

THE EFFECTS OF MATERNAL TRAUMA  
ON EMOTION REGULATION IN CHILDREN:  
A STUDY OF MOTHERS AND CHILDREN WHO HAVE EXPERIENCED  
DOMESTIC VIOLENCE AND HOMELESSNESS

by

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This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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## ABSTRACT

THE EFFECTS OF MATERNAL TRAUMA  
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This study hypothesizes that in a sample of mothers who have experienced domestic violence and who as a group frequently experience one or more symptoms of PTSD, those who have lower levels of PTSD symptomatology will rate their children as having stronger emotion regulation skills, will intervene less often to regulate or calm emotions (restricting inappropriate behavior; controlling tantrums), and will have children who exhibit fewer behavior problems. The study uses pre-intervention archival data from a subset of a larger study, Family Support from Welfare to Work: Investigation of the Individual and Family Characteristics Associated with Engagement with Work and Evaluation of a Family Based Support Program, which examines the relationship of variables affecting psychological functioning in parents and children who have experienced domestic violence (DV) and who are living in a shelter for homeless families. The current study sample consists of thirty-five mother-child pairs (children ages 8-16) who are low-income, predominately African-American or Latino and who reside in a domestic violence

shelter. Shortly after entering the shelter, mothers completed questionnaires about their trauma symptoms and their child's ER and behavior. Children also completed a questionnaire about their own self-reported ER.

Regression Analyses confirmed the study hypothesis that in this sample of mothers and children residing in a domestic violence shelter, there was a significant relationship between maternal PTSD symptoms and mothers' reports of greater emotional and behavioral problems in their children. As hypothesized, maternal PTSD predicted a significant discrepancy in ratings between mother's ER and child self-report of their ER. Finally, maternal PTSD was significantly associated with lower levels of expressed sad emotion.

The present study demonstrates how maternal trauma impacts emotion regulation processes among a sample of mothers and children who have experienced domestic violence and are homeless. The study found that mothers who have lower levels of trauma symptomology are more in sync with their children's emotional state, and have children with fewer problem behaviors, and who have more developed ER skills. These findings point to the importance of designing clinical interventions that promote the development of healthy ER skills to help mothers and children cope with the multitude of distressing emotions that they might encounter. Given the many cumulative stressors and challenges that at-risk populations such as this one face, the transmission of healthy ER from mother-child can serve as a mutually enhancing and resilience building process.

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## LIST OF MEASURES USED IN THE STUDY

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## **Chapter 1: Introduction**

The current study examined the relationship between maternal symptoms of Posttraumatic Stress Disorder (PTSD), the degree to which mothers are aware of their child's emotions and emotion regulatory capacity, and their use of parenting practices intended to regulate their child's emotions. These connections were examined in a sample of low-income, predominately African-American or Latino mothers and children who reside in a domestic violence shelter. The study hypothesizes that in a sample of mothers who have experienced domestic violence and who as a group frequently experience one or more symptoms of PTSD, those who have lower levels of PTSD symptomatology will rate their children as having stronger emotion regulation skills, will intervene less often to restrict inappropriate behavior (i.e. controlling tantrums), and will have children who exhibit fewer behavior problems. Chapter 1 will describe the purpose and significance of the study and the study's potential usefulness in informing clinical and community-based interventions for mothers and children who have experienced domestic violence. Chapter 2 will review the theoretical and empirical literature on emotion regulation, on the impact of trauma on parenting practices, and on the effects of domestic violence and homelessness on families. Chapter 3 will describe the methods. Chapter 4 discusses study findings and chapter 5 is the discussion and implications of the study.

### **Statement of the Problem and Significance of the Study**

**clinical experiences informing the study.**

This study is an outgrowth of a larger study, Family Support from Welfare to Work: Investigation of the Individual and Family Characteristics Associated with Engagement with Work and Evaluation of a Family Based Support Program, which examines the relationship of variables affecting psychological functioning in parents and children who have experienced domestic violence (DV) and who are living in a shelter for homeless families. This study will analyze archival (already collected) data from the larger study. The idea for this new analysis developed from observations I made while collecting data and conducting multiple family discussion groups with the families taking part in the original study. The groups took place at Help Harbor, a domestic violence shelter run by Help USA, one of the largest providers of temporary shelter and services for homeless families in New York City. While providing mental health and other support services to women and their children, I listened to their stories, and grew to understand that each family had unique experiences, in addition to many shared ones. Along with other Fresh Start colleagues, I facilitated multiple family group interventions with children and mothers, and worked more closely with individual mothers to learn more about their specific challenges.

I observed that some women seemed more attuned to their children, while others had more difficulty regulating their own emotions and also struggled to respond sensitively and to regulate their children's emotions. After reading the relevant theoretical literatures, I grew interested in the relationship between maternal psychopathology, specifically PTSD, an individual's emotion regulation

capacity, and the ways in which the quality of parental regulations of their children's emotions might affect the mental health risks for children who had witnessed domestic violence. More specifically, I observed that mothers who exhibited emotion regulation (ER) with their children, who supported them by helping them to identify, label, integrate, communicate, and cope with their emotions, also seemed to have children who were better able to identify and communicate their emotions and develop ways to cope with distressing ones.

These observations led me to an interest in examining how the effect of chronic trauma interferes with the process of parenting, and in turn, how this affects children's emotion regulation. Specifically, I will explore various components of mother-child emotion regulation. The questions I attempt to answer with analyses of the existing data are:

1. Did mothers who reported higher levels of trauma symptoms vary more in their ratings of their child's ER skills from their child's own ER self-report?
2. Did mothers who reported higher levels of trauma symptoms implement more ways of down-regulating (i.e. calming or restricting inappropriate behavior) their children?
3. Did mothers who reported higher levels of trauma symptoms report that their children exhibited more problem behaviors and less developed ER skills?
4. Did children's ability to cope with angry or sad feelings vary with the level of trauma symptoms reported by their mothers?

### **Clinical and Community Intervention Implications.**

More research is necessary to determine the ways that parental trauma history is associated with deficits in parenting and a range of negative child outcomes. Domestic violence has been shown to have deleterious effects on the individual who is the direct target of abuse in addition to those who are witnesses (i.e. the child) (Houskamp & Foy, 1991; Levendosky & Graham-Bermann, 2000). Several studies have identified the need for further research on the effects that witnessing violence has on child outcomes (Jaffee, 2005; Kitzmann & Beech, 2006; Osofsky, 1999; Tajima, Herrenkohl, Moylan & Derr, 2011). Such studies have also noted a need for studies that collect data from both child and parent (Buckner Bassuk, Brooks, & Weinreb, 1999; Sternberg, Baradaran, Abbott, Lamb, & Guterman, 2006) to account for biases in self-reported measures. Since a greater number of children are witnesses to violence than are direct targets of abuse (Chemtob & Carlson, 2004) it is critical to examine the effects that such violence has on this under-researched population. In order to design effective clinical interventions for domestic violence victims and their children, research is needed to identify both risk and protective factors for child outcomes. The findings of the current study provide information about maternal trauma and the relationship between maternal attunement to and regulation of children's emotions to the development of children's ER skills. This may inform future clinical interventions that target domestic violence victims and their children, by focusing on the ways in which emotion regulation is transmitted in this population. Finally, this study may

have implications for children who are homeless, whether or not as a result of domestic violence. Studies have indicated that homelessness and prolonged poverty are risk factors for violence and childhood aggression (Anooshian, 2005; Buckner et al., 1999). Conditions of poverty and homelessness appear to exacerbate family violence and can contribute to social isolation, and a lack of social environments in which children and parents might learn to utilize their emotion regulation skills to cope with ongoing stressors (Anooshian, 2005).

## Chapter 2: Review of the Literature

This study was conceptualized from various theoretical perspectives and empirical studies that focused on the development and transmission of emotion regulation (ER) through the parent-child relationship. Research has found that the capacity to regulate emotions and the ability to apply different emotion regulation strategies may be associated with reduced psychopathology and more adaptive functioning. Internalizing (i.e. depression, anxiety) and externalizing (i.e. impulsivity, hyperactivity, oppositional behavior) disorders have been conceptualized as failures in emotion regulation (ER), otherwise referred to as emotion dysregulation (Cole, Michel, & Teti, 1994). Although there is still much to be learned about the ways in which emotion regulation is acquired, one assumption in the clinical developmental literature is that children internalize their parents' emotion regulation strategies, so that parents who are under stress and have psychopathology tend to promote poor ER patterns in their children (Cole, et al., 1994). Since the most extensive literature on child emotion regulation is in the area of infancy and early childhood, this critical developmental period will be reviewed with an emphasis on how both healthy and maladaptive mother-infant interactions impact ER. The attachment literature outlines how the earliest relationship between mother and infant is fundamental to the development of a child's core personality structure, including the ability to regulate emotions, consolidate a sense of self, relate to others, and negotiate both one's inner psychic world and the external environment. This chapter will relate the theoretical assertions from the

attachment literature to findings of empirical studies that focus on children, specifically the relationship between parental responsiveness and behavioral outcomes for children. Finally, since the study will examine mothers and children who have experienced domestic violence and who are homeless, these contextual factors and associated stressors will be explored. The study will also address the gaps in the literature: the connection between maternal trauma and parenting, and the consequent emotion regulation in children. Three major domains will be reviewed: 1. the development of emotion regulation with an emphasis on ER as an adaptive skill which contributes to socio-emotional health, 2. maternal ER related behavior and its effects on child ER, and 3. the effects of the experience of domestic violence and homelessness on parenting and child ER.

### **Emotion Regulation: Its Development and Its Importance**

Over the past several decades, the study of affect regulation (here referred to as emotion regulation) has become an area of particular interest in psychology (Cicchetti & Izard, 1995; Cummings & Davies, 1996; Dodge & Garber, 1991; Fox, 1994; Katz & Gottman, 1996, 1997; Shields & Cicchetti, 1997, 1998, 2001; Thompson, 1994). The roots of contemporary research on emotion regulation (ER) rest in the early study of psychological defenses (Freud, 1926, 1959), psychological stress and coping (Lazarus, 1966), attachment theory (Bowlby, 1969), and emotion theory (Frijda, 1986). Emotion regulation was originally viewed as a demonstration of positive affect, but is now viewed as a balance of both positive and negative affect. In addition, the importance is not placed on how much one regulates his or her

emotions, rather on the range of emotional responses an individual has access to and the degree to which a response appropriately matches a given situation (Gross & Munoz, 1995).

A current issue is whether emotion regulation refers to intrinsic processes (emotion regulation in the self), extrinsic processes (emotion regulation in others), or to both. The emphasis is most often on extrinsic processes when looking at infancy and early childhood development (Gross & Thompson, 2007). The main themes central to this discussion are: a) ER involves both the amplification and dampening of emotions; b) ER involves the ability to respond to situational demands with both control and flexibility; c) ER has a regulatory influence on other processes (i.e. attention and communication with others); d) ER has a cognitive component: it requires an understanding of one's own thoughts and feelings; and e) ER involves a social component, which means understanding the thoughts and feelings of others (i.e. peers and family).

This study will specifically examine what is referred to in the clinical literature as “downregulation” (Gottman, Katz, & Hooven, 1997). As noted earlier, although affect regulation consists of both down- and upregulation (one can dampen or amplify emotions), most empirical studies thus far have explored downregulation. One critical example informing the current study is the extensive empirical work on affect regulation in children by Gottman and his colleagues (1997). Downregulation is not intended to be a restriction or clamping down of intense emotions. Instead, as Cole et al. (1994) point out, both down- and

upregulation reflect the ability “to respond emotionally and to attune one’s emotional experience and expression to the ebb and flow of life’s moment-to-moment situations” (p. 83).

### **The Role of ER in Healthy and Maladaptive Development**

The acquisition of emotion regulation is a crucial developmental task. Successful ER plays a positive role in healthy development, and failure can significantly contribute to pathology (Cole et al., 1994). Greenspan (1997), who has written extensively about emotion regulation, asserts that the ability to regulate emotions is “the first core process” (p. 71).

The absence or impairment of emotion-regulation abilities characterizes many psychological disorders of affect and thought. For instance, chronic worry and stress, avoidance or restriction of emotions, abrupt shifts in emotions and moods, and inappropriate affect, are among the symptoms of emotion-dysregulation that define many clinical disorders (Cole et al. 1994). Affect regulation also appears to be related to the development of depression. Cole and Kaslow (1998) describe depression as a “failure in the regulation of negative affect” (p. 311). In addition, affect dysregulation appears to be connected to breaks in attention or social competencies, problems which can have far-reaching consequences in children’s development (Cole et al., 1994). Affect dysregulation is also implicated in some research on childhood depression (Cole & Kaslow, 1998), pointing to the importance of research that further investigates the pathways which lead to emotion

dysregulation, and, alternatively, the development of healthy ER for the prevention of mental health problems.

### **Factors Impacting Emotion Regulation**

Individual differences in emotion regulation exist among young children due to numerous internal and external factors that impact the child over the course of early development. During infancy, internal factors such as differences in neuroregulatory or biological systems are one such source. Although physiological, behavioral, and cognitive components clearly play into the emergence of emotion regulation skills, external factors such as early interactions with caregivers and, later, more direct methods of teaching children to behave in accordance with norms and parental expectations also influence ER (Calkins, 1991; Cicchetti, Ganiban & Barnett, 1991; Thompson, 1990). As stated earlier, an infant's temperamental disposition greatly influences his ability to handle affective stimuli; nevertheless, the quality of early interactions can serve to shape an infant's and later a child's cognitive understanding of events and subsequent emotional reaction. Gottman et al. (1997) assert that it may "eventually turn out that emotion regulation abilities are, to some extent, temperamental, but that, to a greater extent, we think that they are shaped by parents beginning in infancy" (p. 102). Moreover, the process of developing emotion regulation skills and strategies is fundamentally an interactive one, requiring both infant or child and parent to contribute and participate.

### **Development of Emotion Regulation through the Attachment Relationship**

Given the emergent view that emotion regulation is a relational process, it follows naturally that its roots and early development occur in the attachment relationship. There is an adaptive nature to both attachment and emotion regulation. For both processes, infants are viewed as having an innate ability to evolve in their responses to variations in their care-giving environment (Thompson, 1991; Cassidy, 1994). Infants form attachment as a result of accumulated interactions with both sensitively responsive and insensitively responsive parents, and the “...biologically based proclivity to form attachments ensures that only in extremely anomalous circumstances will a child remain unattached” (Main, 2000, p. 6). Within this framework, children develop strategies to respond to their particular caregiver by regulating their own behavior, feelings, cognitions, memory and attention. Consequently, emotion regulation can be viewed as an adaptive strategy that an infant learns through interactions with the caregiving environment in order to maintain the attachment relationship (Cassidy, 1994; Main, 1990).

Seeing it as instrumental in fostering the capacity for affect regulation, Fonagy, Gergely, Jurist and Target (2002) discuss *affect mirroring*, which they define as the parent’s use of facial responses and vocalizations in an effort to represent an understanding of the infant’s feeling states, and to be both reassuring and calming, rather than intensifying. In addition, they argue that self-reflection and the ability to reflect on the thoughts and feelings of others are capacities which are constructed, and that have evolved out of the mother-infant relationship. Outlining their theory of *mentalization* and its link to affect regulation, Fonagy et

al. (2002) propose that the forging of this connection has two critical results: a) infants grow to associate the control they have over their parent's mirroring with the resulting improvement in their own emotional state, and b) the development of *second-order representation* of affect states creates the foundation for affect regulation and impulse control. Through this process, the infant's affect is both shared and understood. Alternatively, when parents do not contingently respond to the infant's affect, appropriate labeling of internal states does not occur, so that the affect remains both confusing and unsymbolized, and ultimately difficult to regulate. Through repeated affect-mirroring experiences, the child begins to learn that his or her mental state is decoupled from external reality. However, parents who struggle with emotion regulation tend to be overwhelmed by their infant's negative affect and display this in a realistic unmarked emotional expression, disrupting the development of healthy emotion regulation. Further, maladaptive early experiences with caregivers affect later development by limiting the ability to process or understand information related to mental states, which is critical for adaptive functioning in a stressful environment.

### **Maternal Trauma and Disorganized Behaviors**

Given that the current study focuses on a population of mothers who were exposed to domestic violence, and who consequently suffer from symptoms of PTSD, it is critical to examine how their ability to identify and regulate their own emotions might affect their ability to perceive their child's internal states. Cibul (1997) suggests that the growth and development of the child's self is dependent on the

underlying maternal affective core-- namely her health and her capacity to nurture. Cibul (1997) further notes that there is a link between a mother's failure in identifying her own feeling states and her ability to provide emotional signals, attunement, and mirroring for her infant. These failures of contingent responsiveness can compromise the infant's ability to identify his or her own feeling states, creating anxiety reactions, as well as disrupting the ability to self-regulate. Conversely, the caregiver's appropriate responses allow for the identification of thoughts, ideas, and affects, and the modulation and containment of strong emotions. Slade (1999, 2005) asserts that a deficit in the parent's capacity for reflective functioning (RF) inhibits the development of the child's RF because emotions and feeling states are not regulated and modulated, nor are they symbolized and reflected back to the infant or child. Slade argues that a mother's ability to make sense of and to make her child's internal experience known and understood is a function of her own ability to reflect on her affective experiences. Moreover, mothers who have high reflective functioning are more likely to have a child with the ability to both tolerate and regulate their own emotional/affective experience, who knows and can express needs in meaningful ways, who can moderate behavior, and who has an awareness of their own and other's mental states.

Since this study will not examine or measure whether children were direct victims of violent behavior, it might be useful to understand the ways in which maternal trauma is transmitted through the attachment system. Hesse and Main

(1990) have suggested that frightened and/or frightening parental behavior may be the mediating mechanism through which a caregiver's state of mind (unresolved to trauma and loss) leads to infant disorganization. Later, Hesse and Main (2000) asserted that infant disorganization is characterized by anomalous behaviors (contradictory and disoriented) and is not only a result of an infant's direct experience of maltreatment, but rather is a second-generation effect of more nuanced behaviors on the part of the parent's own "frightened or frightening ideation surrounding experiences of trauma" (Hesse & Main, p. 1102). Thus, Hesse and Main (2000) propose that parents who were found to be unresolved to trauma and loss may at times become frightened when confronted with aspects of the environment that are unconsciously associated with a traumatic experience. In such an altered mental state, the parent might exhibit anomalous forms of threatening, frightened, or dissociated behavior and this inexplicable behavior might be alarming to the infant.

Elaborating on Hesse and Main's work, Lyons-Ruth (1996) reviewed attachment related studies of early aggression and found that disruptive and aggressive behavior in middle childhood is connected to early disorganization with the mother. Longitudinal attachment studies suggest that aggressive school age children had several risk factors already present during infancy such as family adversity (i.e. marital discord, abuse history, familial violence), parental hostility, and parental depression. Elevated rates of disorganized attachment patterns were found with family risk conditions such as maternal depression, or adolescent

parenthood, to a high of 82% among maltreating families (Carlson, Cichetti, Baret, & Braunwald, 1989). In these high-risk samples, disorganized infant attachment was associated with maternal behaviors characterized by a lack of sensitive responsiveness to infant cues and maternal gestures that overrode the infant's communication and goals. These findings point to the ways in which maladaptive parent-infant interactions might lead to later maladaptive emotion regulatory processes for the child.

### **Empirical Studies: Development of and Transmission of ER**

Most of the research on emotion regulation focuses on infants and young children and the role of the attachment relationship in the development of children's emotional control. Recently, more attention has been given to understanding the role that parenting processes may play in older children's and adolescents' ability to regulate negative affect. This section of the chapter will focus primarily on studies that were conducted on children in the age range of late preschool and elementary school to early adolescence in order to focus on the age range (8-16) included in this study.

Katz and Gottman (1991) consider child affect regulation as "consisting of children's ability to (1) inhibit inappropriate behavior related to strong negative or positive affect, (2) self-soothe any physiological arousal the strong affect has induced, (3) focus attention, and (4) organize themselves for coordinated action in the service of an external goal" (p. 130). Unlike most of the work on affect regulation, Katz and Gottman (1991) view the early childhood years (i.e., four to

five) and not the years of infancy as most susceptible to affect dysregulation due to an increase in the interpersonal stresses that accompany peer relationships.

Gottman and his colleagues (1996; 1997) found a correlation between parental awareness of their own emotions and a child's subsequent emotion regulation abilities. Gottman (1996) describes how *emotion coaching*, a process in which parents demonstrate an awareness of differentiated emotions both in themselves and in their child, helps their child process his feelings of anger and sadness, and can lead to later success in the child's ability to downregulate their physiological state, and to have more socially competent peer relationships than children whose parents were not as competent at *emotion coaching*.

Eisenberg and her colleagues (1995, 1996, 1998, 2000) conducted one of the most extensive bodies of empirical research on child ER, examining various factors that impact ER: parental reactions, expressivity, coping, and social competence, and behavioral regulation. In a series of studies they measured parental self-reports of several non-supportive reactions to children's negative emotions and found that they were linked with negative outcomes for children. Several of these studies will be examined in order to illustrate that the data supports the relationship between parental responsiveness/reactivity and the development of healthy or maladaptive emotion regulation in children.

In a longitudinal study conducted by Eisenberg et al. (1995) teachers and parents rated social functioning (i.e. socially appropriate behavior and problem behaviors), emotionality (intensity, autonomic reactivity, and negative affectivity),

and regulation (attentional control, impulsivity/inhibition control, and coping styles) in a sample of 82 kindergarten to second-grade children from primarily European-American and middle-class families. The findings accorded with the hypothesis that children's emotionality and regulation are related to social functioning and are associated with long-term social outcomes. For instance, socially appropriate behavior (rated by teachers and parents) was related to reports of low negative emotionality and reports of high behavioral regulation. Social functioning, however, varies as a function of both emotionality and optimal regulation, and regulation might sometimes moderate the effects of emotionality. In other words, some well regulated children can overcome and inhibit inappropriate impulses and behaviors in a constructive manner. These findings highlight that regulatory skills, particularly behavioral regulation, are in part learned, and that these skills can act as a buffer for a temperamentally difficult child. This study did not, however, examine parental influences on child ER. Another Eisenberg study (Eisenberg, Fabes, & Murphy, 1996), which did explore how parental reactions were linked with children's ER, found that parents' punitive or non-responsive reactions to their children's negative emotions led to dysregulation of both behavior and emotions in young children.

Eisenberg, Shepard, Guthrie, Murphy, and Reiser (1999) followed the same group of children from their 1995 study at three time intervals: ages 6-8, 8-10 and then 10-12. Data were collected from parents and teachers at each time/age interval. The study examined three categories of parent responses to children's

negative emotions: punitive, distressed, or minimizing. Parents and teachers rated children's quality of social functioning (problem behavior versus socially appropriate behavior), emotional intensity (frequency), externalizing negative emotion, and regulation (attention and self control, and impulsivity and inhibition control).

Parent reactions to children's negative emotions were assessed, and its influence on children's ER was measured and compared to their social behavior at school and at home over time. Using structural equation modeling, the results indicate a relationship between both parental punitive and distressed reactions and children's externalized emotions across time. At the third time interval (children ages 10-12), mother reports of problem behavior were predicted by both children's low regulation (parent and teacher ratings) and by parental punitive and distress reactions.

Furthermore, empirical evidence confirms the theoretical assertion that parent reactions and responses affect children's ability to regulate and manage emotions. Eisenberg et al. (1999) conclude by stating that there is considerable support for bidirectional influences in this relationship such that children who exhibit more behavioral difficulties and struggle with ER elicit more negative parental reactions, and that parental negative reactions also promote children's negative emotions and behavior.

In a later study, Eisenberg and her colleagues (2001) examined the relationship between mothers' positive versus negative expressivity, child regulation, social competence, and adjustment. The study examined families with children between the age of 4.5 and 8, mostly of European-American heritage. The

children were selected based on a parent-reported CBCL score suggesting either internalizing or externalizing behavior problems. Utilizing both observational and self-report measures, the mothers' emotion and behavior with their children were measured (positive and negative affect, intensity and duration), as were children's regulation (observed time spent on puzzle task, and mother/teacher reports), and social competence (socially appropriate behavior and popularity rated by parents and teachers). Using structural equation models, the findings suggest that the mother's positively and negatively expressed emotions predicted child ER, which, in turn, affected externalizing behavior problems and social competence as rated by parents and teachers. The model was the same for both boys and girls, and the pattern of relationships was similar for higher and lower SES families. The mother's positive expressivity was positively related to the child's regulation, whereas the mother's negative expressivity was negatively related to regulation. Child regulation was related to low levels of children's externalizing and internalizing behavior problems and high levels of social competence. Although children's ability to regulate emotions increased with age, it appears to serve the same purpose in mediating the relationship between parent expressed emotion and developmental outcomes across the 4.5-8 year age range in early school age years. The exact processes by which expressivity in parents supports or undermines regulation in children was not explored in the study. However, one implication of the study is that children who are exposed to negative parental emotions over time may become emotionally over-aroused when in an evocative situation, and this in

turn may limit their ability to regulate attention, emotions, and behaviors. They also speculate that exposure to maternal negative emotion may disrupt learning associated with regulation, and have ill-effects on a child's emotional security, thereby influencing regulation efforts.

In a more recent study, Eisenberg, Zhou, Spinrad, Valiente, Fabes, and Liew (2005) followed 186 mostly European-American and middle-to-upper income adolescents for three waves of data collection at two-year intervals. The purpose of the study was to explore whether children's *effortful control* (EC), the ability to voluntarily focus and shift attention and to inhibit or initiate behavior -- a process by which one can modulate both internal emotions and external expression of emotions -- mediates the relationship between parental positive expressivity and externalizing behavior in children. Although EC has been linked with temperament and thus has a partly genetic and hereditary basis, most theorists view both EC and emotion regulation as shaped by experience from the environment, including one's interactions with parents. A mother-child interaction looking at slides with positive and negative emotions was observed and coded, in addition to coding of observed parental positive expressivity and warmth during puzzle interaction, parent/teacher ratings of behavior (CBCL), and an observed behavioral measure of children's EC with a puzzle box task. The findings of the study provided strong support for the hypothesis that children's emotional control (EC) mediates the relationship of parental warmth and positive expressivity to children's externalizing behavior problems. Using a longitudinal model, the relationship between parental warmth

and positive emotional expressivity in mid-elementary school children, predicted higher EC two years later, which, in turn, predicted lower externalizing problems in adolescence. These findings are critical for prevention research since they point to the possibility of promoting children's emotion regulation and reducing externalizing and antisocial behaviors by encouraging parental warmth and positively expressed emotion.

In summary, the review of empirical research establishes the connection between dimensions of parenting behavior, transmitting emotion regulation skills, and outcomes for children. For instance, parental responsiveness to children's emotions, parental expressivity of both positive and negative emotions, parent-child discussions about and labeling of emotions, have all been demonstrated to be related to the development of more adaptive and healthy ER. Consequently, the empirical work on the parental transmission of ER to children corroborates the theoretical frameworks that have outlined the way in which ER develops through the attachment relationship. In addition, the empirical research reviewed above has pointed to particular areas of parenting that aid in the development of ER in the age groups that were studied in the current research study. Furthermore, the theoretical and empirical research on the transmission of ER from mother to child strongly support the hypothesis of the current study which holds that parental attunement (awareness, and reaction to children's emotionality), and the ways in which parents regulate their children (punitive or authoritative) are crucial contributors to child ER and later psychological health.

## **Domestic Violence, Homelessness and Parenting Practices**

This section of the chapter will review the relevant literature about the occurrence of marital domestic violence, with an emphasis on how witnessing such violence affects children. In addition, the relationship between domestic violence and homelessness on mothers and children will be explored. In the final section, the literature of maternal trauma (due to domestic violence), parenting practices, and child outcomes will be reviewed.

Indeed, familial violence is a public-health problem, and epidemiological studies indicate that the rates at which children are witnessing or are direct victims of such domestic violence are increasing (Graham-Berman & Edleson, 2001; Margolin & Gordis, 2000, 2004). It is not uncommon for domestic violence victims to become homeless, as mothers and children are often forced to flee their homes in search of a safe haven. An estimated 25% of domestic violence survivors become homeless, and 92% of homeless women have experienced some form of domestic violence (National Law Center on Homelessness and Poverty, 2008). Mothers with young children are the fastest growing sub-group within the larger homeless population and represent an estimated 40% of homeless individuals (Anooshian, 2005; Toro, 2006). Research that examines risk factors associated with children who are homeless suggests that poor, housed children are also at great risk, indicating that group differences can be accounted for by broader poverty-related factors (Buckner, et al., 1999). Despite the interrelatedness and overlap between poverty, welfare, homelessness, and the occurrence of domestic violence, studies

suggest that domestic violence may be an independent risk factor for homelessness. Furthermore, research suggests that mothers and children who have multiple stresses (domestic violence and homelessness) may be at a particular risk for poorer outcomes (Buckner et al., 1999; Haber & Toro, 2004).

**domestic violence: effects on children.**

National Violence Against Women surveys estimate that each year approximately 2 million women and 800,000 men are survivors of intimate partner violence in the United States (Tjaden & Thennes, 2000). Because children who are exposed to interparental violence have no formal status as crime victims, prevalence data are estimates from statistics on violence among partners and from population data on the average number of children per household. Thus, it is estimated that between 3.3 and 10 million children in the US live in households where domestic violence has occurred (Margolin & Gordis, 2000). The National Center of Child Abuse and Neglect (NCCAN) 1996 results indicate that approximately 1.5 million children were found to be victims of maltreatment. Research has shown that children who witness domestic violence or who are direct victims of violence are at high risk for deleterious outcomes: behavior problems, anxiety, depression, PTSD, poor social relationships, and poor performance at school (Margolin & Gordis, 2000; Osofsky, 1999; Sternberg et al., 2006). At a fundamental level, a child witnessing the abuse of their mother, or simply living with an abused mother can be considered to have suffered emotional abuse, with adverse implications for that child's

emotional and mental health and future relationships (Brandon & Lewis, 1996; Holt, Buckley, & Whelan, 2008).

A child's direct observation of violence can include witnessing violent physical and or sexual assaults on their mothers. A study conducted by McGee (2000) which examined 54 children and 48 mothers found that 71% of children witnessed physical violence directed toward their mother and 10% witnessed the rape of their mother. An earlier study, conducted by McCloskey, Figueredo and Koss (1995), that researched a larger sample (365 women and 365 children), reported similar findings, with two-thirds of the women reporting physical assault and just below half of the children reporting that they had witnessed such an assault. In addition, many authors suggest that children can "witness" without direct observation, such as overhearing disputes or observing its aftermath (i.e. seeing marks or bruising and broken furniture) (Cunningham & Baker, 2004; Kaufman, Kantor & Little, 2003).

Interparental violence can extend into violence among other family members, and has been demonstrated to be an important indicator of risk for the direct physical and sexual abuse of children (Holt et al., 2008; McGee, 2000; Osofsky, 2003; Shipman Rossman & West, 1999). Although rates of overlap between domestic violence and child physical abuse vary across studies, spanning the range of 45-70%, nonetheless, there is agreement that the presence of domestic abuse poses a risk for child physical abuse. For instance, Edelson's (1999) review of 35 studies concluded that there was a high co-occurrence of child and maternal abuse

ranging from 30–60% in most studies reviewed. An earlier review of 31 studies, conducted by Appel and Holden (1998), found that child abuse co-occurred with the abuse of the mother in 40% of cases. Further, Osofsky (1999, 2003) concluded from her research that children who live in homes where domestic violence occurs are 15 times more likely to be physically abused and neglected by a parent than the national average. As might be expected, children who experience cumulative violence, when they are both exposed to domestic violence and are themselves maltreated, experience more severe negative outcomes than children who have experienced only one form of violence (Osofsky, 2003).

In the past several decades, researchers, clinicians and policymakers have extended their interest and concern beyond individuals who are direct targets of domestic violence to the psychological effects on children who are exposed to domestic violence (Chemtob & Carlson, 2004; Holt et al., 2008; Kitzmann, Gaylord, Holt, & Kenny, 2003; Shipman et al., 1999; Sternberg et al., 2006; Tajima et al., 2011). Research has found that children who have witnessed domestic violence experience similar deleterious outcomes to children who were direct victims of the violence (Kitzmann et al., 2003, Shipman et al., 1999; Sternberg et al., 2006; Tajima et al., 2011). The emotional and behavioral dysregulation that is characteristic of children who are from violent homes places them at great risk for breakdowns in development (poor peer relations, academic problems, and child psychopathology). The results of an extensive meta-analysis led by Kitzmann et al. (2003) found that exposure to interparental violence is related to children's internalizing and

externalizing problems to a similar degree. In addition, the metaanalysis suggests that a child's developmental stage plays a critical role in their ability to appraise and to emotionally respond to conflict situations. Contrary to the expectation that younger children have an immature capacity for ER and thereby might exhibit more severe externalizing behavior, Sternberg's metaanalysis (2006) found that the negative effects of family violence were greater for children between 7-14 years old (which overlaps the age range of the proposed study) rather than for younger children ages 4-6. Internalizing behaviors were similar regardless of age. One of the weaknesses of studies that focus on child outcomes of family violence is that they rely heavily on mother-reported data of children's emotional responses. Only examining mothers' ratings is problematic because their ability to accurately assess their children's emotional responses might be compromised due to their own distress. Indeed, this points to the importance of researchers obtaining information from multiple informants such as both mother-reported measures and children-reported measures.

An important focus in the recent literature is the identification of variables that mediate the influence on children of witnessing and/or experiencing violence. Children's appraisals and coping skills are found to be linked to a child's vulnerability or resilience when facing various types of violent exposure. Holt et al.'s (1998) review of multiple studies found that children who can self-soothe and modulate their emotions are better able to buffer the stress experienced from exposure to violence. In addition, the research found that a child's exposure to

threatening situations can lead to emotional insecurity and is reflected in reactions of negative emotional arousal. Furthermore, cognitive flexibility and the ability to tolerate change may help a child handle an exposure to violence. Finally, the review found that parental warmth and parental support serve as a buffer against negative outcomes (academic achievement, emotion regulation, socialization, and somaticization) in children who have been exposed to high marital discord.

Gottman (2001) proposed that there were other factors critical to positive parenting beyond mere parental warmth and support. He found that parental meta-emotional ability (i.e. thoughts about their emotions and the emotions of their children) is a critical moderating variable for children's emotional reactions to their parents' marital discord. Gottman (2001) notes that parents with strong *emotion coaching* styles can help safeguard children from the negative outcomes associated with marital discord. Emotion coaching involves five concepts that parents can apply: 1) being aware of their child's emotions; 2) using their child's negative emotions as teaching opportunities rather than being dismissive or critical of them; 3) helping their child label, and process emotions; 4) providing empathy for their child's emotional state by communicating understanding and acceptance of their emotional response; and 5) providing the child with problem solving skills, setting limits, defining inappropriate behavior, and identifying successful strategies to cope with emotions. Gottman (2001) hypothesized that *emotion coaching* skills result in the development of emotional self-awareness in both parents and children that

fosters physiological self-regulation and attentional processes, and that this in turn would lead to social competence and broad emotional intelligence.

Although positive parenting can act as a protective factor against the effects of violence on children, there is considerable evidence suggesting that marital violence is associated with compromised parenting (Holt et al., 1998; Osofsky, 2003). In the following sections, the contextual factors related to this study population--domestic violence and homelessness will be examined in relation to emotion regulation in mothers and their children.

### **domestic violence and homelessness: effects on mothers and their children.**

It is important to consider the cumulative impact of homelessness and domestic violence on the mother and child. According to the U.S. Bureau of the Census (1996) about one in five children in the United States are living below the poverty line. Along with lack of financial resources, children who are members of low-income families experience significant amounts of acute and chronic stressors. These stressors include homelessness, instability in housing, exposure to family and community violence, and parental mental health and substance abuse problems. One prevalent stressor in homeless families is family violence; Hughes-Coolick, Burside-Eaton, and Peters (2003) found that at least half of homeless children were victims or witnesses of domestic violence.

The typical homeless family consists of a single mother and one to two children (Buckner et al., 1999). For these families, homelessness has become synonymous with life in the shelter, limited privacy and crowded conditions.

Moreover, mothers who are experiencing life in the shelter are acutely stressed. This is reflected on their scores on psychological distress measures which were found to be comparable to those in psychiatric outpatients (Buckner, Bassuk & Zima, 1993; Buckner et al., 1999). This same experience of distress could be expected for school-aged children who are old enough to be cognizant of the events leading up to their families' transition to life in the shelter. Buckner et al. (1999) found that homeless children self-reported higher levels of depression and anxiety symptoms than housed children. In addition, they scored well above normative levels on mother-reported measures of internalizing and externalizing behavior problems.

Anooshian (2005) suggests that witnessing or being a victim of violence is an important risk factor for most mothers and children who are homeless. She also posits that children whose mothers report excessive violence and economic hardship are most likely to experience social withdrawal and peer rejection. Anooshian (2005) speculates that there are several pathways by which family violence leads to maladaptive socialization in children. Homeless children who witnessed domestic violence have increased levels of aggression and compromised coping strategies, including difficulty regulating emotionally intense situations, mistrust in family and peers, and poor peer interactions including intimidation and victimization. Anooshian (2005) concludes that cumulative stress undermines parenting behaviors, acting as the underlying mechanism that leads to childhood aggression and subsequently social isolation. This is consistent with evidence that familial

violence is related to less warmth in parent-child relationships (McClosky et al., 1995). Further, family violence coupled with economic distress may lead to increased levels of aggression in parent interactions with their children. Indeed, parents who are homeless domestic violence victims experience significant stressors and might model poor social relationships, and respond negatively to their children, thereby contributing to their children's poor ER and problematic coping strategies.

Few studies have investigated factors related to parenting in homeless mothers, and among these studies, there are inconsistent findings. For instance, Harber and Toro (2004) in a review of studies on homeless mothers and their children, focusing on factors such as maternal warmth, child cognitive and social stimulation, and the availability of social support and social networks, found conflicting results. These mixed results demonstrate an inconsistent pattern of association between parenting behavior and child outcome, indicating the complexities involved in identifying pathways to this association. Pointing to further inconsistencies in this expected link, Buckner et al. (1999) found homelessness to be predictive of internalizing problems in school-aged children even when maternal distress and other explanatory variables were held constant. Buckner et al. (1999) suggests that this might be due to this age group's level of awareness of the social stigma attached to homelessness, their resultant feelings of shame, and their rejection by peers. In another study, Garcia Coll, Buckner, Brooks, Weinreb, and Bassuk (1998) found no consistent disparities in the cognitive and developmental functioning of poor children when comparing those who resided

in homeless shelters with those who were housed. Further, the homeless and housed mothers in this study scored in a similar range on measures of trauma history and maternal pathology. These findings suggest that stressors associated with poverty rather than homelessness have maladaptive effects on children's overall psychological functioning.

Finally, Hughes, Graham-Bermann, and Gruber (2001) reviewed studies that explicitly focused on resilience in mothers and children who reside in domestic violence shelters. One study, with a sample of predominately European-American families, found that 62% of the participants scored as "doing well" or were only slightly distressed in different areas of psychological functioning, including the number of current problems, degree of anxiety symptoms, and level of self-esteem. Protective factors that were associated with these resilient groups included mothers who engaged in less verbal abuse with their partner and who were less depressed and anxious, suggesting the importance of parental modeling of ER on child outcomes.

In a similar study consisting of predominately African-American families, 52% of children were found to be "doing well." In this study, positive beliefs about parental competence, in addition to fewer stressful situations and interactions, contributed to outcomes associated with resilience (Hughes et al., 2001). Resilience on the part of the European-American children was associated with their mother's emotional well-being. For the African-American children, positive outcomes were associated with mothers who exhibited low levels of hostile feelings toward their

children and who were able to competently parent. It is noteworthy that Hughes et al. (2001) attributes part of the positive functioning in these resilient children to their mother's modeling healthy ER and coping, demonstrated in their low level of symptomology.

The role of the mother-child relationship is one factor that has been found to potentially mediate the effects of violence on children in both studies that explicitly examined families who are homeless and domestic violence victims, as well as housed families who are victims of DV. In a community sample of 103 children and their mothers, Levendosky, Huth-Bocks, Shapiro, and Semel (2003) examined the mother-child relationship by measuring maternal psychological functioning, parenting behaviors (maternal report and observation) and child attachment, proposing that these factors mediate the effects of DV on preschool children's functioning. The results indicated that psychological functioning (depression and trauma symptoms) negatively influenced parenting effectiveness only when maternal distress was high, and that this was significantly related to child externalizing behaviors. Although there was no significant effect of domestic violence on mother reports of child behavior, there was a negative effect on the observed child behavior, including less focused attention, less positive affect, fewer verbal exchanges and less proximity. This might indicate that although these children were not exhibiting behavior problems in other contexts, that familial violence has had an impact on the mother-child relationship. Contrary to what one might expect, mothers who indicated more severe abuse reported that they were

more effective parents. This might be due to their effort to compensate for the violence, and for the possibly neglectful and abusive role of their children's father. Alternatively, mothers who experienced increased severity of domestic violence might be more inclined to respond defensively and, in doing so, *report* themselves as a "better" mother. However, it is important to note that there was no *observed* relationship found between severity of domestic violence and parenting behaviors.

Further supporting Levendosky et al.'s (2003) findings, Buckner et al.'s research (1999; 2003) found the mother's psychological distress to be the strongest predictor of children's mental health and problem behaviors among homeless, as well as poor housed children. A similar finding was established by Chemtob and Carlson (2004) in a study that examined 50 mother-child pairs who had been direct targets of or witnesses of verbal, physical, or sexual abuse. This study found mothers' self-reported depression, anger, and PTSD symptoms to be the strongest predictor of children's emotional reactions. These findings suggest that a closer examination of the risk and protective factors is needed to determine the ways in which domestic violence and homelessness may predict children's psychological and behavioral outcomes.

### **Linkages between Maternal Trauma, Parenting Practices and Child Outcomes**

Theory and research have suggested that most women who are victims of domestic violence experience symptoms of PTSD. The prevalence of PTSD in DV victims is high, ranging from 40% to 80% (Astin, Ogland-Hand, Coleman, & Foy,

1995; Gleason, 1993; Houskamp & Foy, 1991; Kemp, Rawlings, & Green, 1991).

Judith Herman (1992) asserts that many women who are victims of DV suffer from a complex syndrome, similar to the symptoms outlined in the DMS IV diagnosis of PTSD. Due to the chronic nature of the trauma, Herman (1992) suggests that these individuals also suffer from depression, idealization of the perpetrator, and dissociation. Herman (1992) further argues that trauma overwhelms the ego's ability to make sense of what occurred, deeply undermines the individual's most fundamental assumptions about the safety of the world and their trust in relationships, which makes for difficulty in assimilating the trauma into a cognitive framework. Herman (1992) describes a fluctuation between constriction and flooding in which victims of domestic violence often oscillate between states of overwhelming emotions and emotional numbing. As a result of the prolonged, unpredictable, and repetitive nature of domestic violence, the victim may experience persistent affective, cognitive and personality changes (Van der Kolk, 1987). Herman proposes a new diagnosis of complex post-traumatic stress disorder which includes changes in affect regulation, alterations in consciousness, and alternations in self-perception.

Maternal history of victimization has been identified as a risk factor in seriously disrupting a parent's caretaking abilities (Cohen, Hien and Batchelder, 2008). Studies have found that parent's own abuse histories are risk factors for negative consequence in parenting, including use of more punitive aggressive and physical discipline (Banyard, 1997; Cohen et al., 2008; Gara, Allen, Herzog, &

Woolfolk, 2000). One way to conceptualize this is by using the *cycle of violence theory*, an intergenerational model whereby traumatic experiences are passed down within a family across generations (Downs, Miller, Testa & Panek, 1992).

Originating from social learning theory, the *cycle of violence theory* posits that children learn to become abusive through socialized experiences in their families, making survivors of abuse at risk for using greater physical punishment with their own children. Although support has been found to corroborate the cycle of violence theory, particularly in examples of physical abuse (Caliso & Milner, 1992; White and Humphrey, 1994), it has also been shown that not all abusive parents have histories of trauma and equally not all traumatized children become abusive parents. Widom (1989) found that history of abuse ranges from an estimated 7% to 70% among abusing parents, suggesting that there might be multiple pathways and a variety of risk and protective factors that affect whether violence and trauma are transmitted from one generation to the next.

Clinical Evidence suggests that PTSD symptoms can have an adverse impact on parent's functioning and ability to parent affectively (Applesyard & Osofsy, 2003). Yet there has been very little empirical research in this area. Recent studies that focus on male veterans found that PTSD symptoms are associated with dissatisfaction with parenting, even after controlling for major depression and substance abuse disorders (Cohen et al, 2008; Sampler, Taft, King & King 2004). In the trauma field, there has been an increased focus placed on the effects of cumulative trauma, which for the present study can be applied to victims of

domestic violence. The first to apply these concepts to parenting, Banyard and colleagues (2003) explored the impact of cumulative trauma on parenting in a sample of 152 mothers with a variety of types of interpersonal trauma exposure both in childhood and in adulthood. The findings illustrate that higher levels of trauma exposure were linked with decreased parenting satisfaction, reports of child neglect, use of physical punishment, and a history of protective service reports.

In a recent study conducted by Cohen et al. (2008), a sample of 176 urban mothers were categorized into four groups: substance using, depressed, comorbid, and control. Participants in the three diagnostic categories reported significantly greater exposure to interpersonal trauma than the controls. The study examined the contributions of cumulative maternal trauma, substance use, diagnoses of depression and post-traumatic stress on parental abuse potential, punitiveness, and psychological and physical aggression toward their children. Hierarchical regressions indicated that cumulative trauma is a significant predictor of all parenting outcomes, and in particular predict abuse potential, punitiveness and psychological aggression. Although seemingly paradoxical, PTSD was found to be significantly negatively-correlated with physical discipline such that PTSD symptoms are characterized by avoidance and emotional numbing. Hence, one might expect mothers who are high in this cluster of symptoms to be less engaged in discipline and that dissociative processes account for this paradoxical finding. The results also point to the importance of the role of emotion regulation and its impact on parental stress, functioning and behavior. Moreover, Cohen and her colleagues

suggest that more empirical exploration is warranted to explore the ways in which deficits in emotion regulation explain the robust connection between trauma exposure and child maltreatment potential reported in their study.

## **Conclusion**

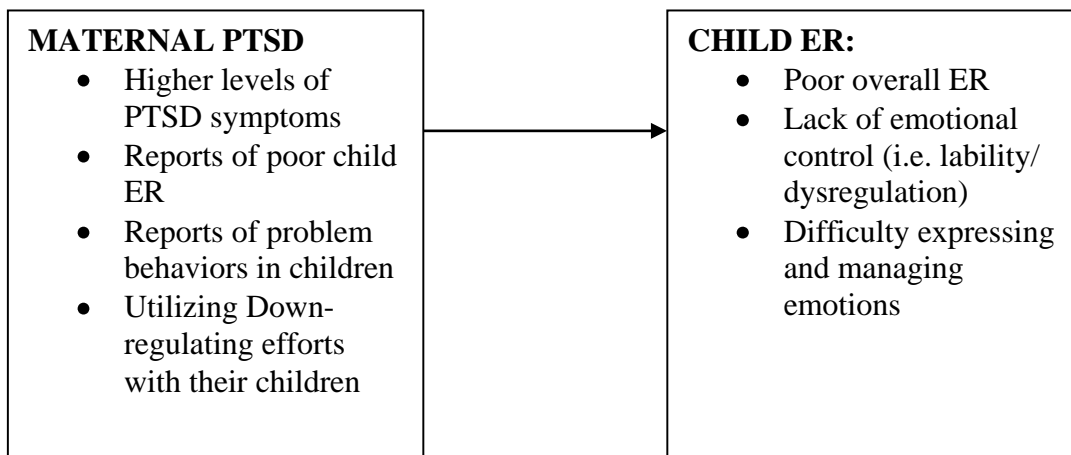
The emerging literature on trauma and parenting supports clinical observations that history of abuse can negatively impact a parent's ability to be an attentive and consistent caretaker. At the present moment the little research in this area focuses on parental support, warmth, and feelings of competency. This study aims to build on this growing body of research by examining the associations among trauma symptomology, parental understanding of children's emotionality and regulation, and maternal behaviors used to regulate their children, in addition to factors related to the children's functioning, including children's expressed emotion. In doing so, the research aims to address more specific mechanisms underlying the process by which mothers transmit ER capacity to their children. This study extends our knowledge about the relationship of parenting behaviors in traumatized mothers and child ER by using well established, multi-component measures of both maternal functioning and child ER; and the study focuses on a group of mothers and children that were exposed to extremely emotional negative experiences that likely challenge their emotional regulation capacities. A better understanding of the relationship between parenting processes and child emotion regulation will inform the development of specific clinical interventions to help these at-risk families.

## Statement of Hypotheses

The study focuses on the extent to which maternal psychological functioning, specifically PTSD symptomology, degree of attunement to a child's ER, and efforts at child regulation are associated with child ER. Overall, the study hypothesizes that:

*Lower levels of PTSD symptoms in mothers who have experienced homelessness and domestic violence will influence maternal attunement to child ER, affect their efforts to regulate their child's behaviors, and will be associated with children who demonstrate better ER skills.*

The hypothesis is examined using archival data from the larger study including cross-sectional mother-reported PTSD symptoms, the mother-reported Emotion Regulation Checklist data for a sample of 35 families with children ages 8-16, the Child Regulation Index, and the Child Behavior Checklist. In order to further explore child emotion regulation, and because mothers' ratings of children's ER may be affected by their own emotional state (Sternberg, et. al, 2006), children were given a self-report measure on ER. Consequently, data assessing mother reports of child ER will be compared with children's self-report measure of their ER. The conceptual model is illustrated in Figure 1. This model hypothesizes that maternal psychological functioning is a factor which impacts child ER.

**Conceptual Model: Figure 1**

## **CHAPTER 3: METHODS**

### **Information about the Larger Study**

This study uses archival data collected as part of a larger study that explored the multiple stressors that homeless families face while living in the shelter system, and their use of coping strategies (Fraenkel, 2006; Fraenkel, et al., 2005). In addition, the larger study examined the effectiveness of a multiple family discussion group intervention called Fresh Start for Families that promotes family resilience in this population (Fraenkel, Hameline, & Shannon, 2009). Fresh Start for Families' main goal is to provide support for families who are coping with the stressors of living in the shelter and the effects that experiencing domestic violence has on mental health. More specifically, the program focuses on helping parents and children identify and metabolize strong negative emotions that are generated as a result of their trauma history, as well as ongoing daily stressors. The objective of the group is to help foster ER skills in both parents and children, and to assist parents in attuning to and helping them better regulate their children's emotions. The program consists of a six week manualized multiple family discussion group for both mothers and children.

### **Setting of the Larger Study**

The larger study took place at two HELP USA Tier II shelters: a homeless family shelter in the South Bronx, and a shelter specifically for women and children who are homeless due to domestic violence in a Northern Manhattan neighborhood of New York City. The archival data for the proposed study were collected at the

HELP USA domestic violence shelter; the specific location is confidential. Families reside at HELP Harbor for approximately 8-9 months while they are searching for permanent housing, seeking employment and involved in a variety of social services.

### **Subjects of the Study**

The proposed study will use pre-intervention archival data from a subset of the larger study's sample, 32 mother-child pairs. The participants are mostly lower-income individuals who are African-American or Latino. All mothers and children in the proposed study sample completed the same set of measures. The study sample was comprised of English-speaking mothers with children ages 8-16. In the larger study, families were identified through the shelter's roster as well as through the assistance of shelter case managers and shelter staff. Trained members of the research team contacted individual families by phone calls to units and mail-box notices. Recruitment of families who had been living in the shelter from between one to six months was on-going.

For the proposed study, families will be included in the analyses if mothers completed data on both self-reported measures and on measures related to child behavior and child ER, as well as if one child (in the target age range) completed the measures. Families who were not included in the study: children outside the age range (i.e. infants and toddlers; or older teenagers), families with incomplete data, families who either left or were discharged from the shelter prior to the end of the study.

## **Procedures**

### **recruitment process of the larger study.**

As part of the larger study, women and children were recruited to join the study, and if interested, they could also join the multiple family group discussions. Research Assistants contacted the women by telephone and described the general information about the study. Interested families were scheduled for an in-person meeting with a Research Assistant to review the details of participation and to sign the consent form. After signing the consent form, all mothers participated in a semi-structured interview which took between 30-60 minutes. Children were also interviewed separately with a Research Assistant. The primary focus of the interview was about their emotions around being and becoming homeless, living in the shelter, the ongoing challenges they face, and the ways in which each family member copes with his or her emotions. Another focus of the parent interview was to explore the parent's perspective of and responses to her children's emotions. Upon completion of the interview, parents were given a packet of questionnaires to complete on their own and return before starting the discussion group.

All parent and child interviews were audio-recorded. The mothers' questionnaire packet included: demographics, information about their own feelings and behaviors, their children's feelings and behaviors, and about the ways their family copes with challenges. Children completed a few scales about their own emotions and how they handle them; and various other measures about their family coping approaches. A detailed description of the instruments used in the proposed

study is described below. Mothers were compensated with \$25 for the interview and \$25 for completing the questionnaire packet. A post-intervention packet was distributed at the end of the group intervention and another \$25 of compensation was given when the packet was completed. Children were compensated with a \$10 gift certificate for completing their packet. In an effort to collect all the data, Research Assistants reminded and encouraged participants to complete their questionnaires. Packets were either returned in-person to a research staff member or brought to a family group session. Upon receipt, packets were checked to ensure they were complete and questions were addressed if needed. If assistance was solicited, Research Assistants assisted parents and children with the completion of their packets.

**multiple family discussion group intervention (larger study).**

At the time of initial contact, research staff informed families about the multiple discussion groups, called Fresh Start for Families, and notified them that they could participate in the research without participating in the group. Participating in the groups did not require participating in the research. However, all families that participated in the groups completed the research portion. Similarly, all the families who elected to participate in the research expressed interest in participating in the group, although some families discontinued from the group because they were placed in housing or discharged early. The program consists of a six week manualized multiple family discussion group for both mothers and children. Each session consists of meeting as a whole group when the family

can gather together to partake in activities, as well as separate times when mothers and children have the space to address their emotions with their own peers. There is an additional week at the start and end of the six week group session used to collect pre- and post-intervention data.

### **Measures used in the Proposed Study**

In the larger study, mothers were administered 13 measures, including a demographic questionnaire. Two sets of measures will be used in the proposed study- one for mothers and one for their child. The measures that mothers completed and were used in the proposed study are: PTSD Checklist, Emotion Regulation Checklist (Shields & Cicchetti, 1997), Child Regulation Index (Gottman & Katz, 1986), and Child Behavior Checklist (CBCL). The child self-reported measure that will be used in this study is the Children's Emotion Management Scale (CEMS: Shipman & Zeman, 2002; Zeman, Shipman & Penza-Clyve, 2001; Zeman, Shipman & Suveg, 2002).

#### **Demographic Questionnaire (About You).**

Mothers provide information about their age, ethnicity, marital/partner status, country of origin, and education level.

#### **Post-Traumatic Checklist- Civilian Version (PCLC).**

The PCL-C is a self-report rating scale for assessing Post-Traumatic Stress Disorder. It consists of 17 items which correspond to the DSM-III-R symptoms of PTSD. Mothers are instructed to indicate how much they have been bothered by

each symptom in the past month using a 5-point (1-5) scale. The anchors for the severity ratings are range from “Not at all” to “Extremely.”

In a study of 123 male Vietnam theater veterans, test-retest reliability of the PCL was .96. Internal consistency was .97 for all 17 symptoms on the PCL. Convergent validity was found to be strong between the PCL and: the Mississippi Scale (.93), the PK scale of the MMPI (.72), and the Impact of Event Scale (.90) (Weathers, Litz, Herman, Huska & Keane, 1993).

### **Emotion Regulation Checklist (ERC).**

Children’s ER was measured for the total sample (n=32) using the Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997, 1998), a 24-item scale completed by mothers. Derived from a Q-sort method, the ERC measures processes critical to emotionality and regulation, such as affective lability, intensity, flexibility, and situational appropriateness of emotional expression. Mothers rate children’s affective behavior in a certain situation (i.e. how often your child is “easily frustrated”). Mothers rate this on a four-point Likert scale, reflecting the degree to which the item characteristic fits the child (‘almost always’ to ‘rarely/never’).

In low-income parent samples, the ERC was used to assess their children’s developmental psychopathology and the various pathways that lead to adaptive and maladaptive functioning (Shields & Cicchetti, 1997). ERC Factor analyses on a sample of 513 maltreated and impoverished children (6–12 years old) revealed two reliable dimensions, emotion regulation, and lability/negativity (Shields & Cicchetti,

1998). The emotion regulation dimension describes appropriate affective displays, empathy, and emotional self-awareness; sample items include “Is empathic toward others,” and “Can say when she/he is feeling sad, angry or mad, fearful or afraid.” The lability/negativity subscale reflects behavior including mood swings, angry reactivity, and intensity of positive and negative emotions, for example, “exhibits wide mood swings.” Low scores in the lability subscale and higher scores in the Emotion Regulation Subscale reflect a child’s success with emotion regulation and vice versa.

Cronbach's alpha was .96 for the lability/negativity subscale and .83 for the emotion regulation subscale. A composite score was generated for the two scores which had an internal consistency of .89 (Shields & Cicchetti, 1998). In testing the construct validity of the measure, both convergent and discriminant validity were examined and the scale appropriately discriminated children who were maltreated and who are at greater risk for deficits in self-regulation, from a comparison group of children who were not maltreated. Furthermore, the ERC is an appropriate scale to measure ER in this study’s at-risk sample.

### **Child Regulation Index (CRI).**

The Child Regulation Index (CRI: Katz & Gottman, 1986) is a 45 item questionnaire completed by parents about the “degree to which the child requires external regulation of emotion” (Gottman, Katz, & Hooven, 1997, p. 162). This questionnaire includes two subscales, items in which the parent’s behaviors reflect their effort to “down-regulate” the child (i.e. help the child soothe themselves after

an intense emotional response) and “up-regulate” (i.e. encouraging an inhibited or fearful child to engage in an activity). The focus of the CRI/ERQ is on the parent’s behavior in response to the child’s affective behavior, specifically how often the parent had to respond to the child’s affective behavior (i.e. “how often did you have to tell your child ‘to get to bed when he/she was too excited to go to sleep”). Katz and Gottman found that the down-regulating subscale items (parent responses which restrict inappropriate behaviors) were the most predictive of a child’s affect-regulating capacities (Katz, in personal communication with Wilson, 1997). Higher scores in the down-regulation subscale suggest poor emotion regulation in children (i.e. they require more parental emotion regulation). The alpha coefficient for the whole scale was .74 (Katz & Gottman, 2002). The Katz-Gottman CRI in its revised version, the ERQ, was used in recent years to study children's emotional responses to stressful parent-child interactions with the intention of finding a possible connection between emotion regulation and vagal tone (Katz & Gottman, 2002).

### **Child Behavior Checklist (CBCL).**

The CBCL (Achenbach, 1991 & 1992) is a general behavioral measure of a wide-range of childhood problems related to attention, thought, affective, social, somatic complains and aggressive behavior. The measure does not specifically target child’s affect-regulatory capacities. There are two versions of the CBCL that target different age ranges: CBCL 1 ½ -5 years (revised in 2000) and the CBCL 6-18 years. The CBCL measures 118 behavior problems rated on a 0- to 2-point scale. It takes between 15-17 minutes to complete. The CBCL has three global scales:

internalizing, externalizing and total behavior problems. Raw scores for these subscales are converted into T-scores according to the appropriate gender and age-group norms for each subject. The CBCL is one of the most widely used and well-validated measures of children's adjustment. The measure has been normed with both clinical and non-clinical populations. It is noteworthy that socioeconomic status and race have little effect on scale scores (Achenbach & Edelbrock, 1991).

Individual item intra-class correlations (inter-interviewer reliability and test-retest reliability) of greater than .90 were found for the CBCL for ages 6-18. The Cronbach's alpha for the CBCL 6-18 ages for internalizing behavior was .90 and for externalizing behavior was .94. The alpha for total problems was .97. The total behavior problem scale is the most reliable and clinically valid measure of the CBCL (Achenbach, & Rescorla, 2001).

### **Child Self-Report Measure**

Children received a self-report measure of ER, the Children's Emotion Management Scale (CEMS: Shipman & Zeman, 2002; Zeman, Shipman & Penza-Clyve, 2001; Zeman, Shipman & Suveg, 2002).

#### **Children's Emotion Management Scale (CEMS).**

The CEMS is a 23-item scale that includes two separate scales: children's sadness and anger management scales (CSMS, CAMS). The CEMS (Zeman, Shipman, & Penza-Clyve, 2001) is a 12-item Sadness scale and an 11-item Anger scale, with a 3-point Likert scale in which each child reported (1: hardly ever, 2: sometimes, 3: often) if the item reflects the way they handle their emotional

response. Factor Analysis reveal three subscales for each emotion: inhibition (suppressing or covering up an emotional expression), dysregulated expression (culturally inappropriate expression of sadness or anger) and ER coping (perceptions of coping with anger and sadness through constructive ways of handling emotions) (Zeman, Shipman, and Suveg, 2002).

In a community sample of mostly white 8-10 year old children construct validity was established in relation to self and other (parent and peer) report measures of anger and sadness regulation. Internal reliability scores ranged from .60 to .72 for each subscale with a test-retest reliability scores ranging from .63- .80. (Zeman et al., 2001). Internal consistency has been adequately demonstrated for the three subscales for both anger and sadness across various samples, in a sample of maltreated children, (Shipman, Zeman, Penza, & Champion, 2000), and African-American youth (Perry-Parrish & Zeman, 2008).

## **Data Analysis**

### **Data management**

All questionnaires were scored by research assistants from the Fresh Start research team. All data were double scored to ensure accuracy. If less than 10 % of items were blank on a questionnaire, missing items were imputed by using subscale average score. Data were entered into SPSS for analysis. Initial frequencies will be examined to check for outliers.

## Analysis

Descriptive statistics will be generated for all demographic items and subscale scores. First, correlation analysis will be performed in order to examine the relationships among the dependent variables (mother's rating of child ER, behavior), predictor variable (mother's PTSD), and the demographic variables (age, income, ethnicity). Then using a regression analysis, Emotion Regulation Checklist subscale scores (Lability/Negativity and Emotion Regulation) will each be regressed on total mother reported PTSD symptom scores to determine whether higher levels of PTSD symptoms in mothers will predict higher value of the Lability/Negativity and lower levels of Emotion Regulation. Further, if the demographic variables were found to be significant in the initial correlation analysis, they will be added in the same regression models (see above) as control variables in order to control the effects of demographic characteristics on the relationship between mother's reported PTSD symptoms and their perceptions of child ER. Separate regression analysis will then be run using the following scales as dependent variables and mother's PTSD as the independent variable. The same analysis will be conducted using different measures: Child Regulation Index and Child Behavior Checklist as the dependent variables. This analysis will be used to examine the main hypothesis that fewer PTSD symptoms in mothers will predict better child ER and fewer parental behaviors to down-regulate children's behaviors.

The analysis model described above will be repeated using the child-self report measure from the CEMS instead of the mother reported ERC. In addition,

regression analysis will be used to examine whether mother's level of PTSD is related to child's level of coping with anger (CEMS anger coping subscale) and with level of coping with sadness.

## Chapter 4: Results

### Demographics

The study sample was composed of 32 mother-child dyads. The mothers ranged in age from 26 to 54 years old with a mean age of 35.97 ( $SD = 7.01$ ). The racial/ethnic background of the women was approximately two thirds African American and nearly one third Hispanic, with the majority reporting U.S. citizenship (see Table 1). The mothers were primarily single, Christian, and unemployed. Educationally there were more high school graduates ( $n = 22, 68.75\%$ ) than non-high school graduates ( $n = 10, 31.20\%$ ).

The children's mean age was 10.33 ( $SD = 2.30$ ) with a range of 5 to 15 years old. The modal age of children was 9 years old. There were an equal number of male and female children (50% each). The racial background of the children was approximately two thirds African American and nearly one third Hispanic.

### Descriptive Statistics of Measures

As a preliminary step to the analyses, means, standard deviations, ranges, kurtosis and skewness were computed for each measure. Cronbach's alphas were computed to determine the internal consistency of the scales in this sample (see Table 2).

#### **Mother reported measures.**

**PCL-C.** The PCL-C scores were normally distributed and showed excellent internal consistency ( $\alpha = .93$ ). Using a cutoff of 30 (Walker et al., 2002) to

indicate the likely presence of PTSD, 65.6% ( $n = 21$ ) of the sample would be categorized as likely to have PTSD (see Table 2).

***Emotion Regulation Checklist (ERC).*** Descriptive statistics for the two ERC subscales are presented in Table 2. The Lability/Negativity subscale scores span almost the entire possible range of scores, are normally distributed (as evidenced by skewness and kurtosis values between -1 and 1), and have good internal consistency ( $\alpha = .83$ ). The Emotion Regulation subscale scores actual range was 18 to 32, out of a possible range of 8 to 32, indicating that the poorest emotional regulation levels were not present in this sample. The scores were normally distributed and showed adequate internal consistency ( $\alpha = .68$ ).

According to Cichetti et al. (1996), who designed the ERC, a score 1 SD above or below the sample's mean is considered to be suggestive of emotion dysregulation. Cichetti et al. (1996) do not have absolute criteria in defining ER, and instead recommend using sample-specific cut offs to define ER. In this study sample 15.6% ( $n = 5$ ) scored 1 SD above the mean ER Lability/Negativity subscale, and 21.8% ( $n = 7$ ) scored 1 SD below the ER subscale (see Table 2).

***Child Regulation Index (CRI).*** The scores on the CRI fell in the lower range of possible scores (the possible range is 14 to 70, and the actual range was 18 to 48, with the midpoint of the scale being 42) indicating that the sample consisted of mothers who engaged low to average levels of down-regulation. Scores were normally distributed and showed good internal consistency ( $\alpha = .80$ ) (see Table 2).

***Child Behavior Checklist (CBCL).*** The CBCL Total scores span almost the entire range of scores. The normative mean T-score for the CBCL is  $M = 50$ ,  $SD = 10$ . For aggregate and total problem scores, a score in the range of 60-63 defines the borderline range (84th - 90th percentile), and a score greater than 63 is defined as falling in the clinical range. In the study sample, 34.37% ( $n = 11$ ) of the children fall within the borderline/clinical range for the CBCL-Total indicating emotional/behavior problems above the 90th percentile according to the normative percentile (Achenbach, 1991; Achenbach & Rescorla, 2000). Twenty-five percent ( $n = 8$ ) of the children fall within the borderline/clinical range for the CBCL-Externalizing T-score, and 28% ( $n = 9$ ) are within the borderline/clinical range for the CBCL-Internalizing T-score (See Table 2). Thus, the majority of children in this sample scored within the normal range.

**Child self-report measure.**

***Children's Emotion Management Scales: Anger and Sadness (CEMS).***

The means, standard deviations, ranges, skew, and kurtosis values for each of the CEMS subscales are presented in Table 3. The range of CEMS total scores does not span the entire possible range, indicating that this sample is in the low to average range of emotion management. The CEMS total scores showed good internal consistency ( $\alpha = .75$ ). All of the subscales showed a full range of scores, indicating that although some subjects showed high levels of the subscale constructs, no individual showed combined overall high levels of emotion

management. All the CEMS scales were normally distributed and showed adequate to good internal consistency.

### **Relationships among Demographic Variables and Dependent Variables**

Pearson correlations and independent sample *t*-tests, were performed to determine the relationship between several demographic variables (mother's age, mother's level of education, mother's employment status) and the dependent variables.

Pearson correlations showed no significant associations between mother's age and any of the dependent variables (see Table 4). Independent samples *t*-tests found no significant differences between any of the demographic variables and mother's level of education or employment status (see Tables 5 and 6). In regards to sex differences among the dependent variables, independent samples *t*-tests revealed no significant differences between male and female children on any of the dependent variables (see Table 7).

### **Relationships among Parent-Reported Measures**

Correlations were conducted in order to understand the interrelationships of the dependent variables (see Table 8). The ERC Lability/Negativity subscale was positively correlated with the CRI downregulation subscale, ( $r [n = 31] = .57, p < .01$ ). This result suggests that mothers who report that their children have greater difficulty with Lability/Negativity also report that they (the parents) utilize more behaviors to help down-regulate their children. ERC Lability/Negativity was also positively correlated with the CBCL total problem scores, ( $r [n = 28] = .65, p < .01$ ) as

well as the CBCL internalizing total subscale ( $r [n =28] = .43, p = .02$ ), and the CBCL externalizing total subscale score ( $r [n =28] = .65, p < .01$ ). These results suggest that mothers who perceive their children as having greater difficulty regulating their angry and sad feelings also perceive their children as having more behavioral and emotional problems.

### **Tests of Hypotheses**

Regression analyses were performed to specifically address the hypotheses of the study.

**Hypothesis 1:** *Higher levels of mothers' reported trauma symptoms will be associated with greater discrepancy between mothers' ratings of their children's ER abilities and their children's self-rating of their ER abilities.*

As described earlier, the ERC Lability/Negativity subscale was used as the measure of mothers' perception of their children's ER. As was discussed in the Methods Section, the Lability/Negativity subscale reflects mothers' perception of their children's behavior, mood swings, anger reactivity, and intensity of positive and negative emotions. High Scores on the Lability/Negativity subscale indicate difficulty with emotion regulation. High scores on the Dysregulated subscale indicate inappropriate expression of sadness or anger. In order to measure the differences between mother's rating of their child's ER skills and child self-report of their ER, a Difference Score was computed. First, the ERC Lability/Negativity subscale and the Child's CEMS Dysregulation subscale score were rescaled to the same scaling system, so that both had a range of 0-1, by transforming them to

represent a percentage of the possible range of scores. The following formula was used to rescale the scores:

$$\frac{(\text{Actual Score} - \text{Minimum Possible Score})}{(\text{Maximum Possible score} - \text{Minimum Possible Score})}$$

Using the 0-1 rescaled scores, a difference score was created by subtracting the CEMS dysregulation subscale scores (0-1 range) from ERC Lability/Negativity scores (0-1 range), creating a new variable ERC Lability/Negativity-CEMS Dysregulation discrepancy variable (ERC-CEMS).

A regression analysis was then conducted to test Hypothesis 1. The PCL-C scores explained 24.70% of the variability ( $R = .50$ ,  $F [1, 29] = 9.53$ ,  $p < .01$ ) of the ERC-CEMS scores. The results of the regression indicated that the model is significant. It was found that there was a positive relationship between mothers' total PTSD and the parent-child difference score on emotion regulation ( $\beta = .01$ ,  $p < .01$ ). This result suggests that mothers with greater trauma perceive their children's Lability/Negativity to be higher than their children's perception of their own dysregulation. This supports Hypothesis 1, which predicted that higher levels of maternal trauma would be associated with greater discrepancies of mothers' and children's ratings of the child's emotion regulation abilities.

**Hypothesis 2:** *Mothers who reported higher levels of trauma symptoms implement more ways of down-regulating (i.e. calming or restricting inappropriate behavior) their children than do mothers with lower levels of trauma symptoms.*

A regression analysis was conducted to test Hypothesis 2. The PCL-C score

explained 5.20 % of the variability ( $R = .23$ ,  $F [3, 28] = 0.88$ ,  $p = .46$ ) in the CRI score. It was found that mother's total PTSD did not significantly predict mothers' tendency to down-regulate their children ( $\beta = .14$ ,  $p = .21$ ). Mothers' self-report of trauma was not related to their down-regulating behaviors, therefore Hypothesis 2 is not supported.

**Hypothesis 3:** *Mothers who reported higher levels of trauma symptoms report that their children exhibited more problem behaviors and less developed ER skills*

In order to test this hypothesis several regressions were performed. Scores from the mothers' ratings of their children's behavior on the CBCL were used as the dependent variable.

The first regression was performed to predict the effect of PCL-C scores on CBCL Total scores. The PCL-C scores explained 22.90 % of the variability ( $R = .48$ ,  $F [1, 26] = 7.74$ ,  $p = .01$ ) of the CBCL Total scores. The results of the regression indicated that the model is significant. It was found that there was a significant positive relationship between mothers' total PTSD and the CBCL Total score ( $\beta = .71$ ,  $p = .01$ ). This result suggests that mothers with greater trauma rate their children as having greater emotional and behavioral problems.

In order to better understand the types of problems that children experience, and how they relate to their mothers' level of trauma, CBCL internalizing subscale scores and the CBCL externalizing subscale scores were regressed on the PCL-C scores. First, a regression was performed to predict the effect of PCL-C scores on

the CBCL Internalizing variable. The PCL-C score explained 25.9% of the variability ( $R = .51$ ,  $F [1, 26] = 9.09$ ,  $p < .01$ ) of the CBCL Internalizing score. The results of the regression indicated that the model is significant. It was found that there was a positive relationship between mothers' total PTSD and the CBCL Internalizing total score ( $\beta = .28$ ,  $p < .01$ ). This result suggests that mothers with higher degrees of trauma report that their children struggle with more withdrawn, anxious/depressed, and somatic behavior.

A second regression was performed to predict the effect of PCL-C scores on the CBCL Externalizing variable. The PCL-C scores explained 6.20 % of the variability ( $R = .25$ ,  $F [1, 26] = 1.71$ ,  $p = .20$ ) of the CBCL Externalizing scores, although not a significant amount. The results indicate that mother's total PTSD scores did not significantly predict children's externalizing problems ( $\beta = .14$ ,  $p = .20$ ) as rated by their mothers. This suggests that there is not a significant relationship between mothers' level of trauma and the degree to which children have externalizing problems, at least as rated by mothers.

Hypothesis 3 was, therefore, only partially supported, with mother's PTSD associated with internalizing but not externalizing symptoms.

**Hypothesis 4:** *(A) Children who have mothers with greater trauma symptoms tend to exhibit difficulty expressing their sad feelings. (B) Children who have mothers with greater trauma symptoms tend to exhibit greater difficulty expressing their anger.*

A regression was performed to predict the effect of PCL-C scores on the CEMS Dysregulated Sadness variable. PCL-C scores explained 12.80 % of the variability ( $R = .36$ ,  $F [1, 29] = 4.27$ ,  $p = .05$ ) of the CEMS Dysregulated Sadness scores. It was found that PTSD symptoms in mothers are significantly related to children's self-report of their dysregulation of sadness ( $\beta = -.03$ ,  $p < .05$ ). This result suggests that mother's who have greater symptoms of trauma have children who rate themselves as expressing their sad feelings in inappropriate ways to a lesser extent.

Another regression was performed to predict the effect of PCL-C scores on the CEMS Dysregulated Anger variable. The PCL-C scores explained less than 1% of the variability ( $R = .09$ ,  $F [1, 29] = .23$ ,  $p = .64$ ) of the CEMS Dysregulated Anger scores. The results of the regression indicated that the model is not significant. This result suggests that mother's who have greater symptoms of trauma don't have children who rate themselves as expressing their angry feelings in inappropriate ways at a significant level.

Hypothesis 4 was, therefore, only partially supported, with mother's PTSD associated with children who express their sad feelings in inappropriate ways to a lesser extent, but not with children who express their angry feelings in inappropriate ways.

## Chapter 5: Discussion

This study is an outgrowth of a larger study which examined the psychological functioning of parents and children living in a homeless shelter who had experienced domestic violence (DV). The larger study also examined the effectiveness of a multiple family discussion group intervention in strengthening individual and family functioning. While conducting these multiple family discussion groups, we observed that some mothers seemed better able to regulate their own emotions, and were more attuned to their children, whereas others had more difficulty regulating their own emotions and also struggled to regulate their children's emotions. Mothers who exhibited more ER skills with their children also seemed to have children who were better able to express their feelings and cope with distressing ones.

The present study grew out of these clinical observations and has also been informed by a review of the theoretical literatures on maternal psychopathology, specifically PTSD, on individuals' emotion regulation capacity, and on the ways in which variation in parental regulation of their children's emotions may affect the mental health risks for children who have witnessed domestic violence. Using well established, multi-component measures of both maternal psychological functioning and child ER, the study focused on a group of mothers and children who had been exposed to severely distressing experiences that were likely to have challenged their capacity to regulate their emotions.

The participants of the study were recruited from an opportunity sample of homeless mothers and children who were living at the domestic violence shelter. The sample was composed of predominately minority families (87.5% African American or Hispanic). Most of the mothers had limited education (31.2% of mothers had not completed high school, 34.4% had high school or GED degrees, and only 34.5% had gone beyond high school). They were mostly unmarried (68.8%), and unemployed (75%). The average age of the mothers was 36 years old and the average age of the children was 10 years old.

The study hypothesized that the level of PTSD symptoms in mothers who had experienced homelessness and domestic violence would influence maternal attunement to child ER, and their efforts to regulate their children's behaviors. It is important to note that the study did not determine the source of maternal trauma, so although this is a sample of women who have experienced domestic violence and homelessness, the study does not examine or identify sources of preexisting trauma. It was hypothesized that lower levels of parental PTSD would be associated with better ER skills for their children.

### **Summary of Findings**

Although the women and children studied faced various socio-contextual challenges including domestic violence and homelessness, they exhibited a wide range of functioning. Only a little more than half of the women were at or above the clinical cut-off for PTSD. Mothers' reports of child ER also revealed a range of functioning. Scores were in the normal range for 85% of the children on a mother-

reported measure of emotion regulation (the ERC). Mothers' reports of child behavior problems as measured by the CBCL also produced scores in the normal range for more than half of the children in the sample. These findings are consistent with those of Hughes, Graham-Bermann, and Gruber (2001), in a study that focused on resilience in mothers and children residing in a domestic violence shelter, where they found that over half of the sample was "doing well," with little distress. Despite current and past stressors, the range of mother and child functioning in the present study reveals areas of resilience for many of the families.

Although variables such as parental warmth and parental support have been found to serve as a buffer against negative outcomes (i.e., problems in emotion regulation, socialization, and somaticization) in children who have been exposed to marital discord, there is considerable evidence suggesting that marital violence is associated with compromised parenting and child behavioral and emotional difficulties (George & Solomon, 2008; Holt et al., 1998; Katz & Weindecker-Nelson, 2006; Levendosky et al., 2011; Osofsky, 2003; Repetti et al., 2002; Rossman & Rea, 2005). The present study focused on whether maternal trauma might compromise various aspects of parenting, and negatively affect emotion regulation processes in children. It has added to the current body of research by examining the associations among mothers' trauma symptomology, maternal perception of children's emotionality and emotion regulation, and maternal behaviors used to regulate their children. The study also examined the relationship between

maternal trauma symptomatology and children's emotional and behavioral functioning, including children's management of sadness and anger.

### **Relationships Among Parenting Behaviors, Child Behavior Problems and ER**

The study demonstrated that mothers who perceive their children as having internalizing and externalizing behavior problems also perceive their children as having difficulty with affect regulation. This is in line with Cole, Michel & Teti's (1994) conceptualization of internalizing (i.e. depression, anxiety) and externalizing (i.e. impulsivity, hyperactivity, oppositional behavior) disorders as failures in emotion regulation. The connection between emotion regulation and behavior problems was further corroborated by a series of studies by Eisenberg and her colleagues (1995, 1999, 2007, 2010) which found that children's emotionality and regulation are related to social behaviors, and are associated with long-term social outcomes. The results of these studies suggest that children's socially appropriate behavior is related to low negative emotionality (intensity, autonomic reactivity, and negative affectivity), and high behavioral regulation. The findings of these studies also suggest that regulation is related to high maternal responsiveness, positive guidance (praise, affection, encouragement, and feedback) and low negative control (scolding, punitive actions and verbalizations), and that these behaviors can moderate the effects of emotionality and can help children to overcome and inhibit inappropriate impulses and behaviors in a constructive manner. In addition, these

findings suggest that regulatory skills are in part learned, and can act as a buffer for a temperamentally difficult child.

A significant relationship was found between mothers who perceive their children as having difficulty regulating their negative affect, and parenting behaviors that aim to restrict or redirect inappropriate behavior. This means that mothers who perceive their children as having difficulty self-regulating tend to intervene more often to restrict inappropriate behavior. Maternal efforts to redirect the child can also be understood as a way to help a child identify problem behaviors that need down-regulating. In turn, these down-regulating behaviors, for instance, directives such as “be quiet,” “simmer down,” or “sit still,” might help modulate internal affect states. A study by Eisenberg et al. (2010) suggests that cognitive assistance or scaffolding (verbally assisting a child to understand something) and questioning techniques (using dialogue, non- explicit directives and hints) rather than directives (such as the down-regulating behaviors listed in the CRI) may help children build a stronger sense of effortful control. Effortful control has been negatively correlated with externalizing and internalizing problems (Eisenberg et.al, 2009, 2010). The findings of the Eisenberg study (2010) also revealed, however, that over time, if a child is in frequent need of regulating attention and behavior, then mothers tend to utilize more directives rather than cognitive assistance and questioning techniques

The present study’s findings suggest that there is a relationship between maternal interventions to down-regulate and children’s emotional and behavioral

regulation. There is also evidence (Eisenberg et al., 1999; Eisenberg et al., 2010; Fagot & Gauvin, 1997) that supports the idea that this relationship is bidirectional. In an earlier study, Eisenberg et al. (1999) suggested that children who exhibit more behavioral difficulties and who struggle with ER elicit more negative parental reactions, and that parental negative reactions may in turn promote children's negative emotions and behavior. Another relevant factor is that if a mother attempts to stop a child's problem behavior, but is not attuned to the emotion driving this behavior, her attempts to help the child regulate may be ineffective or disruptive. In addition, overly frequent attempts to down-regulate negative behavior can actually increase a child's negative emotions and behaviors, which then promotes even more negative parental reactions. In a later Eisenberg et al. (2010) study, it was found that children who have lower effortful control/self-regulation elicit responses from their mothers that are more directive.

### **Maternal PTSD: Maternal Perception of ER and Child ER**

The findings of this study support the hypothesis that for mothers who have higher levels of trauma symptomology, there is a greater discrepancy between their perception of their children's ER and their children's self-report of their own ER than there is for mothers with lower levels of trauma symptomatology. It is possible that the symptoms associated with PTSD -- including hypervigilance, irritability and dissociation -- affect the way mothers perceive their children's ER. In other words, mothers with higher levels of distress might inaccurately rate their child's ER because their view of the child is clouded by their own emotional

experience. An extensive body of theoretical research has examined the relationship between a mother's difficulty in identifying her own affect states and her level of attunement to and reflective capacity for identifying her infant's mental states (Cibul, 1997; Levendosky et al., 2011; Slade, 1999, 2005; Schechter et al., 2005; Schore, 2009). Sternberg et al. (2006) also addressed the potential for a distressed mother to project her own affective experience onto her perception of her child's ER. Further, Sternberg et al. (2006) recommended the use of independent measures of child ER to account for this potential bias. Although the child self-report instruments utilized in the present study provided an assessment of child ER independent of the mother's perspective, observational ratings were not used, in part because videotaping would have compromised the anonymity and confidentiality of families living in the domestic violence shelter.

The potential effects of the gap between mothers' perceptions of child ER and the child's own experience of their ER is that it could likely interfere with what Gottman (1996, 1997) describes as emotion coaching - a parent's ability to be aware of her child's emotions, to help her child label and process emotions, and to appropriately apply a constructive parental intervention. If a mother is not able to ascertain her child's emotional state, she is less likely to be able to intervene appropriately to help the child learn how to self-regulate. Again, this affirms the need to provide interventions to assist high-risk parents and their children in developing a greater understanding of their emotional states and in using skills to help regulate them.

As hypothesized, mothers with greater symptoms of PTSD viewed their children as having more total behavior problems, and as having a greater tendency to internalize their feelings (i.e. depression and anxiety). It is possible that mothers who have higher levels of PTSD symptomatology lack the ability to model healthy ER and coping skills. Hughes et al. (2001) suggest that modeling healthy ER is a way of promoting positive functioning in children and increasing their resilience. Mothers who have greater symptoms of trauma likely demonstrate a lower level of awareness of differentiated emotions both in themselves and in their child, making it more difficult for their children to learn how to process their feelings of anger and sadness. Clinical observation of this sample supports the possibility that children of mothers who were in greater emotional distress were often over-exposed to their mother's dysregulated affect and internal preoccupations.

Interestingly, the study found a statistically significant relationship between the degree of a mother's trauma symptoms and the degree of internalizing behaviors in her child, but did not find statistical significance for the relationship with children's externalizing problems. A tendency toward internalizing rather than externalizing feelings might reflect a child's effort to protect her/his mother from her own emotions, by not acting them out. Zeman, Shipman and Suveg's (2002) study found that the inhibition of anger, and the inappropriate expression of anger and sadness, were associated with internalizing symptoms. They found that children who exhibited either an under- or over-control of emotions were likely to have poorer quality relationships with their peers, and that this would in turn lead

to greater psychological distress. In light of the findings of Zeman and her colleagues (2002), the children in the present sample who may tend toward an over-control of their emotions are at risk of poorer social outcomes and greater psychological distress.

The present study did not find a significant relationship between degree of maternal trauma and mothers' down-regulating behaviors with their children. This might reflect the limitations of the Child Regulation Index (CRI). Although the measure is psychometrically sound, the CRI may not encompass a broad enough range of parenting behaviors that target emotion regulation skills. For instance, the scale has parents rate the frequency with which they do various things to have their children behave differently (i.e. "How often do you tell him/her to be quiet?", "How often did you tell him/her to sit down, or be still?") which seem to be in line with a directive stance, but does not include less directive parenting behaviors such as questioning or cognitive assistance (Eisenberg et al., 2010). In addition, the CRI items could provide more specificity in terms of how parents respond in calming ways so that it is easier to discriminate between nonverbal forms of down-regulating behaviors such as gestures, calming touches, and holding from verbal forms of down-regulating. Future research should address a broader range of emotion regulating behaviors.

The lack of a relationship between down-regulating behaviors measured by the CRI and higher levels of trauma in mothers might also, in part, be due to the way in which the trauma symptoms interfere with parenting, or to the nature of

their child's problem behaviors. In a study that examined the relationship between maternal PTSD and physical discipline, Cohen and colleagues (2008) suggested that PTSD symptoms such as emotional numbing and avoidance might affect mothers' level of awareness and engagement with their children. They found that maternal PTSD was significantly negatively correlated with physical discipline – that is, mothers higher in PTSD symptoms used less physical discipline. The absence of a relationship between down-regulating behaviors and higher levels of trauma in mothers in the present study might be due to the emotional numbing and avoidance discussed by Cohen et al. (2008). Alternatively, since the present study demonstrates that mothers with increased levels of trauma symptoms tend to have children with increased internalizing behavior problems, it is possible that the CRI is not adequately assessing how parents down-regulate children's internalizing problems. Examination of the parenting behaviors listed in the items of the CRI reveals that the main focus is on how parents respond to behaviors that would be characterized as externalizing rather than internalizing. Revising the CRI to include parenting behaviors that target both externalizing and internalizing problems could address this potential issue.

### **Implications of the Study**

This study focuses on a high-risk population of women and children who are victims of domestic violence and are also homeless. Research has suggested that mothers and children who have multiple stressors might be at particular risk for poorer outcomes, emphasizing the need for more research on these high-risk

populations (Bassuk & Paquette, 2009; Buckner et al., 1999; Buckner et al.; 2008, & Haber & Toro, 2004). The destabilizing effect of family violence is a growing public health issue, extending beyond the rupture of the family and the deterioration of living conditions for family members, to the possible ramifications of the psychological trauma inflicted on each person (Margolin & Gordis, 2000, 2004; Sternberg et al., 2006; Vine, Elliot & Keller-Olaman, 2010). For example, maternal psychopathology has been connected to an absence or failure in child ER abilities (Cibul, 1997; Fonagy et al., 2002; Slade, 1999; 2005). Given the increase in family violence (Margolin & Gordis, 2000, 2004; Garcia-Moreno, Janse, Elsberg, Heiss, & Watts, 2006; Vine, Elliot & Olaman, 2010) and the deleterious effects it has on the socio-emotional, behavioral and cognitive well-being of the child, research that examines potential protective factors is of critical importance (Kitzmann et al., 2003, Shipman et al., 1999; Sternberg et al., 2003; Tajima et al., 2011). The focus of recent literature has been on identifying variables that mediate the impact on children who witness and/or are experiencing violence (Holt et al., 1998; Kitzmann et al., 2003; Levendosky et al., 2002; Rossman & Rea, 2005; Sternberg et al., 2006; Tajima et al., 2011). In particular, when children are exposed to violence, it has been found that their appraisal and coping skills are connected to their level of risk or resilience (Holt et al., 1998; Margolin & Gordis, 2000).

As discussed in the literature review, ER is a developmental and relational process that originates from the mother-infant dyad. Although this is a convenience sample, it is a particularly appropriate one in that the cumulative impact of

stressors including the experience of domestic violence, homelessness, and the accompanying psychological sequelae, likely puts an increased strain on the maternal-child relationship (Buckner et al., 1999; Buckner et al., 2003; Levendosky et al., 2003, McClosky et al., 1995). The impaired psychological functioning of many of these mothers may undermine their ability to be consistently attuned to and contingently responsive with their child, and may in turn compromise the child's ability to develop healthy ER skills.

It has been noted that this study extends prior research focusing on family dynamics in homeless families, and in families which have been exposed to violence (Buckner et al., 2003; Chemtob & Carlson, 2004; Harber & Toro, 2004; Hughes et al., 2001; Levendosky et al., 2003; Osofsky, 1999). It is important to observe, however, that there is a paucity of research investigating maternal trauma, parenting processes and the development of child ER in a homeless domestic violence population. More recently, the domestic violence literature has increased attention to the effects that DV has on children's behavioral and psychological outcomes. With the addition of child self-report data, the present study has attempted to obtain a more well-rounded clinical picture which can enhance our understanding of child ER and parent-child ER processes. Despite the severity of the challenges that these mothers and children face, this study found areas of resilience as well as risk in this population, highlighting the need for clinical interventions that target their psychological needs.

Interventions for families who have experienced domestic violence have largely focused on problem-solving skills, improving self-esteem and self-competence, and conflict resolution skills (Graham-Bermann & Edleson, 2001; Sullivan, Bybee, & Allen, 2002). The present study has demonstrated that interventions should address trauma symptoms while also increasing what Gottman (2001) calls meta-emotional development through parent-child emotion coaching. An intervention that focuses on meta-emotional development -- understanding one's own emotions and the emotions of others -- can help build resilience and thus serve as a protective factor. Since the study's findings demonstrate that maternal trauma predicts higher levels of child behavior problems and poorer ER in children, clearly there is a need for interventions that work toward mutually enhancing mother-child ER skills. The study further supports the transactional nature of ER, positing that the way in which a parent views her child's emotional difficulties can also be related to the way in which a mother views her own emotional difficulties. Thus, interventions that enhance parent-child meta-emotional development and foster parents' emotion-coaching skills would strengthen the parent-child relationship, and potentially have a lasting impact on both the parent's and child's psychological well-being.

A greater understanding of maternal trauma symptomology and how it interferes with mothers' ability to attune to and help regulate their children's emotions should inform future clinical interventions. For mothers and children who have maladaptive ER patterns, who disregard or invalidate emotions, or who get

overwhelmed or withdraw as a way of responding to their own or another's emotional states, an intervention that focused on opening up communication processes, and building and strengthening emotion regulation skills could be very effective. In addition to multi-family group sessions intended to develop such skills, these families might concurrently benefit from individual treatment targeting, for example, underlying mood disorders.

### **Study Limitations**

Although the present study has contributed to the literature on the relationship among maternal trauma, parenting, and emotion regulation processes, there are several limitations. First, since the research is archival, the methodology used was that of the larger study, and there were no opportunities to add other measures that might have assisted in examining the study questions such as the type and severity of exposure to trauma and violence. Second, like most studies with clinical or community samples, the generalizability of the findings are limited by the characteristics of the sample. This was a relatively small sample of predominantly low-income, African-American, and Hispanic mothers and their children. The mothers mostly had a low level of education, but all could speak and read in English. Therefore the findings of this study cannot be generalized to groups of mothers and children with other socio-economic, linguistic, ethno-cultural or educational backgrounds.

Third, since the original study was based on an opportunity sample of families who entered the domestic violence shelter over a five-year period, the

study's generalizability is limited by the sample recruitment process. Since, mothers and children were not randomly selected to participate in the original study, it is unclear whether there was a sampling bias. For instance, higher-functioning parents might not have felt that they needed the group program that followed the research assessment, and thus elected not to participate.

Alternatively, they may have wanted to avail themselves of an extra, potentially valuable service, and therefore chosen to participate. Likewise, lower-functioning parents might have declined participation because they did not recognize the program's possible value to their families, or they may have wanted to take advantage of the program because they felt in need of additional support. On the other hand, the wide range of scores on the PCL-C and CBCL argues against the presence of selection biases.

Fourth, in the original study there was no control sample of similar families that had not been exposed to domestic violence, nor was there a control sample of housed similar families. Again, since the present study does not look at the specific impact of domestic violence or homelessness on maternal trauma, a fifth limitation is that the type and severity of exposure to trauma and violence was not assessed. Therefore, a broader definition of violence was used and a more nuanced understanding of the varying degrees of exposure to trauma, and specific types of trauma, is missing.

Sixth, the study did not use a formal diagnostic interview to assess for symptoms of trauma, and instead relied on the PCL-C screening tool, a self-report

symptom-based assessment of PTSD. This limits the generalizability to other populations of women who had a formal diagnostic assessment of PTSD. A further concern is that mothers were not assessed for other psychiatric diagnoses or symptoms, and therefore it is difficult to make close comparisons with other populations of trauma survivors who have co-morbid psychiatric diagnoses.

Seventh, the original study provides no data about the existence, type, or severity of the children's exposure to or witnessing of violence. In addition, it is not possible to distinguish between children who witnessed violence, children who were direct targets of abuse, and those for whom both or neither were experienced. This limits the generalizability of these findings to other populations of children who were victims and/or witnesses of varying types and degrees of violence. Since the aim of the study was to examine the impact of maternal trauma on child ER and problem behaviors, the details of children's exposure to violence was not central to the study's aims and hypotheses. However, it is not clear to what degree the children's problems might be relevant to a mother's ability to regulate their ER abilities.

Finally, as noted earlier, because of the inability to videotape family interactions due to confidentiality concerns in what was essentially a clinical as well as a research setting, there were no observational data for child ER. Other studies that examined child ER using only mother reports have been criticized because the mother's perceptions may be influenced by their own emotional state (Levendosky et al., 2003; Sternberg et al., 2006). Although the present study includes a child

self-report measure of ER, observational data would be another important means of assessing ER independent of either mother or child reports.

### **Directions for Future Research**

The limitations of the present study and the larger study which it extends point to several directions that future studies might take. For example, a closer examination of trauma symptomology in mothers, including the severity of and type of symptoms which impact maternal ER, dimensions of parenting behavior, and the mother-child transmission of ER patterns. In addition, the use of observational data in future studies could supplement self-report data and help to account for biases in self-report data. It is also suggested that future studies should examine both verbal and non-verbal forms of parental down-regulating behaviors in order to capture the full range of things parents do to help their children regulate, including non-verbal behaviors such as touching and holding.

Future research should also include a larger sample of mothers and children from diverse socio-cultural, economic, linguistic and education backgrounds to better understand the differences among different groups. Since the ER process between mother and child is an emotion-communication process, understanding differences among diverse populations will help to create more culturally sensitive clinical interventions. In addition, gathering information from mothers and children regarding the severity, type and exposure to violence will also help in understanding differences within the group of families that have experienced violence. Further, in order to enhance the validity of future research, one should

make use of control groups.

Ideally, as a result of such future studies, clinical research interventions can be modified to address various areas of functioning including targeting trauma symptomology in mothers and children, and developing culturally appropriate parent-child emotion regulation skills. In light of the study's findings, incorporating aspects of evidence-based PTSD treatment approaches in future clinical interventions with mothers and children might add effectiveness in changing maladaptive patterns of ER in this distressed group. By identifying the ways in which these symptom-specific treatments might impact parent-child ER ability, we can broaden our understanding of the development and breakdown of ER in the mother-child relationship. Further, longitudinal studies are needed to examine the long-term impact of these new clinical interventions on child outcomes, including behavioral, socio-emotional and cognitive development.

In conclusion, the present study demonstrates how maternal trauma impacts emotion regulation processes among a sample of mothers and children who have experienced domestic violence and are homeless. Mothers who have lower levels of trauma symptomology are more in sync with their children's emotional state, and have children with fewer problem behaviors, who are less labile and negative, and who have more developed ER skills. Maternal modeling of healthy ER can help children identify, label, and metabolize the multitude of distressing emotions that they might encounter. The transmission of healthy ER from mother-child is a mutually enhancing and resilience building process that can serve to protect at-risk

populations when confronting the many cumulative stressors and challenges in their lives. Thus, further studies which can help fine tune interventions for such populations are of the utmost importance.

## Appendix A: Tables of Quantitative Results

Table 1  
*Demographic Characteristics (N = 32)*

Characteristic	n (%)
<b>Racial Background</b>	
African American	20 (62.50)
Hispanic	8 (25.00)
Other Hispanic	3 (9.30)
Caucasian	1 (3.10)
<b>Marital Status</b>	
Single	22 (68.80)
Separated	8 (25.00)
Married/Widowed	2 (6.20)
<b>US Citizenship Status</b>	
US Citizens	28 (87.50)
<b>Religious Affiliation</b>	
Christian	16 (50.00)
Catholic	7 (21.90)
Nondenominational	7 (21.90)
Other	2 (6.10)
<b>Employment Status</b>	
Unemployed	24 (75.00)
<b>Education</b>	
High School or less	10 (31.20)
H.S.	
graduates/GED	11 (34.40)
Some College/Grad.	9 (28.20)
Graduate School	2 (6.30)

Table 2  
*Descriptive Statistics of Mother Measures (N =32)*

Measure	Possible Range	Actual Range	<i>M (SD)</i>	Skewness	Kurtosis	% at or above clinical cutoff
PCLC	17-85	19-78	41.50 (15.05)	.56	-.44	65.60
ERC Lability/Neg.	15-60	17-45	30.28 (7.54)	.17	.41	15.60
ER subscale	8-32	18-32	24.71 (4.00)	-.28	.41	21.8
CRI down-regulation	14-70	18-48	33.56 (9.37)	.28	.41	NA
CBCL total T-score	0-100	34-72	55.07 (10.48)	.34	.44	34.37
Internalizing T-score	0-100	34-74	54.71 (10.72)	-.20	.44	25.00
Externalizing T-score	0-100	33-74	54.85 (10.37)	1.30	.44	28.00

*Note.* PCLC = PTSD Checklist (civilian); ERC Lability/Neg.= Emotion Regulation Checklist Lability Negativity subscale; ER subscale = Emotion Regulation subscale; CRI = Child Regulation Index; NA = Not applicable; CBCL = Child Behavior Checklist

Table 3  
*Descriptive Statistics of Child Emotion Management Scale, Child Self-Report  
 (n=31)*

Measure	Possible Range	Actual Range	Mean (SD)	Skewness	Kurtosis
CEMS	23-69	29-46	45.90 (6.80)	-.43	-.29
Sadness Inhibition	4-12	4-12	8.38 (2.10)	-.55	.04
Anger Inhibition	4-12	4-11	7.67 (1.96)	-.43	-.65
Inhibition Mean	1-3	1.0-2.6	2.00 (0.44)	-.67	-.16
Sadness ER Coping	5-15	7-14	10.74 (2.03)	-.11	-.83
Anger ER Coping	4-14	4-12	8.29 (2.20)	-.33	-.76
ER Coping Mean	1-3	1.3-2.9	2.11 (0.43)	.04	-1.04
Sadness Dysregulation	3-9	3-8	5.09 (1.39)	.05	-.84
Anger Dysregulation	3-9	3-9	5.71 (1.77)	.05	-.77
Dysregulation Mean	1-3	1.0-2.8	10.86 (2.71)	-.17	-.35

*Note:* CEMS = Child Emotion Management Scale; ER = Emotion Regulation

Table 4  
*Correlations Among Dependent Variables and Mother's Age*

Measure	Mother's Age	<i>p</i>
CBCL Intern	.34	.08
CBCL Extern	.10	.61
CBCL Total	.16	.41
CRI	-.12	.52
Lability/Negativity	-.10	.60
ERC-CEMS	-.05	.78
Sadness Inhibition	.14	.44
Anger Inhibition	.18	.33
Inhibition Mean	.19	.32
Sadness ER Coping	-.12	.54
Anger ER Coping	-.18	.34
ER Coping Mean	-.17	.37
Sadness Dysregulation	-.08	.66
Anger Dysregulation	-.06	.76
Dysregulated Mean	-.08	.67

*Note:* CBCL = Child Behavior Checklist; Intern = Internalizing subscale; Extern = Externalizing subscale; CRI = Child Regulation Index; ERC-CEMS = Emotion Regulation Checklist - Child Emotion Management Scale difference Score; ER = Emotion Regulation

Table 5  
*Difference in Dependent Variables Based on Mother's Level of Education*

Variable	High School or Lower		College or Higher		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )			
CBCL Intern	8.00	(5.22)	10.37	(11.91)	-0.75	26	.46
CBCL Extern	10.35	(7.80)	8.63	(7.52)	0.53	26	.60
CBCL Total	33.25	(20.39)	30.75	(22.20)	0.29	26	.78
CRI	33.28	(9.97)	34.09	(8.54)	-0.23	30	.82
Lability/Negativity	30.29	(6.72)	30.27	(9.27)	0.01	30	.99
ERC-CEMS	0.06	(0.27)	0.01	(0.45)	0.39	29	.70
Sadness Inhibition	7.95	(2.29)	9.39	(1.33)	-1.71	29	.09
Anger Inhibition	7.52	(1.75)	8.00	(2.40)	-0.63	29	.54
Inhibition Mean	1.93	(0.45)	2.16	(0.39)	-1.36	29	.18
Sadness ER Coping	10.52	(2.22)	11.20	(1.55)	-0.86	29	.40
Anger ER Coping	8.43	(2.27)	8.00	(2.16)	0.50	29	.62
ER Coping Mean	2.11	(0.46)	2.12	(0.39)	-0.80	29	.94
Sadness Dysregulation	4.95	(1.36)	5.40	(1.50)	-0.83	29	.41
Anger Dysregulation	5.57	(1.60)	6.00	(2.16)	-0.62	29	.54
Dysregulated Mean	1.75	(0.40)	1.90	(0.56)	-0.84	29	.41

*Note:* CBCL = Child Behavior Checklist; Intern = Internalizing subscale; Extern = Externalizing subscale; CRI = Child Regulation Index; ERC-CEMS = Emotion Regulation Checklist-Child Emotion Management Scale difference score; ER = Emotion Regulation

Table 6  
*Differences in Dependent Variables Based on Mother's Employment Status*

Variable	Employed		Unemployed		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )			
CBCL Intern	12.00	(11.59)	7.77	(6.12)	1.22	26	.23
CBCL Extern	12.33	(11.71)	9.18	(6.30)	0.89	26	.38
CBCL Total	41.16	(30.18)	28.76	(17.83)	1.17	26	.25
CRI	30.12	(8.06)	34.70	(9.65)	-1.21	30	.24
Lability/Negativity	28.00	(7.15)	31.04	(7.66)	-0.99	30	.33
ERC-CEMS	-0.39	(0.35)	0.07	(0.33)	-0.84	29	.41
Sadness Inhibition	8.75	(2.43)	8.26	(2.02)	0.60	29	.58
Anger Inhibition	7.37	(2.26)	7.78	(1.88)	-0.50	29	.62
Inhibition Mean	2.01	(0.50)	2.00	(0.43)	0.05	29	.95
Sadness ER Coping	10.25	(1.83)	10.91	(2.10)	-0.79	29	.44
Anger ER Coping	8.00	(2.56)	8.39	(2.12)	-0.43	29	.67
ER Coping Mean	2.02	(0.45)	2.14	(0.44)	-0.64	29	.53
Sadness Dysregulation	5.13	(1.80)	5.08	(1.30)	0.06	29	.95
Anger Dysregulation	5.62	(2.26)	5.74	(1.63)	-0.15	29	.88
Dysregulated Mean	1.79	(0.65)	1.80	(0.38)	-0.06	29	.95

*Note:* CBCL = Child Behavior Checklist; Intern = Internalizing subscale; Extern = Externalizing subscale; CRI = Child Regulation Index; ERC-CEMS = Emotion Regulation Checklist-Child Emotion Management Scale difference score; ER = Emotion Regulation

Table 7  
*Differences in Dependent Variables Based on Children's Sex*

Variable	Female		Male		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )			
CBCL Intern	9.71	(8.41)	7.64	(6.77)	0.72	26	.48
CBCL Extern	12.36	(8.02)	7.36	(6.55)	1.80	26	.08
CBCL Total	35.36	(17.91)	29.71	(23.19)	0.72	26	.48
CRI	30.12	(8.06)	34.70	(9.65)	-1.01	30	.32
Lability /Negativity	31.88	(8.96)	35.25	(9.75)	-0.99	30	.33
ERC-CEMS	0.03	(0.33)	0.06	(0.35)	-0.84	29	.79
Sadness Inhibition	8.20	(2.30)	8.56	(1.96)	0.60	29	.64
Anger Inhibition	7.60	(2.09)	7.75	(1.88)	-0.50	29	.84
Inhibition Mean	1.97	(0.49)	2.03	(0.40)	0.05	29	.69
Sadness ER Coping	10.80	(1.83)	10.91	(2.10)	-0.79	29	.88
Anger ER Coping	8.00	(2.48)	8.56	(1.97)	-0.43	29	.49
ER Coping Mean	2.08	(0.53)	2.14	(0.34)	-0.64	29	.71
Sadness Dysregulation	5.40	(1.40)	4.81	(1.38)	0.06	29	.25
Anger Dysregulation	5.53	(1.55)	5.88	(2.00)	-0.15	29	.60
Dysregulated Mean	1.82	(0.40)	1.78	(0.51)	-0.06	29	.80

*Note:* CBCL = Child Behavior Checklist; Intern = Internalizing subscale; Extern = Externalizing subscale; CRI = Child Regulation Index; ERC- CEMS = Emotion Regulation Checklist-Child Emotion Management Scale difference score; ER = Emotion Regulation

Table 8  
*Correlations Among Dependent Variables- Mother Measures*

Measure	CRI	ERC Lability/Neg	CBCL Total	CBCL Intern	CBCL Extern.
CRI	—				
ERC Lability/Neg.	.57**	—			
CBCL Total	.47**	.65**	—		
CBCL Internalizing	.26	.43*	.84**	—	
CBCL Externalizing	.40*	.65**	.87**	.63**	—

*Note:* CRI = Child Regulation Index; ERC Lability/Neg. = Emotion Regulation Checklist Lability Negativity subscale; CBCL = Child Behavior Checklist; \* $p < .05$ . \*\* $p < .01$

## Appendix B: Measures Used in the Study

### Demographic Information About You

1. Current relationship status (Please check all that apply):  Single  
 Have a Boyfriend:  Not living together  Living together  
 Have a Girlfriend:  Not living together  Living together  
 Married  Separated  Divorced  Widowed
  - a. If married or living together, for how long: \_\_\_\_\_
  - b. If separated or divorced, for how long: \_\_\_\_\_
  - c. If widowed, for how long: \_\_\_\_\_
  - d. Number of previous marriages: \_\_\_\_\_
  
2. Date of birth: \_\_\_\_\_
3. Sex:  Male  Female
  
4. Place of birth: \_\_\_\_\_  

City
State
Country
  
5. Country of citizenship: \_\_\_\_\_
  
6. Education:  Grade school  Some high school  High school grad/GED  
 Some college  College grad  Some grad school  Grad school grad
  
7. Religious affiliation: \_\_\_\_\_ Active?  Yes  No
  
8. Ethnicity:  Asian or Pacific Islander  Black  Hispanic  Native American  
 White  Other: \_\_\_\_\_
  
9. Primary language?  English  Spanish  Creole  French  Other
  
10. Date left last permanent residence? \_\_\_\_\_

11. Date first entered shelter system? \_\_\_\_\_
12. Date entered Bronx HELP-Harbor? \_\_\_\_\_
13. For how many years and/or months total have you worked since you were 18? (Please do not count time in which you were not employed between jobs) \_\_\_\_\_
14. Are you currently employed?  Yes  No
- If yes, start date? \_\_\_\_\_ Where? \_\_\_\_\_
- Hours/week? \_\_\_\_\_ Hourly wage? \_\_\_\_\_ Medical benefits?  Yes  No
- If no, date of last employment? \_\_\_\_\_
- Are you currently interested in obtaining employment?  Yes  No
15. Are there any current barriers that you believe might prevent you from working or finding employment?  Yes  No
- If yes, which of the following?  Childcare issues  Substance abuse
- Lack of work skills  Physical health or disability  Mental illness
- English deficiency  Domestic violence  Felony Conviction
- On Probation or Parole Other: \_\_\_\_\_
16. What do you consider to be your most positive qualities and strengths as a person? \_\_\_\_\_
- \_\_\_\_\_

### PTSD CheckList – Civilian Version (PCL-C)

Client's Name: \_\_\_\_\_

Instruction to patient: Below is a list of problems and complaints that veterans sometimes have in response to stressful life experiences. Please read each one carefully, put an "X" in the box to indicate how much you have been bothered by that problem *in the last month*.

No.	Response	Not at all (1)	A little bit (2)	Moderately (3)	Quite a bit (4)	Extremely (5)
1.	Repeated, disturbing <i>memories, thoughts, or images</i> of a stressful experience from the past?					
2.	Repeated, disturbing <i>dreams</i> of a stressful experience from the past?					
3.	Suddenly <i>acting or feeling</i> as if a stressful experience <i>were happening</i> again (as if you were reliving it)?					
4.	Feeling <i>very upset</i> when <i>something reminded</i> you of a stressful experience from the past?					
5.	Having <i>physical reactions</i> (e.g., heart pounding, trouble breathing, or sweating) when <i>something reminded</i> you of a stressful experience from the past?					
6.	Avoid <i>thinking about</i> or <i>talking about</i> a stressful experience from the past or avoid <i>having feelings</i> related to it?					
7.	Avoid <i>activities or situations</i> because they <i>remind you</i> of a stressful experience from the past?					
8.	Trouble <i>remembering important parts</i> of a stressful experience from the past?					
9.	Loss of <i>interest in things that you used to enjoy</i> ?					
10.	Feeling <i>distant</i> or <i>cut off</i> from other people?					
11.	Feeling <i>emotionally numb</i> or being unable to have loving feelings for those close to you?					
12.	Feeling as if your <i>future</i> will somehow be <i>cut short</i> ?					
13.	Trouble <i>falling or staying asleep</i> ?					
14.	Feeling <i>irritable</i> or having <i>angry outbursts</i> ?					
15.	Having <i>difficulty concentrating</i> ?					
16.	Being " <i>super alert</i> " or watchful on guard?					
17.	Feeling <i>jumpy</i> or easily startled?					

Name of Child: \_\_\_\_\_

Subject # \_\_\_\_\_

Please circle the answer below each statement that best fits your child.  
Answer the best you can, making sure not to skip any.

## My child . . .

1. Is a cheerful child.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

2. Has big mood swings: It is hard to predict what he or she will feel next because he or she moves quickly from a good mood to a bad mood.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

3. Responds well to adults who are friendly or "neutral" to him or her.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

4. Moves easily from one activity to another: Doesn't become angry, anxious, distressed, or overly excited when going from one activity to another.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

5. Can easily get over being upset or distressed (for example, doesn't pout or remain upset, anxious, or sad after something emotionally upsetting).

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

6. Is easily frustrated.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

7. Responds well to peers who are friendly or "neutral" to him or her.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

8. Often has angry outbursts or tantrums.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

9. Is able to wait for something he or she wants.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

10. Enjoys others being upset (for example, laughs when another person gets hurt or punished; or seems to enjoy teasing others).

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

11. Doesn't get carried away when excited.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

12. Is whiny or clingy with adults.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

13. Has outbursts of energy that disrupt others.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

14. Gets angry when adults tell him or her what he or she can or cannot do.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

15. Can say when he or she is feeling sad, angry or mad, fearful or afraid.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

16. Seems sad or "down" or low in energy.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

17. Is too excited or active or "bouncy" when trying to get others to play.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

18. Doesn't display emotion (for example, has a vacant, empty expression on his or her face, or doesn't seem to be emotionally involved).

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

19. Responds negatively to peers who are friendly or "neutral" to him or her.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

20. Is impulsive; does things without really thinking about it.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

21. Shows concern when others are upset or distressed, is empathic.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

22. Is excited or active or "bouncy" in a way others find annoying or disruptive.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

23. Shows the negative emotions (anger, fear, frustration, distress) most kids would in response to hostile or aggressive or annoying behavior by peers.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

24. Shows negative emotions (anger, frustration) when trying to get others to play.

**Rarely/Never**      **Sometimes**      **Often**      **Almost Always**

## Child Regulation Index

Your Relationship to the Child:      Mother                      Father

### INSTRUCTIONS:

Below is a list of things that parents tend to do to encourage their children to behave in ways they prefer them to behave. We would like you to indicate how often you found yourself telling your child to do each of the things listed below THIS WEEK. If your answer to a question is NEVER, circle "1". If you told you child to do what is indicated in the question RARELY, circle "2"; if you did so a FEW TIMES, circle "3"; if you did so SEVERAL TIMES, circle "4"; and if you did so VERY OFTEN, CIRCLE "5".

	NEVER	RARELY	A FEW TIMES	SEVERAL TIMES	VERY OFTEN
HOW OFTEN DID YOU TELL HIM/HER TO:					
1. Keep quiet	1	2	3	4	5
2. Stop doing the same thing over and over again.	1	2	3	4	5
3. Sit down	1	2	3	4	5
4. Play nicely	1	2	3	4	5
5. Be still	1	2	3	4	5
6. Stop interrupting	1	2	3	4	5
7. Share	1	2	3	4	5
8. Stop hitting or biting	1	2	3	4	5
9. Stop crying	1	2	3	4	5
10. Simmer down	1	2	3	4	5
11. Go outside	1	2	3	4	5
12. Be considerate of others' feelings	1	2	3	4	5
13. Pay attention	1	2	3	4	5
14. Stop saying that some smell is					

	“yukky”	1	2	3	4	5
15.	Let me talk on the phone even though he/she is excited about telling me something	1	2	3	4	5
16.	Leave me alone so that I can finish something I need to get done	1	2	3	4	5
17.	Go play with a friend when he/she seemed bored and couldn’t find anything to do	1	2	3	4	5
		NEVER	RARELY	A FEW TIMES	SEVERAL TIMES	VERY OFTEN
18.	Get to bed when he/she was too excited to go to sleep	1	2	3	4	5
19.	Stop saying that something a friend did was “yukky”	1	2	3	4	5
20.	Eat his/her food when he/she was acting up during a meal	1	2	3	4	5
21.	Stop clinging to me	1	2	3	4	5
22.	Stop yelling	1	2	3	4	5
23.	Stop being so finicky with his/her food	1	2	3	4	5
24.	Stop throwing things	1	2	3	4	5
	HOW OFTEN DID YOU:					
25.	Encourage your child to talk to a new babysitter	1	2	3	4	5
26.	Encourage your child to answer the doctor’s questions	1	2	3	4	5
27.	Tell your child to be friendly to a stranger visiting your home	1	2	3	4	5
28.	Calm him/her down when					

	he/she was afraid of being left alone or abandoned	1	2	3	4	5
29.	Help him/her get over being afraid of the dark	1	2	3	4	5
30.	Encourage your child to play with an unfamiliar pet	1	2	3	4	5
31.	Calm him/her down when he/she was upset	1	2	3	4	5
32.	Encourage him/her to join in an activity that was unfamiliar	1	2	3	4	5
33.	Soothe him/her when he/she was disappointed about not getting a desired toy	1	2	3	4	5
34.	Calm him/her down when he/she was very excited	1	2	3	4	5

	NEVER	RARELY	A FEW TIMES	SEVERAL TIMES	VERY OFTEN
35. Told your child to play with a child she/he doesn't know	1	2	3	4	5
36. Encourage your child to explore an unfamiliar place	1	2	3	4	5
37. Tell your child to talk to an adult s/he doesn't know	1	2	3	4	5
38. Encourage him/her to be adventurous	1	2	3	4	5
39. Cheer him/her up when he/she was sad	1	2	3	4	5
40. Help him/her relax after being nervous at a scary movie	1	2	3	4	5
41. Sooth him/her when he/she was sad about losing a favorite toy	1	2	3	4	5
42. Help him/her when he/she was mad	1	2	3	4	5
43. Sooth him/her when he/she was mad	1	2	3	4	5
44. Comfort him/her when he/she was sad about a failure	1	2	3	4	5
45. Encourage him/her to invite friends over to the house	1	2	3	4	5



Please print

# CHILD BEHAVIOR CHECKLIST FOR AGES 6-18

For office use only  
ID # \_\_\_\_\_

CHILD'S FULL NAME First _____ Middle _____ Last _____			PARENTS' USUAL TYPE OF WORK, even if not working now. <i>(Please be specific — for example, auto mechanic, high school teacher, homemaker, laborer, lathe operator, shoe salesman, army sergeant.)</i> FATHER'S TYPE OF WORK _____ MOTHER'S TYPE OF WORK _____
CHILD'S GENDER <input type="checkbox"/> Boy <input type="checkbox"/> Girl	CHILD'S AGE _____	CHILD'S ETHNIC GROUP OR RACE _____	
TODAY'S DATE Mo. ____ Day ____ Year ____		CHILD'S BIRTHDATE Mo. ____ Day ____ Year ____	THIS FORM FILLED OUT BY: (print your full name) _____
GRADE IN SCHOOL _____	Please fill out this form to reflect <i>your</i> view of the child's behavior even if other people might not agree. Feel free to print additional comments beside each item and in the space provided on page 2. <i>Be sure to answer all items.</i>		
NOT ATTENDING SCHOOL <input type="checkbox"/>			
Your gender: <input type="checkbox"/> Male <input type="checkbox"/> Female			Your relation to the child:
			<input type="checkbox"/> Biological Parent <input type="checkbox"/> Step Parent <input type="checkbox"/> Grandparent
			<input type="checkbox"/> Adoptive Parent <input type="checkbox"/> Foster Parent <input type="checkbox"/> Other (specify) _____

I. Please list the sports your child most likes to take part in. For example: swimming, baseball, skating, skate boarding, bike riding, fishing, etc.

Compared to others of the same age, about how much time does he/she spend in each?

Compared to others of the same age, how well does he/she do each one?

	None <input type="checkbox"/>		Less Than Average	Average	More Than Average	Don't Know	Below Average	Average	Above Average	Don't Know
a. _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

II. Please list your child's favorite hobbies, activities, and games, other than sports. For example: stamps, dolls, books, piano, crafts, cars, computers, singing, etc. (Do not include listening to radio or TV.)

Compared to others of the same age, about how much time does he/she spend in each?

Compared to others of the same age, how well does he/she do each one?

	None <input type="checkbox"/>		Less Than Average	Average	More Than Average	Don't Know	Below Average	Average	Above Average	Don't Know
a. _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

III. Please list any organizations, clubs, teams, or groups your child belongs to.

Compared to others of the same age, how active is he/she in each?

	None <input type="checkbox"/>		Less Active	Average	More Active	Don't Know
a. _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IV. Please list any jobs or chores your child has. For example: paper route, babysitting, making bed, working in store, etc. (Include both paid and unpaid jobs and chores.)

Compared to others of the same age, how well does he/she carry them out?

	None <input type="checkbox"/>		Below Average	Average	Above Average	Don't Know
a. _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. _____	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Be sure you answered all items. Then see other side.**

**Please print. Be sure to answer all items.**

V. 1. About how many close friends does your child have? (Do *not* include brothers & sisters)

None     1     2 or 3     4 or more

2. About how many times a week does your child do things with any friends outside of regular school hours?

(Do *not* include brothers & sisters)     Less than 1     1 or 2     3 or more

VI. Compared to others of his/her age, how well does your child:

	Worse	Average	Better	
a. Get along with his/her brothers & sisters?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Has no brothers or sisters
b. Get along with other kids?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. Behave with his/her parents?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d. Play and work alone?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

VII. 1. Performance in academic subjects.

Does not attend school because \_\_\_\_\_

*Check a box for each subject that child takes*

Other academic subjects—for example: computer courses, foreign language, business. Do *not* include gym, shop, driver's ed., or other nonacademic subjects.

	Failing	Below Average	Average	Above Average
a. Reading, English, or Language Arts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. History or Social Studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Arithmetic or Math	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Science	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Does your child receive special education or remedial services or attend a special class or special school?

No     Yes—kind of services, class, or school:

3. Has your child repeated any grades?

No     Yes—grades and reasons:

4. Has your child had any academic or other problems in school?     No     Yes—please describe:

When did these problems start? \_\_\_\_\_

Have these problems ended?     No     Yes—when?

Does your child have any illness or disability (either physical or mental)?     No     Yes—please describe:

What concerns you most about your child?

Please describe the best things about your child.

Please print. Be sure to answer all items.

Below is a list of items that describe children and youths. For each item that describes your child **now or within the past 6 months**, please circle the **2** if the item is **very true or often true** of your child. Circle the **1** if the item is **somewhat or sometimes true** of your child. If the item is **not true** of your child, circle the **0**. Please answer all items as well as you can, even if some do not seem to apply to your child.

0 = Not True (as far as you know)			1 = Somewhat or Sometimes True	2 = Very True or Often True			
0	1	2	1. Acts too young for his/her age	0	1	2	32. Feels he/she has to be perfect
0	1	2	2. Drinks alcohol without parents' approval (describe): _____	0	1	2	33. Feels or complains that no one loves him/her
0	1	2	3. Argues a lot	0	1	2	34. Feels others are out to get him/her
0	1	2	4. Fails to finish things he/she starts	0	1	2	35. Feels worthless or inferior
0	1	2	5. There is very little he/she enjoys	0	1	2	36. Gets hurt a lot, accident-prone
0	1	2	6. Bowel movements outside toilet	0	1	2	37. Gets in many fights
0	1	2	7. Bragging, boasting	0	1	2	38. Gets teased a lot
0	1	2	8. Can't concentrate, can't pay attention for long	0	1	2	39. Hangs around with others who get in trouble
0	1	2	9. Can't get his/her mind off certain thoughts; obsessions (describe): _____	0	1	2	40. Hears sound or voices that aren't there (describe): _____
0	1	2	10. Can't sit still, restless, or hyperactive	0	1	2	41. Impulsive or acts without thinking
0	1	2	11. Clings to adults or too dependent	0	1	2	42. Would rather be alone than with others
0	1	2	12. Complains of loneliness	0	1	2	43. Lying or cheating
0	1	2	13. Confused or seems to be in a fog	0	1	2	44. Bites fingernails
0	1	2	14. Cries a lot	0	1	2	45. Nervous, highstrung, or tense
0	1	2	15. Cruel to animals	0	1	2	46. Nervous movements or twitching (describe): _____
0	1	2	16. Cruelty, bullying, or meanness to others				
0	1	2	17. Daydreams or gets lost in his/her thoughts	0	1	2	47. Nightmares
0	1	2	18. Deliberately harms self or attempts suicide	0	1	2	48. Not liked by other kids
0	1	2	19. Demands a lot of attention	0	1	2	49. Constipated, doesn't move bowels
0	1	2	20. Destroys his/her own things	0	1	2	50. Too fearful or anxious
0	1	2	21. Destroys things belonging to his/her family or others	0	1	2	51. Feels dizzy or lightheaded
0	1	2	22. Disobedient at home	0	1	2	52. Feels too guilty
0	1	2	23. Disobedient at school	0	1	2	53. Overeating
0	1	2	24. Doesn't eat well	0	1	2	54. Overtired without good reason
0	1	2	25. Doesn't get along with other kids	0	1	2	55. Overweight
0	1	2	26. Doesn't seem to feel guilty after misbehaving				56. Physical problems <i>without known medical cause</i> :
0	1	2	27. Easily jealous	0	1	2	a. Aches or pains ( <i>not</i> stomach or headaches)
0	1	2	28. Breaks rules at home, school, or elsewhere	0	1	2	b. Headaches
0	1	2	29. Fears certain animals, situations, or places, other than school (describe): _____	0	1	2	c. Nausea, feels sick
0	1	2	30. Fears going to school	0	1	2	d. Problems with eyes ( <i>not</i> if corrected by glasses) (describe): _____
0	1	2	31. Fears he/she might think or do something bad	0	1	2	e. Rashes or other skin problems
				0	1	2	f. Stomachaches
				0	1	2	g. Vomiting, throwing up
				0	1	2	h. Other (describe): _____

Please print. Be sure to answer all items.

0 = Not True (as far as you know)			1 = Somewhat or Sometimes True			2 = Very True or Often True		
0	1	2	57. Physically attacks people	0	1	2	84. Strange behavior (describe): _____	
0	1	2	58. Picks nose, skin, or other parts of body (describe): _____	0	1	2	85. Strange ideas (describe): _____	
0	1	2	59. Plays with own sex parts in public	0	1	2	86. Stubborn, sullen, or irritable	
0	1	2	60. Plays with own sex parts too much	0	1	2	87. Sudden changes in mood or feelings	
0	1	2	61. Poor school work	0	1	2	88. Sulks a lot	
0	1	2	62. Poorly coordinated or clumsy	0	1	2	89. Suspicious	
0	1	2	63. Prefers being with older kids	0	1	2	90. Swearing or obscene language	
0	1	2	64. Prefers being with younger kids	0	1	2	91. Talks about killing self	
0	1	2	65. Refuses to talk	0	1	2	92. Talks or walks in sleep (describe): _____	
0	1	2	66. Repeats certain acts over and over; compulsions (describe): _____	0	1	2	93. Talks too much	
0	1	2	67. Runs away from home	0	1	2	94. Teases a lot	
0	1	2	68. Screams a lot	0	1	2	95. Temper tantrums or hot temper	
0	1	2	69. Secretive, keeps things to self	0	1	2	96. Thinks about sex too much	
0	1	2	70. Sees things that aren't there (describe): _____	0	1	2	97. Threatens people	
0	1	2	71. Self-conscious or easily embarrassed	0	1	2	98. Thumb-sucking	
0	1	2	72. Sets fires	0	1	2	99. Smokes, chews, or sniffs tobacco	
0	1	2	73. Sexual problems (describe): _____	0	1	2	100. Trouble sleeping (describe): _____	
0	1	2	74. Showing off or clowning	0	1	2	101. Truancy, skips school	
0	1	2	75. Too shy or timid	0	1	2	102. Underactive, slow moving, or lacks energy	
0	1	2	76. Sleeps less than most kids	0	1	2	103. Unhappy, sad, or depressed	
0	1	2	77. Sleeps more than most kids during day and/or night (describe): _____	0	1	2	104. Unusually loud	
0	1	2	78. Inattentive or easily distracted	0	1	2	105. Uses drugs for nonmedical purposes ( <i>don't</i> include alcohol or tobacco) (describe): _____	
0	1	2	79. Speech problem (describe): _____	0	1	2	106. Vandalism	
0	1	2	80. Stares blankly	0	1	2	107. Wets self during the day	
0	1	2	81. Steals at home	0	1	2	108. Wets the bed	
0	1	2	82. Steals outside the home	0	1	2	109. Whining	
0	1	2	83. Stores up too many things he/she doesn't need (describe): _____	0	1	2	110. Wishes to be of opposite sex	
				0	1	2	111. Withdrawn, doesn't get involved with others	
				0	1	2	112. Worries	
				0	1	2	113. Please write in any problems your child has that were not listed above:	
				0	1	2	_____	
				0	1	2	_____	
				0	1	2	_____	

**Children's Emotion Management Scales-Anger and Sadness (CEMS)**

<b>Question</b>	<b>Hardly Ever</b>	<b>Sometimes</b>	<b>Often</b>
1. When I am feeling sad, I control my crying and carrying on.	Hardly Ever	Sometimes	Often
2. I hold my sadness in.	Hardly Ever	Sometimes	Often
3. I hold my anger in.	Hardly Ever	Sometimes	Often
4. I stay calm and don't let sad things get to me.	Hardly Ever	Sometimes	Often
5. I keep my cool.	Hardly Ever	Sometimes	Often
6. I whine/fuss about what's making me sad.	Hardly Ever	Sometimes	Often
7. I attack whatever it is that makes me very angry.	Hardly Ever	Sometimes	Often
8. I hide my sadness.	Hardly Ever	Sometimes	Often
9. I hide my anger.	Hardly Ever	Sometimes	Often
10. When I'm sad, I do something totally different until I calm down.	Hardly Ever	Sometimes	Often
11. When I am angry, I do something totally different until I calm down.	Hardly Ever	Sometimes	Often
12. I get sad inside but don't show it.	Hardly Ever	Sometimes	Often
13. I get mad inside but I don't show it.	Hardly Ever	Sometimes	Often
14. I can stop myself from losing control over my sad feelings.	Hardly Ever	Sometimes	Often
15. I can stop myself from losing my temper.	Hardly Ever	Sometimes	Often
16. I cry and carry on when I am sad.	Hardly Ever	Sometimes	Often
17. I lose my temper.	Hardly Ever	Sometimes	Often
18. I try to calmly deal with what is making me feel sad.	Hardly Ever	Sometimes	Often
19. I try to calmly settle the problem when I am angry.	Hardly Ever	Sometimes	Often
20. I do things like mope around when I am sad.	Hardly Ever	Sometimes	Often
21. I do things like slam doors when I am angry.	Hardly Ever	Sometimes	Often
22. I'm afraid to show my sadness	Hardly Ever	Sometimes	Often
23. I'm afraid to show my anger.	Hardly Ever	Sometimes	Often

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