

2022

Parental emotion regulation and the socialization of emotion: The role of effortful control

Lindsay Jones Farmer
Long Island University

Follow this and additional works at: https://digitalcommons.liu.edu/brooklyn_fulltext_dis



Part of the [Child Psychology Commons](#)

Recommended Citation

Farmer, Lindsay Jones, "Parental emotion regulation and the socialization of emotion: The role of effortful control" (2022). *Selected Full-Text Dissertations 2020-*. 5.
https://digitalcommons.liu.edu/brooklyn_fulltext_dis/5

This Dissertation is brought to you for free and open access by the LIU Brooklyn at Digital Commons @ LIU. It has been accepted for inclusion in Selected Full-Text Dissertations 2020- by an authorized administrator of Digital Commons @ LIU. For more information, please contact natalia.tomlin@liu.edu.

PARENTAL EMOTION REGULATION AND THE SOCIALIZATION OF EMOTION:
THE ROLE OF EFFORTFUL CONTROL

BY

Lindsay J. Farmer, M.A.

A DOCTORAL DISSERTATION SUBMITTED TO THE GRADUATE FACULTY
OF THE SCHOOL OF HEALTH PROFESSIONS OF LONG ISLAND UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

April 2022

DEPARTMENT OF PSYCHOLOGY
Certified by:

Philip Wong, Ph.D.
DEPARTMENT CHAIRPERSON

April 28, 2022
Date

SPONSORING COMMITTEE:

Sara Chiara Haden, Ph.D.

Kevin B. Meehan, Ph.D.

Nicholas Papouchis, Ph.D.

Abstract

Research and theory have indicated the importance of parental emotion socialization behaviors on children's developing emotional competence. Less attention has been given to factors that influence parent emotion socialization behaviors. The current study sought to build upon emerging research on the impact of parents' self-regulatory capacities on their emotion socializing behaviors, in particular their responses to child negative emotionality. It explored the relationships between emotion regulation, effortful control, and responses to child negative affect in a sample of parents of 3- to 8-year-old children ($N = 528$). As expected, parent emotion dysregulation was significantly negatively related to parent effortful control. In separate multivariate regression models for supportive and nonsupportive responses to child distress, effortful control mediated the relations between emotion dysregulation and emotion socialization. In bivariate analyses, higher levels of parent emotion dysregulation predicted nonsupportive reactions to child negative affect. Contrary to predictions, parent emotional flooding did not significantly moderate the relationship between emotion dysregulation and responses to child distress. Exploratory analyses revealed significant positive correlations between emotion coaching and emotion dismissing beliefs and parent emotion socializing behaviors. Overall, the present study adds to the extant literature supporting the role of effortful control in facilitating emotion regulation and suggests that it may be crucial in supporting emotion socialization. The findings have important treatment implications, particularly for the leading edge of child interventions that designate parent emotion regulation as a primary target.

Acknowledgements

I would like to thank my committee: Sara Haden, Kevin Meehan, and Nick Papouchis. Your support for me has extended well beyond this project. Sara, I am indebted to you for tirelessly guiding this dissertation. Finding ourselves “home schooling” during a pandemic, we laughed at the “rawness” of parental emotion regulation as a topic of exploration. Your sense of humor and understanding helped me keep my eye on the prize through more years than I’d like to admit. Kevin, I feel privileged to have had the opportunity to learn from you as a clinician and a researcher. Thank you for being on my committee; your insights were instrumental. Nick, thank you having confidence in me—as a student and a person—from the moment I joined the program, and for your invaluable perspective that helped shape this dissertation.

Seymour, I am beyond grateful to have had you as a supervisor and mentor during my time at LIU. Your wisdom, humor, generosity, encouragement, and intellect profoundly influenced me as a clinician and transformed my graduate school experience. I treasure the four years I spent learning from you and the time we stole to discuss literature and life. I would like to thank the entire LIU faculty for inspiring me throughout my training, especially Joan Duncan, Lisa Samstag, Linda Penn, and the ever patient and supportive Philip Wong. I also would like to thank my beloved cohort. I couldn’t be prouder to have learned alongside you.

To my parents and my brother, thank you for your encouragement, love, and logistical support. You have always supported my aspirations, even when they have changed. I am especially grateful to you, Mom, and not just for the eleventh-hour copy edits! The process of becoming a psychologist has deepened my respect for you as a

clinician and a mother. Your example has inspired me. It is thrilling to be able to explore this field with you.

To Alex, thank for your endless encouragement and support over so many years. In the past year especially, you have dedicated time that you didn't have to caring for our family so that I could complete this project and my internship. I could not have done this without you. Finally, to Phoebe, Luke, and Gus, thank you for being patient while Mommy finishes school—and for filling every day with joy.

Table of Contents

Abstract.....	ii
Acknowledgements	iii
List of Tables and Figures	ix
1. Introduction	1
II. Literature Review	5
Emotional Competence	5
Emotion Socialization	8
Parent Responses to Child Negative Emotion.....	10
Emotion Regulation.....	17
Emotion Regulation and Sensitive Parenting	19
The Role of Effortful Control in Emotion Regulation	24
Emotional Flooding and Negative Parenting	29
Mentalization and Emotion Regulation.....	34
III. Statement of the Problem	37
Variable List	41
Independent variable	41
Dependent variables	41
Proposed mediating variable	42
Proposed moderating variable	42
Exploratory variables.....	42
Potential covariates.....	42
Primary Hypotheses.....	43

Model A: Parent supportive responses to child negative emotions	43
Model B: Parent nonsupportive responses to child negative emotions	46
Exploratory Research Questions	46
IV. Methods	47
Participants	47
Measures	50
Demographic questionnaire	50
Financial stress	50
Difficulties in Emotion Regulation Scale (DERS)	50
Effortful Control subscale (ECS) of the Adult Temperament Questionnaire (ATQ)	52
Coping with Children’s Negative Emotions Scale (CCNES)	52
The Maternal Emotional Style Questionnaire (MESQ)	53
Parent Flooding scale (PFS)	54
Children’s Behavior Questionnaire Very Short Form (CBQ-VSF) ..	54
The Social Desirability scale (SDS-SF Form C)	55
The Mind-Mindedness (MM) scoring manual	55
Procedure	57
Permissions	57
Data Collection	57
Data Management	58

	Study Design and Data Analysis Plan	58
	Compliance with Ethical Guidelines	58
V.	Results	60
	Preliminary Analyses.....	60
	Inter-variable correlations	60
	Demographic effects.....	63
	Primary Analyses.....	69
	Model A: Supportive responses to child distress	69
	Model B: Nonsupportive responses to child distress	72
	Supplemental Analysis	75
	Exploratory Hypotheses	76
	Exploratory Hypothesis 1	76
	Exploratory Hypothesis 2	76
	Summary of Results	77
VI.	Discussion	79
	Study Aims	79
	Effortful Control as a Mediator in the Relationship between Emotion Dysregulation and Emotion Socialization Behaviors	80
	Emotion Dysregulation and Effortful Control.....	83
	Emotion Dysregulation and Responses to Child Distress.	84
	Parental Emotional Flooding.	86
	Emotion Coaching/Emotion Dismissing and Supportive/Nonsupportive Responses to Child Distress.	88

Parental Mentalization.....	90
Clinical Implications	91
Limitations.....	93
Directions for Future Research.....	95
Summary and Conclusions	97
References	99

List of Tables and Figures

Tables

1. <i>Participant Demographics (N = 528)</i>	49
2. <i>Descriptive Statistics of Main Study Variables</i>	61
3. <i>Pearson’s Correlations Among Main Study Variables</i>	62
4. <i>Independent Samples t-Tests: Differences in Dependent Variables Based on Sex</i>	64
5. <i>Correlations between Demographics and Study Variables</i>	65
6. <i>Ethnicity and Supportive Responses to Child Distress Statistics</i>	67
7. <i>Ethnicity and Nonsupportive Responses to Child Distress Statistics</i>	68
8. <i>Results Summary</i>	78

Figures

1. <i>Proposed model A: Supportive responses to child distress</i>	44
2. <i>Proposed model B: Nonsupportive responses to child distress</i>	45
3. <i>Model A: Supportive responses to child distress</i>	71
4. <i>Model B: Nonsupportive responses to child distress</i>	74

Chapter I

Introduction

Responding sensitively and constructively to a child's negative emotions is one of the core parenting behaviors linked to adaptive social emotional development in children. It is a key method of "emotion socialization," the process by which parents model effective coping strategies for their children (Eisenberg, Cumberland, & Spinrad, 1998). However, emotion socialization practices are often used as a starting point for studying child outcomes while potential explanations for these parenting behaviors have been relatively neglected (Buckholdt, Parra, & Jobe-Shields, 2014). Understanding the factors that help explain why many parents struggle to respond supportively to children's negative emotionality has important implications for parenting interventions.

Existing research on predictors of parent responses to child distress has tended to focus on parent *attitudes* about emotions (e.g., Wong, McElwain, & Halberstadt, 2009). Yet it may be one thing to have healthy values about children's emotions and quite another to integrate these beliefs into behaviors. Emotion regulation has long been seen as key to facilitating sensitive and responsive caregiving behaviors—regardless of the affective state of the child (Thompson, 1994). Emerging evidence supports the theory that parental self-regulatory capacities are a vital part of broad range of healthy parenting practices (Crandall, Deater-Deckard, & Riley, 2015). Parents who are not able to regulate their emotions tend to be more reactive to stressors (Skowron & Friedlander, 1998) and more likely to invalidate their children's emotions (Buckholdt et al., 2014). However, the study of parental self-regulatory capacities is relatively new. Further, there remains a need to identify factors that influence the relationship between parents' emotion

regulation capacities and their emotion socializing behaviors. Only very recently have researchers suggested that parents' emotion regulatory capacities be investigated as contributing to their emotion socializing behaviors (Hajal & Paley, 2020).

Regulatory functioning covers a broad array of processes and includes both strategies related to executive functions and those related to the identification of feeling states. However, existing research on the impact of regulatory capacities on parenting behaviors rarely includes both cognitive and affective aspects of self-regulation (Shaffer & Obradović, 2017). While theoretical distinctions have been made between “hot” (i.e., emotional) and “cold” (i.e., cognitive) regulatory strategies (Mischel, Ayduk, & Mendoza-Denton, 2003), researchers often fail to clarify whether they are studying primarily cognitive or affective components of self-regulation (Morris, Silk, Steinberg, Myers, & Robinson, 2007). Thus, additional research is needed to further characterize the relationship between cognitive and emotion control capacities and their influence on parental responses to child distress. This study will address these gaps in the research by investigating effortful control, a measure of temperament that includes attention and inhibitory control, as a mediator in the relationship between parents' emotion regulation capacities and their responses to child distress.

Moreover, while it makes intuitive sense that parents with greater emotional and cognitive control capacities will respond more sensitively to their child's distress, research shows that this relationship does not always hold (e.g., Hughes & Gullone, 2010). Rutherford and colleagues have argued that, because of the unique demands of caring for a child, parenthood may modulate emotion regulation (Rutherford, Wallace, Laurent, & Mayes, 2015). Indeed, many parents find the experience of parenthood

profoundly dysregulating. Mothers display heightened sensitivity to infant affect compared to non-mothers (Nishitani, Doi, Koyama, & Shinohara, 2011) supporting the notion that otherwise well-regulated parents might become particularly dysregulated in the face of their child's distress.

In family systems research, the concept of "emotional flooding" has come to refer to the subjective experience of a family member's negative affect being perceived as unexpected, overwhelming, and disorganizing (Gottman, 1993). Existing research suggests that emotional flooding predicts negative parenting outcomes, specifically high levels of harsh and coercive discipline. Further, this association seems to be independent of effects of parent anger levels and hostile attributions for child behavior (Slep & O'Leary, 2007). To date, the construct of flooding in parents has been studied exclusively in the context of their discipline practices. However, it stands to reason that it could play a role in a wider range of parenting behaviors, including emotion socialization practices—and help account for the dysregulating effects of one's child's distress. No known study has examined the ways in which parental emotional flooding by child negative affect impacts the link between parents' emotion regulation capacities and their responses to child distress.

Finally, researchers have called for more qualitative methods of assessing parent emotion socialization practices (Shaffer & Obradović, 2017). Parents' capacity to understand and appreciate their children's internal lives is known to play a vital role in children's socio-emotional development (Sharp & Fonagy, 2008). This ability has been operationalized as mind-mindedness (Meins et al., 2003), meta-emotion philosophy (Gottman, Katz, & Hooven, 1996), reflective function (Fonagy & Target, 1997), and

mentalization (Sharp & Fonagy, 2008), among other things. While these constructs have been well studied, there is less known about how sensitive parenting practices such as mentalizing are impacted by self-regulatory capacities (Crandall et al., 2015). This study used a mentalizing measure based on parents' description of their children in distress to explore how mentalizing is influenced by parents' emotion regulation skills in the context of emotion socialization.

Consistent with the literature, this study used self-report measures to assess the relatively understudied associations between parents' emotion regulation and their responses to child negative emotion. In addition, effortful control was examined as a mediator in the presumed relationship between emotion regulation capacities and emotion socializing behaviors. Further, this study explored whether emotional flooding moderated the relationship between parents' regulatory capacities and their reactions to child negative emotions. Relationships between emotion socializing beliefs and behaviors were also explored. Finally, a qualitative assessment of parents' mentalizing was used to shed further light on the cognitive tools that parents employ to nurture their children's developing emotional competence.

Chapter II

Literature Review

This review begins with an overview of the centrality of emotional competence to healthy development. It then surveys the theory and research on emotion socialization as a means of developing emotional competence, particularly as it applies to parenting. Next, it reviews the specific emotion socialization practice of responding to children's negative affect. Then the emerging research on emotion regulation and the role it plays in sensitive parenting is presented. A review of the role of effortful control in emotion regulation follows. The potential role of mentalization in emotion socialization is also discussed. Finally, this section reviews the research on parent emotional flooding in response to child distress.

The review integrates two bodies of theoretical and empirical work: emotion socialization and emotion regulation. In doing so, it makes a case for the importance of focusing on parents' self-regulatory capacities as an antecedent of their emotion socialization behaviors. It builds on the view that children do not simply absorb parents' emotion self-regulatory style as their own, but instead, their regulation capacities develop out of complex parental responses to their expressed emotions. It also argues for a view of emotion regulation that incorporates both cognitive and emotional systems. Further, it posits that child distress may have uniquely destabilizing effects on parents' emotional experience and regulatory response via emotional flooding.

Emotional Competence

Over the past few decades, recognition of the critical role that emotions play in developmental outcomes has contributed to an explosion of empirical research in the

emotion domain (Bariola, Gullone, & Hughes, 2011). Constructs such as emotion understanding, emotional competence, fear of emotions, and emotional intelligence have emerged from a variety of disciplines, including personality research, child development, and clinical psychology. Emotional competence is usually conceptualized as the ability to identify, understand, and manage one's own emotions—as well as those of others. In their seminal article, Salovey and Mayer (1990) defined emotional intelligence as the capacity to monitor self and others, discriminate between varied emotions, and utilize emotional information to guide behavior and cognitions. The concept of emotional intelligence subsequently became popularized with the lay audience (Goleman, 1995) and broadened into various theoretical approaches with less emphasis on purely cognitive factors and more emphasis on numerous interrelated emotional and social competencies (Bar-On, 1997; Halberstadt, Denham, & Dunsmore, 2001; Izard, 2001).

Other constructs such as alexithymia (i.e., difficulty identifying and describing emotions) and emotion regulation (i.e., being aware of feelings, modifying them adaptively, and expressing them appropriately) also spurred much scientific interest and are often thought of as contributing to emotional competence (Denham, Bassett, & Zinsser, 2012). The varied definitions and operationalizations of emotional competence do not merely reflect chaos across disparate fields of study; they also indicate the complexity of the subject matter.

Empirical research has established links between emotional competence and a wide range of mental and physical health outcomes (Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007). The ability to perceive, understand, and regulate emotion is vital to children's ability to form and sustain relationships with others. Children who fail

to develop emotional competence demonstrate higher rates of psychopathology, both concurrently and later in life (Denham, 2007). Low emotional intelligence and emotion dismissing family environments have been linked to relationship violence, general anxiety disorder, and borderline personality disorder (Bariola et al., 2011). Emotional competence has been found to improve academic functioning as well (Denham et al., 2012).

How does a child develop the critical resource of emotional competence? Both intrapersonal and interpersonal factors play a role. Clearly, there is a biological component. Some children are born with robust cognitive and language capacities that help them understand and manage their emotions as well as their social world (Denham, 2007). A child with strong reasoning skills will likely more easily take on a peer's perspective (i.e., mentalize). Children with verbal strengths can better articulate their own emotions and ask questions about the emotional experiences of others (e.g., "I'm mad!" "Why is he crying?"). Temperament also plays a role in a child's ability to develop emotional competence. A child high in dispositional negativity—one who experiences and expresses intense, frequent, or sustained negative affect—will likely have a greater need to regulate her emotions, even as it is more difficult for her to do so (Eisenberg et al., 1998).

At the same time, it is generally agreed that children's emotional development is also heavily "socialized" by key people in their lives (Baker, Fenning, & Crnic, 2011). Children constantly observe emotions in the people around them. Moreover, their expression of their own emotions often demands a response from their social partners (Denham, 2007; Eisenberg, Fabes, Shepard, Guthrie, Murphy, & Reiser, 1999). This

process of encouraging children to appropriately express and regulate their emotions (i.e., to develop emotional competence) is called emotion socialization.

Emotion Socialization

Emotion socialization permeates children's daily interactions with teachers, siblings, peers—and often most powerfully, their parents. Indeed, the socialization of children's emotions seems to represent a vital parenting skill (Dix, 1991). Gottman, Katz, and Hooven (1996) proposed that much of emotion socialization depends on parental “meta-emotion philosophy.” They defined meta-emotion as an organized set of feelings and cognitions about one's emotions and the emotions of others. They found that parents' attitudes about their own emotions and those of their children varied immensely. For example, some parents view anger as “from the devil” (Gottman et al., 1996, p. 244) and implicitly or explicitly prohibit its expression. Others encourage emotion expression and view it as offering important information about their inner child's life. They are in touch with their own emotions and those of the child and view their child's negative feelings as an opportunity to strengthen their relationship. A parent's meta-emotion philosophy can foster an emotional understanding between parent and child, which theoretically contributes to the development of a child's social emotional competence over the life span.

In their model of emotion socialization, Eisenberg and colleagues (1998) identified three main processes by which parents “socialize” their children's emotional development: 1) their reactions to children's displays of emotion; 2) their own emotional expressiveness; and 3) parent-child discussion of emotion. Each of these mechanisms of emotion socialization impacts children's emotion awareness, regulation, and social

functioning. In general, research has shown that parents' overall positive emotional expression (including adaptive expression of negative emotions), comfort with discussing emotions, and supportive responses to children's displays of affect foster their children's emotional competence (Bariola et al., 2011; Denham et al., 2012).

Parents practice adaptive emotion socialization when they recognize and validate children's experiences of emotion as well as tolerate the safe expression of emotion (Denham, 2007). Moreover, they view intensely emotional experiences as opportunities for intimacy with their children (Denham, 2007; Eisenberg, Fabes, & Murphy, 1996). Theoretically, as children learn to effectively regulate their emotions, parents modulate their reactions their children's emotionality in a process of transferring regulatory functions from caregiver to child (Denham, 2007). Conversations about feelings, particularly negative ones, between parents and children foster a vital environment for coaching children about the expression and regulation of emotions (Brown & Dunn, 1992). When exposed to discussions about emotion, children have the opportunity to adopt a reflective distance from the (often uncomfortable) feeling states threatening to overwhelm them and evaluate the nature and origins of their feelings (Eisenberg et al., 1998; Gottman, Katz, & Hooven, 1997). Talking about feelings in the context of scaffolding by a parent helps the child develop a coherent understanding of emotions, their causes, and their consequences (Denham, 2007).

Much of the empirical work in this area has investigated parents' emotional expressivity (Valiente, Lemery-Chalfant, & Reiser 2007). In general, research suggests that a mostly positive emotional climate that includes discourse about emotions gives children access to emotion regulation skills, enhances their emotion knowledge, and

supports adaptive social behavior (e.g., Denham et al., 2003; Dunn & Brown, 1994). In contrast, children whose mothers self-report more negative affect demonstrate less social competence than children of mothers who report more positive emotions (e.g., Eisenberg et al., 2003; Isley, O'Neil, Clatfelter, & Parke, 1999).

At the same time, parents who limit their emotional expression may not teach their children to grapple with emotions. Whereas exposure to parents' frequent and intense negative emotions may frighten children and discourage reflection about the meaning of emotions, exposure to well-modulated negative emotion can promote understanding of emotion. Thus, it seems to be the experience with a broad range of parental emotions—but not overly negative emotionality—that helps children develop emotional competence (Denham, 2007).

In sum, parents act as emotion socializers in both direct and indirect ways, through how they attend to their own emotions and how they react to and talk about emotions with their children. In order to extend the literature, the primary focus of this study was on parents' reactions to children's expression of emotion, specifically negative emotion.

Parent Responses to Child Negative Emotion

A key way in which parents directly influence their children's burgeoning emotion regulation capacities is through their contingent responses to children's expressed affect. Such "responsive" behaviors have generally been broken down into those that encourage or discourage children's expression of emotion (Lozada, Halberstadt, Craig, Dennis, & Dunsmore, 2016). Encouraging reactions support children's ability to access and engage with their emotional experience (Denham et al.,

2012). They help children understand, tolerate, and regulate their own emotions (Fabes, Leonard, Kupanoff, & Martin, 2001). Supportive reactions are positively associated with preschoolers' emotional expressiveness (Gottman et al., 1997).

In contrast, discouraging reactions to child distress often involve minimizing, dismissing, or criticizing a child's expressed emotion (Gottman et al., 1996). Often without meaning to, parents who respond in these ways may contribute to their child's emotional overarousal (Eisenberg et al., 1998). Such unsupportive reactions are associated with diminished emotion regulation capacities in children. Without adaptive skills to cope with their emotional responses, children often learn to suppress the expression of emotion while remaining physiologically aroused (Fabes et al. 2001; Denham et al., 2012).

Specifically, it seems to be parental responses to *negative* affect (i.e., anger, sadness, fear)—rather than positive affect—that most powerfully influence children's social-emotional development (Johnson, Hawes, Eisenberg, Kohlhoff, & Dudeney, 2017). Because managing negative emotions presents particular challenges to young children (Laible & Thompson, 1998), discussion around these emotions may provide the best opportunity for parents to socialize emotions with their children (Gottman et al., 1996). Researchers have found that discussion of negative rather than positive emotion involves more exploration of the sources of emotions and the mental states of others. In studies of families of preschoolers, reminiscing about shared negative experiences is a stronger predictor of attachment security and children's socio-emotional competency than discussing shared positive memories (Laible, 2011; summarized in Johnson et al., 2017).

Indeed, attachment theorists have long positioned parental sensitivity and responsiveness to children's distress as the cornerstone of child personality development. Bowlby (1969) theorized that an innate attachment system drives infants to seek out caregivers when experiencing distress. The extent to which these attachment figures are available and responsive in helping the infant cope with this distress influences the security of the attachment system—and is presumed to be vital to the development of the child's regulatory capacities. Inconsistent, withholding, and unavailable attachment figures can lead to attachment insecurity in a child (Bowlby, 1969; Thompson, 1994). In contrast, consistent, responsive caregivers contribute to secure attachment styles. Stern (1985) identified "attuned" caregivers as those who are sensitive to their child's emotional cues, both verbal and nonverbal. Such caregivers help maintain an optimal level of arousal in their child by responding sensitively to signs of distress, disinterest, or fatigue. This fosters the child's emerging ability to cope with states of heightened excitement, which is known as "affective tolerance" (Fogel, 1982).

Similar theories have come from social psychologists and contemporary emotion researchers. Buck (1984) posited that children whose expression of negative emotion is met with a lack of support or with punishment will associate the experience of distress with negative sanctions. This association, he argued, will heighten the child's arousal when experiencing negative affect even as, over time, the child may learn to conceal or avoid feeling his negative emotions. In this way, parental punitive responses to children's negative emotion undercut attempts at regulation. In the same vein, Tomkins (2008) has written about ways in which punitive parental responses—which focus on reducing the expression of emotion without providing coping strategies—communicate to the child

that negative emotions are overwhelming and unacceptable. In contrast, supportive parental responses to child negative emotion (e.g., accepting the child's emotion while setting behavioral limits and problem solving) teach children to tolerate and regulate these emotions by acknowledging them (Gottman et al., 1996; Tomkins, 2008).

Another perspective on parental responses to child negative affect comes from Gottman et al.'s (1996, 1997) aforementioned work on parental meta-emotion. Gottman and colleagues conceptualized parenting in terms of two styles: "emotion coaching" and "emotion-dismissing". The emotion coaching style is characteristic of parents who are comfortable with their emotions and those of their children—and can help their children manage their affective experiences, particularly negative ones. Emotion coaching involves not only tolerating the expression of anger, sadness, or fear, but also valuing these negative emotions as an opportunity for intimacy and exploration. The emotion coaching parent is sensitive to her child's emotional states and looks for opportunities to use affectively charged situations constructively. For instance, when emotion coaching, a parent listens to her distressed child, helps the child label his negative emotion, and offers guidance on how to express negative emotions acceptably (Gottman et al., 1996, 1997).

Emotion coaching and positive responses to child distress are thought to be related but somewhat distinct constructs. While emotion coaching shares characteristics with parent reactions to child negative emotionality, it may also capture more complex, richer facets of emotion socialization. Baker, Fenning, and Crnic (2011) studied relations among several parental emotion socialization behaviors, including reactions to children's negative emotionality in a sample of parents of 8-year-old children. They found that father's emotion coaching attitudes—which were related to the children's social

competence—predicted their responses to child negative affect and the use of an emotion coaching approach. However, a clear pattern did not emerge for mothers.

In contrast, the emotion dismissing style reflects a lack of emotional awareness and related difficulties in coping with children's emotions. Parents who demonstrate this style tend to fear being emotionally out of control and believe that expressing negative emotions reflects poor parenting (Gottman et al., 1997). Because they lack techniques for managing distress, rather than addressing their children's displays of negative affect, they may ignore, minimize, or dismiss them. They often feel motivated to quickly unburden their children of negative emotions and thus may convey to their children that negative feelings need not be processed. Gottman and colleagues (1996, 1997) argued that these emotion coaching philosophies not only facilitate positive (or negative) parenting behaviors but also directly affect children's regulatory capacities. By consistently emotion dismissing, parents deny their children the tools they need to cope with intense affect. Thus, these children would be predicted to struggle with intense emotions and experience social deficits.

Over the past few decades, empirical research has supported these predictions. Children whose parents model effective coping strategies in the face of their negative feelings have been found to possess higher quality friendships and increased emotional competence (e.g., McElwain, Halberstadt, & Volling, 2007). Mothers' calm reactions to children's anger have been shown to predict lower levels of expressed anger and fearfulness in their children in other contexts (Denham, 1993). In contrast, children whose parents punished or minimized their aversive feelings were found to exhibit

increased physiological arousal, greater externalizing problems, and diminished social competence (e.g., Fabes et al., 2001).

These associations are supported by longitudinal studies, which have found that dismissing parenting predicted beliefs among children that their negative feelings were inappropriate (Katz, Maliken, & Stettler, 2012). Further, studies found that parental negative reactions to children's distress led to impaired emotion regulation and social functioning in their children (e.g., Eisenberg et al., 1999; Snyder, Stoolmiller, Wilson, & Yamamoto, 2003). Similarly, Gottman and colleagues (1997) reported that parents' emotion coaching style predicted greater sensitivity to feelings, better emotion regulation, and more adaptive problem-solving skills among children. In longitudinal studies, children of emotion coaching parents were found to have greater self-esteem, more positive peer relations, better physical health, and stronger academic performance than their peers.

The role of child temperament in these processes is meaningful but does not tell the whole story. Parents who report more nonsupportive reactions to children's negative affect tend to view their children as prone to negative emotionality (Eisenberg & Fabes, 1994; Eisenberg et al., 1996). Research on aggression and negative emotionality in the family (Cook, Kenny, & Goldstein, 1991) suggests that the relationship between nonsupportive parental responses and child temperament is bidirectional, such that children who are more prone to anxiety, fear, and anger provoke more negative parental reactions, and parental negative reactions also elicit increased child negative emotionality. However, correlations between parental responses and individual differences in child outcomes generally hold even when controlling for individual

differences in children's dispositional negativity, especially for younger children (Eisenberg et al., 1999).

Parental temperament also likely contributes to parents' emotion socializing behaviors, but it is far from the only relevant factor (Eisenberg et al., 1999). Notably, researchers have found that it is sensitive responsiveness to child negative emotion—and not simply parental warmth—that is vital to the development of attachment security and children's ability to self-regulate. For instance, one study found that parental sensitivity to distress predicts young children's emotion regulation, but parental warmth does not (Davidov & Grusec, 2006). Linking these behaviors to maternal self-regulatory capacities, Saritaş, Grusec, and Gençöz (2013) found that while mothers with lower regulatory capacities offered less praise, encouragement, and warmth to their children than those with stronger regulatory capacities, these behaviors did *not* mediate the relationship between mother and adolescent emotion regulation. In contrast, mothers' tendency to react negatively to aversive child behavior was associated with decreased social competence, poorer emotion regulation, and externalizing problems among their children.

Because the emotion socialization literature has generally focused on relationships between parenting and child outcomes, there remains a need to elucidate factors that predict individual differences in parents' responses to child negative affect. Wong and colleagues (2009) examined parental beliefs about children's negative emotions as predictors of parents' reported reactions to their kindergarten children's negative emotions. They found that more accepting beliefs about children's negative emotions were associated with fewer nonsupportive reactions to child distress. Baker and

colleagues (2011) found associations between father's emotion coaching attitudes and their reactions to child negative emotion. However, a relationship for mother's emotion socialization behaviors was less clear. Another study found that two specific aspects of parental beliefs about emotion—the importance of acknowledging/accepting emotional reactions and the value of emotion regulation—predicted parents' positive and negative responses to child negative emotion (Meyer, Raikes, Virmani, Waters, & Thompson, 2014).

While these findings have begun to establish a link between parents' emotion related beliefs and their emotion socialization practices, parental beliefs about children's emotions may not always translate into their behaviors. Many parents nurture the best intentions for their children but find their resources overwhelmed by the day to day demands of parenting. Given that few parents *intend* to minimize or dismiss their children's distress, emotion regulation deficits may explain why many parents nonetheless struggle to cope with children's negative emotionality. However, while it makes intuitive sense that a parent's own emotion regulation capacities would impact their emotion socialization behaviors, until recently there has been scant research on parents' self-regulation. Researchers have thus called for designs that target parents' own emotion regulation capacities to enrich the existing developmental literature (Bariola et al., 2011). The next section will first review broad theories of emotion regulation and then examine those specific to parenting.

Emotion Regulation

Emotion regulation is most often understood as an individual's response-focused capacity to influence his or her experience and expression of emotion (Gross, 1998).

According to Gross, the processes by which people influence their emotions may be automatic or controlled, conscious or unconscious. Gross's process model of emotion regulation differentiates among emotion regulation strategies based on the point in the emotion-generative process at which they exert their primary impact. "Antecedent-focused" strategies are utilized before an individual's emotions have reached their full force. Examples include situation selection (e.g., avoiding school on a test day) and attentional deployment (e.g., distracting oneself by thinking about what one will do after the test). "Response-focused" strategies are deployed while the emotion is taking place (e.g., suppressing one's facial expressions in order to hide one's anxiety). Crucially, in Gross' model, not all emotions need to be regulated all the time. Instead, adaptive modification is context-dependent. That is, emotions are regulated when they threaten to interrupt desired behaviors (Gross, 1998).

Many other theorists have developed their own definitions of emotion regulation (e.g., Cole, Martin, & Denis, 2004; Dodge, 1989). Notably, Thompson (1994) emphasized extrinsic factors in emotion regulation, particularly the way in which other people can serve emotion regulatory functions for an individual. Gross and Thompson (2007) collaborated to create a definition of emotion regulation in which an individual influences emotion in *self*, *others*, or *both*. Gratz and Roemer (2004) further broadened the construct by moving away from a view of emotion regulation as the capacity to behaviorally inhibit negative emotion toward an emphasis on the ability to attend to and accept both negative and positive emotions. They defined emotion regulation as composed of the following subcomponents: awareness and understanding of emotions, acceptance of emotions, ability to control impulses and pursue desired goals when

experiencing negative emotions, and ability to employ context-appropriate emotion regulation strategies to alter emotional responses in order to meet individual goals or situational demands. Their theory underscores the internal elements of emotion regulation and emphasizes that the ability to identify and understand emotions is crucial for emotion modulation. All of the aforementioned models cast emotion regulation as a complex process that harnesses elements of cognition, affect, and behavior to achieve emotional flexibility. Importantly, optimal regulation involves neither under-control nor over-control but reflects agile and adaptive coping with emotions (Eisenberg & Fabes, 1992).

Emotion Regulation and Sensitive Parenting

While strong self-regulatory skills are adaptive in many contexts, an individual's capacity to regulate his or her own emotional and behavioral responses is particularly crucial to meeting the substantial demands of parenting. Sensitive parenting often requires that parents engage in the less appealing or more difficult behavior. While most parents strive to be calm and evenhanded, it can be very challenging for a parent to remain emotionally regulated while caring for and attempting to soothe a dysregulated child. Parents benefit from the capacity to regulate their own emotional responses in order to sensitively react to their child's emotions and behaviors—particularly when the child is distressed (Morris et al., 2007).

In his process model of adaptive parental functioning, Belsky (1984) highlighted the importance of parents' own resources. This model identified the predictors of parenting as: 1) parents' personal and psychological resources; 2) characteristics of the child; and 3) contextual sources of stress and support. Of these three, Belsky viewed parents' personality functioning and psychological resources as the biggest predictors of

their parenting behaviors and argued that environmental factors and child characteristics came second and third, respectively, in order of importance to child-parent relations.

Of the numerous potential resources from which a parent can draw, parental emotion regulation may be particularly important to examine given that dysregulation is likely to negatively influence parental responses to child distress. For example, while emotion regulation is a form of fluid intelligence, it may predict parenting behavior more than general intelligence because it captures parents' ability to *use* what they know rather than simply reflecting one's knowledge (summarized in Buckholdt et al., 2014). Parents benefit from the ability to regulate their own emotional responses (e.g., anxiety, anger), to effectively respond to their child's emotions or behavior, and to foster a positive family emotional environment (Morris et al., 2007). Conversely, many of the parenting behaviors that are understood to be maladaptive, even detrimental to child outcomes, are plausibly rooted in parental deficits in self-regulation (e.g., intrusiveness, harsh or inconsistent discipline; Shaffer & Obradović, 2017). Self-regulatory capacities likely influence parents' reactions to child behavior, especially when the child is upset or noncompliant. Parents' ability to inhibit impulses, overlook distractions, or shift goals is likely to facilitate positive interactions with their children (Shaffer & Obradović, 2017).

Others, grounded in attachment theory (e.g., Cassidy, Jones, & Shaver, 2013), have argued that parental insensitivity may be best understood as a failure of emotion regulation. This is based on the idea that parents who struggle with self-regulation can be expected to experience dysregulated emotions in myriad stressful situations, including dealing with a child's distress. The resulting emotion dysregulation may lead them to pursue "parent-focused responses," rather than responses geared toward the needs of the

child (Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002). In other words, parents who become dysregulated may be so motivated to reduce their own discomfort that they employ self-calming strategies at the expense of helping their children cope with their distress. Indeed, researchers have demonstrated that many of parents' negative reactions to their children are impulsive and reactive rather than intentional. In one study, negative, even violent, behaviors stemmed from parents' attempts to decrease their own arousal in response to perceived provocations by the child (Mammen, Kolko, & Pilkonis, 2002).

Theories of self-regulatory depletion (e.g., Bauer & Baumeister, 2011) posit that people have finite regulatory resources that can be diminished through use. This means that a person's attempts to self-regulate in one area (i.e., cognition, emotion, behavior) deplete his abilities to self-regulate in other areas. This is supported by research. For example, in one experiment, people who controlled "forbidden" thoughts subsequently had difficulty suppressing signs of amusement relative to individuals who simply worked on multiplication problems (Muraven, Tice, & Baumeister, 1998).

The self-regulatory resource model may have particular application to parents, whose daily experiences often involve frequent, intense, and unpredictable emotions that drain their resources and cause lapses in self-control (Meehan & Zick, 2016). In this highly emotional context, parents' capacities to monitor contextual cues and adjust their own responses to their children's needs are often hindered. Thus, a parent who is distracted by a work crisis and exhibits "unsupportive" behaviors, such as curtly telling a hurt child to "brush it off" may do so less out of a lack of understanding of supportive emotional responses than because his own cognitive and/or emotional resources have broken down (Jones, Brett, Ehrlich, Lejuez, & Cassidy, 2014). Crucially, parental

emotion regulation is thought to influence emotion socialization not merely by modeling emotion regulation strategies for children, but also through its impact on the quality of parents' emotion socializing behaviors (Hajal & Paley, 2020).

Despite the theoretical reasons to study parental regulatory capacities, it is only relatively recently that researchers have examined parents' own psychological resources as predictors of parenting behaviors. Instead, parental emotion regulation capacities have historically been taken for granted (Shaffer & Obradović, 2017). Recently studies have begun to address this gap, investigating links between parental regulatory capacities and diverse parenting outcomes, including parents' ability to be attuned and flexible in interactions with their children (Crandall et al., 2015).

Poorer global emotion regulation strategies have been found to predict harsh and over-reactive discipline by parents (e.g., Lorber & O'Leary, 2005), greater maternal rejection and less warmth (Saritaş et al., 2013), and higher risk of child maltreatment (Skowron, Kozłowski, & Pincus, 2010). Similar findings have emerged from investigations focused on parents' responses to child negative affect. For example, Leerkes (2010) found that pregnant women who reported greater negative emotions after watching a video of an infant's distress responded less sensitively to their own infant's negative affect when observed six months postpartum. They also self-reported more negative responses to their infant's distress 16 months postpartum. Other findings on the relations between parental emotion regulation and their emotion socialization behaviors have been somewhat mixed.

Hughes and Gullone (2010) examined associations between parent emotion regulation, personality, and parents' self-reported responses to children's negative

emotions and in a sample of 559 mothers and fathers of children between 10 and 18 years. To capture emotion regulation capacities, they used the Emotion Regulation Questionnaire (Gross & John, 2003), which assesses the strategies of cognitive reappraisal and expressive suppression. The researchers found that neither mothers' nor fathers' emotion regulation significantly predicted supportive responses to child distress. Mothers', but not fathers', increased use of suppression to manage their own emotions was negatively correlated with nonsupportive responses. In analyzing their findings that, compared to personality, emotion regulation explained only a small and often non-significant portion of variance in emotion socialization, the researchers noted that only two narrow emotion regulation strategies were investigated. Given the complexity of emotion regulation as a construct, there are likely other facets of relevance to emotion socialization practices. The authors recommended further research into other, more varied aspects of parent emotion regulation and their relations to emotion socialization.

Remmes and Ehrenreich-May (2014) investigated the relationship between parent-reported use of emotion regulation strategies and their self-reported reactions to youth negative affect in a sample of 67 adolescent and parent dyads. They found that parents' adaptive emotion regulation (as measured by their use of reappraisal) predicted emotion coaching behaviors in the context of adolescent distress. However, counter to their hypothesis, parental maladaptive emotion regulation (as measured by their use of suppression) was not associated with parental emotion dismissing responses to youth distress. The researchers speculated that this null finding may have been explained by the short-term, or superficial, effect that suppression has on emotional expression. Parents who use suppression as an emotion regulation strategy may be able to respond relatively

adaptively to their child's intense negative affect in the moment by inhibiting their own emotional response. However, because suppression does not impact the subjective experience of emotion (Gross, 1998), these parents may nonetheless display (and model) subtle signs of distress. Moreover, such signals may be outside of the parent's awareness. Results of both studies highlight need for further investigation into the role of specific emotion regulation strategies in studies of emotion socialization.

The Role of Effortful Control in Emotion Regulation

In their review of the research on associations between maternal self-regulation and parenting, Crandall, Deater-Deckard, and Riley (2015) noted that the lack of consensus on the definition of self-regulation has created chaos in the literature. Studies of self-regulation and parenting have targeted numerous regulatory capacities/deficits, including emotion regulation, executive functioning, and ADHD. While theoretical distinctions between emotion regulation and cognitive control capacities have been made with respect to parenting behavior, there is a dearth of research including both emotion and cognitive regulatory capacities in the same studies. Instead, investigations usually focus on either parental emotion control or other cognitive control components (Crandall et al., 2015; Rutherford et al., 2015).

While emotion regulation clearly contains cognitive components, there is evidence that cognitive and emotional control skills can be meaningfully distinguished from one another in research settings. In experimental studies, measures of emotion regulation and attention control are moderately correlated (Eisenberg et al., 2010). The cognitive ability to override impulses seems to be a "necessary but not sufficient factor" in optimal self-regulation (De Ridder & Kuijer, 2006, p. 15). Recent empirical research

has begun to examine the role of executive functions (e.g., attention and inhibition) in supporting emotion regulation, both in non-parents and parents. Strong executive functions may facilitate emotion regulation by helping parents to monitor their fluctuating emotions and those of their child, reflect on the causes of these emotions, and hypothesize about how such emotional states influence behavior (Rutherford et al., 2015). For example, one study found that mothers' decreased working memory capacity was associated with increased negative reactivity to their children's challenging behaviors during frustrating cooperation tasks (Deater-Deckard, Sewell, Petrill, & Thompson, 2010). In a follow-up study, the association between child conduct problems and harsh parenting was strongest for mothers with poorer executive function (i.e., attention shifting, inhibitory control, and working memory; Deater-Deckard, Wang, Chen, & Bell, 2012).

Beyond specific executive functioning tasks, a rich literature has developed around the construct of effortful control, a broad measure of temperament involving the ability to anticipate, detect errors, and activate a subdominant response instead of a more automatic, dominant response (Rothbart & Bates, 2006). Individuals with robust effortful control capacities are able to shift and focus their attention in the face of distractions and inhibit well-learned behaviors in favor of new behaviors. In other words, they are able to exert effort to modulate dispositional reactivity. Effortful control develops in early childhood (Rothbart, Ellis, Rueda, & Posner, 2003) and strongly predicts later psychological adjustment and adaptive social behaviors (Mezzacappa, 2004).

In theory, people who struggle to purposefully shift their attention away from negative feelings or deliberately engage in positive behaviors should be less able to

regulate emotional distress. Conversely, those with greater effortful control should be able to inhibit undesirable behaviors in times of high emotionality and more effectively modulate their arousal. Bowen's (1978) description of self-regulation highlights the capacity to distinguish fact from feeling and consider actions in the context of intense feelings. Thus, the capacity to self-soothe is based, at least in part, upon one's developing awareness and control over their emotional reactivity (Kerr, Bowen, & Kerr, 1988).

Indeed, existing evidence suggests that effortful control aids children and adolescents in regulating impulsive behavior and negative emotions via basic attentional, activation, and inhibition mechanisms (Rothbart, Ellis, & Posner, 2004). Extending findings to adults, Bell-Thomson (2014) showed that effortful control was negatively correlated with both emotional and behavioral dysregulation, accounting for approximately 15% of variance in emotion dysregulation. While effortful control has been well established as key to the successful management of basic affective experiences (Rothbart et al., 2000, 2004), its role in influencing parental responses to child distress remains unclear. However, it makes sense that parents' effortful control would influence their emotion socializing behaviors, and in particular, their responses to child negative emotionality.

Empirical studies have found that maternal effortful control positively correlates with time spent participating in caregiving activities that are thought to facilitate infant socioemotional development (e.g., playing; Bridgett et al., 2011). It therefore seems reasonable that high levels of effortful control might protect against unsupportive responses to child negative affect. A distressed child can be very dysregulating for a parent, particularly when the parent is the target of the negative affect. Parents high in

effortful control would be expected to regulate their emotions and remain calm during moments of heightened child distress. This prediction is consistent with Eisenberg and Fabes' (1992) argument that people with high effortful control will be able to demonstrate considerable social competence even when experiencing high levels of negative affect. Moreover, cognitive flexibility may allow parents to shift between different goals or different disciplinary strategies in response to child feedback—and to monitor both self- and child-focused goals during their interactions. Indeed, Valiente, Lemery-Chalfant, and Reiser (2007) studied the effects of parental effortful control on their emotion socializing behaviors (and on child effortful control) in a sample of 188 families with children aged 7-12 years. This correlational study found that parental effortful control predicted positive—and inhibited negative—responses to children's negative emotions.

More recently, Shaffer and Obradović's research (2017) suggests that parental executive functions (as measured by tasks) and self-reported emotion regulation may uniquely impact the quality of parenting behavior and parent-child interactions. They observed 102 caregiver-child dyads (in which caregivers were represented by 94 mothers, seven fathers, and one grandmother) complete five structured laboratory tasks that assessed the quality of parental responsiveness, limit setting, and support of child autonomy. They found that, after controlling for socioeconomic factors, parental inhibitory control predicted more “sensitive/responsive” parenting behaviors (i.e., behaviors associated with effective instruction and task scaffolding, including positive responsiveness and support of autonomy). Parental difficulties with emotion regulation were operationalized as responses to the “Limited Access to Emotion Regulation

Strategies” subscale of the Difficulties in Emotion Regulation Scale (DERS, Gratz & Roemer, 2004). Emotion regulatory deficits predicted fewer “positive/collaborative behaviors,” which included the dyadic interaction quality (e.g., child engagement/persistence and dyadic collaboration).

Shaffer and Obradović (2017) speculated that inhibitory control may be uniquely related to behaviors involved in the teaching and structuring of tasks, whereas emotion regulation may be uniquely related to affectively charged interactions. Notably, greater inhibitory control capacities and fewer difficulties identifying effective emotion regulation strategies were not significantly related. The researchers hypothesized that this may have been due to the situational nature of the parent emotion regulation measurement as opposed to the narrowly defined skill of inhibitory control (measured via Flanker task). These findings highlight the complexity of parental self-regulatory capacities and the role that they play in a child’s developing emotional competence.

Given that effortful control measures broader cognitive control skills than individual executive functioning tasks, there may be elements of willful self-regulation not captured by the aforementioned study that are vital to difficult parenting scenarios. Moreover, effortful control is also thought to involve subjective feelings about one’s voluntary control over one’s thoughts and emotions (Eisenberg et al., 2004), which could impact one’s responses to affectively-charged situations. While parents’ behaviors are influenced by their values and motivations toward achieving child’s outcomes, they are also impacted by parents’ capacity to incorporate these beliefs and goals into particular plans of action (Dix, 2000). Given the potential implications for parenting interventions, it is important to understand whether effortful control plays a role in the presumed

association between parents' emotion regulation and their reactions to child negative emotionality.

Emotional Flooding and Negative Parenting

There is mounting evidence that robust self-regulatory capacities contribute to sensitive parenting practices, including adaptive emotion socializing. And yet, both empirical research and intuition suggest that the relationship between these two constructs is not so simple. For example, not all parents fit neatly into categories of "emotion coaches" or "dismissers." This makes sense to any parent and is supported by limited research showing that emotion coaching and emotion dismissing are not inversely related (Baker et al., 2011). Parents use myriad strategies to cope with child distress, often in chaotic, conflicting ways. Not infrequently, a parent's usual repertoire of regulatory strategies fails them in the affectively charged context of parenting. Intuitively, we know that there is something profoundly dysregulating about parenthood (Meehan & Zick, 2016).

Rutherford and colleagues (2015) have argued that due to the unique challenges of parenting, regulatory function during the caregiving period should be considered distinct from the emotion regulation skills used during other life phases. It seems reasonable that affectively-laden parent-child interactions might evoke different levels of stress and require different regulation patterns than stressful non-caregiving interactions, such as performance tasks or other interpersonal scenarios. The stress of experiencing one's own child's strong negative affect can be dysregulating to a humbling degree (Meehan & Zick, 2016). While self-regulation theory offers the limited resource model (Bauer & Baumeister, 2011) to understand how parents' regulatory capacities are

depleted, the specificity of regulatory functioning in caregiving has received scant attention by researchers. There remains a need to probe the processes by which an otherwise well-regulated person may become particularly overwhelmed by his or her own child's distress.

In family systems theory, the term *flooding* has been used to describe the subjective experience of becoming so emotionally overwhelmed by a family member's affect or behavior that one cannot mount an organized response. Following Ekman's (1984) model of emotional conditioning, Gottman (1993) introduced the concept of flooding in the context of relationship conflict in distressed couples. He posited that emotional flooding occurs when one person experiences another person's negative emotions as "unexpected ('seem[ing] to come out of nowhere'), unprovoked, intense, overwhelming, and disorganizing" (Gottman, 1993, p.64). Theoretically, this leads to emotional ("escape") conditioning in which the flooded partner becomes hypervigilant to the cues conditioned to the flooding. He begins to interpret ambiguous cues as threatening or hostile, which, in a vicious circle, makes him more likely to experience flooding.

A defining characteristic of emotional flooding is that it disrupts higher-order cognitive processing, thus compromising the individual's capacity to cope adaptively in aversive situations. Instead, the emotionally flooded partner resorts to fight-or-flight responses that provide immediate escape (e.g., leaving the room). Flooding is distinct from related constructs such as distress intolerance and experiential avoidance (i.e., attempting to avoid painful events or negative emotions) (Malik, Heyman, & Smith Slep, 2020).

Building on Gottman's theory, others have applied the concept of emotional flooding to parent-child interactions. Snyder and colleagues (1994) asserted that flooding may represent a mechanism through which child distress disrupts a parent's capacity to problem solve during challenging interactions. Further, whereas an individual may escape her partner's distress by physically removing herself from the aversive interaction, this strategy is often unavailable to emotionally flooded parents of young children. In order to terminate the aversive interaction and escape the feeling of being overwhelmed with negative emotion, the parent may resort to other overlearned strategies, such as yelling or emotionally withdrawing—or in extreme cases, hitting (Lorber & Slep, 2005). This is consistent with research findings that anger leads mothers to employ coercion instead of soothing strategies that decrease their child's arousal (Dix, 1991; Mence et al., 2014). Snyder and colleagues theorized that over time, cycles of escalating negative emotion and coercion impede interactions that foster the child's developing self-regulatory skills (Snyder et al., 1994).

To date, Gottman's (1991, 1993) conceptualization of emotional flooding has been the focus of relatively little child and family research. To this author's knowledge, only four studies have investigated the role of emotional flooding in parenting behaviors, all of them in the context of parents' harsh or over-reactive discipline. Slep and O'Leary (2007) studied the association between parental flooding and parental aggression in a community sample of 453 mothers and fathers of children aged 3-7 years. They found that flooding was related to increased levels of overreactive discipline and parental aggression. Further, this association was independent of effects for other predictors, including parental anger, hostile attributions for child behavior, and depressive

symptoms. In a subsequent study utilizing the same data set, Lorber, O'Leary, and Smith Slep (2011) found that, contrary to their hypothesis, the relationship between emotional flooding and the use of corporal punishment held across different races.

Mence and colleagues (2014) studied the relationship between harsh discipline practices and dysfunction in parents' processing of child affect in families of toddlers with conduct problems. They found that emotional flooding in response to child negative affect uniquely predicted parents' hostile discipline, independent of the severity of the child's disruptive behavior problems. Moreover, the biased appraisal of child affect cues (i.e., toward the misclassification of child affect as anger) was most pronounced among parents who were more prone to emotional flooding. In addition, hostile discipline was further predicted by an interaction between emotional flooding and affect appraisal bias. Their results suggest that parents who are biased toward "seeing" more anger in a child than is present are only at greater risk for hostile discipline when this biased appraisal of affective cues is accompanied by emotional flooding.

Lorber, Mitnick, and Slep (2016) examined parental flooding in laboratory encounters with 97 mother-toddler dyads. Maternal discipline and physiological responses were observed in discipline encounters. Following these encounters, mothers immediately rated the extent to which they had experienced flooding in response to their children's affective displays. Mothers' experience of negative emotion was then assessed via video-mediated recall. The researchers found that maternal flooding predicted both overreactive and lax discipline behaviors—independent of the amount of negative emotion experienced by mothers. Flooding was also associated with mothers' heart rate reactivity, as well as child misbehavior and negative emotion displays. Moreover, the

association between flooding and overreactive discipline was greater in those mothers who exhibited greater increases in heart rate.

Lorber and colleagues argued that the interaction of flooding with mothers' cardiac responses in relation to overreactive discipline is consistent with Gottman's (1993) view of flooding as so aversive that the flooded person will do "anything" to end the interaction with his partner. Feeling disorganized by a child's emotionality, especially when combined with a racing heart, may powerfully motivate a parent to "make the child behave"—no matter the message this sends about the acceptability of negative affect (Lorber et al., 2016, p. 475). Notably, the association between flooding and discipline was not limited to only those parents who exhibited extreme physiological signs of dysregulation. Instead, the flooding-overreactivity association was statistically significant at levels of physical arousal demonstrated by nearly three quarters of the participants. This research supports the idea that flooding is a common experience among parents that offers incremental validity in terms of predicting discipline practices.

To date, research into emotional flooding and parenting outcomes has focused on flooding as a predictor of parents' negative discipline practices. Flooding may reflect bottom-up influences that undermine top-down cognitive control processes (Del Vecchio, Lorber, Slep, Malik, Heyman, & Foran, 2016). It stands to reason that, by disrupting parents' self-regulatory processes, flooding could impact a range of parenting behaviors, including contingent responses to child distress.

It seems possible that parents with generally robust self-regulatory capacities may nonetheless become easily flooded by their children's negative affect. In fact, highly regulated individuals may even become *more* flooded in response to child distress if they

are not accustomed to outward manifestations of negative affect. It follows that these individuals would struggle to respond supportively to their child's distress in the face of high physiological arousal and cognitive "shutdown" associated with emotional flooding. Given that the research on emotion regulation and parental flooding has largely occurred in different disciplines, there is a need to integrate them. The present study was the first to investigate how parental flooding might impact the link between parents' emotion regulation capacities and their responses to child distress.

Mentalization and Emotion Regulation

Another lens through which to view the dysregulating experience of parenthood comes from Attachment theory. Parental mentalization (Sharp, Fonagy, & Goodyer, 2006)—similar to the concepts of mind-mindedness (Meins et al., 2003) and reflective function (Fonagy & Target, 1997)—refers to an individual's ability to value and understand another person's emotions and thoughts. Fonagy and Target (1997) conceptualized children's mentalization abilities as developing within emotionally charged relationships, and notably, they have argued that the impact of parent mentalization is mediated by parental behavior (e.g., discussion of emotions, social interactions during play). In their model, Fonagy and Target (1997) proposed that accurate mentalization allows parents to show their child that they recognize and understand the child's emotions and, through their reactions, model to the child that uncomfortable feelings can be regulated. In this way, the parent's response to the child's affect permeates the child's affective experience and fosters the child's self-regulatory development.

Because mentalization focuses on the caregiver's willingness or capacity to interpret a child's behavior in the context of the internal states that might be governing it, it has been hypothesized to contribute to sensitive responses to child displays of affect. Supporting this, Rutherford, Goldberg, Luyten, Bridgett, and Mayes (2013) found that mothers who endorsed higher levels of curiosity about their infant's mental states spent more time soothing a "crying" infant doll compared to mothers with lower mentalization capacities. By mirroring the infant's emotional expressions through facial expressions and vocalizations, a parent facilitates the external representation of the emotion to the child—and demonstrates that emotion (both positive and negative) can be managed without becoming overwhelming (Fonagy, 2006). Mentalization becomes a regulatory tool that the child can use throughout her lifespan.

Attachment theorists have explained the dysregulating experience of parenthood in terms of the inhibition of the capacity for mentalization. Ironically, during fraught parent-child situations, this crucial process of mentalizing can be disrupted (see Meehan & Zick, 2016 for a summary). When parents form deep bonds with their children, the activation of their attachment system may suppress their ability to mentalize (Bartels & Zeki, 2004). As an exploratory effort, this study investigated the potential relationship of mentalizing to parental self-regulation capacities and to their responses to child distress.

This review of the literature on emotion socialization and parental emotion regulation offers some preliminary evidence for the impact of parents' self-regulatory capacities on their ability to respond supportively to their child's distress. While emotional competence is widely recognized as a key component of healthy child development, parents' role in supporting it has been less studied. Specifically, the factors

that potentially undermine parents' emotion socialization skills are often assumed, overlooked, or treated as peripheral. A growing number of studies suggest that parental emotion regulation may play a key role. In the literature reviewed, parents' self-regulatory capacities were found to be related to nonsupportive responses to child distress. A clear pattern has not emerged for supportive responses. Further research into parents' emotion regulation—and cognitive control capacities—in the context of emotion socialization is needed.

The study of parental emotion regulation and emotion socialization has important clinical implications. Treatments for children who struggle with emotion dysregulation (a transdiagnostic symptom present in a large percentage of children presenting for treatment) increasingly focus on improving parents' own self-regulatory skills. However, a more nuanced view of which capacities most directly influence healthy emotion socializing behaviors is needed. This study, therefore, aimed to clarify the role of parental emotion regulation and effortful control in predicting parents' responses to child negative affect. It also studied the relationship between parental attitudes toward emotion socialization and their emotion socializing behaviors. In addition, the current study investigated whether parental emotional flooding impacted the relationship between emotion regulation and emotion socialization.

Chapter III

Statement of the Problem

Emotional competence is a crucial component of general wellbeing and adaptive social behavior. While biological factors play a role in children's understanding, regulation, and expression of emotions, children's emotional development is also "socialized," by peers, teachers, and perhaps most importantly, parents (Baker et al., 2011; Eisenberg et al., 1998). One way in which parents impact their children's developing emotion regulation capacities is through their contingent responses to children's expressed emotion. Although the effects of parents' emotion socialization practices, and specifically their responses to children's distress, on children's wellbeing have been well established (e.g., Denham, 2007; Eisenberg et al., 1996), research on the factors that contribute to parents' emotion socialization behaviors has been relatively limited (Remmes & Ehrenreich-May, 2014). There remains a need to identify determinants of parenting behaviors that support child emotional competence (Denham, 2007; Hajal & Paley, 2020).

Theory on the predictors of emotion socialization has acknowledged the critical role of parents' own emotion regulation capacities (summarized in e.g., Eisenberg et al., 1998; Morris et al., 2007; Shaffer, Whitehead, Davis, Morelen & Suveg, 2018). Yet empirical studies of emotion regulation as a predictor of parents' emotion socializing behaviors are limited. Research indicates that parental emotion dysregulation is associated with unsupportive reactions to child distress (Buckholdt et al., 2014). However, empirical findings on the relations of parents' emotion regulation to their

nonsupportive reactions to child negative emotionality have been mixed (Hughes & Gullone, 2010; Remmes & Ehrenreich-May, 2014).

Moreover, it is not well understood which self-regulation capacities affect the quality of parent emotion socialization. Existing research has generally not included both emotion and cognitive control capacities in the same empirical studies, although theoretical distinctions among these constructs have been made as they relate to parenting behaviors (Crandall et al., 2015; Rutherford et al., 2015). Integrating cognitive and emotion regulation perspectives could help determine which individuals might need the most support in practicing adaptive emotion socialization behaviors as well as which regulatory mechanisms could be targeted in future interventions.

Theory suggests that individuals who have difficulty intentionally shifting their attention away from negative emotions or purposefully engaging in adaptive behaviors should exhibit greater emotional dysregulation. Moreover, existing research suggests that effortful control assists in the regulation of negative emotions via attentional and inhibition processes in young people (Rothbart et al., 2004), and possibly adults (Bell-Thomson, 2014). Robust cognitive control capacities may facilitate emotion regulation in parents by helping them to monitor their fluctuating emotions and those of their child and to reflect on the causes of these emotions (Rutherford et al., 2015). Thus, it seems likely that effortful control plays a role in parents' use of emotion regulation to respond to their child's negative affect. However, to date the mediating role of effortful control in the presumed relationship between emotion regulation and responses to child distress has yet to be empirically evaluated. The current study addressed this gap by testing

effortful control as a mediator in the proposed pathway between parent emotion dysregulation and parent reactions to child negative emotion.

While it makes intuitive sense that parents with greater emotion and cognitive control capacities will respond more sensitively to their child's distress, research shows that this relationship does not always hold (e.g., Hughes & Gullone, 2010). Rutherford and colleagues have argued that, because of the unique demands of caring for a child, parenthood may modulate emotion regulation (Rutherford et al., 2015). Indeed, many parents find the experience of parenthood profoundly dysregulating. Findings that mothers display heightened sensitivity to infant affect compared to non-mothers (e.g., Nishitani et al., 2011) support the notion that otherwise well-regulated parents might become particularly dysregulated in the face of their child's distress.

In order to test this theory, the current study investigated the potential role of "emotional flooding" in the relationship between parent emotion regulation and parent responses to child's distress. Emotional flooding is a construct from family systems research that refers to the subjective experience of a family member's negative affect being perceived as unexpected, overwhelming, and disorganizing (Gottman, 1993). Existing research has suggested that emotional flooding predicts negative parenting outcomes, even when controlling for effects of parent anger and negative attributions for child behavior (Slep & O'Leary, 2007).

While flooding in parents has been studied in the context of their discipline practices, it is likely to play a role in a wider range of parenting behaviors, including emotion socialization practices—and perhaps help account for the dysregulating effects of one's child's distress. Parenting interventions can be improved not only by

understanding how to address emotion and cognitive control abilities, but also by considering the unique effects of child negative emotionality on parents' regulatory functioning. To this end, this study sought to elucidate the potential role of parental emotional flooding in the proposed link between emotion regulation capacities and responses to children's negative emotionality.

Another gap in the emotion socialization literature involves the extent to which emotion socializing behaviors and beliefs are related (Baker et al., 2011; Denham & Kochanoff, 2002). While it makes intuitive sense that emotion socialization behaviors and beliefs should align (i.e., parents who endorse an emotion coaching attitude will respond supportively to their child's emotionality), few studies have examined relationships between emotion socializing behaviors and attitudes (Denham & Kochanoff, 2002). Moreover, when emotion-related beliefs and emotion socializing behaviors have been studied together, relations have not always been consistent (Wong et al., 2009). The present study sought to extend previous research by examining the associations between parents' beliefs about their children's emotions and their reported reactions to children's distress.

In sum, the current study sought to probe the relationship between parental self-regulatory capacities and the vital parenting practice of emotion socialization. In order to address issues related to the use of narrowly defined measures of emotion regulation, it used a measure that reflects an integrative conceptualization of emotion regulation as involving not just the modulation of emotional arousal but also an acceptance of emotions as well as the ability to act in desired ways even in moments of intense negative affect (Gratz & Roemer, 2004). In response to calls for studies to employ both affective

and cognitive measures of self-regulation in parents, it examined the role of effortful control in the potential path between parents' emotion dysregulation and maladaptive responses to child distress. In order to explain inconsistent findings, it examined the potential moderating role of parent emotional flooding in the relationship between parents' regulatory capacities and their reactions to child negative emotions. As an exploratory aim, the current study examined correlations between parents' emotion socializing beliefs and behaviors. Finally, the role of mentalization in these processes was explored.

Variable List

Independent variable.

- Parent Emotion Dysregulation - Operationalized as the level of dysregulation reported on the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004) The measure yields a total score as well as scores on six subscales (five were used in the current study). Higher scores suggest greater problems with emotion regulation.

Dependent variables.

- Parent supportive responses to child negative emotions - Operationalized as the total score on the "supportive" dimension (i.e., problem-focused, emotion-focused, expressive encouragement) of the Coping with Children's Negative Emotions Scale (CCNES; Fabes, Eisenberg, & Bernzweig, 1990).
- Parent nonsupportive responses to child negative emotions - Operationalized as the total score on the "nonsupportive" dimension (i.e., distress, minimizing, punitive responses) of the CCNES.

Proposed mediating variable.

- Parent effortful control - Operationalized as the level of effortful control reported on the Effortful Control Subscale (ECS) of the Adult Temperament Questionnaire (ATQ; Evans & Rothbart, 2007).

Proposed moderating variable.

- Parent Emotional Flooding by Child Negative Affect (PEF) - Operationalized as the total score on the Parent Flooding Scale (PFS; Slep & Heyman, 1998).

Exploratory variables.

- Parent emotion coaching (i.e., tolerating the child's distress and valuing negative emotions as an opportunity for intimacy) - Operationalized as the total score on the "emotion coaching" subscale of the Maternal Emotional Style Questionnaire (MESQ; Lagacé-Séguin & Coplan, 2005).
- Parent emotion dismissing (i.e., ignoring, minimizing, or dismissing displays of child distress and being fearful of negative affect) - Operationalized as the total score on the "emotion dismissing" subscale of the MESQ (Lagacé-Séguin & Coplan, 2005).
- Mind Mindedness – operationalized as the score on the Mind-Mindedness (MM) scale (Meins et al., 1998).

Potential covariates.

- Parent's sex - Assessed on the demographics questionnaire
- Parent's age - Assessed on the demographics questionnaire
- Parent's ethnicity - Assessed on the demographics questionnaire

- Number of children in household - Assessed on the demographics questionnaire
- Financial stress – Assessed using three subjective items derived from Essex, Klein, Cho, and Kalin, 2002.
- Child dispositional negative emotionality – Assessed using the Children’s Behavior Questionnaire Very Short Form (CBQ-VSF; Putnam & Rothbart, 2006).
- Social desirability/response bias – Assessed using the Social Desirability scale (SDS-SF Form C; Reynolds, 1982).

Primary Hypotheses

In a sample of parents with children between ages 3-8, it was predicted that:

Model A: Parent supportive responses to child negative emotions

1. Parent emotion dysregulation would be significantly negatively related to parent supportive responses to child negative emotions.
2. Parent emotion dysregulation would be significantly negatively related to parent effortful control.
3. Parent emotion dysregulation would have a significant negative indirect effect on supportive responses through parent effortful control.
4. Parental flooding would significantly moderate the link between parent emotion dysregulation and supportive responses to child negative emotions, so that the negative relationship between parental dysregulation and supportive responses would be weaker as emotional flooding increases.

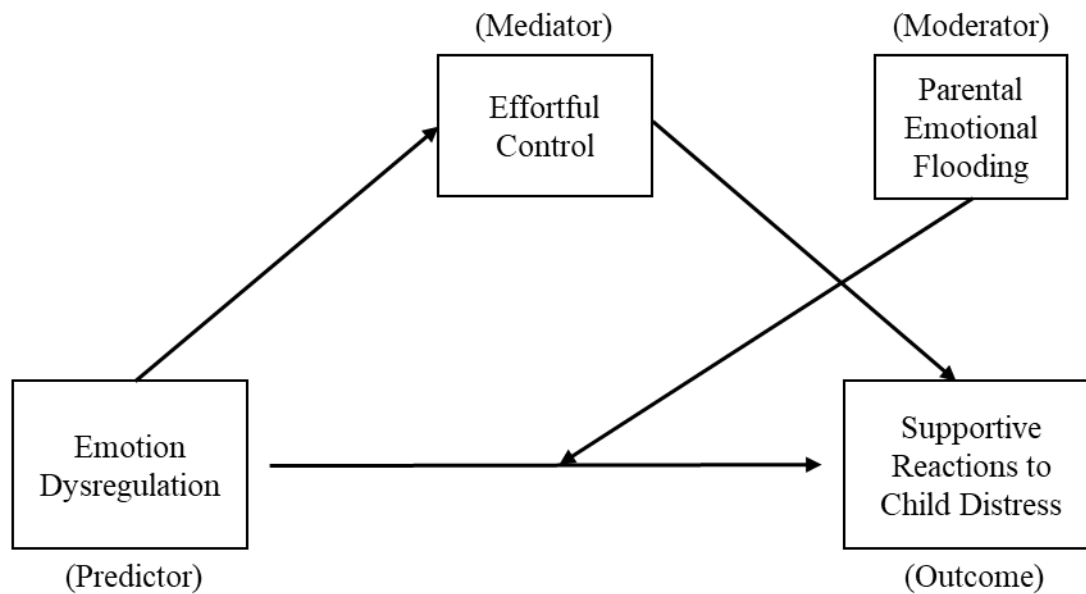


Figure 1. Proposed model A: Supportive responses to child distress.

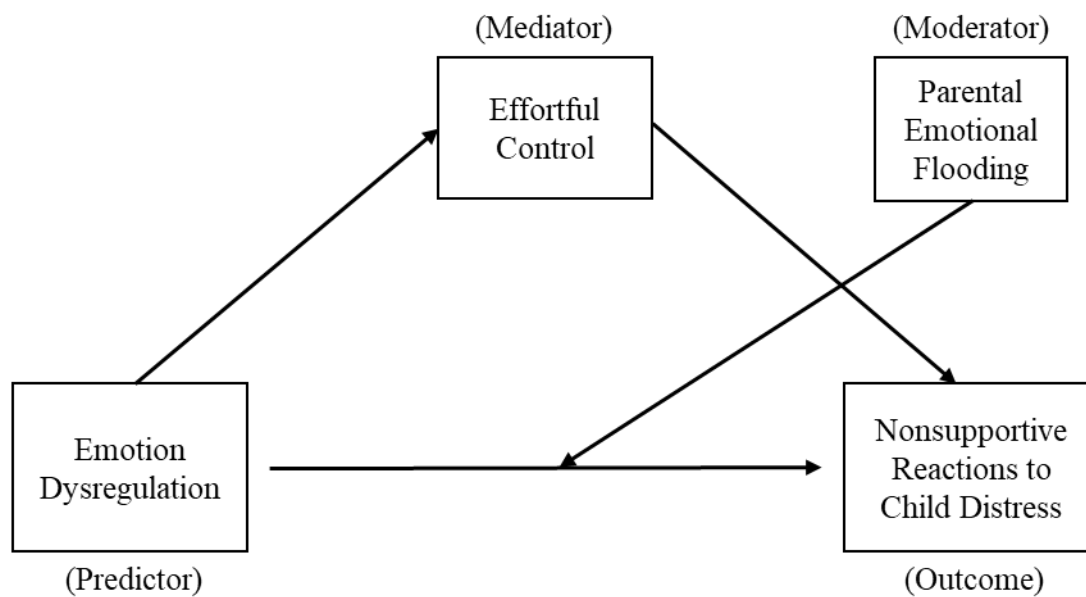


Figure 2. Proposed model B: Nonsupportive responses to child distress

Model B: Parent nonsupportive responses to child negative emotions

1. Parent emotion dysregulation would be significantly positively related to parent nonsupportive responses to child negative emotions.
2. Parent emotion dysregulation would be significantly negatively related to parent effortful control.
3. Parent emotion dysregulation would have a significant positive indirect effect on nonsupportive responses through parent effortful control.
4. Parental flooding would significantly moderate the link between parent emotion dysregulation and nonsupportive responses to child negative emotions, so that the positive relationship between parental dysregulation and supportive responses would be stronger as emotional flooding increases.

Exploratory Research Questions

1. In order to investigate the commonality among parent reactions to children's negative emotions and parental beliefs about emotion socialization, correlations between the MESQ coaching and dismissing scales and the CCNESS supportive and nonsupportive composites were examined.
2. Participants were asked to qualitatively describe a recent experience in which they responded to their child's negative emotions. These descriptions of emotion socialization were coded according to the Mind-Mindedness (MM) scale developed by Meins et al. (1998) for a sub-sample of participants. Relationships between levels of the main study variables (emotion regulation, effortful control, and supportive vs. nonresponses to child negative emotion) and mentalization (as measured by parents' scores on the MM scale) were explored.

Chapter IV

Methods

This study was designed to assess the relationships between emotion dysregulation, effortful control, and emotional flooding on both supportive and nonsupportive reactions to child distress in parents of children aged 3-8. Participating parents completed measures of emotion dysregulation, effortful control, emotional flooding, and both reactions to child distress using survey methodology. Data were analyzed using the PROCESS macro model 5 in SPSS software. Hypotheses were tested at the $p < .05$ threshold for statistical analysis.

This chapter begins with a description of the study participants. Next, study measures are described. Then study procedures, including permissions and recruitment, data collection, and data management, are reviewed. The study design and analysis plan are detailed. This chapter ends with steps taken in compliance with ethical guidelines.

Participants

Study participants were parents of children 3 to 8 years of age. Most emotion socialization research has studied parents of preschool-age children (see Denham, 2007). However, more recent investigations have shifted to middle childhood (e.g., Cassano Perry-Parrish, & Zeman, 2007), a time when critical development in children's comprehension of emotional life may promote more complex emotion socialization opportunities (Denham & Kochanoff, 2002). Therefore, the present study investigated parental emotion regulation and emotion socializing in families of 3 to 8-year-old children. Inclusion criteria required that participants were adults who (1) resided in the

U.S., (2) had completed at least 99% of their previous research studies or “Human Intelligence Tasks” (HITs) successfully, and (3) had a child between ages 3 and 8.

Tests of power were conducted to determine the sample size. Power analysis using G*Power software (Version 3.1, Faul, Erdfelder, Lang, & Buchner, 2007) revealed that, assuming a 95% confidence interval and a medium-sized effect of $f^2 = .15$ for 5 multiple regression predictors, statistically significant results would be obtained on 80% of opportunities (power = .80) with 92 participants. To ensure adequate power given that some potential participants might not meet inclusion criteria and to guard against drop-out, 729 participants were recruited from Amazon’s Mechanical Turk (MTurk). Participants received \$2.00 for their participation.

Prior to formal analysis, data were screened for survey response completion time in order to ensure that respondents had not responded randomly. Of 729 surveys completed, 101 were completed in less than three minutes. These surveys were omitted from the analysis. Participants who had not completed any items on the CCNES or MESQ were also omitted from analyses. Of the remaining 553 participants, only those who had children between the ages of 3 and 8 were included in the final analysis ($N = 528$ total).

Table 1 shows that, of the 528 participants, the majority (70%) were female. The largest group of participants was composed of subjects between the ages of 30 and 39, followed by ages 21 to 29, then ages 40 to 49, while less than 1% of participants were aged 50 or over. The majority of participants were married (73%), while 12% reported living together as a couple and 7% reported being single/not living with a partner. Less than 10% of participants reported being divorced, separated, or widowed. Forty-six

Table 1

Participant Demographics (N = 528)

Demographic	<i>n</i>	%
Sex		
Male	156	29.5
Female	370	70.1
Non-conforming	1	0.2
Age Groups		
21-29	87	17.0
30-39	345	37.8
40-49	90	15.6
50-59	4	0.8
Marital Status		
Married	387	73.3
Not married, but living together as a couple	65	12.3
Divorced	27	5.1
Widowed	2	0.4
Separated	8	1.5
Single, not living with a partner	39	7.4
Number of children living in household		
1	150	28.4
2	243	46.0
3	92	17.4
4	30	5.7
5	7	1.3
6+	5	1.0
Ethnicity		
European	360	68.2
African/Afro Caribbean	55	10.4
Latino/a	44	8.8
Asian	29	5.5
Native American	13	2.5
Middle Eastern	1	0.2

percent of participants reported that there were 2 children living in their household, with 28% reporting households with one child and 17% reporting households with three children. Fewer than 10% of participants reported having more than four children in their household. In terms of ethnicity, the majority of participants identified as Eastern or Western European (68%). Ten percent of participants identified as African or Afro Caribbean, while less than 10% identified as Latino/a, Asian, Native American, or Middle Eastern. Financial stress scores averaged 3.4 (SD = 0.9) on a 1 to 5 scale.

Measures

Demographic questionnaire. Participants completed a brief demographics questionnaire that asked them to report their sex, age, marital status, language, number of children in the household, age of children, and ethnicity, as summarized in Table 1.

Financial stress. Financial stress was assessed using a subjective and validated self-report measure adapted from Essex and colleagues (2002) consisting of three questions (e.g., “How much difficulty do you have in meeting the monthly payments of your household bills?”). Because researchers have argued that geographic differences in cost of living should be considered when studying families (Chien & Mistry, 2013), this measure of financial stress was chosen as a better indicator of the daily strain of financial difficulties than total income. Items were rated using a 5-point Likert scale (reverse-scored when appropriate) and total scores computed by averaging the three items. Cronbach’s alpha for the present study was $\alpha = .83$.

Difficulties in Emotion Regulation Scale (DERS). The DERS (Gratz & Roemer, 2004) was used to measure parents’ capacity for emotion regulation. The DERS is a 36-item self-report questionnaire that assesses individuals’ perception of difficulties

in emotion regulation. It includes 6 subscales: (1) lack of awareness of emotional responses (awareness), (2) lack of clarity of emotional responses (clarity), (3) non-acceptance of emotional responses (non-acceptance), (4) limited access to effective strategies (strategies), (5) difficulties in controlling impulses when experiencing negative affect (impulse), and (6) difficulties in engaging in goal-directed behavior when experiencing negative affect (goals). Participants were asked to indicate how often the items apply to themselves, with items rated on a 5-point Likert scale from 1 (almost never) to 5 (almost always).

Scores on the DERS are coded so that higher scores indicate greater difficulties in emotion regulation and the general score represents a global index of affect regulatory difficulties. A sample item is: “When I’m upset, I feel like I can remain in control of my behaviors” (reverse-scored; impulse control). The DERS has been widely used and well-validated. In samples of undergraduates, it has demonstrated excellent internal consistency, with an alpha coefficient value of .94 and alpha coefficients greater than .80 for each subscale (Gratz & Roemer, 2004). Recent widespread psychometric research on its latent structure in adult samples indicates that emotional awareness subscale consistently shares only modest intercorrelations with the other DERS sub-scales and demonstrates differential relations with criteria of interest (Bardeen, Fergus, & Orcutt, 2012). Some researchers have argued that awareness of negative emotional experience may not be sufficient for adaptive emotion regulation (Tull & Roemer, 2007).

Researchers have thus recommended that it be excluded from the calculation of the overall emotion regulation construct. Given this recommendation, and in order to prevent confounding emotion regulation capacities with emotion-related beliefs, the present study

excluded the emotional awareness subscale. Scores from the five remaining subscales were summed to create an overall measure of parental emotion regulation difficulty.

Cronbach's alpha for the present study was excellent ($\alpha = .95$).

Effortful control subscale (ECS) of the Adult Temperament Questionnaire (ATQ). The ECS of Evans and Rothbart (2007) is a 19-item scale measuring activation control, attentional control, and inhibitory control (e.g., "When interrupted or distracted, I usually can easily shift my attention back to whatever I was doing before"). Items are rated on a 7-point Likert scale from 1 (extremely untrue) to 7 (extremely true). Continuous effortful control scores are calculated by averaging participants' responses, with higher scores indicating greater effortful control. The ATQ been used extensively and has demonstrated strong psychometric properties in diverse community samples (Evans & Rothbart, 2007). It demonstrates good convergent and divergent validity with reliable subscales (Evans & Rothbart, 2007). Cronbach's alpha for the present study was $\alpha = .80$.

Coping with Children's Negative Emotions Scale (CCNES). The CCNES of Fabes et al. (1990) is a self-report measure wherein mothers and fathers respond to 12 hypothetical situations in which their child expresses distress (e.g., "If my child falls off his/her bike and breaks it, and then gets upset and cries, I would ..."). Each scenario is accompanied by six ways of responding to the child's distress in that particular situation, and parents indicate the likelihood of each possible response, ranging from 1 (very unlikely) to 7 (very likely). The measure produces six subscales: problem-focused reactions ("help my child figure out how to get the bike fixed"), emotion focused reactions ("comfort my child and try to get him/her to forget about the accident"),

expressive encouragement (“tell my child it's OK to cry”), distress reactions (“remain calm and not let myself get anxious;” reverse coded), minimization reactions (“tell my child that he/she is over-reacting”), and punitive reactions (“tell my child to stop crying or he/she won't be allowed to ride his/her bike anytime soon”). Previous researchers have calculated two aggregates: supportive (problem-focused, emotion-focused, expressive encouragement) and nonsupportive (distress, minimizing, punitive) responses (Fabes et al., 2002; Nelson, O'Brien, Blankson, Calkins, & Keane, 2009), which the current study used to investigate positive versus negative parental responses. The CCNES has good construct validity; its subscales have been associated with relevant constructs such as interpersonal reactivity, parental control, and parental anger. Internal consistency and test-retest reliability for this measure have been well established among parents of preschool and school-age children (Fabes et al., 2002). Internal reliabilities for the present study were $\alpha = .92$ for the supportive composite and $\alpha = .90$ for the nonsupportive composite.

The Maternal Emotional Style Questionnaire (MESQ). The MESQ of Lagacé-Séguin and Coplan (2005) is a self-report measure adapted from the Meta-Emotion Interview (MEI-Revised; Katz & Gottman, 1999). The MESQ is composed of two 7-item scales: Emotion Coaching and Emotion Dismissing. Emotion coaching items included: “When my child is sad, it’s time to get close.” Emotion Dismissing items included: “Childhood is a happy-go-lucky time, not a time for feeling sad or angry.” The MESQ was developed using a sample of mothers of preschool aged children and has demonstrated good psychometric properties, including stability, convergent validity, and construct validity (Lagacé-Séguin & Coplan, 2005). At least one subsequent study has

examined it with fathers and found that internal consistencies of the scales for fathers were commensurate with those reported in studies of mothers (Baker, et al., 2011). In this study, due to an error, one item (#9) was excluded from the emotion coaching scale. Internal reliabilities for the present current study were $\alpha = .68$ for coaching and $\alpha = .74$ for dismissing.

Parent Flooding scale (PFS). Parent emotional flooding was assessed using the 15-item PFS of Slep and Heyman (1998). This measure was designed to measure the degree to which parents experience their children's negative affect expressed during parent-child conflicts as unpredictable, overwhelming, and disorganizing (e.g., "I get all jumbled when my child is upset"). Five face valid items capture these three elements of flooding. Participants rate each item on a scale ranging from 1 (almost always) to 5 (never). Responses are reverse scored and averaged so that higher scores indicate greater flooding. While the PFS is a relatively new measure, it was recently validated in a community sample of mothers and fathers ($N = 453$) with children between 3 and 7 years old. It demonstrated good psychometric qualities, including excellent internal consistency and high reliability. Incremental validity tests suggest that the scale identifies a construct distinct from parents' experienced anger and their children's negative affect (Del Vecchio et al., 2016). Cronbach's alpha for the present study was excellent ($\alpha = .95$).

Children's Behavior Questionnaire Very Short Form (CBQ-VSF). Parents' perception of their child's dispositional negative emotionality was assessed using Putnam and Rothbart's (2006) 12-item Negative Affect Subscale of the CBQ-VSF. This measure of temperament was designed to assess children aged 3 to 8 by asking parents to rate their child's traits on a 7-point Likert scale. The negative affectivity subscale includes reports

of anger/frustration, fear, sadness, discomfort, and low soothability (Putnam & Rothbart, 2006). An item example from the Negative Affect Subscale is: “Gets quite frustrated when prevented from doing something s/he wants to do.” The negative affectivity score is calculated by taking the mean score of the 12 items. Scores are continuous, with higher scores indicating more temperamental negative reactivity. The CBQ-VSF has been validated in a number of studies assessing temperament in children aged 3 to 8 years and has demonstrated high internal consistency (Ryckman et al., 2017). Cronbach’s alpha for the present study was $\alpha = .78$.

The Social Desirability scale (SDS-SF Form C). As a control variable for the evaluation of parent-report measures, the 13-item SDS-SF of Reynolds (1982) was administered in order to measure the degree to which respondents answered truthfully (as opposed to misrepresenting themselves in order to manage their self-presentation). The SDS-SF is modified from the Marlowe-Crowne Social Desirability scale (MC-SDS, Crowne & Marlowe, 1960). Higher scores indicate a greater tendency to respond according to presumed social desirability norms. The SDS-SF has demonstrated strong psychometric properties (Loo & Thorpe, 2000), with internal reliability ranging from .86 to .94 (Fischer & Fick, 1993), as well as concurrent validity with other measures of socially desirable responding (Kozma & Stones, 1987) with a variety of populations (Bornstein et al., 2015). Cronbach’s alpha for the present study was $\alpha = .77$.

The Mind-Mindedness (MM) scoring manual. Parents’ capacity to mentalize while describing an interaction with their distressed child was assessed through a qualitative exercise. This was based on a single question interview developed by Meins, Fernyhough, Russel, and Clark-Carter (1998) in which a parent is asked to describe his or

her child. In the current study, participants were asked to describe, in writing, a recent situation in which their child displayed negative affect. Further, they were asked, “What did you say or do?”

For a subset of participants (20%), two trained coders rated parents’ descriptions of the emotional interaction using one of four categories in the MM scoring manual (Meins et al., 1998): mental attributes, behavioral attributes, physical attributes, and general descriptors for descriptions not captured by one of the other three categories. Mind-mindedness was measured by calculating the proportion of the total number of descriptors that were mental attributes. Higher proportional scores are understood to represent increased parental mind-mindedness.

Despite the simplicity of the measure, the MM scale has demonstrated strong validity and reliability (summarized in Walker, Wheatcroft, & Camic, 2012). It has been used with both mothers and fathers (Arnott & Meins, 2007), and inter-rater reliability has been shown to be constantly high in numerous studies ($k = 0.90$). The measure has demonstrated good construct validity, with positive relations to maternal sensitivity and children’s attachment security (Meins et al., 1998), and it has been shown to predict children’s ability to understand others’ minds (Meins, 1998; Meins & Fernyhough, 1999).

Unlike other measures for mentalization, the MM scale was developed with mothers of school aged children, and the coding system was developed to incorporate specific phrases that mothers used to describe children in this age range (Meins & Fernyhough, 2010), making it a good fit for this study. Further, the scale aims to shed light on the intersection between parental cognitions and parental behaviors. By asking parents to describe their child during a difficult interaction, this study aimed to capture

parents' ability to attend to their child's mind while discussing their child's behaviors.

The MM therefore seemed suitable given the current study's goal of probing behavioral implications of parents' attitudes about their own emotions.

Participants' responses to the qualitative question were scored according to the MM scale (Meins et al., 1998). There were two raters, including the researcher, and the coding system was introduced and discussed during two hour-long training sessions. Training included understanding the concept of mentalization as defined by Fonagy and Target (1997), studying the MM scoring manual (Meins & Fernyhough, 2010), and practicing scoring of four dummy transcripts. Each rater then scored four transcripts independently and met to discuss disagreements in coding and to refine codebook definitions. The raters then separately analyzed a subset of the data and periodically met to discuss each batch of ratings and refine emergent codes until reaching consensus. Rater 1 scored 50 responses and rater 2 scored 50 responses. In total, 20 descriptions by parents (20% of the sub-sample) were scored in common by the two raters, yielding an intraclass correlation coefficient (ICC) of $r = .85$.

Procedure

Permissions. This study received institutional review board (IRB) approval from Long Island University prior to the onset of the study.

Data collection. Potential participants were presented with a brief description of the study and then asked whether or not they chose to participate. Those who chose to participate were provided a link to the study page via Qualtrics, a secure online survey program. The link took participants directly to an informed consent page. After providing informed consent, participants then completed the quantitative study measures. Subjects

then completed the qualitative items. Upon completion, participants were debriefed about the purpose of the study and were provided with information regarding national mental health lines in the event that completing the survey had led to feelings of distress.

Data Management. Study data were downloaded from Qualtrics using the researcher's private password. Data were checked for errors and scored in preparation for analysis in SPSS statistical software.

Study Design and Data Analysis Plan. This study employed an observational correlational design in that participants were only measured once and there was no experimental manipulation.

Study data were analyzed using SPSS statistical software (versions 27 and 28). Prior to running analyses, Little's Missing Completely at Random (MCAR) test was conducted for both main independent variables used (CCNES-S and CCNES-NS). Missingness for items ranged from 0–.6% with results from Little's MCAR test indicating that data were missing completely at random ($p > .05$). Thus, list-wise deletion was performed in all subsequent analyses.

Preliminary analyses included data descriptives, correlations among study variables, and analysis of variance (ANOVA) to assess whether study variables significantly differed based on demographic variables. Study hypotheses were tested using model 5 of the Hayes PROCESS macro in SPSS (Hayes, 2013). Results were considered to be statistically significant at the $p < .05$ threshold. The proposed models are provided in Figure 1.

Compliance with Ethical Guidelines. This study complied with the ethical guidelines of the American Psychological Association and Long Island University,

including IRB approval, informed consent, and protecting participant rights to anonymity, privacy, and confidentiality. Anonymity was fostered by not collecting participant names or individuation information (telephone numbers, email addresses, etc.). Cases were tracked using alphanumeric codes (S001, S002, S003...). Privacy and confidentiality were ensured by not sharing study data with anyone outside of the study (the researcher and committee).

Chapter V

Results

Preliminary Analyses

Preliminary analyses included assessing for normality of distribution, skewness and kurtosis, multicollinearity, and calculating descriptive statistics. Preliminary analyses revealed that all main variables, including emotion regulation; effortful control; supportive and nonsupportive reactions to child distress; emotion coaching and emotion dismissing; and emotional flooding, met assumptions of normality, with skewness and kurtosis within the acceptable range of ± 1 (Table 2). Therefore, a series of independent samples *t*-tests were used to assess for demographic effects among the main variables.

Inter-variable Correlations. Correlations among the main study variables are displayed in Table 3. All correlations were conducted using Pearson's *r*. Emotion dysregulation was significantly correlated with nonsupportive responses to child distress and with parental emotional flooding in the positive direction, and with emotion coaching and effortful control in the negative direction. Further, supportive responses to child distress were significantly correlated with emotion coaching, emotion dismissing, effortful control, and parental emotional flooding in the positive direction, and with nonsupportive responses to child distress in the negative direction. Nonsupportive responses to child distress were significantly correlated with emotion dismissing and parental emotional flooding in the positive direction, and with emotion coaching and effortful control in the negative direction. Emotion coaching was significantly correlated with emotion dismissing and effortful control in the positive direction, and with parental

Table 2

Descriptive Statistics of Main Study Variables

Variable	<i>n</i>	<i>M (SD)</i>	Skew	Kurtosis
DERS	528	65.17 (21.31)	0.45	-0.57
ECS	528	4.78 (0.91)	0.10	-0.20
PFS	527	2.14 (0.76)	0.68	0.50
CCNES-Su	528	5.17 (0.76)	-0.46	-0.06
CCNES-NS	528	2.95 (0.79)	0.93	0.78
MESQ-EC	527	3.92 (0.55)	-0.10	-0.33
MESQ-ED	527	3.58 (0.63)	-0.13	-0.03

Note. *n* = number of participants; *M* = mean; *SD* = standard deviation; DERS = Difficulties in Emotion Regulation Scale (Gratz & Roemer, 2004); ECS = Effortful Control Subscale of the Adult Temperament Questionnaire (ATQ; Evans & Rothbart, 2007); PFS= Parent Flooding Scale (Slep & Heyman, 1998); CCNES-Su = Coping with Children's Negative Emotions Scale - Supportive subscale, CCNES-NS = Coping with Children's Negative Emotions Scale - Nonsupportive subscale (Fabes, Eisenberg, & Bernzweig, 1990); MESQ-EC = Maternal Emotional Style Questionnaire - Emotion Coaching subscale; MESQ-ED = Maternal Emotional Style Questionnaire - Emotion Dismissing subscale (Lagacé-Séguin & Coplan, 2005).

Table 3

Pearson's Correlations Among Main Study Variables

Variable	DERS	CCNES-Su	CCNES-NS	MESQ-EC	MESQ-ED	ECS
CCNES-Su	-.07					
CCNES-NS	.30**	-.24**				
MESQ-EC	-.09*	.53**	-.12**			
MESQ-ED	-.03	.12**	.18**	.47**		
ECS	-.62**	.20**	-.30**	.16**	.06	
PFS	.44**	.15**	.33**	-.13**	-.02	-.44**

Note. $N=528$; DERS = Difficulties in Emotion Regulation Scale (Gratz & Roemer, 2004); CCNES= Coping with Children's Negative Emotions Scale (Fabes, Eisenberg, & Bernzweig, 1990): S= Supportive subscale, NS=Nonsupportive subscale; MESQ= Maternal Emotional Style Questionnaire (Lagacé-Séguin & Coplan, 2005), EC=Emotion Coaching subscale; ED=Emotion Dismissing subscale; ECS= Effortful Control Subscale of the Adult Temperament Questionnaire (ATQ; Evans & Rothbart, 2007); PFS= Parent Flooding Scale (Slep & Heyman, 1998).

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

emotional flooding in the negative direction. Of note, emotion coaching and emotion dismissing were significantly positively correlated.

Demographic effects. Preliminary analyses were conducted to examine the potential effects of demographic variables on the main variables in the study. An independent samples t-test indicated that levels of emotion dysregulation, effortful control, emotional flooding, and emotion dismissing did not differ significantly for men and women. However, parental responses to child distress and emotion coaching did vary significantly by parent sex. Specifically, female participants reported significantly higher levels of supportive reactions to child distress and emotion coaching than male participants. Women reported significantly lower levels of nonsupportive responses than men (see Table 4).

Table 5 shows that social desirability was significantly negatively correlated with emotion dysregulation, nonsupportive responses to child negative emotions, and parental emotional flooding, and significantly positively correlated with emotion coaching and effortful control. Parent age was significantly negatively correlated with emotion dysregulation. Being married was significantly positively correlated with emotion coaching and effortful control. Number of children in the household was significantly negatively correlated with supportive responses to child negative emotions. Financial stress was significantly positively correlated with emotion dysregulation and parental emotional flooding. Child dispositional negativity was significantly negatively correlated with effortful control and significantly positively correlated with emotion

Table 4

Independent Samples t-Tests: Differences in Dependent Variables Based on Sex

Scale	Male (<i>n</i> = 156) <i>M</i> (<i>SD</i>)	Female (<i>n</i> = 370) <i>M</i> (<i>SD</i>)	<i>t</i>	<i>df</i>	<i>p</i>
DERS	62.67 (20.47)	66.01 (21.44)	1.66	524	.56
CCNES-Su	4.97 (0.70)	5.27 (0.77)	4.15	524	<.0001
CCNES-NS	3.10 (0.77)	2.89 (0.79)	-2.60	524	.01
MESQ-EC	3.83 (0.55)	3.95 (0.54)	2.30	523	.02
MESQ-ED	3.60 (0.60)	3.56 (0.65)	-0.63	523	.53
ECS	4.78 (0.96)	4.76 (0.89)	0.20	524	.84
PFS	2.10 (0.71)	2.16 (0.79)	0.78	523	.44

Note. DERS = Difficulties in Emotion Regulation Scale; CCNES-Su = Coping with Children's Negative Emotions Scale - Supportive subscale, CCNES-NS = Coping with Children's Negative Emotions Scale - Nonsupportive subscale; MESQ-EC = Maternal Emotional Style Questionnaire - Emotion Coaching subscale; MESQ-ED = Maternal Emotional Style Questionnaire - Emotion Dismissing subscale; ECS = Effortful Control Subscale of the Adult Temperament Questionnaire; PFS = Parent Flooding Scale; *M* = mean; *SD* = standard deviation; *t* = *t* test statistic; *df* = degrees of freedom; *p* = *p*-value.

Table 5

Correlations between Demographics and Study Variables

Demographic	DERS	CCNES-Su	CCNES-NS	MESQ-EC	MESQ-ED	ECS	PFS
SDS-SF	-.44**	.08	-.09*	.15**	.12**	.39**	.25**
Parent Age	-.12**	.00	-.08	-.05	-.01	.07	-.04
Marital Status	.00	.03	.01	.10*	.11*	-.03	-.03
# Children	.00	-.11*	.02	-.06	-.03	-.03	.01
FSQ	.22**	.02	-.02	.00	-.05	-.24**	.11*
CBQ	.33**	-.08	.22**	-.07	.03	-.29**	.43**

Note. SDS-SF = Social Desirability scale; FSQ = financial stress; CBQ = Child dispositional negativity; DERS = Difficulties in Emotion Regulation Scale; CCNES-Su = Coping with Children's Negative Emotions Scale - Supportive subscale, CCNES-NS = Coping with Children's Negative Emotions Scale - Nonsupportive subscale; MESQ-EC = Maternal Emotional Style Questionnaire - Emotion Coaching subscale; MESQ-ED = Maternal Emotional Style Questionnaire - Emotion Dismissing subscale; ECS = Effortful Control Subscale of the Adult Temperament Questionnaire; PFS = Parent Flooding Scale.

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

dysregulation, nonsupportive responses to child negative emotions, and parental emotional flooding.

Ethnicities were grouped into four major categories (i.e., Asian, African, European, Latino/a) for the purposes of covariate testing. Categories were selected based on highest frequencies in order to minimize the influence of outliers. In order to determine whether there were significant differences in responses to child distress according to ethnicity, univariate ANOVAs were conducted. Table 6 shows the means and standard deviations of supportive responses to child distress based on ethnicity. A one-way ANOVA revealed that participants significantly differed in supportive responses to child distress depending on their ethnicity, $F(3,484) = 3.30, p = .02$. Pairwise comparisons revealed that Asian participants scored significantly lower than European ($p = .002$), Latino/a ($p = .03$), and African American ($p = .03$) participants in supportive responses to child distress. There were no other statistically significant differences between ethnicities in supportive responses to child distress. Table 7 shows the means and standard deviations of nonsupportive responses to child distress based on ethnicity. A one-way ANOVA revealed that participants significantly differed in nonsupportive responses to child distress depending on their ethnicity, $F(3,484) = 6.50, p < .001$. Pairwise comparisons revealed that European participants scored significantly lower than Asian ($p = .003$), Latino/a ($p = .01$), and African American ($p = .01$) participants in nonsupportive responses to child distress. There were no other statistically significant differences between ethnicities in nonsupportive responses to child distress.

Table 6

Ethnicity and Supportive Responses to Child Distress Statistics

Ethnicity	Mean	<i>SD</i>	<i>N</i>
African American	5.13	0.89	55
Latino/a	5.17	0.81	44
European	5.22	0.72	360
Asian	4.77	0.84	29
Total	5.18	0.76	488

Table 7

Ethnicity and Nonsupportive Responses to Child Distress Statistics

Ethnicity	Mean	<i>SD</i>	<i>N</i>
African American	3.14	0.90	55
Latino/a	3.16	0.97	44
European	2.84	0.70	360
Asian	3.27	0.78	29
Total	2.93	0.77	488

For these reasons, the primary analyses for Model A (Supportive responses to child distress) were conducted with and without demographic variables that were significantly related to CCNES-Su: sex, socially desirable responding, number of children in the household, and Asian ethnicity. Similarly, the primary analyses for Model B (Nonsupportive responses to child distress) were conducted with and without sex, socially desirable responding, child dispositional negativity, and European ethnicity as covariates because these demographics were significantly correlated with CCNES-NS.

Primary Analyses

All hypotheses were tested using regression analyses with the SPSS PROCESS model 5 macro (Hayes, 2013). Separate models were run for supportive and nonsupportive responses to child negative emotion. These regressions were conducted first controlling for social desirability only and then controlling for all demographics that were significantly correlated with the outcome variables (sex, socially desirable responding, number of children, and Asian ethnicity in Model A; sex, socially desirable responding, child dispositional negativity, and European ethnicity in Model B).

Model A: Supportive responses to child distress. For the Model A analyses, supportive responses to child negative emotions (CCNES-Su) was the dependent (outcome) variable, parent emotion dysregulation (DERS) was the independent (predictor) variable, parent effortful control (ECS) was the mediator variable, parent emotional flooding (PFS) was the moderator variable, and the Social Desirability scale (SDS-SF) was the covariate. For Model A, the combination of independent, mediator, moderator, and covariate variables accounted for 5% of the variance in supportive responses to child distress, $F(5,521) = 5.72, p < .0001, R^2 = .05$.

Model A Hypothesis 1. Model A Hypothesis 1 stated that parent emotion dysregulation would be significantly negatively related to parent supportive responses to child negative emotions. This hypothesis was not supported. Figure 2 shows that parent emotion dysregulation (DERS) was not significantly related to parent supportive responses to child negative emotions (CCNES-Su), $b = .007$, $SE = .005$, $t = 1.46$, $p = .15$. The relationship remained non-significant after accounting for sex, socially desirable responding, number of children in household, and Asian ethnicity ($p = .12$).

Model A Hypothesis 2. Model A Hypothesis 2 predicted that parent emotion dysregulation would be significantly negatively related to parent effortful control. This hypothesis was supported. Figure 2 shows that DERS (parent emotion dysregulation) was significantly negatively related to ECS (parent effortful control), $b = -.02$, $SE = .002$, $t = -14.66$, $p < .0001$. The relationship remained significant after accounting for sex, socially desirable responding, number of children in household, and Asian ethnicity ($p < .0001$).

Model A Hypothesis 3. Model A Hypothesis 3 predicted that parent emotion dysregulation would have a significant negative indirect effect on supportive responses through parent effortful control. This hypothesis was supported. Figure 2 shows that the indirect effect parent emotion dysregulation (DERS) on parent supportive responses to child negative emotions (CCNES-Su) through parent effortful control (ECS) was negative and statistically significant, $b = -.0043$, 95% confidence interval: $-.0065$ to $-.0022$. Because the indirect effect was negative and the 95% confidence interval did not include zero, this finding supported Model A Hypothesis 3.

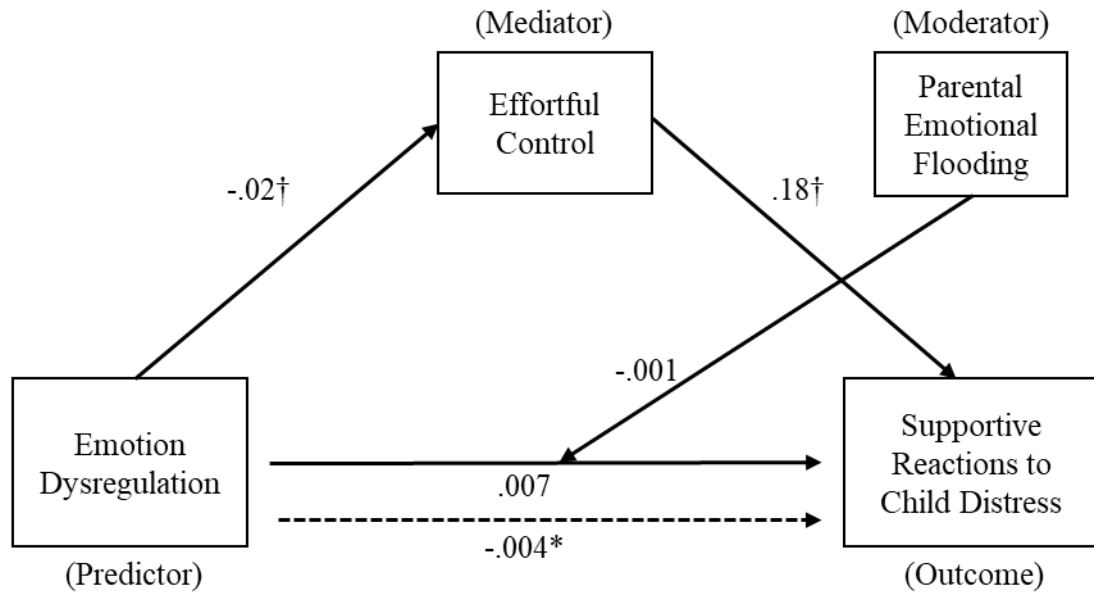


Figure 3. Model A: Supportive responses to child distress.

* $p < .05$

$^\dagger p < .0001$

Note. Dashed line = Indirect effect

The indirect effect remained significant after accounting for ethnicity ($b = -.0040$, 95% confidence interval: $-.0062$ to $-.0019$).

Model A Hypothesis 4. Model A Hypothesis 4 predicted that parental flooding would significantly moderate the link between parent emotion dysregulation and supportive responses to child negative emotions, so that the negative relationship between parental dysregulation and supportive responses will be weaker as emotional flooding increases. This hypothesis was not supported. Figure 2 shows that the interaction between parent emotion dysregulation (DERS) and parent supportive responses to child negative emotions (CCNES-Su) was not statistically significant, $b = -.001$, $SE = .002$, $t = -0.57$, $p = .57$. The interaction remained non-significant after accounting for sex, socially desirable responding, number of children in household, and Asian ethnicity ($p = .48$).

Model B: Nonsupportive responses to child distress. For the Model B analyses, nonsupportive responses to child negative emotions (CCNES-NS) was the dependent (outcome) variable, parent emotion dysregulation (DERS) was the independent (predictor) variable, parent effortful control (ECS) was the mediator variable, parent emotional flooding (PFS) was the moderator variable, and the Social Desirability scale (SDS-SF) was the covariate. For Model B, the combination of independent, mediator, moderator, and covariate variables accounted for 16% of the variance in supportive responses to child distress, $F(5,527) = 19.54$, $p < .001$, $R^2 = .16$.

Model B Hypothesis 1. Model B Hypothesis 1 predicted that parent emotion dysregulation would be significantly positively related to parent nonsupportive responses to child negative emotions. This hypothesis was not supported. Figure 3 shows that parent emotion dysregulation (DERS) was not significantly positively related to parent

nonsupportive responses to child negative emotions (CCNES-NS), $b = .009$, $SE = .005$. $t = 1.93$, $p = .054$. The relationship remained non-significant after accounting for socially desirable responding, sex, (European) ethnicity, and child dispositional negativity ($p = .08$).

Model B Hypothesis 2. Model B Hypothesis 2 predicted that parent emotion dysregulation would be significantly negatively related to parent effortful control. This hypothesis was supported. Figure 3 shows that DERS (parent emotion dysregulation) was significantly positively related to ECS (parent effortful control), $b = -.02$, $SE = .002$, $t = -14.66$, $p < .0001$. The relationship remained significant after accounting for socially desirable responding, sex, (European) ethnicity, and child dispositional negativity ($p < .0001$).

Model B Hypothesis 3. Model B Hypothesis 3 predicted that parent emotion dysregulation would have a significant positive indirect effect on nonsupportive responses through parent effortful control. This hypothesis was supported. Figure 3 shows that the indirect effect of parent emotion dysregulation (DERS) on parent nonsupportive responses to child negative emotions (CCNES-NS) through parent effortful control (ECS) was positive and statistically significant, $b = .0029$, 95% confidence interval: .0008 to .0048. Because the indirect effect was positive and the 95% confidence interval did not overlap with zero, this finding supported Model B Hypothesis 3. The indirect effect remained significant after accounting for socially desirable

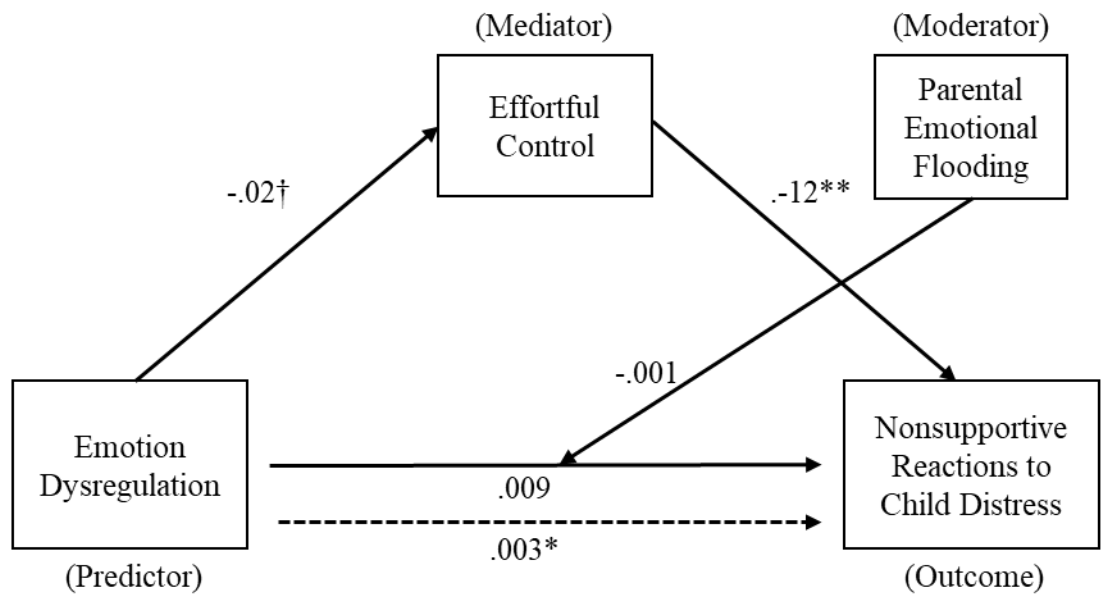


Figure 4. Model B: Nonsupportive responses to child distress.

* $p < .05$

** $p < .01$

† $p < .0001$

Note. Dashed line = Indirect effect

responding, sex, (European) ethnicity, and child dispositional negativity ($b = .0018$, 95% confidence interval: .0001 to .0036).

Model B Hypothesis 4. Model B Hypothesis 4 predicted that parental emotional flooding would significantly moderate the link between parent emotion dysregulation and nonsupportive responses to child negative emotions, so that the positive relationship between parental emotion dysregulation and nonsupportive responses would be stronger as emotional flooding increases. This hypothesis was not supported. Figure 3 shows that the interaction between parent emotion dysregulation (DERS) and parent nonsupportive responses to child negative emotions (CCNES-NS) was not statistically significant, $b = -.001$, $SE = .002$, $t = -0.71$, $p = .48$. The interaction remained non-significant after accounting for socially desirable responding, sex, (European) ethnicity, and child dispositional negativity ($p = .59$).

Supplemental Analysis

Hypothesis 1a and 1b stated that parent emotion dysregulation would be significantly negatively related to parent supportive responses and significantly positively related to parent nonsupportive responses to child negative emotionality. This hypothesis was also tested using simple correlation, with DERS as the predictor (independent) variable and with CCNES-Su (for H1a, CCNES-NS for H1b) as the outcome (dependent) variable. In this analysis, hypothesis 1 was partially supported. DERS scores were not significantly correlated with CCNES-Su scores ($r = -.07$, $r^2 = .005$, $p = .12$). However, DERS scores were significantly correlated with CCNES-NS scores in the positive direction ($r = .30$, $p < .0001$). DERS scores accounted for 9% of the variance in CCNES-NS scores ($r^2 = .09$). This finding supported Hypothesis 1b.

Exploratory Hypotheses

Exploratory Hypothesis 1. The first exploratory hypothesis investigated the relationships between MESQ-EC (emotional coaching), MESQ-ED (emotion dismissing), CCNESS-Su (supportive), and CCNESS-NS (nonsupportive) variables. This question was investigated using a Pearson correlation between scores on the MESQ coaching scale and the CCNES supportive composite as well as between scores on the MESQ dismissing scale and the CCNES nonsupportive composite.

Table 3 shows that MESQ-EC was significantly correlated with MESQ-ED and CCNESS-Su in the positive direction and CCNESS-NS in the negative direction. MESQ-ED was significantly correlated with CCNESS-Su and CCNESS-NS in the positive direction. CCNESS-Su was significantly correlated with CCNESS-NS in the negative direction.

Exploratory Hypothesis 2. The second exploratory hypothesis investigated whether there was a relationship between parents' level of mind-mindedness, or mentalization, while describing an interaction with their child and the main study variables.

A series of Pearson's correlations were done to explore the relationships between the main study variables and the level of mind-mindedness demonstrated on the qualitative description of an experience with child negative emotion. Parents' mentalization when describing an interaction with their child (as measured by the MM scale) showed no significant correlations with any of the main study variables (each $p > .05$).

Summary of Results

Table 8 shows that the same general pattern was evident for Model A (Parent supportive responses to child negative emotions) and for Model B (Parent nonsupportive responses to child negative emotions). Emotion dysregulation was not significantly, negatively associated with parent supportive responses to child negative emotions, which failed to support Hypothesis 1 for Model A. Emotion dysregulation was not significantly, positively associated with parent nonsupportive responses to child negative emotions, which failed to support Hypothesis 1 for Model B.

Hypotheses 2 was supported for Model A and for Model B, as emotion dysregulation was significantly, negatively associated with effortful control. Effortful control was a significant negative mediator of the relationship between emotion dysregulation and parent supportive responses to child negative emotions, supporting Hypothesis 3 for Model A, and a significant positive mediator of the relationship between emotion dysregulation and parent nonsupportive responses to child negative emotions, supporting Hypothesis 3 for Model B. Lastly, parental emotional flooding was not a significant mediator of the relationship between emotion dysregulation and either parent supportive responses to child negative emotions or parent nonsupportive responses to child negative emotions, failing to support Hypothesis 4 for Model A or for Model B.

These findings are discussed in the following chapter.

Table 8

Results Summary

Hypothesis	IV	DV	Mediator	Moderator	Hypothesis Supported?
<u>Model A: Parent Supportive Responses to Child Negative Emotions</u>					
1	DERS	CCNES-Su			No
2	DERS	ECS			Yes
3	DERS	CCNES-Su	ECS		Yes
4	DERS	CCNES-Su		PFS	No
<u>Model B: Parent Nonsupportive Responses to Child Negative Emotions</u>					
1	DERS	CCNES-NS			No
2	DERS	ECS			Yes
3	DERS	CCNES-NS	ECS		Yes
4	DERS	CCNES-NS		PFS	No

Note. DERS = Difficulties in Emotion Regulation Scale; CCNES-Su = Coping with Children's Negative Emotions Scale - Supportive subscale, CCNES-NS = Coping with Children's Negative Emotions Scale - Nonsupportive subscale; ECS = Effortful Control Subscale of the Adult Temperament Questionnaire; PFS = Parent Flooding Scale.

Chapter VI

Discussion

Study Aims

Parents can play a critical role in their children's developing emotional competence. Existing research suggests that parents socialize their children's emotions through their responses to children's emotional displays, which has implications for children's social emotional functioning (Denham, 2007; Eisenberg et al., 1998; Morris et al., 2007). However, there is relatively little research on parental factors that predict how parents respond to children's distress.

This study built upon Belsky's (1984) model of parent emotion socialization in which parents' psychological resources are among the main predictors of their parenting behaviors. It also built upon Eisenberg and colleagues' (1998) model of emotion socialization, which posits that parenting behaviors are determined by parent characteristics, contextual factors, and child qualities. Specifically, it has been suggested that parents' self-regulatory capacities may impact their ability to respond supportively to their children's emotions (Hajal & Paley, 2020; Morris et al., 2007). However, despite the fact that parental emotion regulation and parental socialization of child emotion are deeply interconnected, the research and theory in these two areas have yet to fully merge. Thus, the purpose of the current study was to examine the relatively understudied associations between parents' self-regulation and their emotion socializing behaviors.

In order to do so, the relationship between parental emotion dysregulation and responses to child distress was investigated. Because recent research has called on investigations to probe both cognitive and emotional aspects of self-regulation, the

current study sought to examine whether effortful control might serve as a mediator in the relationship between parental emotion dysregulation and responses to child distress. Further, it examined whether parental emotional flooding moderated the relationship between parents' emotion dysregulation and their reactions to child negative emotions. In addition, this study explored the relationship between parental emotion coaching and emotion dismissing beliefs and their supportive and nonsupportive responses to child distress. Finally, this study explored relationships between the main study variables (emotion regulation, effortful control, parent emotional flooding, and supportive vs. nonsupportive responses to child negative emotion) and parental mentalizing in parents' descriptions of encounters with their dysregulated children.

This chapter begins with a summary of the current findings and an explanation of possible theoretical implications. Study limitations and directions for future research are then described. Finally, the chapter discusses clinical implications of the results.

Effortful Control as a Mediator in the Relationship between Emotion Dysregulation and Emotion Socialization Behaviors

The primary finding of this study was that effortful control mediates the relationship between emotion dysregulation and parental responses to child distress. Interestingly, results from multivariate regression analyses indicated that parental emotion dysregulation did not significantly predict either supportive or nonsupportive responses to child distress. This non-significant direct effect suggests that the effect of emotion dysregulation on emotion socialization *not through the mediator* (i.e., effortful control) is negligible. Therefore, the effect of emotion dysregulation on responses to child distress seems to act through the mechanism of effortful control.

As expected, the indirect effect of emotion dysregulation on both supportive and nonsupportive responses to child distress through effortful control was found to be significant. This indicates that although emotion dysregulation did not significantly predict responses to child negative affect, there was a significant pathway from emotion dysregulation to parental responses to child distress through effortful control. In other words, it appears that greater emotion regulation, combined with the ability to modulate reactivity characteristic of those high in effortful control results in more supportive—and fewer nonsupportive—responses to child distress.

This finding is important because, despite a robust body of literature on effortful control in childhood and adolescence, it has been a relatively understudied construct in parenting and emotion socialization research. The results are consistent with Eisenberg et al.'s (1998) model conceptualizing parental effortful control as influencing parenting practices. These results build upon more general findings regarding the relationship between maternal effortful control and positive parenting behaviors (e.g., Bridgett et al., 2011). They also support Valiente, Lemery-Chalfant, and Reiser's (2007) findings that parental effortful control predicted positive—and inhibited negative—responses to children's distress. And they are in line with recent findings that parent inhibitory control is positively correlated with sensitive and responsive parenting behaviors (Shaffer & Obradović, 2017).

Further, these results support the idea that parents' who can shift their attention and thoughtfully modulate their reactivity will be more likely to respond supportively in the face of their child's distress. Because effortful control is understood to involve subjective feelings about one's ability to exert control over one's thoughts and emotions

(Eisenberg et al., 2004), it makes sense that it would predict supportive responses in affectively-charged scenarios. Most parents *want* to respond sensitively when their children are dysregulated but often struggle to do so. Greater effortful control seems to enable individuals to override reflexive behavioral responses and willfully engage in adaptive behaviors. Parents who are better able to consciously inhibit an undesired emotion and replace it with a desired one may also be less likely to react in a punitive manner when their child expresses negative affect.

The importance of parental emotion regulation emphasizing attention shifting and cognitive control capacities is underscored by the mediational models associating these capacities with both supportive and nonsupportive parental socialization practices. Although causal conclusions cannot be derived, these findings are consistent with the view that parental capacity to modulate reactivity motivates efforts to engage children in problem-solving and other adaptive responses to negative affect—and decreases the impulse to react punitively (Meyer et al., 2014). For example, a child’s screaming might be aversive to many parents, and may induce anger or distress. Those who are able to shift their attention away from the unpleasant sound and toward listening to what the child is saying are more likely to convey support to the child.

Effortful control thus may be part of a process by which parents allocate their finite internal resources while experiencing many simultaneous demands on them. Healthy emotion coaching requires parents to engage in multiple processes, including interpreting their child’s emotional cues, recognizing the value of their child expressing negative emotions, helping the child label these emotions, validating the child’s experience, and facilitating problem-solving (Gottman et al., 1996). Parents must engage

in these tasks while managing myriad (often conflicting) emotions arising within themselves (e.g., frustration, embarrassment, guilt, anxiety). Robust response inhibition skills and the ability to suppress interference characteristic of effortful control likely aid these processes.

The finding that parents' responses to child negative affect can be improved partly through the cognitive control path, and not purely through the emotion regulation path, suggests that parents' cognitive control capacities may play a crucial role in supporting the development of their child's emotional competence. It also enriches our understanding of emotion socialization as involving not just an appreciation for the value of the full range of human emotions but also the capacity to modulate feelings and attend to the child's perspective even in negatively charged situations. The present study thus highlighted the importance of further investigation into the relationship between effortful control, emotion regulation, and emotion socialization.

Emotion Dysregulation and Effortful Control

Also as expected, parent emotion dysregulation was significantly negatively related to parent effortful control. This result builds upon previous research findings that effortful control is negatively correlated with emotion dysregulation (Bell-Thomson, 2014; Skowron & Dendy, 2004). It is an important addition to parenting research because effortful control has been less studied in the context of parents' regulation than in the context of children's and adolescents' regulatory functioning. This finding is consistent with Bowen's theory (1978) and research (Skowron & Dendy, 2004) showing that engaging in conscious effortful control of behavior involves the ability to differentiate between thinking and feeling systems. Effortful control seems to be instrumental in

parents' ability to self-soothe when anxious and to think clearly in the throes of intense emotion.

These results indicate the importance of top-down or “cold” regulatory strategies of affective modulation. Notably, all of the DERS subscale items appear in the context of negative emotion (i.e., “when I am upset”). In contrast, effortful control as measured by the ATQ captures the ability to shift attention and modulate reactions without cues about emotional states, or in some cases, in the context of positive emotion (e.g., “When I'm excited about something, it's usually hard for me to resist jumping right into it before I've considered the possible consequences”). The decontextualized cognitive abilities captured by effortful control seem to be crucial in modulating emotional arousal, though relations between these processes are likely bidirectional.

Emotion Dysregulation and Responses to Child Distress

Regarding the link between parental emotion regulation and emotion socialization behaviors, it was predicted that emotion dysregulation would be positively related to unsupportive responses to child distress and negatively related to supportive responses. While this was not supported by regression analyses, it was partially supported by bivariate correlations. Results from simple correlations indicated that emotion dysregulation was significantly positively correlated with nonsupportive responses to child distress. This may be because parents with emotion regulation deficits believe that emotions are upsetting and unpredictable. Thus, in an effort to prevent their children's emotion dysregulation from amplifying, they may try to minimize their children's experience of negative emotions.

Emotion dysregulation was not, however, correlated with supportive responses to child displays of negative affect. While this result was contrary to this study's hypothesis, past research has also found that models predicting parents' supportive reactions to child negative emotionality were nonsignificant when associations between emotion regulation and nonsupportive responses were significant (Hughes & Gullone, 2010; Wong et al., 2009). This may suggest that emotion dysregulation plays a role in parent emotion socializing more by fostering negative responses to child distress than by undermining constructive ones. It may be that parental emotion regulation capacities are necessary but not sufficient for supportive emotion socialization behaviors.

When interpreting these results, it is worth noting that the measure capturing emotion regulation, the Difficulties in Emotion Regulation Scale (DERS), primarily measures *deficits* in emotion regulation (though it is widely used in studies trying to capture emotion regulation). Most items on this measure begin with the phrase "when I am upset..." (e.g., "When I'm upset, I feel out of control"). Thus, the DERS likely taps primarily negative emotions. It is possible that measures directly assessing positive aspects of emotion regulation would predict parents' supportive reactions to child distress. Another possibility is that parents who find it easy to regulate their own emotions might minimize their child's negative affect out of a lack of insight into the child's experience just as often as they may provide supportive responses because they can easily remain calm. While these basic correlations build on several past research findings, they did not hold up in the more complex model. This suggests that there is a relationship between emotion dysregulation and nonsupportive responses to child distress but that effortful control is the key mechanism driving this relationship.

Parental Emotional Flooding

It was predicted that parental emotional flooding would moderate the relationship between parental emotion dysregulation and supportive responses to child distress. This reflects an attempt to understand the processes that might interrupt the link between emotion dysregulation and emotion socialization. Flooding is a construct developed by Gottman (1993) in order to explain people's behavior during emotional conflicts with their spouses. Theoretically, when a person is overwhelmed, or "flooded" by a partner's negative emotions, one's capacity for coping suffers. Higher order cognitive processing is compromised, and the individual is motivated to end the aversive experience. Slep and O'Leary (2007) argued that this construct applies to parents and children as well as couples. Their study and others suggested that emotional flooding predicts negative parenting outcomes such as harsh and coercive discipline (Lorber et al., 2011; Mence et al., 2014; Slep & O'Leary, 2007).

Building upon this, the current study proposed that flooding might account for the dysregulating effects of one's child's distress. However, the interaction was not significant, indicating that the level of parent emotional flooding did not significantly moderate the relationship between parent emotion dysregulation and supportive responses to child distress. This was also true for nonsupportive responses to child negative emotionality. Again, the interaction was not significant, indicating that levels of parent emotional flooding did not change the relationship between parent emotion dysregulation and nonsupportive responses to child distress. This finding suggests that other parent or family factors, which were not taken into account in the current study, may contribute to explaining variance in parents' emotion socializing behaviors. While

relationships between emotion regulation and emotion socialization appear to be complex and inconsistent, flooding may not be the mechanism through which adaptive emotion socializing behaviors become disrupted.

One possible explanation for this finding is that, contrary to this study's predictions, emotional flooding does not operate in parent-child dyads the same way that it does in partner dyads. Perhaps, compared to interactions with a romantic partner, parents do not find their child's negative affect as intensely dysregulating. While parents likely experience complicated emotions when their child is distraught or in the throes of an aggressive outburst, they may also recognize these behaviors as age appropriate. The current study proposed that the stress of a dysregulated child on a parent may elicit a fight or flight response that erodes the parent's ability to self-soothe, remain calm, and respond sensitively. However, the intrapersonal experience of observing, even being the target of a child's negative emotionality, particularly a child under the age of eight, might be less disorganizing than being the recipient of an adult family member's anger. This could be because parents expect more regulated behaviors from other adults and are more likely to see it as their role to help their child self-regulate.

It is worth noting that flooding was significantly positively correlated with emotion dysregulation and nonsupportive reactions to child distress and significantly negatively correlated with effortful control. This suggests that it may be worth further investigating the interplay between flooding and processes that support parent emotion socialization. It may be premature to assume flooding is not a relevant construct in emotion socialization research as it may yet shed light onto how negative affect is differentially processed by parents in interactions with their children.

Emotion Coaching/Emotion Dismissing and Supportive/Nonsupportive Responses to Child Distress

As expected, emotion coaching beliefs as measured by the MESQ were significantly positively correlated with supportive responses to child negative emotionality. Also as expected, emotion coaching beliefs were significantly negatively correlated with nonsupportive responses to child distress. This suggests that parents who believe that their children's emotions deserve to be acknowledged and discussed are more likely to encourage their children's expression of emotion, engage them in problem-solving or management of emotion, and less likely to respond to children's negative emotions with unsupportive responses. This is consistent with Baker, Fenning, and Crnic's (2010) findings that fathers' emotion coaching attitudes predicted their reactions to child emotion. It also builds on Wong and colleagues (2009) findings that parents who believed in the importance of children's feelings were less likely to discourage their expression. While the aforementioned study did not find that parental emotion coaching beliefs predicted supportive responses to child distress, the current study did. It makes sense that parents who believe that emotions deserve to be explored and digested would be more likely to invest time and attention in responding to the feelings of their children, even when these feelings are uncomfortable or negative. However, future studies could use more complex assessments of emotion socialization behaviors to confirm these initial findings about the relationship between emotion socializing beliefs and behaviors.

Interestingly, exploratory analyses found a significant *positive* association between parental emotion coaching and parental emotion dismissing. This positive correlation is notable given that one might expect emotion coaching and emotion

dismissing to reflect opposite behaviors. While the MESQ has demonstrated a two-factor structure, with emotion coaching and dismissing assessed separately (Lagacé-Séguin & Coplan, 2005), at least one study has found high correlations between the two scales (Olivera, 2017). These findings suggest that these constructs are not simply opposite ends of the same continuum. It may be that the emotion dismissing statements on the MESQ tap a parent's desire to help their child overcome their negative emotions, rather than a dismissive attitude toward their children's emotional expression. For example, the emotion dismissing items include statements such as: "I try to change my child's angry mood into a cheerful one" and "I help my child get over sadness quickly so that he/she can move on." While intended to capture a dismissive stance toward emotion exploration, these statements could resonate with a parent whose goal is to help the child grapple with negative emotion in order to move to a more positive affective state. Thus, the validity of these items as a measurement of emotion "dismissing" may be questionable.

If such "emotion dismissing" items actually capture parents' desire to help their child work through negative emotions, it would make sense for the MESQ emotion dismissing scale to correlate with the CCNES-supportive scale. Indeed, exploratory analyses found that emotion dismissing beliefs as measured by the MESQ were significantly correlated with supportive responses to child distress. This throws into question the validity of these items as capturing emotion dismissing. It may be that the short questionnaire did not work well for this sample. Future research could employ the longer emotion coaching interview of Katz and Gottman (1999) to capture the complexity of parents' beliefs about emotion.

Parental Mentalization

The results of this study did not reveal a direct relationship between parents' capacity for mentalization while describing their distressed child (as measured by parents' scores on the MM scale) and any of the main study variables. The failure to find correlations between parents' mentalizing and emotion regulatory abilities contradicts theory, which views the capacity for mentalization and emotion regulation as closely linked (Fonagy, 2006). However, the measure used to assess parents' mentalizing ability was intended to be used with an emotionally neutral prompt ("Describe your child"). In this case, parents were asked to describe an incident in which their child was in distress. As a result, many parental responses emphasized their feelings about their child's emotions over descriptions of their child's emotions and behavior. Because only child attributes are coded in the MM scale, this lack of child-focused content may have meant that attuned parental responses were not captured. While the original task used by Meins and colleagues (1998) has been similarly adapted in other studies (e.g., Gurney-Smith, Granger, & Fletcher, 2010), this coding scheme may not have been the best fit with the qualitative data drawn from this sample.

The results of the present study highlight the importance of integrating models of emotion socialization with theoretical and empirical work on parental emotion regulation. Research on emotion socialization has largely focused on child outcomes and rarely investigates factors that influence parental behaviors. This gap in the literature has been noted by recent researchers who have called for emotion socialization research to focus on parents' own regulation of emotions (Hajal & Paley, 2020). Similarly, researchers interested in the self-regulatory capacities of parents have generally not explored the

impact of these abilities on emotion socialization. Moreover, research on parents' emotion regulatory abilities has not adequately explored the impact of cognitive control capacities (Crandall et al., 2015). The present study highlighted the importance of integrating emotion regulation and emotion socialization research by demonstrating that effortful control interacts with emotion dysregulation to lead to more adaptive responses to child distress. It also indicated that low effortful control is an important mechanism through which emotion dysregulation leads to maladaptive emotion socialization behaviors.

Clinical Implications

Understanding the factors that help explain why parents respond differently to children's negative emotionality has important implications for parenting interventions. This study highlighted the role that parental regulatory capacities—particularly effortful control—may play in shaping parents' emotion socializing behaviors. Clinicians increasingly recognize that parents serve an important function in the developing emotional competence of their children. Current interventions targeting parents of young children often focus on identification and acceptance of a variety of feeling states. Interventions such as Attachment, Regulation, and Competency (ARC; Blaustein & Kinniburgh, 2017) and Circle of Security (COS; Powell, Cooper, Hoffman, & Marvin, 2013) stress the importance of addressing parents' self-regulatory skills to help them respond to their child in a more supportive fashion. Because effortful control may interact with parents' emotion regulation abilities to predict their socialization practices, taking into consideration parents' *cognitive* capacities is likely to increase the effectiveness of such interventions. Indeed, the failure of many parenting interventions to account for

parents' underlying cognitive control capacities may contribute to their uneven effectiveness (Crandall et al., 2015). It may not be enough to teach parents to deploy emotion coaching strategies in response to children's distress. Parents' ability to utilize these skills may depend not just on practicing them but on parents' enhanced ability to regulate their own emotions.

Parenting interventions aimed at increasing emotional competence in the family could assess parental self-regulatory abilities at intake to guide treatment planning. Parents who present with difficulties engaging in effortful control (e.g., problems shifting and focusing attention; difficulties inhibiting maladaptive behaviors, ranging from procrastination to perfectionism) could receive additional support. Interventions aiming to support children's emotional competency should focus not just on optimal responses to child dysregulation but consider what might get in the way of parents providing these responses. Clinicians could then support parents in identifying contexts in which their own self-regulation resources may be depleted before teaching strategies for self-soothing.

Current research, though somewhat scant, suggests that adults' cognitive control capacities can be changed to a degree. Cognitive behavioral and mindfulness training may improve adults' cognitive control capacities (summarized in Crandall et al., 2015). Behavioral interventions that target self-control skills (e.g., diverting attention from negative thoughts) may help equip parents for stressful encounters with their children. Interventions targeting parents should also emphasize self-care and strategies for replenishing parents' own cognitive and emotional resources during periods of intense emotionality. For example, interventions can teach parents to pause when their child

becomes intensely dysregulated. This pause can be framed not as a punitive measure or as seeking distance from the child but as a strategy to help parents recruit their cognitive, attentional, and emotional resources before responding to their child. For parents whose instinct is to react angrily, or to suppress their own emotional reactions, creating this space may allow them to self soothe and move effectively from regulating their own emotions to coregulating with their child. Such interventions have the potential to drive substantial downstream changes in the critical domain of children's social emotional functioning.

Limitations

Interpretation of the present findings should consider several limitations. First, limitations of the sample should be acknowledged. Most studies of emotion socialization have focused on mothers, and inclusion of fathers is a strength of the current study. Moreover, mothers demonstrated significantly higher levels of supportive responses higher levels of supportive responses to child distress and lower levels of nonsupportive responses, consistent with prior research (Wong et al., 2009). Nonetheless, the majority of subjects (70%) were female. Future investigations should include greater numbers of fathers to increase generalizability.

In terms of ethnicity, the majority of subjects identified as Eastern or Western European (68%). Only ten percent identified as African or Afro Caribbean, with less than 10% identifying as Latino/a, Asian, Native American or Middle Eastern. The current sample also was limited to individuals living in the United States. As cultural and ethnic influences are thought to affect parental reports of their emotion socialization practices (Nelson, Leerkes, O'Brien, Calkins, & Marcovitch, 2012), these factors may limit the

generalizability of the results. Future research should attempt to replicate these findings in more racially and ethnically diverse samples and explore these factors within different cultures and countries.

Second, several limitations of the measures should be noted. While the current study employed psychometrically sound measures of emotion regulation, effortful control, and emotion socialization, parents provided self-report for all variables. Thus, they are subject to the limitations of this method. Self-report methods are useful for studying emotion regulation because they capture an individual's subjective emotion experience, regardless of whether the person modulates the outward expression of that emotion. However, future studies should employ both observational and self-report measures of parental emotion. In addition, potential bias due to a common method variance could have distorted the findings (although this may have been attenuated by accounting for parents' tendency to respond in a socially desirable manner). Further, findings were based on single measure of each construct, a limitation common in this literature (Crandall et al., 2015). Future studies should include both parent and child assessments of socialization behaviors as well as observational measures of emotion socialization.

As previously noted, emotion dysregulation and emotion regulation are not simply opposite constructs. Because this study measured deficits in emotion regulation, relationships to nonsupportive responses may have been stronger than relationships to supportive behaviors. Future work could assess both emotion regulation and emotion dysregulation. Moreover, this study employed a measure of *general* emotion dysregulation rather than capturing parents' regulatory capacities *within the context of*

parenting. Future studies could measure parenting-specific emotion regulation in order to tap potentially unique emotion regulatory experiences within the parenting context (Rutherford et al., 2015). Parent self-report of emotion regulation could be captured via experience sampling method, in which individuals are measured repeatedly while engaged in the routines of daily life. For example, daily diary methodology or event-contingent reporting could ask parents to provide ratings at the moment of, or close to, an interaction with their child. This could capture potential variability in parental emotion regulation that may be lost when people are asked to aggregate their experiences over many days or weeks. It could also serve to assess emotion regulation longitudinally.

Indeed, because this study's design was a cross-sectional, correlational one, the results cannot be considered proof of causality. While analyses revealed multiple significant associations present in the data, this does not allow conclusions to be drawn about the direction of effects, and it is likely that associations are bidirectional. Further, while this study considered possible factors such as child dispositional negativity, number of children in the household, and financial stress, there could be numerous missing variables driving parental responses to child distress.

Directions for Future Research

This study represents part of a growing literature on the ways in which specific parental emotion regulation capacities impact emotion socialization and therefore the development of children's emotional competence. Building upon the findings of the present study, a compelling avenue for future research would be to investigate parental emotion regulation capacities and emotion socializing behaviors using observational methods and experience sampling techniques. Parent-child dyads could be recruited and

observed in interaction tasks designed to assess emotion socialization behaviors (e.g., unstructured play involving directions for the parent not to allow the child to play with certain desirable toys). Observations of parental regulatory functions in parent-child interactions could include physiological indices of self-regulation (i.e., heart rate, skin conductance levels, and cortisol levels). Because stressful laboratory tasks may not capture the same range or intensity of emotions as real-life experiences, experience sampling techniques (e.g., daily diary methodology) could also be employed to assess parental self-regulation and responses to child distress. This would allow parents to evaluate their reactions closer to the interactions they have with their child. Such a multi-method design would expand upon the current study by assessing both objective and subjective measures of emotion regulation and emotion socialization—and increasing ecological validity.

In addition, future research could assess the potential of interventions to increase parental self-regulatory capacities through an experimental longitudinal design. Given the importance of parental effortful control in both promoting supportive emotion socialization behaviors and decreasing nonsupportive behaviors, it will be crucial to determine whether skills such as attention shifting and modulating emotional reactivity can be augmented in the service of improving parents' emotion socialization behaviors. A clinical trial in which one group of parents participates in a mindfulness intervention targeted at improving parental self-regulation would be an exciting extension of the present research. Parental responses to child distress could be assessed using the multi-method approach described above at different points throughout the intervention. While clinicians may intuitively feel that children's emotional competence benefits from

interventions targeting their *parents'* self-regulation, empirical support for this idea is still needed.

Summary and Conclusions

Despite its limitations, this study represented an important step in forwarding the idea that parental self-regulation is critical in supporting child emotional development. It provides potential insights into the specific self-regulatory domains that may be pivotal to supporting parental emotion socialization. In particular, parental cognitive control capacities seem to play an important role in how parents respond to child negative emotionality. This study found that parent emotion dysregulation was significantly negatively related to parent effortful control, suggesting that parents' affect regulation abilities are related to their capacities to shift attention and modulate their reactivity. Effortful control mediated the relations between emotion dysregulation and emotion socialization, indicating that neurocognitive processes are critical to supporting emotion regulation. This suggests that effortful control may be an important protective factor in parent-child interactions, with high effortful control buffering the effect of emotion dysregulation.

The direct relationship between emotion regulation and emotion socialization remains unclear. In bivariate analyses, higher levels of parent emotion dysregulation predicted nonsupportive reactions to child negative affect, which builds upon recent research. The relationship between parent self-regulation and supportive responses to child distress is less clear. Contrary to predictions, parent emotional flooding did not significantly moderate the relationship between emotion dysregulation and responses to child distress, suggesting that the potential role of flooding in affectively charged parent-

child interactions should be further explored. In addition, exploratory analyses revealed significant positive correlations between emotion coaching and emotion dismissing beliefs and parent emotion socializing behaviors. Overall, it seems clear that parental emotion regulation capacities and parental beliefs about emotions constitute important elements of emotion socialization. However, further work is needed to better understand the processes by which parent emotional and cognitive control affect emotion socialization.

The results support the idea that parents who can modulate their own emotional reactivity will be better able to respond to their child's distress. Parental psychological resources are finite, and parenting can be exhausting. Without addressing parents' own self-regulatory resources, including cognitive resources, interventions teaching parenting skills may be of little use in the real-world context of high emotions that characterizes much of parenting (Maliken & Katz, 2013). Innovative parenting interventions aimed at supporting children's emotional competence are already considering the role of parental self-regulation (e.g., Sanders & Mazzucchelli, 2013). Research should thus keep pace by pursuing increasingly nuanced examinations of how self-regulation influences parents' ability to support their dysregulated child.

References

- Arnott, B., & Meins, E. (2007). Links among antenatal attachment representations, postnatal mind-mindedness, and infant attachment security: A preliminary study of mothers and fathers. *Bulletin of the Menninger Clinic, 71*(2), 132-149.
- Baker, J. K., Fenning, R. M., & Crnic, K. A. (2011). Emotion socialization by mothers and fathers: Coherence among behaviors and associations with parent attitudes and children's social competence. *Social Development, 20*(2), 412-430.
- Bardeen, J. R., Fergus, T. A., & Orcutt, H. K. (2012). An examination of the latent structure of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 34*(3), 382-392.
- Bariola, E., Gullone, E., & Hughes, E. K. (2011). Child and adolescent emotion regulation: The role of parental emotion regulation and expression. *Clinical Child and Family Psychology Review, 14*(2), 198.
- Bar-On, R. (1997). *The Emotional Intelligence Inventory (EQ-I)*: Technical manual. Toronto, Canada: Multi-Health Systems, Inc.
- Bartels, A., & Zeki, S. (2004). The neural correlates of maternal and romantic love. *Neuroimage, 21*(3), 1155-1166.
- Bauer, I. M., & Baumeister, R. F. (2011). Self-regulatory strength. *Handbook of self-regulation: Research, theory, and applications, 2*, 64-82.
- Bell-Thomson, S. (2014). *Effortful control and reflective functioning: Testing a model of affect regulation* (Doctoral dissertation, Long Island University, The Brooklyn Center).

- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, 83-96.
- Blaustein, M. E., & Kinniburgh, K. M. (2017). Attachment, self-regulation, and competency (ARC). In *Evidence-based treatments for trauma related disorders in children and adolescents* (pp. 299-319). Springer, Cham.
- Bornstein, M. H., Putnick, D. L., Lansford, J. E., Pastorelli, C., Skinner, A. T., Sorbring, E., ... & Al-Hassan, S. M. (2015). Mother and father socially desirable responding in nine countries: Two kinds of agreement and relations to parenting self-reports. *International Journal of Psychology*, 50(3), 174-185.
- Bowen, M. (1978). *Family therapy in clinical practice*. New York: Aronson.
- Bowlby, J. (1969). *Attachment and loss, Volume I Attachment*. Penguin Books.
- Bridgett, D. J., Gartstein, M. A., Putnam, S. P., Lance, K. O., Iddins, E., Waits, R., VanVleet, J. & Lee, L. (2011). Emerging effortful control in toddlerhood: The role of infant orienting/regulation, maternal effortful control, and maternal time spent in caregiving activities. *Infant Behavior and Development*, 34(1), 189-199.
- Brown, J. R., & Dunn, J. (1992). Talk with your mother or your sibling? Developmental changes in early family conversations about feelings. *Child Development*, 63(2), 336-349.
- Buck, R. (1984). *The communication of emotion*. New York: Guilford Press.
- Buckholdt, K. E., Parra, G. R., & Jobe-Shields, L. (2014). Intergenerational transmission of emotion dysregulation through parental invalidation of emotions: Implications for adolescent internalizing and externalizing behaviors. *Journal of Child and Family Studies*, 23(2), 324-332.

- Cassano, M., Perry-Parrish, C., & Zeman, J. (2007). Influence of gender on parental socialization of children's sadness regulation. *Social Development, 16*(2), 210-231.
- Cassidy, J., Jones, J. D., & Shaver, P. R. (2013). Contributions of attachment theory and research: A framework for future research, translation, and policy. *Development and Psychopathology, 25*(4 pt 2), 1415-1434.
- Chien, N. C., & Mistry, R. S. (2013). Geographic variations in cost of living: Associations with family and child well-being. *Child Development, 84*, 209–225.
- Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion regulation as a scientific construct: Methodological challenges and directions for child development research. *Child Development, 75*(2), 317-333.
- Cook, W. L., Kenny, D. A., & Goldstein, M. J. (1991). Parental affective style risk and the family system: A social relations model analysis. *Journal of Abnormal Psychology, 100*(4), 492.
- Crandall, A., Deater-Deckard, K., & Riley, A. W. (2015). Maternal emotion and cognitive control capacities and parenting: A conceptual framework. *Developmental Review, 36*, 105-126.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*(4), 349.
- Davidov, M., & Grusec, J. E. (2006). Untangling the links of parental responsiveness to distress and warmth to child outcomes. *Child Development, 77*(1), 44-58.

- Deater-Deckard, K., Sewell, M. D., Petrill, S. A., & Thompson, L. A. (2010). Maternal working memory and reactive negativity in parenting. *Psychological Science, 21*(1), 75-79.
- Deater-Deckard, K., Wang, Z., Chen, N., & Bell, M. A. (2012). Maternal executive function, harsh parenting, and child conduct problems. *Journal of Child Psychology and Psychiatry, 53*(10), 1084-1091.
- Del Vecchio, T., Lorber, M. F., Slep, A. M. S., Malik, J., Heyman, R. E., & Foran, H. M. (2016). Parental flooding during conflict: a psychometric evaluation of a new scale. *Journal of Abnormal Child Psychology, 44*(8), 1587-1597.
- Denham, S. A. (1993). Maternal Emotional Responsiveness and Toddlers' Social-Emotional Competence. *Journal of Child Psychology and Psychiatry, 34*(5), 715-728.
- Denham, S. A. (2007). Dealing with feelings: How children negotiate the worlds of emotions and social relationships. *Cognition, Brain, Behavior, 11*(1), 1.
- Denham, S. A., Bassett, H. H., & Zinsser, K. (2012). Early childhood teachers as socializers of young children's emotional competence. *Early Childhood Education Journal, 40*(3), 137-143.
- Denham, S. A., Blair, K. A., DeMulder, E., Levitas, J., Sawyer, K., Auerbach-Major, S., & Queenan, P. (2003). Preschool emotional competence: Pathway to social competence? *Child Development, 74*(1), 238-256.
- Denham, S., & Kochanoff, A. T. (2002). Parental contributions to preschoolers' understanding of emotion. *Marriage & Family Review, 34*(3-4), 311-343.

- De Ridder, D., & Kuijer, R. G. (2006). Managing immediate needs in the pursuit of health goals: The role of coping in self-regulation. *Self-regulation in health behavior*, 147-168. Ebook: John Wiley & Sons.
- Dix, T. (1991). The affective organization of parenting: Adaptive and maladaptive processes. *Psychological Bulletin*, 110(1), 3.
- Dodge, K. A. (1989). Coordinating responses to aversive stimuli: Introduction to a special section on the development of emotion regulation. *Developmental Psychology*, 25(3), 339.
- Dunn, J., & Brown, J. (1994). Affect expression in the family, children's understanding of emotions, and their interactions with others. *Merrill-Palmer Quarterly*, 120-137.
- Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry*, 9(4), 241-273.
- Eisenberg, N., & Fabes, R. A. (1992). *Emotion and its regulation in early development*. San Francisco, CA: JosseyBass/Pfeiffer.
- Eisenberg, N., & Fabes, R. A. (1994). Mothers' reactions to children's negative emotions: Relations to children's temperament and anger behavior. *Merrill-Palmer Quarterly*, 138-156.
- Eisenberg, N., Fabes, R. A., & Murphy, B. C. (1996). Parents' reactions to children's negative emotions: Relations to children's social competence and comforting behavior. *Child Development*, 67(5), 2227-2247.
- Eisenberg, N., Fabes, R.A., Shepard, S.A., Guthrie, I.K., Murphy, B. C., & Reiser, M. (1999). Parental reactions to children's negative emotions: Longitudinal relations to quality of children's social functioning. *Child Development*, 70, 513-534.

- Eisenberg N., Smith C.L., Sadovsky, A., Spinrad, T.L. (2004). Effortful control: Relations with emotion regulation, adjustment, and socialization in childhood. In: R.F. Baumeister & K.D. Vols (Eds.). *Handbook of self regulation: Research, theory, and applications* (pp. 259-282). Guilford Press.
- Eisenberg, N., Spinrad, T. L., Eggum, N. D., Silva, K. M., Reiser, M., Hofer, C., Smith, C.L., Gaertner, B.M., Kupfer, A., Popp, T., & Michalik, N. (2010). Relations among maternal socialization, effortful control, and maladjustment in early childhood. *Development and Psychopathology*, 22(3), 507-525.
- Ekman, P. (1984). Expression and the nature of emotion. *Approaches to emotion*, 3(19), 344.
- Essex, M. J., Klein, M. H., Cho, E., & Kalin, N. H. (2002). Maternal stress beginning in infancy may sensitize children to later stress exposure: effects on cortisol and behavior. *Biological Psychiatry*, 52(8), 776-784.
- Evans, D. E., & Rothbart, M. K. (2007). Developing a model for adult temperament. *Journal of Research in Personality*, 41, 868–888.
- Fabes, R. A., Eisenberg, N., & Bernzweig, J. (1990). *Coping with children's negative emotions scale (CCNES): Description and scoring*. Tempe, AZ: Arizona State University.
- Fabes, R. A., Leonard, S. A., Kupanoff, K., & Martin, C. L. (2001). Parental coping with children's negative emotions: Relations with children's emotional and social responding. *Child Development*, 72(3), 907-920.
- Fabes, R. A., Poulin, R. E., Eisenberg, N., & Madden-Derdich, D. A. (2002). The Coping with Children's Negative Emotions Scale (CCNES): Psychometric properties and

- relations with children's emotional competence. *Marriage & Family Review*, 34(3-4), 285–310.
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191.
- Fischer, D. G., & Fick, C. (1993). Measuring social desirability: Short forms of the Marlowe-Crowne Social Desirability scale. *Educational and Psychological Measurement*, 53, 417–424.
- Fogel, A. (1982). Affect dynamics in early infancy: Affective tolerance. In T. Field & A. Fogel (Eds.), *Emotion and Early interaction* (pp. 15–56). Hillsdale, NJ: Erlbaum.
- Fonagy, P. (2006). The Mentalization-Focused Approach to Social Development. *Handbook of Mentalization-Based Treatment*, 51-99.
- Fonagy, P., & Target, M. (1997). Attachment and reflective function: Their role in self-organization. *Development and Psychopathology*, 9(04), 679-700.
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books.
- Gottman, J. M. (1991). Chaos and regulated change in families: A metaphor for the study of transitions. In P. A. Cowan & M. Hetherington (Eds.), *Family transitions* (pp. 247–272). Hillsdale, NJ: Erlbaum.
- Gottman, J. M. (1993). A theory of marital dissolution and stability. *Journal of Family Psychology*, 7, 57–75.
- Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology*, 10(3), 243.

- Gottman, J.M., Katz, L.F., & Hooven, C. (1997). *Meta-emotion: How families communicate emotionally*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment*, 26(1), 41-54.
- Gross, J. J. (1998). The emerging field of emotion regulation: an integrative review. *Review of General Psychology*, 2(3), 271.
- Gross, J.J., & John, O.P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85, 348–362.
- Gross, J., & Thompson, R. A. (2007). Conceptual foundations for the field. In J. Gross (Ed.), *Handbook of Emotion Regulation* (pp. 3-24). New York: Guilford.
- Gurney-Smith, B., Granger, C., Randle, A., & Fletcher, J. (2010). ‘In time and in tune’—The fostering attachments group: Capturing sustained change in both caregiver and child. *Adoption & Fostering*, 34(4), 50-60.
- Halberstadt, A. G., Denham, S. A., & Dunsmore, J. C. (2001). Affective social competence. *Social Development*, 10(1), 79-119.
- Hajal, N. J., & Paley, B. (2020). Parental emotion and emotion regulation: A critical target of study for research and intervention to promote child emotion socialization. *Developmental Psychology*, 56(3), 403.
- Hayes A. F. (2013). *An introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.

- Hughes, E. K., & Gullone, E. (2010). Parent emotion socialisation practices and their associations with personality and emotion regulation. *Personality and Individual Differences, 49*(7), 694–699.
- Izard, C. E. (2001). Emotional intelligence or adaptive emotions? *Emotion, 1*(3), 249-257.
- Isley, S. L., O'Neil, R., Clatfelter, D., & Parke, R. D. (1999). Parent and child expressed affect and children's social competence: modeling direct and indirect pathways. *Developmental Psychology, 35*(2), 547.
- Johnson, A. M., Hawes, D. J., Eisenberg, N., Kohlhoff, J., & Dudeney, J. (2017). Emotion socialization and child conduct problems: A comprehensive review and meta-analysis. *Clinical Psychology Review, 54*, 65-80.
- Jones, J. D., Brett, B. E., Ehrlich, K. B., Lejuez, C. W., & Cassidy, J. (2014). Maternal attachment style and responses to adolescents' negative emotions: The mediating role of maternal emotion regulation. *Parenting, 14*(3-4), 235-257.
- Katz, L. F. & Gottman, J. M. (1999). *Parent Meta-Emotion Interview*, University of Washington, Seattle.
- Katz, L. F., Maliken, A. C., & Stettler, N. M. (2012). Parental meta-emotion philosophy: A review of research and theoretical framework. *Child Development Perspectives, 6*(4), 417-422.
- Kerr, M. E., Bowen, M., & Kerr, M. E. (1988). *Family evaluation*. WW Norton & Company.
- Kozma, A., & Stones, M. J. (1987). Social desirability in measures of subjective well-being: A systematic evaluation. *Journal of Gerontology, 4*, 56–59.

- Lagacé-Séguin, D. G., & Coplan, R. J. (2005). Maternal emotional styles and child social adjustment: Assessment, correlates, outcomes and goodness of fit in early childhood. *Social Development, 14*(4), 613-636.
- Laible, D. (2011). Does it matter if preschool children and mothers discuss positive vs. negative events during reminiscing? Links with mother-reported attachment, family emotional climate, and socioemotional development. *Social Development, 20*(2), 394-411.
- Laible, D. J., & Thompson, R. A. (1998). Attachment and emotional understanding in preschool children. *Developmental Psychology, 34*(5), 1038.
- Leerkes, E. M. (2010). Predictors of maternal sensitivity to infant distress. *Parenting: Science and Practice, 10*(3), 219-239.
- Loo, R., & Thorpe, K. (2000). Confirmatory factor analyses of the full and short versions of the Marlowe Crowne Social Desirability scale. *Journal of Social Psychology, 140*, 628–635.
- Lorber, M. F., Mitnick, D. M., & Slep, A. M. S. (2016). Parents' experience of flooding in discipline encounters: Associations with discipline and interplay with related factors. *Journal of Family Psychology, 30*(4), 470-479.
- Lorber, M. F., & O'Leary, S. G. (2005). Mediated paths to overreactive discipline: Mothers' experienced emotion, appraisals, and physiological responses. *Journal of Consulting and Clinical Psychology, 73*(5), 972.
- Lorber, M. F., O'Leary, S. G., & Smith Slep, A. M. (2011). An initial evaluation of the role of emotion and impulsivity in explaining racial/ethnic differences in the use of corporal punishment. *Developmental Psychology, 47*(6), 1744.

- Lorber, M. F., & Slep, A. M. S. (2005). Mothers' emotion dynamics and their relations with harsh and lax discipline: Microsocial time series analyses. *Journal of Clinical Child and Adolescent Psychology, 34*, 559–568.
- Lozada, F. T., Halberstadt, A. G., Craig, A. B., Dennis, P. A., & Dunsmore, J. C. (2016). Parents' beliefs about children's emotions and parents' emotion-related conversations with their children. *Journal of Child and Family Studies, 25*(5), 1525-1538.
- Malik, J., Heyman, R. E., & Smith Slep, A. M. (2020). Emotional flooding in response to negative affect in couple conflicts: Individual differences and correlates. *Journal of Family Psychology, 34*(2), 145.
- Maliken, A. C., & Katz, L. F. (2013). Exploring the impact of parental psychopathology and emotion regulation on evidence-based parenting interventions: A transdiagnostic approach to improving treatment effectiveness. *Clinical child and family psychology review, 16*(2), 173-186.
- Mammen, O. K., Kolko, D. J., & Pilkonis, P. A. (2002). Negative affect and parental aggression in child physical abuse. *Child Abuse & Neglect, 26*(4), 407-424.
- McElwain, N. L., Halberstadt, A. G., & Volling, B. L. (2007). Mother-and father-reported reactions to children's negative emotions: Relations to young children's emotional understanding and friendship quality. *Child Development, 78*(5), 1407-1425.
- Meehan, K. B., & Zick, E. (2016). Parental humility. In Tuber, S. (Ed.) *Parenting: Contemporary clinical perspectives*. New York: Rowman & Littlefield.

- Meins, E., & Fernyhough, C. (1999). Linguistic acquisitional style and mentalising development: The role of maternal mind-mindedness. *Cognitive Development*, 14, 363–380.
- Meins, E., & Fernyhough, C. (2010). *Mind-mindedness coding manual, Version 2.0. Unpublished manuscript*. Durham University, Durham, U.K.
- Meins, E., Fernyhough, C., Russell, J., & Clark-Carter, D. (1998). Security of attachment as a predictor of symbolic and mentalising abilities: A longitudinal study. *Social Development*, 7(1), 1-24.
- Meins, E., Fernyhough, C., Wainwright, R., Clark-Carter, D., Das Gupta, M., Fradley, E., & Tuckey, M. (2003). Pathways to understanding mind: Construct validity and predictive validity of maternal mind-mindedness. *Child Development*, 74(4), 1194-1211.
- Mence, M., Hawes, D. J., Wedgwood, L., Morgan, S., Barnett, B., Kohlhoff, J., & Hunt, C. (2014). Emotional flooding and hostile discipline in the families of toddlers with disruptive behavior problems. *Journal of Family Psychology*, 28(1), 12.
- Meyer, S., Raikes, H. A., Virmani, E. A., Waters, S., & Thompson, R. A. (2014). Parent emotion representations and the socialization of emotion regulation in the family. *International Journal of Behavioral Development*, 38(2), 164-173.
- Mezzacappa, E. (2004). Alerting, orienting, and executive attention: Developmental properties and sociodemographic correlates in an epidemiological sample of young, urban children. *Child Development*, 75, 1373–1386.
- Mischel, W., Ayduk, O., & Mendoza-Denton, R. (2003). Sustaining delay of gratification over time: A hot-cool systems perspective. In G. Loewenstein, D. Read, & R.

- Baumeister (Eds.), *Time and decision: Economic and psychological perspectives on intertemporal choice* (pp. 175-200). New York, NY: Russell Sage Foundation.
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development, 16*(2), 361-388.
- Muraven, M., Tice, D. M., & Baumeister, R. F. (1998). Self-control as a limited resource: regulatory depletion patterns. *Journal of Personality and Social Psychology, 74*(3), 774.
- Nelson, J. A., Leerkes, E. M., O'Brien, M., Calkins, S. D., & Marcovitch, S. (2012). African American and European American mothers' beliefs about negative emotions and emotion socialization practices. *Parenting, 12*(1), 22-41.
- Nelson, J. A., O'Brien, M., Blankson, A. N., Calkins, S. D., & Keane, S. P. (2009). Family stress and parental responses to children's negative emotions: Tests of the spillover, crossover, and compensatory hypotheses. *Journal of Family Psychology, 23*(5), 671.
- Nishitani, S., Doi, H., Koyama, A., & Shinohara, K. (2011). Differential prefrontal response to infant facial emotions in mothers compared with non-mothers. *Neuroscience Research, 70*(2), 183-188.
- Olivera, Y. A. (2017). *Preliminary evaluation of a program to help low-income Latina mothers help their children cope with stress: A mixed method approach*. Washington State University.

- Powell, B., Cooper, G., Hoffman, K., & Marvin, B. (2013). *The circle of security intervention: Enhancing attachment in early parent-child relationships*. Guilford publications.
- Putnam, S. P., & Rothbart, M. K. (2006). Development of short and very short forms of the Children's Behavior Questionnaire. *Journal of Personality Assessment*, 87(1), 102-112.
- Remmes, C. S., & Ehrenreich-May, J. (2014). Parental emotion regulation strategy use and responses to youth negative affect. *Journal of Cognitive Psychotherapy*, 28(1), 34-47.
- Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology*, 38(1), 119-125.
- Rothbart, M. K., & Bates, J. E. (2006). Temperament. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Temperament handbook of child psychology: Vol. 3, Social, emotional, and personality development* (6th ed., pp. 99–166). Hoboken, NJ: Wiley.
- Rothbart, M. K., Ellis, L. K., Rosario Rueda, M., & Posner, M. I. (2003). Developing mechanisms of temperamental effortful control. *Journal of Personality*, 71(6), 1113-1144.
- Rothbart, M. K., Ellis, L. K., & Posner, M. I. (2004). Temperament and self-regulation. *Handbook of self-regulation: Research, theory, and applications*, 2, 441-460.

- Rutherford, H. J., Goldberg, B., Luyten, P., Bridgett, D. J., & Mayes, L. C. (2013). Parental reflective functioning is associated with tolerance of infant distress but not general distress: Evidence for a specific relationship using a simulated baby paradigm. *Infant Behavior and Development, 36*(4), 635-641.
- Rutherford, H. J., Wallace, N. S., Laurent, H. K., & Mayes, L. C. (2015). Emotion regulation in parenthood. *Developmental Review, 36*, 1-14.
- Ryckman, K., Richmond, S. A., Anderson, L. N., Birken, C. S., Parkin, P. C., Macarthur, C., ... & Howard, A. W. (2017). Temperament and fracture in preschool-aged children. *Pediatrics and Child Health, 22*(4), 195-198.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 9*(3), 185-211.
- Sanders, M. R., & Mazzucchelli, T. G. (2013). The promotion of self-regulation through parenting interventions. *Clinical Child and Family Psychology Review, 16*(1), 1-17.
- Sarıtaş, D., Grusec, J. E., & Gençöz, T. (2013). Warm and harsh parenting as mediators of the relation between maternal and adolescent emotion regulation. *Journal of Adolescence, 36*(6), 1093-1101
- Schutte, N. S., Malouff, J. M., Thorsteinsson, E. B., Bhullar, N., & Rooke, S. E. (2007). A meta-analytic investigation of the relationship between emotional intelligence and health. *Personality and Individual Differences, 42*(6), 921-933.
- Shaffer, A., & Obradović, (2017). Unique contributions of emotion regulation and executive functions in predicting the quality of parent–child interaction behaviors. *Journal of Family Psychology, 31*(2), 150-159.

- Shaffer, A., Whitehead, M., Davis, M., Morelen, D., & Suveg, C. (2018). A Model-Based Cluster Analysis of Maternal Emotion Regulation and Relations to Parenting Behavior. *Family Process, 57*(3), 707-718.
- Sharp, C., & Fonagy, P. (2008). The parent's capacity to treat the child as a psychological agent: Constructs, measures and implications for developmental psychopathology. *Social Development, 17*(3), 737-754.
- Sharp, C., Fonagy, P., & Goodyer, I. M. (2006). Imagining your child's mind: Psychosocial adjustment and mothers' ability to predict their children's attributional response styles. *British Journal of Developmental Psychology, 24*(1), 197-214.
- Skowron, E. A., & Dendy, A. K. (2004). Differentiation of self and attachment in adulthood: Relational correlates of effortful control. *Contemporary Family Therapy, 26*(3), 337-357.
- Skowron, E. A., & Friedlander, M. L. (1998). The differentiation-of-self inventory: development and initial validation. *Journal of Counseling Psychology, 45*, 235–246.
- Skowron, E. A., Kozlowski, J. M., & Pincus, A. L. (2010). Differentiation, self-other representations, and rupture-repair processes: predicting child maltreatment-risk. *Journal of Counseling Psychology, 57*(3), 304–316.
- Slep, A. M. S., & Heyman, R. E. (1998). *Parental Flooding Scale*. Unpublished manuscript, Stony Brook University, State University of New York.

- Slep, A. M. S., & O'Leary, S. G. (2007). Multivariate models of mothers' and fathers' aggression toward their children. *Journal of Consulting and Clinical Psychology, 75*(5), 739.
- Snyder, J., Edwards, P., McGraw, K., Kilgore, K., & Holton, A. (1994). Escalation and reinforcement in mother-child conflict: Social processes associated with the development of physical aggression. *Development and Psychopathology, 6*, 305–321.
- Snyder, J., Stoolmiller, M., Wilson, M., & Yamamoto, M. (2003). Child anger regulation, parental responses to children's anger displays, and early child antisocial behavior. *Social Development, 12*(3), 335-360.
- Stern, D. N. (1985). *The interpersonal world of the infant: A view from psychoanalysis and developmental psychology*. New York: Basic Books.
- Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. *Monographs of the Society for Research in Child Development, 59*(2-3), 25-52.
- Tomkins, S. S. (2008). *Affect imagery consciousness: The complete edition: Two Volumes*. Springer Publishing Company.
- Tull, M. T., & Roemer, L. (2007). Emotion regulation difficulties associated with the experience of uncued panic attacks: Evidence of experiential avoidance, emotional nonacceptance, and decreased emotional clarity. *Behavior Therapy, 38*(4), 378-391.

- Valiente, C., Lemery-Chalfant, K., & Reiser, M. (2007). Pathways to problem behaviors: Chaotic homes, parent and child effortful control, and parenting. *Social Development, 16*(2), 249-267.
- Walker, T. M., Wheatcroft, R., & Camic, P. M. (2012). Mind-mindedness in parents of pre-schoolers: A comparison between clinical and community samples. *Clinical Child Psychology and Psychiatry, 17*(3), 318-335.
- Wong, M. S., McElwain, N. L., & Halberstadt, A. G. (2009). Parent, family, and child characteristics: associations with mother-and father-reported emotion practices. *Journal of Family Psychology, 23*(4), 452.