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A Longitudinal Examination of Outcomes Related to Emotional Abuse in Children

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The University of Southern Mississippi

A LONGITUDINAL EXAMINATION OF OUTCOMES RELATED TO EMOTIONAL ABUSE IN CHILDREN

by

Lauren Seale Fryer

A Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

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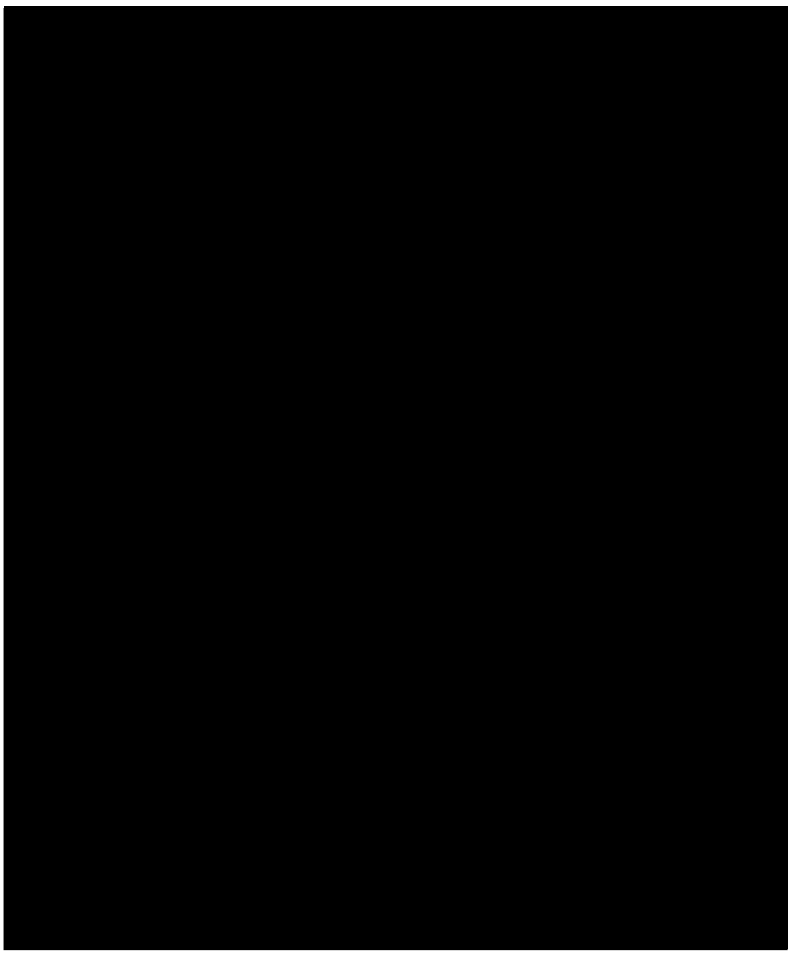

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ABSTRACT

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Emotional abuse has been linked to both internalizing and externalizing outcomes in adults and children, even after controlling for the presence of physical and/or sexual abuse in childhood (Braver, Bumberry, Green, & Rawson, 1992; Gibb et al., 2001; Kaufman & Cicchetti, 1989; Kim & Cicchetti, 2006). The developmental/organizational perspective, as well as attachment theory, suggests that emotional abuse occurring in childhood will result in disrupted views of subsequent relationships, leading to maladaptive outcomes such as aggression, depression, and low self-esteem (Cicchetti & Toth, 1995). The current study examined these relations in an archival sample of low-income urban children ages 5 to 11 years identified by social services as abused. Measures were completed over four years by children attending a summer day camp, as well as by counselors and peers. The relation between emotional abuse and outcomes was examined concurrently, as well as across several time points. Social competence was also examined as a possible mediator in these relations. Self-esteem, as well as onset of abuse, the child's age, and gender were explored as moderators in these relations. After controlling for physical and sexual abuse, emotional abuse was related to counselor-reported internalizing and externalizing behaviors, self-reported depression, peer-reported aggression, and counselor-reported social competence at several time points. Further, social competence acted as a partial mediator in the relation between emotional abuse and

externalizing behaviors. Several moderators were identified as well; however, given the large number of analyses, moderation results were underwhelming. Clinical implications, as well as directions for future research are discussed.

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CHAPTER I

INTRODUCTION

Emotional abuse has only recently become an area of interest and concern in both research and mental health settings. Five forms of child abuse that include emotional abuse, as well as physical abuse, sexual abuse, physical neglect, and emotional neglect have been identified, defined, and empirically measured (Hart, Germain, & Brassard, 1987). Although much research has been devoted to exploring the psychological outcomes of child physical and sexual abuse (e.g., Finzi, Ram, Har-Even, Shnit, & Weizman, 2001; Kaufman & Cicchetti, 1989; Maxwell, & Maxwell, 2003; Shields & Cicchetti, 1998), until recently a disproportionately small amount of studies have been devoted to understanding the specific implications of childhood emotional abuse, particularly examining the specific implications of this form of abuse occurring at different developmental time periods (e.g., Manly, Kim, Rogosch, & Cicchetti, 2001). Many studies have relied on retrospective reports of abuse, and only recently have attempts been made to examine the implications of emotional abuse using prospective designs (Kim & Cicchetti, 2006). Nevertheless, childhood emotional abuse has been suggested to be the most detrimental type in that it leads to long-term negative consequences in emotional functioning (Hart et al., 1987). Childhood emotional abuse has been linked to both internalizing symptoms and externalizing behavior in child and adult populations (Braver, Bumberry, Green, & Rawson, 1992; Ferguson, & Dacey, 1997; Gibb et al., 2001; Kaufman & Cicchetti, 1989; Kim & Cicchetti, 2006) and may be related to a disruption in attachment between the child and his or her caregiver. The current study examined, using multi-informant longitudinal data, the unique relations

between emotional abuse and internalizing symptoms (e.g., depression, anxiety), externalizing behaviors (e.g., aggression), and social problems (e.g., peer rejection), in a sample of abused children. Further, given that emotional abuse has been described as an attack upon one's self-worth (Navarre, 1987), self-esteem was examined as a possible mediator and moderator in these relations. Research also suggests that a child's social functioning plays a role in the relation between emotional abuse and outcomes; thus, social competence was examined as a possible mediator in these relations. Age of the child, onset of abuse, and gender were also explored as possible moderators in these relations.

What is Emotional Abuse?

Defining emotional abuse as a distinct phenomenon with specific implications has been an area of debate for many years in both legal and mental health settings. The term "mental injury" was added to the spectrum of what was to be legally considered child abuse in The Child Abuse, Prevention and Treatment Act of 1974 (Public Law 93-247). Following this event, various attempts have been made to further clarify the meaning of this term. Garbarino, Guttman, and Seeley (1986) addressed the issue of differentiating between abuse, neglect, and psychological maltreatment by describing the latter in terms of words and actions that are inflicted by a parent or guardian, which "jeopardizes the development of self-esteem, of social competence, of the capacity for intimacy, of positive and healthy interpersonal relationships" (p. 1).

Hart and colleagues (1987) proposed seven categories of emotional abuse described as acts of both omission and commission, which include rejecting, degrading, terrorizing, isolating, corrupting, exploiting, and denying emotional responsiveness.

Rejecting is briefly defined as refusal to "acknowledge, believe, or receive" and involves the abuser casting out the child (Hart et al., 1987, p.7). Degrading includes such acts as public humiliation or name-calling. Terrorizing involves coercion via intimidation or threat. Examples of isolating include locking a child in a closet or inhibiting his or her interaction with others in any way. Corrupting involves inadequate socialization of the child and includes providing maladaptive social models, such as exposure to domestic violence. Exploiting occurs when the abuser uses the child to his or her advantage in some way, such as placing him or her in a subservient role. Finally, denying emotional responsiveness is the "failure to provide sensitive, responsive caregiving necessary to facilitate healthy social/emotional development" (Hart et al., 1987, p. 7).

Whereas these categories have been widely accepted, specifically by the American Professional Society on the Abuse of Children (APSAC, 1995), and thus utilized in a great deal of subsequent literature, alternative frameworks have been suggested. Barnett, Manly, and Cicchetti (1993) proposed a framework that conceptualizes emotional abuse in terms of a child's overall well-being. This framework is based on a developmental psychopathology perspective that views acts of abuse as associated with maladaptive outcomes rather than societal views of what constitutes abuse. Any violation of a child's right to be recognized as a person who: "exists," has "personal attributes," "is vulnerable, dependent, and rapidly developing," possesses "feelings, thoughts, and perceptions," and is "a social being who will increasingly interact and communicate within her or his own social context" constitutes emotional abuse (Glaser, 2002, p. 703). With this framework in mind, Barnett and colleagues (1993) developed the Maltreatment Classification System (MCS). This nosological system has

been used in research to examine the impact of specific subtypes of maltreatment by operationalizing child abuse experiences by subtype, severity, frequency/chronicity, developmental timing, number of court-ordered separations, and perpetrator. This system was developed in response to the call by the U.S. National Academy of Sciences for an operational definition of various forms of abuse that could be utilized in research to classify reports from child protective services (CPS) in different regions, thus increasing the consistency of subtype classification, as well as the external validity of research in this area (Runyan et al., 2005). This system has been used in many longitudinal studies examining the impact of abuse. Regarding the current sample, which came from the National Data Archive on Child Abuse and Neglect, authors reported that the majority of cases constituting a label of "emotional maltreatment" included the "persistent or extreme thwarting of children's basic emotional needs," including but not limited to "psychological safety/security," "acceptance and self-esteem," and "age appropriate autonomy" (Cicchetti, Rogosch, Manly, & Lynch, 2005, p. 80).

Several factors distinguish emotional abuse from physical and sexual abuse. Compared to other types of abuse, particularly sexual abuse, emotional abuse is rarely hidden from others and is therefore easily observed (Glaser, 2002). Further, the primary caregiver is often the perpetrator and there is not necessarily a clear intent to harm the child (Glaser). Whereas research has shown that this form of abuse is related to detrimental outcomes in childhood that often extend into adulthood (Braver et al., 1992; Gibb et al., 2001; Kaufman & Cicchetti, 1989; Kim & Cicchetti, 2006), these factors lead some to be reluctant in referring to emotional maltreatment as "abuse." Runyan and colleagues (2005) examined agreement in the classification of reports of abuse in 1,980

reports for 545 children participating in the Longitudinal Studies of Child Abuse and Neglect (LONGSCAN). They found that agreement across classification systems including a revised version of the MCS and actual reported allegations by CPS was relatively high for physical and sexual abuse (82 % and 90%, respectively); however, these two systems only agreed 37% of the time when classifying instances of emotional abuse. This lack of agreement highlights the discrepancy between research and legal definitions of emotional abuse, as well as the underreported nature of this form of abuse. However, this form of abuse is certainly a prevalent phenomenon, with over 61,000 reported cases of emotional abuse in the United States alone in 2004 (U.S. Department of Health and Human Services, 2006). Further, it is likely that many cases of emotional abuse go unreported given the ambiguous nature of this form of abuse (Barnett et al., 1993). Overall, the ambiguity of this form of abuse makes it difficult to define, as well as accurately identify cases of emotional abuse.

Emotional abuse can and does occur alone (Claussen & Crittenden, 1991); yet the majority of children who are emotionally abused also experience some other form of abuse at some time during their lives (McGee, Wolfe, & Wilson, 1997). Researchers have reported that the majority of children experiencing abuse are the victims of multiple subtypes of abuse, with overlap ranging from 60 to 94% (Cicchetti & Rogosch, 1997; Lynch & Cicchetti, 1998; Manly et al., 2001, McGee et al., 1997). Claussen and Crittenden (1991) found that physical abuse rarely occurred independent of emotional abuse in 175 children referred to child protective services. Further, few children have been classified as "emotional abuse only" using the MCS (Cicchetti & Rogosch, 1997; Schneider, Ross, Graham, & Zielinski, 2005), resulting in few studies examining the

unique impact of this form of abuse. Some studies suggest that experiencing multiple forms of abuse increases the likelihood of experiencing negative outcomes (Bifulco, Moran, Baines, Bunn, & Stanford, 2002; Higgins & McCabe, 2000), whereas others suggest that experiencing multiple types of abuse does not increase the severity or frequency of associated symptoms (Cicchetti & Rogosch, 1997). Ney, Fung, and Wickett (1994) compared outcomes of different combinations of abuse and reported that the "worst" combination of types of abuse in terms of outcomes included physical abuse, verbal abuse, and neglect. Bolger and Patterson (2001), as well as Barnett and colleagues (1993), found the most common combination of abuse subtypes included emotional abuse in conjunction with physical abuse and neglect. These studies suggest that emotional abuse rarely occurs independent of other forms of abuse. Nevertheless, emotional abuse has been suggested to be the "core" component of all varieties of child abuse (Hart et al., 1987). Further, studies that controlled for the presence of other forms of abuse have indicated that emotional abuse is a major contributor to the negative outcomes found with other forms of abuse (e.g., Braver et al.; Gibb et al., 2001; Kaufman & Cicchetti, 1989; Kim & Cicchetti, 2006).

Whereas some studies have found that neglect occurring in childhood is related to negative outcomes (Bolger & Patterson, 2001), many studies, including those conducted on samples similar to the current sample, have failed to find a relation between neglect and self-esteem, emotional dysregulation, or overall adaptation (Cicchetti & Rogosch, 1997; Shields & Cicchetti, 2001; Toth, Manly, & Cicchetti,1992). Specifically, these researchers found no significant difference in these constructs between neglected children and comparison children. Given that the implications for negative outcomes associated

with abuse are much more clear than those for neglect, the current study focused exclusively on abuse.

Although less numerous than those for physical and sexual abuse, studies have been conducted examining the outcomes of emotional abuse in both adults and children. Further, researchers have examined the impact of factors such as timing, severity, and chronicity of abuse on related outcomes. The role of self-esteem and social competence in these relations has also been examined. The major findings from this literature base are reviewed below. Likewise, these previous findings are discussed in the context of an attachment theory framework, providing a basis for the current study.

Outcomes in Adults

Difficulties defining and conceptualizing emotional abuse has led to variations in the operational definition of emotional abuse. Nevertheless, research has found a relation between emotional abuse and negative outcomes in adulthood, underscoring the pervasive nature of this form of abuse. In one of the first studies that attempted to examine the unique impact of emotional abuse, Briere and Runtz (1988) found that women undergraduates who retrospectively reported that their fathers emotionally abused them were more likely to suffer from anxiety, depression, interpersonal sensitivity, and dissociation. They reported the impact of this form of abuse went "above and beyond the effects" of other forms of abuse (p. 336). In a related study, a significant relation was reported between retrospectively reported emotional abuse and low self-esteem in female undergraduates (Briere & Runtz, 1990).

Several other studies have found a relation between retrospectively reported childhood emotional abuse and depression, anxiety, and/or low self-esteem in both

community and inpatient adult samples (Braver et al., 1992; Ferguson & Dacey, 1997; Fryer & Barry, 2009; Gibb et al., 2001; Gibb, Benas, Crossett, & Uhrlass, 2007; Gibb, Butler, & Beck, 2003; Gibb, Chelminski, & Zimmerman, 2007; Gross & Keller, 1992; Kaplan & Klinetob, 2000; Kent & Waller, 1998; Moskvina et al., 2006; Spertus, Yehuda, Wong, Halligan, & Seremetis, 2003; Uhrlass & Gibb, 2007; Webb, Heisler, Call, Chickering, & Colburn, 2007). Strikingly, several of these studies reported a relation between emotional abuse and negative outcomes, but no such relation between physical and/or sexual abuse and these outcomes (Ferguson & Dacey, 1997; Gibb et al., 2001), again suggesting that emotional abuse may have unique and pervasive effects on psychological functioning. However, several problems concerning the validity of retrospective report of abuse occurring in childhood utilized in studies examining the impact of abuse in adults have been noted by researchers, underscoring the importance of prospective studies (Widom & Morris, 1997). For example, due to the fact that memory is partially reconstructive, risk of distortion and loss of information is of particular concern to researchers relying on retrospective self-report. Cognitive appraisals may also influence recollection of past maltreatment, in that if a child does or does not determine an event is negative at the time it occurs, later perception and recollection of the event might be influenced (Widom & Morris, 1997). Therefore, it is imperative that prospective studies examining the unique impact of emotional abuse, such as that employed in the current study, be conducted.

Outcomes in Children

Several studies have found a relation between emotional abuse and negative outcomes in children (e.g., Bifulco et al., 2002; Gibb & Abela, 2007; Kaufman &

Cicchetti, 1989; Kim & Cicchetti, 2006). Consistent with the adult literature, whereas a great number of studies have examined the impact of physical and sexual abuse on current psychological functioning in childhood, far fewer studies have been conducted examining the impact of emotional abuse in child samples. Physical and sexual abuse have been linked to both externalizing behavior and internalizing symptoms in children (Bagley & Mallick, 2000; Shields & Cicchetti, 1998; Toth et al., 1992; Toth & Cicchetti, 1996). Yet, studies examining the impact of emotional abuse have found that emotional abuse contributes unique variance in these outcomes and that the relation between other forms of abuse and these outcomes may be accounted for by shared variance with emotional abuse. For example, McGee and colleagues (1997) examined the relation between five forms of abuse in a sample of maltreated adolescents between the ages of 11 and 17 years and found that severity of physical abuse was no longer related to externalizing behaviors once controlling for severity of emotional abuse. Arata and colleagues examined different combinations of forms of abuse (i.e., physical, sexual, emotional, and neglect) and found that the presence of emotional abuse significantly contributed to externalizing behaviors and negative affect in a sample of adolescent males and females (Arata, Langhinrichsen-Rohling, Bowers, & O'Brien, 2007). Whereas physical abuse and neglect were also found to contribute to externalizing symptoms in males, physical abuse was not found to contribute to externalizing symptoms in females. This lack of relation is striking considering the vast literature linking physical abuse and externalizing problems (e.g., aggression) in children (Finzi et al., 2001; Kaufman & Cicchetti, 1989; Maxwell & Maxwell, 2003).

In considering the various outcomes associated with emotional abuse, it is important to consider possible differences between males and females in these outcomes. Perhaps with the exception of sexual abuse, which is more common among females, (Walker, Carey, Mohr, Stein, & Seedat, 2004; Wellman, 1993), gender is not related to the type or severity of abuse experienced in childhood (Claussen & Crittenden, 1991). However, some studies suggest that emotional abuse has a differential effect for males and females experiencing abuse during childhood and adolescence. McGee and colleagues (1997) found that severity of emotional abuse was related to both internalizing symptoms and externalizing behaviors in both male and female adolescents. However, when controlling for the presence of physical and/or sexual abuse, these researchers found that severity of emotional abuse was still related to externalizing symptoms in both males and females, yet only continued to be related to internalizing symptoms in females. The current study is one of the only known studies to examine the unique relation of severity of emotional abuse and outcomes using multi-informant data. The current study adds to the literature by examining these relations and others across time and in a younger population. Shields and Cicchetti (1998) found that maltreated boys exhibited more aggression than maltreated girls. Further, McGee and Wolfe (1994) found that severity of emotional abuse occurring in early and middle childhood was related to behavior problems in girls, whereas physical abuse in conjunction with emotional abuse was related to behavior problems in boys. Therefore, based on the empirical findings to date, it was expected that severity of emotional abuse, after controlling for physical and sexual abuse, may be related to different outcomes for boys and girls. This underscores

the importance of considering gender as a possible moderator of outcomes of emotional abuse in children.

In a large scale effort to determine the outcomes associated with various forms of child abuse and neglect, Cicchetti and colleagues conducted a number of studies using longitudinal data collected between 1989 and 2001. Participants included children between the ages of 5 and 12 years attending a summer day camp in upstate New York. Data from the current study were collected during the course of this larger data collection. The longitudinal nature of the published studies conducted thus far from this dataset has provided information regarding the temporal sequencing of abuse and outcomes, as well as the impact of developmental timing on the effects of abuse.

Timing, Chronicity, and Severity of Abuse

Some studies suggest that the severity of emotional abuse is directly related to the severity of associated outcomes. For example, Bifulco and colleagues (2002) found a "dose-response" relationship between the severity of emotional abuse and the presence of depression in adults. Specifically, 83% of those reporting severe emotional abuse also reported depression, whereas 55% of those reporting mild emotional abuse reported depression. Further, chronicity has been found to be more predictive of both aggression and peer rejection in children than a particular subtype of maltreatment (Bolger & Patterson, 2001).

One seemingly counterintuitive trend seen in several studies is the tendency of older abused children to report less depression and higher self-esteem compared to younger abused children (Kim & Cicchetti, 2006; Lynch & Cicchetti, 1998). It has been suggested that abused children may learn over time to inhibit negative emotions and

report false positive emotions (Cicchetti, 1991; Kim & Cicchetti, 2006), which could explain the trend of older children reporting less negative affect and higher self-esteem compared to younger children who may not have yet mastered the technique of false displays of emotions; in essence, children raised in emotionally abusive environments may feel that they are unable to express their emotions. Kim and Cicchetti (2003) found that younger abused children had more internalizing symptoms and externalizing behaviors compared to non-abused children, whereas older abused children displayed more externalizing behaviors only. It has also been suggested that the developmental changes occurring in childhood (e.g., intellectual and cognitive development) influence children's self-report of symptoms (Flanery, 1990). Changes in social cognitions may also affect a child's self-report, given the fact that younger children tend to think in more egocentric terms, as well as view the world in more inflexible terms (e.g., right or wrong; Flanery). Given these developmental issues, it is important to consider age of the child at each time point when examining the relations between abuse and outcomes. Therefore, in the current study, age of the child was examined as a moderator in the relation between emotional abuse and outcomes at Time 1, as well as outcomes at latter time points.

An early onset of abuse has been related to a greater severity and frequency of, as well as more pervasive, negative outcomes (Bolger, Patterson, & Kupersmidt, 1998). It is logical to assume that abuse that begins earlier in life will continue longer and, therefore, will be more likely to affect a child's functioning across the lifespan. Manly and colleagues (2001) examined the relation of severity, subtype, chronicity, and age of onset of abuse across developmental periods in 814 children ages 5 to 11 years at Time 1 attending a summer day camp between the years of 1986 and 1999. They found that

severity of emotional abuse occurring in infancy or toddlerhood was related to externalizing behaviors (e.g., aggression, delinquent behavior) and that severity of emotional abuse during this developmental period was related to aggression. Further, they found that severity of emotional abuse, as well as severity of physical abuse, during preschool was related to aggression and that severity of emotional abuse during preschool was related to starting fights (Manly et al., 2001). Whereas the authors examined the relation of severity of emotional abuse and internalizing and externalizing outcomes using counselor and peer report measures in a sample similar to the current sample, they did not examine the relation between severity of emotional abuse and outcomes over time, nor did they utilize self-report measures, both of which were addressed in the current study .

The findings of Manly and colleagues (2001) highlight the differential impact of various forms of abuse occurring at different developmental periods. The developmental psychopathology/organizational approach views development as a series of reorganizations in a child's emotional, neurological, behavioral, and physiological systems (Cicchetti & Toth, 1995). This viewpoint stresses the importance of taking into account the specific processes occurring during different developmental periods at the time when abuse occurs. Just as the same parental behavior may or may not be classified as emotional abuse depending on the age of the child (e.g., keeping a child from interacting with same-age peers during infancy versus during adolescence), the salience of such acts of emotional abuse in terms of overall impact may vary depending on the child's age at the time abuse occurs (Cicchetti & Toth, 1995). Therefore, the developmental time period at which abuse first occurred should be considered when

examining the relation between emotional abuse and outcomes. In the current study, onset of abuse was examined as a moderator in the relation between emotional abuse and outcomes at Time 1, as well as outcomes at latter time points. Disruptions in the child-caregiver relationship can contribute to interpersonal problems in toddlerhood through adulthood, as well as contribute to the development of internalizing symptoms and externalizing behaviors. This may be best understood in terms of attachment theory, which provides the primary theoretical framework for the current study.

Emotional Abuse in the Context of Attachment Theory

As noted by the first researchers on the effects of child emotional abuse (i.e., Hart et al., 1987), possibly the single most important early contributor to the conceptualization of emotional abuse is John Bowlby through his work on attachment theory. Attachment theory emphasizes the importance of mother-child interactions and the pervasive consequences of any disruption of this bond (Bowlby, 1969). Later research by Bowlby found that unresponsive parental care leads to subsequent anxiety, depression, and related psychopathology (Bowlby, 1989). Early interactions with caregivers allow children to form internal representational models of relationships, which contribute to their expectations of what a relationship will be like in the future (e.g., relationships with peers and teachers; Cicchetti & Toth, 1995). In the case of emotional abuse, a child learns to expect that negative interactions will occur, particularly in the case of unresponsive care (Cicchetti, 1991). Abused children are also likely to develop negative representational models of the self, possibly leading a child to view themselves as unworthy of love (Cicchetti, 1991). Lynch and Cicchetti (1991) found that both maltreated and nonmaltreated children had similar attachment patterns with parents, teachers, and peers,

suggesting that the quality of relationships with a primary caregiver generalizes to other relationships.

Although patterns of attachment were not directly examined in the current study, it is important to understand emotional abuse within this context and, thus, it provides the theoretical basis for the current study. Ainsworth, Blehar, Waters, and Wall (1978) developed the well-known Strange Situations task, which involves videotaping and coding interactions with infants and their mothers following a brief separation, which yielded the identification of three common patterns of attachment. Overall, approximately two-thirds of abused children exhibit insecure attachment patterns (Cicchetti, 1991). Whereas Type B (classified as a secure pattern of attachment, which involves an infant briefly seeking out their caregiver upon reunion and then returning to independent play) has been linked to consistent, responsive caregiving, Type A (classified as insecure-avoidant, which involves an infant either ignoring a caregiver or displaying little positive affect upon reunion) has been commonly linked to patterns of caregiving consistent with emotional abuse (i.e., rejection, emotional unavailability). Further, Type C (classified as insecure-ambivalent, which involves an infant displaying extreme distress upon separation and then being unable to be comforted upon reunion with a caregiver) has been linked to inconsistent care (Cicchetti, Toth, & Lynch, 1995). Main and Solomon (1986) identified a subset of infants that were "unclassifiable" and subsequently coined a Type "D" attachment. This attachment pattern is characterized by confusion and incoherent coping and has been linked to child abuse, given the fact that the caregiver becomes feared, rather than instilling a sense of security (Cicchetti, 1991). Carlson,

Cicchetti, Barnett, and Braunwald (1989) found that 82% of abused infants exhibited a Type D attachment pattern, compared to 19% of demographically matched controls.

Attachment has also been implicated in the social functioning of abused children; specifically, research suggests that abused preschoolers with insecure attachments are at an increased risk of having difficulty forming peer relationships (Wright, 1994). Affect regulation typically develops in early infancy and allows infants to modify their emotions when aroused emotionally and, thus, is an important precursor to social competence; emotional abuse occurring during infancy is believed to disrupt the development of affect regulation, leading to emotional dysregulation that may continue into childhood (Cicchetti & Toth, 1995), possibly negatively impacting social functioning. Emotional dysregulation has been linked to internalizing symptoms and externalizing behaviors, particularly aggression and related difficulties with peers, and has also been found to mediate abuse and subsequent outcomes including aggression and bullying (Shields & Cicchetti, 1998; Shields & Cicchetti, 2001). In the current study, which included school-aged children rather than infants and toddlers, social competence was examined as a mediator in the relation between emotional abuse and outcomes. Insecure attachment is believed to contribute to externalizing behaviors such as defiance and related conduct problems due to the fact that an insecurely attached child is likely to experience elevated anger and mistrust toward others and may also employ maladaptive strategies to gain attention of caregivers given their general unavailability (Cicchetti, 1991). Speltz (1990) found that 95% of boys and 57% of girls diagnosed with Oppositional Defiant Disorder were insecurely attached. It is important to note, however, that not all abused children

will become insecurely attached, and not all insecurely attached infants will experience maladaptive outcomes (Cicchetti, 1991).

Several studies have directly examined the impact of emotional abuse on attachment styles in infants, children, and young adults. Egeland and Sroufe (1981) found that 100% of infants with psychologically unavailable mothers were insecurely attached at 18 months of age. Egeland, Sroufe, and Erikson (1983) examined attachment relationships in 267 high-risk families and found that 18-month-old infants who experienced parental hostility, verbal abuse, and psychological unavailability were more anxiously attached, angry, and avoidant of their mothers. Hankin (2005) examined the impact of various forms of abuse in young adults and found a relation between emotional abuse and depression after controlling for a history of physical and sexual abuse. Interestingly, having an insecure attachment style mediated this relation, suggesting that faulty representational models of the self as worthless or unworthy of love may explain the relation between emotional abuse and depression. Thus, self-esteem was examined as a potential mediator in the current study.

In short, attachment theory posits that a child's relationships with others are directly impacted by early interactions with the child's primary caregiver. In the case of emotional abuse, a child may develop a sense of worthlessness, thus leading to internalizing symptoms. Further, hostility may be fostered in emotionally abused children that leads to maladaptive social functioning (e.g., aggression, peer rejection, poor social competence). Studies have found that a child's attachment quality with a primary caregiver as late as middle childhood and adolescence is related to internalizing symptoms (Muris, Meester, van Melick, & Zwambag, 2001), as well as externalizing

behavior and social competence (Booth et al., 2006), suggesting that disruptions in attachment relationships occurring during a wide range of developmental periods can impact a child's functioning throughout childhood. In the context of this theory, the current study will examine the relation of emotional abuse and a wide range of negative outcomes that may result from disrupted attachment.

The Relation Between Emotional Abuse and Social Functioning

In addition to internalizing symptoms and low self-esteem, child abuse has been related to aggression and difficulty in social functioning (Kaufman & Cicchetti, 1989; Manly et al., 2001; Shonk & Cicchetti, 2001). It is likely there is a unique interplay between the experience of emotional abuse, low self-esteem, social competence, aggression towards peers, and subsequent impaired peer relationships. Given the nature of emotional abuse, it is possible that experiencing this form of abuse undermines a child's feelings of social competence and may contribute to feelings of hostility toward others. Therefore, it would follow that severity of emotional abuse would relate to social competence and peer rejection. In fact, emotional abuse has been linked to difficulty in social functioning in childhood. In a longitudinal study, Bolger and colleagues (1998) examined the relation between five forms of abuse and neglect as defined by the MCS and found that emotionally abused children between the ages of 8 and 10 years at Time 1 were less likely to have a best friend and had fewer reciprocated friendships compared to children who were not emotionally abused. Interestingly, the authors found that severity of emotional abuse was not related to self-reported low self-esteem. Further, they found that onset of abuse moderated the relation between abuse and peer problems, with those experiencing abuse early in life being less likely to have a best friend compared to those

experiencing abuse later in life. These researchers suggest that emotionally abused children may avoid close friendships as a direct result of being rejected by their parents. Chronicity of abuse has also been linked to problems forming peer relationships (Bolger & Patterson, 2001). Kaufman and Cicchetti (1989) found that the presence of physical abuse and emotional abuse was related to peer-rated aggression in 5 to 11-year-old children attending a summer day camp. Further, they found that counselor reported self-esteem was directly related to social competency in abused children, suggesting that impaired self-esteem may contribute to difficulties in social functioning. However, the authors did not examine the unique effects of severity of emotional abuse alone, nor did they utilize both peer and counselor report of social functioning. Given the relation between attachment, social functioning, and outcomes, both self-esteem and social competence were explored as possible mediators in the relation between emotional abuse and outcomes in the current study.

As part of the series of studies conducted by Cicchetti and colleagues within the aforementioned longitudinal data collection, several interesting findings have emerged. This series of longitudinal studies used various samples of abused and non-abused children, ages 5 to 11, who participated in a summer day camp in upstate New York. Abused children were identified during a review of DSS records, and subtypes of abuse were classified using the MCS system developed by Barnett and colleagues. Shields and Cicchetti (1998) found that abused children displayed more aggression compared to non-abused children and emotional dysregulation mediated this relation. In a related study, Shields and Cicchetti (2001) found that abused children were more likely to bully others and be the victim of bullying compared to non-abused children. Shonk and Cicchetti

(2001) found that abused children had more social skills deficits, as well as internalizing symptoms and externalizing behaviors measured by the Teacher Report Form (TRF; Achenbach, 1991), compared to non-abused children. Further, they found that social competence mediated the relation between abuse and behavioral symptoms. Kim and Cicchetti (2004) also found that social competence partially mediated the relation between abuse and internalizing and externalizing outcomes. Based on these previous findings, the current study examined social competence as a mediator between severity of emotional abuse and outcomes. Rogosch and Cicchetti (2004) found that abused children were rated by peers as less cooperative and more disruptive/more likely to start fights. However, these relations were not examined in conjunction with the specific subtype of emotional abuse. Overall, whereas emotional abuse has been linked to both internalizing symptoms and externalizing behaviors in children and adults, no known study has examined the unique relation between severity of emotional abuse and internalizing, externalizing, and social outcomes in a sample of children using multi-informant, longitudinal data. Further, no known study has examined social competence as a mediator between the subtype of emotional abuse and both internalizing and externalizing outcomes using multi-informant data.

Self-Esteem as a Mediator or Moderator

Global self-esteem, which refers to an individual's general sense of self-worth or self-concept, is thought to develop in conjunction with a child's development of self (Harter, 1999). Discrepancies between a child's perceived self-worth and support or approval from parents can lead to lowered self-esteem (Mann, Hosman, Schaalma, & de Vries, 2004). It is thus logical to assume emotionally abused children who receive little

support from parents are likely to exhibit low self-esteem. Hoglund and Nicholas (1995) explored the possibility of emotional abuse resulting in impaired self-esteem and found that the presence of this form of abuse, including witnessing abuse in the family, resulted in more shame and anger, even without the effects of physical abuse taken into account. Whereas lowered self-esteem can contribute to mental health problems including depression, anxiety, and suicidal ideation (Harter), elevated self-esteem has been shown to serve as a protective factor against detrimental outcomes of negative events (Mann et al.).

Moran and Eckenrode (1992) found that high self-esteem interacts with child maltreatment in predicting depression, which suggested the possibility that self-esteem may serve as a protective factor against depression. Specifically, they found that self-esteem was a more prominent predictor in a group of maltreated adolescent girls than in a non-maltreated group; in fact, maltreated teens with high self-esteem were no more depressed than the non-maltreated group (Moran & Eckenrode). Although Moran and Eckenrode's study did not explore the variation of protective factors across different forms of abuse, it was suggested that the parental rejection and unavailability present in all abuse, but more specifically, emotional abuse, leads to outcomes such as depression (Moran & Eckenrode).

One theoretical approach to understanding the link between abuse, self-esteem, and psychological outcomes, such as depression and other internalizing symptoms, is Seligman's well-known theory of learned helplessness. Seligman's theory suggests that learning that events in life are uncontrollable (characteristic of abusive relationships) leads to depression (Seligman, 1975). Support for this theory has been demonstrated in

several populations, (e.g., Abramson & Sackheim, 1977). According to Peterson, Maier, and Seligman (1993), three elements of learned helplessness are important to consider in relation to internalizing symptoms. The first element involves the contingency between one's actions and outcomes, with helplessness developing when environmental conditions are perceived to be non-contingent with one's own behavior (again, consistent with abusive environments). Secondly, one's perception and explanation of the contingency plays a role. If a person feels that he/she is to blame, perhaps due to low self-esteem, the likelihood of a negative outcome increases. The third component of learned helplessness is the observable outcomes and cognitive distortions resulting from a negative perception of events.

This idea is pertinent when considering outcomes of abuse. Cerezo and Frias (1994) found that 10-year-olds who had been either emotionally or physically abused exhibited low self-esteem, learned helplessness, and depression. When aversive consequences are viewed as uncontrollable, the child may develop learned helplessness, which in turn can lead to anxiety and depression (Kazdin, Moser, Colbus, & Bell, 1985). Parker (1979) found that depressed individuals retrospectively reported lower levels of parental care in conjunction with parental overprotection, suggesting that children reared in controlling environments characterized by the discouragement of independence are likely to develop depression. He, too, related this idea to Seligman's theory, stating that lack of controllability leads to decreased motivation, decreased expectancy of life success, and negative emotional outcomes (Parker).

Research shows that 75% of children diagnosed with depression have a history of some anxiety disorder (Kessler, Avenevoli, & Merikangas, 2001). Further, it has been

suggested that anxiety disorders often precede the onset of depression (Kessler et al., 2001). Therefore, when examining the impact of abuse on outcomes, especially in children that may have yet to manifest depressive symptoms, it is important to utilize a broad measure of internalizing symptoms in addition to a narrow-band measure of depression. Thus, the current study examined the relation between severity of emotional abuse and broadly measured internalizing symptoms (i.e., anxiety, depression, withdrawal, and somatization), as well as the relation between emotional abuse and depression specifically. Additionally, the role that self-esteem plays in these relations was also examined.

Several studies have found self-esteem acts as a mediator between emotional abuse and outcomes in adults as well as children. Finzi-Dottan and Karu (2006) found that self-esteem mediated the relation between a history of childhood emotional abuse and psychopathology in Israeli women. Fryer and Barry (2009) found that self-esteem partially mediated the relation between childhood emotional abuse and current stress, anxiety, depression, and suicidal ideation in university undergraduates. Self-criticism has also been found to mediate the relation between parental verbal abuse and internalizing symptoms, suggesting that the verbal attacks associated with emotional abuse (e.g., being told you are unwanted or unloved) may become internalized and lead to subsequent mood-related outcomes (Sachs-Ericsson, Verona, Joiner, & Preacher, 2006). A direct relation between verbal abuse by parents and low self-esteem in children has also been demonstrated (Solomon & Serres, 1999). Dubois, Felner, Sherman, and Bull (1994) found that self-esteem acted as a mediator in the relation between negative life events and internalizing, but not externalizing, symptoms in children from seventh through ninth

grade. Schneider and colleagues (2005) found that emotional abuse was related to both anger and post-traumatic stress in 545 children between the ages of 4 and 8 years and that self-esteem mediated the relation between emotional abuse and post-traumatic stress.

Cicchetti and Rogosch (1997) examined the impact of different subtypes of abuse in 213 children ages 6 to 11 years at Time 1 over three years and found that self-esteem accounted for 69% of the variance in maladaptive functioning (as measured by an adaptive composite of social competence, school performance, and internalizing symptoms /externalizing behaviors) in a group of abused children compared to a demographically-matched comparison group of children, for which quality of mother-child relationship accounted for the most variance. This suggests not only that self-esteem plays a role in the relation between abuse and outcomes, but also that abused children may place less importance on relationships with their caregiver and rely more on self-concept to define their own competencies (Cicchetti & Rogosch, 1997). These findings are consistent with findings that abused children are more likely to be insecurely attached to their primary caregiver (Cicchetti, 1991). Kim and Cicchetti (2004) found that, whereas abused children had more internalizing symptoms at baseline and more internalizing symptoms, as well as externalizing behaviors two years later, self-esteem did not act as a mediator between abuse and outcomes. However, social competence was found to mediate this relation, and a "secure" mother-child relationship was related to high self-esteem regardless of abuse status. These results, taken with findings from other studies, underscore the complex interplay between parent-child attachment, self-esteem, social problems, and internalizing/externalizing behavioral outcomes.

In 2006, Kim and Cicchetti examined the developmental trajectories of self-system processes and depression in school-aged abused children. They also examined the differential impact of various subtypes of abuse, including emotional abuse. This sample included 251 children attending a summer day camp between the years of 1989 and 2001. Using structural equation modeling, they examined how changes in self-esteem over time related to changes in depression over time. They found that the presence of emotional abuse was related to self-esteem and depression, as well as to changes in self-reported self-esteem and self-reported depression over time. Further, they determined after controlling for other subtypes of abuse that emotional abuse was the strongest predictor of low self-esteem and depression. Most importantly, they found that greater increases in self-esteem were related to greater reductions in reported depression, suggesting that self-esteem may mediate the relation between emotional abuse and depression in children. Interestingly, they found that emotional abuse was related to inhibited growth in self-esteem only in boys. The current study examined self-esteem's role in the relation between severity of emotional abuse and self-reported depression, as well as emotional abuse and a composite of counselor-reported internalizing symptoms that include depression, anxiety, withdrawal, and somatization. Further, the role of self-esteem in the relation between emotional abuse and externalizing behaviors and emotional abuse and social problems were examined.

Current Study

Based on the theoretical frameworks and empirical research reviewed, the first purpose of the current study was to utilize multi-informant data collected on a sample of abused children to examine the relation between severity of emotional abuse and self-

esteem, as well as between severity of emotional abuse and four sets of negative outcomes that may result from disrupted attachment: (1) internalizing symptoms (anxiety, depression, withdrawal, somatization); (2) externalizing behaviors (aggressive behavior, delinquent behavior, fighting); (3) social problems (peer rejection, poor social competence); and (4) low self-esteem. The relations between severity of emotional abuse and these outcomes were examined controlling for the relations of severity of physical and sexual abuse with these outcomes. Relations between severity of emotional abuse and each of the outcomes were examined both concurrently and across three subsequent time points. Although previous research has shown a link between emotional abuse and these outcomes, no known study has examined the unique relation of severity of emotional abuse (above and beyond other forms of abuse) to such a wide array of outcomes using multi-informant data, nor have these relations been examined across time. Thus, the current study could make a significant contribution to the literature base.

Second, given previous research findings with emotional abuse, self-esteem was examined as both a mediator and moderator in these relations. Whereas self-esteem has been found to act as a mediator between emotional abuse and self-reported depression in children over time (Kim & Cicchetti, 2006), the current study added to the literature by examining self-esteem as a moderator in the relation between severity of emotional abuse and internalizing symptoms based on counselor report (i.e., to further generalize the findings with self-report established by Kim and Cicchetti). Likewise, the current study considered the moderating role of self-esteem between severity of emotional abuse and other negative outcomes, including externalizing behaviors and social problems, given the nature of emotional abuse as an attack on self-worth and the role of self-concept in

the formation of social relationships, particularly among abused children (Shields & Cicchetti, 1998; Shields & Cicchetti, 2001).

A third purpose of the study was to examine social competence as a mediator in the relation between severity of emotional abuse and outcomes, given previous research indicating that social competence influences the relation between abuse and internalizing and externalizing symptoms (Shonk & Cicchetti, 2001; Kim & Cicchetti, 2004). The current study examined social competence as a mediator in the relation between severity of emotional abuse and a host of outcomes, including broadly defined internalizing symptoms and externalizing behaviors, as well as self-reported depression, peer-rated aggression, peer rejection, and self-esteem.

A fourth purpose of the current study was to examine how demographic variables, including gender and age, influence the relation between severity of emotional abuse and internalizing symptoms, externalizing behaviors, and social problems. Whereas some studies have reported gender differences (e.g., McGee et al., 1997), as well as age differences (e.g., Kim & Cicchetti, 2006), no known study has previously directly examined the impact of these variables on the relation between severity of emotional abuse and these outcomes using multi-informant data. To address the fourth purpose of the study, gender and age were also examined as possible moderators in the relation between severity of emotional abuse and outcomes. Evidence suggests that age of the child may impact his/her presentation of symptoms, particularly self-reported symptoms, following abuse; the current study examined what impact, if any, the child's age at each time point had on the relation between the severity of emotional abuse at Time 1 and the child's functioning across various time points.

Finally, given previous findings regarding onset of abuse, the developmental time period in which abuse first occurred was examined as a possible moderator in the relation between severity of emotional abuse and internalizing symptoms, externalizing behaviors, social problems, and self-esteem. There is some evidence to suggest that abuse occurring earlier in development has a more pervasive impact on the child's later functioning (Bolger et al., 1998). Therefore, to address the fifth purpose of the study, onset of abuse was examined as a moderator in the relations between severity of emotional abuse at Time 1 and outcomes at Time 1, as well outcomes at latter time points.

Hypotheses

First, it was predicted that severity of emotional abuse would uniquely relate to negative outcomes. Specifically, it was expected that severity of emotional abuse would be related concurrently and longitudinally to internalizing symptoms (depression, broad internalizing symptoms), externalizing behaviors (aggression, broad externalizing behaviors), social problems (peer rejection, poor social competence), and low self-esteem in abused children, even after controlling for the relation of physical and sexual abuse with those outcomes.

Second, an interaction between severity of emotional abuse and self-esteem was predicted. Specifically, it was expected that self-esteem would moderate the relation between Time 1 severity of emotional abuse and depression at Time 1 and latter time points, with those experiencing emotional abuse but maintaining elevated self-esteem reporting less depression than those experiencing emotional abuse and reporting lower self-esteem. It also was expected that self-esteem also would moderate the relation

between severity of emotional abuse and a broader internalizing symptoms composite, severity of emotional abuse and broadly defined externalizing behaviors, severity of emotional abuse and aggression, and severity of emotional abuse and social problems (i.e., peer rejection, poor social competence), both concurrently and longitudinally.

Third, it was predicted that self-esteem would serve as a mediator between severity of emotional abuse and internalizing symptoms. Specifically, it was expected that self-esteem at Time 2 would mediate the relation between Time 1 severity of emotional abuse and depression at latter time points, given this relation has been shown in a similar sample (Kim & Cicchetti, 2006). A similar meditational pattern was expected when examining broader internalizing symptoms as the outcome.

Fourth, it was predicted that social competence would serve as a mediator between severity of emotional abuse and negative outcomes. Specifically, it was expected that social competence at Time 2 would mediate the relation between severity of emotional abuse and internalizing symptoms and externalizing behaviors, as well as self-reported depression, peer-rated aggression, peer rejection, and low self-esteem at latter time points.

Fifth, interactions between severity of emotional abuse and specific demographics (i.e., gender and age) were predicted. Given the limited findings regarding the impact of both gender and age on the relation between emotional abuse and outcomes, these analyses were exploratory in nature. However, some tentative predictions were made. Based on the limited research in this area, it was expected that girls experiencing emotional abuse would be more likely to experience internalizing symptoms, whereas boys experiencing emotional abuse would be more likely to experience externalizing

behaviors. It was tentatively expected that older children would report less internalizing symptoms and higher self-esteem when compared to younger children.

Sixth and finally, a significant interaction between severity of emotional abuse and onset of abuse was predicted. Again, the nature of these analyses were exploratory; however, it was tentatively expected that those children experiencing emotional abuse with an early onset would experience more negative outcomes than those children first experiencing emotional abuse during later developmental periods.

The current study builds on previous literature by examining the unique relation of severity of emotional abuse to a variety of negative outcomes using a prospective, longitudinal design. Further, the current study used multiple informants for the outcomes. That is, internalizing symptoms were measured by self and counselor report, both externalizing behaviors and social problems were measured by counselor and peer report, and self-esteem was based on self-report. Consideration of data from multiple informants not only strengthens the empirical test of these theoretical relations but also sheds light onto how negative outcomes may generalize to several settings and/or types of relationships. The fact that the average correlation across informants is reportedly small (e.g., the average correlation between parent and teacher report is reported to be .28, and the average correlation between parent and child report is reported to be .22), coupled with known issues with reliance on child report alone (e.g., immature cognitive level, inability to adequately appraise behavior, reluctance to report problems), underscores the importance of using multiple informants (McConaughy, 1993). Findings from the current study help to elucidate the nature of the outcomes of emotional abuse, which can have important treatment implications for abused children. Further consideration of self-

esteem as a possible moderator, and social competence and self-esteem as possible mediators, could indicate important specific points of intervention.

CHAPTER II

METHOD

Data

The current study used archival data made available by the National Data Archive on Child Abuse and Neglect, Cornell University, Ithaca, New York. The researcher gained permission to analyze the data for the purpose of conducting a dissertation. Two datasets collected from two different studies funded by the National Center on Child Abuse and Neglect, U.S. Department of Health and Human Services were merged to allow for a longitudinal examination across four time points. It is important to note that item-level data were not available to the researcher for the current study; thus, Cronbach's alpha could not be calculated as an indicator of internal consistency of the measures utilized in the study. However, information regarding the internal consistency of these measures available from previously published literature is discussed.

Participants

A total of 300 children participating in a one-week summer day camp between 1995 and 1996 were recruited to participate in the original one-year longitudinal study (Time 1). Children were invited back during subsequent summers, resulting in an additional three time points. One-year follow-up data were obtained from 95% of the children participating in the first wave of data collection (Time 2). As part of another study, data were collected from 88% of the original sample three years later (Time 3), and 83% four years later (Time 4). Severity of abuse (the primary predictor in the current study) was coded for 298 participants in the original sample. Of these 298 children, 168 children were identified as having experienced some form of abuse. Participants were

low income urban children identified via a review of DSS records and subsequently recruited by researchers. Participants included 110 girls and 188 boys. Children ranged in age between 5 and 11 years at baseline ($M = 7.38$, $SD = 1.48$). Of the 298 children, 65 were Caucasian, 177 were African American, 12 were Hispanic, 38 were biracial, and 6 were classified as "other."

Measures

Child Abuse

Maltreatment Classification System (MCS; Barnett et al., 1993). Records from the Department of Social Services were examined and coded by trained research assistants according to Barnett and colleagues' nosological classification system. Children's maltreatment history was coded following extensive examination of narrative accounts of abuse including statements from police, school officials, hospital workers, family members, and neighbors. Specific details of abuse history included: abuse subtype (i.e., physical abuse, sexual abuse, emotional abuse, physical neglect, moral-legal/education abuse), severity of abuse (rating system from 1 to 5 based on severity of individual acts), frequency/chronicity of abuse, developmental period during which abuse occurred, number of court-ordered separations, and perpetrator. Physical abuse was coded when an "adult inflicts injury upon a child by other than accidental means" (Barnett et al., p. 54). Sexual abuse was coded "when any sexual contact or attempt at sexual contact" was made between an adult and child for the purpose of the adult's "sexual gratification or financial benefit" (Barnett et al., p. 57). Emotional abuse was coded when acts involving "persistent or extreme thwarting of children's basic emotional needs" were documented (Barnett et al., p. 67). Acts that undermined a child's needs according to a child's

developmental level were also included in this definition. Overall, such needs included "psychological safety and security, acceptance and self-esteem, and age appropriate autonomy" (Barnett et al., p. 67). The variable specified as "maximum severity of emotional abuse" was used in analyses examining the relation between abuse and outcome. This variable reflects the most extreme severity rating of abuse a child ever received across all developmental time periods coded for that child (again, severity is rated from 1 to 5). Children not experiencing this form of abuse were coded as 0. The variables "maximum severity of physical abuse" and "maximum severity of sexual abuse" (again ranging from 0 to 5) were used in analyses controlling for these forms of abuse.

The dataset included information regarding whether abuse occurred at specific developmental time periods. From this information, an "onset of abuse" variable was created for each child by determining the first developmental time period in which abuse occurred. This variable was used in analyses examining onset of abuse. Because of a low base rate of initial onset of abuse for some time periods, the onset of abuse variable was coded as falling into one of two categories: infancy-toddlerhood (< 36 months) and preschool and later (≥36 months). That is, the dichotomy for the age of onset of abuse variable was empirically derived from the data for this sample.

Depression

Children's Depression Inventory (CDI; Kovacs, 1985). Children completed the CDI, a self-report measure of depressive symptoms. This measure includes 27 items assessing symptoms over the last two weeks. This measure is estimated to have a first-grade reading level. Each item is rated on a three-point scale ranging from 0 to 2.

Respondents chose one of three statements that best described them. For example: "I have trouble sleeping every night," "I have trouble sleeping many nights," and "I sleep pretty well." Total scores range from 0 to 54, with higher scores indicating more severe depression. A score above 12 indicates a mild level of depression, whereas a score above 19 indicates a significant level of depression (Smucker, Craighead, Craighead, & Green, 1986). Internal consistency computed on various clinic and community samples of children and adolescents was sufficient (Cronbach's α ranging from .71 to .89; Smucker et al.). Sufficient test-retest reliability was demonstrated in a sample of 155 fifth-graders over a three-week interval, r =.77 for boys; r =.74 for girls (Smucker et al.) Adequate internal consistency has been reported in a sample similar in age and demographics to the current sample (average Cronbach's α =.84 across four time points; Kim & Cicchetti, 2006). Further, adequate discriminant validity has been reported. Specifically, in a population of inpatient children between the ages of 6 and 13 years, depressed children scored significantly higher compared to non-depressed children, whereas children diagnosed with oppositional defiant disorder and/or an anxiety disorder did not score significantly higher compared to children without such a diagnosis (Hodges, 1990). Further, Carey, Faulstich, Gresham, Ruggiero, and Enyart (1987) conducted a principal component analysis and found that the CDI correctly classified approximately 70% of nonreferred children.

Internalizing Symptoms and Externalizing Behaviors

Teacher Report Form (TRF; Achenbach, 1991). Counselors completed the Teacher Report Form of the Child Behavior Checklist, a measure that includes ratings of child's internalizing symptoms and externalizing behaviors. The TRF contains 118 items, each rated on a 3-point scale ranging from 0, "not true," to 2, "very true or often true." The Internalizing Composite includes the following subscales: Anxious/Depressed, Withdrawn, and Somatic Complaints (Achenbach). The Externalizing Composite includes Delinquent Behavior and Aggressive Behavior. Composite scores are converted to T-scores, with a range of 0 to 100 and a mean of 50. Given that these are composite scores, T-scores of 63 or higher indicate significant levels of internalizing symptoms and externalizing behaviors (Achenbach, 1991). Counselors based ratings on a child's behavior during the one-week camp. Mean test-retest reliability for ratings from regular classroom teachers has been reported as, $r = .92$, $p <. 01$, over a 15-day interval, and $r = .75$, $p <. 01$, over a two-month interval in a population of 8 and 9-year-olds (Achenbach). The TRF Externalizing Behaviors Composite has shown good construct validity when correlated with the Conners Revised Teacher Rating Scale (Goyette, Conners, & Ulrich, 1978), a well-known teacher rating scale of childhood disorders. The TRF Externalizing Behaviors Composite was significantly correlated with the Conners Conduct Problems scale, $r = .83$, and the Conners Hyperactivity scale, $r = .63$. Wolfe and colleagues (1987) administered self-report measures of depression and anxiety to 102 inpatient adolescents, as well as administered the TRF to the adolescents' teachers in an in-patient classroom and found that self-reported depression and anxiety significantly correlated with the Internalizing scale of the TRF. Further, the TRF has been shown to discriminate between

demographically matched referred and nonreferred children. Specifically, referred children have been shown to score significantly higher than nonreferred children on 112 of 118 items (McConaughy, 1993).

Social Competence

Pupil Evaluation Inventory (PEI; Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976). This measure contains 35 items that provide a rating of children's social adaptation. Behaviors include those associated with psychopathology. This measure is presented in an item-by-item matrix and counselors are instructed to check the name of each child who matches a particular description. Counselors are instructed to select no more than two children per item. Subscales include Aggression (20 items), Likeability (5 items), and Withdrawal (9 items). For the current study, the Likeability scale (a *z*-score) was used as an indicator of social competence, with a low Likeability scale indicating poor social competence. Scores were derived using the same procedure as previous researchers (e.g., Kim & Cicchetti, 2004). This measure was derived using factor analysis, and concurrent validity is indicated by significant correlations between peer, self, and teacher ratings (Pekarik et al., 1976). This scale has been used in past research as an indicator of social competence (Kim & Cicchetti, 2004). Internal consistency of these subscales is adequate as indicated by split-half correlations of .70 across scales and raters (Cicchetti et al., 2005). Test-retest reliability over two weeks yielded correlations of .80, $p <$. 01, (Cicchetti et al., 2005). Cronbach's alphas (among triads of counselors) for the likeability subscale in a sample similar in age and demographics to the present study were reported ranging from .88 to .90 (Kim & Cicchetti, 2004). Frankel and Myatt (1994) administered the PEI, Child Behavior Checklist, and Social Skills Rating System

to parents and found that the Likeability subscale loaded positively on a general social competence factor identified in all three measures, suggesting this subscale is a valid measure of social competence.

Aggression and Peer Rejection

Peer Nominations (Coie & Dodge, 1983). All children attending the camp evaluated peer characteristics of other camp members on the final day of camp using the peer nominations method. Children were provided pictures of peers and asked by a counselor to select one peer from their group of six to eight children who best fit the following descriptions: most liked, least liked, cooperative, leader, shy, disruptive, and fighter. Total nominations are converted into proportions of possible nominations per category (Cicchetti et al., 2005). For the current study, nominations in the "fighter" category (a *z*-score) was used as an indicator of aggression. Peer rejection was calculated by first computing a social preference score for each child by subtracting their standardized "liked least" score from their standardized "liked most" score. Based on the method developed by Coie and colleagues, children were classified as "rejected" if their social preference score is less than 0, their "liked least" score is greater than 0, and their "liked most" score is less than 0. Coie and Dodge (1983) examined the stability of these categories over time in 208 third and fifth graders and found that correlations ranged from .36 to .45 over five years. Terry and Coie (1991) examined the stability of these categories in two cohorts of third to fifth graders, and found stability was moderate over two years, with scores remaining more stable for fourth and fifth graders. Further, authors examined the ability of this method to group children with similar behavioral characteristics. Various peer nominations methods, as well as a behavior rating scale

were administered to children. Authors reported good discriminant validity, with an overall kappa value of .56.

Self-esteem

Coopersmith Self-Esteem Inventory (CSEI; Coopersmith, 1981). This self-report measure contains 58 items that measure four domains of self-concept : General Self (26 items), Home-Parent (8 items), School-Academic (8 items), and Social Self-Peers (8 items). The total scale is comprised of all four subscales. A mean score of 50 items was used as an indicator of overall self-esteem in the current study. A lie scale comprised of 8 items is used to indicate socially desirable response patterns and is not used to calculate the total score. Children responded in a forced-choice format, rating statements as either 0, "unlike me," or 1, "like me." Lane, White, and Henson (2002) reviewed 107 studies in which the CSEI was administered to samples of children and adolescents and found the mean Cronbach's $\alpha = .80$. Adequate internal consistency has been reported in a sample similar in age and demographics to the current sample (Cronbach's $\alpha = .85$; Kim & Cicchetti, 2006). Test-retest reliability in this same sample over a two year interval was adequate, $r = .61$, $p < .01$ (Kim & Cicchetti). Kokenes (1974) administered the CSEI to 7,600 fourth through eight graders and found that factors emerged similar to those proposed by Coopersmith, suggesting construct validity for all four subscales. Demo (1985) administered several measures of self-esteem (peer and self-report) to 55 ninth graders and found evidence of convergent validity as indicated by significant correlations between the CSEI and other self-report measures (e.g., Rosenberg Self-Esteem Scale) and peer-report measures (e.g., peer ratings).

Procedure

Parents were approached and provided informed consent for each child to attend a one-week summer day camp in upstate New York. The day camp is offered annually by the Mt. Hope Family Center, a facility that combines service, training, and research via the University of Rochester. Children also provided assent to participate in research and were given small prizes for their participation. Groups were comprised of six to eight same-age, same-sex peers, half abused, half non-abused. Children attended camp seven hours a day, for five days. Three trained adult camp counselors (undergraduate and graduate students attending the University of Rochester) were assigned to lead each group. Children participated in recreational activities, as well as research assessments and interviews periodically throughout each day. Research assistants and counselors were not aware of a child's abuse status. Children were invited back to the camp over the next three years. Children and counselors completed all measures during all four years each child attended the camp. Counselor and peers completing the counselor-report and peer-report measures may not be consistent across all four time points, although some overlap is likely. Home visits were also conducted and data were collected within one month prior to camp completion.

CHAPTER III

RESULTS

Relation with Demographic Variables

For all analyses, emotional, physical, and sexual abuse refers to the severity ratings of each type of abuse. Descriptive statistics were calculated for all variables of interest as shown in Tables 1 and 2.

Table 1

Means, Standard Deviations, Ranges, and/or Percents for Types of Abuse, Onset of Abuse, and Demographic Variables

	Abused Sample (N=168)				Non-Abused Sample (N=130)				Total Sample (N=298)			
	Mean	Standard Deviation	Range	Percent	Mean	Standard Deviation	Range	Percent	Mean	Standard Deviation	Range	Percent
Emotional abuse	2.59	1.86	0-5	73.2	0.0	0.0	0-5	0.00	1.44	1.89	0-5	41.7
Physical abuse	1.14	1.47	0-5	41.8	0.0	0.0	0-5	0.00	.63	1.23	0-5	24.0
Sexual abuse	.45	1.14	0-5	14.4	0.0	0.0	0-5	0.00	.25	.88	0-5	8.7
Age	7.21	1.41	5-11		7.60	1.52	5-11		7.38	1.48	5-11	
Gender												
Male				66.1				59.1				63.1
Female				33.9				40.9				36.9
Ethnicity												
Caucasian				29.2				12.9				21.8
African American/other				70.8				87.1				78.2
Onset of Abuse												
Infancy-toddlerhood				41.1								
Preschool and Later				58.9								

Note. Physical, sexual, and emotional abuse scores (i.e., severity of abuse), as well as onset of abuse, from the *Maltreatment Classification System* (Barnett et al., 1993).

Table 2

Peer Rejection	Percent

Means, Standard Deviations, and Ranges for Other Variables of Interest[a]

	Mean	SD	Range
Depression Time 1 (N=170)	8.55	7.20	0-38
Internalizing Time 1	52.59	8.45	36-74
Externalizing Time 1	55.50	9.86	39-84.5
Aggression Time 1	.032	.92	-1.32-2.44
Social Competence Time 1 (N=297)	.031	1.02	-1.94-2.40
Self-esteem Time 1 (N=175)	.67	.15	.30-.98
Depression Time 2 (N=250)	8.24	6.52	0-32
Internalizing Time 2 (N=284)	52.75	8.54	36-81
Externalizing Time 2 (N=284)	56.15	9.68	39-88.5
Aggression Time 2 (N=287)	.012	.93	-1.32-2.44
Social Competence Time 2 (N=284)	-.03	1.00	-.168-2.58
Self-esteem Time 2 (N=264)	.69	.15	.32-.98
Depression Time 3 (N=239)	7.05	6.47	0-37
Internalizing Time 3 (N=252)	51.69	7.92	36-72
Externalizing Time 3 (N=252)	55.22	9.15	39-85
Aggression Time 3 (N=262)	.00	.93	-1 to 2
Social Competence Time 3 (N=252)	-.07	.97	-2 to 3
Self-esteem Time 3 (N=257)	.71	.15	.30-.98
Depression Time 4 (N=224)	7.07	6.56	0-39
Internalizing Time 4 (N=244)	50.40	7.71	36-76
Externalizing Time 4 (N=244)	54.85	9.32	39-83
Aggression Time 4 (N=247)	.10	.98	-1 to 3
Social Competence Time 4 (N=245)	-.04	1.03	-2 to 3
Self-esteem Time 4 (N=220)	.74	.14	.36-.98

Table 2 (continued)

Peer Rejection	Percent
Rejected Time 1	19.5
Not Rejected Time 1	80.5
Rejected Time 2 (N=296)	16.6
Not Rejected Time 2 (N=296)	83.4
Rejected Time 3 (N=262)	21.0
Not Rejected Time 3 (N=262)	79.0
Rejected Time 4 (N=248)	23.4
Not Rejected Time 4 (N=248)	76.6

Note. Depression scores from the *Children's Depression Inventory* (Kovaks, 1985); internalizing and externalizing scores from *Teacher Report Form* (Achenbach, 1991); aggression and peer rejection calculated from peer nominations (Coie & Dodge, 1983); social competence scores from *Pupil Evaluation Inventory* (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976); mean self-esteem scores from *Coopersmith Self-Esteem Inventory* (Coopersmith, 1981).

[a] N = 298 unless otherwise indicated.

Results indicated that 56.4% of the sample (168 participants) experienced some form of abuse. Specifically, 41.7% of the sample experienced emotional abuse, 24% of the sample experienced physical abuse, and 8.7% of the sample experienced sexual abuse. Results indicated that of the 168 participants who were abused, 41.1% first experienced abuse during infancy and toddlerhood, whereas 58.9% first experienced abuse during preschool or later. Results also indicated that of the 168 participants identified as abused, 73.2% were emotionally abused, 41.8% were physically abused, and 14.4% were sexually abused. Further, 33.9% of the abused sample experienced both emotional abuse and physical abuse, 11.3% experienced both emotional abuse and sexual abuse, and 8.3%

experienced both physical and sexual abuse. Overall, 7.7% of the abused sample experienced all 3 forms of abuse.

The sample was 63.1% male and 36.9% female. Because of the low base rates of some of the race categories, race was recoded in order to generate two groups: Caucasian (n = 65; 21.8%) and African American/other (n = 233; 78.2%). Scores on the Children's Depression Inventory ranged between 0 and 38 in this sample; the possible range is 0 to 54. Again, a score above 19 indicates a significant level of depression (Smucker et al., 1986). Scores on the Internalizing Composite of the TRF ranged from 36 to 76 across four time points, with mean scores around 50 to 52. Scores on the Externalizing Composite ranged from 39 to 89 with mean scores around 54 to 56. Again, a T-Score of 63 or higher indicates significant levels of internalizing symptoms and externalizing behaviors on these composite scales (Achenbach, 1991).

Demographic variables including age, gender, and race were explored in relation to the variables of interest in the study. Given that the demographic variables were either continuous or dichotomous, correlational analyses were conducted examining the relation between age, gender, and race with three types of abuse as shown in Table 3. Age and race were significantly related to severity of emotional abuse, whereas race was significantly related to the severity of all three types of abuse as shown in Table 3. Specifically, Caucasian children were more severely abused than African American and minority children. Thus, subsequent regression analyses exploring the relation between abuse and outcomes were conducted controlling for age and race. Gender was not related to any of the three types of abuse. Demographic variables were also explored in relation to onset of abuse, self-esteem, and all outcome variables as shown in Table 4. Again, age

and race correlated significantly with several of the outcome variables, but gender significantly related to only one outcome variable (depression at Time 3). This provides further support for controlling only for age and race in subsequent regression analyses.

Table 3

Correlations of Demographic Variables with Severity of Three Types of Abuse

	Age	Gender	Race
Emotional Abuse	-.166**	.106	.156**
Physical Abuse	-.060	.038	.183**
Sexual Abuse	-.014	-.101	.147*

Note: Physical, sexual, and emotional abuse are severity of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993). Gender was coded as 0=female, 1=male. Race was coded as 0=African American/Other, 1=Caucasian.

* $p < .05$; ** $p < .01$

Table 4

Correlations of Demographic Variables with Onset of Abuse, Social Competence, and Outcome Variables

	Age	Gender	Race
Onset of abuse	-.155	.112	.161*
Depression Time 1	-.256**	-.022	.026
Internalizing Time 1	.018	.020	-.081
Externalizing Time 1	.015	.030	-.066
Aggression Time 1	-.053	-.002	-.122*
Social Competence Time 1	.108	-.018	-.048

Table 4 (continued)

	Age	Gender	Race
Self-esteem Time 1	.173*	.079	.094
Peer Rejection Time 1	-.065	.049	.041
Depression Time 2	-.228**	.103	.084
Internalizing Time 2	-.106	.031	.068
Externalizing Time 2	.006	.063	-.114
Aggression Time 2	-.020	-.021	-.174**
Social Competence Time 2	.078	-.044	-.031
Self-esteem Time 2	.363**	-.068	-.010
Peer Rejection Time 2	-.021	-.022	-.043
Depression Time 3	-.201**	.138*	.062
Internalizing Time 3	-.179**	-.021	.044
Externalizing Time 3	-.074	.046	-.049
Aggression Time 3	-.024	-.058	-.170**
Social Competence Time 3	-.018	.033	-.022
Self-esteem Time 3	.278**	-.028	-.053
Peer Rejection Time 3	-.029	-.018	.066
Depression Time 4	-.168*	.103	.069
Internalizing Time 4	-.007	.001	.095
Externalizing Time 4	-.053	-.033	-.045
Aggression Time 4	.055	.040	-.049
Social Competence Time 4	.116	-.069	-.066
Self-esteem Time 4	.254**	-.014	-.115
Peer Rejection Time 4	-.059	-.091	.147*

Note: Onset of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993); depression scores from the *Children's Depression Inventory* (Kovaks, 1985); internalizing and externalizing scores from *Teacher Report Form* (Achenbach, 1991); aggression and peer rejection calculated from peer nominations (Coie & Dodge, 1983); social competence scores from *Pupil Evaluation Inventory* (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976); mean self-esteem scores from *Coopersmith Self-Esteem Inventory* (Coopersmith, 1981). * $p < .05$; ** $p <. 01$

Correlations Among Variables

To examine the relation of the main variables of interest, each type of abuse (i.e., physical, sexual, and emotional) was correlated with each of the criterion variables (i.e., depression as measured by the CDI, internalizing symptoms and externalizing behaviors as measured by the TRF, aggression and peer rejection as measured by peer nominations, social competence as measured by the PEI, and self-esteem as measured by the CSEI) at Time 1 (Table 5), Time 2 (Table 6), Time 3 (Table 7), and Time 4 (Table 8). Results indicated a relation among the three types of abuse. Specifically, emotional abuse was significantly positively correlated with physical abuse, $r = .43$, $p < .01$, and sexual abuse, $r = .22$, $p < .01$. Physical abuse was significantly positively correlated with sexual abuse, $r = .17$, $p < .01$.

Results indicated that emotional abuse was significantly correlated with each one of the outcomes for at least one time point. The relation between emotional abuse and internalizing symptoms was inconsistent with only two of eight possible correlations between emotional abuse and internalizing symptoms emerging. Specifically, there were significant positive correlations between emotional abuse and internalizing symptoms at Time 1, $r = .13$, $p < .05$, and depression at Time 3, $r = .19$, $p < .01$. In contrast, all eight correlations between emotional abuse and externalizing behaviors were significant. That is, emotional abuse was positively correlated with externalizing behaviors at all four time points: Time 1, $r = .22$, $p < .01$, Time 2, $r = .26$, $p < .01$, Time 3, $r = .23$, $p < .01$, and Time 4, $r = .20$, $p < .01$. Likewise, emotional abuse was significantly positively correlated with aggression at all four time points: Time 1, $r = .16$, $p < .01$, Time 2, $r = .15$, $p < .01$, Time 3, $r = .17$, $p < .01$, and Time 4, $r = .17$, $p < .01$.

Six of the eight correlations between emotional abuse and social problems were significant. That is, emotional abuse was significantly negatively correlated with social competence at Time 1, $r = -.21, p < .01$, Time 2, $r = -.23, p < .01$, Time 3, $r = -.18, p < .01$, and Time 4, $r = -.16, p < .01$. Likewise, emotional abuse was significantly positively correlated with peer rejection at Time 3, $r = .17, p < .01$, and Time 4, $r = .13, p < .05$. Finally, emotional abuse was significantly negatively correlated with self-esteem only at Time 3, $r = -.12, p < .05$.

Physical and sexual abuse also related to many of the outcome variables, underscoring the need to control for physical and sexual abuse in subsequent regression analyses in order to gain a clear picture of the unique relation between emotional abuse and these outcomes. Specifically, physical abuse was significantly positively correlated with depression at Time 2, $r = .16, p < .05$. Physical abuse also was significantly positively correlated with externalizing behaviors at Time 1, $r = .23, p < .01$, Time 2, $r = .31, p < .01$, Time 3, $r = .24, p < .01$, and Time 4, $r = .22, p < .01$, and with aggression at Time 3, $r = .12, p < .05$, and Time 4, $r = .23, p < .01$. The positive correlations between physical abuse and peer rejection were significant at Time 1, $r = .12, p < .05$, and Time 2, $r = .15, p < .05$. The negative correlations between physical abuse and social competence were significant at Time 2, $r = -.22, p < .01$, Time 3, $r = -.13, p < .05$, and Time 4, $r = -.13, p < .05$. Sexual abuse was significantly positively correlated with externalizing behaviors at Time 1, $r = .12, p < .05$, and internalizing symptoms at Time 4, $r = .16, p < .05$.

Table 5

Correlations Among Child Abuse and Psychological Variables at Time 1

	Emotional Abuse	Physical Abuse	Sexual Abuse	Depression	Internalizing	Externalizing	Aggression	Social Competence	Self-esteem	Peer Rejection	Onset of abuse
Emotional abuse	-	.43**	.22**	-.01	.13*	.22**	.16**	-.21**	.027	.04	.14
Physical abuse		-	.17**	.00	.05	.23**	.07	-.09	-.02	.12*	.05
Sexual abuse			-	-.04	.10	.12*	.08	-.06	.04	-.00	.05
Depression				-	.29**	.23**	.10	-.15*	-.59**	.19*	-.04
Internalizing					-	.42**	.21**	-.35**	-.29**	.15**	-.19*
Externalizing						-	.52**	-.47**	-.14	.30**	-.03
Aggression							-	-.34**	-.09	.30**	.01
Social Competence								-	.05	-.25**	.01
Self-esteem									-	-.10	-.05
Peer Rejection										-	.01
Onset of abuse											-

Note. Physical, sexual, and emotional abuse scores (i.e., severity of abuse), as well as onset of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993); depression scores from the *Children's Depression Inventory* (Kovaks, 1985); internalizing and externalizing scores from *Teacher Report Form* (Achenbach, 1991); aggression and peer rejection calculated from peer nominations (Coie & Dodge, 1983); social competence scores from *Pupil Evaluation Inventory* (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976); mean self-esteem scores from *Coopersmith Self-Esteem Inventory* (Coopersmith, 1981). * $p < .05$; ** $p <. 01$

Table 6

Correlations Among Child Abuse Variables at Time 1 and Psychological Variables at Time 2

	Emotional Abuse T1	Physical Abuse T1	Sexual Abuse T1	Depression	Internalizing	Externalizing	Aggression	Social Competence	Self-esteem	Peer Rejection	Onset of abuse
Emotional abuse T1	-	.43**	.22**	.02	.10	.26**	.15**	-.23**	-.06	.03	.14
Physical abuse T1		-	.17**	.16*	.09	.31**	.11	-.22**	-.09	-.01	.05
Sexual abuse T1			-	-.01	.06	.08	-.02	-.07	.03	-.02	.05
Depression				-	.11	.16**	.09	-.20**	-.63**	.05	.01
Internalizing					-	.36**	.11	-.37**	-.16**	.12*	.00
Externalizing						-	.53**	-.55**	-.17**	.15*	.05
Aggression							-	-.36**	-.13*	.33**	.00
Social Competence								-	.20**	-.28**	.03
Self-esteem									-	-.13*	-.07
Peer Rejection										-	.10
Onset of abuse											-

Note. Physical, sexual, and emotional abuse scores (i.e., severity of abuse) at Time 1, as well as onset of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993); depression scores from the *Children's Depression Inventory* (Kovaks, 1985); internalizing and externalizing scores from *Teacher Report Form* (Achenbach, 1991); aggression and peer rejection calculated from peer nominations (Coie & Dodge, 1983); social competence scores from *Pupil Evaluation Inventory* (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976); mean self-esteem scores from *Coopersmith Self-Esteem Inventory* (Coopersmith, 1981). * $p < .05$; ** $p <. 01$

Table 7

Correlations Among Child Abuse Variables at Time 1 and Psychological Variables at Time 3

	Emotional Abuse T1	Physical Abuse T1	Sexual Abuse T1	Depression	Internalizing	Externalizing	Aggression	Social Competence	Self-esteem	Peer Rejection	Onset of abuse
Emotional abuse T1	-	.43**	.22**	.19**	.05	.23**	.17**	-.18**	-.12*	.17**	.14
Physical abuse T1		-	.17**	.07	.01	.24**	.12*	-.13*	-.06	.15*	.05
Sexual abuse T1			-	-.07	.04	.04	.04	-.08	.07	.11	.05
Depression				-	.17**	.19**	.10	-.15*	-.52**	.03	.05
Internalizing					-	.26**	.10	-.33**	-.21**	.12	-.18*
Externalizing						-	.51**	-.51**	-.21**	.29**	-.05
Aggression							-	-.36**	-.12*	.41**	-.05
Social Competence								-	.17**	-.29**	.08
Self-esteem									-	-.04	.03
Peer Rejection										-	-.07
Onset of abuse											-

Note. Physical, sexual, and emotional abuse scores (i.e., severity of abuse) at Time 1, as well as onset of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993); depression scores from the *Children's Depression Inventory* (Kovaks, 1985); internalizing and externalizing scores from *Teacher Report Form* (Achenbach, 1991); aggression and peer rejection calculated from peer nominations (Coie & Dodge, 1983); social competence scores from *Pupil Evaluation Inventory* (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976); mean self-esteem scores from *Coopersmith Self-Esteem Inventory* (Coopersmith, 1981). * $p < .05$; ** $p <. 01$

Table 8

Correlations Among Child Abuse Variables at Time 1 and Psychological Variables at Time 4

	Emotional Abuse T1	Physical Abuse T1	Sexual Abuse T1	Depression	Internalizing	Externalizing	Aggression	Social Competence	Self-esteem	Peer Rejection	Onset of abuse
Emotional abuse T1	-	.43**	.22**	-.04	.11	.20**	.17**	-.16**	-.08	.13*	.14
Physical abuse T1		-	.17**	.02	.09	.22**	.23**	-.13*	-.07	.09	.05
Sexual abuse T1			-	-.05	.16*	.06	.04	-.11	-.02	.12	.05
Depression				-	.18**	.18**	.13	-.23**	-.60**	.04	.02
Internalizing					-	.34**	.14*	-.40**	-.16*	.17**	-.12
Externalizing						-	.63**	-.35**	-.17*	.29**	.00
Aggression							-	-.35**	-.11	.31**	.12
Social Competence								-	.23**	-.32**	.14
Self-esteem									-		-.06
Peer Rejection										-	-.05
Onset of abuse											-

Note. Physical, sexual, and emotional abuse scores (i.e., severity of abuse) at Time 1, as well as onset of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993); depression scores from the *Children's Depression Inventory* (Kovaks, 1985); internalizing and externalizing scores from *Teacher Report Form* (Achenbach, 1991); aggression and peer rejection calculated from peer nominations (Coie & Dodge, 1983); social competence scores from *Pupil Evaluation Inventory* (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976); mean self-esteem scores from *Coopersmith Self-Esteem Inventory* (Coopersmith, 1981). * $p < .05$; ** $p <. 01$

Emotional Abuse as a Predictor of Outcomes

To test the first hypothesis, a series of multiple regression analyses were conducted to determine if emotional abuse predicts a unique amount of variance (i.e., above and beyond physical and sexual abuse) in the criterion variables (i.e., depression, internalizing symptoms, externalizing behaviors, aggression, poor social competence, and low self-esteem) at Time 1. In the first of these analyses, with depression at Time 1 as the criterion variable, age, race, physical abuse, and sexual abuse were entered in the first step (as control variables) and emotional abuse was entered in the second step to determine if emotional abuse accounted for a unique amount of variance in depression at Time 1. Similar analyses were conducted to determine if emotional abuse at Time 1 predicts a unique amount of variance in depression at Time 2, Time 3, and Time 4. The results for emotional abuse predicting depression across all four time points are presented in Table 9.

Table 9

Severity of Emotional Abuse Predicting Depression

	CDI Depression Time 1	CDI Depression Time 2	CDI Depression Time 3	CDI Depression Time 4
Model 1 (Control) R^2	**.063***	**.077****	**.054****	**.033**
Child's Age	-.25**	-.23**	-.20**	-.16*
Child's Race	-.00	.04	.04	.04
Physical Abuse	-.00	.15*	.08	.02
Sexual Abuse	-.03	-.06	-.08	-.06
Model 2 (Main Effects) $R^2\Delta$	**.000**	**.007**	**.028****	**.007**

Table 9 (continued)

	CDI Depression Time 1	CDI Depression Time 2	CDI Depression Time 3	CDI Depression Time 4
Child's Age	-.25**	-.23**	-.17**	-.18**
Child's Race	-.00	.04	.03	.04
Physical Abuse	.00	.19**	.01	.06
Sexual Abuse	-.03	-.04	-.12	-.05
Emotional Abuse	-.00	-.10	.19**	-.09

Note. Beta-weights reported for each predictor. **R^2 or $R^2 \Delta$** for models are show in **bold.**

Depression scores from the *Children's Depression Inventory* (Kovaks, 1985); Physical, sexual, and emotional abuse are severity of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993).

$^{*}p < .05; ^{**}p < .01$

Similar regression analyses were repeated with emotional abuse at Time 1 predicting all four time points for internalizing symptoms (Table 10), externalizing behaviors (Table 11), aggression (Table 12), social competence (Table 13), and self-esteem (Table 14) as the criterion variables.

Results indicated that emotional abuse, after controlling for demographics and physical and sexual abuse, accounted for 2.8% of unique variance in depression at Time 3 as shown in Table 9. Further, results indicated that emotional abuse accounted for 1.4% of unique variance in internalizing symptoms at Time 1 as shown in Table 10.

Table 10

Severity of Emotional Abuse Predicting Internalizing Symptoms

	CBCL Internalizing Time 1	CBCL Internalizing Time 2	CBCL Internalizing Time 3	CBCL Internalizing Time 4
Model 1 (Control) R^2	**.022**	**.021**	**.035†**	**.032†**
Child's Age	.01	-.10†	-.18**	-.00
Child's Race	-.11†	.03	.02	.07
Physical Abuse	.05	.07	-.00	.06
Sexual Abuse	.10†	.05	.04	.14*
Model 2 (Main Effects) $R^2\Delta$	**.014***	**.002**	**.000**	**.003**
Child's Age	.03	-.09	-.18**	.01
Child's Race	-.11†	.03	.02	.07
Physical Abuse	.00	.05	-.01	.04
Sexual Abuse	.08	.04	.03	.13*
Emotional Abuse	.14*	.05	.02	.06

Note. Beta-weights reported for each predictor. **R^2 or $R^2\Delta$** for models are show in **bold.**

Internalizing scores from *Teacher Report Form* (Achenbach, 1991); Physical, sexual, and emotional abuse are severity of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993).

† Trend, $p < .10$; * $p < .05$; ** $p < .01$

Emotional abuse accounted for a significant amount of unique variance in externalizing behaviors across time points as shown in Table 11. Specifically, emotional abuse accounted for 1.8% of unique variance at Time 1, 2.3% of unique variance at Time 2, and 2.0% of unique variance at Time 3. Emotional abuse predicted a marginally

significant amount (1.3%) of unique variance in externalizing behaviors at Time 4. Emotional abuse accounted for a significant amount of unique variance in aggression at three time points as shown in Table 12. Specifically, emotional abuse accounted for 2.0% of unique variance at Time 1, 1.8% of unique variance at Time 2, and 1.8% of unique variance at Time 3.

Table 11

Severity of Emotional Abuse Predicting Externalizing Behaviors

	CBCL Externalizing Time 1	CBCL Externalizing Time 2	CBCL Externalizing Time 3	CBCL Externalizing Time 4
Model 1 (Control) R^2	**.073****	**.125****	**.075****	**.060****
Child's Age	.02	.00	-.08	-.06
Child's Race	-.12*	-.17**	-.11†	-.09
Physical Abuse	.23**	.33**	.26**	.23**
Sexual Abuse	.10†	.05	.01	.03
Model 2 (Main Effects) $R^2\Delta$	**.018***	**.023****	**.020***	**.013†**
Child's Age	.04	.03	-.06	-.04
Child's Race	-.12*	-.17**	-.12†	-.09
Physical Abuse	.17**	.26**	.20**	.18**
Sexual Abuse	.08	.02	-.02	.02
Emotional Abuse	.16*	.17**	.16*	.13†

Note. Beta-weights reported for each predictor. **R^2 or $R^2\Delta$** for models are show in **bold.**

Externalizing scores from *Teacher Report Form* (Achenbach, 1991); Physical, sexual, and emotional abuse are severity of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993).

† Trend, $p < .10$; $^{*}p < .05$; $^{**}p < .01$

Table 12

Severity of Emotional Abuse Predicting Aggression

	Aggression Time 1	Aggression Time 2	Aggression Time 3	Aggression Time 4
Model 1 (Control) R^2	**.031†**	**.054****	**.057****	**.064****
Child's Age	-.07	-.04	-.05	.05
Child's Race	-.15*	-.21**	-.21**	-.08
Physical Abuse	.07	.15**	.15**	.24**
Sexual Abuse	.08	-.02	.04	.01
Model 2 (Main Effects) $R^2\Delta$	**.020***	**.018***	**.018***	**.008**
Child's Age	-.04	-.02	-.03	.07
Child's Race	-.15**	-.21**	-.22**	-.08
Physical Abuse	.01	.09	.20	.21**
Sexual Abuse	.06	-.04	.01	-.00
Emotional Abuse	.16**	.15*	.15*	.10

Note. Beta-weights reported for each predictor. **R^2 or $R^2\Delta$** for models are show in **bold.**

Aggression calculated from peer nominations (Coie & Dodge, 1983); Physical, sexual, and emotional abuse are severity of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993).

† Trend, $p < .10$; * $p < .05$; ** $p < .01$

Emotional abuse contributed a significant amount of unique variance in social competence across time points as shown in Table 13. Notably, the relation between emotional abuse and social competence was negative, indicating that more severe emotional abuse was related to poorer social competence. Emotional abuse accounted for 2.7% of unique variance at Time 1, 1.8% of unique variance at Time 2, and 1.9% of

unique variance at Time 3. Emotional abuse accounted for a marginally significant amount of unique variance (1.1%) in social competence at Time 4. Finally, emotional abuse did not predict a unique amount of variance in self-esteem as shown in Table 14.

Table 13

Severity of Emotional Abuse Predicting Social Competence

	Social Competence Time 1	Social Competence Time 2	Social Competence Time 3	Social Competence Time 4
Model 1 (Control) R^2	**.022**	**.052****	**.020**	**.023**
Child's Age	.10†	.07	-.02	.07
Child's Race	-.03	.01	-.01	-.04
Physical Abuse	-.07	-.21**	-.12†	-.09
Sexual Abuse	-.05	-.03	-.06	-.07
Model 2 (Main Effects) $R^2\Delta$	**.027****	**.018***	**.019***	**.011†**
Child's Age	.08	.05	-.04	.05
Child's Race	-.02	.02	-.01	-.04
Physical Abuse	.01	-.15*	-.06	-.04
Sexual Abuse	-.02	-.00	-.03	-.05
Emotional Abuse	-.19**	-.15*	-.16*	-.12†

Note. Beta-weights reported for each predictor. **R^2 or $R^2\Delta$** for models are show in **bold.**

Social competence scores from *Pupil Evaluation Inventory* (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976); Physical, sexual, and emotional abuse are severity of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993).

† Trend, $p < .10$; $^{*}p < .05$; $^{**}p < .01$

Table 14

Severity of Emotional Abuse Predicting Self-esteem

	Self-esteem Time 1	Self-esteem Time 2	Self-esteem Time 3	Self-esteem Time 4
Model 1 (Control) R^2	**.043**	**.142****	**.085****	**.072****
Child's Age	.17*	.37**	.28**	.25**
Child's Race	.12	.05	.00	-.06
Physical Abuse	-.03	-.08	-.07	-.05
Sexual Abuse	.02	.05	.07	-.01
Model 2 (Main Effects) $R^2\Delta$	**.001**	**.000**	**.006**	**.000**
Child's Age	.17*	.37**	.26**	.24**
Child's Race	.12	.05	.01	-.06
Physical Abuse	-.05	-.08	-.03	-.04
Sexual Abuse	.02	.05	.08	.00
Emotional Abuse	.03	.00	-.09	-.03

Note. Beta-weights reported for each predictor. **R^2 or $R^2\Delta$** for models are show in **bold.**

Mean self-esteem scores from *Coopersmith Self-Esteem Inventory* (Coopersmith, 1981);

Physical, sexual, and emotional abuse are severity of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993).

$^{*}p < .05; ^{**}p < .01$

To examine the first hypothesis with peer rejection as the outcome, binary logistic regression analyses were conducted to examine the unique relation between emotional abuse and peer rejection at Time 1 (Table 15), Time 2 (Table 16), Time 3 (Table 17) and Time 4 (Table 18). In this series of analyses, emotional abuse, physical abuse, sexual

abuse, race, and age were entered simultaneously. Wald χ^2 for emotional abuse at each time point were examined for significance. When controlling for physical abuse, sexual abuse, race, and age, emotional abuse did not significantly predict peer rejection at any of the four time points.

Table 15

Severity of Emotional Abuse Predicting Peer Rejection at Time 1

	Peer Rejected vs. Non Peer Rejected			
Predictor	*B*	SE	Odds Ratio	Wald χ^2
Emotional Abuse	-.022	.089	.978	.062
Physical abuse	.229	.122	1.257	3.534
Sexual abuse	-.056	.176	.945	.103
Race	-.015	.361	.985	.002
Age of the child	-.108	.106	.898	1.034

Note. Physical, sexual, and emotional abuse are severity of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993); peer rejection calculated from peer nominations (Coie & Dodge, 1983).

Table 16

Severity of Emotional Abuse Predicting Peer Rejection at Time 2

	Peer Rejected vs. Non Peer Rejected			
Predictor	*B*	SE	Odds Ratio	Wald χ^2
Emotional Abuse	.008	.095	1.008	.007

Table 16 (continued)

Predictor	*B*	SE	Odds Ratio	Wald χ^2
Physical abuse	.206	.129	1.228	2.526
Sexual abuse	.268	.151	1.307	3.145†
Race	.034	.388	1.034	.007
Age of the child	.062	.109	1.064	.319

Note. Physical, sexual, and emotional abuse are severity of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993); peer rejection calculated from peer nominations (Coie & Dodge, 1983).

Table 17

Severity of Emotional Abuse Predicting Peer Rejection at Time 3

	Peer Rejected vs. Non Peer Rejected			
Predictor	*B*	SE	Odds Ratio	Wald χ^2
Emotional Abuse	.142	.087	1.153	2.640
Physical abuse	.154	.123	1.166	1.552
Sexual abuse	.150	.162	1.162	.864
Race	-.162	.366	.850	.196
Age of the child	-.016	.110	.984	.020

Note. Physical, sexual, and emotional abuse are severity of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993); peer rejection calculated from peer nominations (Coie & Dodge, 1983).

Table 18

Severity of Emotional Abuse Predicting Peer Rejection at Time 4

	Peer Rejected vs. Non Peer Rejected			
Predictor	*B*	SE	Odds Ratio	Wald χ^2
Emotional Abuse	.107	.087	1.112	1.509
Physical abuse	.035	.126	1.036	.079
Sexual abuse	.169	.147	1.184	1.311
Race	-.655	.340	.519	3.719†
Age of the child	-.071	.112	.931	.406

Note. Physical, sexual, and emotional abuse are severity of abuse scores from the *Maltreatment Classification System* (Barnett et al., 1993); peer rejection calculated from peer nominations (Coie & Dodge, 1983).

Moderators in the Relation Between Emotional Abuse and Outcomes

Next, a series of moderated multiple regression analyses were conducted to test the second, fifth, and sixth hypotheses. Specifically, to test the second hypothesis, analyses were conducted to determine if self-esteem moderated the relation between emotional abuse and the criterion variables. To test the fifth exploratory hypothesis, moderated multiple regression analyses were conducted to explore whether the child's gender or age interacted with emotional abuse in the prediction of outcomes. Finally, to test the sixth exploratory hypothesis, moderated multiple regression analyses were conducted to explore whether the developmental period of onset of abuse moderated the relation between emotional abuse and outcomes. Analyses examining the interaction

between severity of emotional abuse and onset of abuse were conducted using the abused sample only (N=168). Before conducting the regression analyses, correlations between potential moderators and criterion variables were conducted as shown in Table 19.

Table 19

Correlations of Possible Moderators and Psychological Outcomes

	Gender	Age	Onset of Abuse	Self-esteem Time 1	Self-esteem Time 2	Self-esteem Time 3	Self-esteem Time 4
Depression Time 1	-.022	-.256**	-.039	-.558**			
Depression Time 2	.103	-.228**	.006	-.301**	-.630**		
Depression Time 3	.138*	-.201**	.054	-.210*	-.426**	-.518**	
Depression Time 4	.103	-.168**	.016	-.106	-.264**	-.464**	-.595**
Internalizing Time 1	.020	.018	-.188*	-.289**			
Internalizing Time 2	.031	-.106	.003	-.209**	-.164**		
Internalizing Time 3	-.021	-.179**	-.179*	-.157	-.156*	-.213**	
Internalizing Time 4	.001	-.007	-.120	-.066	-.012	-.166*	-.160*
Externalizing Time 1	.030	.015	-.030	-.141			
Externalizing Time 2	.063	.006	.048	-.099	-.165**		
Externalizing Time 3	.046	-.074	-.049	-.099	-.122	-.208**	
Externalizing Time 4	-.033	-.053	.000	-.087	-.096	-.212**	-.167*
Aggression Time 1	-.002	-.053	.013	-.089			
Aggression Time 2	-.021	-.020	.001	-.095	-.125*		
Aggression Time 3	-.058	-.024	-.054	-.074	.021	-.124*	
Aggression Time 4	.040	.055	.115	-.124	.018	-.031	-.110
Social Competence Time 1	-.018	.108	.011	.049			
Social Competence Time 2	-.044	.078	.025	.091	.203**		
Social Competence Time 3	.033	-.018	.082	.062	.064	.168**	
Social Competence Time 4	-.069	.116	.142	.076	.147*	.255**	.225**

Table 19 (continued)

	Gender	Age	Onset of Abuse	Self-esteem Time 1	Self-esteem Time 2	Self-esteem Time 3	Self-esteem Time 4
Peer Rejection Time 1	.049	-.065	.006	-.097			
Peer Rejection Time 2	-.022	-.021	-.042	-.161*	-.134*		
Peer Rejection Time 3	-.018	-.029	-.067	-.065	.068	-.043	
Peer Rejection Time 4	-.091	-.059	-.053	-.098	-.038	-.170*	-.131

Note. Depression scores from the *Children's Depression Inventory* (Kovaks, 1985); internalizing and externalizing scores from *Teacher Report Form* (Achenbach, 1991); aggression and peer rejection calculated from peer nominations (Coie & Dodge, 1983); social competence scores from *Pupil Evaluation Inventory* (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976); mean self-esteem scores from *Coopersmith Self-Esteem Inventory* (Coopersmith, 1981).

* $p < .05$; ** $p <. 01$

Overall, self-esteem generally correlated with depression, internalizing symptoms, externalizing behaviors, and social competence across time points. Further, age correlated with depression across time points. Gender correlated with depression at Time 3, whereas onset of abuse correlated with internalizing symptoms at Time 1 and Time 3. Given that significant interactions can be found even in the absence of a main effect, all possible interactions were still examined.

In the moderated multiple regression analyses, physical abuse, sexual abuse, age of the child (with the exception of analyses examining age as the potential moderator), and race were entered simultaneously in the first step as control variables. Emotional abuse and the potential moderator were then entered simultaneously in the second step. The interaction term was entered in the third step to determine if the interaction

significantly increased the amount of variance explained in the criterion variable. In examining gender, age, and onset of abuse as potential moderators, the outcome variables were depression, internalizing symptoms, externalizing behaviors, aggression, social competence, and self-esteem at all four time points. Self-esteem at all four time points was examined as a potential moderator in the relation between emotional abuse and criterion variables at time points concurrent with and following the time self-esteem data were collected. Specifically, Time 1 self-esteem was examined as a moderator at all four time points; Time 2 self-esteem was examined as a moderator at Time 2 through Time 4; Time 3 self-esteem was examined as a moderator at Time 3 and 4; and, finally, Time 4 self-esteem was examined as a moderator at Time 4 only. Scores on emotional abuse, self-esteem, age, gender, and onset of abuse were centered using sample means prior to creating the interaction terms to reduce multicollinearity between predictors and the interaction term among them and to aid in the interpretation of post-hoc probing of any significant interactions (Holmbeck, 2002). The R^2 Δ for each model was tested for significance to determine if the addition of the interaction term significantly increased the amount of criterion variance predicted in the model.

Overall, 122 moderated multiple regression analyses were conducted. Only 8 significant interactions ($p < .05$) and 7 marginally significant interactions ($p < .10$) emerged. For each of these 15 significant or marginally significant interactions, the R^2 Δ for step 3 and beta-weight for the interaction term is reported. Likewise, the beta-weight for each of these 15 interactions when examined in a reduced model is reported. Figures showing the post-hoc probes of six of the eight significant interaction effects (i.e., those that remained significant in a reduced model) are provided.

Self-esteem as a moderator. Analyses exploring self-esteem as a potential moderator resulted in four significant interactions and three marginally significant interactions. There was a significant interaction between emotional abuse and self-esteem at Time 2 in the prediction of social competence at Time 2, $R^2 \Delta = .028, p < .05, \beta = -.170, p < .05$, which held in a reduced model, $\beta = -.161, p < .01$. Specifically, whereas children with low self-esteem at Time 2 were rated as having less social competence at Time 2 compared to children with high self-esteem, children with high severity ratings of emotional abuse displayed low social competence regardless of self-esteem as shown in Figure 1.

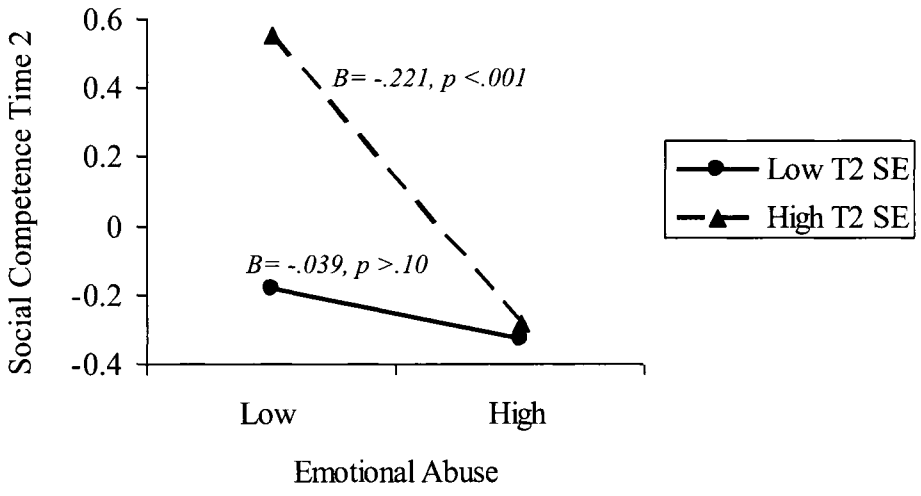

Figure 1. The interaction between severity of emotional abuse and self-esteem at Time 2 predicting social competence at Time 2.

There was a significant interaction between emotional abuse and self-esteem at Time 2 in the prediction of externalizing behaviors at Time 2, $R^2 \Delta = .013, p = .05, \beta = .113, p = .05$. However, this interaction did not hold in a reduced model including only

the main effects and interaction, $\beta = .094, p > .10$. Thus, no post-hoc probe was conducted.

There was a significant interaction between emotional abuse and self-esteem at Time 3 in the prediction of depression at Time 3, $R^2 \Delta = .018, p < .05, \beta = -.135, p < .05$, which held in a reduced model, $\beta = -.141, p < .01$. There was also a marginally significant interaction between emotional abuse and self-esteem at Time 3 in the prediction of depression at Time 4, $R^2 \Delta = .013, p < .10, \beta = .117, p < .10$, which held in a reduced model, $\beta = .110, p < .10$. Finally, there was a significant interaction between emotional abuse and self-esteem at Time 4 in the prediction of depression at Time 4, $R^2 \Delta = .015, p < .05, \beta = .122, p < .05$, which held in a reduced model, $\beta = .119, p < .05$. There was a main effect of self-esteem; those with higher self-esteem at Time 3 and Time 4 reported less depression at Time 3 and Time 4 than those with lower self-esteem. Further, when self-esteem at Time 3 was low, those children with higher severity ratings of emotional abuse had higher levels of depressive symptoms at Time 3 than those children with lower severity ratings of emotional abuse as shown in Figure 2. However, when self-esteem at Time 4 was low, those children with higher severity ratings of emotional abuse had lower levels of depressive symptoms at Time 4 than those children with lower severity ratings of emotional abuse as shown in Figure 3. This same pattern was found when examining Time 3 self-esteem as a moderator between emotional abuse and depression at Time 4 (marginally significant). Therefore, the relation between self-esteem, emotional abuse, and depression was not consistent at various time points.

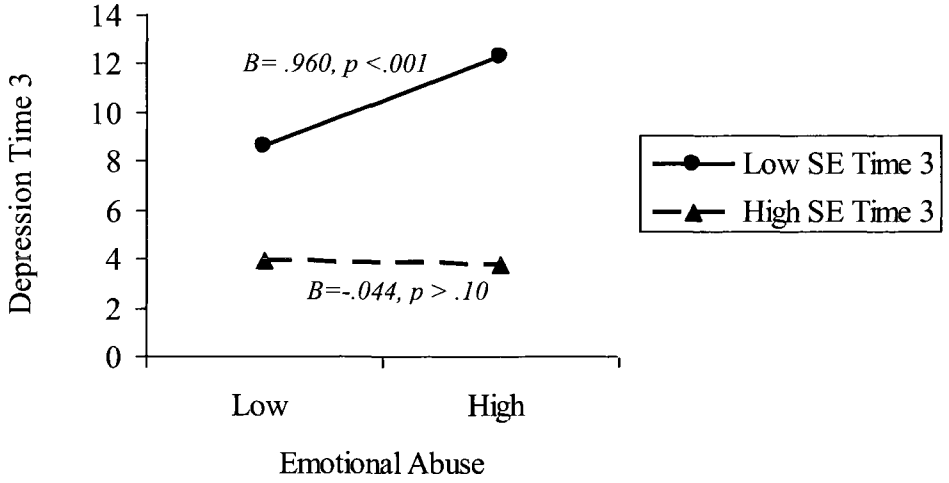

Figure 2. The interaction between severity of emotional abuse and self-esteem at Time 3 predicting depression at Time 3.

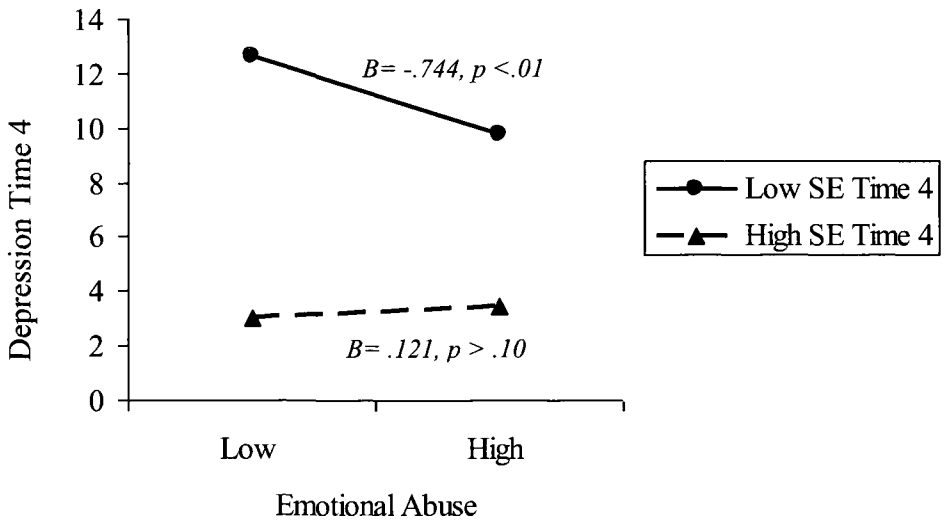

Figure 3. The interaction between severity of emotional abuse and self-esteem at Time 4 predicting depression at Time 4.

Results indicated a marginally significant interaction between emotional abuse and self-esteem at Time 1 in the prediction of depression at Time 1, $R^2 \Delta = .013, p < .10$, $\beta = -.115, p < .10$, which held in a reduced model, $\beta = -.117, p < .10$. However, post-hoc plotting analyses indicated that slopes for both main effects were not significant. There was a marginally significant interaction between emotional abuse and self-esteem at Time 2 in the prediction of aggression at Time 2, $R^2 \Delta = .011, p < .10$, $\beta = .106, p < .10$, which held in a reduced model, $\beta = .101, p < .10$. Because the interaction was not statistically significant, a figure of the plot is not included; however, the plot was conducted to provide an overall picture of how these findings fit with previous literature. Specifically, children with higher severity ratings of emotional abuse tended to be rated as more aggressive by their peers regardless of their level of self-esteem, whereas higher self-esteem was associated with lower levels of aggression for children with lower severity ratings of emotional abuse.

Demographics (gender and age) as a moderator. Analyses exploring gender and age as potential moderators resulted in three significant interactions and two marginally significant interactions. First, there was a significant interaction between emotional abuse and gender in the prediction of depression at Time 2, $R^2 \Delta = .019, p < .05$, $\beta = -.143, p < .05$. This interaction held in a reduced model including only the main effects and interaction, $\beta = -.129, p < .05$. However, although this interaction was significant, post-hoc plotting analyses revealed that the main effect for girls was marginally significant, whereas the main effect for boys was not significant; thus this finding should be interpreted with caution. The post-hoc plot as shown in Figure 4 indicated that girls with higher emotional abuse severity ratings tended to demonstrate higher levels of depression

at Time 2 than girls with lower emotional abuse severity ratings, but this same pattern was not found for males.

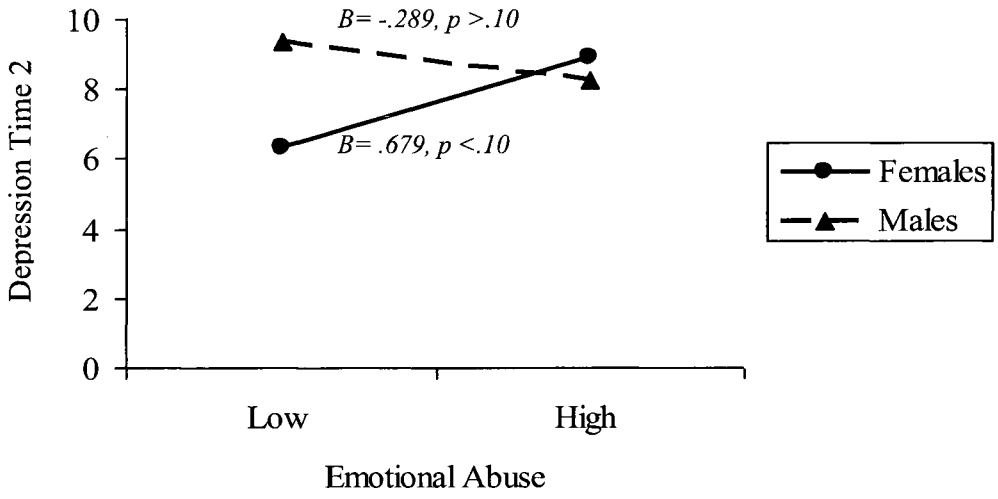

Figure 4. The interaction between severity of emotional abuse and gender predicting depression at Time 2.

Further, there was a significant interaction between emotional abuse and age in the prediction of depression at Time 3, $R^2 \Delta = .025, p < .05$, $\beta = -.160, p < .05$, which also held in a reduced model, $\beta = -.157, p < .05$. Specifically, when emotional abuse severity was high, younger children reported more depression symptoms at Time 3 than did older children as shown in Figure 5. Finally, there was a significant interaction between emotional abuse and age in the prediction of externalizing behaviors at Time 3, $R^2 \Delta = .034, p < .05$, $\beta = -.229, p < .05$. However, this interaction was no longer significant in a reduced model including only the main effects and interaction, $\beta = .072, p > .10$. Therefore, a post-hoc probe of was not conducted.

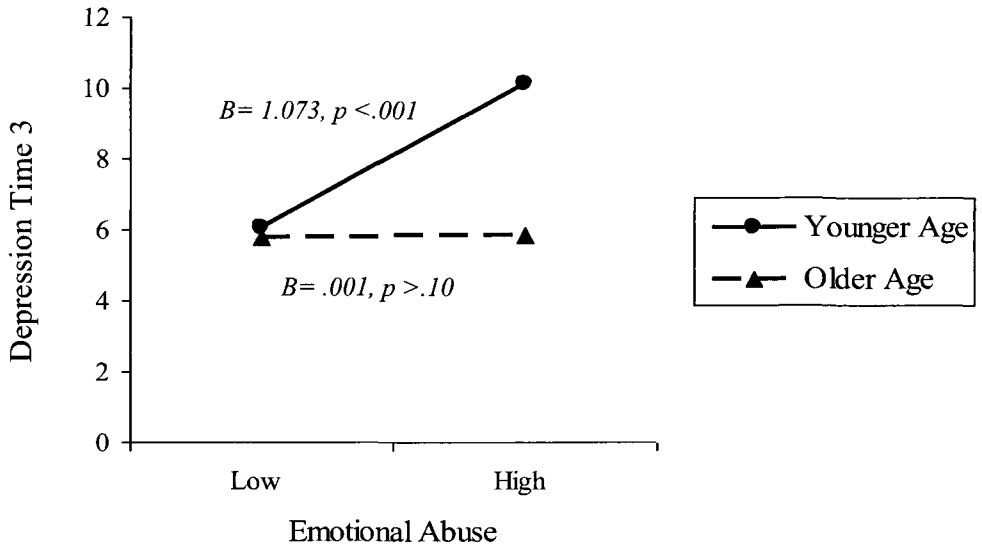

Figure 5. The interaction between severity of emotional abuse and age predicting depression at Time 3.

There was a marginally significant interaction between emotional abuse and age in the prediction of internalizing symptoms at Time 2, $R^2 \Delta = .010, p < .10$, $\beta = .099, p < .10$, as well as social competence at Time 4, $R^2 \Delta = .011, p = .10$, $\beta = -.107, p = .10$. These interactions remained marginally significant in reduced models, $\beta = .103, p < .10$ and $\beta = -.114, p < .10$, respectively. Because these findings were only marginally significant, the plots are not included. However, to determine how these findings fit with previous literature, the plots were conducted and showed that, when emotional abuse severity ratings were high, older children tended to display more internalizing symptoms at Time 2 compared to younger children. Further, when emotional abuse severity ratings were high, younger children tended to display higher social competence compared to older children.

Onset of abuse as a moderator. Analyses exploring onset of abuse as a potential moderator resulted in one significant interaction and two marginally significant interactions. There was a significant interaction between emotional abuse and onset of abuse in the prediction of internalizing symptoms at Time 4, $R^2 \Delta = .064, p < .05, \beta = .314, p < .05$, which remained significant in a reduced model, $\beta = .296, p < .01$. Specifically, whereas children with low severity ratings of emotional abuse who first experienced abuse during infancy or toddlerhood displayed more internalizing symptoms at Time 4 than children first experiencing abuse during preschool or later childhood, children with more severe emotional abuse displayed comparable internalizing symptoms regardless of onset of abuse as shown in Figure 6.

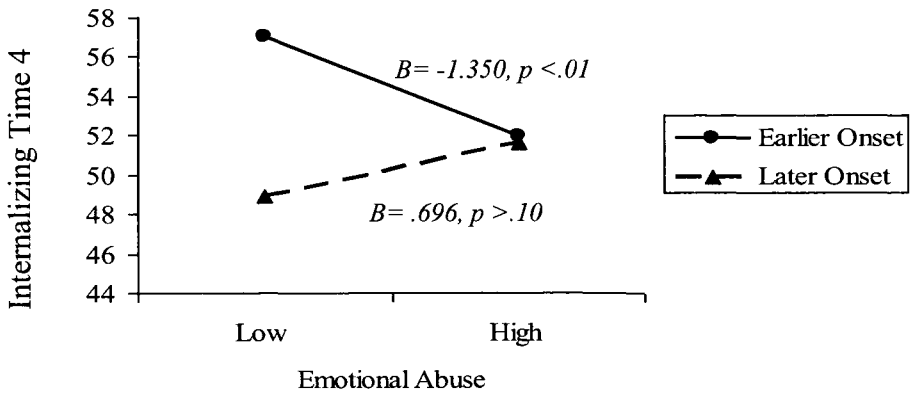

Figure 6. The interaction between severity of emotional abuse and onset of abuse predicting internalizing symptoms at Time 4.

There was a marginally significant interaction between emotional abuse and onset of abuse in the prediction of internalizing symptoms at Time 2, $R^2 \Delta = .023, p < .10, \beta = .185, p < .10$, which remained marginally significant in a reduced model, $\beta = .180, p <$

.10. However, post-hoc plotting analyses indicated that slopes for each main effect were not significant. Further, a marginally significant interaction between emotional abuse and onset of abuse in the prediction of internalizing symptoms at Time 3, $R^2 \Delta = .023, p < .10$, $\beta = .187, p < .10$, did not remain significant in a reduced model, $\beta = .158, p > .10$. Thus, no conclusions were drawn from either of these marginally significant analyses.

Moderators in the relation between emotional abuse and peer rejection. Binary logistic regression analyses were conducted to examine self-esteem, gender, age, and onset of abuse as potential moderators in the relation between emotional abuse and peer rejection across time points. Overall, 22 binary logistic regressions were conducted, with controls, main effects, and possible moderators set up in models as those described for the moderated multiple regression analyses above.

Of these 22 analyses, 4 significant interactions emerged. Results indicated that there was a significant interaction between emotional abuse and self-esteem at Time 1 in the prediction of peer rejection at Time 2. The model was significant, $\chi^2(7, N = 173) = 22.87, p < .01$, with self-esteem demonstrating a significant relation, $B = -4.27, p < .05$, and the interaction term demonstrating a significant relation, $B = 1.89, p < .05$, which held in a reduced model, $B = 1.66, p < .05$. Post-hoc probing at high and low levels of the moderator (self-esteem at Time 1) indicated that children with higher severity ratings of emotional abuse were more likely to experience peer rejection when their self-esteem was low than when their self-esteem was high. In fact, when self-esteem was low, emotional abuse severity was 1.64 times more likely to predict peer rejection than when self-esteem was high. Results also indicated that there was a significant interaction between emotional abuse and self-esteem at Time 2 in the prediction of peer rejection at Time 2.

The model was significant, $\chi^2(7, N = 264) = 14.90, p < .05$, with self-esteem demonstrating a significant relation, $B = -2.74, p < .05$, and the interaction term demonstrating a significant relation, $B = 1.22, p < .05$. The interaction was only marginally significant in a reduced model, $B = 1.08, p < .10$.

Results indicated that there was a significant interaction between emotional abuse and age in the prediction of peer rejection at Time 2. The model was significant, $\chi^2(6, N = 296) = 15.47, p < .05$, with the interaction term demonstrating the only significant relation, $B = .159, p < .01$. This interaction remained significant in a reduced model, $B = .152, p < .01$. Post-hoc probing at younger and older ages indicated that older children with higher severity ratings of emotional abuse were more likely to experience peer rejection than were children with lower severity ratings of emotional abuse. In fact, emotional abuse severity was 1.56 times more likely to predict peer rejection for older children than for younger children. Results also indicated that there was a significant interaction between emotional abuse and gender in the prediction of peer rejection at Time 1. However, the overall model was not significant, $\chi^2(7, N = 298) = 11.68, p > .10$, with the interaction term demonstrating the only significant relation, $B = -.470, p < .05$. Although this interaction remained significant in a reduced model, $B = .425, p < .05$, post-hoc plotting analyses revealed that the main effects for females, as well as the main effect for males, were not significant.

Mediators in the Relation Between Emotional Abuse and Outcomes

Although the third hypothesis predicted that self-esteem at Time 2 would mediate the relation between emotional abuse and the criterion variables at latter time points, emotional abuse was not related to self-esteem at Time 2 (see Table 6), which meant that

the full criteria for mediation could not be met (Baron & Kenny, 1986). Thus, the third hypothesis was not further tested. To examine the fourth hypothesis, a series of regression analyses was conducted to determine if social competence at Time 2 mediated the relation between emotional abuse and other negative outcomes (depression, internalizing symptoms, externalizing behaviors, aggression, peer rejection, and low self-esteem) at latter time points (Time 3 and Time 4) using the approach suggested by Baron and Kenny (1986).

For each test of social competence as a mediator in the relation between emotional abuse and each criterion variable, three regression analyses were conducted: (1) regressing the potential mediator (social competence at Time 2) on the predictor (emotional abuse); (2) regressing the criterion variable on the predictor (emotional abuse); and (3) regressing the criterion variable on the predictor (emotional abuse) and the possible mediator (social competence at Time 2) simultaneously.

After controlling for physical abuse, sexual abuse, age, and race, severity of emotional abuse significantly predicted social competence at Time 2, $R^2 \Delta = .018$, $F(1,278) = 5.429$, $\beta = -.154$, $p < .05$, thus fulfilling the first requirement for mediation. After controlling for physical abuse, sexual abuse, age, and race, emotional abuse was significantly related to: depression at Time 3 (see Table 9), externalizing behaviors at Time 3 and Time 4 (see Table 11), and aggression at Time 3 (see Table 12). All of these findings fulfill the second requirement for mediation for these particular criterion variables. Therefore, the final regression analyses to test for social competence as a mediator were only conducted for these four outcome variables. Internalizing symptoms,

peer rejection, and low self-esteem were not examined as outcomes in the mediation analyses because they failed the second requirement.

To test for the third and fourth requirements for mediation, emotional abuse and social competence at Time 2 were entered simultaneously (as described in the third regression analysis step above). In the four analyses, social competence emerged as a potential partial mediator in the relation between emotional abuse and three outcomes. Specifically, when controlling for emotional abuse, social competence at Time 2 significantly predicted externalizing behaviors at Time 3, $\beta = -.315$, $p < .001$, fulfilling the third requirement for mediation. When controlling for social competence at Time 2, the relation between emotional abuse and externalizing behaviors at Time 3, $\beta = .140$, $p < .05$, was reduced. The Sobel test was then conducted to test the possible partial mediation for significance (Holmbeck, 2002). Results indicated a significant reduction in the beta-weight for emotional abuse when social competence at Time 2 was entered, $t = 2.15$, $p < .05$. Thus, the fourth requirement was met demonstrating that social competence at Time 2 acted as a partial mediator in the relation between emotional abuse and externalizing behaviors at Time 3.

When controlling for severity of emotional abuse, social competence at Time 2 significantly predicted externalizing behaviors at Time 4, $\beta = -2.73$, $p < .001$, fulfilling the third requirement for mediation. When controlling for social competence at Time 2, the relation between emotional abuse and externalizing behaviors at Time 4 was reduced, $\beta = .119$, $p < .10$. Sobel test results indicated a significant reduction in the beta-weight for emotional abuse when social competence at Time 2 was entered, $t = 2.07$, $p < .05$. Thus, the fourth requirement was met demonstrating that social competence at Time 2 acted as

a partial mediator in the relation between severity of emotional abuse and externalizing behaviors at Time 4.

Social competence at Time 2 also significantly predicted aggression at Time 3, $\beta = -.265$, $p < .001$, when controlling for severity of emotional abuse, fulfilling the third requirement for mediation. When controlling for social competence at Time 2, the relation between severity of emotional abuse and aggression at Time 3 was reduced, $\beta = .119$, $p < .10$. Sobel test results indicated a significant reduction in the beta-weight for emotional abuse when social competence at Time 2 was entered, $t = 2.08$, $p < .05$. Thus, the fourth requirement was met demonstrating that social competence at Time 2 acted as a partial mediator in the relation between emotional abuse and aggression at Time 3.

Social competence at Time 2 also significantly predicted depression at Time 3, $\beta = -.139$, $p < .05$, when controlling for emotional abuse, fulfilling the third requirement for mediation. However, when controlling for social competence at Time 2, the relation between emotional abuse and depression at Time 3 was not significantly reduced, $\beta = -.184$, $p < .05$, based on the Sobel test, $t = 1.57$, $p > .10$. Overall, results indicated that social competence at Time 2 partially mediated the relation between emotional abuse and externalizing behaviors at Time 3, emotional abuse and externalizing behaviors at Time 4, and emotional abuse and aggression at Time 3.

CHAPTER IV

DISCUSSION

Unique Effects of Emotional Abuse

The results of the current study provided support for several of the hypotheses. After controlling for a history of physical and sexual abuse, severity of emotional abuse was found to be related to counselor-reported internalizing and externalizing behaviors, self-reported depression, peer-reported aggression, and counselor-reported social competence, providing partial support for the first hypothesis. Specifically, severity of emotional abuse was related to internalizing symptoms at Time 1, depression at Time 3, externalizing behaviors at all four time points, aggression at three time points, and social competence at all four time points.

These findings are consistent with previous research that found a relation between emotional abuse and externalizing behaviors in adolescents (Arata, et al., 2007), severity of emotional abuse and aggression in children (Manly et al., 2001), severity of emotional abuse and social problems in children (Bolger et al., 1998), and emotional abuse and peer-rated aggression in children (Kaufman & Cicchetti, 1989). However, previous studies did not examine the relation between severity of emotional abuse and externalizing behaviors, aggression, and social competence across multiple time points. The current study suggests that the effects of emotional abuse are pervasive across time. It is important to note that emotional abuse was related to both peer-reported aggression and counselor-reported externalizing behaviors. The agreement between multiple reporters strengthens the finding that emotional abuse contributes to aggression and other behavioral problems in children. Whereas emotional abuse contributed a significant

proportion of variance to externalizing behaviors and aggression, physical abuse contributed somewhat more variance to counselor-reported externalizing behaviors in this sample. This finding is consistent with past research that has demonstrated a link between physical abuse and aggression in children (Finzi et al., 2001; Kaufman & Cicchetti, 1989; Maxwell & Maxwell, 2003). Further, whereas emotional abuse related to counselor-reported social competence, it was not related to peer-reported peer rejection. That is, findings suggest that adults viewed emotionally abused children as less socially competent, but peers made no such distinction.

The finding that severity of emotional abuse was related to self-reported depression only at Time 3 was surprising given previous findings in studies conducted with adult populations that demonstrated a link between emotional abuse and depression (e.g., Bifulco et al., 2002; Briere & Runtz, 1988; Ferguson & Dacey, 1997; Fryer & Barry, 2009; Gibb et al., 2003; Gross & Keller, 1992), as well as findings in a study conducted with a similar sample that found emotional abuse contributed to depression in children across time (Kim & Cicchetti, 2006). One possible explanation for the lack of relation between emotional abuse and depression at multiple time points is the previous finding that older abused children reported less depression than younger abused children (Kim & Cicchetti, 2006; Lynch & Cicchetti, 1998). That is, the current study found that age contributed a significant amount of variance to self-reported depression across four time points, and it is thus possible that older children underreported depressive symptoms. It is also possible that children developed coping skills over time, resulting in fewer self-reported symptoms of depression at later time points. However, given the fact the emotional abuse was not related to counselor-reported internalizing symptoms at later

time points, it is unclear if age alone impacted these findings. Also, age was examined as a moderator in the relation between emotional abuse and outcomes and, overall, findings did not suggest that age significantly impacted these relations. Therefore, it appears that emotional abuse as examined within this sample did not relate consistently to depression and other internalizing symptoms and seemed to be a much better predictor of disruptive behavior problems.

Emotional abuse was not related to self-esteem in the current study. Previous findings in studies conducted with adult populations have demonstrated a link between childhood emotional abuse and low self-esteem in adulthood (e.g., Briere & Runtz, 1990; Fryer & Barry, 2009; Gross & Keller, 1992). However, these studies failed to explore the unique effects of severity of emotional abuse on self-esteem in childhood. Further, current results are not consistent with the findings of Kim and Cicchetti (2006) indicating a relation between emotional abuse and self-esteem across time in a population similar to the current sample. Cerezo and Frias (1994) also demonstrated a relation between the presence of emotional abuse and low self-esteem in 10-year-olds; however, they failed to control for the presence of other forms of abuse, suggesting that self-esteem may have been influenced by the presence of co-occurring forms of abuse. However, the current findings are consistent with findings of a previous study that failed to find a relation between severity of emotional abuse and self-reported self-esteem in children (Bolger et al., 1998). A possible explanation is that children reported inflated self-esteem, despite feelings of lack of self-worth. Researchers have identified two forms of self-esteem; explicit self-esteem (indicated by self-report measures) refers to the conscious view of the self, whereas implicit self-esteem refers to an automatic appraisal of the self (Greenwald

& Banjai, 1995). Sandstrom and Jordan (2008) found that children with high levels of "defensive self-esteem" (that is, high explicit self-esteem combined with low implicit self-esteem) were more aggressive compared to children with high implicit self-esteem. It is thus possible that the current study failed to measure a child's true self-worth; rather, self-reported high explicit self-esteem could indicate low implicit self-esteem. Further, given the relation between emotional abuse and aggression in the current sample, future research is warranted to explore the relation between implicit and explicit self-esteem and aggression in abused children. Similar to findings related to depression, the child's age contributed a significant amount of variance in self-esteem in the current study, again consistent with previous findings that older abused children reported higher self-esteem than younger abused children (Kim & Cicchetti, 2006; Lynch & Cicchetti, 1998). However, age was examined as a moderator in these relations and, as was the case for depression, findings do not suggest that age significantly influenced the relation between emotional abuse and self-esteem.

Self-esteem as a Mediator/Moderator

Results did not support the third hypothesis. In fact, self-esteem was not explored as a mediator given the aforementioned lack of relation between emotional abuse and self-esteem. Whereas previous studies demonstrated self-esteem mediates the relation between childhood emotional abuse and outcomes in adulthood (Finzi-Dottan & Karu, 2006; Fryer & Barry, 2009), Kim and Cicchetti (2004) found that self-esteem did not act as a mediator between the presence of emotional abuse and internalizing and externalizing symptoms in a sample similar to the current sample.

Given the large number of analyses conducted to examine self-esteem as a moderator for the second hypothesis, results are inconclusive. Overall, results indicated that there was some support for an interaction between emotional abuse and self-esteem in the prediction of depression. These results are somewhat consistent with the structural equation modeling/latent growth curve modeling results from another study conducted with a similar sample (Kim & Cicchetti, 2006), which indicated that changes in self-esteem contributed to changes in depression over time in emotionally abused children. Results of the current study are somewhat consistent with previous findings that self-esteem acts as a moderator in the relation between emotional abuse and depression in adults (Fryer & Barry, 2009).

Specifically, the current study found a main effect of self-esteem at three time points; that is, those with higher self-esteem reported less depressive symptoms than those with lower self-esteem. However, the interaction between severity of emotional abuse and self-esteem in the prediction of depression was not consistent across time points. The interaction between severity of emotional abuse and self-esteem in predicting Time 3 depression was as expected, with low self-esteem serving as a risk factor. Contrary to expectation, at Time 4, children with higher severity ratings of emotional abuse and low self-esteem tended to report fewer depressive symptoms than children with lower severity ratings of emotional abuse and low self-esteem. This finding is counterintuitive, as it suggests that low self-esteem served as a protective factor against depression in more severely emotionally abused children at that latter time point. Yet, given the small number of significant interactions, these results should be interpreted with extreme caution as they could be spurious findings.

It is possible that this relation was not demonstrated at earlier time points due a lower sample size for depressive symptoms at Time 1 and, thus, lower power to detect a relation. However, the current study did not find that self-esteem acted as a moderator between emotional abuse and counselor-reported internalizing symptoms, which had the full sample size, suggesting that self-esteem does not impact the relation between emotional abuse and internalizing symptoms, including both self- and counselor-reported depression in children. It is possible that more sophisticated statistical procedures would more accurately depict the relation among these variables and replicate the findings of Kim and Cicchetti (2006).

There was a significant interaction between emotional abuse at Time 1 and self-esteem at Time 2 in the prediction of social competence at Time 2. Specifically, children with higher emotional abuse severity ratings displayed low social competence regardless of self-esteem. Likewise, there was a significant interaction between emotional abuse at Time 1 and self-esteem at Time 1 in predicting peer rejection at Time 2 such that children with higher severity ratings of emotional abuse were more likely to experience peer rejection when their self-esteem was low than when their self-esteem was high. However, as these interactions were not found consistently across time, these may be spurious findings.

Social Competence as a Mediator

Results partially support the fourth hypothesis which posited that social competence at Time 2 would mediate the relation between emotional abuse at Time 1 and outcomes at Time 3 and Time 4. Specifically, social competence at Time 2 was found to partially mediate the relation between emotional abuse at Time 1 and externalizing

behaviors at Time 3 and Time 4. Further, social competence at Time 2 was found to partially mediate the relation between emotional abuse at Time 1 and aggression at Time 3. Whereas previous studies demonstrated that social competence acted as a mediator in the relation between child abuse and internalizing symptoms and externalizing behaviors (Shonk & Cicchetti, 2001; Kim & Cicchetti, 2004), these studies did not examine the influence of social competence on the relation between the specific subtype of emotional abuse and outcomes. Shields, and Cicchetti (1998) found that emotional dysregulation mediated the relation between abuse and aggression in children. Current results suggest that emotional abuse is related to a child's social functioning which is, in turn, related to outcomes such as aggression and other disruptive behavior problems. That is, the current study adds to the literature showing that the relation between emotional abuse and aggression and other behavior problems may be explained, in part, on the impact that emotional abuse has on a child's social competence.

Demographic Variables as Moderators

Given the large number of analyses conducted, the few significant findings in support of the fifth exploratory hypothesis (i.e., that age and gender would act as moderators) are underwhelming. Only one significant interaction between emotional abuse and gender emerged. Females with higher severity ratings of emotional abuse reported more depressive symptoms at Time 2; this same pattern did not emerge for males. This is somewhat consistent with previous findings (McGee et al., 1997) indicating that, when controlling for physical and sexual abuse, severity of emotional abuse was related to internalizing symptoms in only females, whereas emotional abuse was related to externalizing behaviors in both males and females. Again, analyses

exploring gender as a moderator were exploratory in nature and findings should be interpreted with caution.

Although there was some support for multiple interactions between emotional abuse and age in the prediction of outcomes, only two held as significant. Specifically, when emotional abuse severity ratings were high, older children reported less depressive symptoms at Time 3 than younger children. This finding is again consistent with previous findings that older abused children reported fewer depressive symptoms than younger abused children (Kim & Cicchetti, 2006; Lynch & Cicchetti, 1998). However, there was a significant interaction between emotional abuse and age in predicting Time 2 peer rejection that showed an opposite pattern. That is, older children with higher severity ratings of emotional abuse were more likely to experience peer rejection than were children with lower severity ratings of emotional abuse. Nevertheless, these results should be interpreted with caution as they could have been spurious findings.

Onset of Abuse as a Moderator

Finally, there was only one significant finding that emerged when examining the sixth exploratory hypothesis, which posited that onset of abuse would act as a moderator between emotional abuse and outcomes. A significant interaction between emotional abuse and onset of abuse in the prediction of internalizing symptoms at Time 4 emerged. Children with low severity ratings of emotional abuse who first experienced abuse during infancy or toddlerhood displayed more internalizing symptoms at Time 4 than children first experiencing abuse during preschool or later childhood. However, children with more severe emotional abuse displayed comparable internalizing symptoms regardless of onset of abuse. This finding is counterintuitive, as it suggests that early

onset of less severe emotional abuse results in more internalizing symptoms, whereas more severe emotional abuse results in less internalizing symptoms regardless of when the abuse began. Whereas this finding is somewhat surprising given previous findings that chronicity of abuse contributes to severity of outcomes (Bolger et al., 1998), it is important to note that onset of abuse did not impact the relation between emotional abuse and other outcomes as expected. Further, the current study did not replicate past research that indicates that timing of emotional abuse has a differential impact on outcomes (Manly et al., 2001).

Overall, results indicate that Caucasian children in this sample were more likely to be more severely abused, as well as to be abused earlier in life. This is interesting given past research suggesting that minority children are more likely to be abused (Lau, et al., 2003). Specifically, maltreatment rates are typically reported to be highest for African American youth (Lau et al.). However, Chand and Thoburn (2006) reported that Caucasian children are more likely to be referred to Child Protective Services for emotional abuse than are minority children, which may explain the relations between abuse and race found within the current sample.

Theoretical and Clinical Implications

Current results can be understood in the context of attachment theory. Attachment theory focuses on the early bond between a child and caregiver; emotional abuse is a disruption of this bond. Thus, emotional abuse can be understood as the disruption of the formation of normal, healthy relationships with a primary caregiver. Theory posits that early relationships will impact later relationships and that emotional abuse can lead to faulty internal representational models of the self and others (Cicchetti, 1991); children

learn to expect that negative interactions will occur, and view themselves as worthless, contributing to negative outcomes. Disruptions in this bond occurring as early as infancy (Bowlby, 1989) and as late as middle childhood (Booth et al., 2006; Muris et al., 2001) have been related to internalizing symptoms, externalizing behaviors, and poor social functioning. Emotional abuse has been related to insecure attachment patterns (Egeland & Sroufe, 1981); further, abused children with insecure attachment patterns have been found to display outcomes such as depression (Hankin, 2005), externalizing behaviors (Speltz, 1990), and social problems (Wright, 1994). The current study found that severity of emotional abuse was in fact related to depression, internalizing symptoms, externalizing behaviors, aggression, and poor social competence. Although the support for depression and internalizing symptoms was inconsistent, the findings for behavior and social problems were consistent across measures, informants, and time points. These findings support theoretical underpinnings of attachment theory which stress the importance of early relationships and the negative impact of unhealthy attachments early in life.

In reference to social functioning, insecurely attached preschoolers have been found to have difficulty making friends (Wright, 1994), and emotional dysregulation has been found to mediate abuse and aggression (Shields & Cicchetti, 1998; Shields & Cicchetti, 2001). That is, affect regulation which typically forms in infancy is imperative to forming appropriate friendships; when this is lacking, children will have difficulty forming and maintaining friendships. This is consistent with current results indicating that emotional abuse was not only related to social competence, but that social competence mediated the relation between emotional abuse and externalizing behaviors

and aggression. That is, results suggest that emotionally abused children have difficulty forming friendships, perhaps due to poor affect regulation, resulting in aggressive and hostile behavior.

Overall, findings suggest that outcomes related to childhood emotional abuse may develop early in life. Developing interventions for emotionally abused children aimed at decreasing internalizing symptoms and externalizing behaviors, as well as increasing social functioning early in life is paramount. Further, it is important for professionals in mental health, medical, and legal forums to be aware of what constitutes emotional abuse and increase awareness of the possible deleterious effects of this form of abuse. Such knowledge may also shape public policy. Specifically, parent education programs should include an overview of emotional abuse and possible outcomes. Results indicated that severity of emotional abuse was related to aggression and externalizing behaviors in children and that social competence partially mediated these relations. Findings from the current study suggest that clinical interventions aimed at increasing a child's social competence, such as social skills training, may decrease externalizing behaviors and aggression in emotionally abused children. However, Fox and Boulton (2003) examined the efficacy of social skills training with child victims of bullying over the course of a year and found that traditional social skills training (i.e., teaching problem-solving skills, relaxation strategies, positive thinking, and verbal strategies) did not result in improved social functioning. Therefore, additional interventions may be necessary. Interventions for both children (e.g., anger management training) and caregivers (e.g., behavior management strategies) could decrease aggression in children identified as emotionally

abused. Further, interventions aimed at increasing coping skills in emotionally abused children should be developed.

Limitations and Directions for Future Research

One limitation of the current study is that, whereas a subset of the sample was identified as emotionally abused at Time 1, it can not be assumed that children not coded as emotionally abused did not experience emotional abuse. That is, it is possible that some children coded as not experiencing emotional abuse were simply not identified by the Department of Social Services as emotionally abused or that some of these children experienced emotional abuse after the first time point. Further, children identified as emotionally abused at Time 1 may have experienced more severe emotional abuse during the course of the study. Such unknown variability in the measurement of severity of emotional abuse may have influenced the results examining associations between severity of emotional abuse and outcomes, potentially masking true relations that exist among the constructs. However, it is important to note that a strength of the current study is the high response rate across time (i.e., 83% of the original sample was available at Time 4).

Given that there were a relatively small number of significant findings within a large number of analyses conducted, it is difficult to determine a clear picture of the possible moderation and mediation findings. Further, a large proportion of analyses conducted were exploratory in nature. Although several significant relations emerged, given these factors, it is possible that these relations were spurious findings. However, given several findings replicated across time (e.g., severity of emotional abuse predicting aggression) it is likely that a portion of the findings were not spurious. Nevertheless, future studies utilizing more powerful statistical techniques such as structural equation

modeling or growth curve analyses are warranted. Another limitation of the current study was the lack of item-level data available to the current researcher. Thus, internal consistency of measures utilized can not be assumed. It is possible that items did not consistently tap the same construct, thus resulting in unclear results. Available self-reported depression (N=170) and self-esteem (N=175) data were lower at Time 1 compared to latter time points. This is likely due to the young age of participants at Time 1 (M = 7.38); these self-report measures require a first grade reading level. It is possible that the lack of available data resulted in reduced statistical power, and thus, analyses exploring the relations of these variables resulted in fewer significant findings.

Another limitation of the current study is the fact that relations demonstrated are correlational in nature; thus causality cannot be inferred. Although the longitudinal nature of the study suggests a temporal relation between emotional abuse and outcomes, other factors could be contributing to outcomes in children, such as socioeconomic status, environmental effects, parenting practices, and a number of other factors that have been shown to contribute to negative outcomes in children. Further, although demographic variables including race and gender were controlled for, as well as a history of physical and sexual abuse, future research is warranted to identify other factors contributing to outcomes.

Another limitation is that demographic information of counselors was not available, and therefore the relation between counselors' race and children's race could not be examined. It is possible that counselors' perception of a child based on race influenced their responses on several measures.

Whereas emotional abuse was found to contribute a significant proportion of variance to various outcomes, the percent of variance accounted for by emotional abuse was quite small. This again suggests that future research is needed to identify other factors contributing to internalizing symptoms, externalizing behaviors, and social problems in children. Further, it is possible that emotional abuse contributes to other outcomes that have yet to be identified. One area of research that has recently emerged is the relation between emotional abuse and disordered eating (Kennedy, Ip, Samra, & Gorzalka, 2007; Wonderlich et al., 2007). Kent, Waller, and Dagnan (1999) found that emotional abuse predicted disordered eating after controlling for a history of physical and sexual abuse, and that other forms of abuse failed to predict disordered eating. Further, they found that dissociation mediated this relation. Another study demonstrated the link between emotional abuse and dissociation in a sample of inpatients addicted to drugs and alcohol (Tamar-Gurol, Sar, Karadag, Evren, & Kargoz, 2008). This is interesting given the fact that some of the earliest research examining outcomes of emotional abuse found a link between this form of child abuse and dissociation later in life (Briere & Runtz, 1988).

Results exploring self-esteem as a possible mediator and moderator in the relation between emotional abuse and outcomes were underwhelming. Further, previous studies have found that self-esteem acted as a mediator in the relation between abuse and outcomes; these findings were not replicated in the current study. Possible explanations have been discussed. Future research is needed to clarify factors contributing to the discrepancy in findings. A recent study demonstrated a link between emotional abuse and self-harm without the intent of suicide, and found that self-criticism mediated this

relation (Glassman, Weierich, Hooley, Deliberto, & Nock, 2007). That is, researchers suggest that self-injury is a form of self-abuse related to a negative view of the self as a result of childhood emotional abuse, again suggesting a link between emotional abuse and low self-esteem, particularly among adults.

Findings related to social competence as a mediator were somewhat promising and suggest that the relation between emotional abuse and behavior problems may be partly explained by poor social competence. However, future research is needed to further explore the impact of social competence on outcomes in emotionally abused children, as well as to identify effective clinical interventions to potentially alleviate negative outcomes. Further, other measures of social competence should be utilized to examine the contribution of this variable to outcomes in children. That is, measures that do not rely on adults' report of social competence, such as peer nominations, would help clarify results given the fact that emotional abuse was not related to peer-reported peer rejection in the current study. Levendosky, Okun, and Parker (1995) examined the relations among child abuse, depression, and social competence and found that children who were depressed in conjunction with a history of abuse demonstrated the lowest social competence, suggesting that depression may impact the relation between abuse and social functioning. This suggests that future research exploring other potential mediators, including depression, in the relation between emotional abuse and social competence is warranted.

A good deal of studies conducted exploring the relation between emotional abuse and outcomes have been conducted with similar samples; that is, many samples included primarily minority urban youth. Future research conducted with children from various

ethnic groups, socioeconomic backgrounds, and geographical locations is warranted. Further, the current study examined the impact of emotional abuse inflicted by a child's primary caregiver. A recent study examined the phenomena of emotional abuse occurring in the classroom (McEachern, Alued, & Kenny, 2008). Given the detrimental sequelae of emotional abuse by caregivers, educators and researchers alike should examine the prevalence and possible outcomes related to emotional abuse inflicted by teachers.

Findings in the adult literature support the link between emotional abuse and internalizing symptoms (e.g., depression, anxiety, low self-esteem). The current study found that emotional abuse was more consistently related to externalizing symptoms and social problems in children. Further research is warranted to examine this discrepancy. One possible explanation is that externalizing behaviors and social problems in childhood contribute to the development of internalizing symptoms later in life. That is, children who are less socially competent or exhibit externalizing behaviors will develop anxiety and depression as adults, perhaps due to lack of positive relationships. Further, research suggests that emotional abuse occurring in childhood adversely affects the stress response system, in turn affecting a child's development (Yates, 2007). It is possible that disruption in normal neurological development may result in vulnerability of developing internalizing disorders (Yates).

Childhood physical abuse has been previously linked to aggression in children, and there is some evidence to suggest that physical abuse may contribute to an intergenerational cycle of abuse later in the child's life. That is, physically abused children may become aggressive as children and continue to display aggression toward partners and their own children as adults. Specifically, one study found that as much as

50% of parents with a history of abuse subsequently abused their own children (Leifer, Kilbane, Jacbosen, & Grossman, 2004). Other forms of abuse may also contribute to a cycle of maltreatment. Moehler, Biringin, and Poustka (2007) found that mothers with a history of physical or sexual abuse were less emotionally available to their infants a mere 5 months after giving birth. The finding that emotional abuse also contributed significant variance to aggression underscores the importance that emotional abuse may play an integral role in this cycle of abuse, and thus, future research is warranted to better understand the impact emotional abuse may have on outcomes including an intergenerational cycle of abuse.

Overall, results of the current study partially supported five of the six hypotheses. In particular, the findings of the current study suggest an association between severity of emotional abuse and behavioral and social problems across time and also suggest that disruptions in social functioning may partly explain subsequent behavior problems. Further, whereas results were somewhat consistent with previous research, results added to the literature by examining the relation between the specific subtype of emotional abuse and internalizing symptoms, externalizing behaviors, and social problems in children across time using multi-informant data. Whereas research examining this specific subtype of abuse has recently expanded, future research examining the long-term sequelae of emotional abuse is warranted to better understand the impact of this type of abuse and guide mental health professionals in identifying effective interventions for children and adults coping with a history of emotional abuse.

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