

2014

## Parenting style and emotion socialization strategies as predictors of children's emotion regulation

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**PARENTING STYLE AND EMOTION SOCIALIZATION STRATEGIES AS  
PREDICTORS OF CHILDREN'S EMOTION REGULATION**

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**Thesis submitted to  
the College of Human Resources and Education  
at West Virginia University**

**in partital fulfillment of the requirements for the degree of**

**Master of Arts  
In Educational Psychology  
With an emphasis in Child Development and Family Studies**

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**Morgantown, West Virginia  
2014**

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## **ABSTRACT**

### **Parenting Style and Emotion Socialization Strategies as Predictors of Children's Emotion Regulation**

**Nicole Nightengale**

The purpose of this study was to examine the way that parenting styles (e.g., authoritative and authoritarian parenting) and parents' emotion socialization strategies (e.g., supportive and non-supportive reactions to emotions) collectively impact children's emotion regulation. Data was collected from 51 mothers (mean age = 34.4 years) and their preschool-aged children (mean age = 3.76 years). The majority of the mothers (93.8%) and children (89.6%) were Caucasian. Mothers completed a demographic questionnaire composed of demographic questions about the mother, the father, and the preschool-aged child. Mothers also completed the Parenting Practices Questionnaire (PPQ; Robinson, Mandleco, Frost Olsen, & Hart, 2005) as a measure of parenting style, the Coping with Negative Emotions Scale (CCNES; Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002) as a measure of emotion socialization strategies, and the Children's Behavior Questionnaire Short Form Version I (CBQ; Putnam & Rothbart, 2006) to examine children's emotion regulation. Initially, two multiple regressions were conducted but the regression models did not yield significant results. Therefore, post hoc analyses were conducted; specifically, four regression analyses were conducted. Supportive reactions to emotions approached significance in the prediction of emotion regulation. In addition, a simple slope analysis indicated a significant relationship between authoritarian parenting and emotion regulation for low supportive reactions to emotions. Limitations are noted and suggestions for future research examining the collective impact of parenting styles and parents' emotion socialization strategies are provided.

## **Acknowledgements**

First and foremost, I would like to thank my family (especially my parents) for all of their support through my entire academic process. You have never given up on me and have always pushed me to go above and beyond. Without your continuous encouragement, I would not be where I am today.

I would like to show my greatest appreciation to my graduate advisor and committee chair, Dr. Amy Root. Thank you for your positivity and continued support not only through my thesis process, but through my entire journey as a graduate student.

I would also like to offer my special thanks to my committee members, Dr. Kristin Moilanen and Dr. Jessica Troilo. I am very grateful for all of the time and expertise you have offered me along the way.

## Table of Contents

|  |    |
|--|----|
| Chapter 1: Introduction .....  | 1  |
| Justification of the Study .....   | 3  |
| Statement of the Problem.....  | 4  |
| Chapter 2: Review of Literature .....  | 6  |
| Attachment Theory .....  | 7  |
| Tripartite Model .....   | 10 |
| Parenting Styles and Children’s Emotion Regulation .....   | 12 |
| Parents’ Emotion Socialization Strategies .....  | 16 |
| Parents’ Emotion Socialization Strategies and Children’s Emotion Regulation .....                  | 17 |
| Collective Examination of Parents’ Global Socialization and Emotion-Specific<br>Socialization..... | 22 |
| The Current Study.....   | 24 |
| Hypotheses .....   | 25 |
| Chapter 3: Method .....  | 27 |
| Participants.....  | 27 |
| Procedure .....  | 27 |
| Measures .....   | 27 |
| Demographic Questionnaire .....  | 27 |
| Parenting Practices Questionnaire .....  | 28 |
| Coping with Negative Emotions Scale .....  | 28 |
| Children’s Emotion Regulation .....  | 29 |
| Analytic Strategy .....  | 30 |

|   |    |
|---|----|
| Chapter 4: Results .....                | 32 |
| Chapter 5: Discussion .....             | 35 |
| Limitations and Future Directions ..... | 40 |
| Conclusion .....                        | 42 |
| References .....                        | 44 |
| Appendices.....                         | 53 |

## List of Tables

|   |    |
|---|----|
| Table 1 – Means, Standard Deviations, and Correlations for all Measures.....  | 49 |
| Table 2 – Predictions of Falling Reactivity from General Parenting Practices and Supportive<br>Emotion Socialization Aggregate .....                | 50 |
| Table 3 – Predictions of Falling Reactivity from General Parenting Practices and CCNES<br>Supportive and Non-supportive Emotion Socialization ..... | 51 |

## List of Figures

|  |    |
|--|----|
| Figure 1 – Falling Reactivity as a Function of Authoritarian Parenting at Levels of Supportive Parenting ..... | 52 |
|--|----|



## Appendices

|  |    |
|--|----|
| Appendix A – Demographic Information .....                               | 53 |
| Appendix B – Parenting Practices Questionnaire.....                      | 57 |
| Appendix C – Parent Attitude/Behavior Questionnaire.....                 | 61 |
| Appendix D – Children’s Behavior Questionnaire Short Form Version I..... | 68 |

## **Chapter 1**

### **Introduction**

#### **Overview**

The development of emotion regulation (using physical, cognitive, and/or behavioral strategies to intrinsically and extrinsically manage emotional experiences and emotional expressions; Denham, Bassett, & Wyatt, 2007; Yagmurlu & Altan, 2010) during the preschool stage has been an area of study for many years. There are two areas of research that have examined the role of parents in the development of children's emotion regulation: parenting style and parents' emotion socialization strategies. A vast amount of research has shown that parents who control their children but who also respond to their children in warm, encouraging ways and place an emphasis on the child's autonomy (also known as authoritative parents) have children who are highly competent in terms of expressing, understanding, and regulating emotions (Baumrind, 1971; Moilanen, Rasmussen, & Padilla-Walker, in press; Piotrowski, Lapierre, & Linebarger, 2013). On the other hand, parents who are harsh, overcontrolling, and interfere with their child's individuality (also known as authoritarian parents) often hinder their child's ability to develop positive emotion regulation strategies (Baumrind, 1971; Moilanen et al., in press).

Previous research has also examined parents' emotion socialization strategies as they relate to children's observed emotion regulation (Nelson, O'Brien, Calkins, Leerkes, Marcovitch, & Blackson, 2012; Shaffer, Suveg, Thomassin, & Bradbury, 2012; Spinrad, Stifter, Donelan-McCall, & Turner, 2004). Researchers have concluded that parents typically react to their children's emotions in two ways. Parents who are supportive of their children's emotions are encouraging and comforting when their children express emotions, and they assist their children with appropriate emotion regulation (Moilanen, Shaw, Dishion, Gardner, & Wilson, 2010;

Shaffer et al., 2012). Using supportive emotion regulation strategies (e.g., coaching and explaining emotions to children) gives children the opportunity to understand their emotional states, as well as the emotional states of others, and teaches children how to respond to those emotional states in appropriate ways (Yagmurlu & Altan, 2010). On the other hand, parents who are non-supportive discourage children from expressing their negative emotions because they view negative emotional expression as unacceptable behaviors (Spinrad et al., 2004). Parents who use non-supportive emotion regulation strategies (e.g., discrediting the child's emotions) may inhibit children from discussing and controlling their emotions appropriately (Yahmurlu & Altan, 2010). In turn, children may gradually learn to display low levels of emotion or hide their emotions altogether (Eisenberg & Fabes, 1994).

There is an extensive amount of research that has separately examined the role of parenting styles and children's emotion regulation (Graziano, Keane, & Calkins, 2010; Piotrowski et al., 2013), as there is work on the links between parents' emotion socialization strategies and children's emotion regulation (Cole, Dennis, Smith-Simon, & Cohen, 2009; Eisenberg & Fabes, 1994). However, no known studies to date have examined the combined effects of both parenting styles and emotion socialization on the development of children's emotion regulation. There is a need to examine the relationship that these two variables have on the development of children's emotion regulation together because emotion regulation is a critical factor in children's development; it impacts children's social interactions with others, as well as children's competence in other areas of development (e.g., academic achievement) and children's overall well-being (Denham et al., 2007). Therefore, examining the way that both parenting style and parents' emotion socialization strategies impact children's emotion regulation will provide a better understanding of the way that parents facilitate or impede on children's

development of emotion regulation abilities.

It seems appropriate to apply the tripartite model developed by Sheffield Morris, Silk, Steinberg, Myers, and Robinson (2007) to a study examining the role of parents on children's development of emotion regulation because a variety of parenting dimensions have been found to impact children's social and emotional development. Specifically, the tripartite model displays three distinct ways that parents and parent-child relationships impact children's development of emotion regulation (Sheffield Morris et al., 2007). Awareness of the impact that parents have on children's development of emotion regulation will provide a better understanding of the ways that parents can promote positive outcomes for children that are important later in life (e.g., prosocial behavior and academic achievement) (Bates & Pettit, 2007).

### **Justification for the Study**

Previous research has been conducted on the associations between parenting styles and children's observed emotion regulation, as well the relation between parent's emotion socialization strategies and children's observed emotion regulation. This is significant because one way that children learn to regulate their emotions is through parent-child interactions (Mirabile, Scaramella, Shor-Preston, & Robison, 2009). However, there is a need to examine how both of these aspects collectively impact children's emotion regulation because parents have the most influential impact on children's socialization abilities (Grusec & Davidov, 2007). Socialization refers to being able to function with other individuals through the acceptance of the values displayed in society (Grusec & Davidov, 2007). Children learn socialization strategies through daily parent-child interactions. As mentioned by Moilanen et al. (2010), parent-child interactions not only expose children to the ways parents expect children to regulate their emotions, but they also provide children with the opportunity to learn regulatory strategies by

observing the emotions parents display and the way that parents regulate their own emotions. In other words, children first learn to socialize their emotions through interactions with their parents and the ways that parents respond to children's emotions impacts the ways that children cope with their own emotional states, as well as emotional states of others (Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002). Therefore, examining the different ways that parents impact children's socialization will provide research that allows precise predictions to be made about how children's emotion regulation develops. It will also provide researchers with the opportunity to develop prevention and intervention strategies for parents who display specific qualities that are expected to hinder the development of children's emotion regulation abilities (e.g., authoritarian and non-supportive parenting styles).

Moreover, emotion regulation is essential for children's healthy development, including developing the ability to understand others' emotions, as well as the ability to express and regulate their own emotions (Yagmurlu & Altan, 2010). The ability to successfully regulate emotions gives children the opportunity to have more positive interactions with other children and to be competent in academic settings as well (Denham et al., 2007). The strategies that children use to self-regulate their emotions are developed through coaching and guidance from their parents (Cole et al., 2009; Piotrowski et al., 2013; Yagmurlu & Altan, 2010), as well as from the relationship quality (attachment) between parents and children (Colmer, Rutherford, & Murphy, 2011).

### **Statement of the Problem**

The purpose of this study was to examine the way that parenting styles (e.g., the way that parents control and respond to their children's behaviors; i.e., authoritative and authoritarian parenting) and parents emotion socialization strategies (e.g., the way that parents respond to their

children's emotions; i.e., supportive and non-supportive reactions to emotions) collectively impact children's emotion regulation. While researchers agree that both parenting styles and parents emotion socialization strategies are important areas to examine, there is a lack of research examining the impact that both of these factors have on children's emotion regulation together. As displayed in Sheffield Morris et al.'s (2007) tripartite model, a variety of parenting dimensions (e.g., specific parenting practices and the emotional climate of the family) have been found to impact children's social and emotional development. As noted above, this is important to consider because of the significant impact that parents have on their children's emotion socialization abilities (Grusec & Davidov, 2007). In simple terms, there is a need to examine how parents and parent-child relationships impact children's development of emotion regulation.

## Chapter 2

### Review of Literature

Previous research has determined that parent-child interactions impact children's emotion regulation (Cole et al., 2009). Although studies have examined both parenting styles and parental emotion socialization strategies individually as they are related to children's emotion regulation, there is also a need to examine the collective associations among these influences. This is crucial in order to establish more precise predictions to support the development of children's emotion regulation in regards to parent-child interactions. As described by Thompson (1994), children are exposed to their parents' ways of regulating emotion through parent-child interactions and may imitate their parents' emotion regulation strategies when their own emotions arise. Thus, parent-child interactions and children's exposure to parents' emotion regulation strategies occur in everyday life and impact children's emotional development later in life (O'Neal & Magai, 2005). Moreover, parents' emotion socialization strategies are related to children's externalizing and internalizing behaviors. For example, O'Neal and Magai (2005) noted that supportive emotion socialization strategies are associated with less child externalizing behavior problems. On the other hand, non-supportive emotion socialization strategies are associated with more child externalizing behavior problems and depression later in adolescence (O'Neal & Magai, 2005).

The focus of this study was to examine the relationship between parenting styles and parents' emotion regulation strategies and the way that parenting styles and parents' emotion regulation strategies collectively impact children's observed emotion regulation. First, attachment theory will be discussed, as it is related to parent-child interactions. Second, the tripartite model developed by Sheffield Morris et al. (2007) will be further introduced; this

model displays the impact of the family, specifically parents, on children's development of emotion regulation. Third, parenting styles will be discussed by reviewing previous research articles examining parenting styles (authoritative and authoritarian) and children's development of emotion regulation. Fourth, parents' emotion socialization will be reviewed by examining previous research articles that include supportive and non-supportive reactions to emotions as they are related to children's development of emotion regulation.

### **Attachment Theory**

The parent-child relationship is the first social relationship that children develop, and is one of the most important aspects of development during the infancy period (Lamb, Bornstein, & Teti, 2002). Immediately after birth, parents are responsible for regulating their children's emotions by nurturing, supporting, and providing for their infant (Sheffield Morris et al., 2007). The attachment relationship that develops, or the quality of the bond between the caregiver and the child, is important for children's later functioning. The quality of parent-child attachment influences children's development of emotion regulation (Colmer et al., 2011).

Parents who are responsive to their infant's needs are more likely to develop a secure attachment relationship with their children than parents who are inconsistent or unresponsive to their infant's need (Colmer et al., 2011; Root et al., 2012). Secure attachments are classified as those caregiving relationships that are continuous and consistent and involve responsive, warm, and positive interactions (Colmer et al., 2011). Parents who develop secure attachment relationships with their children tend to display sensitive caregiving; they are accepting of both positive and negative emotions that their children exhibit (Berlin & Cassidy, 2003). This assures children that their parents are available for assistance when needed (Laible & Thompson, 2007). Therefore, parents can talk about emotions with their children and assist their children in



expressing and regulating their emotions (Denham et al., 2007).

On the other hand, parents who develop an insecure attachment with their children are inconsistent and selectively respond to their child's needs. Insecure attachments result from parents suppressing children's negative affect, which then diminishes children's need for closeness and comfort from their parents (Berlin & Cassidy, 2003). For example, as mentioned by Laible and Thompson (2007), children may not develop a sense of trust with inconsistent caregivers and in turn, children may resist discussing their feelings and emotions with their parents. Thus, an insecure attachment may hinder a child's ability to develop the strategies needed to self-regulate his or her emotions. For example, children may begin to view themselves as incompetent and unworthy (Root, Hastings, & Maxwell, 2012). This may create difficulties for children in various socio-emotional aspects of development (e.g., peer relationships, academic achievement, and controlling problem behaviors) (Root et al., 2012; Yagmurlu & Altan, 2010). In sum, according to attachment theory, establishing a relationship with their parents is crucial for the successful development of children's emotion regulation (Kerns, Abraham, Schlegelmilch, & Morgan, 2007).

There is evidence of the link between the quality of the parent-child relationships and the development of emotion regulation. For instance, research conducted by Diener, Mangelsdorf, McHale, and Frosch (2002) examined the relationships between infant emotion regulation and attachment quality of parent-child interactions. It was hypothesized that infants who had a secure parent-child attachment relationship would engage in more parent-oriented strategies than infants who had an insecure parent-child attachment relationship. Data were collected from 85 families who were involved in a larger study. Attachment quality, behavioral strategies of emotion regulation, and emotional expressions were coded from two laboratory visits, where the Strange

Situation task and the competing demands tasks were completed. During the competing demands task, parents were expected to complete a demographic questionnaire while also responding to their unoccupied infants; it was used to examine infants' behavioral strategies for emotion regulation, thus it was conducted immediately after the Strange Situation task in order to promote mild infant distress. Results showed that children with insecure parent-child attachment relationships, with both mothers and fathers, experienced higher levels of distress than those children with secure parent-child attachment relationships during the completing demands task. Thus, the quality of the attachment relationship between the parent and the child impacted the way that children perceived their emotional experiences.

As children grow older and are better able to regulate their own emotions independently, the quality of the parent-child relationship is still a critical aspect of children's development of emotion regulation because parents are responsible for teaching their children about emotions and coaching them through emotional experiences (Kopp, 1982). Parents also model emotions through emotional expression and emotion regulation. Sheffield Morris et al. (2007) declared that parents' experiences with their own emotions teach children emotions that are acceptable in their specific family environment, as well as strategies to help regulate those emotions. For example, parents who display anger by yelling teach their children that yelling is an acceptable way to express their anger. However, if parents regulate their anger by walking away from the situation, they are modeling a strategy that can be used to regulate their feelings of anger to their children. In addition, according to Calkins and Hill (2009), children who have developed a secure attachment with their parents show higher levels of comfort and lower levels of stress when exploring emotion regulation strategies, while children who have an insecure attachment with their parents show higher levels of ambivalence and stress when exploring emotion

regulation strategies (Calkins & Hill, 2009). For example, a child that has developed an insecure attachment with their parent may be uncertain of the way to express the different feelings they experience (e.g., expressing sadness and expressing anger). Therefore, as noted by Thompson (2008), children who develop strong emotion regulation strategies are commonly children who have previously developed secure attachment relationships with their parents.

Thus, it seems appropriate to apply attachment theory to a study on the role of parents in the development of children's emotion regulation. Attachment theory is significant to this study because a secure attachment is a common predictor of successful social and emotional development. In fact, Madigan, Laurin, Atkinson, and Benoit (2013) pointed out that insecure attachment relationships are early contributors to internalizing behavior problems (e.g., depression and anxiety). Children who have an insecure parent-child attachment relationship lack a secure base for exploration of emotions and emotion regulation strategies (Madigan et al., 2013). Secure attachments, however, provide the basis for children to learn the skills needed to self-regulate their emotions (Colmer et al., 2011). In addition, the way that parents respond to their child's emotions influences the type of attachment that will be formed between the parent and the child (Madigan et al., 2013).

### **Tripartite Model**

The tripartite model developed by Sheffield Morris et al. (2007) displays the impact that the family, specifically parents, has on children's development of emotion regulation. In addition to parent and child characteristics (e.g., temperament, gender, and familial history) displayed in the model, children's development of emotion regulation is influenced by parents in three ways (Sheffield Morris et al., 2007). First, children learn about emotions through observation and modeling of their parents and caregivers. As mentioned by Grusec and Davidov (2007), parents

were known to be children's primary agents of socialization early in life; parents spend the most time with their children early on and therefore have the most important impact on children's socialization during this time (Grusec & Davidov, 2007). As a result, children are able to learn about emotions through their parents' experiences of emotions. By observing their parents' displays of and interactions with emotions, children are exposed to a variety of different emotions that are acceptable to display in their family environment (Sheffield Morris et al., 2007). Children may then manage their own emotions by using strategies of emotion regulation displayed by their parents. For example, when a parent yells to display anger, their children may also duplicate that action when they experience feelings of anger.

Second, specific parenting practices (e.g., reactions to emotions) teach children about emotions. Parents who guide their children through the emotion regulation process (e.g., a supportive reaction to emotions) assist children in labeling their emotions and also help children problem-solve or manage their emotions (Sheffield Morris et al., 2007). On the other hand, parents who dismiss children's emotions (e.g., a non-supportive reaction to emotions) disapprove of and discourage emotional expression. Parents who dismiss children's emotions do not provide children with the opportunity to understand or appropriately express their emotions (Sheffield Morris et al., 2007). Instead, children may learn to hide their emotions altogether; this can lead to difficulties regulating emotions and low quality social functioning (Sheffield Morris et al., 2007).

Third, the emotional climate of the family (e.g., parenting style) affects children's emotion regulation. As previously discussed, secure attachments are formed when parents are responsive and nurturing (a dimension of authoritative parenting) to their children's emotional needs (Colmer et al., 2011; Sheffield Morris et al., 2007; Root et al., 2012). On the other hand, hostility and negative control (i.e., dimensions of authoritarian parenting) have been linked to

poor emotion regulation abilities (Sheffield Morris et al., 2007).

It seems appropriate to apply Sheffield Morris et al.'s (2007) tripartite model to a study examining the role of parents on children's development of emotion regulation because a variety of parenting dimensions can impact children's social and emotional development (Moilanen et al., 2010). Successful social and emotional development results from children learning how to regulate their emotions and their behaviors in ways that are socially appropriate (Sheffield Morris et al., 2007). This process begins at birth through parent-child interactions and encompasses observations and experiences that are associated with parents' display of emotions. Therefore, Sheffield Morris et al.'s (2007) tripartite model is significant to the study because it displays three distinct ways that that children's development of emotion regulation is influenced by parents and parent-child relationships. The focus of this study will be on the second aspect (i.e., specific parenting practices) and the third aspect (i.e., the emotional climate of the family) of Sheffield Morris et al.'s (2007) tripartite model in order to examine the impacts of parenting style and parents' emotion socialization strategies on children's development of emotion regulation.

### **Parenting Styles and Children's Emotion Regulation**

Parenting styles are known predictors of children's outcomes; the two parenting styles relevant to this research study are authoritative and authoritarian parenting. As mentioned by Yagmurlu and Altan (2009), authoritative parenting was linked to emotional competence while authoritarian parenting was found to be a predictor of emotionally incompetent behaviors. According to Baumrind (1971), authoritative parenting is the parenting style linked to the most successful outcomes in children. Authoritative parents express warmth and empathy and are sensitive towards their children's needs (Baumrind, 1971). Moreover, authoritative parents are

responsive to their children's behaviors and emotions in a positive regard (Baumrind, 1971).

Authoritative parents encourage their children to express their thoughts and feelings, grant their children autonomy, and establish a fulfilling parent-child relationship (Baumrind, 1971).

When compared to authoritative parents, authoritarian parents are less lenient and less accepting of their children (Baumrind, 1971). Authoritarian parents typically engage in harsh and punitive behaviors when interacting with their children, and exhibit high levels of behavioral and psychological control (Baumrind, 1971). Behavioral control involves controlling behaviors by enforcing rewards and punishment (e.g., extensive time-out when a child does not clean up their toys), while psychological control involves the emotional state of the child to control behaviors (e.g., manipulating a child or making the child feel guilty) (Baumrind, 1971). Authoritarian parents are often overcontrolling and make decisions for their children; they are not concerned about their child's point of view and often intrude on their individuality (Baumrind, 1971).

As noted above, parenting styles are associated with children's developmental outcomes. Specifically, optimal self-regulatory abilities have been found to be associated with authoritative parenting styles while authoritarian parenting styles are linked to poor self-control of emotions (Moilanen et al., in press). Previous research has provided support for further research examining the impact of parenting style on children's development of emotion regulation. Children raised by authoritative parents have been found to be more emotionally competent than children by authoritarian parents (Yagmurlu & Altan, 2010). This may be due to the fact that children who are raised by parents who are harsh and make decisions for their children (a dimension of authoritarian parenting) are overcontrolled and cannot rely on their parents to provide them with the skills needed to recognize emotion regulation strategies that are necessary to control their behaviors.

Other studies have demonstrated that similar types of dysfunctional parenting are also associated with poor emotion regulation. For instance, Graziano et al. (2010) examined the relation between maternal behavior and emotion regulation. Specifically, they examined the development of children's reactive control (i.e., automatic or involuntary regulation) and effortful control (i.e., control that individuals can voluntarily activate or inhibit) longitudinally. It was hypothesized that parents who displayed warmth and responsiveness to their children at age two would be positively related to children's effortful control at age five, while parents who were overcontrolling and intrusive at age two was expected to be negatively related to children's effortful control at age five.

In this study, data were collected from 425 children between the ages of two and five years and maternal behavior and emotion regulation was assessed via observations (Graziano et al., 2010). Results indicated that mothers who interacted with their children using a warm and responsive parenting style (a dimension of authoritative parenting) at the age of two had children who developed better emotion regulation skills, compared to children with weaker emotion regulation skills, and were also less likely to interact with their children in an intrusive manner at age five. On the other hand, children who experienced high levels of overcontrol and intrusiveness parenting styles (i.e., a dimension of authoritarian parenting) at the age of two were found to display lower levels of reactive control (automatic or involuntary regulation) at age five. Furthermore, higher levels of reactive control were displayed by children who expressed better emotion regulation skills. This study illustrates that children with mothers who display warm and responsive parenting styles will develop stronger abilities to automatically regulate their emotions. Mothers who are responsive to their children's needs provide support and encourage their children to express their emotions in a positive manner, which promotes the development of

successful emotion regulation.

Additional findings support the contention that authoritative parenting is linked to children's emotion regulation. For example, an analysis completed by Piotrowski et al. (2013) examined how parenting styles and early childhood regulation were associated. Specifically, they expected that parents who apply an excessive amount of parental control (i.e., a dimension of authoritarian parenting) would hinder their children's self-regulation skills, while parents who maintained a consistent amount of parental control (control but respond in a warm, encouraging way; i.e., dimension of authoritative parenting) would facilitate their children's self-regulation skills. Data were collected from a total of 1,141 caregivers of children between two and eight years of age; parents completed questionnaires assessing their own parenting behaviors and reported on their children's self-regulation skills. Results indicated that children whose parents used authoritarian parenting styles were more likely to have difficulties with self-regulation of emotions compared to children whose parents used authoritative parenting styles. Thus, it can be concluded that children raised by authoritative parents will develop stronger emotion regulation strategies than those raised by authoritarian parents.

In sum, parents who apply an excessive amount of parental control (Piotrowski et al., 2013) seems to be associated with less adaptive emotion regulatory abilities of children. On the other hand, it seems that sensitive and supportive parenting responses (Graziano et al., 2010; Yahmurlu & Altan, 2010) are associated with better emotion regulation. While this provides me with an understanding of how children's emotion regulation develops in the context of parenting, there is also a body of literature on children's exposure to their parent's emotion socialization strategies that is important to consider in this line of study. As further discussed, children's exposure to their parents' emotion socialization strategies may have an impact children's



development of emotion regulation.

### **Parents' Emotion Socialization Strategies**

Children's exposure to their parents' emotion socialization strategies, specifically their supportive reactions to children's emotions, help children learn about emotions and how to express their emotions (Denham et al., 2007). Through interactions with their caregivers, children learn appropriate ways to express and to cope with their emotions in order to socialize with other individuals (Yagmurlu & Altan, 2010). Parent's emotion socialization strategies include being aware of and accepting their children's emotions, as well as instructing their children on how to manage their emotions (Yagmurlu & Altan, 2010).

Parents typically respond to their children's emotions using a supportive or non-supportive approach. The focus of my study was on supportive reactions to children's emotions, which ranged from low support to high support. Parents who display supportive approaches encourage their children to express and discuss their emotions. Supportive parenting practices, as described by Shaffer and colleagues (2012), include encouraging children to express their emotions and also guiding their regulation of emotions. In addition, it is important for parents to comfort their children and also help their children express their emotions appropriately. The nature of each specific emotion (e.g., happiness, sadness, and anger) determines the appropriateness of emotion expression, which includes how the emotion is expressed and when it is expressed (Denham et al., 2007). Thus, explaining emotions gives children the ability to interpret and to understand their own emotions and how to respond to their specific emotional states, as well as the emotional states of others (Spinrad et al., 2004).

Parents who engage in supportive emotion socialization strategies provide children with the opportunity to become socially and emotionally competent. Emotional competence not only

involves expressing emotions but it also includes regulating emotions and understanding emotions of the self and of others (Denham et al., 2007). Denham et al. (2007) stated that parents are key models for emotional expression and that children's everyday interactions impact their emotion socialization abilities. Parents not only impact children's emotion socialization by modeling the way that they express and regulate their own emotions, but also through their responses to their children's emotions (Denham et al., 2007).

Parents who display a non-supportive approach view some emotion expression as an unacceptable behavior. Spinrad et al. (2004) mentioned that parents who question their children's emotions hinder their emotional experience; not only do these behaviors encourage children to hide their emotions but children also begin to avoid dealing with negative emotions altogether (Spinrad et al., 2004). Parents who use non-supportive emotion socialization strategies may also give in to their children's wishes or distract their children from their negative emotional states (Spinrad et al., 2004). Parents who give in to their children's wishes limit children's experience with negative affect, while distracting children from their emotional states may cause distress when children are left to regulate their emotions independently (Spinrad et al., 2004). In other words, children may not learn to regulate their emotions on their own. Thus, non-supportive emotion socialization strategies impede on children's development of emotion regulation.

### **Parent's Emotion Socialization and Children's Emotion Regulation**

As noted above, parents' emotion socialization practices are associated with children's development of emotion regulation strategies. Previous research has demonstrated that children with parents who are unsupportive of their negative emotions often have poorer emotion regulation abilities. The work of Eisenberg and colleagues has provided support for the relations between parents' emotion socialization and children's development of emotion regulation. For

instance, Eisenberg and Fabes (1994) examined how mothers' reactions to children's negative emotions were related to children's temperament and anger behavior at school.

Data was collected across two academic semesters from 79 four-, five-, and six-year-olds and their mothers, as well as their teachers and teacher aides. Mothers reported their reactions to their children's negative emotions through the Coping with Children's Negative Emotions Scale (CCNES), where they were presented with 12 situations regarding distress and negative affect that children are likely to experience. Mothers who reported comforting their children when reacting to their negative emotions (a supportive reaction to emotion) was associated with children's display of high levels of constructive anger reactions and low levels of venting and intensity relating to anger (Eisenberg & Fabes, 1994); thus, mothers' supportive emotion socialization was predictive of good emotion regulatory ability. This study illustrates that parents' emotion socialization impacts children's development of emotion regulation.

There is also more recent evidence for the relation between parents' emotion socialization and children's ability to regulate emotion. For instance, Cole et al. (2009) examined the impact of parents who were supportive and structured children's self-regulation of negative emotions on preschool-aged children's emotional understanding. Cole et al. (2009) hypothesized that mothers who were emotionally supportive (e.g., expression of sympathy) but did not help their child manage negative emotions would predict the recognition of appropriate strategies while mothers who structured self-regulation of negative emotions (e.g., labeling the situation) would predict children's generation of appropriate strategies. They tested this hypothesis in a sample of 116 preschool-aged children and their mothers. An eight-minute challenge task was used to assess mother's responses, specifically maternal structuring and maternal support, to her child's negative emotions.

Cole et al. (2009) reported that parenting factors were predictors of children's emotion regulation and strategy understanding. Specifically, their findings indicated that when children received high levels of emotional support when distressed, they recognized more strategies to regulate anger but generated fewer strategies to regulate anger. In addition, children who received less support were left to generate ideas on their own and therefore, were not presented with the opportunity to recognize strategies used to regulate anger. This study illustrates that children who receive high levels of emotional support from their parents will develop greater emotion regulation strategies to regulate their negative emotions.

Additional findings support the contention that supportive emotion socialization is linked to children's emotion regulation. For instance, Nelson and colleagues (2012) studied children's emotional development at ages three and four, and examined the relation between maternal expressive styles (persistent styles used to express verbal and nonverbal emotions), both positive (e.g., praising someone for good work) and negative (e.g., scolding another's actions), and children's emotion regulation. Data was collected from 240 families over a one year period. Mothers self-reported their emotional experiences and expressive patterns at time one and time two. Children's emotion knowledge was measured through a series of laboratory tasks (e.g., labeling emotions, affective perspective taking, and identifying the causes of emotions) at both time points. Also at both time points, children's expression of emotion was assessed via observation of two mother-child interactions and a parent-report questionnaire. Children's emotion regulation was assessed using parent-report questionnaires and by examining the child's cardiac activity.

Results indicated that there were three distinct maternal expressive styles (i.e., high positive/low negative, very low positive, and very high negative); overall, mothers who

expressed high amounts of positive emotion and low amounts of negative emotion were the most supportive of their children's positive emotional development. Specifically, at three and four years of age, Nelson et al. (2012) found that children used more emotion words during the mother-child tasks and exhibited less negative affectivity when mothers expressed a high positive and low negative parenting style. Therefore, from this study it can be concluded that children who have parents who are less supportive of their emotions are highly negative and have trouble controlling their negative feelings.

In a similar study, Spinrad et al. (2004) sought to identify strategies that mothers used when responding to their toddlers' emotions and to determine if their strategies would change as the child aged. They hypothesized that maternal regulatory strategies at 18-months of age would be positively related to preschooler's self-regulation expression of emotions. Participants included 43 mother-toddler dyads that were assessed at 18 months, 30 months, and approximately 5 years of age. They reported that the frequency of mothers regulating their children's emotions decreased between 18 months and 30 months. In addition, a negative relationship was found between mothers who used distraction as an emotion regulation strategy when their children were 18-months of age and children's use of distractions at the preschool age. From this study, it can be concluded that maternal strategies have an important influence on children's later self-regulation. This study illustrates that children with parents who provide supportive reactions to their emotions early on will develop better self-regulatory abilities over time.

In addition, Shaffer and colleagues (2012) also examined how parental responses to children's emotional expression were related to children's emotion regulation skills. They hypothesized that supportive reactions to negative emotions would be positively linked to child

emotion regulation. Shaffer et al. (2012) gathered data from two separate samples, which included a total of 97 children between the ages of seven and 12, as well as their mothers. Mothers reported on their own psychological distress and on the ways that they negatively responded to their children's emotional expressions. As expected, poorer child emotion regulation skills and an increase in emotion dysregulation was associated with mothers who displayed unsupportive reactions to their children's negative emotions. Thus, children who receive supportive reactions to their negative emotions (e.g., using coaching strategies and providing explanations for emotions) from their parents have the ability to develop stronger emotion regulation skills than those who receive non-supportive reactions to their negative emotions (e.g., dismissing or questioning children's emotions) from their parents.

In another study conducted by Yagmurlu and Altan (2010), researchers examined the relationship between maternal socialization (specifically mothers' attempts to help their children feel better, to solve their children's emotional problems, and to encourage the expression of negative emotions) and preschoolers' emotion regulation. Data were collected from 145 four- and five-year-Turkish old preschool children, their mothers, and their preschool teachers. Mothers and the child's preschool teachers completed a checklist as a measure of children's emotion regulation. In addition, mothers self-reported their socialization of emotion and completed a questionnaire that assessed their parenting behaviors.

Results indicated that maternal responsiveness and children's emotion regulation were related. Specifically, children who displayed the highest levels of emotion regulation had mothers who were high in responsiveness to their emotions. This study illustrates that those children who receive high levels of positive parenting (e.g., responsiveness to children's negative emotions) have the ability to develop stronger emotion regulation skills than children who

receive high levels of negative parenting (e.g., questioning children's emotions).

In sum, emotion socialization practices marked by support are associated with children's emotion regulation (Denham et al., 2007; Shaffer et al., 2012; Spinrad et al., 2004). On the other hand, non-supportive emotion socialization practices displayed by parents are associated with poorer child emotion regulation abilities (Shaffer et al., 2012; Spinrad et al., 2004). While this provides me with an understanding of how children's emotion regulation develops in the context of children's exposure to their parent's emotion socialization strategies, it is also important to examine the collective impact of the global beliefs and specific parenting styles related to children's observed emotion regulation.

### **Collective Examination of Parents' Global Socialization and Emotion-Specific Socialization**

As previously mentioned, the tripartite model developed by Sheffield Morris et al. (2007) displays three ways that parents collectively impact children's development of emotion regulation, through observation and modeling, specific parenting practices (parents' behaviors; e.g., reactions to emotions), and the emotional climate of the family (parents' attitudes; e.g., parenting style). As discussed in the literature review, it is evident that both parenting styles (Baumrind, 1971) and parent's emotion socialization strategies (Denham et al., 2007) influence children's observed emotion regulation. However, the bulk of previous research has focused on either general parenting styles (e.g., authoritative and authoritarian parenting; Graziano et al., 2010) or parents' emotion socialization strategies (e.g., supportive and non-supportive reactions to children's emotions; Spinrad et al., 2004). Therefore, a gap remains in the literature on parenting styles, parents' emotion socialization strategies, and children's observed emotion regulation. The current study has the potential to advance the literature regarding the impact of the simultaneous association of parenting styles and parent's emotion socialization strategies on

children's development of emotion regulation. There is evidence in the literature regarding children's emotion regulation that suggests that examining both the global beliefs and specific parenting styles will provide a better understanding of the development on children's observed emotion regulation. One known study in which parenting styles and parenting practices are both considered was conducted by O'Neal and Magai (2005). Specifically, they examined adolescents' behavior as it was related to their parents' responses to their emotions; they specifically focused on global socialization (using the same strategies to respond to different emotions) and emotion-specific socialization (using different strategies to respond to different emotions) (O'Neal & Magai, 2005). Data were collected from 161 adolescents, between the ages of 11 and 14, and researchers conducted private interviews to gather information about parent's emotion socialization strategies. The Emotions as a Child Scale (EAC) had been applied during the child interview to assess the quality of the parents' responses to the child's emotions (O'Neal & Magai, 2005). Only the Emotion Socialization Strategies subscale was used to incorporate the domains of global socialization and researchers' pinpointed children's negative emotions, such as feeling sad, feeling angry, feeling fearful, and feeling ashamed; children responded using a seven-point Likert scale, ranging from 1 (*not at all like my mother*) to 7 (*exactly like my mother*). The domains of global socialization include "Reward (e.g., "She understands why you feel sad," "She hugs you"), Punish (e.g., "She calls you a crybaby"), Neglect (e.g., "She ignores you"), Override (e.g., "She tells you to keep quiet"), and Magnify (i.e., escalate; e.g., "She gets angry with you")" (O'Neal & Magai, 2005, p. 475).

The results of O'Neal and Magai's (2005) study indicated that examining both the global socialization model and the emotion-specific socialization model together would be more beneficial than examining the models individually when predicting adolescents' internalizing and



externalizing behaviors. Specifically they reported that parents typically respond in different ways (e.g., rewarding, punishing, neglecting, overriding, or magnifying) when children feel different emotions (e.g., sadness, anger, fear, or shame) (O'Neal & Magai, 2005). For example, parents may magnify their children's feelings of happiness but override their feelings of anger. In addition, responding to different emotions in the same way was found to be more closely related to internalizing and externalizing behaviors than responding to different emotions in different ways (O'Neal & Magai, 2005). Thus, parents who respond to all of their children's emotions the same way may confuse their children regarding the expression of their emotions. Therefore, it appeared that examining both global and specific emotion socialization would provide a more precise picture of the development of internalizing and externalizing behaviors in adolescents, behaviors that are linked to difficulty in regulating emotion (Cicchetti, Ackerman, & Izard, 1995). It seemed plausible that examining global indices of parenting (e.g., authoritative and authoritarian parenting styles) and emotion socialization practices (e.g., supportive and non-supportive reactions to emotions) would provide a better understanding of how children develop specific emotion regulatory abilities. Thus, in order to gain a better understanding of how parents impact children's observed emotion regulation, both parenting styles (e.g., authoritative parenting) and parent's emotion socialization strategies (e.g., supportive reactions to children's emotions) were examined together in the proposed study.

### **The Current Study**

To date, previous research has established that parents have a significant impact on children's development of emotion regulation (Baumrind, 1971; Nelson et al., 2012; Piotrowski et al., 2009; Shaffer et al., 2012). The current study examined the relation between parenting styles and children's emotion regulation, as well as the relation between parent's emotion

socialization strategies and children's emotion regulation. Specific hypotheses are outlined below.

The first goal of the study was to examine the relation between parenting styles (e.g., authoritative and authoritarian parenting) and children's emotion regulation. Given that authoritative parents are sensitive and supportive of their children's needs (Baumrind, 1971; Yahmurlu & Altan, 2010), it was hypothesized that high authoritative parenting styles would be positively related to children's emotion regulation. On the other hand, based on previous research that has shown that authoritarian parents are harsher when interacting with their child and make decisions for their children (Baumrind, 1971), it was hypothesized that authoritarian parenting would predict lower levels of children's emotion regulation.

The second goal of the study was to examine the relation between parents' emotion socialization strategies and children's emotion regulation. Previous research has shown that parents who are supportive of their children's emotions encourage children to express their emotions and provide guidance for appropriate emotional expression (Spinrad et al., 2004). Therefore, it was hypothesized that parents who display higher levels of supportive reactions to emotions would predict higher levels of children's emotion regulation.

The third goal of the study was to examine the combined effects of general parenting practices and emotion socialization on children's emotion regulatory ability. Therefore, it was a goal to see if emotion socialization would moderate the effects of general parenting practices on children's emotion regulatory abilities. Based on Sheffield Morris et al.'s (2007) tripartite model displaying the impact of parents on children's development of emotion regulation, it was predicted that supportive emotion socialization strategies would intensify the relation between authoritative parenting and children's emotion regulatory ability; that is, those children who had

mothers who engage in the highest levels of authoritative parenting and the highest levels of supportive emotion socialization would have the highest levels of emotion regulatory ability. Similarly, it was expected that supportive emotion socialization practices would attenuate the expected negative relation between authoritarian parenting and emotion regulation; specifically, those children with mothers that report the highest levels of authoritarian parenting and the lowest levels of supportive emotion socialization strategies would have the lowest levels of emotion regulatory ability.

## Chapter 3

### Method

#### Participants

Participants were recruited through local nursery schools and day care centers. Fifty-one mothers ( $M = 34.40$  years;  $SD = 5.14$ ; range = 18-47) and their preschool-aged children ( $M = 3.76$  years;  $SD = 0.83$ ; range = 2-5) participated. A majority of the mothers in the sample were not of Hispanic or Latino ethnicities (95.8%). The sample included mothers who were Caucasian (93.8%), African American (4.2%), and Bi-Racial or Multi-Racial (2.1%). Approximately 79% of mothers reported household incomes of \$50,000 or higher and all mothers had received some level of college education at the time of the study. A majority of the children in the sample were not of Hispanic or Latino ethnicities (97.9%). The sample included children who were caucasian (89.6%), African American (4.2%), and biracial or multiracial (6.3%).

#### Procedure

Once families agreed to participate, questionnaires were sent to participants either via e-mail or postal mail. The questionnaires used in the proposed study assessed demographics, parenting practices, and parents' reactions to children's negative emotions.

#### Measures

**Demographic questionnaire.** Mothers completed a questionnaire composed of demographic questions (see Appendix A). The questions included information about the mother, the father, and the child. Child information that was gathered included the child's age, sex, ethnicity, race, and country of origin. The information about each parent that was obtained included the parent's age, ethnicity, education level, occupation, employment status, marital status, primary household language, and household income.

**Parenting Practices Questionnaire.** Mothers also completed the Parenting Practices Questionnaire (PPQ; Robinson, Mandleco, Frost Olsen, & Hart, 2005). This questionnaire consists of 72 items where mothers reported how often they exhibited specific behaviors with their child (see Appendix B). Mothers responded to each of the items using a five-point response scale, ranging from 1 (*never*) to 5 (*always*). Of the three subscales of the questionnaire, two were relevant to the current study (i.e., authoritative parenting and authoritarian parenting). There were 27 items used as measures of authoritative parenting styles (sample items: “responsive to child’s feelings or needs” and “explains the consequences of the child’s behavior”; Cronbach’s  $\alpha = .91$ ) and 20 items used as measures of authoritarian parenting styles (sample items: “argues with child” and “yells or shouts when child misbehaves”; Cronbach’s  $\alpha = .86$ ). Mean scores were examined and on both scales, higher scores reflected greater levels of that parenting style.

**Coping with Negative Emotions Scale.** The Coping with Negative Emotions Scale (CCNES; Fabes et al., 2002) was used to examine different ways that parents respond to negative emotions displayed by their children (see Appendix C). Of the six subscales, five are relevant to the current study. Of the 72 items, 36 items were used as measures of supportive parenting and 24 items were used as measures of non-supportive parenting. The subscales measuring supportive parenting were expressive encouragement (sample item: “If my child becomes angry because he/she is sick or hurt and can’t go to his/her friend’s birthday party, I would encourage my child to express his/her feelings of anger and frustration”; Cronbach’s  $\alpha = .85$ ), emotion-focused reactions (sample item: “If my child falls off his/her bike and breaks it, and then gets upset and cries, I would comfort my child and try to get him/her to forget about the accident”; Cronbach’s  $\alpha = .80$ ), and problem-focused reactions (sample item: “If my child loses some prized possession and reacts with tears, I would help my child think of places he/she hasn’t

looked yet”; Cronbach’s  $\alpha = .78$ ). The subscales measuring non-supportive parenting were punitive reactions (sample item: “If my child is afraid of injections and becomes quite shaky and teary while waiting for his/her turn to get a shot, I would tell him/her to shape up or he/she won’t be allowed to do something he/she likes to do (e.g., watch TV); Cronbach’s  $\alpha = .69$ ) and minimization reactions (sample item: “If my child is going over to spend the afternoon at a friend’s house and becomes nervous and upset because I can’t stay there with him/her, I would tell my child to quit over-reacting and being a baby”; Cronbach’s  $\alpha = .78$ ). Mothers responded to each of the items using a seven-point response scale, ranging from 1 (*very unlikely*) to 7 (*very likely*). Mean scores were examined and on both scales, higher scores reflected greater levels of that emotion socialization scale (supportive or non-supportive).

In addition to the traditional use of the scale, both scales were combined to create a global emotion socialization scale. Higher scores on the global emotion socialization scale were indicative of supportive emotion socialization while lower scores were indicative of non-supportive emotion socialization. Therefore, the items from the non-supportive scale were reverse-coded and then an aggregate were created from all of the items ( $\alpha = .93$ ). The two individual scales (non-supportive and supportive) were significantly and negatively related to one another ( $r = -.34$ , Table 1).

**Children’s emotion regulation.** Mothers also completed the Children’s Behavior Questionnaire Short Form Version I (CBQ; Putnam & Rothbart, 2006) to examine children’s emotion regulation (see Appendix D). Of the 15 subscales, one is relevant to the current study. The falling reactivity/soothability scale was used as a measure of children’s emotion regulation; this scale measures children’s rate of recovery from peak distress, excitement, or general arousal (sample item: “When angry about something, s/he tends to stay upset for ten minutes or longer”).

Of the 94 items, six items were used as a measure of falling reactivity/soothability. Mothers responded to each of the items using a seven-point response scale, ranging from 1 (*extremely untrue of your child*) to 7 (*extremely true of your child*; Cronbach's  $\alpha = .63$ ). Mean scores were examined and higher scores were indicative of better emotion regulatory ability while lower scores are reflective of poor emotion regulatory ability.

### **Analytic Strategy**

Descriptive data were computed on all data (e.g., means and standard deviations); further, a series of correlations were run to examine the relations between the independent variables (authoritative parenting, authoritarian parenting, and emotion socialization). Next, to test the three hypotheses, two multiple regressions were conducted using SPSS version 22. In the first regression analysis, authoritative parenting, supportive emotion socialization, and the interaction between authoritative parenting and supportive emotion socialization were used as predictors of emotion regulation. Significant interactions were tested via simple slope analysis (Cohen, Cohen, West, & Aiken, 2003). In the second regression analysis, authoritarian parenting, supportive emotion socialization, and the interaction between authoritarian parenting and supportive emotion socialization were used as predictors of emotion regulation. Initially, supportive emotion socialization strategies were used as a moderator when examining the relationship between parenting styles and children's emotion regulation. However, post hoc analyses were also conducted. Four regression analyses were conducted, which included the two individual scales of parents' emotion socialization strategies. Specifically, in the first regression analysis, authoritative parenting, supportive emotion socialization, and the interaction between authoritative parenting and supportive emotion socialization were used as predictors of emotion regulation. In the second regression analysis, authoritative parenting, nonsupportive emotion

socialization, and the interaction between authoritative parenting and nonsupportive emotion socialization were used as predictors of emotion regulation. In the third regression analysis, authoritarian parenting, supportive emotion socialization, and the interaction between authoritarian parenting and supportive emotion socialization were used as predictors of emotion regulation. In the fourth regression analysis, authoritarian parenting, nonsupportive emotion socialization, and the interaction between authoritarian parenting and nonsupportive emotion socialization were used as predictors of emotion regulation.

The sample size of similar studies ranged from 43 participants (Spinrad et al., 2004) to 1,141 participants (Piotrowski et al., 2013). However, the sample size suggested by Cohen (1992) to detect a medium effect (power = .80,  $p < .05$ ) is 76; therefore, the models were slightly underpowered.



## **Chapter 4**

### **Results**

Descriptive statistics and correlations are presented in Table 1. Two regression analyses were conducted to examine individual and interactive contributions of parenting styles and parents' emotion socialization strategies on children's development of emotion regulation. The global emotion socialization scale was used as a measure of parents' emotion socialization strategies in both regression analyses. Therefore, supportive reactions to children's emotions were used as a moderator when examining the relationship between parenting style and children's emotion regulation.

#### **Supportive Aggregate as a Moderator**

In the first regression analysis, authoritative parenting, supportive emotion socialization, and the interaction between authoritative parenting and supportive emotion socialization were entered on three separate steps to predict emotion regulation. In the second regression analysis, authoritarian parenting, supportive emotion socialization, and the interaction between authoritarian parenting and supportive emotion socialization were entered on separate steps to predict emotion regulation. The regression models did not yield significant results (see Table 2). Therefore, when using supportive reactions to children's emotions as a moderator, neither authoritative nor authoritarian parenting styles were predictors of children's emotion regulation.

#### **Supportive and Non-supportive Factors as Moderators**

Consequently, post hoc analyses were conducted (see Table 3). Specifically, four regression analyses were conducted to examine individual and interactive contributions of parenting styles and parents' emotion socialization strategies on children's development of emotion regulation. Rather than including the global emotion socialization scale, the two

individual scales of parents' emotion socialization strategies (supportive and non-supportive) were included in the post hoc analyses.

In the first regression analysis, authoritative parenting, supportive emotion socialization, and the interaction between authoritative parenting and supportive emotion socialization were entered on separate steps to predict emotion regulation. Supportive reactions to emotions approached significance in the prediction of emotion regulation,  $F(1,48) = 2.84, p = .10, R^2 = .02$ . The presence of a positive beta weight for supportive reactions to emotions,  $\beta = .29$ , indicated that higher levels of supportive reactions to their children's emotions had children who displayed higher levels of falling reactivity (i.e., better regulation).

In the second regression analysis, authoritative parenting, nonsupportive emotion socialization, and the interaction between authoritative parenting and nonsupportive emotion socialization were entered on separate steps to predict emotion regulation. No significant findings were revealed,  $F(1,47) = .29, p = .59, R^2 = -.03$ .

In the third regression analysis, authoritarian parenting, supportive emotion socialization, and the interaction between authoritarian parenting and supportive emotion socialization were entered on separate steps to predict emotion regulation. The interaction between authoritarian parenting and supportive emotion socialization approached significance,  $F(1,47) = 3.68, p = .06, R^2 = .06$ ; the interaction was modeled at low and high supportive reactions to emotions (see Figure 1). A simple slope analysis indicated that the relation between authoritarian parenting and emotion regulation was significant only for the low supportive reactions to emotions group ( $\beta = -.41, p = .04$ ) but not the high supportive reactions to emotions group ( $\beta = .08, ns$ ). Specifically, the strongest negative relation between authoritarian parenting and emotion regulation was for those parents who displayed low levels of supportive reactions. Thus, parents who engaged in

high levels of authoritarian parenting and low levels of supportive emotion socialization had children who displayed the lowest levels of emotion regulation, as indicated by falling reactivity scores.

In the fourth regression analysis, authoritarian parenting, nonsupportive emotion socialization, and the interaction between authoritarian parenting and nonsupportive emotion socialization were entered on separate steps to predict emotion regulation. Again, no significant findings were revealed,  $F(1,47) = .51, p = .48, R^2 = -.01$ .

## **Chapter 5**

### **Discussion**

The current study examined the role of parents in the development of children's emotion regulation. Previous research has suggested that parents impact children's development of emotion regulation in both direct and indirect ways (Grusec & Davidov, 2007; Sheffield Morris et al., 2007). Therefore, the purpose of this study was to examine the relationship between parenting styles and mothers' emotion regulation strategies and the way that these two variables collectively impacted children's observed emotion regulation.

#### **Supportive Aggregate as a Moderator**

First, it was hypothesized that authoritative parenting styles would be positively related to children's emotion regulation while authoritarian parenting would predict lower levels of children's emotion regulation. Second, it was hypothesized that parents who displayed higher levels of supportive reactions to children's emotions would predict higher levels of children's emotion regulation. The findings of the study did not support these original hypotheses. In other words, authoritarian and authoritative parenting styles did not predict children's emotion regulation. In addition, higher levels of children's emotion regulation were not associated with higher levels of supportive reactions to children's emotions. The non-significant findings could be a result of the small, homogeneous sample of the study and the strong correlations between the independent variables. Specifically, the majority of the participants in the study were Caucasian women who reported a household income of \$50,000 or higher, and all participants reported earning some level of college education. Further support of this notion comes from Piotrowski and colleagues (2013), who found that children from high-income households and children whose parents had more formal education experienced less difficulty with self-

regulation than children from low-income households and children whose parents had less formal education. Moreover, the mean scores of these variables indicated that mothers in this sample, on average, engaged in high levels of supportive emotion socialization and authoritative parenting, and low levels of authoritarian parenting. Thus, coupled with the notion that children from high-income households are well-regulated, the constructs examined herein had little variation.

The low variability and null findings could also be a result of the quality of the parent-child relationships among the participants of the study. Specifically, the high levels of supportive emotion socialization and authoritative parenting, and low levels of authoritarian parenting (see Table 1) suggest that the mother-child dyads of the study had previously developed a secure attachment relationship. This is consistent with findings of Calkins and Hill (2009) who found that children of secure parent-child attachment relationships show higher levels of comfort and lower levels of stress when exploring emotion regulation strategies. In other words, the null findings suggest that the majority of the mothers in this sample are consistent and caring in their interactions with their children; thus, they may have already provided their children with a sense of comfort and the basis to be well-regulated. Conversely, if children had developed an insecure attachment relationship with their parents, they may be intimidated or afraid to express their emotions or discuss their emotions with their parents; this may cause distress when children attempt to regulate their emotions on their own.

Just as the parent-child attachment relationship begins to develop at birth (Lamb et al., 2002), children also begin to learn how to regulate their emotions and their behaviors at birth through parent-child interactions. Therefore, Sheffield Morris et al.'s (2007) tripartite model may also explain the findings of the study. Specifically, this model displays that specific parenting

practices and parenting styles are associated with children's development of emotion regulation (Sheffield Morris et al., 2007). Therefore, the high levels of supportive emotion socialization suggest that the majority of mothers have guided their children through the emotion regulation process and helped their children manage their emotions. In addition, the high levels of authoritative parenting and low levels of authoritarian parenting suggest that the majority of mothers were responsive and displayed consistent caregiving to their children's emotional needs.

Third, it was hypothesized that emotion socialization strategies would intensify the relation between authoritative parenting and children's emotion regulatory ability and that supportive emotion socialization practices would attenuate the expected negative relation between authoritarian parenting and emotion regulation. The findings of the study did not support this original hypothesis. Indeed, the aggregate created for supportive reactions to children's emotions (where higher scores indicated supportive emotion socialization and lower scores indicated nonsupportive emotion socialization) was not found to be a predictor of children's observed emotion regulation. Although the global emotion socialization aggregate has not been used in previous research, these results are surprising, considering the significant and negative correlation between the supportive and non-supportive scales (see Table 1). The results fit the conceptual rationale provided by Fabes et al. (2002) regarding the development of the *CCNES* scale. Specifically, the scale was developed in order to examine the various ways or the specific types of coping responses that parents use to respond to negative emotions displayed by their children.

### **Supportive and Non-supportive Factors as Moderators**

When supportive and non-supportive emotion socialization were examined individually, the results revealed a near-significant interaction between authoritarian parenting

and supportive reactions to children's observed emotion regulation. Specifically, children displayed the lowest levels of falling reactivity (poor emotion regulation) when parents displayed high levels of authoritarian parenting and low levels of supportive reactions to children's emotions. In other words, children displayed poor emotion regulatory abilities when their parents were overcontrolling and did not respond to their children's emotional expressions in a sensitive manner. This is consistent with findings of Piotrowski et al. (2012), who found that children displayed weaker self-regulation when their parents exhibited an overbearing amount of parental control. These findings are also consistent with those of Shaffer and colleagues (2012), who found that children displayed poorer emotion regulatory abilities when they had mothers who were low in support when responding to their negative emotions.

Interestingly, children displayed the highest levels of falling reactivity (better emotion regulation) when parents displayed low levels of authoritarian parenting and low levels of supportive reactions to children's emotions. As mentioned by Cole et al. (2009), a lack of support of children's emotions may provide children with the opportunity to generate ideas to regulate their emotions on their own. Conversely, parents who provide high levels of supportive reactions to their children's emotions may be overcontrolling and intrusive while providing support (Yagmurlu & Altan, 2010). For example, parents may allow children to express their emotions but instead of discussing children's emotions with them, parents may tell their children the emotions they think their children felt instead. In other words, instead of teaching children appropriate strategies they could use to manage their emotions independently, parents providing high levels of support may actually interfere with their child's development by managing children's emotions for them. Further support of this notion comes from Piotrowski and colleagues (2013), who found that children with weaker self-regulatory abilities had parents who

displayed high levels of control. In other words, children who were overcontrolled displayed weaker self-regulatory abilities. Thus, from these findings, it can be concluded that although mothers may not encourage their children to express their emotions or explain emotions to their children, children still have the opportunity to develop strong emotion regulation skills as long as their parents are not overcontrolling or interact with them in a harsh manner.

Additionally, supportive reactions to children's emotions approached significance as a main effect predictor of emotion regulation regarding authoritative parenting. Specifically, higher levels of supportive reactions to children's emotions predicted higher levels of falling reactivity (better emotion regulation). In other words, children displayed better emotion regulation when their parents were supportive of their emotions and their emotional expressivity. This is consistent with the findings of previous research (Eisenberg & Fabes, 1994; Fabes et al., 2002; Yagmurlu & Altan, 2010), which found that parents who are accepting and respond to their children's emotions in a supportive manner will promote emotional expression and emotional competence among their children.

There were no significant findings reported with non-supportive reactions to children's emotions. Due to the fact that a global emotion socialization scale was used (i.e., responses to multiple negative emotions), an aggregate was created in order to measure non-supportive reactions to children's emotions. Overall, mothers reported low levels of non-supportive reactions to children's emotions. Therefore, the non-significant findings could be a result of low variability, or a lack of power. However, it is also possible that examining parents' responses to multiple emotions limited my understanding of the contribution to emotion regulation (O'Neal & Magai, 2005). It may be that parents encourage their children to express specific emotions (e.g., happiness) while they discourage their children from expressing others (e.g., sadness). In



addition, the mothers' responses regarding non-supportive reactions to children's emotions may have been impacted if the strategies they typically implement in their home were not included as options on the CCNES measure.

### **Limitations and Future Directions**

The current study contributes to previous research by examining the combined effects of both parenting styles and parents' emotion socialization strategies on the development of children's emotion regulation (Grusec & Davidov, 2007; O'Neal & Magai, 2005; Sheffield Morris et al., 2007). Aside from the study's divergent findings, there were several limitations that are important to note. In addition, there is a need for more research in this area to gain a better understanding of how specific parenting dimensions impact children's development of emotion regulation.

The first limitation of the study was that the homogenous sample was relatively small in size; specifically, the majority of the participants in the study were Caucasian women who reported high incomes (i.e., over \$50,000) and all had some level of college education. Therefore, it was difficult to generalize findings beyond this sample due to parent and parent-child interaction differences, which may be related to specific characteristics of the participants (e.g., differences in socioeconomic status, culture, and level of education). For example, Piotrowski et al. (2013) found that children from low-income households had more difficulties with self-regulation than children from more affluent backgrounds. In addition, the majority of mothers in this small sample engaged in high levels of supportive emotion socialization and authoritative parenting, and low levels of authoritarian parenting; this could be a result of the characteristics previously mentioned. Therefore, it is clear that studies that include larger and more diverse samples are needed in order to examine the global indices of parenting (e.g.,

authoritative and authoritarian parenting styles) and emotion socialization practices (e.g., supportive and non-supportive reactions to emotions); this will provide a better understanding of how children develop specific emotion regulatory abilities (Sheffield Morris et al., 2007) and may also increase the generalizability of the findings.

For future research, it may be valuable to consider the contribution of child sex. Previous research indicates that gender differences regarding children's emotion regulation do exist. Specifically, boys tend to have weaker self-regulation skills than girls (Piotrowski et al., 2013). Therefore, a second limitation of the study was that child gender differences were not examined. It has been noted that parents respond to boys' and girls' emotions in different ways due to society's expectations of emotion expression relating to gender (Denham et al., 2007). As mentioned by Zeman, Perry-Parrish, and Cassano (2010), mothers rarely discuss anger with girls but frequently discuss anger with boys while fathers frequently discuss sadness with girls but rarely with boys. Consequently, children may not be presented with opportunities to learn about emotions that are stereotyped for the opposite gender to display. Therefore, future studies should examine the gender differences associated with children's emotional expression.

A third limitation of the study was that information was only collected from mothers of the targeted sample; this limitation is rather typical in studies examining the role of parents in the development of children's emotion regulation. Similar to other studies in this area of research regarding parent and parent-child interactions, the focus of this study was on mothers and mother-child interactions (e.g., Graziano et al., 2010; Spinrad et al., 2004; Yagmurlu & Altan, 2010). However, as mentioned by Denham et al. (2007), mothers are not the only agent of socialization regarding children's development of emotion regulation. Therefore, in future research, it is important to consider other agents of socialization that may have an impact on

children's development of emotion regulation during the preschool years (e.g., fathers, siblings, peers, and teachers). Mothers are known to be children's primary caregiver within the family and therefore, have more opportunities than fathers to regulate children's emotions (Moilanen et al., in press). Thus, children's dysregulated behavior more often reflects on mothers than it does on fathers (Moilanen et al., in press).

In addition, mothers were the only respondents of the questionnaires. Therefore, a fourth limitation of the study was that there was no verification of the accuracy of the information provided. Specifically, the way that mothers responded to the questionnaires may have been affected by the parenting expectations of the society. In addition, data was only collected via questionnaires, which may have limited mothers' responses and also may not reflect typical parent-child interactions. In future studies, it would be beneficial to include a number of informants in order to avoid respondent bias; respondent bias may result from mothers responding to the questionnaire in socially desirable ways. For example, data could be collected from both the mother and the father of the child, from the child's preschool teachers, as well as the child him/herself. As previously mentioned, parents typically respond in different ways when children feel different emotions (O'Neal & Magai, 2005). Therefore, it would also be useful to integrate other data collection methods, such as observations or open ended questions. An observation of a parent-child interaction task would provide researchers with the opportunity to examine how parents interact with their children (e.g., parenting style), while open ended questions would allow parents to elaborate on and provide an explanation for their reactions to specific emotions (e.g., parents' emotion socialization strategies).

## **Conclusion**

Parents are known to be children's primary agents of socialization early in life (Grusec &

Davidov, 2007). Since the socialization process begins at birth and children spend the majority of their time with their parents early on, a variety of parenting dimensions may impact children's socialization abilities (Sheffield Morris et al., 2007). Research has shown that is important to consider the collective relationship between parenting style and parents' emotion socialization strategies on children's development of emotion regulation. Findings from my study provide support for the notion that children learn to regulate their emotions through direct and indirect interactions with their parents. Specifically, both parenting styles and parents' emotion socialization strategies were found to be associated to children's observed emotion regulation abilities. Therefore, a better understanding of the ways that parents can promote positive outcomes for their children's development (e.g., emotion regulation) can be attained through future studies that examine the collective impact of both parenting styles and parents' emotion socialization strategies.

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Table 1

*Means, Standard Deviations, and Correlations for all Measures*

|                            | 1. | 2.     | 3.     | 4.    | 5.   | 6.     | <i>M</i> | <i>SD</i> | <i>Min</i> | <i>Max</i> |
|----------------------------|----|--------|--------|-------|------|--------|----------|-----------|------------|------------|
| 1. Authoritative Parenting | -- | -.55** | .56**  | -.12  | .02  | .14    | 4.03     | 0.32      | -0.81      | 0.51       |
| 2. Authoritarian Parenting |    | --     | -.43** | .36** | -.17 | -.38** | 1.87     | 0.29      | -0.61      | 0.55       |
| 3. Supportive Reactions    |    |        | --     | -.34* | .21  | .35*   | 5.56     | 0.68      | -1.42      | 1.05       |
| 4. Nonsupportive Reactions |    |        |        | --    | -.16 | -.97** | 2.53     | 0.85      | -1.29      | 3.92       |
| 5. Emotion Regulation      |    |        |        |       | --   | .15    | 5.14     | 0.73      | 3.00       | 6.50       |
| 6. Supportive Aggregate    |    |        |        |       |      |        | -69.29   | 24.86     | -184.34    | -33.14     |

*Note.* \*  $p < .05$ ; \*\*  $p < .01$  (two-tailed).

Table 2

*Predictions of Falling Reactivity from General Parenting Practices and Supportive Emotion Socialization Aggregate*

| Predictor                               | Falling Reactivity |         |
|---|--------------------|---------|
|   | $\Delta R^2$       | $\beta$ |
| 1. Authoritative                        | .00                | .02     |
| 2. Supportive Aggregate                 | .02                | .15     |
| 3. Authoritative X Supportive Aggregate | .01                | .01     |
| 1. Authoritarian                        | .03                | -.17    |
| 2. Supportive Aggregate                 | .01                | .10     |
| 3. Authoritarian X Supportive Aggregate | .01                | .11     |

*Note.* No significant findings emerged in these models.

Table 3

*Predictions of Falling Reactivity from General Parenting Practices and CCNES Supportive and Non-supportive Emotion Socialization*

| Predictor                  | Authoritative Models |                  | Authoritarian Models |                  |
|----------------------------|----------------------|------------------|----------------------|------------------|
|                            | $\Delta R^2$         | $\beta$          | $\Delta R^2$         | $\beta$          |
| 1. General Parenting       | .00                  | .02              | .03                  | -.17             |
| 2. CCNES Supportive        | .06 <sup>t</sup>     | .29 <sup>t</sup> | .02                  | .16              |
| 3. Gen. Parent X. Supp     | .00                  | .05              | .07 <sup>t</sup>     | .29 <sup>t</sup> |
| 1. General Parenting       | .00                  | .02              | .03                  | -.17             |
| 2. CCNES Non- Supportive   | .03                  | -.16             | .01                  | -.11             |
| 3. Gen. Parent X. Non-Supp | .01                  | -.08             | .01                  | -.11             |

*Note.* \*  $p < .05$ ; \*\*  $p < .01$ ; <sup>t</sup>  $p < .10$

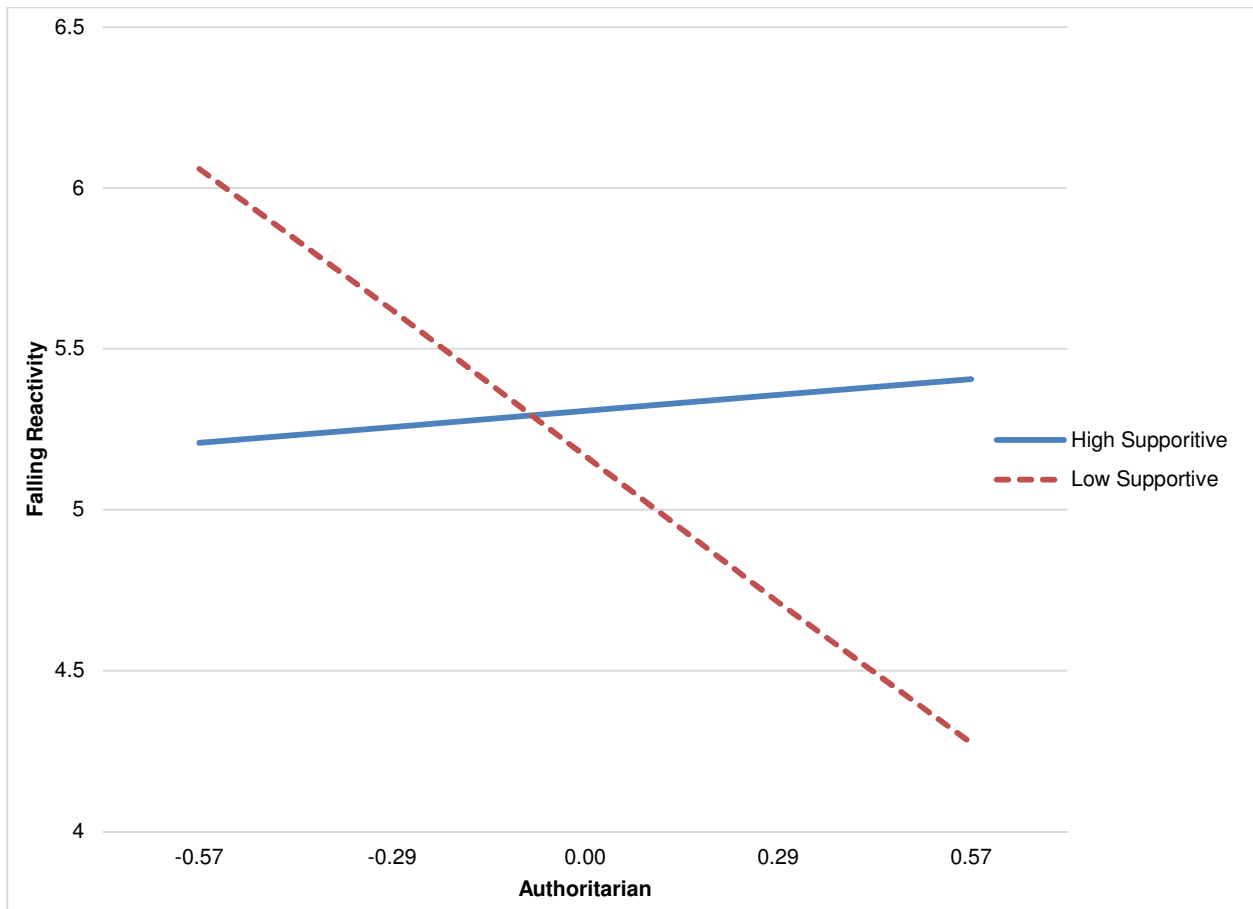


Figure 1. Falling Reactivity as a Function of Authoritarian Parenting at Levels of Supportive Parenting

**APPENDIX A**

Demographic Information

**Child's Birthdate** \_\_\_\_\_ **Child's Age** \_\_\_\_\_  
Month Day Year

**Child's Sex (circle one):** MALE FEMALE

**Child's Country of Birth** \_\_\_\_\_

**Is your child biological?** \_\_\_\_\_ **Adopted?** \_\_\_\_\_ **Foster child?** \_\_\_\_\_

**Child's Ethnicity (circle one):**  
Hispanic or Latino  
Not Hispanic or Latino

**Child's Race (check one):**  
American Indian/Alaska Native  
Asian  
Black or African American  
Native Hawaiian or Other Pacific Islander  
White or Caucasian  
Bi- or Multi-racial (please specify): \_\_\_\_\_  
Other (please specify): \_\_\_\_\_

**Mother's Birthdate** \_\_\_\_\_ **Age** \_\_\_\_\_  
Month Day Year

**Occupation** \_\_\_\_\_

**What the mother's employment status:** Employed full-time \_\_\_\_\_  
Employed part-time \_\_\_\_\_  
Not employed outside of home \_\_\_\_\_  
Retired \_\_\_\_\_  
Unemployed \_\_\_\_\_  
Other (specify) \_\_\_\_\_

**Mother's education level:** Elementary School \_\_\_\_\_  
High School \_\_\_\_\_  
Vocational School \_\_\_\_\_  
Some College \_\_\_\_\_  
University Degree \_\_\_\_\_  
Some Graduate School \_\_\_\_\_

Master's Degree \_\_\_\_\_  
Doctoral Degree \_\_\_\_\_  
Other (specify) \_\_\_\_\_

Mother's country of birth \_\_\_\_\_

If mother was not born in the U.S., how long has she been residing in the U.S.?

0 to 1 year \_\_\_\_\_ 1 to 3 years \_\_\_\_\_ 3 to 5 years \_\_\_\_\_  
5 to 10 years \_\_\_\_\_ over 10 years \_\_\_\_\_ Other \_\_\_\_\_

Mother's Ethnicity (circle one):

Hispanic or Latino  
Not Hispanic or Latino

Mother's Race (check one):

American Indian/Alaska Native  
Asian  
Black or African American  
Native Hawaiian or Other Pacific Islander  
White or Caucasian  
Bi- or Multi-racial (please specify): \_\_\_\_\_  
Other (please specify): \_\_\_\_\_

What language is spoken most often in your home?

English \_\_\_\_\_ Chinese \_\_\_\_\_ Spanish \_\_\_\_\_  
Filipino \_\_\_\_\_ Japanese \_\_\_\_\_ Korean \_\_\_\_\_  
Malaysian \_\_\_\_\_ Other (specify) \_\_\_\_\_

Mother's Marital Status with  
child's father  
(check one):

Married \_\_\_\_\_ How long? \_\_\_\_\_  
Separated \_\_\_\_\_ How long? \_\_\_\_\_  
Divorced \_\_\_\_\_ How long? \_\_\_\_\_  
Common law \_\_\_\_\_  
Other (specify) \_\_\_\_\_

Mother's current relationship status (check one): Married \_\_\_\_\_

Separated \_\_\_\_\_  
Divorced \_\_\_\_\_  
Common law \_\_\_\_\_  
Single \_\_\_\_\_  
Living with partner \_\_\_\_\_  
Other (specify) \_\_\_\_\_

Child's Father's Birthdate \_\_\_\_\_ Age \_\_\_\_\_  
Month Day Year

Occupation \_\_\_\_\_

**What is the father's employment status:** Employed full-time \_\_\_\_\_  
Employed part-time \_\_\_\_\_  
Not employed outside of home \_\_\_\_\_  
Retired \_\_\_\_\_  
Unemployed \_\_\_\_\_  
Other (specify) \_\_\_\_\_

**Father's education level:** Elementary School \_\_\_\_\_  
High School \_\_\_\_\_  
Vocational School \_\_\_\_\_  
Some College \_\_\_\_\_  
University Degree \_\_\_\_\_  
Some Graduate School \_\_\_\_\_  
Master's Degree \_\_\_\_\_  
Doctoral Degree \_\_\_\_\_  
Other (specify) \_\_\_\_\_

**Father's country of birth** \_\_\_\_\_

**If father was not born in the U.S., how long has he been residing in the U.S.?**

0 to 1 year \_\_\_\_\_ 1 to 3 years \_\_\_\_\_ 3 to 5 years \_\_\_\_\_  
5 to 10 years \_\_\_\_\_ over 10 years \_\_\_\_\_ Other \_\_\_\_\_

**Father's Ethnicity (circle one):**

Hispanic or Latino  
Not Hispanic or Latino

**Father's Race (check one):**

American Indian/Alaska Native  
Asian  
Black or African American  
Native Hawaiian or Other Pacific Islander  
White or Caucasian  
Bi- or Multi-racial (please specify): \_\_\_\_\_  
Other (please specify): \_\_\_\_\_

**Father's Marital Status with  
child's mother  
(check one):**

Married \_\_\_\_\_ How long? \_\_\_\_\_  
Separated \_\_\_\_\_ How long? \_\_\_\_\_  
Divorced \_\_\_\_\_ How long? \_\_\_\_\_  
Common law \_\_\_\_\_  
Other (specify) \_\_\_\_\_

**Father's current relationship status (check one):** Married \_\_\_\_\_  
Separated \_\_\_\_\_  
Divorced \_\_\_\_\_



Common law \_\_\_\_\_  
Single \_\_\_\_\_  
Living with partner \_\_\_\_\_  
Other (specify) \_\_\_\_\_

**Household Income:**

Less than \$10,000  
\$10,000 - \$25,000  
\$25,000 - \$50,000  
\$50,000 - \$75,000  
\$75,000 - \$100,000  
\$100,000 - \$150,000  
Greater than \$150,000

## APPENDIX B

### PARENTING PRACTICES QUESTIONNAIRE

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Make one rating for each item, rate *how often* you exhibit this behavior with your child

I Exhibit This Behavior:

1=Never

2=Once in Awhile

3= About Half of the Time

4= Very Often

5= Always

- \_\_\_\_\_ 1. I encourage my child to talk about the child's troubles.
- \_\_\_\_\_ 2. I guide my child by punishment more than by reason.
- \_\_\_\_\_ 3. I know the names of my child's friends.
- \_\_\_\_\_ 4. I find it difficult to discipline my child.
- \_\_\_\_\_ 5. I give praise when my child is good.
- \_\_\_\_\_ 6. I spank when my child is disobedient.
- \_\_\_\_\_ 7. I joke and play with my child.
- \_\_\_\_\_ 8. I withhold scolding and / or criticism even when my child acts contrary to my wishes.
- \_\_\_\_\_ 9. I show sympathy when my child is hurt or frustrated.
- \_\_\_\_\_ 10. I punish by taking privileges away from my child with little if any explanation.
- \_\_\_\_\_ 11. I spoil m child.
- \_\_\_\_\_ 12. I give comfort and understanding when my child is upset.
- \_\_\_\_\_ 13. I yell or shout when my child misbehaves.
- \_\_\_\_\_ 14. I am easy going and relaxed with my child.
- \_\_\_\_\_ 15. I allow my child to annoy someone else.
- \_\_\_\_\_ 16. I tell my child my expectations regarding behavior before the child engages in an

activity.

- \_\_\_\_\_ 17. I scold and criticize to make my child improve.
- \_\_\_\_\_ 18. I show patience with my child.
- \_\_\_\_\_ 19. I grab my child when being disobedient.
- \_\_\_\_\_ 20. I state punishments to my child and do not actually do them.
- \_\_\_\_\_ 21. I am responsive to my child's feelings or needs.
- \_\_\_\_\_ 22. I allow my child to give input into family rules.
- \_\_\_\_\_ 23. I argue with my child.
- \_\_\_\_\_ 24. I appear confident about parenting abilities.
- \_\_\_\_\_ 25. I give my child reasons why rules should be obeyed.
- \_\_\_\_\_ 26. I appear to be more concerned with own feelings than with my child's feelings.
- \_\_\_\_\_ 27. I tell my child that we appreciate what the child tries or accomplishes.
- \_\_\_\_\_ 28. I punish by putting my child off somewhere alone with little if any explanation.
- \_\_\_\_\_ 29. I help my child to understand the impact of behavior by encouraging my child to talk  
about the consequences of own actions.
- \_\_\_\_\_ 30. I am afraid that disciplining my child for misbehavior will cause the child not to like  
her/ his.
- \_\_\_\_\_ 31. I take my child's desires into account before asking the child to do something.
- \_\_\_\_\_ 32. I explode in anger towards my child.
- \_\_\_\_\_ 33. I am aware of problems or concerns about my child in school.
- \_\_\_\_\_ 34. I threaten my child with punishment more often than actually giving it.
- \_\_\_\_\_ 35. I express affection by hugging, kissing, and holding my child.
- \_\_\_\_\_ 36. I ignore my child's misbehavior.

- \_\_\_\_\_ 37. I use physical punishment as a way of disciplining my child.
- \_\_\_\_\_ 38. I carry out discipline after my child misbehaves.
- \_\_\_\_\_ 39. I apologize to my child when making a mistake in parenting.
- \_\_\_\_\_ 40. I tell my child what to do.
- \_\_\_\_\_ 41. I give in to my child when the child causes a commotion about something.
- \_\_\_\_\_ 42. I talk it over and reason with my child when the child misbehaves.
- \_\_\_\_\_ 43. I slap my child when the child misbehaves.
- \_\_\_\_\_ 44. I disagree with my child.
- \_\_\_\_\_ 45. I allow my child to interrupt others.
- \_\_\_\_\_ 46. I have warm and intimate times together with my child.
- \_\_\_\_\_ 47. When two children are fighting, I discipline the children first and ask questions later.
- \_\_\_\_\_ 48. I encourage my child to freely express herself/himself even when disagreeing with parents.
- \_\_\_\_\_ 49. I bribe my child with rewards to bring about compliance.
- \_\_\_\_\_ 50. I scold or criticize when my child's behavior doesn't meet my expectation.
- \_\_\_\_\_ 51. I show respect for my child's opinions by encouraging my child to express them.
- \_\_\_\_\_ 52. I set strict well-established rules for my child.
- \_\_\_\_\_ 53. I explain to my child how I feel about my child's good and bad behavior.
- \_\_\_\_\_ 54. I use threats as punishment with little or no justification.
- \_\_\_\_\_ 55. I take into account my child's preferences in making plans for the family.
- \_\_\_\_\_ 56. When my child asks why s/he has to conform, I state: because I said so, or I am your parent and I want you to .
- \_\_\_\_\_ 57. I appear unsure on how to solve my child's misbehavior.

- \_\_\_\_\_ 58. I explain the consequences of the child's behavior.
- \_\_\_\_\_ 59. I demand that my child does things.
- \_\_\_\_\_ 60. I channel my child's misbehavior into a more acceptable activity.
- \_\_\_\_\_ 61. I shove my child when the child is disobedient.
- \_\_\_\_\_ 62. I emphasize the reasons for rules.
- \_\_\_\_\_ 63. I intervene if there is a chance that my child will fail at something.
- \_\_\_\_\_ 64. I get anxious when my child tries to do something new or difficult for him/her.
- \_\_\_\_\_ 65. I feel guilty when my child does not measure up to his/her potential.
- \_\_\_\_\_ 66. I am fearful that others will not think well of my child.
- \_\_\_\_\_ 67. I try to control much of what my child does.
- \_\_\_\_\_ 68. I think it is important to supervise all of my child's activities.
- \_\_\_\_\_ 69. I discourage my child from trying new things if there is a chance my child will fail.
- \_\_\_\_\_ 70. I expect my child to be close by when playing.
- \_\_\_\_\_ 71. I tend to be overly involved in my child's activities.
- \_\_\_\_\_ 72. I tend to be overly protective with my child.

**APPENDIX C**

**Parent Attitude/Behavior Questionnaire**

Instructions: In the following items, please indicate on a scale from 1 (very unlikely) to 7 (very likely) the likelihood that you would respond in the ways listed for each item. Please read each item carefully and respond as honestly and sincerely as you can. For each response, please circle a number from 1-7.

|               |   |   |        |   |   |             |
|---------------|---|---|--------|---|---|-------------|
| 1             | 2 | 3 | 4      | 5 | 6 | 7           |
| Very Unlikely |   |   | Medium |   |   | Very Likely |

1. If my child becomes angry because he/she is unable to go to his/her friend's birthday party, would:
- a. send my child to his/her room to cool off 1 2 3 4 5 6 7
  - b. get angry at my child 1 2 3 4 5 6 7
  - c. help my child think about ways that he/she can still be with friends (e.g., invite some friends over after the party) 1 2 3 4 5 6 7
  - d. tell my child not to make a big deal out of missing the party 1 2 3 4 5 6 7
  - e. encourage my child to express his/her feelings of anger and frustration 1 2 3 4 5 6 7
  - f. soothe my child and do something fun with him/her to make him/her feel better about missing the party 1 2 3 4 5 6 7
2. If my child breaks his/her new bike, and then gets upset and cries, I would:
- a. remain calm and not let myself get anxious 1 2 3 4 5 6 7
  - b. comfort my child and try to get him/her to forget about the accident 1 2 3 4 5 6 7
  - c. tell my child that he/she is over-reacting 1 2 3 4 5 6 7
  - d. help my child figure out how to get the bike fixed 1 2 3 4 5 6 7
  - e. tell my child it's OK to cry 1 2 3 4 5 6 7
  - f. tell my child to stop crying or he/she won't be allowed to ride his/her bike anytime soon 1 2 3 4 5 6 7
3. If my child loses some prized possession (stuffed animal) and reacts with tears, I would:
- a. get upset with him/her for being so careless and then crying about it 1 2 3 4 5 6 7
  - b. tell my child that he/she is over-reacting 1 2 3 4 5 6 7
  - c. help my child think of places he/she hasn't looked yet 1 2 3 4 5 6 7
  - d. distract my child by talking about happy things 1 2 3 4 5 6 7
  - e. tell him/her it's OK to cry when you feel unhappy 1 2 3 4 5 6 7
  - f. tell him/her that's what happens when you're not careful 1 2 3 4 5 6 7

4. If my child is afraid of injections and becomes quite shaky and teary while waiting for his/her turn to get a shot, I would:

- a. tell him/her to shape up or he/she won't be allowed to do something he/she likes to do (e.g., watch TV) 1 2 3 4 5 6 7
- b. encourage my child to talk about his/her fears 1 2 3 4 5 6 7
- c. tell my child not to make big deal of the shot 1 2 3 4 5 6 7
- d. tell him/her not to embarrass us by crying 1 2 3 4 5 6 7
- e. comfort him/her before and after the shot 1 2 3 4 5 6 7
- f. talk to my child about ways to make it hurt less (such as relaxing so it won't hurt or taking deep breaths). 1 2 3 4 5 6 7

---

|               |   |   |        |   |   |             |
|---------------|---|---|--------|---|---|-------------|
| 1             | 2 | 3 | 4      | 5 | 6 | 7           |
| Very Unlikely |   |   | Medium |   |   | Very Likely |

---

5. If my child is going over to spend the afternoon at a friend's house and becomes nervous and upset because I can't stay there with him/her, I would:

- a. distract my child by talking about all the fun he/she will have with his/her friend 1 2 3 4 5 6 7
- b. help my child think of things that he/she could do so that being at the friend's house without me wasn't scary (e.g., take a favorite book or toy with him/her) 1 2 3 4 5 6 7
- c. tell my child to quit over-reacting and being a baby 1 2 3 4 5 6 7
- d. tell the child that if he/she doesn't stop that he/she won't be allowed to go out anymore 1 2 3 4 5 6 7
- e. feel upset and uncomfortable because of my child's reactions 1 2 3 4 5 6 7
- f. encourage my child to talk about his/her nervous feelings 1 2 3 4 5 6 7

6. If my child is participating in some group activity with his/her friends and proceeds to make a mistake and then looks embarrassed and on the verge of tears, I would:

- a. comfort my child and try to make him/her feel better 1 2 3 4 5 6 7
- b. tell my child that he/she is over-reacting 1 2 3 4 5 6 7
- c. feel uncomfortable and embarrassed myself 1 2 3 4 5 6 7
- d. tell my child to straighten up or we'll go home right away 1 2 3 4 5 6 7
- e. encourage my child to talk about his/her feelings of embarrassment 1 2 3 4 5 6 7
- f. tell my child that I'll help him/her practice so that he/she can do better next time 1 2 3 4 5 6 7

7. If my child is about to appear in a recital or sports activity and becomes visibly nervous about people watching him/her, I would:

- a. help my child think of things that he/she could do to get ready for his/her turn (e.g., to do some warm-ups and not to look at the audience) 1 2 3 4 5 6 7
- b. suggest that my child think about something relaxing

- so that his/her nervousness will go away 1 2 3 4 5 6 7
- c. remain calm and not get nervous myself 1 2 3 4 5 6 7
- d. tell my child that he/she is being a baby about it 1 2 3 4 5 6 7
- e. tell my child that if he/she doesn't calm down, we'll  
have to leave and go home right away 1 2 3 4 5 6 7
- f. encourage my child to talk about his/her nervous feelings 1 2 3 4 5 6 7

8. If my child receives an undesirable birthday gift from a friend and looks obviously disappointed, even annoyed, after opening it in the presence of the friend, I would:
- a. encourage my child to express his/her disappointed feelings 1 2 3 4 5 6 7
  - b. tell my child that the present can be exchanged  
for something the child wants 1 2 3 4 5 6 7
  - c. NOT be annoyed with my child for being rude 1 2 3 4 5 6 7
  - d. tell my child that he/she is over-reacting 1 2 3 4 5 6 7
  - e. scold my child for being insensitive to the  
friend's feelings 1 2 3 4 5 6 7
  - f. try to get my child to feel better by doing something fun 1 2 3 4 5 6 7

-----

|               |   |   |        |   |   |             |
|---------------|---|---|--------|---|---|-------------|
| 1             | 2 | 3 | 4      | 5 | 6 | 7           |
| Very Unlikely |   |   | Medium |   |   | Very Likely |

-----

9. If my child is panicky and can't go to sleep after watching a scary TV show, I would:
- a. encourage my child to talk about what scared him/her 1 2 3 4 5 6 7
  - b. get upset with him/her for being silly 1 2 3 4 5 6 7
  - c. tell my child that he/she is over-reacting 1 2 3 4 5 6 7
  - d. help my child think of something to do so that he/she can get  
to sleep (e.g., take a toy to bed, leave the lights on) 1 2 3 4 5 6 7
  - e. tell him/her to go to bed or he/she won't be allowed to  
watch any more TV 1 2 3 4 5 6 7
  - f. do something fun with my child to help him/her forget  
about what scared him/her 1 2 3 4 5 6 7

10. If my child is at a park and appears on the verge of tears because the other children are mean to him/her and won't let him/her play with them, I would:
- a. NOT get upset myself 1 2 3 4 5 6 7
  - b. tell my child that if he/she starts crying  
then we'll have to go home right away 1 2 3 4 5 6 7
  - c. tell my child it's OK to cry when he/she feels bad 1 2 3 4 5 6 7
  - d. comfort my child and try to get him/her to think about  
something happy 1 2 3 4 5 6 7
  - e. help my child think of something else to do 1 2 3 4 5 6 7
  - f. tell my child that he/she will feel better soon 1 2 3 4 5 6 7



11. If my child is playing with other children and one of them calls him/her names, and my child then begins to tremble and become tearful, I would:

- |   |               |
|---|---------------|
| a. tell my child not to make a big deal out of it   | 1 2 3 4 5 6 7 |
| b. feel upset myself  | 1 2 3 4 5 6 7 |
| c. tell my child to behave or we'll have to go home right away  | 1 2 3 4 5 6 7 |
| d. help my child think of constructive things to do when other children tease him/her (e.g., find other things to do) | 1 2 3 4 5 6 7 |
| e. comfort him/her and play a game to take his/her mind off the upsetting event                                       | 1 2 3 4 5 6 7 |
| f. encourage him/her to talk about how it hurts to be teased  | 1 2 3 4 5 6 7 |

12. If my child is shy and scared around strangers and consistently becomes teary and wants to stay in his/her bedroom whenever family friends and their children come to visit, I would:

- |  |               |
|--|---------------|
| a. help my child think of things to do that would make meeting my friends less scary (e.g., to take a favorite toy with him/her when meeting my friends) | 1 2 3 4 5 6 7 |
| b. tell my child that it is OK to feel nervous   | 1 2 3 4 5 6 7 |
| c. try to make my child happy by talking about the fun things we can do with our friends   | 1 2 3 4 5 6 7 |
| d. feel upset and uncomfortable because of my child's reactions  | 1 2 3 4 5 6 7 |
| e. tell my child that he/she must stay in the living room and visit with our friends   | 1 2 3 4 5 6 7 |
| f. tell my child that he/she is being a baby   | 1 2 3 4 5 6 7 |

---

|               |   |   |        |   |   |             |
|---------------|---|---|--------|---|---|-------------|
| 1             | 2 | 3 | 4      | 5 | 6 | 7           |
| Very Unlikely |   |   | Medium |   |   | Very Likely |

---

13. It is 15 minutes until dinner is ready. Your child asks for a cookie because she/he is "starving." You explain that dinner will be ready in 15 minutes and that she/he will have to wait until then. Your child yells and stomps his or her feet continuously. I would:

- |   |               |
|---|---------------|
| a. punish him/her for his/her behavior  | 1 2 3 4 5 6 7 |
| b. get angry for his/her overreaction   | 1 2 3 4 5 6 7 |
| c. tell my child that he/she is over-reacting   | 1 2 3 4 5 6 7 |
| d. help my child think of something to do so that he/she can get keep occupied until dinner | 1 2 3 4 5 6 7 |
| e. tell my child that it's o.k. to feel angry, but s/he will have to wait for dinner        | 1 2 3 4 5 6 7 |
| f. comfort my child by offering an alternate healthy snack (e.g., carrots)                  | 1 2 3 4 5 6 7 |

14. You and your child are in a toy store. Your child asks you to buy him/her a new toy. You tell your child no, that she/he just received several new toys at her/his birthday party, and then you go to leave the store. Your child throws her/himself onto the floor kicking and screaming, yelling that she/he wants the toy. Your child will not leave the store. I would:

- |  |               |
|--|---------------|
| a. NOT get upset myself  | 1 2 3 4 5 6 7 |
| b. tell my child that if he/she will be punished when you get home | 1 2 3 4 5 6 7 |
| c. tell my child it's OK to be angry, but they need to calm down   | 1 2 3 4 5 6 7 |

- d. comfort my child and suggest to him/her how to calm down (e.g., count to five; deep breaths) 1 2 3 4 5 6 7
- e. distract my child by reminding him/her of another fun activity s/he'll be doing later in the day/week 1 2 3 4 5 6 7
- f. tell my child to stop acting like a baby 1 2 3 4 5 6 7

15. You've moved into a new neighborhood, and your child is invited to a birthday party being held for the child next door. You take your child to the party and stay awhile. You notice that your child looks very nervous and uncomfortable, and is keeping to her/himself.

- a. tell my child not to make a big deal out of it 1 2 3 4 5 6 7
- b. feel upset myself and uncomfortable because of my child's reactions 1 2 3 4 5 6 7
- c. tell my child that s/he must remain at the party 1 2 3 4 5 6 7
- d. help my child think of constructive things to do to feel more comfortable 1 2 3 4 5 6 7
- e. tell my child s/he is being a baby 1 2 3 4 5 6 7
- f. tell my child it's OK to be nervous 1 2 3 4 5 6 7

16. Your child has a race with friends in the neighborhood, comes in first, and is very excited. When you get home, for a long time, your child continues to jump around gleefully and exclaim to you about her/his victory.

- a. praise my child for his/her accomplishment, encourage him/her to celebrate 1 2 3 4 5 6 7
- b. tell my child that it is OK to feel happy 1 2 3 4 5 6 7
- c. point out my child's accomplishment, and tell him/her I am proud of him/her 1 2 3 4 5 6 7
- d. feel uncomfortable because of my child's jubilant behavior 1 2 3 4 5 6 7
- e. tell my child that it's not that big of a deal, and to calm down 1 2 3 4 5 6 7
- f. tell my child to calm down or they'll get a time out 1 2 3 4 5 6 7

17. It is your sister's birthday and she has invited the whole family to celebrate by going out for dinner. The restaurant she has chosen is rather elegant and formal. During the dinner your child exuberantly jumps out of his/her chair and shouts, "Happy birthday, Auntie!"

- a. Encourage him/her to celebrate 1 2 3 4 5 6 7
- b. tell my child that it is OK to feel happy 1 2 3 4 5 6 7
- c. point out that my child's reaction was thoughtful, and tell him/her I am proud of him/her 1 2 3 4 5 6 7
- d. feel uncomfortable because of my child's jubilant behavior 1 2 3 4 5 6 7
- e. tell my child to calm down 1 2 3 4 5 6 7
- f. tell my child to calm down or they won't get any birthday cake 1 2 3 4 5 6 7

When your child displays ANGER how does it make you feel?

| 1              | 2 | 3 | 4           | 5 | 6 | 7             |
|----------------|---|---|-------------|---|---|---------------|
| Not at all     |   |   | Quite a bit |   |   | Extremely     |
| -----          |   |   |             |   |   |               |
| How angry?     |   |   |             |   |   | 1 2 3 4 5 6 7 |
| How disgusted? |   |   |             |   |   | 1 2 3 4 5 6 7 |
| How anxious?   |   |   |             |   |   | 1 2 3 4 5 6 7 |

How happy? 1 2 3 4 5 6 7  
 How sad? 1 2 3 4 5 6 7

-----  
 1 2 3 4 5 6 7  
 Rarely Sometimes Always

-----  
 How often does your child need to be reminded to control his/her anger? 1 2 3 4 5 6 7  
 When you remind your child to control his/her anger, how often are they able to control it? 1 2 3 4 5 6 7

When your child displays FEAR/ANXIETY how does it make you feel?

-----  
 1 2 3 4 5 6 7  
 Not at all Quite a bit Extremely

-----  
 How angry? 1 2 3 4 5 6 7  
 How disgusted? 1 2 3 4 5 6 7  
 How anxious? 1 2 3 4 5 6 7  
 How happy? 1 2 3 4 5 6 7  
 How sad? 1 2 3 4 5 6 7

-----  
 1 2 3 4 5 6 7  
 Rarely Sometimes Always

-----  
 How often does your child need to be reminded to control his/her fear/anxiety? 1 2 3 4 5 6 7  
 When you remind your child to control his/her fear/anxiety, how often are they able to control it? 1 2 3 4 5 6 7

When your child displays SADNESS how does it make you feel?

-----  
 1 2 3 4 5 6 7  
 Not at all Quite a bit Extremely

-----  
 How angry? 1 2 3 4 5 6 7  
 How disgusted? 1 2 3 4 5 6 7  
 How anxious? 1 2 3 4 5 6 7  
 How happy? 1 2 3 4 5 6 7  
 How sad? 1 2 3 4 5 6 7

---

|        |   |   |           |   |   |        |
|--------|---|---|-----------|---|---|--------|
| 1      | 2 | 3 | 4         | 5 | 6 | 7      |
| Rarely |   |   | Sometimes |   |   | Always |

---

|   |               |
|---|---------------|
| How often does your child need to be reminded to control his/her sadness?                     | 1 2 3 4 5 6 7 |
| When you remind your child to control his/her sadness, how often are they able to control it? | 1 2 3 4 5 6 7 |

When your child displays HAPPINESS how does it make you feel?

---

|            |   |   |             |   |   |           |
|------------|---|---|-------------|---|---|-----------|
| 1          | 2 | 3 | 4           | 5 | 6 | 7         |
| Not at all |   |   | Quite a bit |   |   | Extremely |

---

|                |               |
|----------------|---------------|
| How angry?     | 1 2 3 4 5 6 7 |
| How disgusted? | 1 2 3 4 5 6 7 |
| How anxious?   | 1 2 3 4 5 6 7 |
| How happy?     | 1 2 3 4 5 6 7 |
| How sad?       | 1 2 3 4 5 6 7 |

---

|        |   |   |           |   |   |        |
|--------|---|---|-----------|---|---|--------|
| 1      | 2 | 3 | 4         | 5 | 6 | 7      |
| Rarely |   |   | Sometimes |   |   | Always |

---

|   |               |
|---|---------------|
| How often does your child need to be reminded to control his/her happiness?                     | 1 2 3 4 5 6 7 |
| When you remind your child to control his/her happiness, how often are they able to control it? | 1 2 3 4 5 6 7 |

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Thank you for your participation. If you'd like to add any other comments, please feel free to do so below. However, please refrain from using names, or any other identifiable information in your comments.

**APPENDIX D**

**Children's Behavior Questionnaire**

**Short Form Version I**

Subject No. \_\_\_\_\_

Date of Child's Birth:

Today's Date \_\_\_\_\_

\_\_\_\_\_

Month Day Year

Sex of Child \_\_\_\_\_

Age of Child \_\_\_\_\_

Years months

Instructions: Please read carefully before starting:

On the next pages you will see a set of statements that describe children's reactions to a number of situations. We would like you to tell us what your child's reaction is likely to be in those situations. There are of course no "correct" ways of reacting; children differ widely in their reactions, and it is these differences we are trying to learn about. Please read each statement and decide whether it is a "true" or "untrue" description of your child's reaction within the past six months. Use the following scale to indicate how well a statement describes your child:

- | Circle # | If the statement is:                 |
|----------|--------------------------------------|
| 1        | extremely untrue of your child       |
| 2        | quite untrue of your child           |
| 3        | slightly untrue of your child        |
| 4        | neither true nor false of your child |
| 5        | slightly true of your child          |
| 6        | quite true of your child             |
| 7        | extremely true of your child         |

If you cannot answer one of the items because you have never seen the child in that situation, for example, if the statement is about the child's reaction to your singing and you have never sung to your child, then circle NA (not applicable).

Please be sure to circle a number or NA for every item.

1. Seems always in a big hurry to get from one place to another.

1      2      3      4      5      6      7      NA

2. Gets angry when told s/he has to go to bed.

1      2      3      4      5      6      7      NA

3. Is not very bothered by pain.

1      2      3      4      5      6      7      NA

4. Likes going down high slides or other adventurous activities.

1      2      3      4      5      6      7      NA

5. Notices the smoothness or roughness of objects s/he touches.

1      2      3      4      5      6      7      NA

6. Gets so worked up before an exciting event that s/he has trouble sitting still.

1      2      3      4      5      6      7      NA

7. Usually rushes into an activity without thinking about it.

1      2      3      4      5      6      7      NA

8. Cries sadly when a favorite toy gets lost or broken.

1      2      3      4      5      6      7      NA

9. Becomes quite uncomfortable when cold and/or wet.

1      2      3      4      5      6      7      NA

10. Likes to play so wild and recklessly that s/he might get hurt.

1      2      3      4      5      6      7      NA

11. Seems to be at ease with almost any person.

1      2      3      4      5      6      7      NA

12. Tends to run rather than walk from room to room.

1      2      3      4      5      6      7      NA

13. Notices it when parents are wearing new clothing.  
1 2 3 4 5 6 7 NA
14. Has temper tantrums when s/he doesn't get what s/he wants.  
1 2 3 4 5 6 7 NA
15. Gets very enthusiastic about the things s/he does  
1 2 3 4 5 6 7 NA
16. When practicing an activity, has a hard time keeping her/his mind on it.  
1 2 3 4 5 6 7 NA
17. Is afraid of burglars or the "boogie man."  
1 2 3 4 5 6 7 NA
18. When outside, often sits quietly.  
1 2 3 4 5 6 7 NA
19. Enjoys funny stories but usually doesn't laugh at them.  
1 2 3 4 5 6 7 NA
20. Tends to become sad if the family's plans don't work out.  
1 2 3 4 5 6 7 NA
21. Will move from one task to another without completing any of them.  
1 2 3 4 5 6 7 NA
22. Moves about actively (runs, climbs, jumps) when playing in the house.  
1 2 3 4 5 6 7 NA
23. Is afraid of loud noises.  
1 2 3 4 5 6 7 NA
24. Seems to listen to even quiet sounds.  
1 2 3 4 5 6 7 NA
25. Has a hard time settling down after an exciting activity.

- |     |   |   |   |   |   |   |   |    |
|-----|---|---|---|---|---|---|---|----|
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 26. | Enjoys taking warm baths.   |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 27. | Seems to feel depressed when unable to accomplish some task.                                |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 28. | Often rushes into new situations.   |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 29. | Is quite upset by a little cut or bruise.   |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 30. | Gets quite frustrated when prevented from doing something s/he wants to do.                 |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 31. | Becomes upset when loved relatives or friends are getting ready to leave following a visit. |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 32. | Comments when a parent has changed his/her appearance.                                      |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 33. | Enjoys activities such as being chased, spun around by the arms, etc.                       |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 34. | When angry about something, s/he tends to stay upset for ten minutes or longer.             |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 35. | Is not afraid of the dark.  |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 36. | Takes a long time in approaching new situations.  |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 37. | Is sometimes shy even around people s/he has known a long time.                             |   |   |   |   |   |   |    |



- |     |   |   |   |   |   |   |   |    |
|-----|---|---|---|---|---|---|---|----|
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 38. | Can wait before entering into new activities if s/he is asked to.     |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 39. | Enjoys "snuggling up" next to a parent or babysitter.                 |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 40. | Gets angry when s/he can't find something s/he wants to play with.    |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 41. | Is afraid of fire.  |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 42. | Sometimes seems nervous when talking to adults s/he has just met.     |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 43. | Is slow and unhurried in deciding what to do next.                    |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 44. | Changes from being upset to feeling much better within a few minutes. |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 45. | Prepares for trips and outings by planning things s/he will need..    |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 46. | Becomes very excited while planning for trips.                        |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 47. | Is quickly aware of some new item in the living room.                 |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 48. | Hardly ever laughs out loud during play with other children.          |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 49. | Is not very upset at minor cuts or bruises.                           |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |

50. Prefers quiet activities to active games.  
1 2 3 4 5 6 7 NA
51. Tends to say the first thing that comes to mind, without stopping to think about it.  
1 2 3 4 5 6 7 NA
52. Acts shy around new people.  
1 2 3 4 5 6 7 NA
53. Has trouble sitting still when s/he is told to (at movies, church, etc.).  
1 2 3 4 5 6 7 NA
54. Rarely cries when s/he hears a sad story.  
1 2 3 4 5 6 7 NA
55. Sometimes smiles or giggles playing by her/himself.  
1 2 3 4 5 6 7 NA
56. Rarely becomes upset when watching a sad event in a TV show.  
1 2 3 4 5 6 7 NA
57. Enjoys just being talked to.  
1 2 3 4 5 6 7 NA
58. Becomes very excited before an outing (e.g., picnic, party).  
1 2 3 4 5 6 7 NA
59. If upset, cheers up quickly when s/he thinks about something else.  
1 2 3 4 5 6 7 NA
60. Is comfortable asking other children to play.  
1 2 3 4 5 6 7 NA
61. Rarely gets upset when told s/he has to go to bed.  
1 2 3 4 5 6 7 NA
62. When drawing or coloring in a book, shows strong concentration.

- |     |   |   |   |   |   |   |   |    |
|-----|---|---|---|---|---|---|---|----|
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 63. | Is afraid of the dark.  |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 64. | Is likely to cry when even a little bit hurt.   |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 65. | Enjoys looking at picture books.  |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 66. | Is easy to soothe when s/he is upset.   |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 67. | Is good at following instructions.  |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 68. | Is rarely frightened by "monsters" seen on TV or at movies.   |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 69. | Likes to go high and fast when pushed on a swing.   |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 70. | Sometimes turns away shyly from new acquaintances.  |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 71. | When building or putting something together, becomes very involved in what s/he is doing, and works for long periods. |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 72. | Likes being sung to.  |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 73. | Approaches places s/he has been told are dangerous slowly and cautiously.   |   |   |   |   |   |   |    |
|     | 1   | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 74. | Rarely becomes discouraged when s/he has trouble making something work.   |   |   |   |   |   |   |    |

- |     |  |   |   |   |   |   |   |    |
|-----|--|---|---|---|---|---|---|----|
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 75. | Is very difficult to soothe when s/he has become upset.            |   |   |   |   |   |   |    |
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 76. | Likes the sound of words, such as nursery rhymes.                  |   |   |   |   |   |   |    |
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 77. | Smiles a lot at people s/he likes.                                 |   |   |   |   |   |   |    |
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 78. | Dislikes rough and rowdy games.                                    |   |   |   |   |   |   |    |
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 79. | Often laughs out loud in play with other children.                 |   |   |   |   |   |   |    |
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 80. | Rarely laughs aloud while watching TV or movie comedies.           |   |   |   |   |   |   |    |
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 81. | Can easily stop an activity when s/he is told "no."                |   |   |   |   |   |   |    |
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 82. | Is among the last children to try out a new activity.              |   |   |   |   |   |   |    |
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 83. | Doesn't usually notice odors such as perfume, smoke, cooking, etc. |   |   |   |   |   |   |    |
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 84. | Is easily distracted when listening to a story.                    |   |   |   |   |   |   |    |
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 85. | Is full of energy, even in the evening.                            |   |   |   |   |   |   |    |
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |
| 86. | Enjoys sitting on parent's lap.                                    |   |   |   |   |   |   |    |
|     | 1  | 2 | 3 | 4 | 5 | 6 | 7 | NA |

87. Gets angry when called in from play before s/he is ready to quit.  
1 2 3 4 5 6 7 NA
88. Enjoys riding a tricycle or bicycle fast and recklessly.  
1 2 3 4 5 6 7 NA
89. Sometimes becomes absorbed in a picture book and looks at it for a long time.  
1 2 3 4 5 6 7 NA
90. Remains pretty calm about upcoming desserts like ice cream.  
1 2 3 4 5 6 7 NA
91. Hardly ever complains when ill with a cold.  
1 2 3 4 5 6 7 NA
92. Looks forward to family outings, but does not get too excited about them.  
1 2 3 4 5 6 7 NA
93. Likes to sit quietly and watch people do things.  
1 2 3 4 5 6 7 NA
94. Enjoys gentle rhythmic activities, such as rocking or swaying.  
1 2 3 4 5 6 7 NA

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Please check back to make sure you have completed all the pages of the questionnaire. Thank you very much for your help!