CHILD CARE PROVIDERS' BELIEFS ABOUT AND REACTIONS TO CHILDREN'S NEGATIVE EMOTIONS

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Chapter I

INTRODUCTION

With the number of very young children spending time in child care facilities increasing rapidly, it is imperative that we begin to understand the role of child care providers in the emotional development of these children. Due to the increase in dual earner families, increases in marital breakup, and decreases in interaction with extended family, Muijs and his colleagues have argued that schools are no longer only responsible for the intellectual development of students, but for the moral and social growth as well (Muijs, Campbell, Kyriakides, & Robinson, 2005). In theory, early childhood programs have always held this as a core value, and indeed the National Association for the Education of Young Children (NAEYC) accreditation standards outline the importance of sensitive and warm caregiver interactions and a classroom environment marked by consistency and harmony (NAEYC, 2005). Also, the revision of the ECERS addressed this issue by adding criteria related to teacher-child interaction and teacher behavior in the classroom (Sakai, Whitebook, & Wishard, 2003). The fact that these two widely respected sets of criteria now include these indicators highlights the field's acknowledgment of caregivers' critical role in the emotional development of children.

Empirical support for the importance of warm and sensitive teacher-child interactions adds credence to the call to better understand the factors which impact these interactions. Howes, Phillips, and Whitebook (1992) found that the single best predictor

of children's secure attachment was the interactions between caregiver and child. The authors went on to state that they did not find any direct influence of regulatable factors, such as adult-child ratio and group size, on competence in peer interactions, but instead the link was mediated by factors of the teacher-child interactions, including discipline and other everyday interactions.

Additionally, Love (1993) found that caregiver sensitivity was related to children's level of stress, where children more frequently displayed behaviors like nail-biting, complaining of not feeling well, and fighting in classrooms where teachers were observed to exhibit harsh, critical or detached behavior rather than in classes with teachers who were rated as encouraging and attentive. Clearly, teacher behaviors impact children's socioemotional development in ways that deserve our attention. But what factors affect the way in which teachers behave in their classrooms? The quality of child care offered varies widely from center to center, and researchers must move beyond simply confirming that these variations do in fact exist, and begin to explore the underlying causes of teacher behavior. The current study is an attempt to make this shift.

This section of the paper begins with a discussion of two theories. First, Harris and Olthof (1982) provide a description of three models for examining children's emotional development. Second, the MODE model (Fazio, 1990) highlights two pathways by which individuals make behavioral decisions. The next section will discuss the literature on teachers' beliefs and actions related to children's emotional development using the mechanisms identified in the MODE model.

Theoretical Framework

Harris and Olthof (1982) outlined three models of children's emotional development: Solipsistic, Behavioristic, and Sociocentric. These three models provide distinct conceptualizations of the paths through which children develop emotionally. The Solipsistic model relies on the assumption that children primarily gain their knowledge about emotions through reflection and observation of their own actions. This self-awareness is thought to promote emotional growth. The Behavioristic Model asserts that children develop emotional knowledge by observing the behaviors and reactions of people around them. In both the Behavioristic and Solipsistic models, the child is the one constructing knowledge. Finally, the Sociocentric model suggests that children learn about emotions from the community in which they live. In this model, people around the child verbally instruct or teach the child about emotion. Seemingly, the majority of individuals in early childhood education—both practitioners and theorists—hold beliefs represented in the Behavioristic and Sociocentric models. This is expected, as Harris and Olthof themselves note that metacognition by the child about emotional states is not typical in early childhood. Additionally, teachers and educational researchers tend to view adults as active agents in the socialization of children. For these reasons, the focus of this paper will be on teacher beliefs and behaviors best characterized by the Behavioristic and Sociocentric models.

With this understanding of two ways in which young children appear to develop emotionally, attention must then focus on exploring the mechanisms whereby teachers influence this development. Fazio (1990) proposed a framework describing how individuals' beliefs guide behavior called the MODE model (Motivation and

Opportunities as DEterminants). In this dual process model, individuals execute certain behaviors as determined by one of two processes—deliberative or spontaneous—as allowed by the motivation and opportunities inherent to themselves and the situation.

The deliberative process is modeled after Ajzen's Theory of Reasoned Action and suggests that individuals immediately form beliefs regarding a situation when they encounter an "attitude object" (Fazio, 1990). The term "attitude object" stems from the use of this theory in other fields such as consumer research. However this attitude object does not need to be an actual object, but may also be a person or situation requiring a behavioral response by the individual (Ajzen & Madden, 1986). In the social sciences, one might term attitude objects a more generic "stimulus". In the case of child care, one such stimulus could be a child crying or one child hitting another. Any situation prompting response from the individual of interest—the teacher, in this case—can be considered the attitude object.

Upon encountering this situation, the individual assesses the potential consequences of performing the behavior and uses this assessment to form his or her beliefs about the behavior. Additionally, the individual assesses the normative beliefs regarding this behavior—that is, what the individual thinks key persons or groups of people might want him or her to do. In a child care situation, key referents might be parents, center or school administrators, and policy makers. When attempting to decide what action to take in a particular situation, a teacher would consider the opinions of these people in assessing the norms of his or her environment. This understanding of subjective norms, coupled with his or her personal beliefs about the behavior would then be used to form the person's intention, or desired behavior. If the individual has the

ability and the control of the situation necessary to act on their intention, they do so, resulting in the behavior (Ajzen, 1985).

The MODE model states that not all situations allow for the type of processing outlined by Ajzen (Fazio, 1990). Some situations, including most teacher-child interactions, require an immediate response by those involved, and some situations simply may not be thought to merit the investment of time and energy of a deliberative decision-making process. For an individual to engage in the deliberative process, he or she must be motivated to do so. This motivation stems from a fear of reaching an invalid conclusion, and is particularly motivating in situations where an individual feels that reaching a wrong conclusion would be costly. Additionally, even if the individual is sufficiently motivated to deliberate, the situation may limit his or her opportunity to do so. According to the MODE model, both the motivation and the opportunity must be present for an individual to use the deliberative process to make a behavioral decision. In the absence of either, the spontaneous process is used instead.

In the spontaneous process, an individual's actions are again thought to be guided by their beliefs (Fazio, 1990). In this process, though, both the conceptualization of beliefs and the way in which they impact behavior are distinctly different from the deliberative process described above. The spontaneous process model suggests that individuals who encounter an attitude object have beliefs that are immediately activated regarding the object or situation at hand. These attitudes, in turn, have an immediate impact on the way in which the individual perceives the situation and this perception plays a key role in determining the person's behavior. The entirety of this process—from attitude activation, to the perception of the situation being shaped by this attitude, to the

behavior based on this perception—is spontaneous and requires no conscious effort on the part of the individual. This is particularly true if an attitude is especially strong.

Strength of attitude has been found to impact attitude accessibility, and strong attitudes are activated "effortlessly and inescapably" (Fazio, 1995, p. 248). In the case where the individual does not hold a highly accessible attitude about the situation, their perception is likely to be based on whatever factors are immediately salient and may not reflect their actual attitude toward the situation. Thus, in situations where individuals' attitudes are sufficiently accessible to be automatically activated, higher correlations between beliefs and behaviors are expected than in situations where the individuals' beliefs are less accessible.

Finally, Fazio (1990) acknowledges the possibility of mixed-process decision making. In this type of situation, individuals may rely primarily on the spontaneous process but actively deliberate on one small piece of the process. Alternatively, individuals may rely on the deliberative process but activate an attitude automatically. For instance, if an individual has been previously exposed to a very similar situation, he or she may not have to engage in the full calculation of attitude based on personal beliefs and normative beliefs, but instead may be able to automatically retrieve the previously calculated attitude.

The MODE model presents a valuable framework for examining teacher behavior in the classroom. A review of the literature reveals a great deal of inconsistency in the type and quality of teacher behaviors observed, and to date very little progress has been made in mapping out the factors contributing to these variations. The discussion of the literature to follow will highlight teacher behaviors related to children's emotional

development as well as factors identified by the MODE model as potentially contributing to the teachers' behavioral decisions.

The Deliberative Process and Teacher-Child Interactions

Teachers' Beliefs About Children's Emotional Development

According to Fazio (1990), the deliberative process involves three variables: beliefs, intentions, and behaviors. As discussed above, the beliefs in this process refer to an individual's beliefs about the consequences of performing a certain behavior. This type of belief is distinctly different from a more general belief, sometimes termed a personal theory or worldview. None of the studies done on teachers' beliefs about children's emotions fit into this conceptualization. Although Wilcox-Herzog and Ward (2004) examined this process in their study of teachers' beliefs and intentions regarding interactions with children, their beliefs measure seems to more closely fit the definition of beliefs in the spontaneous process. For this reason, their findings and the other literature on teacher beliefs will be discussed below in the framework of the spontaneous process.

Teacher Intentions Regarding Children's Emotional Development

A review of the literature revealed two studies that had investigated teachers' intentions regarding their classroom behaviors. Eheart and Leavitt (1989) conducted interviews with 31 home daycare providers to assess their intended behaviors. The interviews covered topics like the caregivers' perceived primary responsibility to the children, the kinds of experiences they hope to provide for the children, and a description of an average day in their child care home. The majority of these caregivers indicated that their main responsibilities included providing a warm, homelike atmosphere and ensuring the children's happiness. The other recurring theme noted by Eheart and Leavitt was that

many of the providers seemed to feel that one way of making sure the children are happy is to provide them with a large amount of free play.

Wilcox-Herzog and Ward (2004) created a self-report measure for assessing teachers' intentions for interactions with children in their classrooms, consisting of 20 items rated on a Likert scale. The items in this measure were adapted from numerous observational measures of quality teacher-child interactions and are mostly indicative of depth of caregiving (e.g., "I hug and hold children" and "I get involved in children's dramatic play."). The authors reported mean intention scores in the low 80s, which indicates that most teachers intend to engage in these high quality interactions. For this sample, a small correlation between depth of training and teacher intentions was found. Eheart and Leavitt (1989) did not discuss any differences in their sample's expressed intentions by level of education.

It is necessary to discuss here the difficulties associated with assessing intentions accurately, and these difficulties are highlighted by the two studies at hand. Recall, that in the Theory of Planned Behavior (and the deliberative process of the MODE model), intentions were defined as one's desire to engage in a particular behavior (Fazio, 1990). In Eheart and Leavitt's (1989) study, two of the interview questions used seem to fit into this definition—the provider's perceived primary responsibility to the children and the kinds of experiences he or she hopes to provide for the children. The final section of the interview—a description of a typical day—does not fit into the theory's definition of intention, but information gathered from this part of the interview was used in developing an understanding of the providers' intended behaviors.

Inspection of the intentions measure used by Wilcox-Herzog and Ward (2004) reveals a similar disparity between the theoretical meaning of intentions and how the variable was operationalized in the study. All of the items in this measure are essentially a self-report behavior inventory, asking the teachers to indicate which of the behaviors he or she does or does not engage in. For example, the first item is "I get down on the floor and play with children" (p. 16). This is clearly asking the teacher to respond if and how often they engage in this behavior, and does not address the more conceptually correct issue of whether or not the teacher desires to get down on the floor and play with the children in his or her care. Perhaps, it is the authors' belief that individuals responding to these items as "Yes, I engage in this behavior very often—5" are in reality rating how they hope they behave or how they wish to behave. This assumption is an important one with potentially serious impact on the results of these studies and deserves exploration.

Additionally, careful consideration must be given to whether or not teacher-child interactions can be accurately described using the deliberative process. With the parameters of the MODE model requiring that both motivation and opportunity be present to allow an individual to engage in the deliberative process, one must question the likelihood of this happening in the fast-paced environment of early childhood classrooms. The current study will take the position that the deliberative process is not applicable to teacher-child interactions, and will instead examine the mechanisms described in the spontaneous process. For this reason, a discussion of teacher behaviors will be left to a later section.

The Spontaneous Process and Teacher-Child Interactions

The spontaneous process portion of the MODE model outlines a correlation between one's beliefs and behaviors, with the accessibility of this belief acting as a moderator (Fazio, 1990). In the current discussion, the beliefs of interest are teachers' beliefs regarding children's emotions and emotional expression, and the behaviors to explore are the teachers' behaviors in emotional situations in their classrooms. Literature pertaining to these components are discussed below.

Teachers' Beliefs about Children and Emotions

Common teacher beliefs. It is first important to reach an understanding of what teachers actually believe about children and emotions, as well as how they view their role in children's emotional development. Hyson and Lee (1996) devised and tested a questionnaire for assessing teachers' beliefs about emotions. Since very little work had been done in this area, they used theories of emotional development and empirical findings in related areas to create the "Caregivers' Beliefs about Feelings" measure consisting of 10 belief categories. Although the findings in the pilot of this measure revealed poor internal reliability for the 10 core areas, items which received high levels of agreement among the sample serve to highlight commonly held beliefs. One interesting outcome not discussed by the authors is that the items receiving strongest agreement seem to fit in two categories: emotional closeness or warmth (e.g., "I constantly show the children in my class how much I love them" and "It's important to hug and touch children affectionately throughout the day.") and teaching or modeling (e.g., "As a teacher, it's important for me to teach socially acceptable ways of expressing their feelings.").

Although Hyson and Lee revised their measure in an attempt to improve reliability in the core belief areas, they were still unable to obtain good correlations between items in each area. Dunsmore and Karn (2001) modified the measure for use with parents and had similar difficulties with reliability, but Denham and Kochanoff (2002)—who also used the measure with parents—were able to obtain strong alphas by removing one item and summing the remaining 22 to create an emotion coaching/dismissing index. Seemingly, parents and teachers alike hold beliefs recognizing the importance of supporting children's emotional development, but the specifics of how these beliefs are organized is more difficult to determine.

Leavitt and Power (1989) used field notes from observations of child care homes and centers to arrive at an understanding of the emotional socialization of children taking place in child care settings. Although this study never asked teachers about their beliefs, the researchers arrived at the conclusion that the teachers' observed actions were impacted by their beliefs, specifically societal myths that they had incorporated into their personal belief system. Based on the observed behaviors, Leavitt and Power stated that the teachers seemed to believe myths like "Only babies cry" and "Emotional displays are childish." This set of teacher beliefs is in stark contrast to the set of beliefs described in Hyson and Lee's findings above, again highlighting the difficulty of categorizing teachers' beliefs about emotion, especially when using a theoretical framework.

Delaney (1997) discussed this disparity between theory and practice in her study on experienced teachers' beliefs about emotion. Based on multiple, in-depth interviews with four preschool teachers nearing retirement, she determined that teachers do in fact organize their beliefs, but that the patterns of organization and the level of importance

given to specific aspects of children's emotional development vary from one teacher to the next. Additionally, Delaney noted that in comparing the personal theories of these teachers to theories of psychology and child development, the teachers began from distinctly different assumptions than the theorists. First, teachers' theories began with the emotional nature of children rather than the more abstract nature of emotions. Also, teachers do not view emotions as "quickly passing passions" but instead as "long term underlying processes" (Delaney, 1997, p. 16).

Additional findings by Delaney (1997) indicated that teachers view children as "active agents in their appraisal and generation of emotions" (p. 16) and that teachers believe that children's emotions are inextricably linked to their cognition. The latter findings are described by Delaney as originating from the "wisdom of practice" rather than from any professional development system. Recognizing the contribution of experience to teachers' belief systems as well as their foundational differences as compared to developmental theories demonstrates the complexity of mapping out teacher beliefs on emotion.

What then do we know about teachers' beliefs about emotion? Delaney (1997) pointed out that all four of the teachers in her sample view "emotional development as an interpersonal process" (p. 15), which is supported by Hyson and Lee's (1996) report of teachers' strong agreement with the need to model and teach children about appropriate emotional responses. Hyson and Lee's finding that most teachers believe in the importance of nurturance and affection in the classroom is also substantiated by similar findings of Wilcox-Herzog and Ward (2004). Beyond these two core belief areas, no other clear patterns of teacher beliefs have emerged in the studies done to date.

However, Delaney (1997) was able to map out her teachers' personal theories using Hunt and Sullivan's categories, breaking down ideas into categories of person, behavior, and environment. Using this method, she was able to demonstrate the teachers' commonalities as well as their differences. For example, Delaney reported that while all four of the teachers espouse the interpersonal nature of emotional development, they differ in their understandings of how this works. Similarly, while all of the teachers' beliefs include multiple facets of emotional development—including contributions by teacher, parent, and child, as well as the behavioral, physical, and cognitive aspects of emotion—the level of importance ascribed to each aspect and the way they all work together varies from one teacher to the next. Taken together, these similarities and differences highlight the reality of multiple influences on teachers' beliefs.

Origins and evolution of teachers' beliefs. Recognizing the clear differences in beliefs that exist from teacher to teacher, the next step is to explore the causes of these variations. Research has indicated that teachers enter the field with beliefs formed during their own schooling through which they then filter any training and education as well as their experiences with children in the classroom (Wilcox-Herzog & Ward, 2004). Additionally, teachers tend to stick to these beliefs without some "dissonance producing experience" causing them to reevaluate their beliefs (See Wilcox-Herzog & Ward, 2004, for a discussion of this issue). One experience widely thought to prompt such an interpersonal evaluation is higher education. Multiple studies have assessed teachers' beliefs related to childcare, and the growing consensus is that education is a good predictor of developmentally appropriate beliefs while experience is not (See Wilcox-Herzog & Ward, 2004, for a review).

In contrast to the body of literature on teacher beliefs in general, an investigation of teacher beliefs directly related to teacher-child interactions by Wilcox-Herzog and Ward (2004) found that depth of training did not affect teacher beliefs. In Delaney's (1997) in-depth examination of four experienced teachers' beliefs about emotions, she found support for multiple information sources guiding beliefs, both formal education and training as well as using classroom experience to construct one's personal belief system. A third perspective is provided by Hyson and Lee's (1996) study in which teachers' level of education was associated with more appropriate beliefs about children's emotion, while amount of experience in an early childhood classroom was not related. These studies highlight the current lack of understanding on what informs teachers' beliefs about children's emotions. It is unclear what role education and experience play, or more specifically under what conditions these factors impact teachers' beliefs. Further, it is almost certain that other unexplored factors impact the beliefs held by teachers. These factors must be identified and examined as well. The current study will explore the differences in teachers' beliefs across varying levels of self-esteem, type of facility, and job title.

Teacher Behaviors in Socializing Children's Emotional Development

Common teacher behaviors. Parke (1994) provides a useful framework for discussing the ways in which adults socialize children's emotions. Although his discussion was focused on parental behavior, similar patterns are found in teacher behaviors, and his framework provides a way to organize a review of research on emotional socialization in the classroom. This tripartite framework outlines three distinct

ways adults approach the emotional socialization of children: indirectly, direct teaching or coaching, and through regulation of opportunities.

Much like Harris and Olthof's (1982) Behavioristic model, the first part of Parke's framework suggests that teachers may influence the emotional development of children in their classrooms indirectly through their own behaviors and reactions during interactions that occur naturally throughout the progression of the day. In these interactions, it may not be the teacher's intention to teach the child emotion rules, but these truths are expressed implicitly in the interactions. Observations of child care classrooms have revealed numerous such teacher behaviors, including providing warm care (Eheart & Leavitt, 1989), affection, and anger (Mill & Romano-White, 1999). Hyson, Hirsh-Pasek, and Rescorla (1989) report observing teachers smiling and touching children throughout the day, and Kontos and Dunn (1993) observed teachers' nurturing behavior as part of a three-part rating of teachers' guidance of socioemotional development. Although this indirect type of emotional socialization seems to be under-investigated in the field, it is likely that these behaviors play a large part in teachers' contributions to children's emotional development.

The second part of Parke's framework provides for more direct socialization of children, akin to the Sociocentric model proposed by Harris and Olthof (1982). In this type of interaction, the teacher's goal is to teach the children about emotions or appropriate ways of expressing emotion. Several key areas emerge that fit under direct methods of teaching children about emotion. First, numerous studies have observed teachers labeling emotions for children—that is putting words to the emotion a child seems to be feeling. This can be used in explaining one child's emotion to another

(Johansson, 2002) or in identifying an emotion to the child currently experiencing the feeling (Hyson et al., 1990; Pollak & Thoits, 1989).

Teachers have also used various approaches to help children explore the causes of emotions. Ahn (2005) observed teachers using books to help children think about how characters in the books might be feeling. One teacher in a toddler classroom was observed using facial expressions along with verbalizations to help a child understand a character's feelings. Teachers may also discuss the causes of a child's emotion with the child him or herself (Pollak & Thoits, 1989) or with the other children in the class (Johansson, 2002).

Moving beyond simply teaching children how to sense and identify other's emotions, many teachers have been observed coaching children in empathy. One part of this teaching stems from helping a child understand how a classmate might feel due to his or her actions (Ahn, 2005; Johansson, 2002). Teachers were also observed helping children reflect on how they themselves might feel in a similar situation and then guiding the children to act empathically (Ahn, 2005; Johansson, 2002).

Teachers also provide children direct guidance on how to express emotions appropriately. Examples of this type of socialization include teaching children how to clearly state their wishes and to negotiate for what they want (Johansson, 2002) and helping children express their emotions through words rather than through inappropriate means like pushing (Ahn, 2005). Pollak and Thoits (1989) whose study centered around observations in a therapeutic school for disturbed 3 to 5-year-olds made an interesting observation between distinct ways in which the children were taught about emotion. Although the authors acknowledge that the specific situations encountered in their study

are outside the norm, they asserted that the behaviors they observed in this setting were indicative of what adults believe young children should know about emotion. In teaching these children about emotion, the teachers were consistent in using implicit direction to teach about feeling norms (e.g., "In this situation, some children might be angry," rather than saying "You're angry" or "You should be angry.") but were equally consistent in using explicit direction of expectations regarding emotional expression (e.g., "It is not okay to hit."). Other methods less frequently observed include teaching about emotion through pretend play (Ahn, 2005) and encouragement of emotion expression (Pollak & Thoits, 1989).

The third facet of Parke's framework involves adults regulating children's opportunities to learn about emotion. This type of socialization is not provided for in the emotional development framework of Harris and Olthof (1982), but Parke makes a clear case for its importance. He states that one common example of how parents engage in this sort of socialization is by limiting the types of violence children are exposed to through toys, video games, or television. While there is a large movement in early childhood classrooms to protect children from violent play and media (see Levin & Carlsson-Paige, 1994, for a review), evidence of teachers engaging in a broader regulation of opportunities in the area of emotion is sparse. Two studies provide glimpses into ways that teachers might manifest this socialization. Leavitt and Power (1989) report observing one caregiver scolding a young boy for wanting to play with a doll. Not allowing boys to play with dolls seems to limit them from certain types of emotionally charged play. Also, in Ahn's (2005) discussion about teachers using books to discuss emotions with children, she notes that 8 out of the 12 teachers she observed did not read

any books about or focusing on emotion. By choosing to not expose children to this type of books, the teachers are in fact limiting their opportunities to learn about emotion.

Of course, not all teacher behaviors are positive or developmentally appropriate ways of guiding children's emotional development. For those studies that measured the teacher's affect and nurturance, varying levels of the desired behaviors were observed. Some studies spoke almost entirely of behaviors which are far from helpful to a child's healthy emotional development. One such study was conducted by Leavitt and Power (1989) in which they observed caregivers in both centers and child care homes ignoring children's expressed needs, punishing children by withholding warmth and affection, using sarcasm, and minimization of children's feelings. In the same study, caregivers were frequently observed forcing children to act in a way that was clearly not in line with how they were feeling. These types of observations highlight the important fact that teachers can not only be important resources in children's emotional development, but they can be detrimental as well.

Measurements of teacher behaviors. Currently, no quality instruments exist to assess teachers' responses to children's emotions. Some studies have examined teacher behavior using detailed field notes (e.g. Ahn, 2005; Leavitt & Power, 1989; Pollak & Thoits, 1989), while others have utilized time-sampling measures (Mill & Romano-White, 1999). Perhaps the most widely used measure of teacher behavior is Arnett's Caregiver Interaction Scale. Using this tool, observers are asked to rate teachers on 26 items related to positive interaction, punitiveness, permissiveness, and detachment (Arnett, 1989). While this measurement has been used widely and has contributed a great deal to the current understanding of teacher-child interactions, it lacks the specificity

needed to assess teachers' behaviors as they pertain directly to children's emotional development.

With the limited tools available in the field of early childhood, an investigation into the parent-child research seemed to be a reasonable next step. Parents' role in the emotional development of their children has been more thoroughly investigated, and revealed several possible methods of exploring the teachers' contribution as well. Gottman and his colleagues have done a great deal of work on parents' understanding of emotion and the ways in which they attempt to guide their children's emotional development (Gottman, Katz, & Hooven, 1996). The primary tool used in these studies has been the "Meta-emotion Interview," in which parents are asked to reflect on their feelings about their own and their child's emotions. Questions in this interview include, "What is it like for you to be sad? What do you look like? If I saw you could I tell if you were sad? What would I see?" (Katz & Gottman, 1999, p. 2) The interviewee is then asked similar questions about other emotions, including anger and fear, as well as his or her parents' emotional expression and that of his or her child. Other questions asked about the child's emotions include "Do you see ways in which s/he tries to get over that emotion?" and "If you could sum it up, what are you trying to teach your child about the world of feelings?" (p. 5). This technique has yielded a great deal of information regarding parents' understanding of children's emotions and could feasibly be used with teachers as well.

Another type of measure frequently used to investigate parental behaviors in interactions with children is self-report questionnaires. One such instrument is the Coping with Children's Negative Emotions Scale (CCNES) (Fabes, Eisenberg, & Bernzeig,

1990). The CCNES consists of 12 scenarios commonly encountered by children and their parents. For each scenario, the parent is given a list of six possible responses and is asked to rate the likelihood that he or she would respond in that way. The six response options make up the subscales of the CCNES. Of these subscales, three are considered to be positive responses to children's emotional behavior and three are considered to be less desired.

The three positive subscales measure parents' responses that are (a) emotion-focused, that is responding in a way in an effort to help the child feel better; (b) problem-focused, or addressing the issue or problem causing the child's distress; and (c) expressive encouragement, that is validating or encouraging the child's emotional expression. The three negative parental response subscales are (a) distress, which taps the level which parents experience personal distress over the child's behavior; (b) minimization, which assesses the degree to which parents down-play their child's emotion or the seriousness of the situation; and (c) punitive reactions, which measures the parents' proclivity to punishing their child for expression of negative emotions (Fabes, et al, 1990).

The CCNES has been demonstrated to have good internal reliability and generally strong psychometric properties, including good construct validity and test-retest validity (Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002). Additionally, parents' responses on the CCNES have been found to predict children's emotional competence (Fabes, et al, 2002; Fabes, Leonard, Kupanoff, & Martin, 2001). These findings demonstrate the usefulness of this tool, and it could easily be adapted for use with teachers by simply modifying some of the scenarios. Using situational vignettes in this way allows for

larger-scale data collection than would observational research. However, no studies have been done to confirm the accuracy of parents' self-reports as compared to observed behaviors.

Fabes et al (2001) found a positive correlation between maternal education level and scores on the Distress and Expressive Encouragement subscales, but the authors acknowledge that this finding could be merely due to chance. Other studies have reported no differences by level of parental education, income, age, or ethnicity (Fabes, et al, 2001; Jones, Eisenberg, Fabes, & MacKinnon, 2002). From these findings, it remains unclear what factors affect one's reactions to children's negative emotions.

Factors influencing teacher behavior. Numerous factors are thought to influence teacher behavior in the classroom, including their beliefs (Clark & Peterson, 1986), their level of self-esteem (Mill & Romano-White, 1999), their level of Emotional Intelligence (Mayer & Cobb, 2000), class size and make-up (Eheart & Leavitt, 1989; Mill & Romano-White, 1999), and work environment factors (Mill & Romano-White, 1999). The contributions of these factors have not been thoroughly explored, and the limited data is sometimes contradictory. For that reason, this portion of the review will focus primarily on the single most explored factor affecting teacher behavior—level of teacher education or training.

In the National Child Care Staffing Survey (Whitebook, Howes, & Phillips, 1998), observations were conducted using factor analysis of the Early Childhood Environmental Rating Scale (ECERS) and Arnett's criteria for rating staff sensitivity. The findings of these observations indicated that the amount of education obtained by

teachers was the single best predictor of appropriate teacher behavior—that is exhibiting behaviors marked by sensitivity and warmth and lacking in harshness or detachment.

Mill and Romano-White (1999) were not able to identify a direct impact of level of education on teacher behavior, but they did find evidence emphasizing its importance. Using a "dual risk hypothesis" and a "compensatory hypothesis," the researchers tested and confirmed that education could serve as a buffer in the presence of other risk factors, while a lack of education presented an additional risk factor. For instance, teachers with low self-esteem behaved differentially, based on the level of training they had received. Teachers with low self-esteem and low training behaved less affectionately and exhibited more anger than did those with low self-esteem and higher levels of training.

Another risk factor that emerged in the study by Mill and Romano-White is the work-environment. Teachers who reported a strained relationship between themselves and their supervisor displayed higher levels of anger, and teachers who displayed high levels of affection were more likely to work in a center with higher ECERS scores, more children from families with higher socioeconomic status, and less teacher turnover than teachers who displayed lower levels of affection. These factors highlight the importance of the child care environment as well, and the authors suggest that education may play an indirect role there as well in a self-select phenomenon.

The factors impacting teachers' classroom behaviors pertaining to children's emotions are not yet fully understood. No studies examining the relation between teacher beliefs and teacher behaviors were found. Additionally, no studies have investigated the role of attitude accessibility in predicting teachers' behaviors.

Attitude Accessibility

Attitude accessibility refers to the likelihood that an attitude will be automatically activated when an individual is presented with a situation related to that attitude. While no studies have previously applied this notion to teacher beliefs, the impact of attitude accessibility can be demonstrated using studies in consumer research. Attitude accessibility has typically been assessed by measuring the response latency to a question regarding the attitude (Fazio, Powell, & Williams, 1989). In studies using this technique, the time that passes between when the individual is presented with the questions or prompt and their response is recorded. Individuals with highly accessible attitudes respond more quickly to these questions than do those with less accessible attitudes.

Attitude accessibility has been found to moderate the relationship between beliefs and behaviors (Fazio et al., 1989). In this study, highly accessible attitudes were found to strengthen the correlation between beliefs and behavior, while less accessible beliefs weakened this relation. Additionally in this study, individuals with less accessible opinions were found to be more heavily affected by factors like the placement of the product (front row versus back row) than were their counterparts with more accessible attitudes about the products. These findings illustrate the role of attitude accessibility, and its impact in the relation between teacher beliefs and behaviors deserves exploration.

Teacher-child interactions are gaining interest in the field of early childhood education. In a time when an academic focus is permeating early care settings even to the youngest age levels, professionals in the field are raising concerns about the need to serve the whole child, and not just to focus on school readiness. To adequately guide the field in addressing this issue, sound instrumentation is needed. To date, no such tools exist to

assess teacher behaviors surrounding children's emotional development. While refinement and further testing of this instrument are certainly needed, the possibility exists for it to become a respected measure in the field.

Additionally, professional development initiatives are underway in this state and many others to equip child care providers with the skills and knowledge they need to provide higher quality care. The research on early childhood professional development to date has left a fragmented picture of the overall standing of the field. Very little is known about the process by which providers come to behave in the way they do, and the current investigation of the impact of provider beliefs seeks to illuminate part of this puzzle. Previously, no studies in this field have utilized the MODE model and a look at the impact of accessibility of teacher beliefs is promising as well. This study has the potential to provide a glimpse at various factors affecting teacher behavior, as well as providing the field with a new framework to assess the impact of teacher beliefs. Finally, this study looks to make the beginning strides in the arduous process of instrument development and refinement in hopes of providing the field of early childhood with a much needed measure.

Research Questions

1. Does the Teachers Coping with Children's Negative Emotions Scales (TCCNES) adequately measure teacher beliefs and behaviors respectively?

    1a. Are the subscales of the TCCNES represented by the data?

    1b. Are the self-report responses on the TCCNES accurate as assessed by observations of classroom behavior?

2. Are there differences in teacher beliefs, the accessibility of these beliefs, and/or behaviors based on self esteem, type of facility, or job title?

3. Does the spontaneous process of the MODE model provide a good framework for examining teacher-child interactions in emotional situations?

Chapter II

METHODOLOGY

Research Design

The current study explored the relation between teachers' beliefs about children's emotions and teachers' behaviors in emotional situations in their classrooms using a correlational, non-experimental research design. The study involved two samples of participants, the first came from an on going multi-site case study in which the participants were selected using multi-stage purposive sampling. The second set of participants was randomly selected from individuals participating in the Scholars for Excellence in Child Care (SECC) program in the spring of 2006. The time dimension for this study was cross-sectional, as all data were collected only at one point in time. Data used in this study from the multi-site case study were collected from December 2005 through January 2006. Data collection for the second sample was done in February and March 2006.

This study used two self-response measures: the TCCNES, which is a modification of the CCNES, and a survey of teacher beliefs about children's emotions. Face validity of the measures was assessed by a panel of experts in Early Childhood Education, including two early childhood faculty members and two research team members, both of whom hold graduate degrees in early childhood education.

Additionally, participants in the ongoing case study were observed in their classrooms to assess their childcare practices. One portion of the observational protocol in the ongoing case study involved noting the teachers' response to each incident of a child displaying a negative emotion.

Sampling

The target population for this study was child care workers in the state of Oklahoma, both those who work in child care centers as well as in child care homes. These individuals were drawn from participants in the Scholars for Excellence in Child Care (SECC) program, which provides scholarships for child care providers to enroll in early childhood coursework at a local community college. All participants in this study were currently enrolled in college level coursework as part of this program.

As noted above, this study involved two separate samples. The first sample was made up of 9 teachers who were chosen using multi-stage purposive sampling in August 2005, and their involvement in this study is part of the ongoing multiple case study. The second sample was selected for participation in this study only. For this sample, the sampling frame was all active participants in the Scholars program as of January 16, 2005. In the spring semester of 2006, 1,316 scholars were enrolled.

Based on these enrollment numbers, for a 95 percent confidence level and a confidence interval of 5, the sample would need to include 298 participants. To account for an anticipated low response rate, SPSS was used to randomly select 550 scholars to be invited to participate in this study. Random sampling is the method most likely to achieve a representative sample, and was chosen for that purpose. These 550 scholars were mailed a letter giving information about the study and the website for taking the surveys.

This letter also contained information about the incentive as well as the required information for human subjects research. A follow-up postcard was sent to those who had not completed the survey within 2 weeks of receiving the letters.

A total of 54 Scholars completed the online survey. Participants in this study did not vary significantly from non-respondents in level of self-esteem (t=-.569, df=1058, p=.569), nor were there significant differences in last grade completed prior to participation in the SECC program (F=.390, df=1, p=.533). The only significant difference between those who participated in the study and those who did not was a slight over-representation of Scholars with CDAs in the participant group as compared to the population. 22 percent of participants have earned a CDA, compared to 11 percent in the population (χ^2=5.823, p=.021). Overall, the sample is largely representative of the population.

Instrumentation and Measurement

Much of the data collection in this study was done via self-report instruments. The participants were also asked to complete two other questionnaires, the Interpersonal Reactivity Index and an index of social desirability, which were used to assess the reliability of the beliefs survey and TCCNES. Additional data for the participants were gathered from a database maintained by the SECC program, including scores on the Coopersmith Self-Esteem Inventory, last grade completed prior to entering the SECC program, and childcare credentials earned to date. As previously mentioned, observational data were collected for those individuals participating in the case study and case study participants were asked to complete the TCCNES as well. The sections below describe each of the instruments in detail.

Survey of teachers' beliefs about children's emotions. The Teachers' Emotion Beliefs Scale (TEBS) was used to assess the beliefs of the respondents regarding children's emotions. This survey was newly developed for this study and was created using an online-survey tool and hosted on a server belonging to Oklahoma State University. Respondents were asked to rate their beliefs about 22 items on a 4 point Likert scale, with 1 representing strongly disagree and 4 corresponding to strongly agree. To achieve a suitable level of internal reliability, five items were removed from the initial instrument, resulting in an alpha equal to .760 for the 17 items included in the analysis. Responses were summed (with reverse coding as needed) to form an index of beliefs with a theoretical range of 17 to 68. Higher scores on this measure indicate more developmentally appropriate beliefs about children's emotions. Please see Appendix A for a copy of this measure.

This online version of the TEBS was also used to measure the accessibility of these teachers' beliefs by capturing the response latency for each item. Three dummy items that asked participants about basic factual information (name, age, and type of facility employed in) were used to establish baseline latency values which would account for variation in participants' speed in using a computer. Since the formats of these baseline questions differed from the TEBS items, both the baseline time and the mean response time on the beliefs items were converted to z-scores to allow for comparison. Taking the difference between these two values resulted in the measure of accessibility of participant beliefs. Values calculated in this process are reported in the results section.

Teachers' Coping with Children's Negative Emotions Scale. The Coping with Children's Negative Emotions Scale (CCNES; Fabes, et al, 2002) which was developed

for measuring parents' responses to children's negative emotions was adapted for use in assessing teachers' behaviors. Like the CCNES, the TCCNES consists of twelve situational vignettes similar to situations commonly encountered in interactions with children. Participants were provided with six possible responses to the situation and are then asked to rate from 1, very unlikely, to 7, very likely, the likelihood that they would respond in that manner. The described teacher responses to the child's behavior fall into six categories: minimization, distress, punitive, emotion-focused, problem-focused, and expressive encouragement reactions. For the twelve situations, Chronbach's alpha was computed for each subscale, and subscale scores were computed by averaging each participant's response to the choices in each category. These values are presented in the results section, in response to research question 1. Please see Appendix B for a copy of the TCCNES.

Assessing the psychometric properties of the instruments. In the studies conducted to assess the psychometric properties of the CCNES, Fabes and his colleagues used several instruments to examine the construct validity of the CCNES (Fabes, et al, 2002). Of the instruments used in that study, all but two were designed for use specifically with parents and would require modification for use in this study. The two instruments suitable for this study are the Interpersonal Reactivity Index (IRI) and a measure of social desirability. The IRI consists of 28 items and measures four aspects of empathy. Following the procedure used by Fabes and colleagues, this study did not use the Fantasy Empathy Scale, leaving three scales to be assessed: Perspective-Taking (α=.579), Empathic Concern (α=.783), and Personal Distress (α=.736). Please see Appendix C for a copy of the IRI.

Again following the procedure used in evaluating psychometric properties of the CCNES (Fabes, et al, 2002), a subset of items from the Marlowe-Crowne Social Desirability index (α=.717) was used to measure participants' compliance with social norms. The items are true-false and one point was scored for each time the participant responds in the socially desirable way, resulting in a theoretical range from 0 to 10, where higher scores indicate greater adherence to social norms. Please see Appendix D for a copy of the measure of social desirability.

Observations of teacher behavior. Nine participants were observed to assess the congruence of these behaviors with the self-report responses on the TCCNES. As part of an ongoing study, observers spent a minimum of 2 hours observing in each teacher's classroom and rated the teacher's response to each incident of children's negative emotional expression that occurred during that time. Using an instrument developed in Microsoft Infopath, the observers rated the teacher's response as being punitive, minimizing, distressed, emotion-focused coping, problem-focused coping, and/or expressive encouragement. The descriptions of these categories in the TCCNES serve as the basis for the observational coding as well. (See Appendix B for these descriptions.) Since the teachers' reactions could fit in more than one of these categories, the observers were instructed to mark all that applied to each interaction involving children's negative emotions. For each teacher, proportions were computed for each category by counting the number of times she received a mark in each category and dividing by the total number of negative emotional situations observed in that classroom. These values were then compared to the teacher's responses on the TCCNES to assess the accuracy of the self-report measure.

Ethical Considerations

Participants in this study didhot experience any physical harm, psychological abuse, or stress beyond that which they might encounter in everyday life. Participants were not deceived at any time during this study. All participants entered the study only at their voluntary consent, and they were informed that if they wished to discontinue their participation, they were free to do so at any time. This information, as well as a description of the study was included in both the solicitation letter as well as the preliminary information displayed before beginning the online questionnaires. The participants were informed that after reading this information, by hitting the "Next" button, they were acknowledging that they had read the information and were agreeing to participate willingly. In all facets of the study, the participants' confidentiality was protected as a matter of high priority.

Chapter III

RESULTS

This study sought to pilot test a measure of child care providers' responses to children's negative emotions. This study also aimed to investigate teachers' beliefs about children's emotions and factors affecting these beliefs, the accessibility of their beliefs, as well as the self-reported behaviors. Finally, this study tested the spontaneous process of Fazio's (1995) MODE model, which predicts a correlation between beliefs and behaviors, with stronger a relation between these variables when beliefs are more highly accessible. This chapter details findings related to these research questions.

Descriptives

The TCCNES was adapted from an existing parent measure and was used to assess teachers' reactions to children's displays of negative emotions. Please see Table 1 for the mean, standard deviation, and range for each of the TCCNES subscales.

Observations were also conducted to assess the accuracy of participants' self-reports on the TCCNES. As described in the methods section, each display of children's negative emotion was noted, and the teacher's reaction to the child's emotion was coded. For the nine participants involved in this portion of the study, the mean number of episodes of children's negative emotions observed was 8.44. The number of observations and proportion of reactions in each category is reported in Table 2.

The other primary instrument used in this study was the Teachers' Emotions Beliefs Scale (TEBS). After removing 5 items, the TEBS has a theoretical range of 17 to

68, and the mean score for this sample was 50.315 (SD=5.14) Please see Table 3 for descriptives of each item on the TEBS.

Research Question 1

Since the current study is piloting a new measure, the Interpersonal Reactivity Index and an Index of Social Desirability were also completed by the participants to assess the construct validity of the TCCNES. Please see Table 4 for descriptives on each of these measures. Correlations between these measures are similar to findings reported by Fabes et al (2002) and in the directions expected. For example, this study found the IRI's Empathic Concern subscale to be significantly negatively correlated with the Punitive Reactions subscale of the TCCNES matching similar findings by Fabes et al. This study found no significant correlations between the index of social desirability and any subscale of the TCCNES. Correlations between these measures and the TCCNES are reported in Table 5.

Research Question 1a

To determine whether or not the subscales of the TCCNES were represented by the data, Cronbach's Alpha was computed for each subscale. These values along with the mean, standard deviation, and range for each score are presented in Table 1. All subscales, with the exception of Distress Reactions, have alphas greater than .70, and the alpha for the Distress subscale raised to .696 with the deletion of one item.

To further investigate the congruence of the collected data with the proposed subscales, a factor analysis was run on the items of the TCCNES. Using Varimax rotation and eigenvalues greater than 1 as the cutoff, the factor analysis extracted 20 components and was unable to converge in 25 iterations. Another factor analysis was conducted using

Direct Oblimin rotation and the same cutoffs as before. This analysis was also unable to converge in 25 iterations. Thus, no conclusive findings resulted from these analyses.

Correlations between the subscales were also calculated to guard against multicollinearity and to investigate the possibility that the subscales were not distinct. These correlations have been presented in Table 6. The three negative subscales (DR, PR, and MR) are all significantly correlated at the .01 level. The high level of correlation between Punitive and Minimization Responses suggests that these two subscales may actually represent one construct rather than two distinct ones. Combining these two subscales results in an alpha of .905 for 24 items. Since the analysis in this study was all conducted on each subscale separately, multicollinearity was not a concern, and these two subscales were kept separate for the analysis.

Research Question 1b

To assess the accuracy of child care providers' self-reported behavior on the TCCNES, observational data were collected in situations where children expressed negative emotions in their classrooms. Because the number of displays of children's negative emotions varied from one observation to another, proportions of each type of response was calculated for each caregiver and participant A was excluded from further analysis due to the low number of observations. Correlations were calculated for each category of responses to determine the relation between the teachers' self-reported behaviors and those that were observed. These correlations are presented in Table 7. On two of the six subscales, participants' self-reports were slightly positively correlated with the corresponding observed behaviors. For the other four subscales, participants' self-

reported behaviors were negatively correlated with observed practices, with one correlation significant at the $p<.05$ level.

Research Question 2

To investigate whether or not group differences exist in participants beliefs, accessibility of beliefs, or behaviors, independent *t*-tests and one-way ANOVAs were conducted by self-esteem, type of facility employed in, and job title.

Self-esteem. Upon acceptance to the SECC program, Scholars complete a battery of assessments, including the Coopersmith Self-Esteem Inventory. Participants' scores on this measure were retrieved from the SECC database. Scores on this measure can range from 0 to 100, and the sample mean was 80.66. To assess the impact of self-esteem on teachers' beliefs, accessibility of beliefs, and behaviors related to children's emotions, correlations were computed for the relation between the Coopersmith and the TEBS, TCCNES, and accessibility of beliefs. While none of the correlations reached significance, marginal differences were indicated on two subscales of the TCCNES, with participants with higher self-esteem reporting themselves more likely to respond to children's negative emotions with expressive encouragement and less likely to respond with personal distress. Please see Table 8 for these correlations.

Type of facility. Participants in this study were all employed either in family child care homes (FCCH) or centers. To assess whether or not differences existed between these two groups in responses to children's negative emotions, independent sample *t*-tests were conducted. No significant differences were found for center employees versus FCCH providers for beliefs, accessibility of beliefs, or behaviors. Marginal but not significant differences indicate that center employees rate themselves more likely to react

in each of the three negative manners (minimization, punitive, and distress) as compared to child care home providers. Additionally, center employees reported themselves more likely to respond with emotion-focused and problem-focused responses. Home providers were only more likely to respond with expressive encouragement. Please see Table 9 for information regarding these *t*-tests.

Job title. This study included child care employees who serve in various roles, including FCCH providers, center directors, assistant directors, master teachers, and teachers (both lead and assistant). One-Way ANOVA found no significant differences for participants' scores on the TEBS, although group means indicate that center directors held the most developmentally appropriate beliefs, with master teachers holding the least appropriate beliefs. The ANOVA on the TCCNES subscales found a significant difference in scores on the Emotion-Focused Response subscale, with teachers rating themselves most likely ($\bar{x}$=5.72) and directors rating themselves least likely ($\bar{x}$=4.88) to respond in this manner (F=3.541, df=4, *p*=.013). No significant differences in accessibility of beliefs were found. Please see Table 10 for further information on the results of these One-Way ANOVAs.

To further examine the possibility of differences by type job responsibility, a job type variable was created which placed center directors and assistant directors in one category and FCCH providers, master teachers, and teachers in a second category. This results in two distinct groups, the first of which (Administrators) has more administrative duties and little or no classroom responsibility. The second group (Caregivers) contains participants whose jobs involve more direct interaction with children. To examine differences between these two groups, independent sample *t*-tests were conducted. None

of the differences between these two groups reached significance;however, directors self-reported behaviors were rated as more developmentally appropriate than those of teachers in 4 of the 6 areas assessed by the TCCNES. Please see Table 11 for further information on these *t*-tests.

Additional factors. Additional information collected from participants included their age, last grade completed prior to entering the SECC program, and child care credentials earned to date. One-way ANOVAs and *t*-tests were conducted as appropriate to assess the possibility of group differences across these variables. Significant group differences were found in age comparisons on two TCCNES subscales (PFR and EFR) and the TEBS. On the TCCNES subscales, the youngest age groups reported themselves as most likely to use both Problem-Focused and Emotion-Focused Responses to children's negative emotions. Scores on the TEBS indicate that participants in the 35 to 44 age group held the most developmentally appropriate beliefs while the youngest and oldest groups held the least appropriate beliefs about children's emotions. Please see Table 12 for results of the One-way ANOVA.

To check for group differences in beliefs, accessibility of beliefs, and behaviors for participants with different levels of education and training, independent sample *t*-tests were conducted. No significant differences were found for varying levels of education completed prior to entering the SECC program. However, significant differences were found between participants who have earned a child care credential versus those who have not. For this analysis, participants were placed in one of two groups: those who have earned one or more credential (Child Development Associate, Certificate of Mastery, or Associates Degree) and those who have not yet completed any credential. Independent

sample *t*-tests revealed significant differences on the Punitive subscale (*t*=2.251, df=47.571, *p*=.029) with a group mean of 1.88 (SD=.75) for those who have not earned a credential and 1.48 (SD=.49) for those who have received a credential. Similarly, participants who have earned credentials are significantly less likely to minimize children's negative emotions ($\bar{x}$=1.99, SD=0.40) than are those who have not earned a credential ($\bar{x}$=2.54, SD=1.05) (*t*=2.596, df=38.010, *p*=.013).

Research Question 3

The final goal of this study was to test the fit of the spontaneous process of the MODE model for childcare providers' responses to children's negative emotions. A variable representing accessibility of beliefs was created by first converting both the baseline time latency and the average latency in response to the beliefs items to z-scores. Next, the difference between the baseline and the belief response latency z-score was calculated, with higher values indicating longer response time and less accessible beliefs and lower values indicating more highly accessible beliefs ($\bar{x}$=1.69, SD=.66) Following Holmbeck's (1997) directions on testing for moderated effects, the independent and moderator variables (beliefs and accessibility of beliefs, respectively) were centered by subtracting each value from the mean and then entered into a multiple regression. Separate tests were conducted for each of the six subscales of the TCCNES. TEBS was found to be a significant predictor of the three negative subscales of the TCCNES: Punitive (F(3) = 4.892, *p*=.005), Distress (F(3) = 5.494, *p* = .002), and Minimization (F(3) = 3.470, *p* =.023). No significant predictors were identified for any of the three positive subscales of the TCCNES: Problem-Focused Responses (F(3) = 2.167, *p* =.104), Emotion-Focused Responses (F(3) = .816, *p* = .491), and Expressive Encouragement

($F(3) = 1.748$, $p = .169$). Accessibility of Beliefs was not found to be a significant predictor in any of the analyses, thus for this dataset, accessibility of beliefs does not moderate the relation between beliefs and behaviors. Please see Tables 13-18 for complete results of these multiple regression analyses.

Chapter IV

DISCUSSION

In response to a need for better measures of teacher responsiveness to children's emotional needs, the TCCNES was developed and tested with a sample of childcare providers currently involved in the SECC program. In piloting a new measure, it is always expected that the task will require some amount of stopping and restarting, refining, and re-evaluating. The current study is no different. Additionally, this study explored the possibility of applying the MODE model, originally developed for use in consumer research, as a framework for understanding the relation between teacher beliefs and behaviors. Both of these endeavors were grounded in theory and guided by the existing body of research on early childhood practices, but the lack of prior investigation in this area necessitated the exploratory mode of this study. This chapter will first discuss the findings related to each research question and then will address limitations of the study, as well as implications for research and the field of early childhood education.

Research Question 1

A key component in developing a new instrument is assuring that it is both valid and reliable. To examine the characteristics of the TCCNES, several methods were employed. Internal reliability of the TCCNES was verified by calculating Cronbach's alphas for each of the subscales. The alphas are similar to those reported by Fabes et al (2002) and indicate satisfactory levels of internal reliability.

One step taken in assessing the reliability not previously done by Fabes et al (2002) on the CCNES is factor analysis. They reported that factor analysis using the six subscores as the input variables extracted four components. Instead of following this method for the current study, factor analysis was conducted using the individual items as input variables. Initially, Varimax rotation was employed, but after a more thorough review of the priniciplese behind the rotations, Direct Oblimin rotation was used. While Varimax aims to produce orthogonal results—that is, factors that are not correlated—Direct Oblimin is structured to define oblique factors, where correlation among factors is allowed (Field, 2005). Since the six subscales of this measure are expected to correlate, the Direct Oblimin rotation is the proper choice of method. Neither type of analysis was able to converge in 25 iterations, so no conclusive results were obtained.

To assess the validity of the instrument, participants also completed the Interpersonal Reactivity Index (IRI). Fabes and his colleagures (2002) found that each of the three subscales of the IRI correlated with at least one of the subscales of the CCNES, and it was expected that this instrument would provide a good indicator of construct validity for the TCCNES as well. Correlations for this sample on the TCCNES were found similar to Fabes's reports for the CCNES, including significant negative relations between IRI subscale Empathic Concern and the Punitive ($p<.01$), Emotion-Focused ($p<.05$), and Distress ($p<.01$) responses on the TCCNES. The Perspective Taking subscale of the IRI was also significantly negatively correlated with several of the TCCNES subscales: Punitive ($p<.01$), Emotion-Focused ($p<.05$), Minimization ($p<.05$), and Distress ($p<.01$). Overall, the patterns of correlation between the TCCNES and the

IRI are similar to what Fabes and his colleagues reported and correlate in the way one would expect, indicating good construct validity for this instrument.

Participants also completed an Index of Social Desirability to investigate the possibility that their responses on the TCCNES might reflect how they think they should respond, rather than how they actually would respond in a given situation. No significant correlations were found between any of the subscales of the TCCNES and the Index of Social Desirability. Fabes and his colleagues (2002) reported only one significant correlation between his instrument and Social Desirability—a negative relation with the Distress subscale. While the direction of correlation is also negative for the relation between the TCCNES Distress subscale and Social Desirability, it did not reach significance. Thus, it appears that participants' proclivity to answer in a socially desirable way was not related to their responses on the TCCNES, so it was not necessary to account for social desirability in further analysis.

A final step taken to assess the validity of the TCCNES involved comparisons of observations of teachers' responses to children's negative emotions with the self-reported responses on the TCCNES. To date, no such comparison has been published on the CCNES, but it was felt that observational confirmation of the self-reported behaviors could add credibility to the instrument. As discussed in the results section, correlations between observed and self-reported behaviors were negatively correlated on 4 of the 6 subscales, indicating a substantial issue with validity. The remaining 2 subscales had were slightly positively correlated. One possible explanation for this could be that respondents indicated how they hope they would respond in a given situation rather than

how they would actually react. This would account for the disparity between self-reported and observed behaviors.

One study that gives credence to this possibility involved child care providers self-reports in a telephone interview (Holloway, Kagan, Fuller, Tsou, & Carroll, 2001). In this study, the authors created a phone questionnaire by modifying the ECERS-R and FDCRS and examined the congruence between providers' self-report and observed scores on these instruments. Although Holloway and colleagues report mostly favorable results, as Ponder (2001) points out, there was less correlation on items related to interactions than on items about classroom materials. This finding substantiates that child care providers may have a difficult time providing objective reports of their interactions with children.

There are other possible reasons for the disparity between self-reports on the TCCNES and observed behavior involving methodology of the current study. These issues are addressed below.

Other analysis conducted on the TCCNES included examining the relations between the six subscales. Consistent with findings on the CCNES (Fabes et al, 2002), the three negative subscales were all found to be significantly correlated with one another as are the three positive subscales. Unlike the findings reported by Fabes and his colleagues, the current study found some negative correlations between the positive and negative subscales. While Fabes and his colleagues stated that their findings indicate that positive and negative reactions do not appear to be on a linear continuum, the findings of this study suggest further investigation is needed into this matter, as this may not be true for teachers' responses.

Research Question 2

Analyses investigating the possibility of group differences in beliefs or self-reported behaviors according to variations in participants' level of self-esteem, job title, and type of facility employed in revealed few significant differences. As noted in the results section, only job title was found significantly relate to any of the subscales, and no group difference among any of these variables was found for the TEBS.

Exploration of additional factors potentially related to participants' beliefs and behaviors revealed significant differences for age and credentials earned. The results for variations by age do not fit into a consistent pattern, so it is possible that the significant differences were just coincidental. The differences among participants who had and had not received a credential are consistent with other research in the field indicating that level of education, especially in coursework related directly to early childhood, is a good predictor of quality of child care provided and developmentally appropriate beliefs (see Wilcox-Herzog & Ward, 2004 for a review). Wilcox-Herzog and Ward's own findings though did not find depth of training to be related to quality of care provided.

Maxwell, Field, and Clifford (2006) suggest that one reason for these inconsistent findings related to the impact of professional development has to do with inconsistency in how professional development is defined and measured. Many factors, including content and method of delivery, for the professional development affect the impact it can have on child care practices. Additionally, variations in performance in the classes and supplementary trainings taken outside of official coursework create variations in the amount of knowledge taken in by child care providers. This variable is difficult to measure in a way that gives proper weight to each of these details, but an attempt to

refine the measurement of professional development could provide fruitful results in future studies.

Research Question 3

Borrowing a model from consumer research that connects beliefs and behaviors, this study tested the relation between teachers' beliefs about and reactions to children's negative emotions and examined the possibility that accessibility of these beliefs moderated this relationship. Participants' responses on the TEBS were found to predict scores on 3 of the 6 TCCNES subscales. None of the models found accessibility of beliefs to be a significant moderator of this relation. Various limitations in data collection procedures may have resulted in the lack of significant results demonstrating moderated effects. These limitations are discussed below.

An alternate explanation could be found by revisiting the theoretical basis of the MODE model. Recall that the spontaneous process of the model indicates that individuals' beliefs are positively correlated with their behaviors, with beliefs that are more highly accessible resulting in a stronger correlation. However, Fazio (1990) indicates that if beliefs are not strong enough to be effortlessly activated, a person's behavior will be chosen based on factors salient to the situation rather than his or her beliefs. If this phenomenon of no accessible beliefs was occurring with the current sample, it could explain the lack of correlation between observed and self-reported behaviors. If, as will be discussed below, the items on the TCCNES were too clear as to what the "good" and "bad" responses were, participants' self-reports could have been based more on this fact rather than their beliefs, resulting in high self-reports on the "good" items and low on the "bad" responses. Additionally, inaccessible beliefs would

contribute to disparity between responses on the TCCNES and in real-life situations. Just as participants' responses on the TCCNES would be impacted by factors salient to the instrument and its situations, issues surrounding real-life situations like caregiver fatigue or mood would lead to behaviors, rather than the behaviors reflecting their actual beliefs.

A corollary explanation is that the sample in this study was too homogeneous to detect the effect of accessibility of beliefs. While some differences were detected by whether or not the participant had received a credential, even greater differences would be expected if the sample were to include persons ranging from those with little or no training or experience in child care all way to those with high levels of training and experience. A study assessing the impact of a program like SECC in another state found that significant change in child care practices did not occur until coursework in excess of 12 to 20 hours was completed (Cassidy, Buell, Pugh-Hoese, & Russell, 1995). Perhaps, accessibility of beliefs has a similar threshold in training needed before a significant change occurs.

Another possibility within the homogeneous sample explanation is suggested by research by the creator of the MODE model. Fazio's studies have demonstrated the possibility of manipulating the accessibility of beliefs by repeated exposure to situations (e.g., Fazio, Chen, McDonel, & Sherman, 1982). Perhaps all child care workers reach a certain level of accessibility of beliefs related to children's emotions simply by repeated exposure to situations involving children. Accessibility of beliefs would be further strengthened by participation in professional development through discussions and reading about children's emotions, though the actual content of these beliefs might change. Here again though, it is important to note the homogeneity of the sample. All

participants have participated in at least some college classes related to early childhood and the greatest amount of schooling any of them have completed is what is required to earn an Associate's Degree, approximately twenty hours related to child development. It is possible that while members of this sample hold beliefs on this subject that are more highly accessible than that of the general population, beliefs held by child care providers with higher levels of education may hold even more accessible beliefs. Certainly the possibility exists that the current sample is simply too homogeneous for the effect of accessibility of beliefs to be significant. Such small differences in accessibility could be addressed by using larger sample sizes which could then be used to test for moderated effects.

Limitations of Study

One obvious limitation of this study is the sample size. Five hundred and fifty individuals were invited to participate and only 54 responded, a response rate of nearly 10 percent. While survey research typically suffers poor response rates, this study was even more subject to a lack of response due to the online nature of the survey and characteristics of the population that make them unlikely to complete an online survey.

Web-based technology was selected for this study due to the need to capture response latencies to measure accessibility of beliefs. There are limitations involved in this measure as well. Most of Fazio's studies involve participants coming to a lab or setting up a lab-type situation up remotely. In these situations, everything can be standardized removing some of the variability encountered in the current study. Another limitation in this study is the lack of a good baseline measure. Initially it was thought that three extra belief items would serve as baseline measures of response latency, but upon

further consideration and reading of the literature, it became clear that baselines must be established using factual statements. Thus, for this study the baseline was established with responses on the demographics questions, but since the format and length of these questions vary from the belief items which times are compared for, the accuracy of this measure is questionable. This limitation could be addressed in future studies by creating factual items similar in length and format to the items on which accessibility is needed. Additionally, as pointed out by Fazio (1990), other methods of data collection including telephone surveys could be used to gather information and collect time latencies as well.

A final limitation of this study is the TEBS and TCCNES instruments themselves. Since both of these instruments are newly developed, refinement and further testing is needed to assure that they are valid and reliable. One concern is that items on the TCCNES may be too clear as to which choices are the "good" responses and which are less desirable, causing individuals to report what they think they should do or what they think others in the field would want them to do, rather than accurately reflecting their actual practices. The lack of significant correlation between the TCCNES and the index of social desirability would indicate that this is not a factor, but the issue deserves further exploration. Additionally, refinement of the observational protocol is needed and future studies should include reliability checks to check for consistency among the observers.

Implications

This study carries implications for both professional development of child care providers as well as for future research in this area. The primary implication for professional development is the underscoring of the importance of addressing developmentally appropriate practices and beliefs regarding broader issues than just

children's learning. Professional development efforts need to focus on proper expectations of children and ways those providers can interact with them to foster healthy emotional development. Additionally, a finding that attitude accessibility is more readily increased through behavioral experience rather than non-behavioral (Fazio, et al, 1982) suggests that professional development initiatives need to extend their pedagogical practices beyond theory and even "soft" application to more direct behavioral experience in applying the material if true changes are to be seen.

Some suggestions for future research have already been addressed in discussing the limitations of this study. Other issues that could be addressed in future studies include further refinement of the measures and retesting of the MODE model. Additionally, studies should address factors beyond simply the amount of coursework completed, and also examine other salient factors including content and delivery of courses. Finally, studies are needed to examine other factors affecting teachers' beliefs and behaviors, including variables related to their ability to transfer knowledge learned in classes to their working environment.

A plan has been developed to incorporate many of these suggestions into ongoing and future studies related to program evaluation of the SECC program. The TCCNES and the observational protocol will be refined and tested again in the ongoing case study, and a thorough investigation of the pedagogy and curriculum of the community colleges is planned for the upcoming year. Finally, further analysis modeled after Mill and Romano-White's (1999) findings that an interaction between self-esteem and professional development result in changes in child care practice will be conducted to assess the possibility of more complex relations among variables in this dataset as well. Together

these efforts will form a more complete understanding of the way in which teachers' beliefs about children's emotions impact their behaviors and the role that professional development plays in modifying those beliefs.

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APPENDIXES

Appendix A

Teachers' Emotions Beliefs Scale

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

Again, there are no right or wrong answers. What you are going to be asked about is your own feelings regarding emotions—how you experience different feelings and how you feel about feelings in general. (from Katz and Gottman's Meta-Emotion Interview, 1999)

Demographics
Name
Age
Type of facility (Family Child Care Home/Center)

Beliefs
- Tantrums are a normal part of development and children should not be punished for them.
- When it comes to anger, sadness, and frustration, sometimes children just need to get it all out.
- Children should be free to express both positive and negative emotions in whatever way they wish, as long as they do not hurt themselves, others, or classroom materials.
- I think that sadness can be good and even helpful.[1]
- Children should never be expected to hold back their emotions.[1]
- Children are not miniature adults. We should not expect them to behave that way either.
- It is part of a teacher's job to help an upset child become happy again.
- Distraction is a valuable method of calming children.
- Some teachers go too far in letting children express their anger.*
- It is part of a teacher's job to help children address the issue that is making them upset.
- Children need to be taught to label their feelings with words.
- Most of children's displays of anger and frustration stem from a lack of skills (motor, cognitive, social, or otherwise) rather than from more general behavior problems.

- When a child cries because he does not get what he wants, he is trying to manipulate me.*
- Children need to learn that they don't have to cry when they don't get their way.*
- Children frequently become upset over things that don't really matter.*
- Children need to understand that I cannot immediately respond to their requests at all times.*
- Young children need to be taught that displaying anger is inappropriate.*
- Children need to learn how to properly express anger, fear, and sadness at a very young age.*
- A child should be punished for throwing a temper tantrum.*
- A child's anger deserves a time-out.*[1]
- When children display their anger inappropriately, it reflects a lack of control by their teacher.*
- Seeing children in my class sad makes me uncomfortable.* [1]

Scoring

Respondents will rank each item from 1=Strongly Disagree to 4=Strongly Agree.
Score is calculated by summing items, with items marked with a * reverse coded.
A higher score on this measure indicates more developmentally appropriate beliefs.

1 From Gottman, Katz, & Hooven, 1996

Appendix B

TCCNES

Instructions: In the following items, please indicate on a scale from very unlikely to very likely the likelihood that you would respond in the ways listed for each item. Please read each item and respond as honestly and sincerely as you can. For each response, check the box that corresponds with the best answer.

Response Scale: 1……4……..7
Very Unlikely Medium Very Likely

1. If a child in my class becomes angry because he/she has a doctor's appointment and can't stay for a class party, I would…

a. send the child to time-out to cool off before his or her mother arrives	1	2	3	4	5	6	7
b. get angry at the child	1	2	3	4	5	6	7
c. help the child think of ways that he/she can still enjoy the party, like taking a cupcake home	1	2	3	4	5	6	7
d. tell the child not to make a big deal out of missing the party	1	2	3	4	5	6	7
e. encourage the child to express his/her feelings of anger and frustration	1	2	3	4	5	6	7
f. soothe the child and find something special to do until his/her mother arrives so that the child can feel better about missing the party	1	2	3	4	5	6	7

2. If a child in my class is being careless during art time and spills the rinse cup on his/her painting and begins to cry, I would…

a. remain calm and not let myself get upset	1	2	3	4	5	6	7
b. comfort the child and try to get him/her to forget about the accident	1	2	3	4	5	6	7
c. tell the child to stop over-reacting	1	2	3	4	5	6	7
d. help the child figure out how to fix the painting or to make another one	1	2	3	4	5	6	7
e. tell the child that it's OK to cry	1	2	3	4	5	6	7
f. tell the child to stop crying and that next time he or she will know not to be so careless	1	2	3	4	5	6	7

Response Scale: 1……4……..7
Very Unlikely Medium Very Likely

3. If a child in my class loses a favorite toy that was brought for show-and-tell and reacts with tears, I would…

a. get upset with him/her for not putting the toy in his/her cubby as directed and then crying about it being lost	1	2	3	4	5	6	7
b. tell the child that he/she is over-reacting	1	2	3	4	5	6	7
c. help the child think of places that he/she hasn't looked yet	1	2	3	4	5	6	7
d. distract the child by finding something he or she really enjoys to do	1	2	3	4	5	6	7
e. tell him/her it's OK to cry when you feel unhappy	1	2	3	4	5	6	7
f. tell him/her that's what happens when you don't listen to the teacher	1	2	3	4	5	6	7

4. If a child falls down and scrapes his/her knee and runs away from me when I try to take care of the wound because he/she is afraid of getting it cleaned because it might burn, I would…

a. tell him/her to get over here right now or I am going to come get him/her, clean the wound, and then send him/her to time-out	1	2	3	4	5	6	7
b. encourage the child to talk about his/her fears	1	2	3	4	5	6	7
c. tell the child to stop making such a big deal of this	1	2	3	4	5	6	7
d. get frustrated with the child and raise my voice	1	2	3	4	5	6	7
e. comfort him/her and explain that as soon as we get all cleaned up and put a band-aid on we can get back to playing outside	1	2	3	4	5	6	7
f. talk to the child about the steps involved in taking care of the wound and ways to make it hurt less	1	2	3	4	5	6	7

Response Scale: 1……4……..7
Very Unlikely Medium Very Likely

5. If a child in my class is moving up to the next room and becomes nervous and upset because I can't stay there with him/her, I would…

a. distract the child by talking about all the fun he/she will have with his/her new friends	1	2	3	4	5	6	7
b. help the child think of things that he/she could do so that being in the new room without me wasn't so scary	1	2	3	4	5	6	7
c. tell the child to quit over-reacting and that he/she needs to act like a big boy/girl	1	2	3	4	5	6	7
d. tell the child that if he/she doesn't stop pouting that I am going to get angry	1	2	3	4	5	6	7
e. feel upset and uncomfortable because of the child's reactions to the new teachers.	1	2	3	4	5	6	7
f. encourage the child to talk about his/her nervous feelings.	1	2	3	4	5	6	7

6. If the class is involved in some group activity and one of the children makes a mistake and then looks embarrassed and on the verge of tears, I would…

a. comfort the child and try to make him/her feel better	1	2	3	4	5	6	7
b. tell the child that he/she is over-reacting	1	2	3	4	5	6	7
c. feel upset myself	1	2	3	4	5	6	7
d. tell the child to put on a happy face or else he/she is not going to be able to participate in the rest of the activity	1	2	3	4	5	6	7
e. encourage the child to talk about his/her feelings of embarrassment	1	2	3	4	5	6	7
f. tell the child that we can do the activity again, so that with practice he/she can do better next time	1	2	3	4	5	6	7

Response Scale: 1……4……..7
Very Unlikely Medium Very Likely

7. If my class is about to put on a program for their families and friends and one child becomes visibly nervous about people watching him/her, I would…

a. help the child things that he/she could do to get ready for the performance (e.g., practice his/her part with a friend)	1	2	3	4	5	6	7
b. suggest that the child think about something relaxing so that his/her nervousness will go away.	1	2	3	4	5	6	7
c. remain calm and not get nervous myself	1	2	3	4	5	6	7
d. tell the child that there's no reason to be nervous	1	2	3	4	5	6	7
e. tell the child that if he/she doesn't calm down, he/she won't be allowed to participate in the program	1	2	3	4	5	6	7
f. encourage the child to talk about his/her nervous feelings	1	2	3	4	5	6	7

8. If a child in my class complains that he/she doesn't like the songs I've chosen for group time and calls them "dumb" and "babyish", I would…

a. encourage the child to express his/her feelings of disappointment with the song choices	1	2	3	4	5	6	7
b. talk with the child about possible solutions to the issue	1	2	3	4	5	6	7
c. NOT be annoyed with the child for being rude	1	2	3	4	5	6	7
d. tell the child that there is no need to feel that way	1	2	3	4	5	6	7
e. scold the child for being insensitive and rude	1	2	3	4	5	6	7
f. try to get the child to feel better by changing the subject	1	2	3	4	5	6	7

Response Scale: 1……4……..7
Very Unlikely Medium Very Likely

9. If a child in my class suddenly starts refusing to nap and says that he/she is scared of bad dreams/monsters, I would…

a. encourage the child to talk about his/her fears	1	2	3	4	5	6	7
b. get upset with him/her for not napping	1	2	3	4	5	6	7
c. tell the child to quit being so silly	1	2	3	4	5	6	7
d. tell the child that I will watch carefully during nap time to make sure that no monsters come near him/her	1	2	3	4	5	6	7
e. tell him/her to lay down or he/she won't be allowed to play outside after nap time	1	2	3	4	5	6	7
f. help the child think of happy things to think about so he/she will forget about being scared	1	2	3	4	5	6	7

10. If a child in my class appears on the verge of tears because the other children are mean to him/her and won't let him/her play with them, I would…

a. NOT get upset myself	1	2	3	4	5	6	7
b. tell the child that if he/she starts crying then the other children will certainly not want to play with him/her	1	2	3	4	5	6	7
c. tell the child that it's OK to cry when he/she feels bad	1	2	3	4	5	6	7
d. comfort the child and try to get him/her to think about something happy.	1	2	3	4	5	6	7
e. help the child think of something else to do	1	2	3	4	5	6	7
f. tell the child that he/she will feel better soon	1	2	3	4	5	6	7

Response Scale: 1……4……..7
Very Unlikely Medium Very Likely

11. If a child in my class is playing with the other children and one of them calls him/her a name, and he/she begins to tremble and become fearful, I would…

a. tell him/her not to make such a big deal out of it	1	2	3	4	5	6	7
b. feel angry with the other child	1	2	3	4	5	6	7
c. tell the children to play nicely together or they will both have to go to time-out	1	2	3	4	5	6	7
d. help the child think of constructive things to do when other children tease him/her (e.g., find other things to do)	1	2	3	4	5	6	7
e. comfort him/her and play a game to take his/her mind off of the upsetting event	1	2	3	4	5	6	7
f. encourage him/her to talk about how it hurts to be teased	1	2	3	4	5	6	7

12. If a child in my class is shy and scared of a new assistant teacher and consistently becomes teary and hides when the teacher arrives, I would…

a. help the child think of things to do that would make talking with the new teacher less scary (e.g., point out things they have in common)	1	2	3	4	5	6	7
b. tell the child that it's OK to feel nervous	1	2	3	4	5	6	7
c. try to make the child happy by talking about the fun things we're going to do later in the day	1	2	3	4	5	6	7
d. feel upset and uncomfortable because of the child's reactions	1	2	3	4	5	6	7
e. tell the child that he/she must come sit by the new teacher or he/she will not be allowed to participate in group time that day	1	2	3	4	5	6	7
f. tell the child that big boys/girls don't act that way	1	2	3	4	5	6	7

TCCNES SUBSCALES

1. Distress Reactions (DR). These items reflect the degree to which teachers experience distress when children express negative affect.

Scoring: Mean of: 1B, 2A*, 3A, 4D, 5E, 6C, 7C*, 8C*, 9B, 10A*, 11B, 12D

2. Punitive Reactions (PR). These items reflect the degree to which teachers respond with punitive reactions that decrease their exposure or need to deal with the negative emotions of the children around them.

Scoring: Mean of: 1A, 2F, 3F, 4A, 5D, 6D, 7E, 8E, 9E, 10B, 11C, 12E

3. Expressive Encouragement (EE). These items reflect the degree to which teachers encourage children to express negative affect or the degree to which they validate the child's negative emotional states (i.e., "it's okay to feel sad.")

Scoring: Mean of : 1E, 2E, 3E, 4B, 5F, 6A, 7F, 8A, 9A, 10C, 11F, 12B

4. Emotion-Focused Reactions (EFR). These items reflect the degree to which teachers respond with strategies that are designed to help the child feel better (i.e., oriented towards affecting the child's negative feelings).

Scoring: Mean of: 1F, 2B, 3D, 4E, 5A, 6A, 7B, 8F, 9F, 10D, 11E, 12C

5. Problem-Focused Reactions (PFR). These items reflect on the degree to which teachers help the child solve the problem that caused the child's distress (i.e., oriented towards helping the child solve his/her problem or coping with a stressor).

Scoring: Mean of: 1C, 2D, 3C, 4F, 5B, 6F, 7A, 8B, 9D, 10E, 11D, 12A

6. Minimization Reactions (MR). These items reflect the degree to which teachers minimize the seriousness of the situation or devalue the child's problem or distressful reaction.

Scoring: Mean of: 1D, 2C, 3B, 4C, 5C, 6B, 7D, 8D, 9C, 10F, 11A, 12F

Note: Items marked with a * are reverse scored.

Appendix C

Interpersonal Reactivity Index

Participants are asked to rank each item from 1 “Strongly Disagree” to 5 “Strongly Agree”.

Perspective-taking items

- I believe that there are two sides to every question and try to look at them both.
- When I’m upset at someone, I usually try to “put myself in his shoes” for a while.
- I try to look at everybody’s side of a disagreement before I make a decision.
- It’s rare that some issue is ever black and white—usually the truth is somewhere in between.
- I sometimes find it difficult to see things from the “other guy’s” point of view.
- Before criticizing somebody, I try to imagine how *I* would feel if I were in their place.
- If I’m sure I’m right about something, I don’t waste time listening to other people’s arguments.
- It’s often harmful to spend lots of time trying to get everyone’s point of view—some decisions have to be made quickly.
- I sometimes try to understand my friends better by imagining how things look from their perspective.

Empathic Concern Items

- I am often quite touched by things that I see happen.
- Seeing warm, emotional scenes melts my heart and makes me teary-eyed.
- When I watch a sad, “tear-jerker” movie, I almost always have warm, compassionate feelings for the characters.
- I would describe myself as a pretty soft-hearted person.
- Occasionally I am not very sympathetic to my friends when they are depressed.
- Usually I am not extremely concerned when I see someone else in trouble.
- Sometimes I don’t fee sorry for other people when they are having problems.
- When I see someone being treated unfairly, I sometimes don’t fee very much pity for them.
- When a friend tells me about his good fortune, I feel genuinely happy for him.
- When I see someone being taken advantage of, I feel kind of protective toward them.
- I care for my friends a great deal.
- I often have tender, concerned feelings for people less fortunate than me.
- When someone gets hurt in my presence, I feel sad and want to help them.
- I feel sad when I see a lonely stranger in a group.

Personal Distress Items

- In emergency situations, I feel apprehensive and ill-at-ease.
- I tend to lose control during emergencies.
- Being in a tense emotional situation scares me.
- When I am with a friend who is depressed, I become so uncomfortable that I can't really talk to her.
- When I see someone who badly needs help in an emergency, I go to pieces.
- It bothers me to see poor people on the street.
- It occasionally embarrasses me when someone tells me their problems.
- Sometimes disagreements with others become so intense that I can't deal with it at the time.
- Other people's misfortunes do not usually disturb me a great deal.
- When I see someone get hurt, I tend to remain calm.
- I am usually pretty effective in dealing with emergencies.
- I sometimes feel helpless when I am in the middle of a very emotional situation.
- Although tense emotional confrontations are unpleasant, I can usually control myself pretty well.

Appendix D

Marlowe-Crowne 2(10) Social Desirability Scale

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

1. I never hesitate to go out of my way to help someone in trouble. (T)
2. I have never intensely disliked anyone. (T)
3. There have been times when I was quite jealous of the good fortune of others. (F)
4. I would never think of letting someone else be punished for my wrong doings. (T)
5. I sometimes feel resentful when I don't get my way. (F)
6. There have been times when I felt like rebelling against people in authority even though I knew they were right. (F)
7. I am always courteous, even to people who are disagreeable. (T)
8. When I don't know something I don't at all mind admitting it. (T)
9. I can remember "playing sick" to get out of something. (F)
10. I am sometimes irritated by people who ask favors of me. (F)

Scoring Algorithm

For each answer the respondent provides that matches the response given above (i.e., T=T or F=F) assign a value of 1. For each discordant response (i.e., the respondent provides a T in place of an F or an F in place of a T) assign a value of 0. Total score can range from 10 (when all responses "match") to 0 (when no responses "match").

Oklahoma State University Institutional Review Board

Date:	Thursday, February 02, 2006
IRB Application No	HE0639
Proposal Title:	Child Care Providers' Reactions to Children's negative Emotions
Reviewed and Processed as:	Exempt

Status Recommended by Reviewer(s): Approved **Protocol Expires: 2/1/2007**

Principal Investigator(s

Sherri L. Gosney
105 Bartlet
Stillwater, OK 74078

Deborah J. Norris
103 Bartlett
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

[X] The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 415 Whitehurst (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,

Sue C Jacobs

Sue C. Jacobs, Chair
Institutional Review Board

Table 1

Means, Standard Deviations, and Alphas for TCCNES Subscales

Subscale	Mean	SD	Range	α
Punitive Reactions	1.69	.664	1.00-3.75	.844
Distress Reactions	2.04	.611	1.00-3.25	.642
Minimization Reactions	2.28	.864	1.17-5.08	.869
Expressive Encouragement	5.78	.761	3.40-6.83	.794
Emotion-Focused Responses	5.34	.769	3.00-6.50	.810
Problem-Focused Responses	6.14	.551	4.42-7.00	.703

Table 2

Proportions of Teachers' Behaviors by Rating

		Type of Response					
Scholar	# of Obs.	DR	PR	MR	EE	EFR	PFR
A	1	0.00	1.00	1.00	0.00	0.00	0.00
B	4	0.25	0.50	0.25	0.25	0.25	0.25
C	11	0.91	0.64	0.18	0.09	0.00	0.27
D	14	0.00	0.07	0.64	0.00	0.21	0.29
E	5	0.00	0.00	0.00	0.40	0.20	0.60
F	5	0.00	0.00	0.00	0.40	0.40	1.00
G	14	0.21	0.21	0.43	0.00	0.07	0.00
H	14	0.00	0.36	0.21	0.21	0.00	0.43
I	8	0.00	0.25	0.50	0.38	0.00	0.50
Mean	8.44	0.15	0.34	0.36	0.19	0.13	0.37

Table 3

Means and Standard Deviations for TEBS Items

	Item	Mean[a]	SD
1.	Tantrums are a normal part of development and children should not be punished for them.	2.76	.799
2.	When it comes to anger, sadness, and frustrations, sometimes children just need to get it all out.	3.09	.708
3.	Children should be free to express both positive and negative emotions in whatever way they wish, as long as they do not hurt themselves, others, or classroom materials.	3.07	.797
4.	I think that sadness can be good and even helpful.	3.00	.434
5.	Children should never be expected to hold back their emotions.	3.17	.666
6.	Children are not miniature adults. We should not expect them to behave that way either. [c]	3.54	.719
7.	It is part of a teachers' job to help an upset child become happy again. [c]	3.07	.669
8.	Distraction is a valuable method of calming children.	3.09	.622
9.	Some teachers go too far in letting children express their anger.[b]	2.81	.702
10.	It is part of a teacher's job to help children address the issue that is making them upset.	3.31	.609
11.	Children need to be taught to label their feelings with words.	3.37	.525
12.	Most of children's displays of anger and frustration stem from a lack of skills rather than from more general behavior problems. [c]	2.91	.759
13.	When a child cries because he does not get what he wants, he is trying to manipulate me. [b]	2.37	.760
14.	Children need to learn that they don't have to cry when they don't get their way. [b]	3.07	.544
15.	Children frequently become upset over things that don't really matter. [b]	2.56	.861
16.	Children need to understand that I cannot immediately respond to their requests at all times. [b,c]	2.98	.714
17.	Young children need to be taught that displaying anger is inappropriate. [b]	1.80	.595
18.	Children need to learn how to properly express fear, anger, and sadness at a very young age. [b,c]	2.70	.816
19.	A child should be punished for throwing temper tantrums. [b]	1.98	.629
20.	A child's anger deserves a time-out. [b]	2.13	.616
21.	When children display their anger inappropriately, it reflects a lack of control by their teacher. [b]	1.80	.528
22.	Seeing children in my class sad makes me uncomfortable. [b]	2.39	.738

a Item response range is 1-4, with 1=Strongly Disagree and 4=Strongly Agree.

b Item was reverse scored. Values recorded here are in recoded format; higher values indicate more developmentally appropriate beliefs.

c Item was removed from index due to low internal reliability and not used in analysis.

Table 4

Descriptives for Interpersonal Reactivity Index and Index of Social Desirability

	Mean	SD
IRI Personal Distress [a]	2.44	0.482
IRI Empathic Concern [a]	4.18	0.399
IRI Perspective Taking [a]	3.85	0.432
Index of Social Desirability [b]	6.69	2.382

a Possible range is 1-5
b Possible range is 1-10

Table 5

Correlations between IRI, SD, AND TCCNES

	PR	MR	DR	EE	EFR	PFR
IRI Personal Distress	.05	.05	.25	.10	.22	-.07
IRI Empathic Concern	-.39**	-.17	-.56**	.10	-.29*	.01
IRI Perspective Taking	-.43**	-.35*	-.52**	.18	-.33*	-.11
Social Desirability	-.02	.07	-.14	-.11	.03	.03

Note: * $\rho < .05$; ** $\rho < .01$

Table 6

Correlations between Subscales of TCCNES

	DR	PR	MR	EE	EFR	PFR
Distress Reactions (DR)	--					
Punitive Responses (PR)	.56**	--				
Minimization Responses (MR)	.46**	.77**	--			
Expressive Encouragement (EE)	-.22	-.22	-.12	--		
Emotion-Focused Responses (EFR)	.20	.27*	.38**	.36**	--	
Problem-Focused Responses (PFR)	-.23	-.06	.02	.28*	.57**	--

Note: * $\rho < .05$; ** $\rho < .01$ (one-tailed)

Table 7

Correlations of Teachers' Self-Reported and Observed Reactions to Children's Negative Emotions

TCCNES Subscale	Observed Reactions
Punitive Reactions	-.231
Distress Reactions	-.178
Minimization Reactions	.293
Expressive Encouragement	-.074
Emotion-Focused Responses	-.567*
Problem-Focused Responses	.296

Note: * $\rho < .05$

Table 8

Correlations between Coopersmith and TEBS, TCCNES, and Accessibility of Beliefs

	Coopersmith
TEBS	.053
TCCNES	
DR	-.209
MR	-.070
PR	-.049
EE	.201
EFR	.050
PFR	.073
Accessibility	-.024

Table 9

Differences in TEBS, TCCNES, and Accessibility of Beliefs by Type of Facility

	Center		Home			
	Mean	SD	Mean	SD	df	t
TEBS	50.32	5.15	50.29	5.33	22	0.024
TCCNES						
DR	1.98	0.67	1.74	0.54	52	1.212
MR	2.39	0.96	1.96	0.37	51	2.390
PR	1.79	0.70	1.42	0.48	52	1.854
EE	5.74	0.82	5.89	0.57	52	-0.649
EFR	5.44	0.78	5.05	0.69	52	1.644
PFR	6.20	0.53	5.99	0.60	52	1.191
Accessibility	-0.07	1.49	0.20	0.66	52	-0.657

Table 10

Differences in TEBS, TCCNES, and Accessibility of Beliefs by Job Title

	FCCH Provider		Center Director		Asst. Director		Master Teacher		Teacher		ANOVA
Variable	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F
TEBS	50.29	5.33	52.88	3.87	49.75	4.27	49.40	6.80	49.74	5.32	0.601
TCCNES											
DR	1.74	0.54	1.96	0.81	1.77	0.62	2.40	0.56	1.93	0.65	1.038
MR	1.96	0.37	2.37	1.18	2.02	0.63	2.13	0.45	2.54	1.01	1.153
PR	1.42	0.48	1.50	0.64	1.77	0.75	1.73	0.69	1.91	0.72	1.423
EE	5.89	0.57	5.81	1.12	6.29	0.40	5.77	0.84	5.61	0.75	0.806
EFR	5.05	0.69	4.88	1.18	4.92	0.89	5.47	0.41	5.72	0.49	3.541*
PFR	5.99	0.59	5.90	0.71	6.00	0.38	6.02	0.51	6.38	0.45	1.941
Accessibility	0.20	0.66	0.89	1.71	-0.42	0.36	0.31	0.88	-0.43	1.52	1.869

* $p<.05$

Table 11

Differences in TEBS, TCCNES, and Accessibility of Beliefs by 2 Category Job Title

	Administrators		Caregivers			
	Mean	SD	Mean	SD	df	t
TEBS	51.83	4.11	49.88	5.37	52	-1.164
TCCNES						
DR	1.90	0.73	1.92	0.62	52	0.131
MR	2.21	1.01	2.30	0.83	52	0.303
PR	1.60	0.66	1.72	0.67	52	0.593
EE	5.97	0.95	5.72	0.70	52	-0.999
EFR	4.89	1.05	5.47	0.63	13.3	1.823
PFR	5.93	0.60	6.21	0.53	52	1.544
Accessibility	0.45	1.52	-0.13	1.25	52	-1.995

Table 12

Differences in TEBS, TCCNES, and Accessibility of Beliefs by Age

	Under 25		25-34		35-44		45-54		55 or Greater		ANOVA
Variable	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F
TEBS	47.88	5.46	51.12	5.28	53.00	4.96	50.38	4.33	45.40	2.07	2.773*
TCCNES											
DR	1.67	0.65	1.88	0.61	1.88	0.76	2.03	0.60	2.25	0.61	0.568
MR	3.01	1.25	2.11	0.76	2.25	1.06	2.19	0.45	2.00	0.28	0.123
PR	2.15	0.74	1.59	0.68	1.71	0.73	1.51	0.56	1.75	0.48	0.279
EE	5.54	1.04	5.83	0.63	5.73	1.05	5.81	0.52	5.98	0.68	0.867
EFR	5.82	0.60	5.56	0.64	4.89	0.92	5.06	0.75	5.55	0.46	0.027*
PFR	6.64	0.22	6.24	0.50	5.98	0.64	5.80	0.49	6.27	0.43	0.006*
Accessibility	-0.04	0.42	-0.36	1.59	0.65	1.59	0.11	1.20	-0.43	0.45	1.159

* $p<.05$

Table 13

Regression Analysis Summary for Variables Predicting Punitive Responses

Variable	B	SEB	β
TEBS	-.060	.016	-.466**
Accessibility of Beliefs	.006	.076	.011
TEBS x Accessibility	-.006	.012	-.080

Note: R^2 = .181 (n = 53, *p*<.01)
**p*<.01

Table 14

Regression Analysis Summary for Variables Predicting Distress Responses

Variable	B	SEB	β
TEBS	-.053	.015	-.427**
Accessibility of Beliefs	.009	.072	.018
TEBS x Accessibility	-.018	.011	-.232

Note: R^2 = .203 (n = 53, *p*<.01)
**p*<.01

Table 15

Regression Analysis Summary for Variables Predicting Minimization Responses

Variable	B	SEB	β
TEBS	-.070	.022	-.415**
Accessibility of Beliefs	.036	.102	.055
TEBS x Accessibility	.001	.016	.010

Note: R^2 = .123 (n = 53, *p*<.05)
**p*<.01

Table 16

Regression Analysis Summary for Variables Predicting Problem-Focused Responses

Variable	B	SEB	β
TEBS	.011	.014	.104
Accessibility of Beliefs	-.166	.067	-.399*
TEBS x Accessibility	-.014	.011	-.217

Note: R^2 = .062 (n = 53, *p*=.104)
*p<.05

Table 17

Regression Analysis Summary for Variables Predicting Emotion-Focused Responses

Variable	B	SEB	β
TEBS	-.018	.021	-.119
Accessibility of Beliefs	-.118	.097	-.203
TEBS x Accessibility	-.007	.015	-.076

Note: R^2 = -.011 (n = 53, *p* = .491)

Table 18

Regression Analysis Summary for Variables Predicting Expressive Encouragement Responses

Variable	B	SEB	β
TEBS	.044	.020	.296*
Accessibility of Beliefs	-.046	.094	-.080
TEBS x Accessibility	.002	.015	.021

Note: R^2 = ..041 (n = 53, *p*=.169)
*p<.05

VITA

Sherri L. Gosney

Candidate for the Degree of

Master of Science

Thesis: CHILD CARE PROVIDERS' BELIEFS ABOUT AND REACTIONS TO CHILDREN'S NEGATIVE EMOTIONS

Major Field: Human Development and Family Science

Biographical:

Personal Data: Born October 18, 1979 in Oklahoma City, OK
Resides in Stillwater, OK with husband and daughter

Education:

- Oklahoma State University, Stillwater OK 1999-2006
- University of Oklahoma, Norman, OK 1997-1999

Experience:
Project Manager, Scholars for Excellence in Child Care Program Evaluation
Intern, Stillwater Domestic Violence

Professional Memberships:
Oklahoma Council on Family Relations

Name: Sherri L. Gosney Date of Degree: May, 2006

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: CHILD CARE PROVIDERS' BELIEFS ABOUT AND REACTIONS TO CHILDREN'S NEGATIVE EMOTIONS

Pages in Study: 81 Candidate for the Degree of Master of Science

Major Field: Human Development and Family Science

Scope and Method of Study: This study pilot-tested the Teachers' Coping with Children's Negative Emotions Scale (TCCNES) using an online format with 54 child care providers. Participants also completed the Teachers' Emotions Beliefs Scale. This study reports on the psychometric properties of the TCCNES as well as findings on the relations between teachers' beliefs and behaviors regarding children's negative emotions.

Findings and Conclusions: The TCCNES was found to demonstrate satisfactory reliability and validity. Additionally, Child Care providers' beliefs about children's emotions were found to correlate with their reactions to children's displays of negative emotion, with those holding more developmentally appropriate beliefs found to respond less harshly and more positively than those with less appropriate beliefs. A model suggesting that the accessibility of the beliefs moderate the relation between beliefs and behaviors was tested, but no moderated effects were found. Implications for professional development initiatives and future research are discussed.

ADVISER'S APPROVAL: Deborah J. Norris