the relation between parent's childhood maltreatment and child maladjustment. By understanding the ways in which parenting behaviors and other parent and family characteristics can affect the transmission of the negative effects of parent's childhood maltreatment, research is better able to understand those protective and risk factors which can best be addressed by intervention and prevention efforts.

It was hypothesized that parenting behavior, parent intrapersonal characteristics, parent maltreatment behaviors, and parent's socio-demographic factors would mediate or moderate the relation between parent's childhood maltreatment and child maladjustment as evidenced by child internalizing/externalizing symptomatology. Parent's childhood maltreatment was expected to differentially effect child adjustment by parent's childhood maltreatment type, including physical abuse, physical neglect, sexual abuse, emotional abuse, and emotional neglect. Additionally, it was hypothesized that these relations may differ by parent versus child report of child symptomatology. The proposed model hypothesized that several parent characteristics and factors would act as risk or protective factors in the relation between parent's childhood maltreatment and child maladjustment.

Parenting behaviors that were expected to be affected by parent's childhood maltreatment and in turn were related to child maladjustment included child monitoring, parent-child negativity, parent-child relationship quality, psychological maltreatment, mild and severe physical assault. Parent intrapersonal characteristics that were expected be affected by parent's childhood maltreatment and in turn were related to child maladjustment included depression and self esteem. Parent socio-demographic characteristics expected to act as mediators or moderators included parent education, age of becoming a parent, and income.

Some of the hypothesized mediations and moderations were supported. Overall, fifty mediation analyses were run and mediation was found in twenty-one of the models. Fifty moderation analyses were run and moderation was found in twenty-three of the models. In particular, parent depression and parent socio-demographic factors (age of becoming a parent, parent income and education) were supported as both mediators and moderators of the relation between a multitude of parent's childhood maltreatment types and child adjustment. Parent self-esteem was consistently not found to act as a mediator or moderator in any of the models. Further research is needed, however, as the effects of depression may have overshadowed any potential effects of parent self esteem.

Though there were a small amount of findings evidencing parenting behaviors and parent maltreatment behaviors to act as mediators or moderators, these factors were largely not supported in the relation between parent's childhood maltreatment and child adjustment. In general, there were few differences found by the type of parent's childhood maltreatment, and many of the variables that acted as mediators also showed evidence of acting as moderators. Parent versus child report of child symptomatology evidenced several differences which will be discussed further. Finally, across many of the models child age only showed evidence of playing a role in that younger children exhibited higher child externalizing symptomatology. Each of these findings will be discussed as well as future directions and implications.

# 4.1 - The Role of Parent Characteristics in the Effects of Parent's Childhood Maltreatment on Children

It was expected that depression and self esteem may act as protective or risk factors in moderating and/or mediating the relations between parent's childhood maltreatment and child adjustment. In particular, parent depression and low self esteem were expected to act as risk

factors. This hypothesis was supported across several of the moderation and mediation analyses for depression; however, this was not supported across any analyses for self esteem.

For mediation, parent's report of child symptomatology showed full or partial mediation of the relations between parent's childhood maltreatment and child internalizing and externalizing symptomatology through parent depression for all five subtypes of parent's childhood maltreatment. This indicates that parents who experienced childhood maltreatment were more likely to report higher levels of depression which in turn was related to higher levels of internalizing and externalizing symptomatology in children. For parent's emotion and physical neglect to child externalizing symptomatology as well as for all five types of parent's childhood maltreatment to child internalizing symptomatology full mediation was found (i.e., parent's childhood maltreatment was not directly related to child symptomatology after taking into account the mediation effects of depression). This mediation was supported both for Wave 1 outcomes as well as for Wave 2 outcomes after controlling for levels of Wave 1 outcomes. For parent's emotion, physical, and sexual abuse to child externalizing symptomatology, partial mediation was found and did not extend to Wave 2. Child report of child symptomatology revealed no mediation across any of the analyses.

For moderation, depression moderated the relations between parent's childhood maltreatment and parent's report of child externalizing symptomatology for parent's emotion, physical, and sexual abuse. Depression moderated the relations between parent's childhood maltreatment and parent's report of child internalizing symptomatology for parent's emotion abuse. For parent's physical abuse and emotion neglect, parents' childhood maltreatment was significantly related to parent's report of child internalizing symptomatology only for those children those parents reported lower levels of depression. For child reports of child symptomatology no moderations were found with the exception that the effects of parent's physical abuse on child externalizing symptomatology were significant only when depression was low. This indicates that for many parent abuse experiences, parent depression appears to act as a powerful risk factor for child symptomatology such that the effects of parent's childhood maltreatment were weaker in its presence.

Overall, the current findings indicated that parent depression acted as both a mediator and moderator of the relations between parent's childhood maltreatment and child symptomatology. The current study supports research indicating that parental depression is related to depressive

symptoms and internalizing and externalizing problems in children and adolescents and has been found to mediate the link between maternal victimization and child internalizing behaviors (Dubowitz et al., 2001; Morrel et al., 2003; Reeb & Conger, 2009). This finding extends previous research by indicating that parent depression is likely to play a key role in the effects of parent trauma, be they adult or child victimization.

This finding also indicates that parent intrapersonal factors and characteristics are likely to be important mechanisms of transmission, though future research should expand on these findings. The current study gave evidence that parent depression was a moderator and mediator, though the specific findings did differ somewhat between parent and child report. Future research should further explore these differences to determine if parent characteristics, such as depression, may be affected by a parent's childhood maltreatment and in turn affect child maladjustment. Alternately, parent characteristics may develop independently of a parent's childhood maltreatment, such as achieving healthy self esteem or exhibiting no depression symptoms, and may influence the relation between parent's childhood maltreatment and child maladjustment.

Additionally, future research should explore the cumulative effects of parent intrapersonal functioning in the relations between parent's childhood maltreatment and child adjustment through models which integrate and combine a multitude of parent functioning and adjustment indicators to create an overall picture of parent risk and resilience. Though the current study did not find any indication of parent's self esteem acting as a mediator or moderator, this variable as well as other characteristics should be explored further. It may be that parent intrapersonal functioning overlaps to a large degree and is best determined by creating an overall indicator of functioning that combines several factors such as adaptive coping, parent symptomatology, emotion regulation, and self view. Parent characteristics factors should be examined further as both mediators and moderators of the relations between parent's childhood maltreatment and child adjustment as there is evidence that parent intrapersonal functioning may be affected by a parent's childhood maltreatment or may develop independently of a parent's childhood maltreatment.

# 4.2 - The Role of Broader Contextual and Socio-Demographic Factors in the Effects of Parent's Childhood Maltreatment on Child Adjustment

It was expected that age of becoming a parent, parent education, and family income may act as protective or risk factors in moderating and/or mediating the relations between parent's childhood maltreatment and child adjustment. In particular, low socio-demographic factors (i.e. low education, young age of becoming a parent, and low income) were expected to act as risk factors whereas higher socio-demographic factors were expected to act as protective factors or buffers. This hypothesis was supported across several of the mediation analyses; however, this was rarely found for moderation analyses.

For mediation, parent's report of child symptomatology showed full or partial mediation of the relations between parent's childhood maltreatment and child internalizing and externalizing symptomatology through income for all five subtypes of parent's childhood maltreatment. This finding indicates that parents who experienced childhood maltreatment were more likely to report lower levels of income which in turn was related to higher levels of internalizing and externalizing symptomatology in children. For parent's physical and sexual abuse to child internalizing symptomatology and for parent's emotion and physical neglect to child internalizing and child externalizing symptomatology, full mediation was found (i.e., parent's childhood maltreatment was not directly related to child symptomatology). This mediation was supported both for Wave 1 outcomes as well as for Wave 2 outcomes after controlling for levels of Wave 1 outcomes. For parent's emotion abuse to both types of child symptomatology and for parent's physical and sexual abuse to child externalizing symptomatology, partial mediation was found and extended to Wave 2.

For mediation, child report of child symptomatology showed somewhat different findings. Age of becoming a parent fully mediated the relations between parent's emotion and sexual abuse as well as emotion and physical neglect to child internalizing symptomatology, and for sexual and physical abuse to child externalizing symptomatology, for Wave 1 as well as for Wave 2 outcomes after controlling for levels of Wave 1 outcomes. Age of becoming a parent fully mediated the relations between emotion and physical neglect to Wave 1 child externalizing symptomatology. Partial mediation was found for age of becoming a parent mediating the relation between physical abuse and child internalizing symptomatology for Wave 1 as well as extending to Wave 2. Parent education was found to mediate the relations between parent's

physical and sexual abuse and physical and emotion neglect to child internalizing symptomatology, and extended to Wave 2 for parent's physical and sexual abuse. Finally, parent's income was found to mediate the relations between emotion and sexual abuse as well as parent's emotion neglect to child externalizing symptomatology at Wave 1, and from parent's physical neglect to child internalizing symptomatology for Wave 1 and extending to Wave 2. This indicates that for several parent/family socio-demographic factors that when using child report of symptomatology low income and education, and young age of becoming a parent may mediate the relations between parent's childhood maltreatment and child symptomatology.

For moderation, both low and high parent education moderated the relations between parent's childhood maltreatment and parent's report of child symptomatology for parent's emotion abuse to parent report of child externalizing symptomatology at Wave 2, physical abuse to child report of child internalizing symptomatology at Wave 2, sexual abuse to parent report of child externalizing symptomatology at Wave 1, physical neglect to parent report of child externalizing symptomatology at Wave 2, and physical neglect to parent report of child externalizing symptomatology at Wave 2. For emotion neglect only, a younger age of becoming a parent was found to moderate the relations between parent's higher childhood maltreatment and child report of child externalizing symptomatology at Wave 2. This indicates that for certain types of parent childhood maltreatment socio-demographic factors, namely parent education and age of becoming a parent, may act as protective or risk factors in moderating the relations between parent's childhood maltreatment and child symptomatology.

For emotion abuse only, it was found that more educated parents were more likely to have amplified effects of emotion abuse on child symptomatology. This finding is incongruent with the other findings of the study as well as with the hypothesis. It may be that for some reason educated parents are more likely to transmit the effects of emotion abuse only to their children and that emotion abuse interacts differently with education of parents than is found for other types of parent maltreatment experience. However, it may also be that these findings are spurious due to the overall number of analyses completed in this study and/or may be particular to the sample examined. As this link has not been found in other research, further research is needed to examine the nature of this inconsistent finding.

The current study contributes evidence to the theory that parents who have experienced childhood maltreatment and face financial adversity, low education, and a young age of becoming a parent are at an increased risk of having children with poor adjustment. The findings further suggest that when parents have a good education, comfortable income, and were older (such as over 21) when having their first child, these factors may buffer the negative effects of the parent's childhood maltreatment.

There was evidence of socio-demographic factors acting as mediators, moderators, or both in the relations between majority of types of parent's childhood maltreatment and child adjustment. This result indicates that poor versus adequate socio-demographic factors and status are likely to be important mechanisms of transmission, though future research should expand on these findings. The current study gave evidence that age of becoming a parent, income, and parent education were all likely moderators and/or mediators, though the findings did differ somewhat between parent and child report. Future research should further explore these differences to determine if for example parent income may be more likely to impact parent's adjustment following maltreatment experiences while a young age of becoming a parent or lower parent education may be more likely to impact the child's perceptions of the home and subsequent child symptomatology. Additionally, future research should explore the cumulative effects of socio-demographic factors/status in the relations between parent's childhood maltreatment and child adjustment through models which test a higher level factor, such as a composite, which represents a multitude of socio-demographic factors to create an overall picture of family status and dynamics. Finally, other socio-demographic factors, such as neighborhood characteristics, should be examined further as both mediators and moderators of the relations between parent's childhood maltreatment and child adjustment as there is evidence that socio-demographic factors may be affected by a parent's childhood maltreatment or may develop independently of a parent's childhood maltreatment. The current findings support prior research indicating that parent's childhood maltreatment may increase their contextual risk, such as living in a high risk neighborhood, through a variety of mechanisms including younger age of becoming a parent, lower education, and low socioeconomic status (Garbarino & Sherman, 1980).

# 4.3 - The Role of Parent's Childhood Maltreatment on Child Maltreatment in the Effects of Parent's Childhood Maltreatment on Child Adjustment

It was expected that parent maltreatment behaviors (i.e., psychological maltreatment, minor assault, and severe assault) would act as risk factors in moderating and/or mediating the relations between parent's childhood maltreatment and child adjustment. This hypothesis was largely not supported across the mediation analyses and moderation analyses. For mediation, child report of child symptomatology showed full mediation of the relations between parent's childhood maltreatment and child internalizing and externalizing symptomatology through psychological maltreatment only for sexual abuse and emotion and physical neglect. This result indicates that parents who experienced certain types of childhood maltreatment were more likely to have children who reported being psychological maltreated by the parent which in turn was related to higher levels of internalizing and externalizing symptomatology in children when children reported on child symptomatology. For parent's report of child symptomatology, no evidence of mediation was found.

For moderation, low severe assault experiences of children moderated the relations between parent's sexual abuse and parent's report of child externalizing symptomatology at Wave 2. No other evidence of moderation was found for child maltreatment behaviors. This indicates that specifically in cases where a parent has been sexually abused, low severe assault may act as an interactive risk factor for child externalizing symptomatology. However, it may be that parent's who have been sexually abused exhibited higher risks of child maltreatment and/or over-reported on their children's symptomatology.

Though several of the parent's childhood maltreatment types, all but physical abuse, were directly related to psychological maltreatment and minor or severe assault with little to no mediation or moderation found for these variables. This result may indicate that the intergenerational transmission of parent's childhood maltreatment to child maltreatment is not a direct transmission. Rather, it is likely the case that other factors are facilitating this relation such as parent adjustment after trauma, parent depression, or socio-demographic factors (Ezzel et al., 2000; Hilarski, 2004).

Findings on the intergenerational transmission of maltreatment are mixed and inconclusive as to whether transmission occurs and by what mechanisms. Prior research indicates that the transmission of trauma from parent to child is complex and not inevitable

(Kaufman & Zigler, 1987). Though some studies have shown a higher likelihood of abuse potential in parents or adults who have experienced childhood maltreatment, it is frequently influenced by other protective and risk factors in the family environment (Belsky, Youngblade, & Pensky, 1989; Caliso & Milner, 1992; Cohen, Hien, & Batchelder, 2008; Coohey & Braun, 1997; DiLillo, Tremblay, & Peterson, 2000; Hilarski, 2004; Ferrari, 2002; Newcomb & Locke, 2001). The current findings support this idea that parent's childhood maltreatment's transmission to child maltreatment is frequently influenced by other protective and risk factors and not a direct or inevitable path.

All analyses explored parent's childhood maltreatment by both primary caregiver and the child's overall experience of child maltreatment behaviors. However, little to no significant findings were indicated for those mediation and moderation models involving overall childhood maltreatment within the household. There are several reasons why findings may have been specific to the primary caregiver who had reported on their own childhood maltreatment experience. As evidenced by the correlation tables (see Tables 5-6), there were very few significant correlations found between overall childhood maltreatment experienced by the child, whereas there were somewhat more significant correlations indicated when correlations were specific to the primary caregiver.

This finding may indicate that the primary caregiver is specifically transmitting their maltreatment experience to the child as opposed to recreating a household with similar features or selecting a partner who is abusive. However, this idea was not possible to test because there were no data in the current study which assessed each caregivers' childhood maltreatment experience in combination with their contribution to parenting. Further research is needed to determine each caregiver's unique contribution to parenting and childhood maltreatment experience in order to better understand whether transmission is specific to a parent who was maltreated or occurs through poor partnering choices or the recreation of an unhealthy home environment similar to the one the parent experienced as a child.

# 4.4 - The Role of Parenting Behaviors in the Effects of Parent's Childhood Maltreatment on Child Adjustment

It was expected that parenting behaviors (i.e., parent-child negativity, child monitoring, and parent child relationship quality) may act as protective or risk factors in moderating and/or mediating the relations between parent's childhood maltreatment and child adjustment. In

particular, poor parenting behaviors (i.e., high parent-child negativity, poor monitoring, and poor relationship quality) were expected to act as risk factors whereas good parenting behaviors were expected to act as protective factors or buffers. This hypothesis was largely not supported for mediation or moderation analyses.

For mediation, parent's physical and emotion abuse showed full mediation of the relations between parent's childhood maltreatment and child report child externalizing symptomatology through parent-child negativity for Wave 1 and extending to Wave 2. Similarly, parent-child negativity partially mediated the relations between parent's physical abuse and parent's report of child externalizing symptomatology at Wave 1. These findings indicate that parents who experienced physical or emotion abuse were more likely to have poorer parenting skills as shown by high parent-child negativity which in turn was related to higher levels of externalizing symptomatology in children.

For moderation, children whose parents exhibited high parent-child negativity were more likely to be negatively affected, as seen by child externalizing symptomatology, by their primary caregiver's childhood experiences of physical abuse or emotion neglect compared to children whose parents did not exhibit high parent-child negativity. Finally, children whose parents exhibited high child monitoring were less likely to be negatively affected, in terms of internalizing symptomatology, by their primary caregiver's childhood experiences of emotion abuse compared to those children whose parents exhibited low child monitoring. Overall, this indicates that the parenting behaviors explored largely did not act as mediators or moderators, however, there is some evidence that parent-child negativity may act as an interactive risk factor in child externalizing symptomatology and that good child monitoring may act as a protective factor whereas poor child monitoring may act as a risk factor.

Some previous research has suggested that parent trauma can negatively affect children's adjustment (Hilarski, 2004; Morrel et al., 2003). This research lends evidence to the potential influences of parent's childhood maltreatment on child adjustment being dependent on many other factors such as vicarious trauma, parent's recovery following maltreatment, substance abuse, parental depression, and later adult victimization (Dubowitz et al., 2001; Hilarski, 2004). The mediated effects of parent's childhood maltreatment on child adjustment through parenting behaviors may also be highly dependent on protective and risk factors for children, such as children's self esteem, emotion regulation, and coping skills (Kim & Cicchetti, 2004, 2009).

Though findings were less prevalent for parenting behaviors as mediators or moderators, there was some evidence of child monitoring and parent-child negativity acting as mediators, moderators, or both. The results indicate that healthy versus unhealthy parenting behaviors are likely to be important mechanisms of transmission, though future research should expand those parenting behaviors that are explored. Additionally, future research should explore the cumulative effects of parenting behaviors in the relations between parent's childhood maltreatment and child adjustment through models which test a higher level factor, such as a composite, which represents multiple individual indicators. Finally, parenting behaviors beyond those included in the current study should be examined further as both mediators and moderators of the relations between parent's childhood maltreatment and child adjustment as there is evidence that parenting behaviors may be affected by a parent's childhood maltreatment or may develop independently of a parent's childhood maltreatment. There is evidence that healthy parenting may act as a protective factor or buffer in the relation between parent's childhood maltreatment and child maladjustment whereas unhealthy parenting behaviors may act as a risk factor in affecting child maladjustment.

## 4.5 - The Role of Type of Parent's Childhood Maltreatment

Several studies have shown that the influences of parent's childhood maltreatment on children differ according to the type of parent childhood maltreatment (Dixon, Browne et al., 2005; Dixon, Hamilton-Giachritsis et al., 2005; Newcomb & Locke, 2001). The current findings suggest that parent's childhood maltreatment types yielded similar findings in their effects on parenting behaviors, socio-demographic factors, parent maltreatment behaviors, parent depression, and ultimately child adjustment and symptomatology. However, such a finding may be in part due to the high likelihood that an individual will experience more than one type of childhood maltreatment. In general, individuals who have been maltreated tend to have experienced multiple types of maltreatment which are also impacted by other abuse characteristics such as age of onset and duration (Manly, Kim, Cicchetti, & Rogosch, 2001).

As there is a small amount of evidence in the current study that different types of parent's childhood maltreatment may have differential effects on parents and children, future research should explore these pathways further within a sample that includes mothers and fathers. While much of the current studies findings indicate an overlap in parent's childhood maltreatment types, further research is needed to confirm this and/or find those ways in which maltreatment

types may differ. For example, differences by parent's childhood maltreatment type may emerge when exploring mothers versus fathers or protective and risk factors beyond those included in the current study, such as cognitive functioning or coping behaviors. As will be discussed further in terms of feminist theory, sex roles are likely to play a role in the effects of parent's childhood maltreatment on children and thus further research is needed to understand those ways in which parent sex/gender may lead to differential effects in intergenerational transmission.

Additionally, future research would benefit from exploring parent's childhood maltreatment not only by type of abuse/neglect but also by other abuse characteristics, such as duration or age of onset.

## 4.6 - The Role of Feminist Theory

The current study examined the roles of some socio-demographic characteristics of the family that may be key in reinforcing the negative effects of parent's childhood maltreatment and overall systems of oppression. It was found that young age of becoming a parent, lower education in parents, and lower familial income were all related to parent's childhood maltreatment as well as child symptomatology. These findings support the idea that multiple systems of class and oppression are often working in concert in at risk families and children. It appears that low income, low education, and younger age of becoming a parent are all creating a context in which it is all the more difficult for parents who have been maltreated to overcome their adversity and become resilient. As many children who are maltreated also face other hardships such as low income, low education opportunities, few mentors, and early delinquency (such as early sexual behavior leading to teen pregnancy), it is important that socio-demographic factors be considered in understanding at-risk families. Future studies should further examine the ways that class, race, education, socio-economic status, and neighborhood safety may act to decrease the likelihood of resilience in parents who have been maltreated as children.

As discussed earlier, in order to fairly represent and examine intergenerational transmission in families, it is essential to search for those things that enable families to thrive despite negative circumstances as well as those which may increase their risk of transmitting negative effects to future generations. This means that future research should explore both risk and resilience. By dedicating equal attention to continuity and discontinuity in intergenerational transmission of maltreatment we are able to see it and the individuals impacted clearly. Research exploring the discontinuity may be more beneficial in design as through it we are able to

understanding those protective factors that lead to adaptive outcomes following maltreatment or neglect. Research on risk is still important, however, to knowing how to rehabilitate individuals and knowing what areas to target in interventions and preventions whereas resilience can tell us what to promote. This may broaden our lens to enable the cultivation of resilience and hardiness. After all, continuity and discontinuity, risk and resilience, exist in the same sample, and in many cases even in the same individual.

It is unfortunate that developmental psychopathology and risk and resilience research have not previously addressed research design in terms of feminism and feminist methodology. However, future research would benefit from further integrating the two fields and forming a more functional form of feminist psychology as it applies to developmental psychopathology and risk and resilience. This is especially important to psychology's goals of objectively and scientifically reporting and understanding what is going on in the world and individuals. This is true for overall continuity and discontinuity explorations as well as our understanding of gender roles versus sex differences. Feminism may give developmental psychopathology and risk and resilience research the exact tools they need to create more objective and bias free research design.

# 4.7 - The Role of Child Age

In the majority of models tested using parent's report of child symptomatology, child age was negatively related to child externalizing symptomatology at Wave 1 but not Wave 2, indicating that younger children were more likely to exhibit child externalizing symptomatology. However, as shown in the correlations (see Table 2) Wave 1 and Wave 2 child symptomatology were highly correlated, indicating that child externalizing symptomatology was consistent across time for the current sample.

Child age was not related to child internalizing symptomatology in any of the models tested and was not related to child externalizing symptomatology in any models using child report of child symptomatology. The differences in findings by parent versus child reporter may be in part due to reporter bias. This may be a particular difficulty of research involving parent's who have experienced maltreatment as some studies have found effects for mothers' report but not teachers' or children's report of child symptomatology in cases where the parent has experienced childhood maltreatment or trauma (Morrel et al., 2003). However, several studies

have demonstrated that even in the absence of parent's childhood maltreatment, parents and children frequently report very differently on symptomatology (Briggs-Gowan, Carter, & Schwab-Stone, 1996; Grills & Ollendick, 2002/2003)

Some prior research has shown that the relation between parent trauma and child adjustment may be informed by reports from children as well as parents. Comparing multiple informants may be important to understanding how parent's childhood maltreatment affects child outcomes or if parents with abuse histories are either more sensitive, or overly sensitive, to children's outcomes. It may be that parents who have been maltreated are more sensitive or attentive to these relations than other observers. Alternately, it may be that parents who have been victimized are more likely to over-report child adjustment problems due to the influences of their experience on their perception of their children (Briggs-Gowan, Carter, & Schwab-Stone, 1996; Morrel et al., 2003). Further research comparing parent and child reports is essential to developing our understanding of this relation.

Further research is needed to understand the role of child development and adjustment within an at-risk ecological context or family environment. While some research has begun to broach the intricacies of intergenerational transmission and the ways in which vicarious trauma can impact children, this research to date is quite broad and includes a limited sample. Due to these limitations in sampling, there has yet to be a thorough exploration of the role of child development in intergenerational transmission and the effects of parent's childhood maltreatment on children and parenting across child development.

#### 4.8 - Limitations

The current study have several strengths, including a sample of both abused and non-abused parents, including mothers and fathers, children's reports of parenting behavior and parent's and children's reports of child adjustment, and the exploration of different subtypes of parent's childhood maltreatment on a continuum. However, several caveats should be noted. First, it should be noted that causal claims cannot be made about the relations and mediations supported. Second, it should also be noted that a common issue with maltreatment and intergenerational transmission research is the use of retrospective report; this issue was also present in the current study. Third, this study's findings also may not be generalized to a large

variety of races due to the lack of racial and ethnic diversity in the current sample. Future research should further explore the roles of the factors explored in the current study in various races and ethnicity as well as with prospective longitudinal designs.

Fourth, this study is limited by a lack of information on the potential roles of diverse aspects of parent's childhood maltreatment beyond by overall type of parent's childhood maltreatment, such as the potential cumulative effects of having experienced more than one childhood maltreatment type, the presence of parent's adult victimization, or by duration, age of onset, or severity of trauma. It is possible that relatively low levels of parent trauma experience may have limited significant findings in the current analyses. The effects of trauma can be influenced by types, timing/age of onset, amount/cumulative effects, duration, and potentially relationship to perpetrator. Further, this study explored parent's childhood maltreatment effects in a normative sample and therefore the findings may not be generalizable to a clinical sample. However, this limitation also represents a strength via the ability to assess the effects of parent's childhood maltreatment in a normative sample. Future research should explore the effects of parent trauma in a clinical sample as well as according to severity of parent's childhood maltreatment.

Fifth, a similar problem exists for those measures of parenting behavior which were limited to child monitoring, parent-child relationship quality, and parent-child negativity. There are a plethora of factors which lend to overall parenting beyond these factors, though these three do provide a good picture of parenting. Future studies may benefit from extending parenting behaviors to include the many various parenting characteristics including discipline, communication, attachment, parenting stress, and warmth. Similarly, it would be beneficial in future studies to further analyze how these dynamics may change according to the development of the child. Though this design was limited to 2 Waves of data collection and a middle childhood to adolescent sample, future research would benefit from exploring these factors using a longitudinal design which encompasses many developmental periods from infancy to early adulthood. Research in this field is generally limited by a lack of exploring intergenerational transmission as it relates to child and adolescent development, largely due to the limited ability to sample parent's and families with a childhood maltreatment history.

Finally, all measures were completed via self report by parents and children. Therefore there may be possible reporter errors for both parents' and children's reports of parenting behaviors and child symptomatology as these may be influenced by the family and individual perceptions. Other means of assessing these measures in future studies could include teacher report, experimental tasks, or observation.

#### 4.9 - Future Directions

Several suggestions for future research have been made throughout this paper, a few essential directions of future research include better longitudinal research designs in examining intergenerational transmission, exploring other potential factors in the effects of parent's childhood maltreatment, diverse sampling across race/ethnicity and parent sex, longitudinal developmental designs, and a closer examination of factors which promote resilience in parents who have been maltreated. Research designs on intergenerational transmission should distinguish between continuity and discontinuity in the intergenerational transmission of maltreatment. More progressive research designs which take this into account include comparisons of discontinuity and continuity (Egeland, 1988) or even compare initiators (abusers not abused as children), maintainers (abusers abused as children), cycle breakers (nonabusers who were abused as children), and controls (nonabusers who were not abused as children) (Dixon, et al., 2009). Research designs such as this have much to offer to the overall understanding of parent's childhood maltreatment's effects on parenting behaviors, parent characteristics, and child adjustment in that they are better equipped to tease apart those factors related to parent's childhood maltreatment versus those which may be mere artifacts of other contextual and ecological factors (such as SES or other risk factors for parent's childhood maltreatment and child maltreatment and/or maladjustment).

Some factors which may play a role as protective or risk factors in the effects of parent's childhood maltreatment on child adjustment include adult victimization, cognitive processes, and parent interpersonal skills (i.e. marital quality and social support). Adult victimization experience has been shown to play a role in the continuity of parent's childhood maltreatment in negatively affecting child adjustment (Banyard, Williams, & Siegel, 2003; Dubowitz et al., 2001; Morrel, et al., 2003). This is particularly important as childhood victimization has been linked to an increased risk of adult revictimization, particularly in cases of physical and sexual abuse (Fortier et al., 2009). Cognitive processes and skills of parents have been alluded to as a

potentially important and thus far neglected line of inquiry in understanding the effects of parent's childhood maltreatment on parenting and children's adjustment (Azar, Reitz, & Goslin, 2008; Caliso & Milner, 1994; Main & Goldwyn, 1984). Therefore, cognitive processes and skills are likely an important direction for future research on parent's childhood maltreatment's effects, as characteristics such as high intelligence may represent important protective factors for parents and families at risk.

Additionally, future research should seek to broaden our knowledge of the ways these factors work according to some often neglected populations, namely, fathers and minority ethnic groups. As has been an issue in many fields of developmental psychology research, there is a dearth of literature on fathers' childhood maltreatment history and the various ways that it can affect parenting, fathers' personal development, and child adjustment. Majority of the studies have focused on maternal influences while largely ignoring paternal influences, with the exception of the occasional nod to the need for more research on fathers (DiLillo et al., 2009). The role of fathers to date has been largely constricted to their role in supporting the mother or overall marital quality as a determinant of child adjustment and parenting behaviors. In the existing literature, findings on differential influences of parent's childhood maltreatment on child adjustment for mothers and fathers are mixed and insufficient, though it has been found that for fathers sexual abuse experience was related to rejecting parenting practices, whereas for mothers it was related to aggressive parenting (Newcomb & Locke, 2001). Alternatively, mothers and fathers may differ in coping factors implemented following a trauma and those coping differences may be what determine the effect parent trauma will have on children (Ferrari, 2002; Newcomb & Locke, 2001).

Though little is known about the differential outcomes for mothers versus fathers in the effects of parent's childhood maltreatment on parenting behaviors and child adjustment, it is essential that this role be explored further in future research. Parent sex is likely to lead to differential outcomes in parent functioning following childhood maltreatment and thus may be an important aspect of the ontogenic development of the parent that has thus far been largely overlooked. As has been pointed out in the past, the characteristics that the parent brings to the table play an important role in children's risk as well as children's overall adjustment (Belsky, 1980, 1984).

It is unclear whether these mothering and fathering characteristics should be called gender or sex differences. Research in psychology typically asks individuals to report whether they are male or female, individuals are likely to answer the question based on their perceived sex, not gender. However, according to social role theory, it is likely that many of these differences and effects between mothers and fathers are influenced by society. This theory seems to be supported in that there is a large overlap in fathers and mothers and often in research these differences disappear in more equality-based homes or in cases where the caregivers are more androgynous (Renk et al., 2003; Thompson & Walker, 1989). However, one cannot rule out sex role theory without further research that clearly differentiates between sex and gender, between society and biology and unfortunately, as gender roles begin being implemented on children in infancy (blue for boys, pink for girls as well as playing rougher with male infants) this task is made all the more difficult to untangle.

Points which are likely to be influenced by gender roles include adjustment following childhood maltreatment, fathering, mothering, and level of physical versus verbal discipline. However, these variables may also be influenced by socioeconomic status and culture. As discussed earlier, some differences that may help in understanding mothering and fathering include that fathers seem to spend less time with children, spend more time in leisure or play activities, and are less likely to transmit maltreatment experiences to their children directly (Renk et al., 2003; Thompson & Walker, 1989).

In addition, according to research on fathering, it seems that both high and low levels of paternal involvement in one's own childhood predict high levels of involvement in the care of one's own children (Belsky, 1984). This may tell us something both about continuity (i.e. involved fathering begets involved fathering) as well as discontinuity (i.e. those who received low paternal involvement show higher paternal involvement with their own children). It may be that good examples as well as poor examples lead to similar outcomes and that fathers may wish to model their own parents' good parenting or ensure that their children receive the attention they did not. However, it is also known that fathers who are poor in supervision, are aggressive, or have engaged in deviant or criminal behavior are more likely to put their children at risk of similar outcomes (Belsky, Conger, & Capaldi, 2009; Capaldi et al., 2003; Conger et al., 2003). This evidences the importance of dedicated research to teasing apart these effects.

Ethnicity may also play an important role in the effects of parent's childhood maltreatment on parents, parenting behaviors, and child development. Unfortunately, the research to date has been almost entirely limited to predominantly Caucasian or African American samples where differences among diverse ethnic groups were not fully appreciated. Even in those samples where there was a larger percentage of both Caucasian and African American participants, ethnicity was either not explored or no differences were found between groups (Caliso & Milner, 1992; Crittenden, 1985; Hall et al., 1998; Herman-Giddens et al., 1998; Lutenbacher & Hall, 1998; McLoyd & Wilson, 1990). Finally, there is a dearth of literature on the influences of other often neglected races in the research, including Hispanic, Asian, and Middle Eastern families. Some research has alluded to differences in certain races and cultures in their family value systems, parenting behaviors, and interpretation of physical discipline (Maker, Shah, & Agha, 2005). For example, different demographic characteristics have different base rates of arrests for violent crimes which should be taken into account in exploring these issues (Widom, 1989a).

Studies on physical discipline have found different effects on disruptive behavior problems in Black and White children and have found warm parental attitudes to protect against later problems among White children but not Black children (Lau, Litrownik, Newton, Black, & Everson, 2006; Spieker, et al., 1996). This research indicates that it is likely that differences exist by ethnicity and culture in the continuity and discontinuity of the negative effects of parent's childhood maltreatment as well as in risk and protective factors. Future research may benefit from considering cultural models of family violence in determining the effects of parent's childhood maltreatment on children (Maker et al., 2005). As these variables are rarely explored and frequently overlap

Finally, the current study yields implications for intervention and prevention efforts a disservice by focusing on those families in which there is continuity of risk as opposed to those families that break the cycle or show discontinuity (i.e. adaptive outcomes despite being at risk). This may stem from the fact that it may be easier to sample those continuous groups (i.e., where parent's childhood maltreatment leads to negative parenting outcomes) due to CPS reports, however, discontinuous groups (i.e., where parents show adaptive outcomes despite adversity)

may be more informative to prevention and intervention efforts. As those who are able to find ways to adapt in adverse and risk represent an excellent natural resource in understanding resilience within the natural ecological contexts in which development occurs.

### 4.10 - Implications for Intervention and Prevention

In general, the current study supported the need for intervention and prevention efforts specifically targeting parent depression and parent socio-demographic factors with some evidence that parenting behaviors and parent maltreatment behaviors may be appropriate targets of intervention efforts as well. Intervention and prevention efforts should work to promote positive coping behaviors in parents, positive intrapersonal skills, parent-child relationships and parenting skills in parents at risk due to adverse childhood experiences including parenting behaviors and child maltreatment. Positive coping behaviors should be promoted in both parents and children in at-risk families in order to reduce the potential child symptomatology which may be impacted by vicarious trauma. Enhancing parent positive resources may in turn promote better parent-child interactions and thereby child adjustment by creating better equipped parents thereby hopefully disrupting the transmission of poor parenting and even maltreatment across generations. In keeping with the ecological-transactional model, adjustment/maladjustment, psychopathology and coping influence both parents and children as well as the parent-child relationship over time.

In cases where a parent has been maltreated as a child, they are likely also facing a multitude of other risk factors including low education opportunities, a low income environment, poor neighborhoods, and a greater risk of maladjustment and risky behaviors (such as becoming a parent at a younger age due to risky or early sexual behavior) (Crittenden, 1985; Garbarino & Sherman, 1980; Widom, 1989a). This seems to have been supported by the findings of the current study regarding the role of socio-demographic factors in mediating or moderating the relations between parent's childhood maltreatment and maladjustment. Intervention and prevention efforts should keep in mind that childhood maltreatment rarely occurs in exclusion, and victims of maltreatment generally have several risk factors that need to be addressed in the process of recovering from childhood maltreatment victimization experiences. Parents at risk due to childhood maltreatment may never have been exposed to good parenting behaviors and styles in their own development (Milner, 2000). They therefore may not have had the same beneficial observational learning in modeling parenting as parents without childhood

maltreatment. Teaching at risk parents good parenting behaviors and techniques for interacting with children in a positive way could prevent at risk familial factors from being transmitted across generations.

In counseling and interventions with adults who have experienced childhood victimization, clinicians and counselors should explicitly address parent's childhood maltreatment not only in its effects on parents but also in the ways that poor adjustment for parents who have been maltreated can affect children and the parent-child relationship.

Prevention and intervention efforts are likely to benefit from promoting those factors which have been demonstrated themselves as protective factors for parents and for recovery from maltreatment experiences. These factors may include education, social supports, social skills, stress management techniques, learning positive parenting techniques, and financial stability. We know from past work with at-risk samples that broader macrosystems such as low socioeconomic status and high risk neighborhoods can be added stressors which may act as risk factors for continuity of risk across generations. Research following the efficacy of various protective factors in prevention of continuity of risk can enhance our understanding of the ways in which healthy development can be promoted for at-risk children, as well as creating a better understanding of the mechanisms by which risk factors and maladjustment may be transmitted across generations.

#### 4.11 - Conclusions

In exploring parent's childhood maltreatment and its effects on child adjustment, it is essential that the roles of parenting behaviors, child maltreatment, and parent characteristics be understood as often the effects on child adjustment are indirect and occur through other factors in the family's environmental context. Each of these pathways is important to creating a full picture of the relations among parent's childhood maltreatment, parenting behaviors, and child adjustment. It is clear from the current study that parent's childhood maltreatment represents an important factor in family dynamics and child development.

Although the current literature on the intergenerational transmission of maltreatment may be well established our understanding of the various ways in which parent's childhood maltreatment can affect families, parenting and children is far from complete. Overall, it was found that parent's childhood maltreatment was mediated or moderated by parent depression and parent socio-demographic factors and to a much lesser extent through parenting behaviors. The

current findings support past research indicating that children may be at a higher risk of trauma when parents have a maltreatment history (Dubowitz et al., 2001). Additionally, the current study supports the need to explore pathways of resilience in parents who have experienced childhood maltreatment.

The current study highlights the impact of parent's childhood maltreatment on parents, socio-demographic factors, parenting behaviors and their child's adjustment. Research in this area is essential to learning important information that can be used to develop better intervention and prevention programs relating to improved trauma recovery and parenting skills for parents who have been abused or experienced trauma are therefore considered high-risk families. In addition, research on parenting behaviors and child adjustment through parent's childhood maltreatment and parent characteristics may have important implications for children's adjustment and well-being over time and across developmental periods. Through obtaining a better understanding of the ways in which different parent trauma experiences and parenting behaviors may contribute to child adjustment, improvements may be made in intervention and prevention programs targeted to children at risk due to familial adversities.

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Table 1

Means, Standard Deviations, and Ranges for Parent's Childhood Maltreatment, Parenting Behaviors, Parent Characteristics, Socio-Demographic Factors, and Child Symptomatology

Age became a parent Parent Emotional Abuse Parent Physical Abuse Parent Sexual Abuse Parent Emotional Neglect Parent Physical Neglect Overall Psychological Maltreatment Overall Minor Assault	11.16 27.26 1.84 1.51 1.48 1.93 1.30 1.71 1.23 .24	2.53 5.89 .92 .70 1.03 .89 .56 1.25 1.26 .72	2.00-15.00 15.00-45.00 1.00-4.80 1.00-5.00 1.00-5.00 1.00-5.00 1.00-5.00 .00-4.80 .00-4.92
Parent Emotional Abuse Parent Physical Abuse Parent Sexual Abuse Parent Emotional Neglect Parent Physical Neglect Overall Psychological Maltreatment Overall Minor Assault	1.84 1.51 1.48 1.93 1.30 1.71 1.23	.92 .70 1.03 .89 .56 1.25 1.26	1.00-4.80 1.00-5.00 1.00-5.00 1.00-5.00 1.00-5.00 .00-4.80
Parent Physical Abuse Parent Sexual Abuse Parent Emotional Neglect Parent Physical Neglect Overall Psychological Maltreatment Overall Minor Assault	1.51 1.48 1.93 1.30 1.71 1.23	.70 1.03 .89 .56 1.25 1.26	1.00-5.00 1.00-5.00 1.00-5.00 1.00-5.00 .00-4.80 .00-4.92
Parent Sexual Abuse Parent Emotional Neglect Parent Physical Neglect Overall Psychological Maltreatment Overall Minor Assault	1.48 1.93 1.30 1.71 1.23	1.03 .89 .56 1.25 1.26	1.00-5.00 1.00-5.00 1.00-5.00 .00-4.80 .00-4.92
Parent Emotional Neglect Parent Physical Neglect Overall Psychological Maltreatment Overall Minor Assault	1.93 1.30 1.71 1.23 .24	.89 .56 1.25 1.26 .72	1.00-5.00 1.00-5.00 .00-4.80 .00-4.92
Parent Physical Neglect Overall Psychological Maltreatment Overall Minor Assault	1.30 1.71 1.23 .24	.56 1.25 1.26 .72	1.00-5.00 .00-4.80 .00-4.92
Overall Psychological Maltreatment Overall Minor Assault	1.71 1.23 .24	1.25 1.26 .72	.00-4.80 .00-4.92
Overall Minor Assault	1.23 .24	1.26 .72	.00-4.92
	.24	.72	
			.00-4.67
Overall Severe Assault	.88	1 5 (	
Overall Neglect		1.56	.00-7.00
Overall Sexual Maltreatment	.06	.29	.00-3.00
Primary Caregiver Psychological Maltreatment	1.77	1.44	.00-6.00
Primary Caregiver Minor Assault	1.37	1.54	.00-7.00
Primary Caregiver Severe Assault	.24	.93	.00-7.00
Child Monitoring Scale	4.50	.65	1.15-5.00
Parent Child Negativity	2.10	.74	1.14-5.00
Parent-Child Relationship Quality	4.18	.61	1.75-5.00
Parent Depression	.44	.38	.00-1.76
Parent Self Esteem	3.31	.49	1.40-4.00
CBC Internalizing- Wave 1	52.88	9.95	33.00-80.00
CBC Externalizing- Wave 1	49.63	10.05	33.00-79.00
YSR Internalizing- Wave 1	51.17	10.07	27.00-81.00
YSR Externalizing- Wave 1	49.19	9.46	29.00-76.00
CBC Internalizing- Wave 2	50.05	9.86	33.00-85.00
CBC Externalizing- Wave 2	47.31	8.69	34.00-76.00
YSR Internalizing- Wave 2	50.64	9.59	27.00-75.00
YSR Externalizing- Wave 2	49.41	8.31	29.00-73.00
Parent Education	5.39	1.20	2.00-8.00

*Note.* N = 354 for Wave 1 and N = 220 for Wave 2. CBC = Child Behavior Checklist, YSR = Youth Self Report.

Table 2 Stability Correlations of the Study Variables between Wave 1 and Wave 2

Measures	
1. Income	.71**
2. Parent Child Negativity	.33**
3. Child Monitoring	.44**
4. Parent Child Relationship Quality	.53**
5. Parent Depression	.59**
6. Parent Self Esteem	.59**
7. CBC Internalizing	.44**
8. CBC Externalizing	.44**
9. YSR Internalizing	.28**
10.YSR Externalizing	.36**
11. Parent Education	.94**
12. Parent Emotion Abuse	.86**
13. Parent Physical Abuse	.83**
14. Parent Sexual Abuse	.89**
15. Parent Emotional Neglect	.84**
16. Parent Physical Neglect	.77**

Note. N = 354 for Wave 1 and N = 220 for Wave 2. \*p < .05, \*\* p < .01.

Table 3

Overall Correlations among Study Variables for Intrapersonal Model

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. SexAbuse															
2. PhyAbuse	.39**														
3. EmAbuse	.40**	.61**													
4. EmNegl	.35**	.55**	.73**												
5. PhysNegl	.39**	.51**	.59**	.65**											
6. Depression	.20**	.15**	.30**	.28**	.13*										
7. Self Esteem	15**	11*	26**	28**	14**	60**									
8. YSRInt1	.11*	.15**	.07	.03	.04	.06	.01								
9. YSRExt1	.06	.13*	.11*	.04	.11*	.09	06	.59**							
10.YSRInt2	.08	.09	.09	.07	.02	.15*	07	.28**	.19**						
11. YSRExt2	.05	01	.12	.10	.04	.07	13	.19**	.36**	.52**					
12. CBCInt1	.09	.03	.18**	.09	.01	.06	.01	.23**	.16**	.27**	.10				
13. CBCExt1	.19**	.16**	.24**	.11*	.14*	.09	06	.19**	.31**	.04	.13	.58**			
14. CBCInt2	.18**	.03	.17*	.13*	.06	.21**	19**	.09	01	.45**	.23**	.44**	.19**		
15. CBCExt2	.16*	.08	.13	.11	.14*	.18**	22**	.08	.14*	.16*	.33**	.29**	.44**	.48**	
16. CAge2	07	02	04	02	08	04	.16*	.03	.07	.07	01	08	15*	09	13

Note. N=220. SexAbuse = Sexual Abuse, PhyAbuse = Physical Abuse, EmAbuse = Emotional Abuse, EmNegl = Emotional Neglect, PhysNegl = Physical Neglect, Depression Wave 1, Self Esteem Wave 1, YSRInt1= YSR Internalizing Wave 1, YSRExt1 = YSR Externalizing Wave 1, YSRInt2= YSR Internalizing Wave 2, YSRExt2 = YSR Externalizing Wave 2, CBCInt1 = CBC Internalizing Wave 1, CBCExt1 = CBC Externalizing Wave 2, Cage2 = Child Age Wave 2.

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

Table 4

Overall Correlations among Socio-Demographic Models

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. SexAbuse																
2. PhyAbuse	.39**															
3. EmAbuse	.40**	.61**														
4. EmNegl	.35**	.55**	.73**													
5. PhysNegl	.39**	.51**	.59**	.65**												
6. Age First	24**	21**	13	14*	16*											
7. Income	27**	19**	25**	22**	25**	.29**										
8. Education	20**	23**	15**	19**	20**	.41**	.42**									
9. YSRInt1	.11*	.15**	.07	.03	.04	17*	10	.00								
10. YSRExt1	.06	.13*	.11*	.04	.11*	18*	14**	06	.59**							
11. YSRInt2	.08	.09	.09	.07	.02	07	07	03	.28**	.19**						
12. YSRExt2	.05	01	.12	.10	.04	11	14*	06	.19**	.36**	.52**					
13. CBCInt1	.09	.03	.18**	.09	.01	04	18**	.02	.23**	.16**	.27**	.10				
14. CBCExt1	.19**	.16**	.24**	.11*	.14*	09	22**	12*	.19**	.31**	.04	.13	.58**			
15. CBCInt2	.18**	.03	.17*	.13*	.06	.01	11	04	.09	01	.45**	.23**	.44**	.19**		
16. CBCExt2	.16*	.08	.13	.11	.14*	10	20**	14*	.08	.14*	.16*	.33**	.29**	.44**	.48**	
17. CAge2	07	02	04	02	08	.06	.04	07	.03	.07	.07	01	08	15*	09	13

Note. N=220. Age First = Age Became a Parent. \*p < .05, \*\* p < .01.

Table 5

Overall Correlations among Parents' Maltreatment Behaviors

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. SexAbuse														
2. PhyAbuse	.39**													
3. EmAbuse	.40**	.61**												
4. EmNegl	.35**	.55**	.73**											
5.PhysNegl	.39**	.51**	.59**	.65**										
6. PsycMalt	.13	.09	.07	.08	.10									
7. MinAsslt	.09	.21**	.07	.07	.08	.58**								
8. SevAsslt	.18**	.21**	.07	.05	.10	.29**	.49**							
9. Neglect	.19**	.10	02	.02	.03	.09	01	.07						
10. SexMalt	.10	.12	.06	.06	.02	.05	.13	.19**	.22**					
11.YSRInt2	.08	.09	.09	.07	.02	.23**	.17*	.07	08	.04				
12.YSRExt2	.05	01	.12	.10	.04	.32**	.16*	.09	01	.15*	.52**			
13.CBCInt2	.18**	.03	.17*	.13*	.06	.02	.02	02	.05	03	.45**	.23**		
14.CBCExt2	.16*	.08	.13	.11	.14*	.08	.10	.13	00	.07	.16*	.33**	.48**	
15. CAge2	07	02	04	02	08	.15*	01	06	15	16*	.07	01	09	13

 $Note.\ N=220.\ PsycMalt=Psychological\ Maltreatment,\ MinAsslt=Minor\ Assault,\ SevAsslt=Severe\ Assault,\ SexMalt=Sexual\ Maltreatment.\ *p<.05, **p<.01.$ 

Table 6

Overall Correlations among Primary Caregiver Maltreatment Behaviors

Measures	1	2	3	4	5	6	7	8	11	12	15	16
1. SexAbuse												
2. PhyAbuse	.39**											
3. EmAbuse	.40**	.61**										
4. EmNegl	.35**	.55**	.73**									
5. PhysNegl	.39**	.51**	.59**	.65**								
6. PsycMalt	.22**	.11	.11	.16*	.19**							
7. MinAsslt	.15*	.25**	.11	.12	.11	.58**						
8. SevAsslt	.18*	.14*	.02	.02	.04	.30**	.53**					
11.YSRInt2	.08	.09	.09	.07	.02	.25**	.17*	.08				
12.YSRExt2	.05	01	.12	.10	.04	.32**	.15*	.09	.52**			
15.CBCInt2	.18**	.03	.17*	.13*	.06	.07	.06	.04	.45**	.23**		
16.CBCExt2	.16*	.08	.13	.11	.14*	.10	.09	.11	.16*	.33**	.48**	
17. CAge2	07	02	04	02	08	.09	01	05	.07	01	09	13

*Note.* N=220. \*p < .05, \*\* p < .01.

Table 7

Overall Correlations among Parenting Behaviors

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. SexAbuse																
2. PhyAbuse	.39**															
3. EmAbuse	.40**	.61**														
4. EmNegl	.35**	.55**	.73**													
5. PhysNegl	.39**	.51**	.59**	.65**												
6. ChildMon	03	.00	01	00	04											
7. PCNeg	.05	.11*	.10	.08	.09	31**										
8. PCRelQual	09	10	05	10	12*	.62**	51**									
9. YSRInt1	.11*	.15**	.07	.03	.04	27**	.32**	45**								
10. YSRExt1	.06	.13*	.11*	.04	.11*	39**	.53**	50**	.59**							
11. YSRInt2	.08	.09	.09	.07	.02	12	.13	18**	.28**	.19**						
12. YSRExt2	.05	01	.12	.10	.04	20**	.15*	27**	.19**	.36**	.52**					
13. CBCInt1	.09	.03	.18**	.09	.01	08	.13*	09	.23**	.16**	.27**	.10				
14.CBCExt1	.19**	.16**	.24**	.11*	.14*	11*	.24**	15**	.19**	.31**	.04	.13	.58**			
15.CBCInt2	.18**	.03	.17*	.13*	.06	09	.09	02	.09	01	.45**	.23**	.44**	.19**		
16.CBCExt2	.16*	.08	.13	.11	.14*	10	.13	08	.08	.14*	.16*	.33**	.29**	.44**	.48**	
17. CAge2	07	02	04	02	08	28**	.09	15*	.03	.07	.07	01	08	15*	09	13

Note. N=220. ChildMon = Child Monitoring, PCNeg = Parent Child Negativity, PCRelQual = Parent Child Relationship Quality. \*p < .05, \*\* p < .01.

Table 8

Overall Model Fits for the Mediation Models of Parent Intrapersonal Characteristics

		Absolute (	Goodness-of-	Fit	Test of Close-Fit		
Model Label	df	$\chi^2$	p(exact)	CFI	RMSEA	p(close)	
Emotional Abuse CBC	4	10.40	.03	.99	.07	.23	
<b>Emotional Abuse YSR</b>	4	7.21	.13	.99	.05	.45	
<b>Emotion Neglect CBC</b>	4	10.31	.04	.99	.07	.24	
<b>Emotion Neglect YSR</b>	4	7.60	.11	.99	.05	.42	
Physical Abuse CBC	4	10.65	.03	.99	.07	.22	
Physical Abuse YSR	4	7.53	.11	.99	.05	.43	
Physical Neglect CBC	4	9.98	.04	.99	.07	.26	
Physical Neglect YSR	4	6.89	.14	.99	.05	.48	
Sexual Abuse CBC	4	10.10	.04	.99	.07	.25	
Sexual Abuse YSR	4	7.25	.12	.99	.05	.45	

*Note.* df = degrees of freedom;  $\chi^2$  = Chi Square; p(exact) = probability of an exact fit to the data; CFI = Comparative Fit Indices; RMSEA = root mean square error of approximation; p(close) = probability of a close fit to the data.

Table 9

Overall Model Fits for the Mediation Models of Socio-Demographic Factors

		Absolute (	Goodness-of-	Fit	Test of Close-Fit			
Model Label	df	$\chi^2$	p(exact)	CFI	RMSEA	p(close)		
Emotional Abuse CBC	5	7.07	.22	1.00	.03	.62		
<b>Emotional Abuse YSR</b>	5	3.60	.61	1.00	.00	.89		
<b>Emotion Neglect CBC</b>	5	6.50	.26	1.00	.03	.67		
<b>Emotion Neglect YSR</b>	5	4.05	.54	1.00	.00	.86		
Physical Abuse CBC	5	7.10	.21	1.00	.03	.62		
Physical Abuse YSR	5	3.96	.56	1.00	.00	.87		
Physical Neglect CBC	5	6.39	.27	1.00	.03	.68		
Physical Neglect YSR	5	3.24	.66	1.00	.00	.91		
Sexual Abuse CBC	5	6.12	.29	1.00	.03	.70		
Sexual Abuse YSR	5	3.60	.61	1.00	.00	.89		

Table 10

Overall Model Fits for the Mediation Models of Overall Parent Maltreatment Behaviors

		Absolute	Goodness-of-	Fit	Test of Close-Fit		
Model Label	$\overline{df}$	$\chi^2$	p(exact)	CFI	RMSEA	p(close)	
Emotional Abuse CBC	5	18.72	.00	.94	.09	.06	
<b>Emotional Abuse YSR</b>	5	18.73	.00	.95	.09	.06	
<b>Emotion Neglect CBC</b>	5	18.65	.00	.94	.09	.06	
Emotion Neglect YSR	5	18.66	.00	.95	.09	.06	
Physical Abuse CBC	5	18.68	.00	.94	.09	.06	
Physical Abuse YSR	5	18.70	.00	.95	.09	.06	
Physical Neglect CBC	5	18.96	.00	.94	.09	.06	
Physical Neglect YSR	5	18.98	.00	.95	.09	.06	
Sexual Abuse CBC	5	18.05	.00	.95	.09	.07	
Sexual Abuse YSR	5	18.06	.00	.95	.09	.07	

Table 11

Overall Model Fits for the Mediation Models of Primary Caregiver Maltreatment Behaviors

		Absolute (	Goodness-of-	Fit	Test of Close-Fit			
Model Label	df	$\chi^2$	p(exact)	CFI	RMSEA	p(close)		
Emotional Abuse CBC	3	3.62	.31	1.00	.02	.63		
<b>Emotional Abuse YSR</b>	3	3.62	.31	1.00	.02	.63		
<b>Emotion Neglect CBC</b>	3	3.60	.31	1.00	.02	.63		
<b>Emotion Neglect YSR</b>	3	3.60	.31	1.00	.02	.63		
Physical Abuse CBC	3	3.40	.33	1.00	.02	.65		
Physical Abuse YSR	3	3.40	.33	1.00	.02	.65		
Physical Neglect CBC	3	4.18	.24	1.00	.03	.56		
Physical Neglect YSR	3	4.19	.24	1.00	.03	.56		
Sexual Abuse CBC	3	3.98	.26	1.00	.03	.56		
Sexual Abuse YSR	3	3.99	.26	1.00	.03	.56		

Table 12

Overall Model Fits for the Mediation Models of Parenting Behaviors

		Absolute Goodness-of-Fit			Test of Close-Fit	
Model Label	df	$\chi^2$	p(exact)	CFI	RMSEA	p(close)
Emotional Abuse CBC	5	23.75	.00	.97	.10	.02
<b>Emotional Abuse YSR</b>	5	18.66	.00	.98	.09	.06
<b>Emotion Neglect CBC</b>	5	23.11	.00	.97	.10	.02
Emotion Neglect YSR	5	18.80	.00	.98	.09	.06
Physical Abuse CBC	5	23.51	.00	.97	.10	.02
Physical Abuse YSR	5	18.78	.00	.98	.09	.06
Physical Neglect CBC	5	23.60	.00	.97	.10	.02
Physical Neglect YSR	5	18.89	.00	.98	.09	.06
Sexual Abuse CBC	5	23.01	.97	.97	.10	.02
Sexual Abuse YSR	5	18.49	.00	.98	.09	.06

Table 13

Overall Model Fits for the Moderation Models of Parent Intrapersonal Characteristics

		Absolute Goodness-of-Fit			Test of Close-Fit		
Model Label	df	χ2	p(exact)	CFI	RMSEA	p(close)	
Emotional Abuse-CBC	9	345.67	.00	.57	.33	.00	
Emotional Abuse-CBC	6	2.73	.84	1.00	.00	.98	
(Trimmed)							
Emotional Abuse-YSR	9	344.98	.00	.52	.33	.00	
Emotional Abuse-YSR	6	1.25	.97	1.00	.00	1.00	
(Trimmed)							
Emotion Neglect-CBC	9	310.83	.00	.58	.31	.00	
Emotion Neglect-CBC	9	7.44	.59	1.00	.00	.94	
(Trimmed)							
Emotion Neglect-YSR	9	310.57	.00	.53	.31	.00	
Emotion Neglect-YSR	10	5.90	.82	1.00	.00	.99	
(Trimmed)							
Physical Abuse-CBC	9	351.18	.00	.52	.33	.00	
Physical Abuse-CBC	9	5.162	.82	1.00	.00	.98	
(Trimmed)							
Physical Abuse-YSR	9	350.84	.00	.45	.33	.00	
Physical Abuse-YSR	11	4.53	.95	1.00	.00	1.00	
(Trimmed)							
Physical Neglect-CBC	9	277.37	.00	.59	.29	.00	
Physical Neglect-CBC	8	9.51	.30	1.00	.02	.79	
(Trimmed)							
Physical Neglect-YSR	9	276.17	.00	.53	.29	.00	
Physical Neglect-YSR	13	12.56	.48	1.00	.00	.94	
(Trimmed)							
Sexual Abuse-CBC	9	289.53	.00	.59	.30	.00	
Sexual Abuse-CBC	7	3.13	.87	1.00	.00	.99	
(Trimmed)							
Sexual Abuse-YSR	9	288.90	.00	.54	.30	.00	
Sexual Abuse-YSR	2	2.77	.25	.99	.03	.51	
(Trimmed)							

Table 14

Overall Model Fits for the Moderation Models of Socio-Demographic Factors

		Absolute Goodness-of-Fit		Test of Close-Fit		
Model Label	df	$\chi^2$	p(exact)	CFI	RMSEA	p(close)
Emotional Abuse-CBC	19	268.85	.00	.66	.19	.00
<b>Emotional Abuse-CBC</b>	4	7.21	.13	.99	.05	.45
(Trimmed)						
Emotional Abuse-YSR	19	272.17	.00	.63	.19	.00
<b>Emotional Abuse-YSR</b>	5	6.78	.24	.99	.03	.65
(Trimmed)						
<b>Emotion Neglect-CBC</b>	19	254.05	.00	.65	.19	.00
<b>Emotion Neglect-CBC</b>	5	6.03	.30	1.00	.02	.71
(Trimmed)						
Emotion Neglect-YSR	19	257.85	.00	.62	.19	.00
<b>Emotion Neglect-YSR</b>	6	8.16	.23	.99	.03	.67
(Trimmed)						
Physical Abuse-CBC	19	314.95	.00	.63	.21	.00
Physical Abuse-CBC	7	14.49	.04	1.00	.06	.37
(Trimmed)						
Physical Abuse-YSR	19	322.11	.00	.60	.21	.00
Physical Abuse-YSR	9	11.50	.24	.99	.03	.77
(Trimmed)						
Physical Neglect-CBC	19	399.11	.00	.60	.24	.00
Physical Neglect-CBC	5	6.67	.25	1.00	.03	.65
(Trimmed)						
Physical Neglect-YSR	19	404.55	.00	.58	.24	.00
Physical Neglect-YSR	6	6.07	.42	1.00	.01	.82
(Trimmed)						
Sexual Abuse-CBC	19	221.67	.00	.74	.17	.00
Sexual Abuse-CBC	11	25.92	.01	1.00	.06	.23
(Trimmed)						
Sexual Abuse-YSR	19	224.40	.00	.72	.18	.00
Sexual Abuse-YSR	13	4.09	.99	1.00	.00	1.00
(Trimmed)						

Table 15

Overall Model Fits for the Moderation Models of Overall Parents' Maltreatment Behaviors

		Absolute Goodness-of-Fit			Test of Close-Fit	
Model Label	df	$\chi^2$	p(exact)	CFI	RMSEA	p(close)
Emotional Abuse-CBC	45	331.90	.00	.43	.13	.00
<b>Emotional Abuse-CBC</b>	5	6.69	.25	.97	.03	.66
(Trimmed)						
<b>Emotional Abuse-YSR</b>	45	335.89	.00	.45	.14	.00
<b>Emotional Abuse-YSR</b>	5	7.56	.18	.96	.04	.58
(Trimmed)						
<b>Emotion Neglect-CBC</b>	45	246.19	.00	.53	.11	.00
<b>Emotion Neglect-CBC</b>	6	3.36	.76	1.00	.00	.96
(Trimmed)						
<b>Emotion Neglect-YSR</b>	45	251.11	.00	.54	.11	.00
Emotion Neglect-YSR	5	5.86	.32	.99	.02	.73
(Trimmed)						
Physical Abuse-CBC	45	359.92	.00	.45	.14	.00
Physical Abuse-CBC	3	5.17	.16	.97	.05	.46
(Trimmed)						
Physical Abuse-YSR	45	365.04	.00	.47	.14	.00
Physical Abuse-YSR	4	6.09	.19	.97	.04	.55
(Trimmed)						
Physical Neglect-CBC	45	372.42	.00	.43	.14	.00
Physical Neglect-CBC	5	7.70	.17	.97	.04	.57
(Trimmed)						
Physical Neglect-YSR	45	376.60	.00	.45	.14	.00
Physical Neglect-YSR	14	43.42	.00	.83	.08	.04
(Trimmed)						
Sexual Abuse-CBC	45	507.50	.00	.40	.17	.00
Sexual Abuse-CBC	5	2.62	.76	1.00	.00	.95
(Trimmed)						
Sexual Abuse-YSR	45	510.42	.00	.41	.17	.00
Sexual Abuse-YSR	5	3.74	.59	1.00	.00	.89
(Trimmed)						

Table 16

Overall Model Fits for the Moderation Models of Primary Caregiver Maltreatment Behaviors

		Absolute Goodness-of-Fit			Test of Close-Fit		
Model Label	df	χ2	p(exact)	CFI	RMSEA	p(close)	
Emotional Abuse-CBC	17	196.94	.00	.59	.17	.00	
<b>Emotional Abuse-CBC</b>	4	1.34	.86	1.00	.00	.97	
(Trimmed)							
Emotional Abuse-YSR	17	200.85	.00	.60	.17	.00	
<b>Emotional Abuse-YSR</b>	4	2.35	.67	1.00	.00	.90	
(Trimmed)							
<b>Emotion Neglect-CBC</b>	17	166.70	.61	.60	.16	.00	
<b>Emotion Neglect-CBC</b>	7	2.05	.96	1.00	.00	.99	
(Trimmed)							
<b>Emotion Neglect-YSR</b>	17	168.70	.00	.64	.16	.00	
Emotion Neglect-YSR	5	.82	.98	1.00	.00	1.00	
(Trimmed)							
Physical Abuse-CBC	17	215.85	.00	.58	.18	.00	
Physical Abuse-CBC	3	1.91	.59	1.00	.00	.84	
(Trimmed)							
Physical Abuse-YSR	17	218.33	.00	.60	.18	.00	
Physical Abuse-YSR	6	9.55	.15	.97	.04	.57	
(Trimmed)							
Physical Neglect-CBC	17	74.05	.00	.82	.10	.00	
Physical Neglect-CBC	6	2.98	.81	1.00	.00	.97	
(Trimmed)							
Physical Neglect-YSR	17	75.71	.00	.83	.10	.00	
Physical Neglect-YSR	7	4.29	.75	1.00	.00	.96	
(Trimmed)							
Sexual Abuse-CBC	17	261.73	.00	.59	.20	.00	
Sexual Abuse-CBC	5	2.53	.77	1.00	.00	.95	
(Trimmed)							
Sexual Abuse-YSR	17	264.03	.00	.60	.20	.00	
Sexual Abuse-YSR	5	6.77	.24	.98	.03	.65	
(Trimmed)							

Table 17

Overall Model Fits for the Moderation Models of Overall Parenting Behaviors

		Absolute Goodness-of-Fit		Test of Close-Fit		
Model Label	df	$\chi^2$	p(exact)	CFI	RMSEA	p(close)
Emotional Abuse-CBC	22	505.88	.00	.40	.25	.00
<b>Emotional Abuse-CBC</b>	8	23.73	.00	.95	.07	.11
(Trimmed)						
Emotional Abuse-YSR	22	510.37	.00	.46	.25	.00
Emotional Abuse-YSR	8	19.90	.01	.96	.07	.22
(Trimmed)						
<b>Emotion Neglect-CBC</b>	22	485.42	.00	.40	.24	.00
<b>Emotion Neglect-CBC</b>	8	6.70	.57	1.00	.00	.92
(Trimmed)						
<b>Emotion Neglect-YSR</b>	22	492.26	.00	.47	.25	.00
<b>Emotion Neglect-YSR</b>	7	4.97	.66	1.00	.00	.94
(Trimmed)						
Physical Abuse-CBC	22	544.35	.00	.39	.26	.00
Physical Abuse-CBC	5	3.38	.64	1.00	.00	.91
(Trimmed)						
Physical Abuse-YSR	22	551.29	.00	.46	.26	.00
Physical Abuse-YSR	7	3.74	.81	1.00	.00	.98
(Trimmed)						
Physical Neglect-CBC	22	400.64	.00	.48	.22	.00
Physical Neglect-CBC	6	7.98	.24	.99	.03	.69
(Trimmed)						
Physical Neglect-YSR	22	408.34	.00	.55	.22	.00
Physical Neglect-YSR	11	26.21	.01	.96	.06	.23
(Trimmed)						
Sexual Abuse-CBC	22	572.87	.00	.36	.27	.00
Sexual Abuse-CBC	10	21.06	.02	.97	.06	.35
(Trimmed)						
Sexual Abuse-YSR	22	577.73	.00	.44	.27	.00
Sexual Abuse-YSR	10	24.81	.01	.96	.06	.20
(Trimmed)						

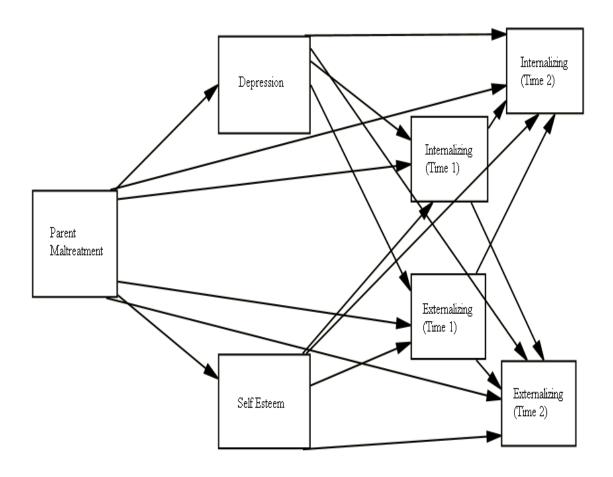


Figure 1. Overall Hypothesized Mediational Model for Parent Intrapersonal Characteristics Mediating the Relation between Parent's Childhood Maltreatment and Child Maladjustment. Note. Correlations amongst variables are not shown in the following figures for simplicity.

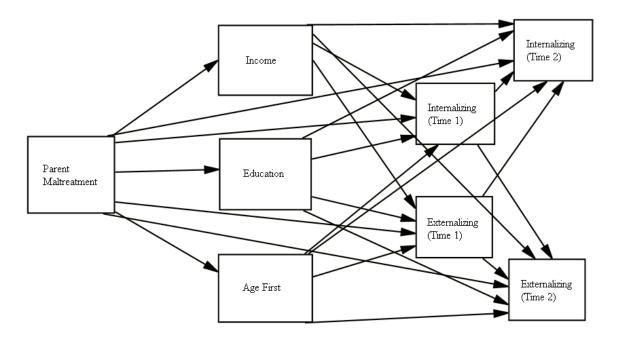


Figure 2. Overall Hypothesized Mediational Model for Socio-Demographic Factors Mediating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

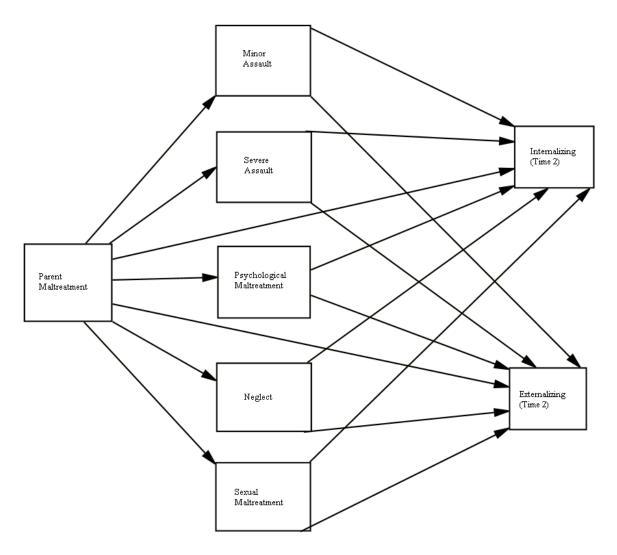


Figure 3. Overall Hypothesized Mediational Model for Overall Parent Maltreatment Behaviors Mediating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

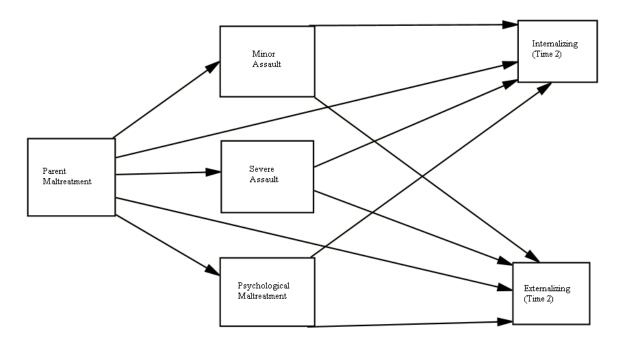


Figure 4. Overall Hypothesized Mediational Model for Primary Caregiver Maltreatment Behaviors Mediating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

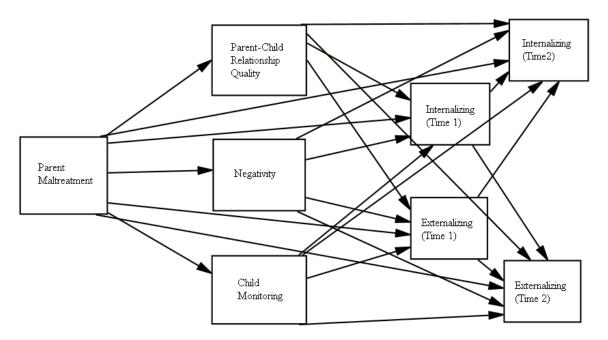


Figure 5. Overall Hypothesized Mediational Model for Parenting Behaviors Mediating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

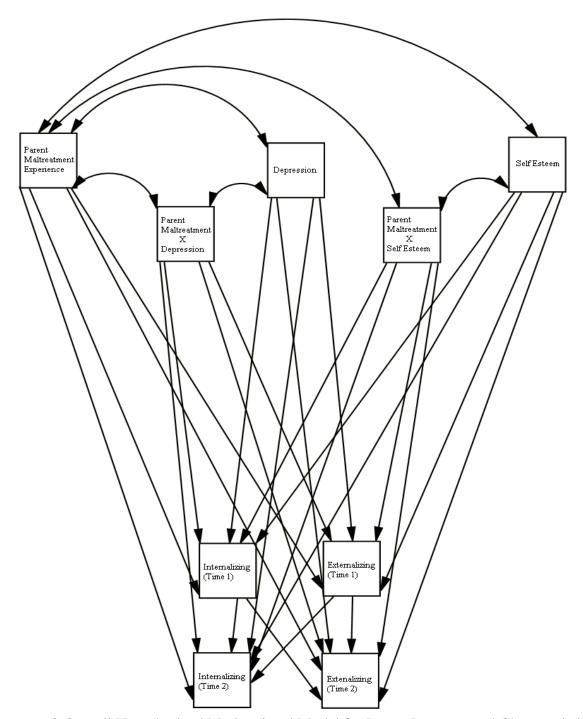


Figure 6. Overall Hypothesized Moderational Model for Parent Intrapersonal Characteristics Moderating the Relation Between Parent's Childhood Maltreatment and Child Maladjustment.

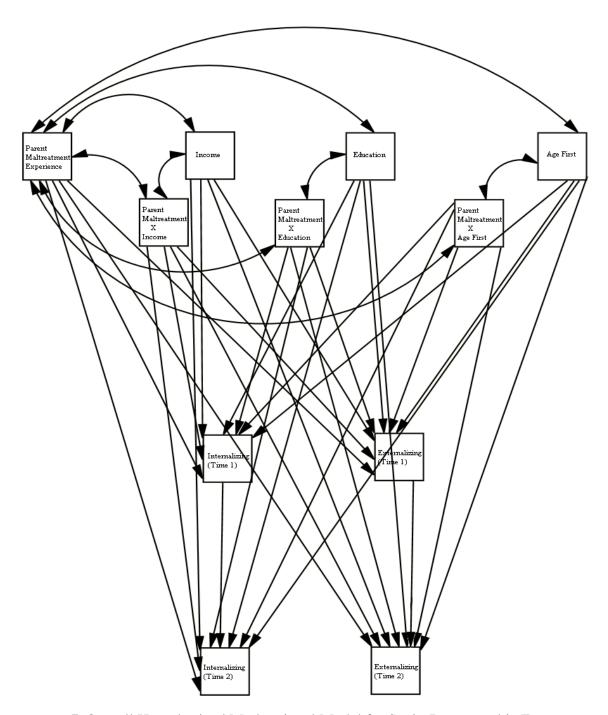


Figure 7. Overall Hypothesized Moderational Model for Socio-Demographic Factors

Moderating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

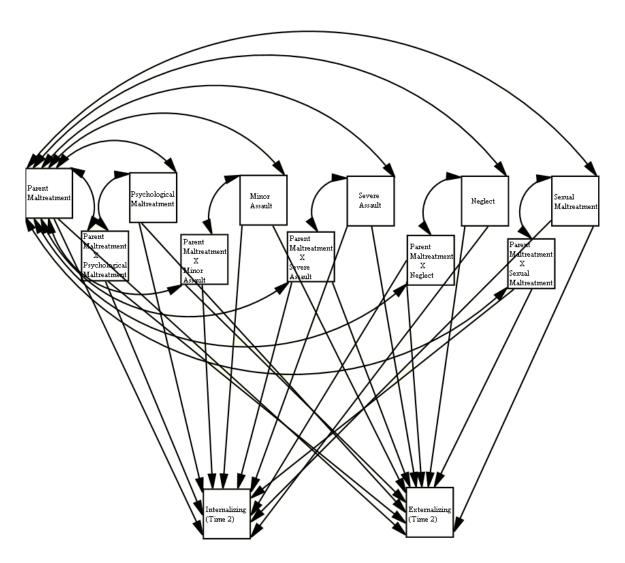


Figure 8. Overall Hypothesized Moderational Model for Overall Parent Maltreatment Behaviors Moderating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

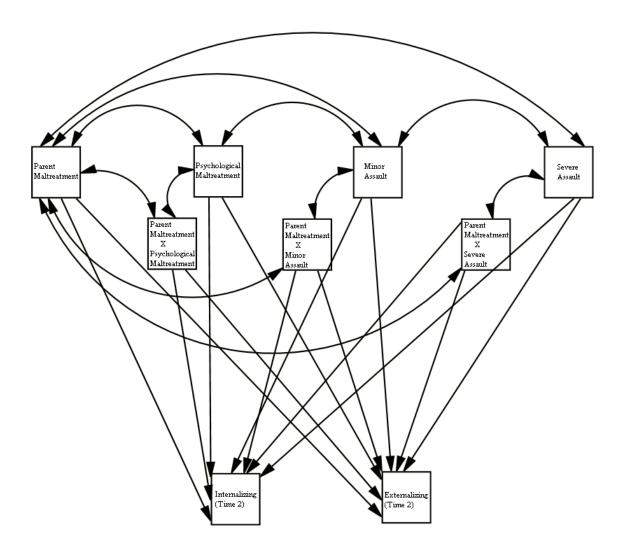


Figure 9. Overall Hypothesized Moderational Model for Primary Caregiver Maltreatment Behaviors Moderating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

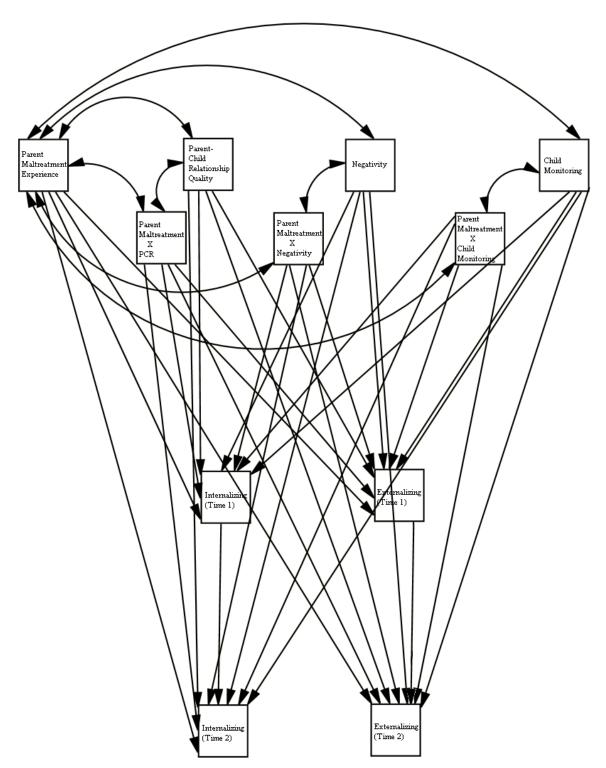


Figure 10. Overall Hypothesized Moderational Model for Parenting Behaviors Moderating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

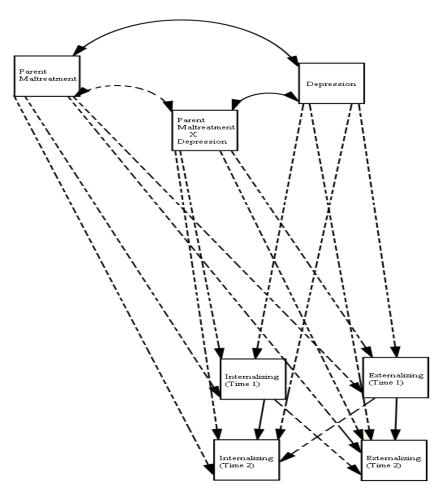


Figure 11. Trimmed Hypothesized Moderational Model for Parent Intrapersonal Characteristics Moderating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

Note. Dashed lines indicate paths removed. Paths removed by model are: Emotion Abuse-CBC: Parent Maltreatment→Child ExternalizingT1, Parent Depression→Child InternalizingT2, Parent MaltreatmentxParent Depression→Child InternalizingT2, Child InternalizingT1→Child ExternalizingT2; Emotion Abuse-YSR: Parent MaltreatmentxParent Depression→Child InternalizingT2, Child InternalizingT1→Child ExternalizingT2, Child ExternalizingT1→Child InternalizingT2; Emotion Neglect-CBC: Parent Maltreatment↔Parent MaltreatmentxParent Depression, Parent Depression—CHILD INTERNALIZINGT2, Parent Depression—Child ExternalizingT2, Parent MaltreatmentxParent Depression→INT2, Parent MaltreatmentxParent Depression→Child ExternalizingT2, Child InternalizingT1→Child ExternalizingT2; Emotion Neglect-YSR: Parent Maltreatment↔Parent MaltreatmentxParent Depression, Parent Maltreatment→Child InternalizingT2, Parent Maltreatment—Child ExternalizingT1, Parent MaltreatmentxParent Depression—Child InternalizingT2, Parent MaltreatmentxParent Depression—Child ExternalizingT1, Child InternalizingT1—Child ExternalizingT2, Child ExternalizingT1—Child InternalizingT2; Physical Abuse-CBC: Parent Maltreatment→Child InternalizingT2, Parent Maltreatment→Child ExternalizingT2, Parent Depression→Child ExternalizingT2, Parent MaltreatmentxParent Depression—Child InternalizingT2, Parent MaltreatmentxParent Depression—Child ExternalizingT2, Child InternalizingT1 → Child ExternalizingT2; Physical Abuse-YSR: Parent Maltreatment → Child InternalizingT2. Parent Depression→Child InternalizingT1, Parent Depression→Child ExternalizingT1, Parent MaltreatmentxParent Depression→Child InternalizingT1, Parent MaltreatmentxParent Depression→Child InternalizingT2, Parent MaltreatmentxParent Depression→Child ExternalizingT1, Child  $Internalizing T1 \rightarrow Child\ Externalizing T2,\ Child\ Externalizing T1 \rightarrow Child\ Internalizing T2;\ Physical\ Neglect-CBC:\ Parent\ Maltreatment \leftrightarrow Parent\ Pare$ MaltreatmentxParent Depression, Parent Maltreatment→Child InternalizingT1, Parent MaltreatmentxParent Depression→Child InternalizingT1, Parent MaltreatmentxParent Depression→Child ExternalizingT1, Child InternalizingT1→Child ExternalizingT2; Physical Neglect-YSR: Parent Maltreatment→Parent MaltreatmentxParent Depression, Parent Maltreatment→Child InternalizingT1, Parent Maltreatment→Child InternalizingT2, Parent Depression→Child InternalizingT1, Parent Depression→Child ExternalizingT1, Parent MaltreatmentxParent Depression→Child InternalizingT1, Parent MaltreatmentxParent Depression→Child InternalizingT2, Parent MaltreatmentxParent Depression→Child ExternalizingT1, Child InternalizingT1→Child ExternalizingT2, Child ExternalizingT1→Child InternalizingT2; Sexual Abuse-CBC: Parent Maltreatment→Child InternalizingT1, Parent MaltreatmentxParent Depression→Child InternalizingT1, Parent MaltreatmentxParent Depression→Child ExternalizingT1, Child InternalizingT1→Child ExternalizingT2.

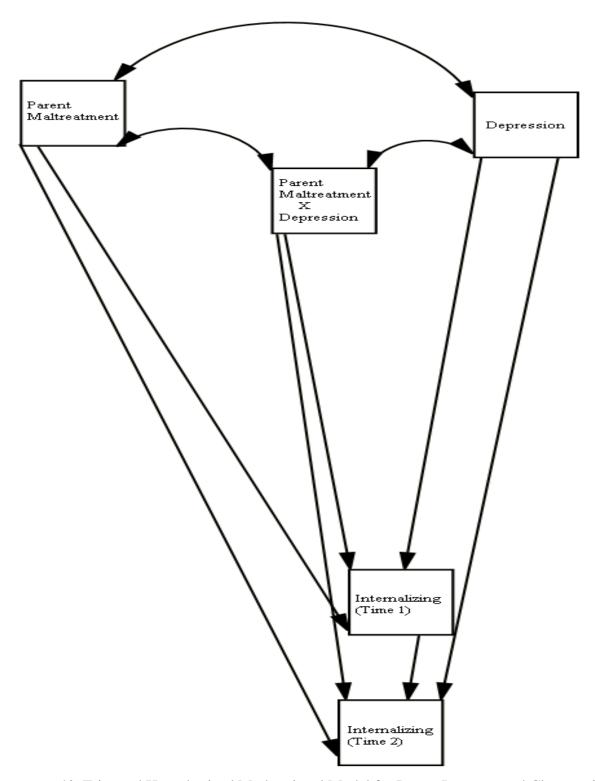


Figure 12. Trimmed Hypothesized Moderational Model for Parent Intrapersonal Characteristics Moderating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

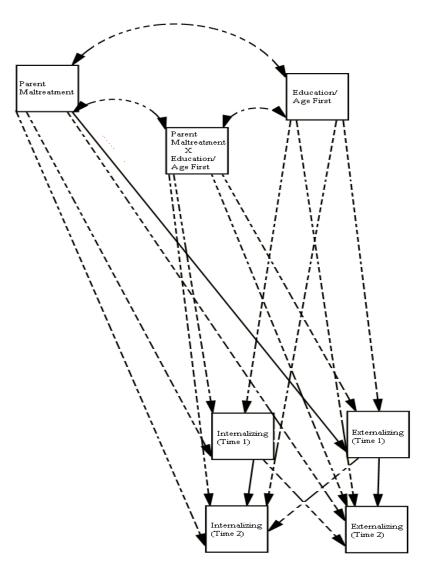


Figure 13. Trimmed Hypothesized Moderational Model for Socio-Demographic Factors

## Moderating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

Note. Dashed lines indicate paths removed. Paths removed by model are: Emotion Abuse-CBC: Parent MaltreatmentxRHED—Child InternalizingT1, Child InternalizingT1→Child ExternalizingT2; Emotion Abuse-YSR: Child InternalizingT1→Child ExternalizingT2; Emotion Neglect-CBC: Child InternalizingT1→Child ExternalizingT2; Emotion Neglect-YSR: Parent Maltreatment↔Age became a parent, Parent Maltreatment↔Parent MaltreatmentxAge became a parent, Age became a parent ↔Parent MaltreatmentxAge became a parent; Physical Abuse-CBC: Parent MaltreatmentxParent Education—Child InternalizingT2, Parent MaltreatmentxParent Education—Child ExternalizingT1, Parent MaltreatmentxParent Education→Child ExternalizingT2, Child InternalizingT1→Child ExternalizingT2; Physical Abuse-YSR: Parent Education—Child InternalizingT2, Parent Education—Child ExternalizingT2, Parent MaltreatmentxParent Education—Child InternalizingT2, Parent MaltreatmentxParent Education→Child ExternalizingT2, Child InternalizingT1→Child ExternalizingT2, Child ExternalizingT1→Child ExternalizingT0, Child ExternalizingT1→Child ExternalizingT0, Child Exte InternalizingT2; Physical Neglect-CBC: Parent Education→Child ExternalizingT1, Parent MaltreatmentxParent Education→Child ExternalizingT1; Physical Neglect-YSR: Age became a parent →Parent MaltreatmentxAge became a parent, Parent MaltreatmentxAge became a parent→Child InternalizingT1, Parent MaltreatmentxAge became a parentChild ExternalizingT1; Sexual Abuse-CBC: Parent Maltreatment→Child InternalizingT1, Parent Education→Child InternalizingT1, Parent Education→Child ExternalizingT2, Parent MaltreatmentxParent Education→Child InternalizingT1, Parent MaltreatmentxParent Education→Child ExternalizingT2; Sexual Abuse-YSR: Age became a parent → Parent Maltreatment × Age became a parent, Parent Maltreatment → Child Internalizing T2, Parent Maltreatment → Child ExternalizingT2, Age became a parent→Child InternalizingT2, Age became a parent→Child ExternalizingT2, Parent MaltreatmentxAge became a parent→Child InternalizingT1, Parent MaltreatmentxAge became a parent→Child InternalizingT2, Parent MaltreatmentxAge became a parent→Child ExternalizingT2, Child InternalizingT1→Child ExternalizingT2, Child ExternalizingT1→Child InternalizingT2

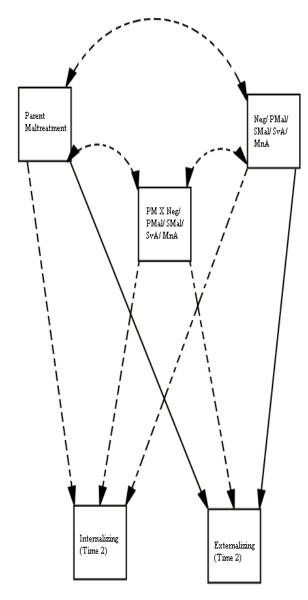


Figure 14. Trimmed Hypothesized Moderational Model for Overall Parent Maltreatment Behaviors Moderating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

Note. Dashed lines indicate paths removed. Paths removed by model are: Emotion Abuse-CBC: Sexual Maltreatment↔Parent MaltreatmentxSexual MaltreatmentxSexual Maltreatment→Child ExternalizingT2; Emotion Abuse-YSR: Sexual Maltreatment↔Parent MaltreatmentxSexual Maltreatment→Child InternalizingT2; Emotion Neglect-CBC: Parent Maltreatment→Severe Assault, Parent MaltreatmentxSevere Assault, Parent MaltreatmentxSevere Assault, Parent MaltreatmentxSevere Assault, Parent MaltreatmentxSevere Assault →Child ExternalizingT2; Emotion Neglect-YSR: Parent Maltreatment MaltreatmentxSexual Maltreatment, Parent MaltreatmentxSexual Maltreatment, Parent MaltreatmentxSexual Maltreatment →Child ExternalizingT2; Physical Abuse-CBC: NONE; Physical Abuse-YSR: Neglect ↔Parent MaltreatmentxNeglect; Physical Neglect-CBC: Psychological Maltreatment →Child InternalizingT2; Physical Neglect-YSR: Psychological Maltreatment →Parent MaltreatmentxPsychological Maltreatment, Parent MaltreatmentxPsychological Maltreatment →Child InternalizingT2, Parent Maltreatment, Parent Maltreatment →Child InternalizingT2; Sexual Abuse-CBC: Severe Assault →Child InternalizingT2, Parent MaltreatmentxSevere Assault →Child InternalizingT2; Sexual Abuse-YSR: Minor Assault →Parent MaltreatmentxMinor Assault, Parent MaltreatmentxMinor Assault →Child InternalizingT2

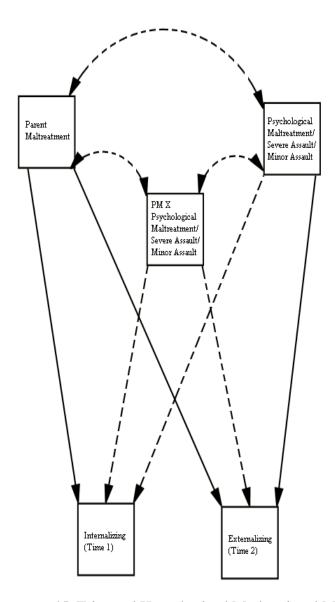


Figure 15. Trimmed Hypothesized Moderational Model for Primary Caregiver Maltreatment Behaviors Moderating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

Note. Dashed lines indicate paths removed. Paths removed by model are: Emotion Abuse-CBC: Parent Maltreatment↔Severe Assault; Emotion Abuse-YSR: Parent MaltreatmentxPsychological Maltreatment→Child ExternalizingT2; Emotion Neglect-CBC: Parent MaltreatmentxSevere Assault, Parent Maltreatmentx→Parent MaltreatmentxSevere Assault→Child InternalizingT2; Parent MaltreatmentxSevere Assault→Child InternalizingT2; Emotion Neglect-YSR: Minor Assault→Parent MaltreatmentxMinor Assault, Parent MaltreatmentxMinor Assault→Child ExternalizingT2; Physical Abuse-CBC: NONE; Physical Abuse-YSR: Psychological Maltreatmentx→Parent MaltreatmentxPsychological Maltreatmentx→Parent MaltreatmentxPsychological Maltreatment→Child ExternalizingT2; Physical Neglect-CBC: Parent Maltreatmentx→Severe Assault, Parent Maltreatmentx→Parent MaltreatmentxSevere Assault, Parent MaltreatmentxSevere Assault, Parent Maltreatmentx→Parent Mal

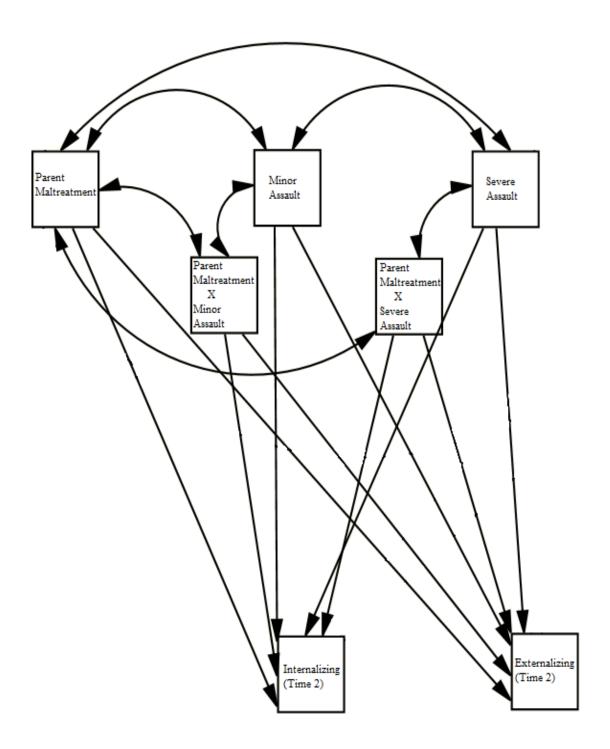


Figure 16. Trimmed Hypothesized Moderational Model for Primary Caregiver Maltreatment Behaviors Moderating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

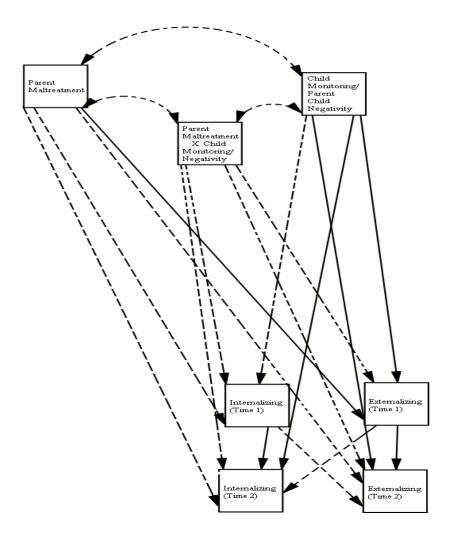


Figure 17. Trimmed Overall Hypothesized Moderational Model for Parent Behaviors

## Moderating the Relation between Parent's Childhood Maltreatment and Child Maladjustment.

Note. Dashed lines indicate paths removed. Paths removed by model are: Emotion Abuse-CBC: Parent Maltreatment ← Child Monitoring, Child Monitoring→Parent MaltreatmentxChild Monitoring, Parent MaltreatmentxChild Monitoring→Child InternalizingT2, Child InternalizingT1→Child ExternalizingT2; Emotion Abuse-YSR: Parent Maltreatment↔Child Monitoring, Parent MaltreatmentxChild Monitoring→Child ExternalizingT1, Child InternalizingT1→Child ExternalizingT2, Child ExternalizingT1→Child InternalizingT2; Emotion Neglect-CBC: Parent Maltreatment↔Parent-Child Negativity, Parent-Child Negativity, Parent MaltreatmentxParent-Child Negativity, Parent Maltreatment→Child InternalizingT2, Parent MaltreatmentxParent-Child Negativity→Child ExternalizingT2, Child InternalizingT1→Child ExternalizingT2; Emotion Neglect-YSR: Parent Maltreatment↔Parent-Child Negativity, Parent-Child Negativity, Parent MaltreatmentxParent-Child Negativity, Child InternalizingT1→Child ExternalizingT2, Child ExternalizingT1→Child InternalizingT2; Physical Abuse-CBC: Parent-Child Negativity↔Parent MaltreatmentxParent-Child Negativity, Child InternalizingT1→Child ExternalizingT2; Physical Abuse-YSR: Parent-Child Negativity↔Parent MaltreatmentxParent-Child Negativity, Child InternalizingT1→Child ExternalizingT2, Child ExternalizingT1→Child InternalizingT2; Physical Neglect-CBC: Parent Maltreatment↔Parent-Child Negativity, Parent-Child Negativity↔Parent MaltreatmentxParent-Child Negativity, Child InternalizingT1→Child ExternalizingT2; Physical Neglect-YSR: Parent Maltreatment→Child Monitoring, Parent Maltreatment→Parent MaltreatmentxChild Monitoring, Parent Maltreatment→Child InternalizingT1, Parent Maltreatment→Child ExternalizingT2, Parent MaltreatmentxChild Monitoring→Child InternalizingT1, Parent MaltreatmentxChild Monitoring→Child ExternalizingT2, Child InternalizingT1→Child ExternalizingT2, Child ExternalizingT1, Child InternalizingT2; Sexual Abuse-CBC: Parent-Child Negativity—Child InternalizingT1, Parent MaltreatmentxParent-Child Negativity—Child InternalizingT1, Parent MaltreatmentxParent-Child Negativity→Child InternalizingT2, Child InternalizingT1→Child ExternalizingT2; Sexual Abuse-YSR: Parent Maltreatment↔Child Monitoring, Parent Maltreatment↔Parent MaltreatmentxChild Monitoring, Child InternalizingT1→Child ExternalizingT2, Child ExternalizingT1→Child InternalizingT2

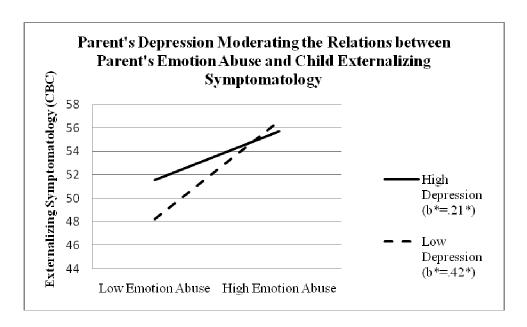


Figure 18. Parent's Depression Moderating the Relations between Parent's Emotion Abuse and Child Externalizing Symptomatology.

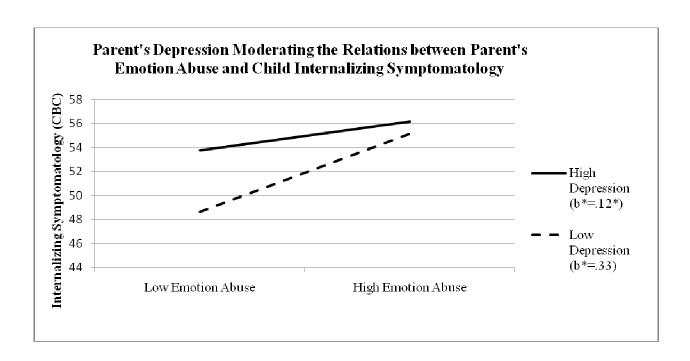


Figure 19. Parent's Depression Moderating the Relations between Parent's Emotion Abuse and Child Internalizing Symptomatology.

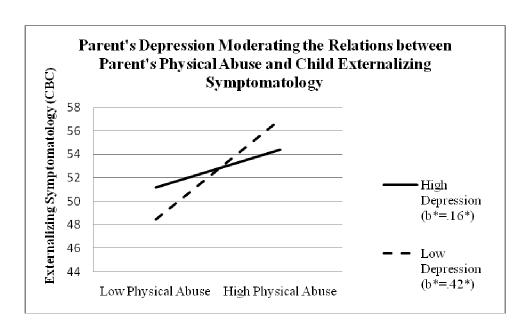


Figure 20. Parent's Depression Moderating the Relations between Parent's Physical Abuse and Child Externalizing Symptomatology.

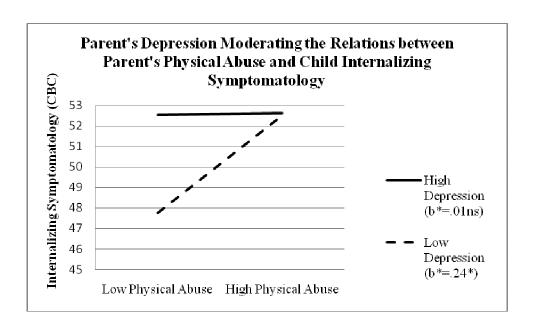


Figure 21. Parent's Depression Moderating the Relations between Parent's Physical Abuse and Child Internalizing Symptomatology.

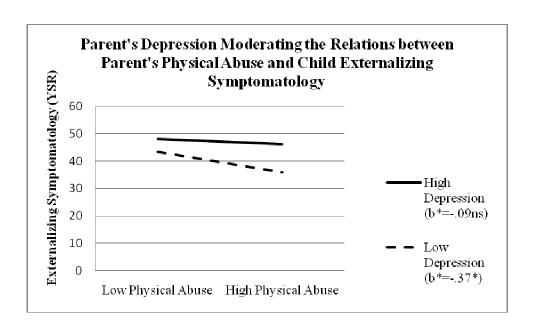


Figure 22. Parent's Depression Moderating the Relations between Parent's Physical Abuse and Child Externalizing Symptomatology.

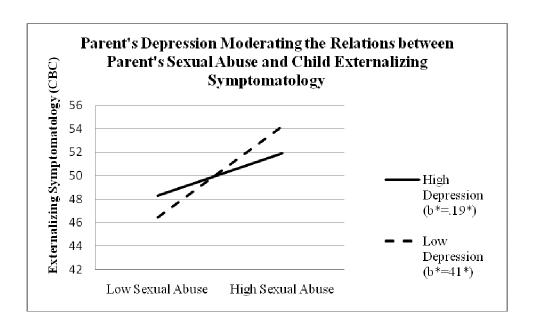


Figure 23. Parent's Depression Moderating the Relations between Parent's Sexual Abuse and Child Externalizing Symptomatology.

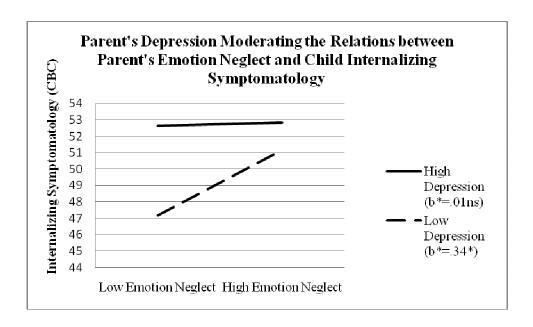
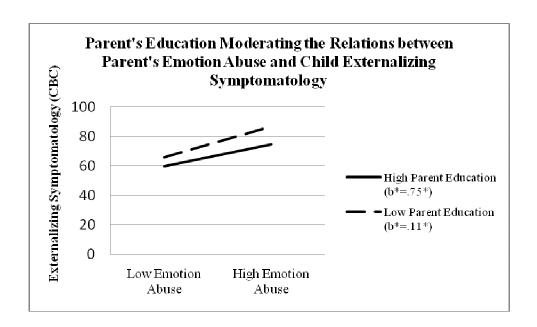


Figure 24. Parent's Depression Moderating the Relations between Parent's Emotion Neglect and Child Internalizing Symptomatology.



*Figure 25.* Parent's Education Moderating the Relations between Parent's Emotion Abuse and Child Externalizing Symptomatology.

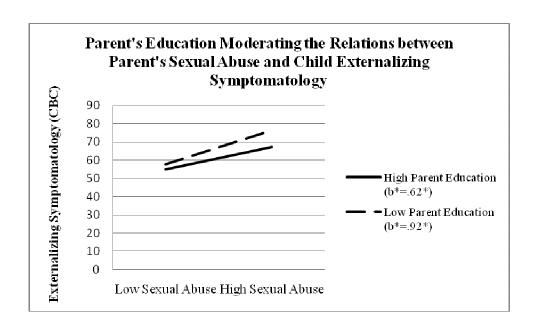


Figure 26. Parent's Education Moderating to Relations between Parent's Sexual Abuse and Child Externalizing Symptomatology.

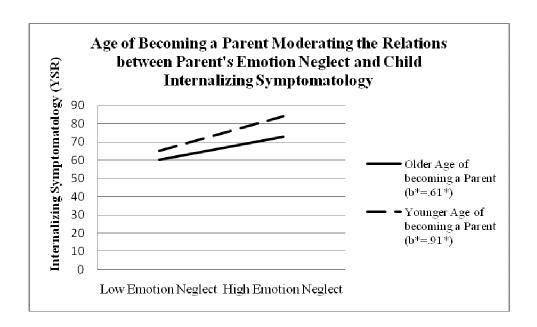


Figure 27. Age of Becoming a Parent Moderating the Relations between Parent's Emotion Neglect and Child Internalizing Symptomatology.

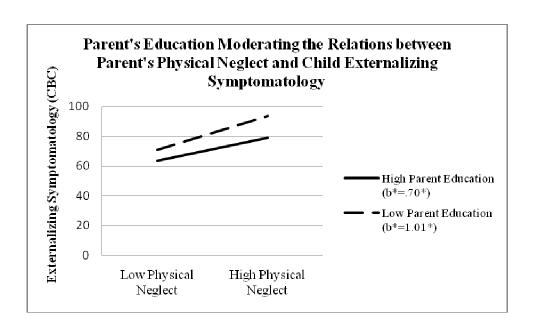


Figure 28. Parent's Education Moderating the Relations between Parent's Physical Neglect and Child Externalizing Symptomatology.

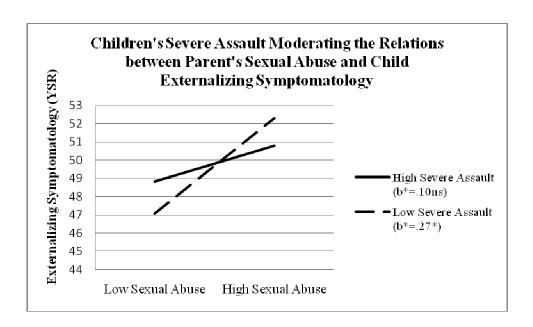


Figure 29. Children's Severe Assault Moderating the Relations between Parent's Sexual Abuse and Child Externalizing Symptomatology.

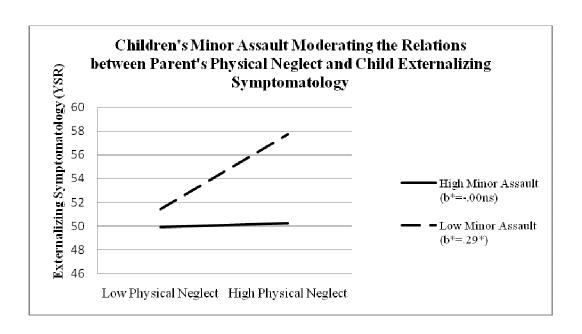
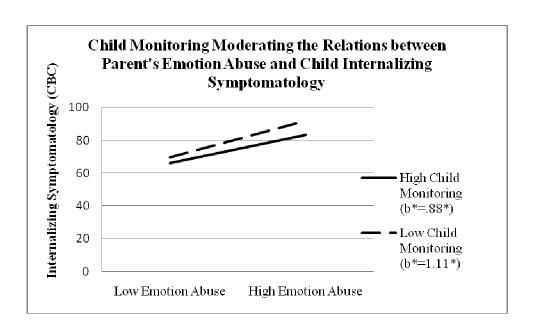


Figure 30. Children's Minor Assault Moderating the Relations between Parent's Physical Neglect and Child Externalizing Symptomatology.



*Figure 31.* Child Monitoring Moderating the Relations between Parent's Emotion Abuse and Child Internalizing Symptomatology.

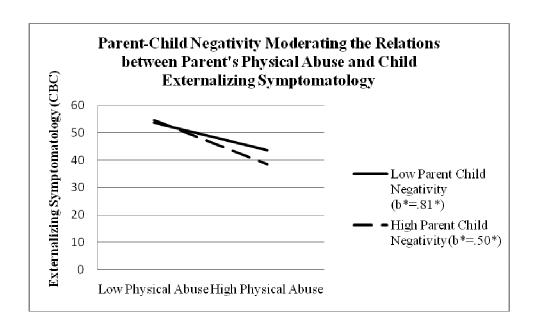
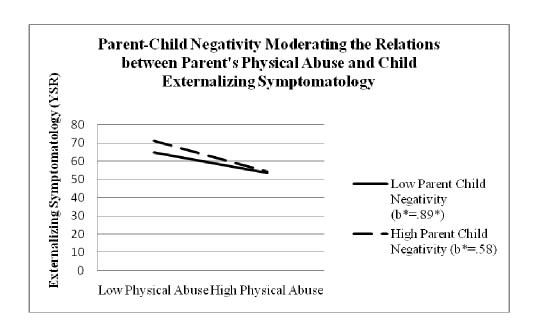


Figure 32. Parent-Child Negativity Moderating the Relations between Parent's Physical Abuse and Child Externalizing Symptomatology.



*Figure 33.* Parent-Child Negativity Moderating the Relations between Parent's Physical Abuse and Child Externalizing Symptomatology.

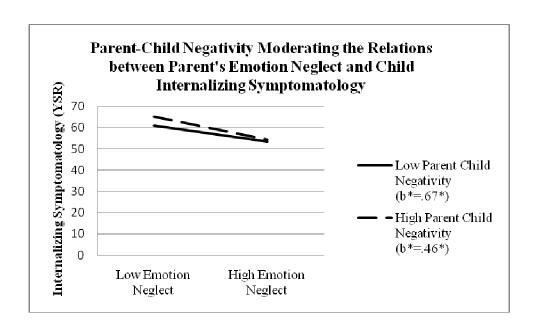


Figure 34. Parent-Child Negativity Moderating the Relations between Parent's Emotion Neglect and Child Internalizing Symptomatology.

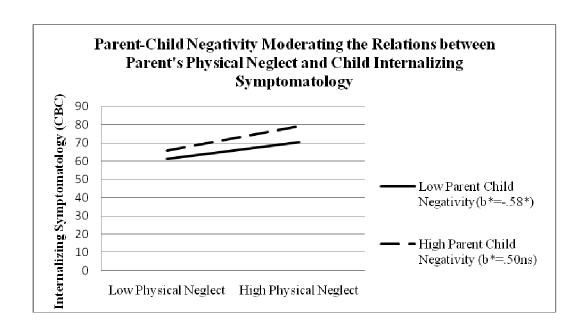


Figure 35. Parent-Child Negativity Moderating the Relations between Parent's Physical Neglect and Child Internalizing Symptomatology.

## Appendix A

## Demographic Interview

1. How old	are you? (Record age in	n years.)	AGE
2. When is	your birthday?	DOB	//
Now I am	going to ack you about	t your current family situati	•
110W I am	going to ask you about	your current family situati	011.
6. How old	d were you when your F	TRST child was born?	
	uld you describe your ov	wn race?	
	40 African America	n	
	41 Caribbean or We	est Indian	
	42 Cuban		
	43 Dominican		
	44 Puerto Rican		
	90 Other (sp	pecify) Black mix- with 2 or i	nore black ethnicities.
2 W	Vhite		
	80 White, Caucasian	n, Euro-American not of Latin	no Origin
3 L	atino or Hispanic, Non	ı-Black	
	50 Cuban		
	51 Dominican		
	52 Puerto Rican		
	53 Mexican		
	Other		
		(specify) Latino/ Nonblac	k mix with 2 or more
	Latino/nonblack ethnici		
4,5,	or 6 Biracial or Multi	racial	
4	90 Black / White		
	90 Latino / White		
6	90 Latino / Black		
9	90 Other	(specify)	
7 A	sian or Asian-America	ı	
	30 Chinese		
	31 (East) Indian		
	32 Filipino		
	33 Japanese		
	34 Other	· ·	2
.•		(specify) Asian mix- with	2 or more Asian
ethr	nicities		

8	20 American Indian	
9	Other	
	10 Alaskan Native / Eskimo / Aleut	
	60 Middle Eastern	
	70 Pacific Islander	
	91 Other(specify)	
	(specify)	RACE
		SUBRACE
		SUBRACE
8a. How man	y years of school do you have credit for altogether?	REDUC
8b. What is the	he highest education degree or certificate you hold?	
0 = N		
-	lementary School / Junior High	
	ED (General Education Development)	
	igh School Diploma	
	ocational / Technical Diploma	
	ssociate Degree	DDECDEE
	N Diploma	RDEGREE
	achelor Degree	
	laster Degree	
9 = D	octorate: MD., Ph.D., J.D., etc.	RHEDHollingshead education score 1-7
9. During the	past week, were you working full-time or part-time?	_
. •	= full time (35 + hrs) or 2 = part-time	
(If No, ask	k) Which one of these best describes your current situ	action?
3 = 111	nemployed or laid off and looking for work	
	nemployed or laid off and not looking for work	
5 = re		
	school	
	eeping house/taking care of children	
	isabled and not looking for work	
9 = 01	ther (specify)	<del></del>
9b. How wor	ald you describe your present or most recent job? WI	nat are (were) your duties and
responsibiliti	es at work? If you hold more than two jobs, describe	only one job, that which you
consider to b	e your main job.	
Consider to 0	c your main joo.	
		<del></del>
RCUI	RWORK ROCPRES	

# For the following questions, please circle the number or letter that is associated with your answer.

14. Do you receive any public income assistance such as TANF (Temporary Assistance for Needy Families), AFDC (Aid to Families with Dependent Children), food stamps, fuel assistance, rent vouchers or SSI (Supplemental Security Income)?

- 1 = Yes
- 2 = No
- 15. What is your total annual family income before taxes for all the adults in your household? Please include all (including TANF, AFDC, food stamps, SSI, rent voucher, fuel assistance and child support). If you are not sure about the amount, please estimate.

a. None	or	\$0 per month
b. Less than 1,000	or	Less than \$83 per month
c. \$1,000 - \$2,999	or	\$83 - \$249 per month
d. \$3,000 - \$4,999	or	\$250 - \$416 per month
e. \$5,000 - \$7,499	or	\$417 - \$624 per month
f. \$7,500 - \$9,999	or	\$625 - \$833 per month
g. \$10,000 - \$14,999	or	\$834 - \$1,249 per month
h. \$15,000 - \$19,999	or	\$1,250 - \$1,666 per month
i. \$20,000 - \$24,999	or	\$1,667 - \$2,083 per month
j. \$25,000 - \$34,999	or	\$2,084 - \$2,916 per month
k. \$35,000 - \$49,999	or	\$2,917 - \$4,167 per month
1. \$50,000 - \$74,999	or	\$4,168 - \$6,249 per month
m. \$75,000 - \$99,999	or	\$6, 250 - \$8,333 per month
n. \$100,000 - \$199,999	or	\$8,334 - \$16,666 per month
o. \$200,000 or more	or	\$16,667 or more per month

#### Appendix B

#### **IPPA-Parent**

This questionnaire asks about your relationship with important people in your life; your parents. Please read the directions carefully.

Some of the following statements asks about your feelings about your parents or the people who have acted as your parents. If you have more than one set of people acting as your parents (e.g. a natural mother and step-father and natural father and step-mother) answer the questions for the one you feel has most influenced you.

Please circle each statement and circle the <u>ONE</u> number that tells how true the statement is for you now.

	Almost Never or Never True	Not Very Often True	Some- times True	Often True	Almost Always or Always True
1. I tell my parents about my problems and troubles.	1	2	3	4	5
2. My parents help me understand myself better.	1	2	3	4	5
3. If my parents know something is bothering me, they ask me.	1	2	3	4	5
4. My parents have their own problems, so I don't bother them with mine.	1	2	3	4	5
5. My parents respect my feelings.	1	2	3	4	5
6. When I'm angry about something my parents try to be understanding.	1	2	3	4	5
7. I wish I had different parents.	1	2	3	4	5
8. My parents accept me as I am.	1	2	3	4	5
9. I don't get much attention at home.	1	2	3	4	5
10. I get easily upset at home.	1	2	3	4	5
11. Talking over my problems with my parents makes me feel ashamed or foolish.	1	2	3	4	5
12. I feel angry with my parents.	1	2	3	4	5

#### Appendix C

#### **Parenting**

(Step) mother	
(Step) father_	

We are interested in how much your (step) mother and (step) father know about what you do in school and out of school, who your friends are, and so forth. For each item below, circle the number that best describes your (step) mother. Then circle the number that best describes your (step) father.

How much do your (step) mother and your (step) father know about your life in the following areas? Please use the following key to answer the questions.

- 1 = Always knows
- 2 = Usually knows
- 3 =Sometimes knows
- 4 = Seldom knows
- 5 =Never knows

	How much your (step)MOTHER knows			How much your (step)FATHER knows						
1. Your choice of friends, who they are, what they are like	1	2	3	4	5	1	2	3	4	5
2. Your intellectual interests, both in and out of school	1	2	3	4	5	1	2	3	4	5
3. Your activities outside of school (e.g. sports, jobs, clubs, etc.)	1	2	3	4	5	1	2	3	4	5
4. Your interest in and activities with (boy or girl) friends; your dating behaviors	1	2	3	4	5	1	2	3	4	5
5. The extent of your sexual behavior	1	2	3	4	5	1	2	3	4	5
6. Your health habits, such as amount of sleep, diet, exercise.	1	2	3	4	5	1	2	3	4	5
7. Your use of tobacco	1	2	3	4	5	1	2	3	4	5
8. Your use of alcohol	1	2	3	4	5	1	2	3	4	5

More questions in the back...

How much do your (step) mother and your (step) father know about your life in the following areas? Please use the following key to answer the questions.

- 1 = Always knows
- 2 = Usually knows
- 3 = Sometimes knows
- 4 = Seldom knows
- 5 =Never knows

		ow i tep) k		TĤ		How much your (step)FATHER knows					
9. Your use of drugs	1	2	3	4	5	1	2	3	4	5	
10. Your problem behaviors in school (e.g., skipping school, cutting classes, acting out, being late, being sent to the principal's office, etc).	1	2	3	4	5	1	2	3	4	5	
11. Your school life such as who your teachers are, if and how well you do your homework, your grades	1	2	3	4	5	1	2	3	4	5	
12. Your extracurricular activities, sports, clubs, etc	1	2	3	4	5	1	2	3	4	5	
13. Where you are and what you are doing when you are not at home	1	2	3	4	5	1	2	3	4	5	

## Appendix D

### **Parent-Child Relationship**

The following questions deal with mother and your relationship wit question and first circle t	h, y	our (step) father. Read each your relationship with
relationship with, your		
For questions 1 through 8, please u	se the following scale:	
1 = Extremely		
2 = Very 3 = Somewhat		
4 = A little		

	(Step) MOTHER			(Step) FATHER						
1. How much do you yell at this person after you've had a bad day?	1	2	3	4	5	1	2	3	4	5
2. How much does this person yell at you after he or she has had a bad day?	1	2	3	4	5	1	2	3	4	5
3. How much do you nag this person about what he or she is doing wrong?	1	2	3	4	5	1	2	3	4	5
4. How much does this person nag you about what you are doing wrong?	1	2	3	4	5		2			
5. How much do you criticize this person?	1	2	3	4	5		2			
6. How much does this person criticize you?	1	2	3	4	5	1	2	3	4	5
7. How often does this person get into disagreements or fights with you?	1	2	3	4	5	1	2	3	4	5
8. How much do you enjoy being this person's (step) child?	1	2	3	4	5	1	2	3	4	5

5 = Not at all

## **Appendix E**

#### **RSE-P**

1 = strongly agree

Please circle the appropriate number for each statement depending on whether you strongly agree, agree, disagree or strongly disagree with it.

2 = agree

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