

University of Nevada, Reno

**The Relation between Parents' Knowledge of Social-Emotional Development and
Preschoolers' Social-Emotional Outcomes**

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requirements for the degree of Master of Science in
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Danielle Schefcik

Dr. Lydia DeFlorio/ Thesis Advisor

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We recommend that the thesis
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DANIELLE SCHEFCIK

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Lydia DeFlorio, Ph.D, Advisor

Jennifer A. Mortensen, Ph.D, Committee Member

Lindsay L. Diamond, Graduate School Representative

David W. Zeh, Ph.D., Dean, Graduate School

December, 2018

ABSTRACT

The purpose of this study was twofold: The first objective was to identify whether there is a relation between parents' knowledge about children's social-emotional development and their young children's social-emotional development. The second objective was to examine whether parents' knowledge about children's social-emotional development varied by socioeconomic status (SES), as measured by parents' educational attainment. Participants included 45 parents or guardians of children ages two to five. Participants completed questionnaires measuring their knowledge of social-emotional development and their child's social-emotional development. Measures of parenting-efficacy, parental stress, depression, and anxiety were also administered for use as potential control variables. Results from this study indicate no significant correlation between parents' knowledge and children's social-emotional development, but parents' self-efficacy and children's social-emotional development were positively correlated. Future research is warranted to better understand these relations.

Keywords: social development, emotional development, early childhood, parenting

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CHAPTER ONE

INTRODUCTION

The Center on the Social-Emotional Foundations for Early Learning (CSEFEL) defines early social and emotional development as “the developing capacity of the child from birth through five years of age to form close and secure adult and peer relationships; experience, regulate, and express emotions in socially and culturally appropriate ways; and explore the environment and learn all in the context of family, community, and culture” (Yates et al., 2008, p. 2). Ultimately, when children are socially and emotionally competent they will be able to accomplish three major skills: (1) develop positive relationships with others, (2) understand and communicate emotions and feelings, and (3) regulate the emotions being felt (Campbell et al., 2016). Children’s social-emotional skills are correlated with school readiness and later academic success (Darling-Churchill & Lippman, 2016; Dindo, Brock, Aksan, Gamez, Kochanska, & Clark, 2017; Graziano, Reavis, Keane, and Calkins, 2007; Rhoades, Warren, Domitrovich, & Greenberg, 2011), as well as with the quality of their social relationships (Graziano et al., 2007). Given the importance of these early skills, research focused on understanding how to best promote healthy social-emotional development is warranted.

Children’s interactions with attachment figures are instrumental for their social-emotional development (Darling-Churchill & Lippman, 2016). Starting in infancy, caregivers who are responsive and meet their child’s needs lay the groundwork for healthy social-emotional development by promoting secure attachments (Wang, Cox, Mills-Koonce, & Snyder, 2015). As children get older, their social-emotional development continues to be shaped by the quality of the caregiving they receive

(Darling-Churchill & Lippman, 2016). Although a plethora of research focuses on relations between parenting behavior and children's social-emotional outcomes (Lyons-Ruth, Bronfman, Parsons, Vondra, & Barnett, 1999; Morris, Criss, Silk, & Houlberg, 2017; Wang et al., 2015), research has yet to examine relations between parents' knowledge about social-emotional development and children's outcomes. There is some evidence that parents' knowledge about child development, more generally, is related to their parenting behavior (National Academies of Science, Engineering, and Medicine, 2016; Sanders & Morawska, 2014). Specifically, parents with greater knowledge of children's development respond to their children more sensitively, while parents with less knowledge about child development are at a higher risk for responding in a harsher manner. Sanders and Morawska (2014) also found a correlation between parents' knowledge of child development and their expectations of their children. Unfortunately, there has been little research specifically examining relations between parent's knowledge of social-emotional development and children's later outcomes.

Theoretical Framework

This thesis was grounded within three major theories; psychosocial theory, attachment theory, and theory of planned behavior.

Psychosocial theory. Erikson (1950) proposed eight stages of conflicting identity crises individuals experience from infancy through adulthood, the first three of which are relevant to this study. The first stage infants must get through is the *trust vs. mistrust* stage, which is happening from birth to 12 months. During this initial stage, the goal is for infants to establish basic trust with their caregivers. This is achieved through a consistently nurturing and supportive environment that is meeting the infant's basic

needs. If basic trust with a caregiver is established, it will support a securely attached relationship between infant and caregiver. Although trust is the optimal outcome, Erikson believed that infants need to maintain an element of mistrust, as this allows for infants to differentiate their caregivers from strangers. The second stage is *autonomy vs. shame and doubt*, which occurs from 12-36 months. During this stage, toddlers are trying to establish independence and confidence. This is accomplished by toddlers finding a balance with their caregivers that allows them to explore the world around them while still having caregivers accessible for support. The third and final stage relevant stage is *initiative vs. guilt*, which typically occurs from three to six years of age. During this stage, children develop the ability to pursue tasks on their own. Participating in child-directed activities allows children to build a sense of confidence to initiate activities and develop a sense of purpose. Psychosocial theory is useful as a framework for the current study as it both describes social-emotional milestones on a continuum ranging from healthy to unhealthy in early childhood and considers the influence of the parent on children's outcomes.

Attachment theory. Attachment theory, discussed in greater detail in Chapter 2, posits that children's attachment to their parents or caregivers is an evolutionary trait designed to ensure survival throughout the early years of life (Bowlby, 1988). For example, over the first year of life, distressed infants will cry. By crying, they are prompting the adults around to care for and soothe them. These actions foster the attachment relationships between infants and their caregivers. When infants' needs are predictably met, they learn that the world is a safe place and that their caregiver is a source of safety. Secure attachment is achieved through the continuous sensitivity and

responsiveness of the parent or caregiver. Secure attachment is built through actions such as cuddling, soothing, diapering, or attentiveness. This attachment relationship will subsequently affect various domains of a child's development. One important tenant of attachment theory is that infants must attach to a caregiver in order for healthy social-emotional development to occur. Without this attachment relationship, children have difficulties developing emotion regulation and positive social relationships. Children who are securely attached to their caregiver tend to be more motivated and respond to difficult situations in a positive manner (Ainsworth, Blehar, Waters, & Wall, 1978). Alternatively, children who are insecurely attached during infancy will often give up easily and are less able to handle difficult emotions.

Theory of planned behavior. Finally, the theory of planned behavior (Ajzen, 1985) provides a framework for extending parents' knowledge about social-emotional development to their probable parenting behavior. This theory links a person's beliefs with the behavior that follows. This theory posits that attitudes, perceived behavioral control, and subjective norms influence one's intentions to engage in a behavior. Ajzen discovered that if an individual thinks the action they are going to make is going to be positively accepted by peers, family, or colleagues, they are more likely to participate in that particular action. Alternatively, if an individual believes that a behavior will be negatively perceived by others, it will often detour the individual from participating in that behavior. This theory also takes into account the individual's perception of ease of a behavior. Guerin, Toland, Okun, Rojas-Guyler, and Bernard (2018) compared this perception of behavior control to self-efficacy, which is the confidence of an individual's ability to successfully complete a task.

The Current Study

The purpose of the current study is to identify whether there is a link between parent's knowledge and beliefs and their child's social-emotional development. Specifically, I will examine to what extent parents' knowledge about social-emotional development is related to their young children's social-emotional development. My primary research question is as follows: To what extent is parent's knowledge and beliefs about social-emotional development related to their young children's social-emotional outcomes? Both parents' knowledge about children's social-emotional development and children's current social-emotional development will be assessed and analyzed to see whether they are correlated. Measures of parenting-efficacy, parental stress, depression, and anxiety will also be administered for use as potential control variables. As a secondary research question, I will also examine whether parents' knowledge about social-emotional development is related to family socioeconomic status (SES), as measured by parents' educational attainment. Previous studies have shown that family SES is positively correlated with children's social-emotional development (Brown, Gustafsson, Mills-Koonce, & Fox, 2017) and negatively correlated with stress and family cohesion (Criss, Morris, Ponce-Garcia, Cui, & Silk, 2016; Davis, Logsdon, Myers, Ryan, Evanow, & Hancock, 2016). However, relations between parents' knowledge of social-emotional development and family SES have not been examined.

Identifying whether a relation between parents' knowledge about social-emotional development and children's social-emotional outcomes exists is important for informing parent-based education or intervention. If they are correlated, then it may be that education or intervention should focus on increasing parents' knowledge. If they are not

correlated, then it may be that increasing parents' knowledge of child development is not the most effective means for intervention. Furthermore, answering this research question can spark new questions for future research.

CHAPTER TWO

LITERATURE REVIEW

Social-emotional development is a broad developmental domain which provides a foundation for many important skills throughout childhood, adolescence, and adulthood. Beginning in infancy, social-emotional development develops through interactions with parents and caregivers (Halle & Darling-Churchill, 2016). The Center on the Social-Emotional Foundations for Early Learning (CSEFEL) defines early social-emotional development as the ability for children birth through five to develop positive relationships with adults and peers, regulate and express emotions, and explore the world around them in a socially appropriate manner (Yates et al., 2008). When children continuously have their needs met by the adults in their life, they begin to develop emotion regulation and secure relationships (Halle & Darling-Churchill, 2016).

As described below, the influence of parenting behavior on children's social-emotional development has been widely examined in the literature. Although social-emotional development encompasses many things, I focus here on three important concepts: attachment, emotion regulation, and behavioral regulation. I begin this chapter by providing an overview of each of these concepts, including what each entail, how it develops, and the influence of parents on the developmental process. I then turn to reviewing literature on the influence of parenting behaviors and practices on children's social-emotional development, more generally, followed by a discussion of environmental influences on parenting behaviors and practices. Finally, I conclude this chapter by summarizing the literature on parents' knowledge about child development, and how that influences their practices and children's outcomes.

Attachment

Attachment is the bond formed between an infant and their caregiver.

Attachment begins at birth and is extremely important throughout childhood. Bowlby (1988) identified four stages of attachment in the early years of life. From birth through two months, infants demonstrate *indiscriminate sociability*, meaning infants respond to any adult when they are expressing attachment behaviors such as crying, cooing, or smiling. Between two and seven months, infants develop *discriminant sociability*, meaning the infants' primary caregivers are able to soothe them more successfully than unfamiliar adults. From seven to 24 months, children display *directed attachment behaviors*. Children begin to initiate attachment behaviors toward their primary caregivers such as hugging or moving closer to caregivers in unfamiliar situations. Primary caregivers are generally more effective at calming children during this stage when compared to unfamiliar adults. The final stage from 24 months and on is *goal-corrected partnership*. By this age, most children have developed language, which allows them to communicate with their caregivers and ask for help when needed. Throughout this stage, children are becoming more aware of their feelings and emotions and can share those feelings with caregivers in their life.

Patterns of attachment. Social-emotional development begins with infants' early relationships with parents and caregivers. The quality of this relationship influences the type of attachment an infant has to that caregiver (Ainsworth et al., 1978). Using a procedure known as the *strange situation*, Ainsworth et al. (1978) identified three patterns of attachment: secure, insecure-avoidant, and insecure-ambivalent. The strange situation procedure was designed to elicit infant attachment behaviors through a series of

separations and reunifications with the primary caregiver. Essentially, a young child between the age of 9-18 months and his or her mother enter a playroom and begin to play, a stranger enters the playroom, the mother then leaves the infant with the stranger, the mother returns, the stranger leaves, the mother leaves again leaving the infant completely alone, the stranger returns, the mother returns, and finally the stranger leaves. The infant's reaction upon each reunification with the mother is indicative of their attachment pattern. Using the strange situation procedure, Ainsworth and colleagues classified 66% of the infants as having secure attachments, 22% were classified as insecure-avoidant, and the remaining 12% were classified as insecure-ambivalent. Later, Main and Solomon (1986) identified a fourth pattern, disorganized/disoriented.

Ainsworth and colleagues found that prior to the initial separation, infants with secure attachments were able to use their caregiver as a secure base to explore the playroom (Ainsworth et al., 1978). Once the mother left, the children were often noticeably distressed. However, they were easily soothed by the mother upon reunification, likely because throughout their life their mothers had been regularly receptive and attentive. Children with insecure-avoidant attachments typically explored the playroom with ease prior to the first separation, often times ignoring their mother. Once the mothers left the room, these children showed little to no distress. Upon reunification, these children were slow to initiate contact. In contrast, insecure-ambivalent attached children did not explore their surroundings prior to the first separation, staying very close to their mothers. When the mothers left, these children were extremely distressed, showing a range of different emotions such as anger and calm along with other contradictory feelings, such as wanting to be close to their mothers

while at the same time showing anger toward them. When the mothers returned, children demonstrated confused feelings of wanting to be close to their mother's while at the same time being unable to be soothed. These children likely received unpredictable or unresponsive care from their mothers in the past, so upon reunification, their mothers were unable to soothe them. The fourth attachment pattern found by Main and Solomon (1986) characterizes behavior patterns not typical of secure, insecure-avoidant, and insecure-ambivalent attachments. When the strange situation procedure was recreated with children exhibiting this attachment pattern, they often reacted with a frozen or trance-like state upon the mother's return. According to Main and Solomon, children may be unsure if their mothers are a source of safety or source of danger. Often, children exhibiting this attachment pattern have experienced abuse or trauma.

It has long been established that the quality of attachments to primary caregivers during infancy has implications for social-emotional development during toddlerhood and childhood (Ainsworth et al., 1978). Ainsworth and colleagues found that infants who were securely attached to their caregivers tended to be more curious children, having gained the confidence to explore their environment freely. Securely attached children were also typically more resilient, motivated, and responded to difficult situations in a positive manner. Insecurely attached infants were quite the opposite. Children who were insecurely attached during infancy often gave up easily, were less able to handle difficult emotions, and only explored their proximate environment. By 15 months, infants who had secure attachments with their caregiver were better able to handle stressful situations when compared to children who had insecure attachments.

Between the ages of two and five, it becomes apparent again which children were securely and which were insecurely attached to their caregivers (Bowlby, 1988). Children with secure attachments typically have more positive relationships with peers and teachers in their classroom, portraying more advanced social and emotional competencies than children who had insecure attachments with their caregivers (Lamb & Lewis, 2004). Matas, Arend, and Sroufe (1978) found that by age two, toddlers who had securely attached to a caregiver were more enthusiastic, positive, and persistent when learning new skills and showed considerably less frustration when encountering difficulties. Alternatively, the two-year-olds who were classified as insecurely attached showed difficulty adapting to difficult situations. Similarly, Haltigan, Rosman, and Franley (2012) found children who were securely attached to their caregivers at a younger age had few teacher-reported behavior problems as well as more positive peer relationships in the classroom.

While most research has focused on the advantages of secure attachment and the disadvantages of insecure attachment, more recent studies have focused on examining relations between the three insecure attachment patterns and later outcomes. For example, Sibert and Kerns (2015) followed 1,140 children longitudinally to assess whether their early attachment patterns predicted the quality of their peer relationships during childhood and adolescence. They found that children with disorganized patterns had problematic peer relationships later. These particular children exhibited the highest levels of aggression toward same age peers. Similarly, children with avoidant attachment had trouble with peer relationships and interactions. However, children with ambivalent attachment did not differ from children with secure attachment.

Children raised in poverty are at increased risk for insecure attachment (Brown et al., 2017). Although the reasons are not yet well understood, contributing factors may include parental stress, depression, and/or anxiety. Parents living in poverty are more likely to experience stress and anxiety in their everyday life (Brown et al., 2017; Linver, Brooks-Gunn & Kohen, 2002). This stress can be attributed to unstable work, unavailable support systems, and family disruption. Parents under increased stress tend to engage in less supportive parenting and may not interact with their child in ways that foster a secure attachment (Brown et al., 2017). Furthermore, Repetti and Wood (1997) found that caregivers who experience more stress in their life are more likely to be emotionally and behaviorally withdrawn from their children. Overall, the stress and anxiety caregivers feel when living in a socioeconomically disadvantaged environment has the ability to put the children living in their care at a higher risk for forming insecure attachments (Brown et al., 2017; Repetti & Wood, 1997; Stelter & Halbertadt, 2011).

Emotion Regulation

Emotions develop rapidly over children's first two years (Honig & Wittmer, 2017). Some emotions are present at birth, including, distress, interest, and pleasure. By six months, infants will typically have also developed sadness, anger, disgust, fear, surprise and joy. By 18 months, infants are able to demonstrate embarrassment and jealousy. Finally, by 24 months, infants demonstrate more complex emotions such as, guilt, shame, and pride. Over this same time period, children also begin to develop an awareness of what their emotions are and how to express them (Halle & Darling-Churchill, 2016). Emotion regulation is defined as both an internal and external process by which emotions are monitored, appraised, and modified (Honig & Wittmer, 2017).

When children are able to understand the emotions they are feeling, they will be more successful at expressing those emotions in an appropriate way, and in modifying their emotions when necessary (Karsten, Foster, Decker, & Vollotton, 2017). Emotion regulation is positively correlated with academic success, mental health, the quality of personal relationships, and social skills (Cole & Deater-Deckard 2009). Children with poor emotion regulation typically have lower academic success, trouble controlling negative emotions, increased problem behaviors, and poor personal relationships (Thompson, Lewis, & Calkins, 2008).

Social-emotional development is influenced by both intrinsic and extrinsic factors. Intrinsic factors include the factors that children are born with such as reflex behavior and temperament (Fox & Calkins, 2003). Intrinsically, during early infancy, emotion regulation begins with reflexes such as sucking and head turning (Ekas, Lickenbrock, & Braungart-Rieker, 2013). Sucking is a source of comfort for infants. For example, when a bottle or breast is placed in an infant's mouth they will begin sucking. Although initially a reflex, the sucking behavior will become a source of emotion regulation for the infant. Similarly, infants will move their head to see a caregiver as a source of comfort, which is an early tool for self-regulation. By three to six months, advances in motor development allow for more intentional self-soothing behaviors, such as sucking on one's own fingers or thumb. Between seven and nine months, infants become more aware of what arouses them, and with increased motor development, gain the ability to seek out preferred toys, objects, or people when they are feeling unpleasant emotions (Ekas, Lickenbrock, & Braungart-Rieker, 2013; Fox & Calkins, 2003).

Children's temperament is also an intrinsic factor affecting emotion regulation (Ekas, Lickenbrock, & Braungart-Rieker, 2013; Fox & Calkins, 2003). Temperament includes the irritability, soothability, motor activity, sociability, attentiveness, adaptability, response to novelty, arousal, and regulation states of an individual (Wachs & Bates, 2001). Thomas, Chess, and Birch (1968) found that most children can be classified as having one of three temperament styles: Easy, difficult, and slow-to-warm-up. Easy infants show positive emotions, adapt well to new situations, and have a relatively low reaction level. Difficult infants generally have negative moods, slowly adjust to new people or situations, and have very intense emotional reactions. Slow-to-warm-up infants are characterized by their slow adjustments to new people or situations. These infants may appear difficult when confronted with unfamiliar people or routines, but once comfortable, share more characteristics with easy children.

Extrinsic factors affecting emotion regulation include parent/caregiver responsiveness and other parenting behaviors (Halle & Darling-Churchill, 2016). Infants and their caregivers develop their own form of interaction between the two of them, known as dyadic synchrony (Harrist & Waugh, 2002). Dyadic synchrony is characterized by mutual attention and affective regulation and is critical for healthy emotional development. An example of dyadic synchrony is a back and forth conversation between infant and his mother. For example, a baby may fuss, the mother expresses concern and picks him up, makes eye contact, uses language and facial expressions to soothe him, the fussing turns to cooing, the mother responds with more language, and the baby shrieks with delight.

The importance of dyadic synchrony has been demonstrated in studies utilizing a procedure known as the still-face paradigm (Tronick, Als, Adamson, Wise, & Brazelton, 1978). This procedure involves having a parent or caregiver (typically the mother) become “still-faced” or unresponsive while interacting with her child. It generally begins with an initial face-to-face play period, where the mother interacts regularly with her baby. After the allotted play period, the mother will become emotionless and cease interaction with her child while maintaining eye contact. The mother is encouraged to not respond, touch, or sooth her child during this “still-face” period. After a few minutes, the mother resumes interaction as normal. Of interest are the infant's reaction and the coping mechanisms used while the mother is unresponsive. During the “still-face” portion of the procedure, children generally become distressed, as their mother is no longer responding to their actions. In an attempt to get their mothers to respond to them again, the children often smile and point to a different part of the room. When this does not elicit a response, they may scream because this is what typically elicits a response from the mother. As the children become increasingly distressed, they may react with negative emotions, such as looking away from the mother, crying, and loss of posture. At this point children may begin to participate in self-comforting behaviors (Tronick et al., 1978). In a later study utilizing this same paradigm, Montrirosso, Borgatti, Trojan, Zanini, and Tronick (2010) found that mouthing, self-clasping, and distancing from the mother were coping mechanisms used by the children during the still-face portion of the experiment.

More recent studies have been conducted focusing on the reunion portion (i.e., the mother resumes positive interaction) of the still-faced paradigm. Cappola, Aureli, Grazia,

and Ponzetti (2016) found that children demonstrate one of three types of reunion patterns: playful, neutrally matched, and disrupted. Children's reunion patterns were determined by the amount of time it took children to match the positive affect of their mothers. Children with playful reunion patterns took the least amount of time to be soothed and matched their mothers' positive affect almost immediately. In contrast, children with disruptive reunion patterns took much longer. Reunion patterns were related to the prior relationship between infant and mother. Reunions between mothers and their children were smoother when mothers had a history of being responsive and emotionally available, further supporting the argument that children who have emotionally responsive parents are typically better able to recover from a stressful event (Halle & Darling-Churchill, 2016; Morris, Criss, Silk, & Houlberg, 2017).

Children with parents or caregivers who are regularly meeting their needs and being emotionally available will be better able to regulate emotions. A recent study by Morris, Criss, Silk, and Houlberg (2017) researched how parenting impacts the development of emotion regulation during childhood. They found that there are three key factors that affect emotional regulation in children: the parents' own emotion regulation, emotional parenting practices, and the overall emotional climate of the household. Parent's own emotion regulation was categorized by the way parents modeled their own emotions to their children. Emotional parenting practices were categorized by how parents reacted to their children's emotions. The emotional climate of the household was categorized by family relationships, parenting style, and the degree to which all family members were emotionally expressive. When parents regulated their own emotions and allowed for emotions to be freely expressed within a household, children carried this

positive emotional regulation into childhood and adolescence. Children have the ability to mirror their parent's emotional expression, so if emotions are freely expressed in a healthy manner, children will learn how to regulate and express their own emotions.

Positive emotion regulation during childhood is correlated with early academic success (Graziano, Reavis, Keane, & Calkins, 2007; Rhoades, Warren, Domitrovich, & Greenberg, 2011). Rhoades, Warren, Domitrovich, and Greenberg (2011) measured emotion regulation during preschool using the Affect Knowledge Test (AKT) and measured academic competence in first grade using the Woodcock-Johnson Psycho-Educational Battery-Revised. As the researchers predicted, children who had better emotion regulation during preschool showed higher academic achievement scores in first grade. Positive emotion regulation affects classroom behaviors, such as behavioral control. When children are able to control their behavior (e.g., sitting quietly, remaining focused) during a lesson they are able to retain more information, thus leading to higher academic success (Graziano, Reavis, Keane, and Calkins, 2007). Graziano, Reavis, Keane, and Calkins (2007) assessed the emotion regulation of 325 kindergarteners using an emotional regulation checklist and their academic competence using the Academic Performance Rating Scale (APRS). They found a strong correlation between high emotion regulation and academic success and productivity in kindergarten. Specifically, they found higher scores in both literacy and math. Additionally, they found that children with better emotion regulation had more positive student-teacher relationships, which may at least partially mediate the relation between emotion regulation and academic performance, possibly because children who have more positive relationships with their teachers are more likely to put maximum effort into learning.

Similar to attachment, family SES may have implications for children's emotion regulation. Among families of lower SES, parents are more likely to engage in authoritarian parenting (Criss et al., 2016). As described later in this chapter, this parenting style is generally disciplinarian in nature, and includes strict rules and little warmth within the home (Baumrind, 1967). Parents living in poverty generally demonstrate lower responsiveness to their children, which can lead to less family cohesion and higher levels of conflict (Criss et al., 2016). Though there has been minimal research examining relations between SES and emotion regulation, Criss et al. (2016) argues that low family cohesion and high conflict is associated with children's low emotion regulation.

Behavioral Regulation

Research on young children's behavioral regulation has typically been approached from two perspectives: effortful control and executive function. Although constructs from the two perspectives overlap, I discuss each separately here.

Effortful control. Effortful control refers to a child's ability to inhibit responses, plan, and resolve conflict (Zhou, Chen, & Main, 2012). Effortful control skills allow children to shift their attention, focus on stimuli, and inhibit negative emotional responses. A great deal of effortful control research has been done in conjunction with research around temperament, inhibitory control, attention shifting, planning, and conflict resolution (Zhou, Chen, & Main, 2012). As a whole, effortful control skills are directly related with children's ability to regulate their emotions and their behavioral responses to those emotions (Lengua et al., 2014; Zhou, Chen, & Main, 2012).

Effortful control skills begin developing as young as six months, with development occurring the most rapidly between the ages of three and six years (Lengua et al., 2014). The development of effortful control is aided by experiences that children have with their parents and caregivers. When parents are responsive to their children throughout infancy, they are providing their children with external emotion regulation. As children enter the preschool years and become more autonomous, they should need increasingly less support from their parents in terms of external regulation and begin to use effortful control to internally regulate emotions and emotionally-driven behavior (Mintz, Hamre, & Hatfield, 2011; Reuben et al., 2016). Silverman and Ragusa (1990) found that children with parents who are too intrusive, harsh, or irritable during infancy and early childhood had lower effortful control skills. It is important for parents to be responsive, while allowing their children to exercise their independence in order to develop positive effortful control skills (Mintz, Hamre, & Hatfield, 2011; Reuben et al., 2016).

Mintz, Hamre, & Hatfield (2011) examined the relation between developing effortful control skills and maternal sensitivity from early childhood into first grade. Their study utilized data from the longitudinal NICHD Study of Early Child Care and Youth Development, which included assessments of mothers and children when children were six, 15, 24, and 36 months old. The children were then observed in a classroom setting when they were in first grade. They found that maternal sensitivity during infancy and toddlerhood was significantly correlated with children's social and emotional abilities in first grade. Specifically, children with sensitive mothers were better able to internally regulate and inhibit their behaviors and demonstrated more positive social

skills with peers and teachers. This is consistent with previous research suggesting positive correlations between responsive parenting in early childhood, effortful control, and later peer relationships (Dindo et al., 2017; Ladd & LeSieur, 1995; Lengua et al., 2014).

Children from families with lower SES tend to have lower effortful control skills when compared to their moderate to high SES counterparts (Lengua et al., 2014). Growing up in a family with lower SES comes with numerous risks; including stress, instability, and conflict (Lengua et al., 2014). These risks associated with living in a family with lower SES have the potential to affect not only effortful control but children's ability to regulate emotions. Lengua et al. (2014) specifically studied mothers with children between 36 and 40 months spanning through all income levels. Income, race, parent's age, and child's effortful control skills were assessed to determine whether there was a difference in skills between high and low-income families (Lengua et al., 2014). Lengua et al. (2014) confirmed that children coming from families with low SES had lower effortful control skills than their high-income counterparts.

Executive function. Executive function is the cognitive component of self-regulation, and includes skills such as working memory, the ability to organize thoughts, problem-solve, inhibit undesirable behavior, pay attention to others, and participate in tasks to completion (Willoughby & Blair, 2016). Executive function affects self-control and emotional expression and allows young children to engage in planned behavior and to anticipate the responses of others' (Fox & Calkins, 2003; Willoughby & Blaire, 2016). Toddlers, for example, may use their working memory to remember that a specific toy has helped them calm down in the past and then seek out that toy when upset (Fox &

Calkins, 2003). As children get older, executive function will become apparent in the school setting. Executive function enables children to play cooperatively with friends, understand appropriate times for specific emotional responses, and understand why others react in certain situations (Fox & Calkins, 2003; Graziano, Reavis, Keane, & Calkins, 2007; Halle & Darling-Churchill, 2016).

Executive function can be categorized as either hot or cool (Garon, Bryson, & Smith, 2008; Nilsen, Huyder, McAuley & Liebermann, 2016; O'Toole, Monks, & Tsermentseli, 2018). Cool executive function consists of skills that are more linked with cognitive development, such as working memory and inhibition. Hot executive function skills typically consist of skills with an emotional component, such as delay of gratification and decision-making (Nilsen, Huyder, McAuley & Liebermann, 2016; O'Toole, Monks, & Tsermentseli, 2018). Research regarding the development of cool executive function is far more prevalent than the research on hot executive function (O'Toole, Monks, & Tsermentseli, 2018). However, both are positively correlated to later developmental outcomes (Mischel, Shoda, & Rodriguez, 1989; O'Toole, Monks, & Tsermentseli, 2018; Purpura, Schmitt, & Ganley, 2017). Although studies that have focused on hot vs cool executive functions a major difference is, hot executive function develops early and rapidly over the preschool years, while cool executive functions develop more gradually through early childhood, the primary grades, and beyond (O'Toole, Monks, & Tsermentseli, 2018).

The development of executive function begins in infancy and continues into emerging adulthood, when the prefrontal cortex is finally fully developed (Nilsen, Huyder, McAuley & Liebermann, 2016). As early as six months, many infants can

refrain themselves from touching objects they know they should not touch, and typically by nine months, many infants begin to strategize ways to obtain objects that they want (Nilsen, Huyder, McAuley & Liebermann, 2016). In preschool, children are able to understand etiquette of certain situations such as remembering to take off your shoes at home but leaving your shoes on at school. Preschool-aged children also typically develop the ability to understand why others respond to certain situations in different ways, such as knowing a classmate is crying because they were kicked (Nilsen, Huyder, McAuley & Liebermann, 2016).

Executive function has been positively correlated with school readiness and academic achievement (Fuhs, Turner, & Farran, 2014; Mann, Hund, Hesson-McInnis, & Roman, 2016). For example, Mann, Hund, Hesson-McInnis, and Roman (2016) found that executive function is a strong predictor of school readiness. They assessed 104 children ranging from three to six years of age using measures of cool executive function (working memory, sustained attention, and inhibitory control) and hot executive function (delay of gratification). Overall, they found that executive function was directly and positively correlated with social-emotional skills, which then led to lower problem behavior and higher school readiness. Fuhs, Turner, and Farran (2014) examined whether preschoolers' executive function also predicted academic achievement in pre-k and kindergarten. They administered a battery of executive function tasks and a measure of academic achievement to 572 pre-k children. They found that having executive function was positively correlated with academic achievement in all content areas during pre- k, and math and language achievement in kindergarten (Fuhs, Turner, & Farran 2014). As with other components of social-emotional development, children from lower SES

families are at increased risk for the delayed development of executive function skills (Chung, Liu, McBride, Wong, & Lo, 2016; Granero, Louwaars, & Ezpeleta, 2015).

Parental Influences on Children's Social-Emotional Development

Parenting styles have been described as the level of responsiveness and demandingness parents typically exhibit during their interactions with their children (Baumrind, 1967). Early research in this area of study identified three main parenting styles: permissive, authoritarian, and authoritative (Baumrind, 1967). According to Baumrind, permissive parents or caregivers are usually indulgent toward their children. They let their children do what they want without much supervision or guidance and are viewed as more of friend than a parent. Authoritarian parents are the opposite. Authoritarian parents are typically disciplinarians. They tend to be very strict with their children and do not allow discussion or debate. Authoritative parents are generally reasonable. They set clear expectations for their children, but allow for discussion and clarification when necessary. Generally, authoritative parenting has shown to have the most positive influence on later child development (September, Rich, & Roman, 2016; Steinberg, Lamborn, Dornbusch, & Darling, 1992; Zarra-Nezhad, Aunola, Kiuru, Mullola, & Moazami-Goodarzi, 2015).

Parenting styles and practices are correlated with infant attachment (Lyons-Ruth, Bronfman, & Parsons, 1999; Wang et al., 2015). Wang et al. (2015) longitudinally examined parenting styles beginning at three months, and their relation to children's attachment at 12 months using video data and parent questionnaires. They found that children of parents who were negatively intrusive, defined as verbal and physical behaviors that restrict their child's behavior negatively, demonstrated disorganized

attachment at 12 months. Similarly, Wang, Deng, and Du (2018) researched the impact of harsh parenting in early childhood on effortful control and classroom engagement in middle school. Wang et al. (2018) defined harsh parenting as authoritarian parents participating in behaviors such as spanking, yelling, and criticizing their children. Harsh parenting was measured using a questionnaire, effortful control was measured using the Early Adolescence Temperament Questionnaire-Revised (EATQ-R), and classroom engagement was measured using a self-assessment. Wang et al. found children who grew up in a home with harsh parents had lower effortful control and lower classroom engagement. The researchers attribute this to children developing negative feelings towards school due to their parents' critical behaviors during early childhood.

Parenting practices have also been linked with differences in executive function skills (Schroeder & Kelley, 2009). Using self-report parent questionnaires Schroeder and Kelley (2009) found that parents that set reasonable limits and have less family conflict will foster children to have higher levels of behavior regulation at age five. Participants from this study were recruited from volunteer after school groups, when there was little difference between parent response revolving around family conflict and organization, Schroeder and Kelley (2009) hypothesized that parents who volunteer with their children's activities also foster higher executive function skills.

Finally, parents who participate in transition practices before their children enter kindergarten will be more prepared for school and will be more successful in school (Barnett & Taylor, 2009). These transition practices include but are not limited to, reading to children, singing, and practicing counting (Barnett & Taylor, 2009). These transition practices allow parents to engage with their children and build children's

socialization prior to entering kindergarten. Furthermore, these practices, when tied with continued responsiveness, then boost children's effortful control skills by kindergarten entry (Chang, Olson, Sameroff, & Sexton, 2011).

Environmental Influences on Parent Behavior

Environmental influences such as stress, family SES, prior maltreatment, and lack of social support can all have an impact on parent behavior (Blair & Raver, 2015). Some of these influences are co-occurring. For example, parental stress can be elevated due to low SES, or prior maltreatment can cause a lack of support from family members (Beckerman, van Berkel, Mesman, & Alink, 2017). Such negative environmental influences place parents at higher risk for engaging in non-responsive, harsh, or abusive parenting behaviors.

Parental stress contributes significantly to diminished parenting. According to the Family Stress Model, stress can be caused by a multitude of reasons such as low SES, marital troubles, or work instability (Beckerman et al., 2017). Parents experiencing high levels of stress are more likely to be more irritable, harsh, and inconsistent with their children and their disciplinary actions. These disciplinary actions can present themselves through physical punishments such as hitting or spanking (Beckman et al., 2017).

Child maltreatment rates are higher among families living in poverty (Sedlak et al., 2010). Socioeconomically disadvantaged parents are more likely to have low education levels, which results in a lower paid occupations or unemployment (Beckerman et al., 2017). Poverty also limits where a family can live, often times meaning communities with more crime and less neighborhood togetherness (Barajas-Gonzalez & Brooks-Gunn, 2014). If parents do not have any other friends or family and no

neighborhood support, there can be higher parental stress (Barajas-Gonzalez & Brooks-Gunn, 2014). When parents have high parental stress and feel financial instability they also are at a higher risk for turning to harsh parenting practices, sometimes to the extent of child maltreatment (Beckerman et al., 2017).

Often, when a parent is maltreating their child it is because they were abused during their own childhood (Berlin, Appleyard, & Scarr, 1996). When parents were maltreated during their own childhoods, they are more likely turn to harsh parenting behaviors such as corporal punishment and physical abuse toward their own children (Beckerman et al., 2017). Subsequently, when parents were maltreated they can feel as though they do not know how to parent competently. When parents perceive parenting as difficult or overly demanding they are at a higher risk to participate in negative or harsh parenting behaviors (Beckerman, 2017). Furthermore, according to the Parenting Stress Model, when parents experience increased overly demanding parenting challenges such as challenging behavior or poor attachment to their child their parental stress can be elevated, resulting in negative and harsh parenting behaviors (Abidin, 1990).

The Effect of Parents' Knowledge and Beliefs on Parents' Behavior

Parental beliefs have shown to affect parental behavior (Wang et al., 2015). For example, if a parent or caregiver believes that children will learn better through self-exploration, they will allow for their children to be more autonomous (Wang et al., 2015). Alternatively, if a parent or caregiver believes that children need a strict set of rules in order to learn, they will incorporate stringent rules within the home (Wang et al., 2015). While numerous studies have examined relations between parenting and children's cognitive development (e.g., DeFlorio & Beliakoff, 2015; Miller 1988; Starkey & Klein,

2000) there has been little research specifically focusing on parents' knowledge or beliefs about social-emotional development.

Miller (1988) has categorized research on parental beliefs about cognitive development into four themes. The first theme looks specifically at what caregivers believe about children's cognitive development. These beliefs include the process of how a child learns and the specific skills they are learning. The second theme seeks to understand where and how caregivers develop these beliefs. The third theme seeks to understand the relationships between what caregivers believe and their parenting behaviors. Finally, the fourth theme focuses on whether their beliefs are accurate (Miller, 1988). While this research involves cognitive development, the framework can be used to better understand caregivers' beliefs of social-emotional development and their subsequent behavior. The current study would fall under the first theme.

Research involving beliefs and social-emotional development that has occurred thus far has largely focused on teacher beliefs about social-emotional development. For example, Hollingsworth and Winter (2013) conducted surveys and focus groups with public and Head Start pre-k teachers to better understand their beliefs about the importance of social-emotional development. Hollingsworth and Winter found that pre-k teachers are placing higher importance on social-emotional development than the development of language and literacy.

Due to the high importance that pre-k teachers ascribe social-emotional development, they are changing their practices within the classroom. In order to bolster children's social-emotional development, pre-k teachers are implementing numerous opportunities for children to play (Hollingsworth & Winter, 2013). Teachers are

implementing time for play to allow turn-taking to increase peer interactions, which will reinforce peer friendships. Through the use of play, teachers are increasing their students' social-emotional development prior to their entrance into kindergarten (Hollingsworth & Winters, 2013).

Summary

This literature review has focused on various components of social-emotional development and the ways in which parenting influences children's social-emotional outcomes. Attachment, emotional regulation, and behavior regulation are important components of social-emotional development, and each are heavily influenced by parenting behavior. Less clear is how parents' knowledge about child development influence children's social-emotional development, and whether that knowledge varies by family SES. This study aims to examine whether and to what extent parents' knowledge about social-emotional development is related to their young children's social-emotional development. Furthermore, this study also examines whether SES, educational attainment, self-efficacy, depression, anxiety, or stress plays a role in knowledge, beliefs, or their children's later social-emotional outcomes.

CHAPTER THREE

METHOD

Design

This study utilized a correlational design for the purpose of examining the relation between parent knowledge/beliefs about social-emotional development and children's social-emotional development. Parents were recruited from local early childhood programs serving both lower and middle/high SES families. Both parents' knowledge/beliefs about social-emotional development and children's social-emotional development were measured via parent report.

Participants

The target population for this study includes primary caregivers of children ages two to five. Primary caregivers were recruited from three early childhood programs that serve predominantly middle to higher SES families and two early childhood programs that serve predominantly families of lower SES. Consent forms were distributed to primary caregivers of all age-eligible children at each program, of which 60 were returned. Of those 60, a total of 45 actually participated. Eight were from the programs serving lower SES families, and the remaining 37 from the other programs.

Thirty-four participants self-identified as Caucasian, five identified as Latino, two identified as Asian American, one identified as African American, and one identified as multiracial. Ethnicity information was missing for two participants. All participants were fluent in English, but nine participants reported speaking a language other than English in the home. All participants reported having some post-secondary education. Twenty-five participants reported having a graduate degree, twelve reported having a four-year

degree, and six reported having attended some college or vocational training.

Educational attainment was missing for two participants.

The children of the participants ranged in age from 2.08 to 5.82 years ($M = 3.82$). Twenty-nine were male. Thirty-eight children lived with both biological parents, five lived with a single parent, and two lived with grandparents. Participants were most likely to be the children's mothers ($n = 40$), but three fathers and two grandparents also participated. Nine children had either IEPs or IFSPs, seven of which were for speech and the other two were for general developmental delays.

Measures

Copies of all measures are provided in the Appendix.

Demographic questionnaire. This questionnaire was used to collect information on the children's age, gender, ethnicity, and any identified special needs, as well as parents' age, gender, educational background, relation to the child, and family structure (see Appendix pp. 57-61).

Parent knowledge/beliefs. An adapted version of the Knowledge of Child Development Inventory (KCDI; Larsen & Juhasz, 1986; see Appendix pp. 68-72) was used to measure parents' knowledge/beliefs about social-emotional development. The KCDI was originally published in 1971 as a multiple-domain measure consisting of 56 multiple choice questions to test the knowledge of child development of children birth to three. The KCDI is a self-reporting measure completed by the primary caregivers of young children. For the purpose of my study, I used only the social development and the emotional development sections, comprised of 14 questions each. Adaptations were made to update language (e.g., parents instead of mothers). The multiple-choice questions

were scored using a key and percentage correct used in all analyses. The KCDI has shown to have an internal consistency with Cronbach's alpha coefficient of 0.93. and criterion validity of 0.83.

Social-emotional development. The Ages and States Questionnaire: Social-Emotional 2 (ASQ-SE2; Squires, Bricker, & Twobly, 2015; see Appendix pp. 62-67) was used to measure children's social-emotional development. The ASQ-SE2 is a primarily strength based, parented-completed measure. Domains within this measure include: Self-regulation, communication, adaptive behaviors, autonomy, affect, and interaction with people. The ASQ-SE2 consists of separate forms for into 2 month, 6 month, 12 month, 18 month, 24 month, 30 month, 36 month, 48 month, and 60 month children. For the purpose of this study I only used the 24-60 month questionnaires. The appropriate questionnaire was sent to the families based on their child's age (see Table 1). Each portion of the ASQ-SE2 is comprised of 20 to 30 questions utilizing a Likert Scale corresponding to the phrases: "Often or always", "Sometimes", "Rarely or Never". Each answer is then converted to point values of 0, 5, or 10. The child's score is then compared to an empirically derived cutoff point and if a child's score is above the cutoff point they're social-emotional development is not considered "typical" and should be considered for referral to intervention services. The ASQ-SE2 has Cronbach's alpha ranging from 0.71 to 0.87 with an overall of 0.84. Additionally, there is a validity score between 0.81 and 0.95 and interrater reliability score of 0.91.

Table 1
ASQ-SE2 Forms, Age Ranges, and Number of Participants Receiving Each Form

Form	Age range	<i>n</i>
24 months	21 months, 0 days to 26 months, 30 days	1
30 months	27 months, 0 days to 32 months, 30 days	5
36 months	33 months 0 days and 41 months 30 days	11
48 months	42 months 0 days and 53 months 30 days	18
60 months	54 months 0 days and 72 months 0 days	10

Self-efficacy. Parents' self-efficacy was measured using Echelle Globale du Sentiment de Compétence Parentale (EGSCP; Muenier & Roskam, 2008; see Appendix pp. 73-74). The EGSCP, translated from French, is a self-report measure measuring parents' level of self-efficacy in regards to five subscales (1) Discipline, (2) Play, (3) Nurturance, (4) Instrumental Care, and (5) Teaching. Each subscale has between three and seven questions. The questions are on a Likert Scale corresponding to the phrases "Strongly Disagree," "Disagree," "Neither Agree or Disagree," "Agree," and "Strongly Agree." Some items were reverse-scored. The overall score was computed by first calculating the mean score of each individual subscale, and then the mean of those means. The higher the score received the higher the parent's self-efficacy is. The EGSCP has a Cronbach's alpha ranging from 0.56 and 0.85 for mothers and 0.58 to 0.84 for fathers.

Stress. The Parental Stress Scale (PSS; Berry & Jones, 1995; see Appendix p. 75) was used to measure parents' stress. The PSS is a self-report scale containing 18 items representing positive themes of parenthood such as emotional benefits and self-enrichment as well as the negative themes of parenthood such as demands and restrictions. Parents are presented with statements about their capabilities as a parent, and asked to choose from "strongly agree," "agree," "neutral," "disagree," and "strongly

disagree.” Responses are scored on a scale of zero to four, with some items reversed scored. Item scores are summed to produce an overall stress score. The higher the score, the higher the stress parents are experiencing. The PSS has satisfactory levels of internal reliability at 0.83 and a test-retest reliability of 0.81.

Depression. The Center for Epidemiological Studies-Depression screener was used as a measure of depressive symptoms (CES-D; Radloff, 1977; see Appendix p. 76). The CES-D is a self-report scale containing 20 items to determine the level of depression a parent is feeling. Respondents are asked to indicate how frequently they have been distressed or bothered during the past week. Samples items from the CES-D include “you felt fearful” and “you felt lonely.” Response choices include “rarely or never,” “some or little of the time,” “occasionally or a moderate amount of the time,” and “most of/all of the time.” “Rarely or none of the time” is scored as zero and “most of/all of the time” is scored as three. Scores are summed across items; with scores above 16 indicating possible clinical depression. The CES-D has a Cronbach’s alpha ranging 0.940 and 0.895.

Anxiety. Anxiety was measured using the Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988; see Appendix p. 77). The BAI is a self-report scale containing 21 items to screen for generalized anxiety. Respondents are presented with symptoms of anxiety (e.g., feeling terrified, feeling unsteady), and asked to indicate the frequency in which they experienced each symptom over the past week. Response choices include “not at all,” “a little bit,” “some,” and “a lot.” Responses are scored zero to three, with “not at all” scored of zero and “a lot” as three. These scores are summed to produce an overall anxiety score. The higher the score, the higher level of anxiety the

parent is experiencing. The BAI has a Cronbach's alpha score of 0.94 as well as an acceptable reliability score of 0.67.

Procedures

This study received exempt status from the institutional review board. Upon receiving exempt status, packets including consent forms and the demographic questionnaire were sent home to parents/guardians via their children's teachers. Participants were given the option of completing the remaining measures online via Qualtrics or as a paper packet ($n = 34$ chose online). Links were emailed to families via e-mail and paper copies were delivered to the child care center in a manila envelope and sent home with the child. Participants were asked to complete the surveys within two weeks. On average, participants who did not return the survey within two weeks were sent two reminders. As an incentive, participants were given the opportunity to win one of four \$25.00 gift cards via a drawing after completing the study.

CHAPTER FOUR

RESULTS

Research Question 1: To What Extent is Parent's Knowledge about Social-Emotional Development Related to Their Young Children's Social-Emotional Outcomes?

Correlational analyses were conducted to answer this research question. As shown in Table 3, scores on the KCDI were not correlated to scores on the ASQ-SE2. However, there was a significant correlation between parents' self-efficacy and their children's ASQ-SE2 scores, suggesting that parents who have higher self-efficacy are raising children with higher social emotional development. The only other significant correlation was found for parental stress and depressive symptoms. Descriptive statistics for all measures are provided in Table 3.

Measure	1	2	3	4	5	6
1. ASQ-SE2	--					
2. KCDI	-.044	--				
3. EGSCP	-.413**	.002	--			
4. PSS	.264	.196	-.287	--		
5. CES-D	.041	.050	.001	.458**	--	
6. BAI	.199	-.124	-.027	.326*		--

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

Table 3
Descriptive Statistics for All Measures

Measure	<i>n</i>	M	SD	Range
ASQ-SE2	45	37.56	26.10	0 – 105
KCDI	45	.85	.08	.61 – 1.00
EGSCP	43	4.46	.33	3.78 – 5.00
PSS	43	13.44	7.74	0 – 28.00
CES-D	43	15.95	5.49	9.00 – 31.00
BAI	43	4.84	6.73	0 – 27.00

Research Question 2: To What Extent is Parents’ Knowledge About Social-Emotional Development Related to Family Socioeconomic Status (SES), as Measured by Parents’ Educational Attainment?

A correlational analysis was conducted to examine this secondary research question. Parents’ educational attainment levels were coded as follows: high school = 1, some college or vocational training = 2, four-year college degree = 3, and graduate degree = 4, and a Pearson’s r correlation coefficient was calculated for educational attainment and KCDI scores. This correlation was significant, $r = .393$, $p = .009$. This suggests that parents with higher levels of education know more about children’s social-emotional development. The means and standard deviations for each educational group on all measures are presented in Table 4.

Table 4
Means and Standard Deviations for All Measures by Parents' Educational Level

Measure	Some College*		Four-Year Degree		Graduate Degree	
	<i>n</i> = 6		<i>n</i> = 12		<i>n</i> = 25	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
ASQ-SE2	37.50	18.37	58.33	28.23	25.00	17.68
KCDI	.79	.06	.84	.07	.87	.08
EGSCP	4.60	.34	4.41	.45	4.45	.27
PSS	12.00	6.69	12.50	7.38	14.35	8.65
CES-D	17.83	7.41	13.67	4.98	16.70	5.30
BAI	7.00	8.12	5.33	7.49	4.39	6.32

Note. *Includes Vocational Training

CHAPTER FIVE

DISCUSSION

To date, there has been little research specifically examining parents' knowledge of social-emotional development with children's outcomes. Prior to the current study, research has correlated parents' knowledge with overall child development but these studies were not specifically focused on social-emotional development (National Academies of Science, Engineering, and Medicine, 2016; Sanders & Morwska, 2014). Understanding whether and how parents' knowledge about children's social-emotional development is related to children's social-emotional development is important for informing parent education and intervention. Additionally, it is important to better understand the contributors to children's social-emotional development more generally, due to the importance of this developmental domain for a plethora of children's outcomes.

The primary purpose of the current study was to identify whether there was a correlation between parents' knowledge and their child's social-emotional development. A secondary objective was to examine whether there are any differences in parents' knowledge by family SES. Results from this study suggest no significant correlation between parents' knowledge about social-emotional development and their young child's social-emotional development. This finding was not expected. Given other findings correlating parental knowledge with overall development (National Academies of Science, Engineering, and Medicine, 2016; Sanders & Morwska, 2014), I expected a similar relation within the social-emotional domain. I suspect the lack of findings may be due to the small sample size or the lack of diversity, both in terms of race/ethnicity and

SES. A larger, more diverse sample would likely increase the variability of responses on the measures, thus resulting in correlations not found here.

Although there was no correlation between parents' knowledge and children's social-emotional development, my findings suggest that there is a significant correlation between parents' self-efficacy and children's social-emotional development. However, the direction of this relation has not been established. Further research is needed to examine whether efficacy predicts social-emotional development, or whether children with better developed social-emotional skills are just easier to parent, resulting in higher parenting efficacy among their parents. Giallo, Treyvaud, Cooklin, and Wade (2012) found that having a child with a difficult temperament negatively effects parental self-efficacy, which suggests development predicts efficacy. Previous research has also found that parents with increased knowledge of child development have higher levels of parenting self-efficacy, likely because the increased knowledge leads to greater confidence in their parenting skills (National Academies of Science, Engineering, and Medicine, 2016). However, in the current study, there was no correlation between parents' knowledge and self-efficacy.

Secondly, I attempted to measure whether there are any differences in parents' knowledge by family SES. Unfortunately, I was unable to obtain socioeconomic diversity despite efforts to recruit from socioeconomically diverse early childhood programs. The majority of subjects who participated in my study were all highly educated. However, the findings within this study suggest there is a positive correlation between SES and parental knowledge about social-emotional development. Meaning the higher SES, the higher their knowledge about social-emotional development. Further,

with the high education attainment found in this study, I found a significant correlation parent education and children's social-emotional development. This study suggests the more education attained by the parent the higher their child's social-emotional development is. This particular finding was not expected, as it was not specifically written within my research questions, but aligns with previous research (Brown, et al., 2017). Although, with the demographic information I was able to see that the higher education level a parent has the lower their child's ASQ-SE2 score their child had, which equates to healthier social-emotional development.

In addition to the stated research questions, relations between stress, anxiety, depression, self-efficacy, and parents' knowledge and children's development were also explored. These measures were administered as potential control variables, but given the lack of correlation between knowledge and development, they were not utilized for that purpose. Past research has correlated parental stress with negative parenting practices, such as harsh parenting, which is correlated with negative social-emotional outcomes (Wang et al., 2018). Similarly, Giallo et al. (2012) found that parents who have higher feelings of stress, anxiety and depression have lower self-efficacy. The results of this study do not support these past findings. There was no significant correlation found between stress, anxiety or depression and social-emotional development. This was also unexpected, and may be due to the small sample size or sample characteristics (e.g., high education levels). Primary caregivers within this study did not report high levels of depression or, only 16 of the 45 subjects scored above the cut point indicating potential clinical concern, and only two subjects reported moderate anxiety. However, the current study did find a significant correlation between depression and stress, which was

expected based on past research (Brown et al., 2017; Linver, Brooks-Gunn & Kohen, 2002). There have been vast amounts of research done involving depression, anxiety, and stress and whether it is correlated to parenting practices but there is still a very little research regarding parental knowledge (National Academies of Science, Engineering, and Medicine, 2016). Future research should continue to explore relations between stress, anxiety, depression and parental knowledge of child development.

Limitations

A major limitation of this study was the small sample size. While there were correlations found between parental self-efficacy and social-emotional development, there could have been opportunity for more correlations or more significant findings with a larger sample size. A larger sample size would also allow for the use of more advanced statistical analysis. Also, due to small sample size, these findings cannot be generalized to other populations.

Furthermore, the sample lacked diversity. The majority of participants were highly educated, not allowing an accurate representation of all education levels. The majority of participants were also Caucasian, English speaking, and part of two-parent, nuclear families. This is not representative of larger population demographics, which are much more heterogamous. If a more diverse sample were available, it would make findings more generalizable, and possibly lead to correlations not captured in this study.

The final limitation of this study is the use of self-report measures. When measures are self-reported, response bias is a concern. Due to embarrassment or lack of knowledge, parents could have answered questions untruthfully, skewing the data. Future studies should include an observational measure or a teacher-completed measure to

increase the validity of outcomes. Furthermore, there are limitations of the measures chosen as well. Other measures regarding social-emotional development could be used in future research to test correlations between parent knowledge and parental self-efficacy, such as direct measures of attachment and self-regulation.

Implications

The results of this study open up different avenues of research aiming to understand the relationship between parental self-efficacy and social-emotional development. Future research should focus on establishing the direction of the relationship between parental self-efficacy and children's social-emotional development. I hypothesize this relationship could go either direction. Parental self-efficacy could be higher due to their children's more mature social-emotional development, thus making them easy to parent, or children's social-emotional development could be higher due to their parents' higher self-efficacy. Future research should also focus on what bolsters parental-self efficacy. Especially if higher parental self-efficacy is positively correlated with children's social-emotional development. If educators are able to strengthen parental self-efficacy, those parents will then be more equipped to support their child's social-emotional development. This research found that stress, anxiety, and depression have no correlation with self-efficacy. Future research can focus on what exactly influences parental self-efficacy for the purpose of informing intervention practices for parents.

If this study were to be replicated, the sample size and participant diversity should be increased. There is a possibility for different findings with a bigger picture that can be generalized across multiple populations. The study can be expanded to include

knowledge of different domains, and whether knowledge is related to these different developmental domains.

Conclusion

This study aimed to identify whether there was a link between parents' knowledge about social-emotional development and their child's social-emotional outcomes. While there was no correlation found, this study has opened up interesting new avenues of research regarding parental self-efficacy and social-emotional development. Future research should focus on the direction of the relationship between parental self-efficacy and social-emotional development. As well as what specifically bolsters parental self-efficacy. It is recommended that this study be executed with a larger and more diverse sample size in the future as well as with incorporation of observations in addition to parental self-report.

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APPENDIX

Demographic Survey

BRIEF SURVEY (PLEASE RETURN WITH CONSENT FORM)

Thank you for agreeing to participate in this study. Within the next two weeks, you will receive a survey to complete. However, before we can send the survey, we need to ask some questions about you and your child. Your responses are confidential and will not be shared with anyone outside of the research team. Please return this form to your child's lead teacher.

Child's Information

1. What is your child's name?

2. What is your child's date of birth?

3. What is your child's gender?
 - Male
 - Female
 - Other: _____
4. What language(s) does your child speak at home? (Check all that apply)
 - English
 - Spanish
 - Other: _____
5. What is your child's race/ethnicity? (Check all that apply)
 - American Indian or Alaska Native
 - Black, Afro-Caribbean, or African American
 - East Asian or Asian American
 - Latino or Hispanic American
 - Middle Eastern or Arab American
 - Native Hawaiian or Other Pacific Islander
 - South Asian or Indian American
 - White, European American, or Caucasian

Other _____

6. Which school (child care) does your child attend?

7. Which classroom is he/she in?

8. Does your child have an IFSP or IEP?

Yes

No

If yes, please specify target area(s) (Check all that apply)

autism spectrum disorder

cognitive delay or difference

developmental delay or difference

medical needs

physical/motor delay or difference

social or emotional delay or difference

speech/language delay or difference

vision/hearing difference

Other: _____

Family Information

9. What is your name?

10. What is your relation to the child?

11. How many other children do you have?

12. What are their ages?

13. Which of the following best describes your current family structure?

Two-parent family, both parents biologically related to all children

- Two-parent family, at least one parent not biologically related to all children
- Single parent family, I have physical custody of my child(ren) most of the time
- Single parent family, I have physical custody of my child(ren) about half of the time
- Single parent family, I have physical custody of my child(ren) less than half of the time
- Other: _____

14. What language(s) do you speak at home?

- English
- Spanish
- Other: _____

15. What is your race/ethnicity?

- American Indian or Alaska Native
- Black, Afro-Caribbean, or African American
- East Asian or Asian American
- Latino or Hispanic American
- Middle Eastern or Arab American
- Native Hawaiian or Other Pacific Islander
- South Asian or Indian American
- White, European American, or Caucasian
- Other _____

16. What is your highest educational attainment?

- Less than high school
- High school graduate or equivalent
- Some college
- Vocational training
- Two year college degree (e.g., A.A., A.S.)

- Four year college degree (e.g., B.A., B.S.)
- Graduate degree (e.g., M.A., M.S., Ed.D., Ph.D., J.D., M.D)
- Other: _____

17. If applicable, what is your partner's highest educational attainment?

- Less than high school
- High school graduate or equivalent
- Some college
- Vocational training
- Two year college degree (e.g., A.A., A.S.)
- Four year college degree (e.g., B.A., B.S.)
- Graduate degree (e.g., M.A., M.S., Ed.D., Ph.D., J.D., M.D)
- Other: _____

Contact Information and Preferences

18. In the event we need to contact you, what is your preferred method?

- email
- phone call
- text

19. What is the best phone number to reach you?

20. What is your email address?

21. How would you like to take your survey?

- online (we will email you a link to take the survey electronically)
- paper (we will send a paper copy of the survey home with your child for you to complete and return to school)

Parent Questionnaire Measures

The following measures were administered together as one questionnaire, divided into sections by measure. The organization of the survey was as follows:

1. ASQ:SE-2. Each parent will receive only the form/set of questions specific to their child's age according to the following guidelines:

Child age on the day the questionnaire is sent to parent	ASQ:SE-2 Form
24 months 0 days through 26 months 31 days	24-month questionnaire
27 months 0 days through 32 months 31 days	30-month questionnaire
33 months 0 days through 41 months 31 days	36-month questionnaire
42 months 0 days through 53 months 31 days	48-month questionnaire
54 months 0 days through 72 months 0 days	60-month questionnaire

2. KCDI, two subscales: Social development and emotional development. Items will be randomly shuffled across subscales prior to survey creation/administration. All parents will receive items in the same order.
3. EGSCP, five subscales: Discipline, play, nurturance, instrumental care, and teaching. Items will be randomly shuffled across subscales prior to survey creation/administration. All parents will receive items in the same order.
4. Parental Stress Scale.
5. CES-D.
6. BAI

ASQ:SE-2 (Squires, Bricker, & Twombly, 2015)

For all questionnaires, respondents are asked to select “often or always,” “sometimes,” “rarely or never,” and to check whether this item is a concern.

24-month questionnaire

1. Does your child look at you when you talk to him?
2. Does your child seem too friendly with strangers?
3. Does your child laugh or smile when you play with her?
4. Is your child’s body relaxed?
5. When you leave, does your child stay upset and cry for more than an hour?
6. Does your child greet or say hello to familiar adults?
7. Does your child like to be hugged or cuddled?
8. When upset, can your child calm down within 15 minutes?
9. Does your child stiffen and arch his back when picked up?
10. Is your child interested in things around her, such as people, toys, and foods?
11. Does your child cry, scream, or have tantrums for long periods of time?
12. Do you and your child enjoy mealtimes together?
13. Does your child have eating problems? For example, does he stuff food, vomit, eat things that are not food, or _____? (Please describe.)
14. Does your child sleep at least 10 hours in a 24-hour period?
15. When you point at something, does your child look in the direction you are pointing?
16. Does your child have trouble falling asleep at naptime or at night?
17. Does your child get constipated or have diarrhea?
18. Does your child follow simple directions? For example, does he sit down when asked?
19. Does your child let you know how he is feeling with words or gestures? For example, does he let you know when he is hungry, hurt, or tired?
20. Does your child check to make sure you are near when exploring new places, such as a park or friend’s home?
21. Does your child do things over and over and get upset with you try to stop her? For example, does she rock, flap her hands, spin, or _____? (Please describe.)
22. Does your child like to hear stories or sing songs?
23. Does your child hurt himself on purpose?
24. Does your child like to be around other children? For example, does she move close to or look at other children?
25. Does your child try to hurt other children, adults, or animals (for example, by kicking or biting)?
26. Does your child try to show you things by pointing at them and looking back at you?
27. Does your child play with objects by pretending? For example, does your child pretend to talk on the phone, feed a doll, or fly a toy airplane?
28. Does your child wake three or more times during the night?
29. Does your child respond to his name when you call him? For example, does he turn his head and look at you?
30. Is your child too worried or fearful? If “sometimes” or “often or always,” please describe:
31. Has anyone shared concerns about your child’s behaviors? If “sometimes” or “often or always,” please describe:

30-month questionnaire

1. Does your child look at you when you talk to him?
2. Does your child like to be hugged or cuddled?
3. Does your child cling to you more than you expect?
4. Does your child say hello to familiar adults?
5. Does your child seem happy?
6. Does your child like to hear stories and sing songs?
7. Does your child seem too friendly with strangers?
8. Does your child settle herself down after exciting activities?
9. Does your child cry, scream, or have tantrums for long periods of time?
10. Does your child do things over and over and get upset with you try to stop him?
For example, does he rock, flap his hands, spin, or _____? (Please describe.)
11. Does your child stay with activities she enjoys for at least 3 minutes (other than watching shows or videos, or playing with electronics)?
12. Does your child do what you ask him to do?
13. Is your child interested in things around her, such as people, toys, and foods?
14. When upset, can your child calm down within 15 minutes?
15. Does your child have eating problems? For example, does he stuff food, vomit, eat things that are not food, or _____? (Please describe.)
16. Do you and your child enjoy mealtimes together?
17. When you point at something, does your child look in the direction you are pointing?
18. Does your child sleep at least 8 hours in a 24-hour period?
19. Does your child let you know how she is feeling with words or gestures? For example, does she let you know when she is hungry, hurt, or tired?
20. Does your child follow routine directions? For example, does he come to the table or help clean up his toys when asked?
21. Does your child check to make sure you are near when exploring new places, such as a park or a friend's home?
22. Does your child move from one activity to the next with little difficulty (for example, from playtime to mealtime)?
23. Does your child stay away from dangerous things such as fire and moving cars?
24. Does your child destroy or damage things on purpose?
25. Does your child hurt himself on purpose?
26. Does your child play next to other children?
27. Does your child try to hurt other children, adults, or animals (for example, by kicking or biting)?
28. Does your child try to show you things by pointing at them and looking back at you?
29. Does your child use at least two words to ask for things he wants? For example, does he say "want ball" or "more apple?"
30. Does your child play with objects by pretending? For example, does your child pretend to talk on the phone, feed a doll, or fly a toy airplane?
31. Does your child wake three or more times during the night?
32. Is your child too worried or fearful? If "sometimes" or "often or always," please describe:
33. Has anyone shared concerns about your child's behaviors? If "sometimes" or "often or always," please describe:

36-month questionnaire

1. Does your child look at you when you talk to him?
2. Does your child like to be hugged or cuddled?
3. Does your child or play with adults he knows well?
4. Does your child cling to you more than you expect?
5. When upset, can your child calm down within 15 minutes?
6. Does your child seem too friendly with strangers?
7. Does your child settle herself down after exciting activities?
8. Does your child move from one activity to the next with little difficulty (for example, from playtime to mealtime)?
9. Does your child seem happy?
10. Is your child interested in things around her, such as people, toys, and foods?
11. Does your child do what you ask her to do?
12. Does your child seem more active than other children his age?
13. Does your child stay with activities she enjoys for at least 5 minutes (other than watching shows or videos, or playing with electronics)?
14. Do you and your child enjoy mealtimes together?
15. Does your child have eating problems? For example, does he stuff food, vomit, eat things that are not food, or _____? (Please describe.)
16. Does your child sleep at least 8 hours in a 24-hour period?
17. Does your child use words to tell you what she wants or needs?
18. Does your child follow routine directions? For example, does he come to the table or help clean up his toys when asked?
19. Does your child cry, scream, or have tantrums for long periods of time?
20. Does your child check to make sure you are near when exploring new places, such as a park or a friend's home?
21. Does your child do things over and over and get upset with you try to stop her? For example, does she rock, flap her hands, spin, or _____? (Please describe.)
22. Does your child hurt himself on purpose?
23. Does your child stay away from dangerous things such as fire and moving cars?
24. Does your child destroy or damage things on purpose?
25. Does your child use words to describe her feelings and the feelings of others? For example, does she say "I'm happy," "I don't like that," or "She's sad"?
26. Can your child name a friend?
27. Do *other* children like to play with your child?
28. Does *your child* like to play with other children?
29. Does your child try to hurt other children, adults, or animals (for example, by kicking or biting)?
30. Does your child show an unusual interest in or knowledge of sexual language or activity?
31. Does your child try to show you things by pointing at them and looking back at you?
32. Does your child pretend that objects are something else? For example, does he pretend a banana is a phone?
33. Does your child wake three or more times during the night?
34. Is your child too worried or fearful? If "sometimes" or "often or always," please describe:
35. Has anyone shared concerns about your child's behaviors? If "sometimes" or "often or always," please describe:

48-month questionnaire

1. Does your child look at you when you talk to him?
2. Does your child cling to you more than you expect?
3. Does your child or play with adults he knows well?
4. When upset, can your child calm down within 15 minutes?
5. Does your child like to be hugged or cuddled?
6. Does your child seem too friendly with strangers?
7. Does your child settle herself down after exciting activities?
8. Does your child cry, scream, or have tantrums for long periods of time?
9. Is your child interested in things around her, such as people, toys, and foods?
10. Does your child stay dry during the day?
11. Does your child have eating problems? For example, does he stuff food, vomit, eat things that are not food, or _____? (Please describe.)
12. Do you and your child enjoy mealtimes together?
13. Does your child do what you ask her to do?
14. Does your child seem happy?
15. Does your child sleep at least 8 hours in a 24-hour period?
16. Does your child seem more active than other children his age?
17. Does your child use words to tell you what she wants or needs?
18. Does your child stay with activities he enjoys for at least 10 minutes (other than watching shows or videos, or playing with electronics)?
19. Does your child use words to describe her feelings and the feelings of others? For example, does she say "I'm happy," "I don't like that," or "She's sad"?
20. Does your child move from one activity to the next with little difficulty (for example, from playtime to mealtime)?
21. Does your child explore new places, such as a park or a friend's home?
22. Does your child do things over and over and get upset with you try to stop her? For example, does she rock, flap her hands, spin, or _____? (Please describe.)
23. Does your child hurt himself on purpose?
24. Does your child follow rules at home or at child care?
25. Does your child destroy or damage things on purpose?
26. Does your child stay away from dangerous things such as fire and moving cars?
27. Can your child name a friend?
28. Does your child show concern for other people's feelings? For example, does he look sad when someone is hurt?
29. Do *other* children like to play with your child?
30. Does *your child* like to play with other children?
31. Does your child try to hurt other children, adults, or animals (for example, by kicking or biting)?
32. Does your child show an unusual interest in or knowledge of sexual language or activity?
33. Does your child wake three or more times during the night?
34. Is your child too worried or fearful? If "sometimes" or "often or always," please describe:
35. Does your child have simple back-and-forth conversations with you? For example:
Parent: "It's raining!" Child: "And cold outside." Parent: "Let's get your coat." Child: "I got it!"
36. Has anyone shared concerns about your child's behaviors? If "sometimes" or "often or always," please describe:

60-month questionnaire

1. Does your child look at you when you talk to him?
2. Does your child cling to you more than you expect?
3. Does your child like to be hugged or cuddled?
4. Does your child or play with adults he knows well?
5. When upset, can your child calm down within 15 minutes?
6. Does your child seem too friendly with strangers?
7. Does your child settle herself down after exciting activities?
8. Does your child seem happy?
9. Does your child cry, scream, or have tantrums for long periods of time?
10. Is your child interested in things around him, such as people, toys, and foods?
11. Does your child go to the bathroom by herself? (Reminders and help with wiping are okay.)
12. Does your child have eating problems? For example, does he stuff food, vomit, eat things that are not food, or _____? (Please describe.)
13. Does your child stay with activities he enjoys for at least 15 minutes (other than watching shows or videos, or playing with electronics)?
14. Do you and your child enjoy mealtimes together?
15. Does your child do what you ask her to do? For example, does he wash his hands or wait to take a turn when asked?
16. Does your child seem more active than other children his age?
17. Does your child sleep at least 8 hours in a 24-hour period?
18. Does your child use words to tell you what she wants or needs?
19. Does your child use words to describe her feelings and the feelings of others? For example, does she say "I'm happy," "I don't like that," or "She's sad"?
20. Does your child move from one activity to the next with little difficulty (for example, from playtime to mealtime)?
21. Does your child explore new places, such as a park or a friend's home?
22. Does your child do things over and over and get upset with you try to stop her? For example, does she rock, flap her hands, spin, or _____? (Please describe.)
23. Does your child hurt himself on purpose?
24. Does your child follow rules at home or at child care?
25. Does your child destroy or damage things on purpose?
26. Does your child stay away from dangerous things such as fire and moving cars?
27. Does your child show concern for other people's feelings? For example, does he look sad when someone is hurt?
28. Do *other* children like to play with your child?
29. Does *your child* like to play with other children?
30. Does your child try to hurt other children, adults, or animals (for example, by kicking or biting)?
31. Does your child take turns and share when playing with other children?
32. Does your child show an unusual interest in or knowledge of sexual language or activity?
33. Does your child wake three or more times during the night?
34. Is your child too worried or fearful? If "sometimes" or "often or always," please describe:
35. Does your child have simple back-and-forth conversations with you? For example:
Parent: "It's raining!" Child: "And cold outside." Parent: "Let's get your coat." Child: "I got it!"

36. Has anyone shared concerns about your child's behaviors? If "sometimes" or "often or always," please describe:

KCDI (Larsen & Juhasz, 1986)

Directions: Choose the response you believe BEST answers each question.

Emotional Development Subscale

1. It is most important for young children's emotional development that their parents/caregivers
 - a. teach them not to be afraid of anything
 - b. touch them, love them, and give them attention
 - c. teach them right from wrong
 - d. teach them not to cry

2. The most important sign of healthy emotional development in young children is that they have:
 - a. a sense of patience
 - b. a sense of respect
 - c. a sense of fear
 - d. a sense of trust

3. What type of care causes babies to become children who are fearful and mistrustful?
 - a. spoiling the baby by always comforting or meeting the baby's needs
 - b. insensitive, irregular care
 - c. how a baby is cared for does not really matter since babies are born with a natural tendency to trust
 - d. any care outside the home, no matter how good, causes a child to be fearful and mistrustful

4. A close relationship between parents/caregivers and child is most related to:
 - a. the number of hours spent together
 - b. the quality of the hours spent together
 - c. how many children are in the family
 - d. birth order, whether the child is the oldest, middle, youngest, or an only child

5. When children become about two years old they have an important need to:
 - a. for their parent/guardian to do everything for them
 - b. learn to ride tricycles and color within the lines
 - c. become more independent and begin to do things for themselves
 - d. make-believe play with other children

6. A two-year-old has begun to say "no" when asked to put toys away. This response:
 - a. shows that the child is spoiled
 - b. is typical of a normal two-year-old's development toward independence

- c. shows that the child has not been properly disciplined
 - d. should be ignored
7. What might cause children to feel worthless?
- a. allowing them to follow their own interests
 - b. allowing them to make choices for themselves
 - c. using shame as a method to control them
 - d. being firm, but kind when correcting them
8. An 8-month-old baby cries whenever a stranger comes near. His parent/caregiver should:
- a. place the baby in the stranger's arms so that the baby overcomes his fears
 - b. ask the child's doctor about the problem because this is not a normal reaction
 - c. scold the baby since the child has to learn how not to be afraid
 - d. understand that this is a normal reaction and give the baby time to get used to the stranger
9. When a caregiver gives a 10-month-old baby new objects or toys, how would you expect the baby to respond?
- a. with no interest, because babies this age only like the familiar
 - b. with confusion, because babies this age can learn only one thing at a time
 - c. with curiosity, because babies this age enjoy exploring new things
 - d. with fear, because it is a natural instinct
10. Shortly after the arrival of a new sibling a three-year-old begins refusing to feed and dress herself. The child's parents/caregivers can best deal with this by:
- a. explaining that she is a big kid and should act like one
 - b. not giving her treats until she starts to do these things for herself
 - c. promise a special treat if she feeds and dresses herself
 - d. showing more love and spending more time with her
11. The keynote phrase of a two-year-old is:
- a. "look at me"
 - b. "will you do this for me"
 - c. "me do"
 - d. "leave me alone"
12. Cuddling and touching babies
- a. is not very important in the first four weeks
 - b. is not very important after the first four weeks
 - c. is very important during the first four weeks and after
 - d. often will spoil the child
13. For children to grow up to be happy, healthy, and well-adjusted adults, they must:

- a. be protected from all unpleasant emotions
- b. learn to cope with unpleasant emotions
- c. learn to cope with all emotions
- d. experience only pleasant emotions

14. The ability to respond emotionally:
- a. does not appear until a baby recognizes strangers
 - b. appears in newborn infants
 - c. is the result of learning
 - d. is the result of conditioning

Social Development Subscale

1. If a 2-month-old child smiles at everyone, even strangers, parents/caregivers should:
 - a. keep the child away from strangers
 - b. be concerned the child is too trusting
 - c. realize that it is normal and in time the child will recognize strangers
 - d. tell the child in a firm tone to not smile at strangers
2. When children play with their own genitals at home, parent/caregivers should:
 - a. scold them
 - b. redirect their attention to something else
 - c. recognize this as normal and allow them to explore their own bodies
 - d. place them in time out
3. Why might temper outbursts increase as a child approaches two years of age?
 - a. because the child is becoming more dependent on others
 - b. because the child has a great need to do things for herself
 - c. because the child is spoiled and is used to getting her own way
 - d. has nothing to do with age, it is just the way the child is
4. A young child needs:
 - a. very strict rules
 - b. rules that are clear and firm
 - c. no rules
 - d. rules that change often
5. If two children, both two years old, seem to push and hit when they play together, their parents/caregiver should:
 - a. never allow them to play together
 - b. before play begins tell them they will be in trouble if they push and hit
 - c. realize this is normal behavior for two-year-olds
 - d. be concerned the children are overly aggressive

6. If two children, both two-years-old, play side by side rather than with each other, their caregiver should:
 - a. be concerned that something is wrong
 - b. tell them to play together
 - c. have an older child join to show them how to play with each other
 - d. realize that this type of play is normal for their age
7. When a three-year-old child misbehaves, parents/caregivers should:
 - a. compare their behaviors to the behavior of others'
 - b. spank and remove the child from the situation
 - c. firmly, but calmly, remind the child of the rules and if they continue, remove the child from the situation
 - d. scold the child and remove them from the situation
8. In dealing with anger in toddlers, parents/caregivers can best help their children develop self-control by:
 - a. giving choices within firm limits
 - b. giving plenty of opportunities for expressing anger
 - c. ignoring angry outbursts
 - d. punishing lightly but consistently after each outburst
9. The following statement is true:
 - a. the sooner toilet training is begun the less time it will take
 - b. punishment and scolding shorten the time needed to complete toilet training
 - c. when toilet training is begun is not important
 - d. children toilet trained after the age of 24 months tend to learn faster
10. Parallel play means that:
 - a. the children are not aware of each other's presence
 - b. the children play the same activity side by side, but independently
 - c. the children play together cooperatively
 - d. a child plays alone
11. Cooperation:
 - a. appears in children's play by the time they are two years of age
 - b. is best developed by strict child-training methods
 - c. is uncommon in young children because they are too self-centered to cooperate with each other
 - d. is uncommon in many young children because their parents/caregivers do too much for them
12. Aggression in young children is:
 - a. always provoked by others
 - b. often unprovoked by others

- c. always in the form of physical attacks on others
- d. usually in the form of verbal attacks

13. Early social experiences are:

- a. more important in the home than outside the home
- b. more important outside the home than in the home
- c. limited to the mother
- d. more important with peers

14. Conformity to group expectations

- a. is unimportant
- b. is best achieved by strict child training
- c. is necessary for the healthy socialization of the child
- d. is best achieved by waiting until the child is older than four years of age

EGSCP (Muenier & Roskam, 2008)

Please indicate the extent to which you agree with the following statements.

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neither Agree or Disagree
- 4 = Agree
- 5 = Strongly Agree

Subscale: Discipline

1. I have trouble getting my child to listen to me.
2. Despite my efforts, I find it hard to influence the way my child behaves.
3. Generally, my children obey me and this pleases me.
4. When my child tests the limits that I have set up, I find myself becoming extremely discouraged.
5. My child often behaves in a manner very different from the way I would want him/her to behave.
6. Sometimes I feel that I don't have enough control over the direction my child's life is taking.
7. When my child gets angry, I can usually deal with him/her if I stay calm.

Subscale: Play

8. Playing is a part of my relationship with my child that I have very little difficulty with.
9. I am able to get actively involved in playing with my child.
10. I am a fun playmate for my child.
11. I can always think of something to play with my child.
12. Sitting down regularly with my child to read or do some other one-on-one activity is not difficult for me.

Subscale: Nurturance

13. My child feels very loved by me.
14. My child knows that I understand when his/her feelings are hurt.
15. I think that my child knows by my behavior how much I really adore him/her.
16. I am definitively an adequately nurturing parent.
17. I am able to sense when my child is starting to become distressed.

Subscale: Instrumental Care

18. I am able to provide my child with a comfortable amount of daily structure.
19. I have been successful in getting my child to stick to a regular daily schedule.
20. I am not very good at getting my child to stick to a regular daily schedule.
21. I don't seem to be able to establish a regular bedtime routine with my child.

22. I feel like I have no control over my child's daily habits (sleep habits, eating habits, etc.).

Subscale: Teaching

23. I have some difficulty figuring out the appropriate level of instruction when I am trying to explain something to my child.
24. Although I would like to help my child learn more about his/her surroundings, this is an area of parenting that I do not feel well-equipped for.
25. I am probably not that great at teaching my child about the world.

Parental Stress Scale (Berry & Jones, 1995)

- 4 = Strongly Agree
- 3 = Agree
- 2 = Neutral
- 1 = Disagree
- 0 = Strongly Disagree

Please indicate your agreement with the following statements

1. I am happy in my role as a parent.
2. There is little or nothing I wouldn't do for my child if it is necessary.
3. Caring for my child sometimes takes more time and energy than I have to give.
4. I sometimes worry whether I am doing enough for my child.
5. I feel close to my child.
6. I enjoy spending time with my child.
7. My child is an important source of affection for me.
8. Having children gives me a more certain and optimistic view for the future.
9. The major source of stress in my life is my child.
10. Having children leaves me little time and flexibility in my life.
11. Having children is a financial burden.
12. It is difficult to balance different responsibilities because of my child.
13. The behavior of my child is often embarrassing or stressful to me.
14. If I had to do it over again, I wouldn't have children.
15. I feel overwhelmed by the responsibility of being a parent.
16. Having children has meant too few choices and too little control over my life.
17. I am satisfied as a parent.
18. I find my child enjoyable.

The Center for Epidemiological Studies-Depression (CES-D; Radloff, 1977)

- 3 = Most of/all of the time (5-7 days)
2 = Occasionally or a moderate amount of time (3-4 days)
1 = Some or little of the time (1-2 days)
0 = Rarely or none of the time (Less than 1 day)

Please indicate how frequently you have been distressed or bothered during the PAST WEEK.

1. You were bothered by things that don't usually bother you.
2. You did not feel like eating; your appetite was poor.
3. You felt that you could not shake off the blues even with help from your friends or family.
4. You felt you were just as good as other people.
5. You had trouble keeping your mind on what you were doing.
6. You felt depressed.
7. You felt that everything you did was an effort.
8. You felt hopeful about the future.
9. You thought your life had been a failure.
10. You felt fearful.
11. Your sleep was restless.
12. You were happy.
13. You talked less than usual.
14. You felt lonely.
15. People were unfriendly.
16. You enjoyed life.
17. You had crying spells.
18. You felt sad.
19. You felt that people dislike you.
20. You could not get "going."

Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988)

- 3 = A lot
2 = Some
1 = A little bit
0 = Not at all

Please rate how much you have been bothered by each of the feelings listed below OVER THE PAST WEEK.

1. Numbness or tingling
2. Feeling hot
3. Wobbliness in legs
4. Unable to relax
5. Fear of the worst happening
6. Dizzy or lightheaded
7. Heart pounding or racing
8. Unsteady
9. Terrified
10. Nervous
11. Feelings of choking
12. Hands trembling
13. Shaky
14. Fear of losing control
15. Difficulty breathing
16. Fear of dying
17. Scared
18. Indigestion or abdominal discomfort
19. Faint
20. Face flushed
21. Sweating