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Parental Stress, Emotion Regulation, Meta-Emotion, and Changes Following an MBSR Intervention

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Parental Stress, Emotion Regulation, Meta-Emotion, and Changes Following an MBSR Intervention

by

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Each person whose signature appears below certifies that this dissertation in his/her opinion is adequate, in scope and quality, as a dissertation for the degree Doctor of Philosophy.

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ABBREVIATIONS

DD	Developmental Delay
PME	Parental Meta-Emotion
MBSR	Mindfulness-Based Stress Reduction

ABSTRACT OF THE DISSERTATION

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by

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Doctor of Philosophy, Graduate Program in Clinical Psychology
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Parents of children with developmental delays (DD) have consistently reported higher rates of parental stress (Dabrowska & Pisula, 2010; Oelofsen & Richardson, 2006). Difficulties with child emotion regulation are often exhibited among children with DD, and the relationship between parental stress and child emotion regulation may be bidirectional. Previous studies have found that underlying thoughts about parent's own emotions is an important construct that has a direct impact on parental emotional well-being and child emotion regulation (Gottman et al., 1996). Furthermore, previous studies suggest that Mindfulness-Based Stress Reduction (MBSR), an empirically supported stress-reduction intervention, is efficacious in reducing parenting stress and child behavior problems. However, previous studies have not examined the relationship between parental meta-emotion, parental stress, and child regulation, as well as related changes within an MBSR intervention. The current study investigated the relationship between parental stress, child emotion regulation, and parental meta-emotion. We further examined the changes in parental stress, child emotion regulation, and parental meta-emotion from pre to post an MBSR intervention. The results of the current study suggested no significant relationship between parental meta-emotion, parenting stress,

and child emotion regulation. Only parenting stress demonstrated a significant reduction after the MBSR intervention. Future studies using a larger sample with a control group are warranted to replicate the current study and clarify factors that may explain this finding. Significant findings may help to identify underlying factors that may explain changes in parental stress and child emotion regulation in the context of an MBSR intervention.

Keywords: Parental stress, child regulation, meta-emotion, developmental delays (DD)

CHAPTER ONE

INTRODUCTION

The challenges involved in raising a child with developmental delays (DD) have been well documented in previous research. Studies have found parents of children with DD exhibit higher levels of parenting and psychological stress than parents of typically developing children, with many reporting stress levels in the clinical range (Baker, McIntyre, Blacher, Crnic, Edelbrock & Low, 2003; Dabrowska & Pisula, 2010; Oelofsen & Richardson, 2006; Webster, Majnemer, Platt, & Shevell, 2008). Parental mental health within this population is a significant concern for both parents and their children with DD, as the stress experienced by those parents can be chronic and is associated with many undesirable child outcomes. Moreover, children with DD whose parents have high parenting stress are shown to have elevated emotional problems, which negatively impacts the child's ability to effectively regulate their emotions (Mustillo, Dorsey, Conover, & Burns, 2011). More recently, studies have found Mindfulness-Based Stress Reduction (MBSR) intervention to be efficacious in reducing parenting stress. Additionally, there appears to be an indirect "spillover effect" on the child, which may explain the improvement in child outcomes (Neece, 2014). Interestingly, previous parental meta-emotion (PME) studies have found that parents who are more aware of their own feelings about their own emotions reported lower parental stress and demonstrated more desirable parenting behaviors, which also lead to positive child outcomes, such as increase in child emotion regulation abilities. However, the relationship between MBSR and meta-emotion has not been examined previously, such that the impact of MBSR on parental meta-emotion (PME) may play a role in the

outcome of such interventions. Thus, a more in-depth intervention examining parental meta-emotion in parents of children with DD, and how it is related to parental stress, child emotion-regulation, as well as changes in those factors after an MBSR intervention is crucial in order to better understand this gap in the literature. The current study may help families identify areas that can be modified in order to lessen their parenting stress. The present study was designed to investigate (1) the relationship between parental stress and parent meta-emotion, (2) to investigate the relationship between child emotion regulation and parent meta-emotion, and (3) to replicate previous studies examining changes in parental stress, in addition to (4) examine changes in child regulation, and parental meta-emotion following an MBSR intervention.

Parental Meta-Emotion (PME)

Parental meta-emotion is a construct that captures parents' thoughts and feelings about their own and their children's emotions, which includes one's attitude or underlying appraisal of an emotion (Gottman, Katz, & Hooven, 1996*)*. The meta-emotion interview (Gottman, Katz, & Hooven, 1996) was developed to assess parents' awareness of their own and their children's emotional states and parental effort to connect with their child emotionally, and was used in the current study to more directly understand parental meta-emotion in parents of children with DD. Only a limited number of studies have used the meta-emotion interview due to the time-consuming nature of the interview; however, it is suggested that the evaluation of parental meta-emotion may facilitate better understanding of emotional connection between the parents and their children, and would inform literature about possible ways to improve parent-child emotional relationships

(Katz & Gottman, 1997). Parental meta-emotion may be directly associated with parenting stress and a child's ability for emotion regulation. Particularly, differences in parents' awareness of their own feelings about emotions may have a direct impact on their parenting behavior, such that parental stress may be inversely associated with parental meta-emotion. Furthermore, previous studies have found that children learn about expression and management of emotions in the context of the family setting, and that children's emotional reactivity is closely related to emotional climate in their home (Cummings & Davis, 1996; Halberstadt, Crisp, & Eaton, 1999).

Research has recognized the importance of parents in socializing the development of children's emotion regulation skills (Eisenberg, Cumberland & Spinard, 1998; Halberstadt, 1991; Katz, Maliken, & Stettler, 2012). Parents are the primary sources in helping infants and toddlers develop proper emotional regulation abilities. The socialization of emotional displays begins as early as infancy, in which infants use others' emotional expressions to guide their reactions to novel situations and environments (Zeman, Cassano, Perry-Parrish, & Stegall, 2006). Furthermore, parents' expression and management of their own emotion, reaction to the child's emotional expression, and engagement in coaching and discussion of child emotions have been found to influence the development child emotion regulation skills (Eisenberg, Cumberland & Spinard, 1998; Halberstadt, 1991). Child emotion-coaching refers to parental support of child expression of emotions, such that parents do not minimize the importance of child's emotion because of child's age or parents offer comfort to the child and talk to the child about their emotion experience (Katz, Mittman, & Hooven, 1994). Moreover, studies suggest that child emotion-coaching improves three aspects of emotional competence in

children, including emotional awareness, expression, and regulation, as well as improvements in psychosocial adjustment and peer relations (Katz, Maliken & Stettler, 2012). Additionally, parents who are high on emotion-coaching are aware of low intensity emotions in themselves and in their children, and use their child's negative emotions as opportunities for intimacy or teaching of useful goals and strategies (Gottman et al., 1996).

Studies indicate that parental meta-emotion is positively correlated with other positive parenting behaviors such as emotional scaffolding, validation, self-disclosure, and praising (Cleary & Katz, 2008; Gottman et al., 1996). Research has also documented the benefits of high parental meta-emotion for children. More specifically, parents' reported ability to notice and describe their child's emotional experience (awareness) and the parental perception of use a child's negative emotions as opportunities for parent-child bonding, teaching, and formulating goals and strategies (emotion coaching) were shown to have a positive effect on both child and family outcomes. Specifically, higher parental meta-emotion buffered children against child behavior problems and negative affect with peers (Katz & Gottman, 1997); the children also reported a higher resiliency to negative outcomes related to parental marital conflicts (Katz & Gottman, 1997). Further, the subscale of meta-emotion, more specifically, improved emotional competence, or the child's emotional awareness, expression, and regulation, is associated with a number of positive outcomes including better social adjustment and peer relations (Katz, Maliken, & Stettler, 2012), enhanced attentional abilities, fewer behavior problems, high academic achievement, and fewer physical illness (Gottman et al., 1996). Research has also supported the benefit of parental meta-emotion for better parent-child

relationships, such that parents' awareness and ability to discuss emotions with their children allows for positive parent-child bonding (Katz & Hunter, 2007) and improved parent-teen communication during adolescence (Katz & Hunter, 2007).

The implications of persistent parenting stress in parents of children with DD is a significant concern and has been found to lead to other undesirable outcomes, such as increased risks for developing psychopathology (Oelofsen & Richardson, 2006; Hastings et al., 2006; Murray et al, 2006). Additionally, poorer social skills have been found in parents with negative affect, particularly in children with intellectual disability (Neece & Baker, 2008), which may be a result of high parenting stress level. As parents of children of DD often endorse higher levels of parental stress (Baker, McIntyre, Blacher, Crnic, Edelbrock & Low, 2003; Dabrowska & Pisula, 2010; Oelofsen & Richardson, 2006), it is reasonable to suspect that parents may be less aware and accepting of their own and their child's emotions, such that disengagement coping is often used (e.g., avoidant responses) to mitigate stress in parents with lower levels of acceptance, particularly to their own emotions, which may further lead to an overall reduction in parental meta-emotion. Given that parents of children with DD exhibit elevated levels of parental stress (Baker, McIntyre, Blacher, Crnic, Edelbrock & Low, 2003; Dabrowska & Pisula, 2010; Oelofsen & Richardson, 2006), the current study can be used to inform how parental stress is related to meta-emotion, such that reduction in parental stress may be related to improvements in parental meta-emotion, and consequently impact child regulation abilities positively, in the context of an MBSR intervention.

To date, previous research has not examined parental meta-emotion in this population, and difficulties in emotion regulation are commonly reported in children with

developmental delays; thus, warrants further investigation. The Meta-Emotion Interview was developed to assess parents' feelings about their own emotions, as well as their child's emotions. Parent dimensions include: Emotional Awareness (parent's ability to distinguish the experience of one emotion from that of another), Emotional Expressivity (parent's expression of this emotion), Emotional Acceptance (parent's level of acceptance of an emotion, which can vary from enjoying and seeking the experience, to reporting that the emotion has value although not pleasant to experience), Emotional Remediation (parent's awareness of his/her own emotional soothing process), and Emotion Regulation (parent's ability to regulate an emotion; Hunter, Hessler, Katz, Mittmann, & Hooven, 2006). This interview also assesses parents' feelings about their child's emotional experiences. The dimensions include: Child Emotional Awareness (parent is able to decode and observe their child's emotion, and is aware of when a child expresses an emotion), Child Emotional Acceptance (parent's acceptance of a child's emotion), Child Emotion Coaching (parent ability to refrain from minimizing a child's emotion, and involvement in teaching strategies to cope with an emotion when a child experiences an emotion), Child Behavioral Strategies (parent's practice when a child express an emotion), and Child Emotion Dysregulation (parent's report of child's expressivity of an emotion; Hunter, Hessler, Katz, Hooven, & Mittmann, 2006). Each domain is evaluated across three emotions: sadness, anger, and fear (Hunter, Hessler, Katz, Mittmann, & Hooven, 2006). These interviews are conducted with parents and are recorded and then coded by trained coders. A total meta-emotion score is derived from combined total scores of three emotions, which each consists of five subscales for both parental and child subscales.

Mental Health of Parents of Children with DD

Parents of children with DD are more likely to experience serious psychological distress than parents of typically developing children (Baker, Blacher, Crnic, & Edelbrook, 2002; Hauser-Cram et al., 2001; Johnston et al., 2003). This is alarming as persistent parenting stress has been found to increase the risk for developing psychopathology, such as parental depression (Oelofsen & Richardson, 2006; Hastings et al., 2005; Murray et al, 2006). High levels of parental stress are also associated with a number of adverse outcomes such as problematic parenting behaviors (Downey & Coyne, 1990; Crnic, Gaze, & Hoffman, 2005), poor physical health (Eisenhower, Baker, & Blacher, 2009; Oelofsen & Richardson, 2006), and unsatisfying parent-child relationships (Guralnick, 1999). Overall, parents of children with developmental delays were found to have lower coping skills and poorer psychological well-being (Abbeduto et al., 2004; Blacher & McIntyre, 2006; Eisenhower, Baker, & Blacher, 2005; Dumas et al., 1991).

The presence of child behavior problems in everyday life may also result in significant parental stress, which further leads to persistent stress that often progresses into other adverse parental mental health outcomes (Murray, Stanley, Hooper, King, & Fiori-Cowley, 1996; Garstein & Sheeber, 2004). Significant parental distress often impacts parents' thinking and interactions abilities, which subsequently cause negative outcomes in typically developing children and children with DD (Slatcher, Trenacosta, 2011; Gross et al., 2008). Interestingly, parents with higher parental stress also reported higher levels of behavior problems in their children on a self-rating behavior checklist (Hastings & Johnson, 2001) versus parents with relatively lower parental stress,

suggesting that parents who endorsed higher levels of stress may be more critical of their children's behaviors. Additionally, children with DD whose parents have high parenting stress are shown to have elevated emotional problems (Mustillo, Dorsey, Conover, & Burns, 2011), poorer social skills and self-regulatory skills (Neece & Baker, 2008; Dominick et al., 2007), and increased child behavior problems (Neece, Green, & Baker, 2012; Baker et al., 2003; Donenberg & Baker, 1993). Therefore, parenting stress has been one of the most frequently studied aspects of family functioning among families of children with DD over the past several decades.

While many studies focused on the importance of parental meta-emotion and other family outcomes, previous literature has not examined parental meta-emotion in relation to parents' reported stress level in this population. The current study will provide informative direction for parents, particularly to identify factors that parents may possess in buffering risks for child emotion regulation difficulties. Additionally, future investigation of domains of parental meta-emotion that may be targets of intervention, and may facilitate improvements in other aspects of family functioning and general well-being.

Emotion Regulation in Children with DD

The framework of emotion regulation has been conceptualized as one's ability to be aware of and understand emotions, to accept emotions, to control impulsive behaviors and behave in accordance with desired goals when experiencing negative emotions, and to use appropriate emotion regulation strategies to modulate emotional responses according to situational demands (Thompson, 1994; Thompson & Calkins,

1996; Gratz & Roemer, 2004). A child's ability for emotional understanding, affective perspective taking, and social problem solving is especially important as it has been found to predict better subsequent adaptive functioning (Denham et al., 2003; Mostow, Izard, Fine, & Trentacosta, 2002). It is also important to note that improving emotion regulation abilities may lead to better social skills and reduced child behavior problems. In contrast, children with poor self-regulation skills are often reported to display externalizing behavior problems such anger, aggression, and frustration toward others; whereas those children who reported over self-regulation often display internalizing behavior problems, such as depression, fearfulness, and frustration toward themselves (Roeser, Eccles, & Strobel, 1998; Cole, Zahn-Waxler, Fox, Usher, & Welsh, 1996). Further, biological and social stressors can often interrupt adaptive emotional functioning, thus result in the development of psychopathology or disruptive behaviors (Plutchick, 1993).

Higher difficulties with emotion regulation and greater risk for social skill deficits is commonly reported in children with DD and often leads to heightened parenting stress over time (Merrell & Holland, 1997; Cole et al., 1994; Neece & Baker, 2008). Children with DD are also at significant risk for developing a comorbid psychiatric disorder such as intellectual disability, which is associated with increased risk for comorbid psychopathology (Cormack, Brown, & Hastings, 2000; Koskentausta, Livanainen, & Almquvist, 2007; Borthwick-Duffy & Eyman, 1990). Further, previous research indicated that punishment of a child's emotional expression provides a sense of invalidation and often leads to a lower threshold for triggering emotional reaction to internal or external stimuli, which can lead to children becoming

more emotionally dysregulated over time (Linehan, 1993). Altogether, further research examining the underlying cognitive and emotional processes that contribute to one's emotional expression is important, as these children are at significant risk for adverse developmental outcomes.

Research indicates that parents have a primary role in socializing children's emotional development including emotional understanding, expression, and regulation through social learning (Eisenberg, Cumberland & Spinrad, 1998). Familial interactions are also directly related to child's adjustment through parental impact on child emotion regulation (Eisenberg, Cumberland, & Spinrad, 1998; Gottman, Katz, & Hooven, 1997). While children learn from social modeling in public settings, their ability for emotion regulation has been strongly associated with the level of parental emotional expressivity in the family (Dunsmore & Halberstadt, 1997; Baker, Fenning, & Crnic, 2011). Parental reactivity towards their children in distressing situations may determine the way children react to or understand their own emotions and the related situations, as well as the developmental of relevant emotional regulation or coping strategies to better manage situations in the future (Denham et al., 2007; Baker, Fenning, & Crnic, 2011). Gottman et al. (1996) proposed that parents assist children in developing their emotion regulation through parental interaction by providing emotional awareness and emotion-coaching during their children's emotional moments. Further, the links between parenting behavior and children's emotional developmental have been well established, such that parenting styles influence a child's ability to regulate emotions and cope with stressful situations (Lagace-Seguin & Gionet, 2009; Aunola & Nurmi, 2005).

Overall, the relationship between parental meta-emotion and child emotion

regulation is likely bidirectional, such that higher parental meta-emotion may facilitate better child emotion regulation, and vice versa. However, previous research has not examined the interrelationship between meta-emotion and child emotion regulation. It is critical to understand the family emotional processes in children with DD, particularly given that higher emotional dysregulation and heightened risk for poor emotion regulation skills have been documented in previous research. The aim of the current study was to investigate the association between parental meta-emotion and child emotion regulation, which could further inform the literature to better understand and assist families of children with DD, as well as to improve other corresponding child outcomes.

Mindfulness-Based Stress Reduction Intervention and Parental Mental Health

Parental stress negatively impacts overall functioning of parents and has been identified to have potential negative implications for child outcomes**.** Additionally, children with DD are at significant risk for developing comorbid psychiatric disorders over time and are inherently more susceptible to poor behavioral and social outcomes (Leyfer et al., 2006; Simonoff, Pickles, Charman, Chandler, Loucas & Baird, 2008; Matson & Nebel-Schwalm, 2007; Merrell & Holland, 1997). As such, interventions designed to address parenting stress may be particularly relevant and important given the heightened levels of parenting stress and associated risks for both parental mental health and child outcomes (Davidov & Grusec, 2006). It has been well established that the Mindfulness Based Stress Reduction (MBSR) intervention (Kabat-Zinn, 1990) is an

efficacious form of clinical intervention in reducing chronic pain, stress, anxiety, depression, and stress (Grossman, Niemann, Schmidt, & Walach, 2004; Herbert, Forman, Salmon, Sephton, & Dreeben, 2012; Chiesa & Serretti, 2008; Carlson & Garland, 2005). Recent studies suggest that it is also effective in reducing parenting stress among parents of children with DD (Bazzano, Wolfe, Zylowska, Wang, Shuster, Barrett, & Lehrer, 2013; Minor, Carlson, Mackenzie, Zernicke, & Jones, 2006; Neece, 2014; Dykens, Fisher, Taylor, Lambert, & Miodrag, 2014).

MBSR has also been found to improve aspects of child outcomes (Ivanovski & Malhi, 2007; Kabat-Zinn, 1990; Neece, 2014). One study has found that targeting only parental stress (without teaching parenting skills) using MBSR has led to reductions in parental stress, parental depressive symptoms, child behavior problems, and improved life satisfaction (Neece, 2014). Additionally, the study further suggested a 'spill over' effect in which child behavior problems were also reduced when only parents were intervened (Neece, 2014). Another recent study expanded the results of Neece (2014) and has found a significant improvement in parent-child relationship, as well as child's social skills such as self-control, assertion, empathy, and engagement (Lewallen & Neece, 2015) after MBSR intervention.

One mechanism of change may be the impact that MBSR has on emotional functioning. The program stresses the importance of repetition and practice of mindfulness meditation, and individuals eventually learn to attend to their psychological and physical state in more accepting, less reactive, and nonjudgmental ways (Kabat-Zinn, 1990). Research has found that individuals who have a nonjudgmental awareness may engage in emotions in a more adaptive way (Hayes & Feldman, 2004), and express their

emotions without suppressing negative thoughts or avoiding situations (e.g. underengagement; Hayes, Wilson, Gifford, Follette, & Strosahl, 1996; Wegner, 1994). Additionally, a link has been found between mindfulness and reduced emotional regulation difficulties (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). Additionally, higher practice of mindfulness was shown to decrease rumination and avoidance of emotions, and promote adaptive emotional responses to situations (Hayes & Feldman, 2006). Previous studies have suggested that mindfulness meditation may facilitate the development of metacognitive insight (Bishop et al., 2004; Mason & Hargreaves, 2001; Teasdale, 1999). It was suggested that positive outcomes are associated with the extent of parental acceptance and awareness of emotion of both their child and their own, in addition to their ability to discuss emotions with their child (Mason & Hargreaves, 2001).

The Current Study

We anticipated an increase in parents' reported meta-emotion, particularly through an MBSR intervention that aims to promote awareness and acceptance, and thus further foster constructive parental-child interaction and improve children's level of adjustment and emotional regulation. In an effort to have a better understanding of the relationship between how parental meta-emotion and their stress level, its impact on child emotion regulation, as well as to build upon literature on the effectiveness of MBSR intervention in relationship to other outcome variables, we hypothesized that: (1) there is an inverse relationship between parental stress and parental meta-emotion among parents of children with DD; (2) there is an inverse relationship between child

regulation and parental meta-emotion; (3) there will be an increase in parental meta-emotion and child emotion regulation, and a decrease in parental stress following an MBSR intervention; (4) changes in parental stress and child emotion regulation from pre to post intervention are partially explained by changes in parental meta-emotion following MBSR intervention.

It is important to note that the latter questions on meta-emotion have not been examined previously in parents of children with DD. Identifying factors such as meta-emotion that improve through MBSR intervention is meaningful as it may help to facilitate and target parent-training interventions. Additionally, this study contributes to the current literature by targeting potential aspects of meta-emotion that may lead to subsequent improvement in adaptive emotional functioning in children with DD.

CHAPTER TWO

METHOD

Participants

The current study involved 31 parents of children with DD who participated in the second phase of the Mindful Awareness for Parenting Stress (MAPS) Project. Subjects were primarily recruited through the Inland Empire Regional Center, a government agency that provides and purchases diagnostic and intervention services for persons with developmental disabilities. Participants who met the inclusion criteria were selected by the Regional Center's computer databases and received a letter and brochure informing them of the study. Families were also recruited through the local newspaper, elementary schools, and the Regional Autism Society.

Criteria for inclusion in the study were: (1) Having a child ages 2.5 to 5 years, (2) child receive a Full Scale IQ score between 35 and 84 on the Wechsler Preschool and Primary Scale of Intelligence (WPPSI-IV, Wechsler, 1991), (3) parent reported 10 or more child behavior problems (the recommended cutoff score for screening children for treatment of conduct problems) on the Eyberg Child Behavior Inventory (ECBI; Robinson, Eyberg, & Ross, 1978), (4) parent reported a score of 16 or greater on the Parenting Stress Scale (Berry & Jones, 1995), (5) parent was not receiving any form of psychological or behavioral treatment at the time of referral (e.g., counseling, parent training, parent support group, etc.), and (6) parent spoke and understood English or Spanish. Parents were excluded from participation if they had children with debilitating physical disabilities or severe intellectual impairments that prevented the child from

participating in the play assessment that was a part of the protocol for the larger study (e.g., child is not ambulatory). In order to be included, parents also must have completed all intake measures and attended the intake assessment before the beginning of the first intervention session.

A total of 136 families contacted the second phase of the MAPS project, 124 phone screens were completed. Figure 1 depicts the flow of sample size through each stage of the current study. A total of 96 families were eligible participants upon screening, 28 were not eligible. Common reasons for ineligibility were: the child was too old, parents were receiving psychological services at the time phone screen was conducted, and family was too busy to participate at the time. Out of the 96 eligible families, 67 participants completed the first assessment; 23 participants dropped out after the initial assessment process. . There were no significant demographic differences between participants who completed the first assessment versus participants who dropped out the initial assessment. Of the 44 parents who participated in the larger part of the study, 32 parents were English-speaking parents and 12 were Spanish-speaking parents. The pre-intervention PME interview was conducted with 42 participants as we were not able to reach two parents (one English-speaking and one Spanish-speaking) prior to the beginning of the MBSR group. Regarding post-treatment data, one participant dropped out after the first MBSR session; three participants failed to complete the questionnaire portion of the post-treatment assessment, and 12 participants (English-speaking parent) either were unable to reach or refused to complete the PME interview. Only 1 Spanish-speaking parent completed the post-intervention PME interview. However, the Spanish interviews were lost through the data collection process, therefore, interviews from only

English-speaking parents were used for the current study. The final sample size of the current study consisted of 31 pre-treatment and 19 post-treatment intervention interviews from English-speaking parents.

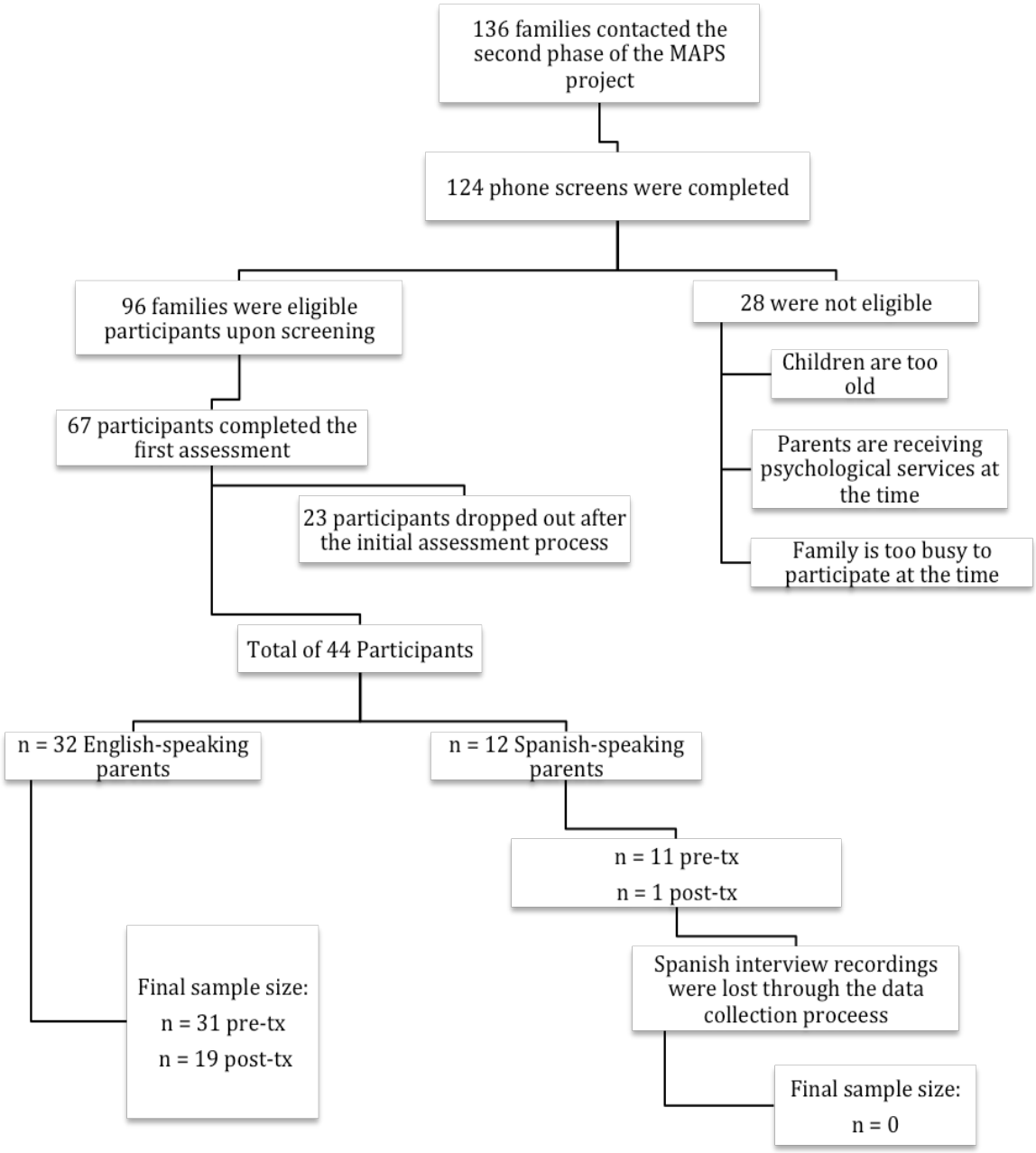

Figure 1. Flow of sample size through the data collection process.

Table 1 depicts the demographics of the sample for both pre and post treatment. At pre-treatment, the majority of the children were boys (71%) and the mean age of the children was 4.68 years (*SD* = 2.08). Parents reported 38.7% of the children as Caucasian, 41.9% as Hispanic, and 19.4% as "Other". The diagnosis of the children varied, with 48.4% diagnosed with autism, 16.1% with Down syndrome, and 35.5% diagnosed with intellectual disability or other developmental delays. Of the 31 participating parents (M_{age} = 36.16, SD_{age} = 8.71), the majority of parents were mothers (90.3%) and married (71%). There was a range of annual family income from $0 to over $95,000 (61.3% made greater than $50,000 in 2014), and parents completed an average of about three years of college (M_{years} = 14.97, SD_{years} = 2.56). There were no significant demographic differences between participants who completed the MBSR session versus those who dropped out.

Table 1. Demographic characteristics of participants.

	Pre-Tx N (%)	Pre-Tx X (*SD*)	Post-Tx N (%)	Post-Tx X (*SD*)
Children				
Gender (% boys)	22 (71)		14 (73.68)	
Ethnicity				
Caucasian	12 (38.7)		7 (36.84)	
Hispanic	13 (41.9)		7 (36.84)	
Other	6 (19.40)		5 (26.32)	
Mean Age in Years		4.68 (2.08)		5.01 (2.51)
Diagnosis				
Autism	15 (48.4)		9 (47.4)	
Down Syndrome	5 (16.1)		2 (10.5)	
Other DD	11 (35.5)		8 (42.1)	
Participating Parent				
Marital Status (% Married)	22 (71)		15 (79)	
Family Income (% > $50K)	19 (61.3)		10 (52.63)	
Mean Age in Years		36.16 (8.71)		35.59 (6.08)
Education (Mean Grade in School)		14.97 (2.56)		14.74 (2.03)

Note. Participating children and parents: n = 31 pre-treatment; n = 19 post-treatment.

Procedure

Interested parents contacted the MAPS project by phone, returned a postcard requesting the PI to contact them, or submitted their information on the MAPS website. The research team then conducted a phone screen assessing participants' eligibility once the families indicated their interest in the program. If the family met eligibility criteria for the study, an appointment for an intake laboratory assessment was scheduled. Prior to the initial laboratory assessment, a packet of questionnaires was mailed to parents to complete before coming into the lab. Only the parents participating in the study completed the packet. At the initial assessment, parents were given an informed consent

form that the researchers reviewed with the parent. Demographic information was collected after consent was obtained. Parents also participated in a play assessment and were assigned to a treatment group that was a part of the larger study.

After the initial assessment, the parents were contacted by phone and verbal informed consent was obtained if they agreed to complete the Meta-Emotion interview (Katz & Gottman, 1986). Mothers were informed that we were interested in their experiences and perspectives about these emotions, and that there were no right or wrong answers. The interviews were conducted via a call recorder for phone calls application, TapeACall Pro using iPhones. The recordings were de-identified and saved within the application after each phone call. The recordings were uploaded through an iCloud drive to the computer. The researchers completed and recorded the Meta-Emotion interview prior to their intervention sessions (pre-treatment). The parents then participated in the mindfulness-based stress reduction (MBSR) intervention, which included eight weekly 2-hour sessions, a daylong 6-hour meditation retreat, and daily home practice with audio CD instruction. The parents were contacted shortly after the intervention and completed the Meta-Emotion interview (post-treatment) over the phone. The parents were paid ten dollars upon the completion of each interview and up to twenty dollars for the interview portion of the study.

Coding for Meta-Emotion

The coding team consisted 6 doctoral students who were trained on the revised Meta-Emotion Coding System by Hunter et al., 2006 (based on original coding system by Katz, Mittman, & Hooven, 1994) at the University of Washington. The Principle

Investigator (PI) worked with a master coder at the University of Washington to learn the coding system and coded audiotapes used to train new coders and obtain acceptable reliability. The PI coded tapes and continued to be trained by the master coder until she achieved the criterion reliability score of Pearson's correlations coefficient of equal or above 0.6 between the PI and the master coder's scores across subscales (Katz & Hunter, 2007).

Once the master coder achieved acceptable reliability, five other graduate students participated in four months of coding training. The students were required to code sample recordings and meet weekly to discuss discrepancies in their codes and reach consensus codes with the PI. Once adequate reliability across consensus scores was achieved (i.e., intra-class correlation 0.6 or greater for most dimensions), coders were paired into dyads and coded audio recordings as a team. Audio recordings were coded in random order and coders were blind to when the interview was conducted (pre or post-treatment). Each person coded individually and then reached a consensus code between the dyad. Coding teams meet weekly to answer questions, resolve discrepancies, and maintain reliability. Interrater reliability was checked every other week, with a Pearson's correlation of >0.6 to ensure reliability between coder within the dyad. In addition, at least 33% of the audiotapes were coded by the master coder for reliability check purposes and maintained a correlation of >0.6 between the master coder and the coding dyad (Katz & Hunter, 2007).

Measures

Meta-Emotion Interview & Revised Meta-Emotion Coding System

Parents were administered the meta-emotion interview (Katz & Gottman, 1986). The interview consisted of questions about parents' experience of sadness, anger, and fear, as well as their feelings, attitudes, and behaviors toward their children's sadness, anger, and fear. Sample questions include: "What do you think about when you are sad?" "Do you have any physical sensations when you are angry," and "Is there anything you do to help your child get over feeling sad?" The interviews were typically 45-60 minutes in length and were audio-recorded, and later coded with the Revised Meta-Emotion Coding System (Hunter, Hessler, Katz, Mittmann, & Hooven, 2006). The total parent scale codes included five subscales (Awareness, Expressivity, Acceptance, Remediation, and Regulation) for three different emotions (sadness, anger, and fear). The total child meta-emotion codes included five codes (Awareness, Acceptance, Coaching, Behavioral Strategies, and Regulation) for the same three emotions. See Appendix D for more details. Estimates of internal consistency ranged from 0.48-0.75, and inter-rater reliability ranged from 0.60-0.70. Total meta-emotion scores were calculated by summing all subscale scores and the total score were used for the purpose of the current study. The inter-rater reliability for subscales of the ranged from 0.64-0.99. The inter-rater reliability for the total meta-emotion scale was 0.96.

Parenting Stress Index (PSI-Short Form)

The short-form of The Parenting Stress Index was used to assess parenting stress (Abidin, 1990). The measure consisted of 36 items that measures three subscales, including Parental Distress, Parent-Child Dysfunctional Interaction, and Difficult Child.

The ratings range from “Strongly Agree” to “Strongly Disagree.” The Parental Distress scale was used for the purpose of this study. The Cronbach’s alpha for the current sample was 0.90. The Cronbach’s alpha for the normative sample ranged from 0.78-0.88.

Child Emotion Checklist (ERC)

To assess child emotion regulation, parents completed the ERC, a 24-item parent-report measure of children’s emotion regulation (Shields, & Cicchetti, 1997). The measure consisted of two subscales, including Emotion Lability/Negativity and Emotion Regulation. The checklist consisted of positively and negatively weighted items rated on a 4-point Likert scale (1=Rarely/Never, 2=Sometimes, 3=Often, and 4= Almost always). Sample items included “How often does your child quickly change their mood or experience mood swings” and “How often is your child cheerful.” The measure has strong convergence with other behavioral measures and an alpha coefficient of .96 (Shields, & Cicchetti, 1997). The total score was used for the purpose of this study. One item was removed from the analysis to achieve a Cronbach’s alpha of 0.61 for the current sample.

Data Analytic Plan

Residual scatterplots were used for tests of normality, linearity, and homoscedasticity. No assumptions were violated. Tests for leverage, discrepancy and influence were used for detecting outliers. Data points that are more than three standard deviations above or below the mean of a variable were considered to be outliers (Tabachnick & Fidell, 2012). Multicolinearity between parental stress, child emotion regulation, and parental meta-emotion may increase the variance of the coefficient

estimates, thus making the estimates unstable or sensitive to changes (Bruin, 2006). Thus, tests of collinearity for parental stress, child emotion regulation, and parental meta-emotion were conducted. Variables with VIFs of 10 or higher (or tolerances of .20 or less) may indicate issues of multicollinearity (O'Brien, 2007; Bruin, 2006), and the independent variables are standardized to address potential issues of multicollinearity (Bruin, 2006). Tests for leverage and influence indicated that no cases were three times or more than the average leverage value, and no outliers were detected. Bivariate correlations were used to test for significant correlations among demographic variables (e.g. gender, ethnicity, education, SES) with independent and dependent variables. Demographic variables that had a significant relationship ($p < .05$) with one or more of the independent variables and one or more of the dependent variables were used as covariates in the analyses. No demographic variables were identified to have a significant relationship with parental meta-emotion, parental stress, and child emotion regulation, and thus, no covariates were included in the subsequent analyses.

To address the first two research questions, Pearson's correlations were used to investigate the relationship between parental stress and meta-emotion, and child regulation and meta-emotion. Paired samples t-tests were used to compare changes in parental stress, child emotion regulation, and parental meta-emotion following the intervention to address the third aim. For aim four, we conducted exploratory analyses using hierarchical linear regression models to investigate whether changes in parental meta-emotion accounted for changes in parental stress and child emotion regulation. First, to test whether changes in meta-emotion account for changes in parental stress, parental stress at pre-treatment on Step 1, meta-emotion at pre-treatment on Step 2, and

meta-emotion total score at post-treatment on Step 3. To test whether changes in parental meta-emotion accounted for changes in child emotion regulation, child regulation at pre-treatment on Step 1, meta-emotion total score at pre-treatment on Step 2, and meta-emotion total score at post-treatment on Step 3.

With regard to statistical limitations, we recognize that the proposed regression analyses for aim four require a larger sample size and therefore the analyses are likely to be underpowered. The current study aimed to conduct exploratory analyses investigating the effects of MBSR on parental meta-emotion, particularly examining the impact of changes in meta-emotion on parental stress and child emotional regulation. Additionally, given the reported levels of higher stress and risk for further psychopathology in this population, it is crucial to investigate factors that may be account for positive changes of parental mental health and child outcomes. Further, the current study is the first investigation examining changes in parental meta-emotion following an MBSR intervention. Although underpowered, the exploratory investigations of the proposed questions are thought to be important to investigate, as the findings may shed light on potential intervening variables that may consequently aid to alleviate parental stress, and facilitate better parental mental health and child emotion-regulation abilities.

CHAPTER THREE

RESULTS

Bivariate correlations were used to examine the relationship between parental meta-emotion and parenting stress, and parental meta-emotion and child emotion regulation. The correlation analyses revealed that parental meta-emotion was not significantly correlated with either parenting stress or child emotion regulation ($p > .05$) (See Table 2).

Table 2. Correlations between parental meta-emotion, parental stress, and child emotion regulation.

Variable	1	2	3	4	5
1. Meta-Emotion Total	--				
2. Parental Stress	-.14	--			
3. Child Emotion Regulation	-.12	-.07	--		
4. Parental Meta-Emotion Subscale	.84***	-.18	-.14	--	
5. Child Meta-Emotion Subscale	.82***	-.06	-.05	.38*	--

Note. *** $p = <.001$; * $p = <.05$

Changes in parenting stress, child emotion regulation, and parental meta-emotion following the intervention were calculated using paired samples t-tests (See Table 3). The results suggested a significant reduction in parenting stress at post-intervention (t=2.23, $p < 0.05$). However, there were no significant changes in child emotion regulation scores from pre-intervention to post-intervention (t = -.53, $p > .05$). In terms of parental meta-emotion, there was an increase in parents reported meta-emotion scores, however, the

Table 3. Paired samples t-tests from pre-to-post MBSR intervention.

Variables (pre-post intervention)	Mean	SD	Std. Error	95% CI of the Difference	*t*	Sig. (2-tailed)	*Cohen's d*
Meta-Emotion Total	-9.67	39.08	9.21	[-29.10, 9.77]	-1.05	.31	.23
Parental Stress	10.74	23.08	4.81	[.76, 20.72]	2.23	.04	.70
Child Emotion Regulation	-.82	7.24	1.54	[-4.03, 2.39]	-.53	.60	.12
Parental Meta-Emotion Subscale	-8.28	22.66	5.34	[-19.54, 2.99]	-1.55	.14	.34
Child Meta-Emotion Subscale	-1.39	22.95	5.41	[-12.80, 10.02]	-.26	.80	.06

change scores were not statistically significant from pre-intervention to post-intervention (t = -1.05, p > .05).

The proposed exploratory analyses using hierarchical multiple regression model to examine whether (1) changes in parental meta-emotion accounted for changes in parenting stress and (2) whether changes in parental meta-emotion accounted for changes in child emotion regulation would typically not be conducted, as a linear relationship was not found in the previous correlation analyses; such that an underestimation of the relationship may occur. However, given that these analyses were included in the dissertation proposal, the regression analyses were conducted for this project. The first model using changes in parental meta-emotion as predictors of changes in parental stress was not significant, R^2 = .11, p = .97 (See Table 4). Changes in parental meta-emotion did not account for changes in child emotion-regulation, R^2 = .05, p = .67 (See Table 5).

Table 4. Regression analyses predicting changes in parental stress from changes in parental meta-emotion.

	ΔR^2	β	B	95% CI (B)
Predictor Variable: Parental Stress Post-Tx				
Step 1				
Parental Stress Pre-Tx	.099	-.57	-.28	[-1.84, .69]
Step 2				
Parental Meta-Emotion Pre-Tx	.109	-.05	.10	[-.25, .35]
Step 3				
Parental Meta-Emotion Post-Tx	.109	.01	.01	[-.33, 0.34]

Note. f^2 = 0.12, 29.4% power. ΔR^2 = R square change; β = standardized regression coefficient; 95% CI (B) = the 95% confidence interval associated with the unstandardized regression coefficient; B = unstandardized regression coefficient.

Table 5. Regression analyses predicting changes in child emotion regulation from changes in parental meta-emotion.

	ΔR^2	β	B	95% CI (B)
Predictor Variable: Child Emotion Regulation Post-Tx				
Step 1				
Child Emotion Regulation Pre-Tx	.033	.25	.19	[-.56, 1.05]
Step 2				
Parental Meta-Emotion Pre-Tx	.033	.01	.07	[-.11, .13]
Step 3				
Parental Meta-Emotion Post-Tx	.049	-.03	-.16	[-.16, .11]

Note. $f^2 = 0.05$; 14.12% power. ΔR^2 = R square change; β = standardized regression coefficient; 95% CI (B) = the 95% confidence interval associated with the unstandardized regression coefficient; B = unstandardized regression coefficient.

Twelve exploratory post-hoc analyses were conducted examining changes in 10 subscales of parental meta-emotion, parental total meta-emotion scale, and child total meta-emotion scale. The results (See Table 6) suggest that only parental expression scale achieved a close to significant change from pre ($\bar{x} = 78.83$) to post intervention ($\bar{x} = 84.11$; $t = -2.04$, $p = 0.057$).

Scores for all other scales did not change significantly ($p > .05$) from pre-intervention to post-intervention. It is important to recognize that the current study is underpowered, thereby increasing the likelihood of Type II error and limiting our ability to detect changes that may exist in reality.

Table 6. Exploratory post-hoc analyses of parental meta-emotion subscales.

Parental Meta-Emotion (pre-post intervention)	Mean	SD	Std. Error	95% CI of the Difference	*t*	Sig. (2-tailed)	*Cohen's d*
Parent Total	8.28	22.66	5.34	[-19.55, 2.99]	-1.55	.14	.34
Parental Awareness	1.44	15.20	3.58	[-9.00, 6.11]	-.40	.69	.09
Parental Expressivity	5.28	10.99	2.59	[-10.74, .19]	-2.04	.057	.48
Parental Acceptance	-.67	5.91	1.39	[2.27, 3.61]	.48	.64	.11
Parental Remediation	.56	5.70	1.34	[-3.39, 2.28]	-.41	.68	.10
Parental Regulation	1.67	7.06	1.66	[-5.18, 1.85]	-1.00	.33	.24
Child Total	1.39	22.95	5.41	[12.80, 10.02]	-.26	.80	.06
Child Awareness	.33	9.35	2.20	[-4.98, 4.32]	-.15	.88	.04
Child Acceptance	-.22	3.92	.92	[-1.73, 2.17]	.24	.81	.06
Child Coaching	1.06	5.94	1.39	[-4.01, 1.90]	-.75	.46	.18
Child Behavioral Strategies	1.06	5.94	1.39	[-4.01, 1.90]	-.75	.46	.18
Child Regulation	-.83	12.02	2.83	[-5.14, 6.81]	.29	.77	.07

Note. 73% power for parental expressivity subscale.

CHAPTER FOUR

DISCUSSION

The current study aimed to advance the literature by examining the relationship between parental meta-emotion and parenting stress, and parental meta-emotion and child emotion regulation. Previous studies have found that parents' underlying thoughts about their own emotions is an important construct, which associate directly with parental emotion well-being and child emotion regulation (Gottman et al., 1996). However, previous studies have not examined how parental meta-emotion may be directly associated with parental stress and child emotion regulation, particularly given higher levels reported distress in parents of children with DD when compared to parents of typically developing children. Contrary to our hypotheses, the results of the current study indicated no significant relationship between parental meta-emotion and parenting stress, and parental meta-emotion and child emotion regulation. We also examined changes in parental stress, child emotion regulation, and parental meta-emotion following an MBSR intervention. The results of the current study are consistent with previous studies (Neece, 2014; Cachia, Anderson & Moore, 2016; Lunsky, et al., 2017) that significant reduction in parents reported parenting stress were found after the MBSR intervention. Furthermore, while parents' report of parental meta-emotion and child emotion regulation did not significantly change from pre-to-post intervention (i.e., changes were not statistically significant), parents reported an increase in their total meta-emotion scores after the MBSR intervention, suggesting that the MBSR intervention may be beneficial in improving aspects of parental meta-emotion.

To gain a better understanding of domains of parental meta-emotion, an exploratory set of post-hoc analyses were conducted to examine specific changes in 10 subscales of parental meta-emotion, parental total meta-emotion scale, and child total meta-emotion scale from pre-to-post MBSR intervention. Although no significant changes were found in all subscales, an interesting result of marginal significance suggested improvements in the parental expression scale following the intervention. Interestingly, post-hoc power analysis indicated a 73% power and an effect size of .48 for the parental expressivity scale, which highlights that although the current findings were not statistically significant, the observed increase in raw scores were in the expected direction, particularly after the MBSR intervention. The parents were able to more appropriately express and communicate their emotions after the MBSR intervention, rather than suppress or express in a way that adversely impact their life or have a negative influence on others, after the MBSR intervention. It corroborates similar findings that practice of mindfulness promotes adaptive emotional responses to situations and allows one to reduce emotion avoidance (Hayes & Feldman, 2006). This relationship, however, would need further investigation with a large sample size. Future research may examine this relationship by implementing a randomized controlled trial to examine the ways in which intervention may have influenced this relationship.

Findings of previous literature suggested that parents who are more aware of their own feelings about their own emotions reported lower parenting stress and showed more desirable parenting behaviors that led to positive child outcomes, such as better emotion regulation abilities in their children (Gottman et al., 1996). However, studies have not examined this relationship in parents of children with DD. Previous studies have

consistently indicated strong evidence that parents of children with DD exhibit higher levels of parenting stress than parents of typically developing children (Baker et al., 2003; Dabrowsak & Pisula, 2010), of which, were predicted primarily by child's delays in social-emotional/interaction skills and child problematic behaviors (Davis & Carter, 2008; Baker, Blacher, Crnic, & Edelbrock, 2002). Our null findings of relationships between parental meta-emotion and parenting stress and child emotion regulation may suggest that although parents reported high levels of parenting stress and low child emotion regulation abilities, those appeared to be a separate "observable" construct that do not seem to interfere with their underlying or "internal" attitude or underlying appraisal about their own emotions and feelings. In another word, it may be that when assessing parents' meta-emotion, parents of children with DD take consideration or factor in their children's emotion regulation abilities in relevant to their diagnoses. Although high levels of parental stress are often reported in parents of children of DD (Dabrowska & Pisula, 2010; Oelofsen & Richardson, 2006), parents' feelings and thoughts about their own feelings and cognitions remain unchanged and appeared to be independent from their reported level of parental stress and child emotion regulation abilities. Additionally, although the parent meta-emotion interview was used to measure family outcomes in many studies (Katz & Hunter 2007; Katz, Maliken & Stettler, 2012; Katz & Nelson, 2004), the current interview has not been adapted for this population, and thus, certain questions from the interview were less relevant to parents of children with DD. For example, some parents expressed that some aspects of coaching behavior are difficult to achieve given that their child is non-verbal, which minimizes their opportunities for teaching their children remediation strategies and/or behavior modification strategies. A

parent also described that due to her child's limited verbal skills, she had a harder time distinguishing her child's expressions at times, such as "a tantrum versus feelings of physical discomfort." The results of the current study further evident the need to better measure parental-meta emotion in this population, particularly as non-adaptive emotion regulation abilities are often precursors to the development of psychopathology. Further research is needed to examine the psychometric properties of the meta-emotion interview for this population, and interview may need to be adapted to better measure parental meta-emotion in this population.

Our findings must be considered with the context of several study limitations. First, the sample was small, limiting the detection of smaller effects if they were present. While previous literature on MBSR has indicated a large intervention effect in increasing general awareness, acceptance, and regulation, the proposed questions have not yet been examined in the previous literature. Post-hoc power analyses indicated that given our sample, there was 6.22% power to detect a small effect size (.02), 20.37% for medium effect size (.15), and 60.24% power to detect a large effect size (.35) indicated that given our sample and effect size, our power ranged from 14% to 29%. The observed power for the pared samples t-tests was 70% for parental stress, 25% for parental meta-emotion, and 11% for the child emotion regulation. Further, there was a 29.4% power ($f^2 = 0.12$) to detect changes in parental stress from changes in parental meta-emotion, and a 14.12% power ($f^2 = 0.05$) to detect changes in child emotion regulation from changes in parental meta-emotion. In addition, post-hoc power analyses indicated that given our sample and effect size (Cohen's $d = 0.04$-0.48), the actual power for the post-hoc exploratory analyses ranged from 14% to 29%. The researcher acknowledges concerns of elevated

type II error in choosing regression analyses given our small sample size. Second, although the meta-emotion interviews were consistently used to measure parental meta-emotion and the current study demonstrated excellent inter-rater reliability, however, the meta-emotion interviews were conducted by phone in an open-ended question format. Parents may under-report or over-report their thoughts and emotional expressions based on their communication preferences, comfort level with the assessor, and their understanding of the questions, which may lead to response variability, particularly given the subjectivity and personal nature of the questions. The total meta-emotion score may not accurately reflect the proposed construct of meta-emotion, and therefore, should be interpreted with caution.

The present study highlights the importance of examining various underlying parental factors (i.e. underlying thoughts, emotions, etc.) that have not been investigated previously, particularly in this population. Our findings suggest that although consistent studies have reported that higher parenting stress is associated with child emotion regulation and risk for parental depression, how parents perceive their underlying thoughts and emotions are not directly linked to parenting stress and child emotion regulation. As previous studies have indicated that parental meta-emotion is positively correlated with many aspects of parent-child relationships, such as positive parenting behaviors, positive parent child bonding, and better social adjustment in children (Katz & Hunter, 2007; Gottman et al., 1996; Katz & Gottman, 1997), it is reasonable to speculate that high levels of parental meta-emotion may act as a potential buffer to prevent the development of psychopathology in this population, given its lack of association with parenting stress and child emotion regulation. However, the differential effect should also

be considered, as people react differently to emotions and emotions are not weighted equally for every parent.

In summary, the current findings are some of the first to provide a more in-depth investigation of the concept of parental meta-emotion among this population. Considering the limitations of the current study, we were unable to establish the connection between parental meta-emotion and parenting stress or child emotion regulation. It is important to note that previous research has found an inverse relationship between parental meta-emotion and parenting stress, as well as a positive relationship between parental meta-emotion and child emotion regulation in typically developing children. Therefore, future studies are needed to clarify specific contributing factors that may explain this difference using a larger sample with a control group. Increased sample size may provide a more accurate representation of parental meta-emotion and its relationship with parenting stress and child emotion regulation abilities. Additionally, parental meta-emotion did not improve significantly after the MBSR intervention, while previous MBSR researches have found positive outcomes such as improved parental acceptance and awareness of emotions after the intervention (Mason & Hargreaves, 2001); thus, warrants further investigation. Furthermore, given that the concept of parental meta-emotion consists domains of underlying thoughts, feelings, and emotions toward their own cognition, feelings, and emotions, interventions that utilize cognitive behavioral approach that aim to teach parents more positive skills, rather than aimed to reduce parenting stress, may be more favorable when providing interventions aim to strengthen one's meta-emotion. Improvement in overall parental meta-emotion may also enhance parents' management of their own and their child's emotion regulation abilities,

and facilitate other positive parental and child outcomes. The experience of parents of children with DD can be very stressful, and parenting stress and child emotion dysregulation has been identified as risk factors for the developmental of psychopathology, which lends more justification for the need to provide intervention in this population. Future researches aim to identify underlying factors that may alleviate parenting stress and promote better child outcomes would contribute significantly to further understanding of distress and adjustment in this population.

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APPENDICES

APPENDIX A

SID#: _____
Interviewer: _____ Date: _____

M.A.P.S. Intervention Project
PHONE SCREENING FORM

I. Referral Information
How did you hear about us?
_____
_____
_____

II. Family Information
Child's Name: _____ Sex: M F
Date of Birth: _____ Age: ___yr.
Mother's Name: _____
Relation to child:
Biological Step Adoptive/Legal Guardian Foster
If non-biological: Length of time living with child: _____
Father's Name: _____
Relation to child:
Biological Step Adoptive/Legal Guardian Foster
If non-biological: Length of time living with child: _____
Marital Status:
Married Living Together Separated/Divorced Never Married

Address: _____
_____
Phone #: _____ Home
_____ Work
_____ Cell (Primary parent)
_____ Cell (Other:_____)
Email: Mother: _____
Father: _____
Preferred Method of Contact: _____

III. Diagnosis Information
Has the child been identified as having a developmental concern or developmental delay?
Yes No ****STOP. Explain that we're only recruiting children with developmental delays at the time****
If yes, specify:
Diagnosis ("What names have the doctors given you"):
_____

Details- symptomatology, specific behavioral/physiological problems, degree of developmental delay ("What are the main symptoms associated with your child's problem/delay"): _____
When were these symptoms first identified? _____-
Who first identified them? _____
What did the doctors tell you was causing the problems or delay, or do they know?

IV. Behavior Problems-

Now I am going to read you a number of phrases that describe children's behavior. Please indicate whether each of these behaviors is currently a concern you have with regard to [CHILD'S NAME].

1. Dawdles in getting dressed	**Yes**	**No**
2. Dawdles or lingers at mealtime	**Yes**	**No**
3. Has poor table manners	**Yes**	**No**
4. Refuses to eat food presented	**Yes**	**No**
5. Refuses to do chores when asked	**Yes**	**No**
6. Slow in getting ready for bed	**Yes**	**No**
7. Refuses to go to bed on time	**Yes**	**No**
8. Does not obey house rules on his/her own	**Yes**	**No**
9. Refuses to obey until threatened with punishment	**Yes**	**No**
10. Acts defiant when told to do something	**Yes**	**No**
11. Argues with parents about rules	**Yes**	**No**
12. Gets angry when doesn't get own way	**Yes**	**No**
13. Has temper tantrums	**Yes**	**No**
14. Sasses adults	**Yes**	**No**
15. Whines	**Yes**	**No**
16. Cries easily	**Yes**	**No**
17. Yells or screams	**Yes**	**No**
18. Hits parents	**Yes**	**No**
19. Destroys toys or other objects	**Yes**	**No**

20. Is careless with toys and other objects	**Yes**	**No**
21. Steals	**Yes**	**No**
22. Lies	**Yes**	**No**
23. Teases or provokes other children	**Yes**	**No**
24. Verbally fights with friends his/her own age	**Yes**	**No**
25. Verbally fights with brothers and sisters	**Yes**	**No**
26. Physically fights with friends	**Yes**	**No**
27. Physically fights with brothers and sisters	**Yes**	**No**
28. Constantly seeks attention	**Yes**	**No**
29. Interrupts	**Yes**	**No**
30. Is easily distracted	**Yes**	**No**
31. Has short attention span	**Yes**	**No**
32. Fails to finish tasks or projects	**Yes**	**No**
33. Has difficulty entertaining himself /herself alone	**Yes**	**No**
34. Has difficulty concentrating on one thing	**Yes**	**No**
35. Is overactive or restless	**Yes**	**No**
36. Wets the bed	**Yes**	**No**

TOTAL NUMBER OF "YES" ITEMS: _____

*****IF 10 OR MORE PROCEEDE. If less than 10 inform parent that "At this time we are only recruiting children with severe levels of behavior problems and currently your child does not appear to be experiencing the significant number of behavior problems that would qualify him/her for the study."**

V. Service Information-

Has your child or family received services/treatment for the diagnosis (concerns)? Yes No

If yes: Type of services received:_____

___

Where: _____

When: _____

Ongoing? Yes No

By whom: _____
Are you currently receiving any psychological or behavioral services for yourself such as counseling, parent training class, or participating in a regular parent support group?
Yes No
If yes:
Type of service received:
_____
Where: _____
When: _____
Ongoing? Yes No
By whom: _____
*****If parent is receiving ongoing services inform him/her that "Due to the nature of this intervention, if you are currently receiving psychological services I will review your specific case with the principal investigator and get back to you regarding your eligibility."**

VI. Exclusion Criteria Checklist

***Interviewer:** you should be able to complete this from the information above. Ask these questions ONLY if you are still unclear based on the parent's responses to the above.

A. Is child able to walk unassisted? Yes No

VII. Concerns, Comments, Questions

Can I please have the name of at least one person (family, friend, etc.) who will always know how to reach you?

Name:_____ Relationship:_____
Address:_____
Phone Number: (_)_____

Name:_____ Relationship:_____
Address:_____
Phone Number: (____)_____

Do you have any concerns or questions about the study at this time?
If yes, specify: _____
_____
_____
What do you hope to get out of the study?
_____
_____
_____
Is there anything important you think we should know about your child before we see you?
_____
_____

_____

"Thank you for your interest in our project. Would you like to schedule a time to come in for your initial assessment?"

If yes: "Great. We will mail you a packet of questionnaires to fill out as well as two questionnaires for _____ (name of spouse or other significant adult) to complete. Please bring these packets to your first assessment. The first meeting will take about 30 minutes and you will receive $10 for your visit at that time. Are you available…(schedule assessment)"

"Also, our groups are going to be held on Wednesday evenings. The Spring group will start on March 7th and the Summer group will begin on June 6th. Would you prefer if the group went from 6 to 8pm or from 6:30 to 8:30?

If no: when will be a good time for us to contact you to scheduled the first assessment? _____

If unsure they still want to participate, ask them specifically what the perceived barriers are._____

_____

_____

Regardless of outcome: Thank them for their time! If we need to get back to them, assure them we will be in contact as soon as possible.

VIII. Action Taken

Set up initial visit: Date- _____

Need to call back to schedule visit. Date/time when parent prefers to be called back:

_____

Hold for further discussion: Reason- _____

_____

_____

Clearly inappropriate for study: Reason- _____

_____

_____

Requested more information: Date sent- _____

Notes:

_____

_____

APPENDIX B

PARENT META-EMOTION INTERVIEW

Lynn Fainsilber Katz

John M. Gottman

v 3.0, Revised 5/29/2008

This interview contains changes from the original Katz & Gottman (1986) Meta-Emotion Interview, based on changes to the PMEI Coding Manual (Hunter, Hessler, Katz, Hooven, & Mittman, 2007). Additional questions are asked and other minor modifications were made to the phrasing of the questions

DO NOT DUPLICATE

PARENT META-EMOTION INTERVIEW

Introduction

Interviewer (I): In this part of your visit, we would like to ask you some questions about how you feel about different emotions.

What we are looking for is your natural responses to the questions. There is a broad range of answers for questions about emotions. Take surprise for example. Some people don't ever like being surprised. They hate surprise parties, and if you throw them a surprise party, they wouldn't like it at all. On the other hand, some people love to be surprised and love surprising others. They go out of their way to experience that emotion more often. In both cases, people experience the emotion of surprise in very different ways and neither is right or wrong. The same is true for the emotions that we will talk about today. People are just different.

We are going to talk about three emotions today: sadness, anger and fear. Each emotion is broken into two parts: how you feel today and how (child's name) feels. Even though the questions may begin to sound familiar to you, they are addressing different emotions you feel.

Again, there are no right or wrong answers. What I am going to be asking you about is your own feelings regarding your emotions. How you experience different feelings and how you feel about feelings in general, OK? Before we start do you have any questions?

Part One: The Interviewee's and Child's Sadness

I: Let's talk about feeling sad.

- ☐ What is it like for you to be sad?
- ☐ What do you look like? If I saw you could I tell if you were sad? What would I see?
- ☐ What are you feeling inside?
  - ◊ Do you have any physical sensations when you're sad?
- ☐ What do you think about when you're sad?
  - ◊ Are there any thoughts or images that go through your mind?
- ☐ Is there anything you do to try to get through (resolve) feeling sad?
  - ◊ Does this work for you?
  - ◊ (Ask appropriate follow-up questions as necessary for remediation strategies: e.g., "Do you talk with your friend to help you work through your sadness or to forget about your sadness?")
- ☐ When you are sad, do you prefer to be around others or do you prefer to be alone?
- ☐ Can you give me a recent and vivid example of one time that you were sad? What happened, who was there, what was said and how did you resolve it (try to get a play-by-play account of what happened)?
- ☐ What do you think about sadness in general?

- ☐ How do you feel about the way other people experience and express their sadness?

I: Let's talk about your child's sadness.

- ☐ What about _____ (the child)? Can you tell when (s)he's sad?
- ☐ What does (s)he do when sad or a little blue?
- ☐ Is there anything (s)he does to try to get over feeling sad?
- ☐ What do you do to help your child get over this emotion?
  - ◊ What skills do you teach ____(child) to help him/her deal with his/her sadness on his/her own?
- ☐ What are your reactions, thoughts and feelings when _____ (the child) is sad?
- ☐ In terms of your reactions, thoughts and feelings, does this relate to anything in your past? Tell me a story of that.
- ☐ Can you give me a recent and vivid example of one time that ____ (child) was sad? What happened, who was there, what was said and how did he/she get over it. (try to get a play-by-play account of what happened)?
- ☐ What do you want to teach ___(child) about sadness?

Part Two: The Interviewee's and Child's Anger

I: Let's talk about feeling angry.

- ☐ What is it like for you to be angry?
- ☐ What do you look like? If I saw you could I tell if you were angry? What would I see?
- ☐ What are you feeling inside?
  - ◊ Do you have any physical sensations when you're angry?
- ☐ What do you think about when you're angry?
  - ◊ Are there any thoughts or images that go through your mind?
- ☐ Is there anything you do to try to get through (resolve) feeling angry?
  - ◊ Does this work for you?
  - ◊ (Ask appropriate follow-up questions as necessary for remediation strategies: e.g., "Do you go for a walk to help you work through your anger or to forget about your anger?")
- ☐ When you are angry, do you prefer to be around others or do you prefer to be alone?
- ☐ Can you give me a recent or vivid example of one time that you were angry? What happened, who was there and what was said (try to get a play-by-play account of what happened)?
- ☐ What do you think about anger in general?
- ☐ How do you feel about the way other people experience and express their anger?

I: Let's talk about your child's anger.

- ☐ What about _____ (the child)? Can you tell when (s)he's angry?
- ☐ What does (s)he do when angry?

- ☐ Is there anything (s)he does to try to get over feeling angry?
- ☐ What do you do to help your child get over this emotion?
  - ◊ What skills do you teach ____(child) to help him/her deal with his/her anger on his/her own?
- ☐ What are your reactions, thoughts and feelings when _____ (the child) is angry?
- ☐ In terms of your reactions, thoughts and feelings, does this relate to anything from your childhood? Tell me a story of that.
- ☐ Can you give me a recent and vivid example of one time that ____ (child) was angry? What happened, who was there, what was said and how did he/she get over it. (try to get a play-by-play account of what happened)?
- ☐ What do you want to teach ___(child) about anger?

Part Three: The Interviewee's and Child's Fear

I: Let's talk about feeling fear.

- ☐ What is it like for you to be afraid now?
- ☐ What do you look like? If I saw you could I tell if you were feeling fear? What would I see?
- ☐ What are you feeling inside?
  - ◊ Do you have any physical sensations when you're afraid?
- ☐ What do you think about when you're afraid?
  - ◊ Are there any thoughts or images that go through your mind?
- ☐ Is there anything you do to try to get through (resolve) feeling afraid?
  - ◊ Does this work for you?
  - ◊ (Ask appropriate follow-up questions as necessary for remediation strategies: e.g., "Do you take deep breaths to help you work through your fear or to forget about your fear?")
- ☐ When you are feeling afraid, do you prefer to be around others or do you prefer to be alone?
- ☐ Can you give me a recent and vivid example of one time that you were afraid? What happened, who was there, what was said and how did you resolve it (try to get a play-by-play account of what happened)?
- ☐ What do you think about fear in general?
- ☐ How do you feel about the way other people experience and express their fear?

I: Let's talk about your child's fear.

- ☐ What about _____ (the child)? Can you tell when (s)he's afraid?
- ☐ What does (s)he do when afraid?
- ☐ Is there anything (s)he does to try to get over feeling fear?
- ☐ What do you do to help your child get over this emotion?
  - ◊ What skills do you teach ____(child) to help him/her deal with his/her fear on his/her own?
- ☐ What are your reactions, thoughts and feelings when _____ (the child) is afraid?

- ☐ In terms of your reactions, thoughts and feelings, does this relate to anything in your past? Tell me a story of that.
- ☐ Can you give me a recent and vivid example of one time that ____ (child) was afraid? What happened, who was there, what was said and how did he/she get over it. (try to get a play-by-play account of what happened)?
- ☐ What do you want to teach ___(child) about fear?

APPENDIX C

PARENTAL META-EMOTION CODING SHEETS

ECI B1 **Coder: _____**

ID # _____ **Parent Sadness/Anger/Fear** **Date: _____**

Awareness

SA	A	N	D	SD		
5	4	3	2	1	**A1.**	P experiences this emotion
5	4		2	1	**A2.**	P has no problem distinguishing this emotion from others
5	4	3	2	1	**A3.**	P is descriptive of their experience of this emotion
5	4	3	2	1	**A4.**	P is descriptive of physical sensations
5	4	3	2	1	**A5.**	P is descriptive of cognitive process
5	4	3	2	1	**A6.**	P provides descriptive anecdote
5	4	3	2	1	**A7.**	P answers questions easily, without hesitation or confusion
5	4	3	2	1	**A8.**	P talks at length about this emotion
5	4	3	2	1	**A9.**	P voice shows interest, excitement re emotion

TOTAL =

Expressivity

SA	A	N	D	SD		
5	4	3	2	1	**B1.**	P expresses this emotion (alone or with others)
1	2	3	4	5	**B2.**	P distinguishes times when they would and would not express
5	4	3	2	1	**B3.**	Others can tell when P is experiencing this emotion
5	4	3	2	1	**B4.**	P feels comfortable with their expression of this emotion
1	2	3	4	5	**B5.**	The importance of controlling emotion is emphasized
5	4	3	2	1	**B6.**	P shares emotion with others
1	2	3	4	5	**B7.**	P prefers waiting until emotion is over and then talk
5	4	3	2	1	**B8.**	P says it is important to express this emotion

TOTAL =

Acceptance

SA	A	N	D	SD		
5	4	3	2	1	**C1.**	P accepts this emotion -it has value, it's part of life
1	2	3	4	5	**C2.**	P dislikes the way others express this emotion
5	4	3	2	1	**C3.**	P confides in interviewer
5	4	3	2	1	**C4.**	P is open to feeling this emotion vs. tries to avoid emotion

TOTAL =

Remediation

SA	A	N	D	SD		
5	4	3	2	1	**D1.**	P is aware of their own remediation process
	4	3	2	1	**D2.**	Remediation techniques suggest acceptance vs. avoidance
5	4	3	2	1	**D3.**	P says that it is important to talk about emotion
5	4	3	2	1	**D4.**	P has remediation techniques that work for this emotion

TOTAL =

Regulation

SA	A	N	D	SD		
1	2	3	4	5	**E1.**	There is difficulty regulating intensity
1	2	3	4	5	**E2.**	This emotion occurs often
1	2	3	4	5	**E3.**	This emotion is difficult to get over
1	2	3	4	5	**E4.**	This emotion has been a problem/concern
1	2	3	4	5	**E5.**	P thinks this emotion can be dangerous
1	2	3	4		**E6.**	P has needed help with this emotion

TOTAL =

ID # _____ **Child Sadness/Anger/Fear**

Awareness

SA	A	N	D	SD		
5	4	3	2	1	**F1.**	P notices that child has this emotion
5	4		2	1	**F2.**	P has no problem distinguishing this emotion
5	4	3	2	1	**F3.**	P is descriptive of child's experience of emotion
5	4	3	2	1	**F4.**	P has insight into child's experience of this emotion
5	4	3	2	1	**F5.**	P is descriptive of some part of the remediation process
5	4	3	2	1	**F6.**	P knows cause of C's emotion
5	4	3	2	1	**F7.**	P talks at length about C's experience
5	4	3	2	1	**F8.**	P answers questions quickly and easily about C's experience

TOTAL =

Acceptance

SA	A	N	D	SD		
5	4	3	2	1	**G1.**	P seems comfortable with C's emotion and expression
5	4	3	2	1	**G2.**	P empathizes with C's emotion (look at voice tone)
5	4	3	2	1	**G3.**	P wants C to know it's OK to have this feeling
5	4	3	2	1	**G4.**	P values talking to the child about emotion
1	2	3	4	5	**G5.**	P seems concerned about appropriateness, usually of expression
1	2	3	4	5	**G6.**	P prefers child to be soothed before P gets involved

TOTAL =

Coaching

SA	A	N	D	SD		
5	4	3	2	1	**H1.**	P shows respect for child's experience of emotion
5	4	3	2	1	**H2.**	P teaches strategies to soothe own emotion
5	4	3	2	1	**H3.**	P seems involved in child's experience of this emotion
5	4	3	2	1	**H4.**	P seems confident in dealing with this emotion
5	4	3	2	1	**H5.**	P has given thought and energy to what child knows of emotions
5	4	3	2	1	**H6.**	P's voice shows interest (excitement) re C's experience

TOTAL =

Behavioral Strategies

SA	A	N	D	SD		
1	2	3	4	5	**I1.**	P practices when C is expressing
1	2	3	4	5	**I2.**	P uses a mental (analytical) approach to C's emotion
5	4	3	2	1	**I3.**	When child is upset, P talks about situation, emotion
5	4	3	2	1	**I4.**	P provides verbal comfort during emotion
5	4	3	2	1	**I5.**	P provides physical comfort during emotion
5	4	3	2	1	**I6.**	Strategies used seem age and situationally appropriate

TOTAL =

Regulation

SA	A	N	D	SD		
5	4	3	2	1	**J1.**	C expresses this emotion
1	2	3	4	5	**J2.**	C has difficulty regulating this emotion
1	2	3	4	5	**J3.**	This emotion occurs frequently in C
1	2	3	4	5	**J4.**	This emotion is difficult for C to get over
1	2	3	4	5	**J5.**	P is concerned about C's experience or expression
5	4	3	2	1	**J6.**	P knows of remediation techniques that work with C
5	4	3	2	1	**J7.**	C has regulation strategies

TOTAL =

APPENDIX D

PARENTAL META EMOTION CODING SYSTEM SUBSCALES

Subscale (Parent)	Description
Parental Awareness	This dimension taps into parents' awareness of their own emotion process. We are interested in their ability to distinguish the experience of one emotion from that of another. We want to know how consciously experienced their emotions are for them. How clear and concrete is their emotional experience; can they provide details of the process, from the induction of an emotion through its remediation? Are we able to tell what it's like for them to be sad or angry? Are they aware of physical and mental responses to emotion? Do they provide examples or situational details of a time they felt that emotion? Are they used to labeling their emotions and thinking about them? Do they find emotions interesting, exciting even?
Parent Expressivity	This scale is an expression continuum. We are looking for evidence that a parent expresses (as distinguished from just experiencing) this emotion. Parent's report times that they would express or not express an emotion, and whether others can tell if they are experiencing this emotion. Parent is comfortable and accepting of his/her emotion. Some activity may not be a stereotypical expression of a particular emotion, but if a parent says that for them it's related to the emotion, we can consider that outward manifestation an expression of that emotion. If a person expresses alone, we can say they express as long as the activity would be observable if someone were looking.
Parent Acceptance	Accepting an emotion can vary from enjoying and seeking the experience of an emotion, to resignedly confessing that the emotion has value although not pleasant to experience. Parents' view of other's expression of this emotion.
Parent Remediation	Parents' awareness of his/her own soothing process. Their remediation strategies (either positive or avoidant)
Parent Regulation	This interview is an opportunity for Parents to mention any reservation or concern they have with an emotion, and we will allow ourselves to code them as not having problems if they do not use this opportunity to mention problems.

Subscale (Child)	Description
Child Awareness	This dimension taps into a parent's awareness of their child's emotion. It taps into how good an observer and emotion decoder a parent is of their child, and how interested a parent is in their child's emotional life. Is the parent aware of which emotion the child is feeling, how the child expresses it, why the child is feeling this emotion and how the child is soothed.
Child Acceptance	A parent's philosophy of emotion acceptance may or may not be articulated and, in fact, may not even be conscious. Sometimes people don't realize they have a philosophy of acceptance until we start asking them questions. A parent's acceptance of a child's emotion can be measured by the direct and indirect ways a parent responds to their child's expression of that emotion. What a parent does when their child is expressing anger or sadness; how they tell us about their child's expression of emotion; what they say to their child; all give us information about how accepting they are about emotion.
Child Coaching	This parent provides strategies and is involvement in the emotion experience of the child. The parent does not minimize the importance of the child's emotion and feels confident in their child's ability to deal with an emotion.
Child Behavioral Strategies	Parent behavioral practices and approach (provide verbal/physical comfort, mental strategies, restraining) while the child is expressing an emotion.
Child Dysregulation	Parent says whether their child is expressive, communicative of this emotion, "child is easy to read". Parent mentions any difficulty Child has had in regard to intensity. Parent mentions the frequency and if he or she is concerned about child's expression of an emotion.

APPENDIX E

PARENTING STRESS INDEX

PSI Short Form Test Booklet
for use with PSI Software Portfolio

Respondent's Name _____ ID Code_____

Relationship of Respondent to Child: ☐ Mother (or female caretaker) ☐ Father (or male caretaker)

Ethnic Group _____ Age _____

Child's Name _____ Age _____

Examiner's Name _____ Test Date_____

Referral Source_____

Instructions

Complete the information requested above before you begin the questionnaire.

This questionnaire contains 36 statements. Read each statement carefully. For each statement, please focus on the child you are most concerned about, and circle the response that best represents your opinion.

Circle the SA if you strongly agree with the statement.

Circle the A if you agree with the statement.

Circle the NS if you are not sure.

Circle the D if you disagree with the statement.

Circle the SD if you strongly disagree with the statement.

For example, if you sometimes enjoy going to the movies, you would circle A in response to the following statement:

I enjoy going to the movies. SA (A) NS D SD

While you may not find a response that exactly states your feelings, please circle the response that comes closest to describing how you feel. YOUR FIRST REACTION TO EACH QUESTION SHOULD BE YOUR ANSWER.

Circle only one response for each statement, and respond to all statements. **DO NOT ERASE!** If you need to change an answer, make an "X" through the incorrect answer and circle the correct response. For example:

I enjoy going to the movies. SA A NS (X) (SD)

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SA = Strongly Agree	A = Agree	NS = Not Sure	D = Disagree	SD = Strongly Disagree

		1	2	3	4	5
1.	I often have the feeling that I cannot handle things very well.	SA	A	NS	D	SD
2.	I find myself giving up more of my life to meet my children's needs than I ever expected.	SA	A	NS	D	SD
3.	I feel trapped by my responsibilities as a parent.	SA	A	NS	D	SD
4.	Since having this child, I have been unable to do new and different things.	SA	A	NS	D	SD
5.	Since having a child, I feel that I am almost never able to do things that I like to do.	SA	A	NS	D	SD
6.	I am unhappy with the last purchase of clothing I made for myself.	SA	A	NS	D	SD
7.	There are quite a few things that bother me about my life.	SA	A	NS	D	SD
8.	Having a child has caused more problems than I expected in my relationship with my spouse (or male/female friend).	SA	A	NS	D	SD
9.	I feel alone and without friends.	SA	A	NS	D	SD
10.	When I go to a party, I usually expect not to enjoy myself.	SA	A	NS	D	SD
11.	I am not as interested in people as I used to be.	SA	A	NS	D	SD
12.	I don't enjoy things as I used to.	SA	A	NS	D	SD
13.	My child rarely does things for me that make me feel good.	SA	A	NS	D	SD
14.	Sometimes I feel my child doesn't like me and doesn't want to be close to me.	SA	A	NS	D	SD
15.	My child smiles at me much less than I expected.	SA	A	NS	D	SD
16.	When I do things for my child, I get the feeling that my efforts are not appreciated very much.	SA	A	NS	D	SD
17.	When playing, my child doesn't often giggle or laugh.	SA	A	NS	D	SD
18.	My child doesn't seem to learn as quickly as most children.	SA	A	NS	D	SD
19.	My child doesn't seem to smile as much as most children.	SA	A	NS	D	SD
20.	My child is not able to do as much as I expected.	SA	A	NS	D	SD
21.	It takes a long time and it is very hard for my child to get used to new things.	SA	A	NS	D	SD

For the next statement, choose your response from the choices "1" to "5" below.

			1	2	3	4	5
22.	I feel that I am:	1. not very good at being a parent 2. a person who has some trouble being a parent 3. an average parent 4. a better than average parent 5. a very good parent					

23.	I expected to have closer and warmer feelings for my child than I do and this bothers me.	SA	A	NS	D	SD
24.	Sometimes my child does things that bother me just to be mean.	SA	A	NS	D	SD
25.	My child seems to cry or fuss more often than most children.	SA	A	NS	D	SD
26.	My child generally wakes up in a bad mood.	SA	A	NS	D	SD
27.	I feel that my child is very moody and easily upset.	SA	A	NS	D	SD
28.	My child does a few things which bother me a great deal.	SA	A	NS	D	SD
29.	My child reacts very strongly when something happens that my child doesn't like.	SA	A	NS	D	SD
30.	My child gets upset easily over the smallest thing.	SA	A	NS	D	SD
31.	My child's sleeping or eating schedule was much harder to establish than I expected.	SA	A	NS	D	SD

For the next statement, choose your response from the choices "1" to "5" below.

			1	2	3	4	5
32.	I have found that getting my child to do something or stop doing something is:	1. much harder than I expected 2. somewhat harder than I expected 3. about as hard as I expected 4. somewhat easier than I expected 5. much easier than I expected					

For the next statement, choose your response from the choices "10+" to "1-3."

33.	Think carefully and count the number of things which your child does that bother you. For example: dawdles, refuses to listen, overactive, cries, interrupts, fights, whines, etc.	10+	8-9	6-7	4-5	1-3
34.	There are some things my child does that really bother me a lot.	SA	A	NS	D	SD
35.	My child turned out to be more of a problem than I had expected.	SA	A	NS	D	SD
36.	My child makes more demands on me than most children.	SA	A	NS	D	SD

APPENDIX F

EMOTION REGULATION CHECKLIST (ERC)

Emotion Regulation Checklist

Please indicate how often the following statements describe your child's behavior.

My child…:	Never	Sometimes	Often	Almost Always
1. Is a cheerful child.	1	2	3	4
2. Exhibits wide mood swings (child's emotional state is difficult to anticipate because s/he moves quickly from positive to negative moods).	1	2	3	4
3. Responds positively to neutral or friendly overtures by adults.	1	2	3	4
4. Transitions well from one activity to another; does not become anxious, angry, distressed or overly excited when moving from one activity to another.	1	2	3	4
5. Can recover quickly from episodes of upset or distress (for example, does not pout or remain sullen, anxious, or sad after emotionally distressing events.)	1	2	3	4
6. Is easily frustrated.	1	2	3	4
7. Responds positively to neutral or friendly overtures by peers.	1	2	3	4
8. Is prone to angry outbursts / tantrums easily.	1	2	3	4
9. Is ably to delay gratification.	1	2	3	4
10. Takes pleasure in the distress of others (e.g. laughs when another person gets hurt or punished; enjoys teasing others).	1	2	3	4
11. Can modulate excitement in emotionally arousing situations (e.g. does not get 'carried away' in high-energy play situations, or overly excited in inappropriate contexts).	1	2	3	4

My child…:	Never	Sometimes	Often	Almost Always
12. Is whiny or clingy with adults.	1	2	3	4
13. Is prone to disruptive outbursts of energy and exuberance.	1	2	3	4
14. Responds angrily to limit-setting by adults.	1	2	3	4
15. Can say when s/he is feeling sad, angry or mad, fearful or afraid.	1	2	3	4
16. Seems sad or listless.	1	2	3	4
17. Is overly exuberant when attempting to engage others in play.	1	2	3	4
18. Displays flat affect (expression is vacant and inexpressive: child seems emotionally distant).	1	2	3	4
19. Responds negatively to neutral or friendly overtures by peers (e.g. may speak in an angry tone of voice or respond fearfully).	1	2	3	4
20. Is impulsive.	1	2	3	4
21. Is empathic towards others; shows concern when others are upset or distressed.	1	2	3	4
22. Displays exuberance that others find intrusive or disrupting.	1	2	3	4
23. Displays appropriate negative emotions (anger, fear, frustration, distress) in response to hostile, aggressive, or intrusive acts by peers.	1	2	3	4
24. Display negative emotions when attempting to engage others in play.	1	2	3	4