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The current study examined teachers' emotion language (verbalization of emotions using labeling, questioning, explaining, and minimizing language) within naturally-occurring teacher-toddler interactions with 28 teachers and 115 toddlers in 28 toddler early childhood education classrooms. First, this study explored relationships between teachers' beliefs about toddlers and their emotions, teachers' knowledge about toddlers' development, and teachers' characteristics (such as education, experience, and ethnicity) predicting teachers' use of emotion language. Second, this study assessed associations between teachers' emotion language and toddlers' social emotional competence. Analyses controlled for program quality, child age, and child gender. Results suggest that aspects of teachers' beliefs about toddlers and their emotions, teachers' knowledge, and teachers' characteristics are predictive of teachers' emotion language. Toddlers in classrooms with teachers who used emotion minimizing were rated as exhibiting less social emotional competence in toddler classrooms. Implications regarding the connection between teachers' beliefs and knowledge to their practice, and the potential effects of teachers' emotion language on toddlers' social emotional functioning in classrooms are discussed.

PREDICTORS OF TEACHERS' EMOTION LANGUAGE AND ITS ASSOCIATION  
WITH TODDLERS' SOCIAL EMOTIONAL COMPETENCE

by

Elizabeth K. King

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Approved by

Karen La Paro  
Committee Chair

APPROVAL PAGE

This dissertation written by Elizabeth K. King has been approved by the following committee of the Faculty of the Graduate School at The University of North Carolina at Greensboro.

|                   |                        |
|-------------------|------------------------|
| Committee Chair   | <u>Karen La Paro</u>   |
| Committee Members | <u>Deborah Cassidy</u> |
|                   | <u>Linda Hestenes</u>  |
|                   | <u>Esther Leerkes</u>  |

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## CHAPTER I

### INTRODUCTION

The environments in which toddlers learn and develop greatly influence how toddlers understand and navigate their worlds. The early childhood education classroom environment is of great importance to toddlers' development, as it is estimated that young children enrolled in programs spend an average of 36 hours per week in early care and education contexts (Child Care Aware, 2014). Research indicates that early childhood educators have significant influence on classroom environments and young children's learning and growth within classroom contexts (Burchinal, Cryer, Clifford, & Howes, 2002; Hamre & Pianta, 2001); therefore, teachers' interactions with toddlers have significant implications for toddlers' development. One specific component of teachers' interactions with toddlers that may facilitate toddlers' social emotional development in particular is the emotion language that teachers use within teacher–toddler interactions. Teachers' emotion language consists of teachers' labeling emotions, explaining emotions, and questioning about emotions (Brownell, Svetlova, Anderson, Nichols, & Drummond, 2013). Also, teachers may react to toddlers' emotional expressions by encouraging emotions or dismissing emotional expressions; therefore, in addition to exploring teachers' emotion labeling, explaining, and questioning, the current study evaluates teachers' use of language to minimize toddlers' emotions (e.g. "You're okay, be quiet"). The current study examines the association between teachers' emotion language in

teacher–toddler interactions, and toddlers’ social emotional competence, and examines potential precursors to teachers’ emotion language, including teachers’ beliefs, knowledge, and characteristics. The beliefs that teachers hold and the knowledge teachers possess regarding children and their development are suggested to affect teachers’ practices in early childhood education classrooms (Hamre et al., 2012; Maxwell, McWilliam, Hemmeter, Ault, & Schuster, 2001; McMullen & Alat, 2002; Scott-Little, La Paro, & Weisner, 2006; Zinsser, Shewark, Denham, & Curby, 2014). Because teachers’ language is a component of teachers’ teaching practices, it is possible that teachers’ beliefs and knowledge may relate to their language. Thus, teachers’ beliefs about toddlers and their emotions, and their knowledge about toddlers’ development may influence the ways that teachers use language to discuss and address emotions with toddlers in classroom contexts. Teachers’ emotion language within teacher–toddler interactions also may be influenced by teachers’ characteristics such as teachers’ education, experience, and racial identity, as teachers’ education and experience impact teachers’ language practices in preschool classrooms (Gerde & Powell, 2009; Wen, Elicker, & McMullen, 2011), and racial identity has been suggested to influence the way parents discuss emotions with their infants (Garrett-Peters, Mills-Koonce, Adkins, Vernon-Feagans, & Cox, 2008). Though these teacher and parenting studies did not assess toddler classrooms specifically, it stands to reason that these teachers’ characteristics may relate to their practices in similar ways across classroom age group.

In considering teacher–child interactions and children’s social emotional competence, it is important to note the specific age group of young children to whom

“toddlers” refer. A general frame of reference defines toddlerhood as the beginning of the second year of life until the end of the third year of life (Brownell & Kopp, 2007). Within this period of development, toddlers transition from relying solely on caregivers for emotion regulation (a component of social emotional competence) to being more able to self-regulate (Thompson & Goodvin, 2007); therefore, toddlerhood is an important period of development during which to examine teachers’ practices that may influence toddlers’ social emotional competence. Because toddlers are consistently receiving information from their environments about how to manage their social emotional worlds, and toddlers rely on caregivers for assistance in emotional regulation (Sameroff, 2010) and learning about emotions (Denham, 2005), teachers’ language regarding emotions may influence toddlers’ social emotional competence (Lally, 2009). Furthermore, teachers’ language about emotions (both general discussion of emotions as well as language specifically regarding toddlers’ emotions in the classroom) may affect how toddlers view social interactions and emotional responses; thus, the specific language practices teachers use to discuss toddlers’ emotions warrants examination.

Toddlers’ social emotional competence is comprised of a number of skills needed to navigate the social emotional expectations of their worlds; specifically, toddlers need the ability to understand that they have emotions and others have emotions (and these emotions differ between self and other), there are causes to emotions, and emotions can be expressed in appropriate ways in order to attain relevant social goals. Development of social emotional competence within early childhood classrooms in toddlerhood allows for toddlers to develop these skills in the presence of a caregiver, which builds the

foundation for later social and emotional functioning with others (Kopp, 1989; Waters & Sroufe, 1983). Social emotional competence in early childhood leads to a host of positive developmental outcomes, such as peer acceptance and friendships (Ladd, Herald, & Kochel, 2006), school adjustment (Denham et al., 2012), and academic learning (Pianta, 1999). It is important for early childhood educators to facilitate toddlers' social emotional competence early in life, as toddlers who lack adequate social and emotional skills are at risk for developing social-emotional problems (Hay, Castle, Stimson, & Davies, 1995) and may not adequately meet the social and emotional demands of their environment (Cicchetti, 1993).

The current study draws from Vygotsky's social development theory and sociocultural approach to examine how teachers' emotion language relates to toddlers' social emotional competence in early childhood education classrooms, and how teachers' beliefs, knowledge, and characteristics may influence teachers' emotion language. The current study is compelling to the field of early childhood education because it examines the association between specific teaching behaviors, namely teachers' emotion language, and toddlers' social emotional competence and it explores predictors of teachers' emotion language in toddler classrooms.

## CHAPTER II

### THEORY

Vygotsky's social development theory and sociocultural approach focuses on the link between language and thinking, thus this theory helps to explicate how teachers' internal thoughts regarding emotions may affect the way teachers use language as a tool to discuss emotions with children. Vygotsky's theoretical position also informs the current study by describing the mechanisms through which teachers' emotion language may be associated with toddlers' mental representations of emotional concepts, which serve to organize the way toddlers understand and maneuver their social emotional worlds. Through toddlerhood, young children gain a variety of developmental skills, including (but not limited to) emotion understanding (Thompson & Goodvin, 2007) and language skills (Akhtar & Martinez-Sussmann, 2007; Shatz, 2007). It is the intersection of these skills that makes toddlerhood an important developmental period to learn the words associated with emotions, which can facilitate toddlers' understanding of their own and others' mental states (Brownell & Kopp, 2007) thereby enhancing children's social and emotional understanding (Nichols, Svetlova, & Brownell, 2010; Thompson & Lagattuta, 2006). Toddlers' increased social and emotional understanding, potentially facilitated by a teachers' verbalization of emotions, can then help a toddler to complete socially and emotionally competent interactions with peers in early childhood education classrooms (Denham, 2005; Denham, 2006; Denham, Bassett, & Zinsser, 2012).

Vygotsky's theory emphasizes the link between the emotion language spoken to children and their subsequent understanding of emotional concepts and eventual social emotional competence.

### *Teachers' Emotion Language and Toddlers' Social Emotional Competence*

Vygotsky describes child development as the connection of external words to internal thoughts through exposure to speech in social interactions (Vygotsky, 1987). Language spoken to children is thus an important component of socialization. According to Vygotsky, "internal speech and reflective thought arise from the interactions between the child and persons in her environment" (Vygotsky, 1978, p. 90). Social development theory thereby argues that development occurs when external interactions are internalized to consequently organize internal thoughts (Vygotsky, 1978, 1987). The verbal language within teacher-toddler interactions therefore serve as social contexts within which toddlers develop. Applying Vygotsky's theoretical position to the development of children's social emotional competence, teachers' verbalization of emotions facilitates toddlers' internalization of the words associated with emotions and potential causes of emotions, which then helps to organize toddlers' thoughts about emotions. Toddlers' exposure to emotion language may therefore facilitate toddlers' understanding of emotions, and toddlers' hearing and internalization of emotion language can help to organize the way toddlers view their worlds, thereby affecting the way they navigate social emotional situations.

Teachers' facilitation of toddlers' social emotional competence can be supported within toddlers' zone of proximal development, as this is one mechanism through which

teachers have the opportunity to facilitate child development (Vygotsky, 1978). The zone of proximal development is the conceptualization of a process of maturation through which children develop higher psychological functioning through relationships and interactions with adults who have already mastered such higher psychological functions (Vygotsky, 1978). Teachers can promote child social emotional development within children's zone of proximal development through developmentally appropriate communication about emotions within teacher-child interactions. This communication within adult-child interactions is crucial for children's mental development, as children learn through their interactions with adults that propel higher level functioning (Gredler, 2012). Because adult-child interactions influence children's mental development, it stands to reason that teachers' language in their interactions with children guide children's thoughts, and thus guide the development of children's social emotional competence. Emotion language within teacher-toddler interactions may potentially serve to organize toddlers' thoughts about appropriate emotion expression, emotion regulation strategies, and social interactions. The current study therefore hypothesizes that teachers' emotion language (labeling, questioning, and explaining) will be positively related to toddlers' social emotional competence. The current study also hypothesizes that teachers' use of language to minimize toddlers' emotions will be negatively related to toddlers' social emotional competence, as minimization of emotions may not allow for toddlers to develop an understanding of emotions and their meanings. Additionally, the current study hypothesizes that teachers' emotion language within teacher-toddler interactions may be influenced by the beliefs and thoughts teachers have about toddlers

and their emotions, as well as by other teacher characteristics, as underscored by Vygotsky's argument of the link between language and thinking.

### *Teachers' Beliefs and Teachers' Emotion Language*

Multiple factors may affect if and how teachers use emotion language in their interactions with toddlers. Social development theory identifies three factors that affect social interactions that include language: individual factors, interpersonal relationships, and cultural-historical influences (Tudge & Scrimsher, 2003). Individual factors that may influence teachers' use of emotion language include teachers' education and teaching experience; although findings are mixed, several research studies suggests these individual factors are associated with teaching behaviors (Early et al., 2007; Hestenes et al., 2015; Wen et al., 2011). The interpersonal relationships relevant to the current study are the teacher–child relationships; though the current study does not directly assess teacher–child relationships, it is important to note that these relationships may affect teachers' behaviors in classrooms. Vygotsky discusses cultural-historical influences as socializers of thought and behavior through the use of language as a meaningful tool (Ghassemzadeh, Posner, & Rothbart, 2013). Language, according to Vygotsky, is therefore meaningful because of the sociocultural meaning coded within words (Damianova & Sullivan, 2011). Thus, cultural philosophies and beliefs about emotions and emotional expression will influence how teachers discuss emotions in their classroom; these discussions will reflect societal ideas regarding emotions, classroom-level cultural values (e.g. a classroom-wide focus on respecting others' emotions), and individual beliefs about emotions (reflecting the cultures and backgrounds of both teacher

and child). Though the current study does not specifically examine the effects of teachers' or children's specific cultural beliefs, the current study assesses teachers' beliefs about emotions and beliefs about how children learn and how children should act (which may or may not be influenced by their cultural backgrounds). This study also explores teachers' racial identity as a cultural-historical predictor of teachers' emotion language. Racial identity is defined as "a sense of group or collective identity based on one's perception that he or she shares a common heritage with a particular racial group" (Helms, 1993, p. 3). Though racial identity is a social construct and is not genetically or biologically defined, one's racial identity has implications for one's socialization practices and identity development (Chavez & Guido-DiBrito, 1999). Racial identity can also, unfortunately, be a source for potential racial discrimination in a racialized society with historically marginalized groups (Tatum, 1992). Though not the only factor that relates to differences in emotion language, research in parenting suggests different emotion socialization practices for parents who endure racial discrimination compared to parents who do not encounter such marginalization (Odom, Garrett-Peters, & Vernon-Feagans, 2014). This difference in parents' emotion language based on racial identity may be due to cultural-historic influences of living in a racialized society where race has implications for discrimination. Although racial discrimination is not the only potential predictor of differences in emotion language, this is one potential component that has been argued in the literature to influence emotion language. Though it is not assumed that all parents and/or teachers experience racial discrimination if they identify with a

historically marginalized group, this may be an important explanation in the potential differences in emotion language based on racial identity.

The current study therefore hypothesizes that teachers' beliefs about emotions and teachers' characteristics (including teachers' education, experience, and racial identity) will be related to teachers' emotion language. Although Vygotsky's theoretical position describes a breadth of concepts not only focused on emotions, this theory can be used to explain how teachers' thoughts or beliefs about emotions can influence the linguistic tools, or words, teachers use to symbolize emotions when interacting with young children. Because language organizes human thought, teachers' internal beliefs and understanding about emotions may affect if and how teachers choose to verbalize emotions in their external worlds.

Teachers' use of language within classroom communication is particularly significant to young children's development because teacher-child interactions are contexts in which teachers use external words as symbols to represent internal feelings and mental states. Vygotsky argues that there is a significant link between language and thinking, because the external speech children hear is translated into children's internal speech, and internal speech then organizes thoughts (Vygotsky, 1978) and regulates mental processes (Ghassemzadeh et al., 2013). This theoretical position underscores the potential effects of teachers' emotion language within teacher-child interactions on toddlers' social emotional competence, as toddlers will internalize teachers' language to organize their own emotional thoughts, which serve to inform their social emotional competencies in their social worlds. At the onset of toddlerhood, young children have the

ability to recognize spoken words (Swingley & Aslin, 2000; Werker & Yeung, 2005), and throughout toddlerhood young children experience a rapid increase of vocabulary development (Mitchell & McMurray, 2009); thus, this period of development is an opportunity to provide toddlers the linguistic tools to ascribe meaning to emotions. The ability to name emotion words thus perpetuates emotion knowledge (i.e. the ability to interpret emotions) (Denham, 2005; Denham et al., 2012), which leads to more competent social emotional behaviors (Denham, 2006). Furthermore, Vygotsky's theory elucidates that teachers' individual characteristics, including beliefs, knowledge, and identity, may affect the language teachers use to verbalize emotions.

### CHAPTER III

#### LITERATURE REVIEW

Toddlers learn to navigate the world through social and emotional interactions with their caregivers (Kopp, 1989). Through teacher–child interactions occurring in early childhood classrooms, teachers and young children develop teacher–child relationships, and teachers influence how children view learning and view themselves in relation to others (Lally, 2009). Long-term effects of early teacher–child relationships are evident in children’s later academic and behavior outcomes through eighth grade (Hamre & Pianta, 2001). High quality child care environments characterized by high quality teacher–child interactions and responsive stimulation are well-documented to predict later social emotional competence and decreased behavior problems (National Institute of Child Health and Development (NICHD) Early Child Care Research Network, 2003), as well as better pre-academic skills and language performance (Halle, Anderson, Blasberg, Chrisler, & Simkin, 2011; NICHD Early Child Care Research Network, 2002).

A synthesis of existing research on infant and toddler care in early childhood education classrooms indicates that teachers’ practices consisting of sensitive and responsive stimulation within teacher–child interactions are associated with infant and toddler competencies in social-emotional, cognitive, and language skills, even after accounting for family and child effects (Halle et al., 2011). More specifically related to children’s social emotional development, the quality of the classroom environment is

suggested to be associated with young children's social emotional competence (Brophy-Herb, Lee, Nievar, & Stollak, 2007; Morris, Denham, Bassett, & Curby, 2013).

Toddlers' social emotional competence develops throughout toddlerhood as other developmental domains progress; thus, toddlerhood is an important time for young children to learn the words ascribed to emotions through teachers' emotion language.

Through the progression of infancy to prekindergarten age, children gain vital emotion regulation and emotion understanding skills (Thompson & Goodvin, 2007), develop theory of mind and the ability to understand others' mental states (Brownell & Kopp, 2007) which enhances children's social understanding (Nichols et al., 2010; Thompson & Lagattuta, 2006). During this time, children also advance their self-awareness and increase their independence (Brownell & Kopp, 2007; Kopp 1989), and enhance their language skills (Akhtar & Martinez-Sussmann, 2007; Shatz, 2007). Each of these developmental milestones help to facilitate important expansions in toddlers' social emotional competence. Because of toddlers' burgeoning awareness of their own and others' emotional states, and their increased language skills, toddlerhood is an important time for teachers to use emotion language to ascribe meaning to emotion states, thus potentially facilitating toddlers' understanding of their own and others' emotions, and assisting in toddlers' social emotional competence.

The age group of children in classrooms may guide how teachers' beliefs, knowledge, and other characteristics work together to influence teacher practices. Teachers working in classrooms of toddlers specifically require the beliefs, knowledge, and experience to facilitate toddlers' social emotional development and their burgeoning

self-awareness and independence. Though it stands to reason that the ways in which teachers' beliefs interact with their knowledge and characteristics to inform their practices holds throughout the teaching of any age group in early childhood, it is important to note that teachers of toddlers may require specific belief systems, knowledge, and skill in practices to effectively teach toddlers. For example, if a teacher believes toddlers to be completely self-sufficient or lacks knowledge about why and how toddlers express emotions, the connection between that teacher's beliefs and practices may make for a potentially nonsupportive experience for toddlers in that classroom. Teachers of toddlers must have the knowledge to understand the wide range of emotions that toddlers feel (Brophy-Herb et al., 2009) and must be able to sensitively attune to their emotional needs.

Because teachers' practices in their classrooms have implications for toddlers' social emotional competence (Brophy-Herb et al., 2007; Denham, 2005), precursors to teachers' practices, such as teachers' beliefs, knowledge, and characteristics, must be examined in an effort to assess what drives teachers' practices. Additionally, more specific teacher practices, including teachers' emotion language within teacher-child interactions, should be explored in order to understand distinct teacher behaviors that facilitate toddlers' social emotional competence. In the section that follows, I first define teachers' emotion language and describe its role in toddler classrooms. Second, I discuss how teachers' beliefs, knowledge, and characteristics may relate to teachers' emotion language. Third, I define toddlers' social emotional competence and explore how teachers' emotion language may facilitate toddlers' social emotional competence.

### *Defining Teachers' Emotion Language*

The verbal language that teachers use within teacher–child interactions in classrooms has been directly associated with ratings of teachers' sensitivity and responsiveness to children (Degotardi & Sweller, 2012; Gest, Holland-Coviello, Welsh, Eicher-Catt, & Gill, 2006), and teachers' sensitivity has been demonstrated to be related to positive academic outcomes for children (Burchinal et al., 2008). Teachers' verbal acknowledgement of toddlers' emotions characterizes an emotion socialization practice called a *contingent reaction* (a behavioral reaction to a toddler's emotion that either encourages or discourages the expression of the emotion) to toddlers' emotional expressiveness (Denham, Bassett, & Wyatt, 2007). Within teacher–child interactions, teachers can use verbal cues to help toddlers express emotions appropriately through play and can scaffold toddlers to learn to reason about their emotions (Greenspan, 1990). Classrooms are contexts in which teachers have the opportunity to facilitate children's labeling of emotion states, which help children to assign words to describe their feelings (Pianta, 1999). In addition to specifically addressing toddlers' experience of emotions in the moment, teachers can also use emotion language to teach children about emotions through discussion of the emotions of others. For example, teachers can use book reading as an opportunity to label and describe emotions; even if the emotion language is used to describe emotions distal to the toddler, the child can learn the words associated with emotions. In sum, teachers can use emotion language as a direct response to toddlers' emotions as well as in more broad interactions about emotions; both are included in the current study. Helping children to label and understand emotion states

can be accomplished through teachers' emotion language within teacher–toddler interactions.

Teachers' emotion language has been defined to consist of teachers' labeling emotions, explaining emotions, and asking questions about emotions (Brownell et al., 2013). Emotion labeling is defined as the use of “nouns, verbs, adjectives, or adverbs naming emotional feelings or behaviors” (Brownell et al., 2013, p. 101). Teachers may tell a toddler that a peer “looks sad” during a peer interaction, or note that the dog in the story they are reading “feels angry”, for example. Teachers also can use emotion explaining techniques, which are “phrases or statements that explain or clarify the possible reason or cause for a particular emotion...” (Brownell et al., 2013, p. 101). This verbalization of emotion may occur, for example, if a teacher picks up a toddler who is expressing her emotions and says, “I think you might be feeling upset because your toy broke.” Teachers may also verbalize emotions in terms of a question by asking toddlers how they are feeling, as in “Are you feeling happy?” upon hearing a toddler giggle. Teachers react to toddlers' emotional expressions in a variety of supportive and unsupportive ways by encouraging emotions or dismissing emotional expressions; therefore, in addition to examining teachers' emotion labeling, explaining, and questioning, the current study evaluates teachers' use of language to minimize toddlers' emotions (e.g. “You're okay, be quiet” , “Shhh, stop crying”). Emotion minimization techniques distance oneself from a child's emotions and discourage children's expression of their emotions, which is characteristic of less sensitive caregiving when observed in parents (Gottman, 1997). Teachers' use of emotion minimization is also considered a

negative response that diminishes the seriousness of the child's emotions (Ahn & Stifter, 2006). It is important to note that emotion minimizing is not always detrimental to developmental outcomes; therefore, the current study seeks to understand more about the relationship between emotion minimizing language and toddlers' social emotional competence. The aforementioned examples of teachers' emotion language within teacher-toddler interactions illustrate the ways teachers can verbalize emotions, as emotion language provides teachers the opportunities to influence toddlers' social emotional competence. Additionally, examples of teachers' emotion minimizing language demonstrate how teachers can use language to discourage toddlers' emotions. Because teachers' use of emotion language may be an important practice in toddler classrooms, potential precursors to all types of teachers' emotion language, including teachers' beliefs, knowledge, and characteristics must be examined.

#### *The Role of Teachers' Beliefs, Knowledge, and Characteristics in Teachers' Emotion Language*

Teachers' beliefs and knowledge regarding toddlers and their emotions in classrooms may be related to teaching practices in classrooms, including the specific emotion language that teachers use in their interactions with toddlers. Teachers' characteristics, such as their education level, years of teaching experience, and racial identity may also influence teachers' emotion language in toddler classrooms.

*Teachers' Beliefs and Teachers' Emotion Language.* The beliefs that teachers hold about their teaching are personal, emotional, and unique to each teacher. Beliefs are not universal in their functioning; they are the intangible judgments that one makes based

primarily on knowledge, experiences (Pajares, 1992), and contexts (Fang, 1996). Thus, the relationship between teachers' beliefs and knowledge includes overlap of the two constructs as beliefs and knowledge interact to influence teachers' behavior. Teachers' beliefs are important concepts to consider when examining teachers' practices in early childhood education classrooms because research suggests teachers' beliefs directly affect teachers' observed classroom practices (Maxwell et al., 2001; Scott-Little et al., 2006; Vartuli, 1999). One such study indicates that 11% of the variance in teachers' observed use of developmentally appropriate classroom practices is accounted for by teachers' reported beliefs about developmentally appropriate practices (Maxwell et al., 2001). Although teachers' beliefs may not account for all of teachers' behaviors in the classroom, they constitute an integral piece of the puzzle in examining teacher practices. Because teachers' beliefs are instrumental in guiding teachers' practices in early childhood education classrooms, the field of early childhood education must examine how beliefs are related to practice. In order to enhance teachers' practices in early childhood classrooms through both in-service and pre-service teachers' professional development, the field requires a greater understanding of the influence of teachers' beliefs about specific areas of children's development on their practices. The current study will examine the association between *two* types of teachers' beliefs and teachers' emotion language. One type of belief assessed in the current study is specific to toddlers' emotions (teachers' beliefs about toddlers' emotions) and the other type of belief examines teachers' beliefs about children more generally (teachers' democratic compared to traditional beliefs about children).

*Teachers' beliefs about toddlers' emotions.* Teachers' beliefs about specific facets of child development may influence their practices used to support such development; therefore, the current study will examine teachers' beliefs about toddlers' emotions as a predictor of teachers' emotion language. Teachers' beliefs about the importance of children's social and emotional development and social emotional learning in preschool classrooms are suggested to influence teachers' observed emotional supportiveness. Research suggests that more emotionally supportive teachers believe social emotional learning to be important for children's lives and therefore use practices that facilitate children's social and emotional learning (Zinsser et al., 2014). In a study of 32 preschool teachers, teachers who reported beliefs about the value of emotions and social emotional learning were observed to be more highly emotionally supportive to children, indicating the influence of beliefs on teachers' behaviors in classrooms.

Research examining parents' beliefs about toddlers' emotions suggests the existence of seven main components of beliefs about young children's emotions. These components include Cost of Positivity, Value of Anger, Manipulation, Control, Knowledge, Autonomy, and Stability (Halberstadt et al., 2013). The Cost of Positivity subscale assesses the evaluation of the usefulness of positivity for young children. Teachers who believe that emotional positivity is harmful may be more likely to use emotion minimizing language to diminish toddlers' feelings of happiness. The Value of Anger subscale assesses the evaluation of the usefulness of anger for young children. Teachers who believe anger to be a positive and motivational feeling may use language that either promotes or, at the very least, does not attempt to reduce toddlers' feelings of

anger. The Manipulation subscale evaluates the beliefs that children's emotions are used for manipulative purposes. It is possible that teachers who believe toddlers' emotions are used only to get attention may use less emotion labeling, questioning, and explaining, and more emotion minimizing language. Parents who score more highly on the Manipulation subscale are suggested to be more invalidating of their children's feelings (Halberstadt et al., 2013). The Control subscale assesses the belief that young children can control their emotions and their expressions of emotions. Parents who believe children can control their emotions are less supportive of children's negative emotions (Halberstadt et al., 2013); therefore, teachers who hold these beliefs may use less emotion labeling, questioning, and explaining and more emotion minimizing language. The Knowledge subscale assesses parents' beliefs that they should know what their child is feeling. Parents' scores on this subscale are related positively to their supportiveness of children's emotions in parent-child interactions (Halberstadt et al., 2013). Thus, teachers' scores on this subscale may relate to their use of emotion labeling, questioning, and explaining. The Autonomy subscale assesses beliefs that young children do not need help in managing their emotions. Parents scoring higher on this measure exhibit less supportive behaviors regarding their children's emotions (Halberstadt et al., 2013), which may suggest that teachers scoring higher on this measure may use more emotion minimizing language. Finally, the Stability subscale assesses the beliefs that young children's emotional styles stay the same over time. Because this subscale assesses the beliefs that what occurs in response to young children does not change their emotionality, parents who score higher on the Stability subscale exhibit less supportive behaviors regarding

children's emotions (Halberstadt et al., 2013); thus, teachers' scores on this subscale may relate to their emotion minimizing language. The current study will draw from these components of beliefs about toddlers' emotions and the associations between teachers' beliefs and their practices and examine the associations between teachers' beliefs about toddlers' emotions and teachers' emotion language.

*Teachers' beliefs about children in general.* Additionally, research suggests that classrooms with teachers who hold more child-centered beliefs are rated higher in quality when compared to classrooms with teachers who hold less child-centered beliefs (Pianta et al., 2005). Progressive, democratic beliefs about children are characterized by beliefs such as "Children should be allowed to disagree with their parents if they feel their own ideas are better." Traditional, authoritarian beliefs about children are characterized by beliefs such as "Children should always obey the teachers." Early childhood teachers who hold more child-centered beliefs (also described here as more progressive, democratic beliefs) are also suggested to provide more positive caregiving and higher quality caregiving environments in child care homes (Clarke-Stewart, Vandell, Burchinal, O'Brien, & McCartney, 2002; Pianta et al., 2005). Thus, the current study examines if teachers' beliefs about children in general (including progressive, democratic beliefs about children compared to teachers' traditional, authoritarian beliefs about children) relate to teachers' emotion language used with toddlers in early childhood education classrooms.

Teachers' beliefs about toddlers' emotions, and teachers' beliefs about children (democratic compared to traditional beliefs), may be related to teachers' discussion of

emotions, as research suggests that teachers' beliefs about children affect their teaching practices in early childhood education classrooms (Hamre et al., 2012; Hollingsworth & Winter, 2013; Maxwell et al., 2001; Scott-Little et al., 2006; Stipek & Byler, 1997; Vartuli, 1999). Given findings in previous research (Pianta et al., 2005; Zinsser et al., 2014), the current study hypothesizes that both teachers' beliefs about toddlers' emotions as well as teachers' democratic compared to traditional beliefs about children will be related to teachers' emotion language. An additional variable that may influence teachers' emotion language, and is explored in the current study, is teachers' knowledge about toddlers' development.

*Teachers' Knowledge and Teachers' Emotion Language.* The complex interplay of factors that influence the association between teachers' beliefs and teachers' teaching practices relies on a multifaceted, messy, and sometimes overlapping system comprising of teachers' beliefs about children, as well as their knowledge about child development. It is important to note that teachers' beliefs and knowledge are connected and interrelated, yet are discussed as separate constructs (Pajares, 1992); for example, teachers may *know* that children learn through play, but teachers may have different *beliefs* about the importance of this concept and how to implement this knowledge. The knowledge teachers hold regarding their practices in early childhood classrooms differs from the beliefs teachers embrace, as knowledge is primarily based on fact, and is unemotional and more universal than teachers' beliefs (Pajares, 1992). It is important to note that though the current study measures beliefs and knowledge as separate constructs,

teachers' beliefs and knowledge may be related to one another as they inform teachers' practices.

Recent research assessing pre-service teachers' knowledge of infant/toddler development (via the Knowledge of Infant Development Inventory; KIDI) has provided evidence of the importance of knowledge of infant/toddler development as a mediational variable in the relationship between pre-service teachers' attachment security and their observed supportiveness in interactions with young children (Vallotton et al., 2015). Another study of 440 early childhood teachers suggests that the knowledge teachers have about effective teacher-child interactions influences teachers' teaching practices in their classrooms in terms of their intentional use of effective teaching skills (Hamre et al., 2012).

Teachers note that they frequently draw upon the knowledge they gained through professional development opportunities, both pre-service and in-service, to inform their practice (Gholami & Husu, 2010). Specific coursework taken in completion of undergraduate degrees in early childhood education have been touted as integral sources of knowledge and the construction of teachers' beliefs about developmentally appropriate practice and child-initiated learning (McMullen & Alat, 2002). The beliefs and practices of 34 teachers were examined after 19 of the 34 teachers completed 20 hours of community college coursework through the Teacher Education and Compensation Helps (TEACH) program. Teachers who had received the 20 hours of coursework exhibited more developmentally appropriate scores on the Teacher Beliefs Scale (TBS), which is a questionnaire that assesses teachers' beliefs about the importance of specific classroom

practices, and demonstrated gains in their Early Childhood Environment Rating Scale (ECERS) or Infant/Toddler Environment Rating Scale (ITERS) scores. Teachers in the college course group also had higher final scores on the ECERS or ITERS and more appropriate scores on the TBS than the control group of students at the close of the course (Cassidy, Buell, Pugh-Hoese, & Russell, 1995). The research regarding pre-service and in-service teachers' knowledge indicates that teachers can improve upon their knowledge through coursework and other professional development opportunities. It is interesting to note, however, that many teachers do not receive specific instruction or experiences specifically related to toddlers and their development neither through 2- nor 4-year institutions of higher education (Buell, Hallam, Adams, & Wilson, 2000; Early & Winton, 2001). It is therefore important to understand how both teachers' beliefs and teachers' knowledge impact their teaching practices because, as both research and theory indicate, behaviors are enacted through the beliefs and knowledge that shape how teachers view their worlds (Hamre et al., 2012; Maxwell et al., 2001; Pajares, 1992; Scott-Little et al., 2006; Vartuli, 1999). Understanding more about how teachers' beliefs and knowledge affects their practices in toddler classrooms has implications for teachers' professional development.

Specific to language, teachers' knowledge about toddlers' development may be associated with teachers' emotion language with toddlers, as teachers use their knowledge to inform their practice (Gholami & Husu, 2010). Teachers' knowledge about toddlers' development across a variety of domains may serve to inform teachers on the developmentally appropriate ways to use language to verbalize emotions. For example, if

a teacher does not know that talking to toddlers influences their cognitive development, that teacher may be less likely to use emotion language in teacher–toddler interactions. The current study hypothesizes that teachers who are more knowledgeable about toddlers’ development will use more emotion labeling, questioning, and explaining, and less emotion minimizing language, than teachers who are less knowledgeable about toddlers’ development.

*Teachers’ Characteristics and Teachers’ Emotion Language.* Teachers’ characteristics such as teachers’ education, experience, and racial identity may also influence teachers’ emotion language during teacher–toddler interactions. First, the importance of early childhood teachers’ education level on classroom quality and child outcomes has been identified in previous research (Denny, Hallam, & Homer, 2012; Hestenes et al., 2015; Morris et al., 2013). A study examining characteristics of 740 toddler teachers suggests teachers’ education level is positively related to teachers’ emotional and cognitive support in teacher–toddler interactions as assessed by the Observational Record of the Caregiving Environment (Thomason & La Paro, 2013). As a specific example regarding teachers’ language, differences in teachers’ language practices during book-reading activities have been found across teachers’ education level (Gerde & Powell, 2009; Price, Bradley, & Smith, 2012); thus, teachers’ education may influence the specific language practices that teachers use language to discuss emotions, potentially because teachers have learned specific strategies through their education. The current study hypothesizes that teachers with higher levels of education will use more

emotion labeling, questioning, and explaining, and less emotion minimizing language, than teachers with less education.

Second, teachers' years of experience may also be associated with teachers' emotion language, as research has indicated differences in teachers' mental state talk (verbal speech that references internal states) by teachers' years of experience (King & La Paro, 2015). Teachers' experience is suggested to moderate the association between teachers' beliefs about teaching practices and teachers' observed practices; the relationship between teachers' beliefs endorsing teacher-directed learning and teachers' directive behavior is suggested to be stronger for teachers with more years of experience (Wen et al., 2011). This finding is interesting as it presents evidence that the longer teachers have been teaching, the more entrenched their beliefs may be and the more aligned their beliefs are to their practices. Though some studies have found no relationship between teachers' experience and teachers' language (Degotardi & Sweller, 2012), and other studies of teachers' language simply control for the effects of teachers' experience (Dickinson, Hofer, Barnes, & Grifenhagen, 2014) or do not assess the role of teachers' experience (Frampton, Perlman, & Jenkins, 2009), research has not yet addressed the possible association between teachers' years of experience and teachers' *emotion* language. Therefore, the current study evaluates the relationship between teachers' experience and teachers' emotion language. The current study hypothesizes that teachers with more years of experience will use more emotion labeling, questioning, and explaining, and less emotion minimizing, than teachers with less experience.

Third, teachers' racial identity may also influence how teachers discuss emotions with children. Vygotsky's social development theory and sociocultural approach suggests that teachers' racial identities may be related to how teachers have been socialized to discuss emotions (Damianova & Sullivan, 2011; Vygotsky, 1978). Although the role of teachers' racial identities in influencing teachers' emotion language has not been studied, research suggests that parents' racial identities may affect emotion socialization processes, which could affect how emotions are discussed (Matsumoto, 1993; Nelson, Leerkes, O'Brien, Calkins, & Marcovitch, 2012). A study of mothers' emotion language use with their 7-month-old children suggests that mothers who identify as African American use significantly more emotion language than mothers who identify as European American (Garrett-Peters et al., 2008). It is suggested that differences in parents' emotion language based on racial identity stem from the cultural-historic influences of living in a racialized society, as the emotion socialization practices of parents of color differ in order to prepare their young children for successful interactions in a world where race has implications for discrimination. Mothers' perception of racial discrimination is related to more use of emotion language with toddlers (aged 24 months), as greater emotional understanding and regulation may be adaptive for people of color that are often marginalized in order to facilitate constructive and positive interactions with individuals with more societal power (Odom et al., 2014). For teachers, differences in emotion language may be due to how teachers were socialized in their upbringing to discuss emotions based on one's racial background, and in concert with their racial socialization. Thus, differences in how much teachers employ emotion

language may be partially due to teachers' racial identities. The current study will examine differences in teachers' emotion language based on teachers' racial identities, and hypothesizes that teachers who identify with a racial identity often marginalized (i.e. African American and/or Black) will use more emotion labeling, questioning, and explaining, compared to teachers who identify with a racial group with more societal power (i.e. European American and/or White); it is hypothesized that teachers' emotion minimizing language will not differ by racial identity.

It is important to examine how teachers' beliefs, knowledge, and characteristics relate to their emotion language, and how their emotion language relates specifically to toddlers' social emotional competence, because toddler classrooms are unique environments that provide important opportunities for young children. Spoken language in the presence of children is an important component of facilitating foundations of social emotional competence (Eisenberg, Cumberland, & Spinrad, 1998; Kopp, 1989). Teachers' emotion language in early childhood education classrooms may be a mechanism through which to facilitate children's understanding of others' internal states. Teachers can use language as a way to understand children's affective states and promote children's affective development (Kostelnik, Soderman, & Whiren, 2011). Research suggests that early childhood educators who more often discuss children's cognitions through language are rated as more sensitive and stimulating teachers within teacher-child interactions (Degotardi & Sweller, 2012), and teachers who more often use language to discuss children's mental states are more positive in teacher-child interactions than teachers who do not discuss children's mental states (Frampton et al.,

2009). It is possible that connecting with children on a mental level through language and communication allows for the development of a deeper understanding of one another, thereby improving the teacher–child relationship, and supporting children’s social emotional competence. On the other hand, if a teacher uses language to minimize toddlers’ emotional expression, this may lead to an unresponsive teacher–child relationship or not allow toddlers to experiment in their expression of emotions, and may hinder toddlers’ social emotional competence or increase toddlers’ problem behaviors. The current study evaluates the relationship between teachers’ emotion language, including emotion labeling, questioning, explaining, and minimizing, and toddlers’ social emotional competence.

#### *Teachers’ Emotion Language and Toddlers’ Social Emotional Competence*

Competence is broadly defined as making use of “environmental and personal resources to achieve a good developmental outcome” (Waters & Sroufe, 1983, p. 2). A variety of developmental abilities are included within the broad umbrella term of social and emotional competence, as competence is the ability to use both internal and external resources to accomplish goals and social emotional competence is therefore both an intra-personal and inter-personal functional domain (Brownell & Kopp, 2007). Social and emotional competence have been viewed both as separate constructs and as constitutionally intertwined constructs. Both frames of thinking regarding social and emotional competence have produced important research and theoretical perspectives to further define social and emotional competence and allow for a synthesis of the two definitions; therefore, I argue that social and emotional competence are inseparable

constructs. Each is discussed below, and a synthesis of the definitions is presented to define social emotional competence.

Social competence, when researchers have defined it as its own construct, is described as a set of skills necessary to attain relevant social goals (Rose-Krasnor, 1997). Another definition of social competence describes the construct as “the development of social-cognitive skills and knowledge, including the capacity for emotional control, to mediate behavioral performance in specific contexts, which in turn are judged by the self and others...” (Yeates & Selman, 1989, p. 66). These definitions emphasize that social competence is not simply a within-child characteristic (Rose-Krasnor, 1997) as much as it is a measurement of one’s ability to engage in successful social interactions with others in their social contexts. Thus, an important concept in the discussion of social competence is argument that social competence requires a degree of effectiveness in social interactions (Fabes, Gaertner, & Popp, 2006; Rose-Krasnor, 1997). Effectiveness in social interactions is often conceptualized as outcome measures such as prosocial behavior (Brownell, 2013; Brownell, Iesue, Nichols, & Svetlova, 2013; Hay & Cook, 2007), and the understanding of others’ internal states (Svetlova, Nichols, & Brownell, 2010). It is important to note that using only one skill to discuss the entirety of social competence as a whole is not appropriate to the construct (Rose-Krasnor, 1997), though assessments of specific skills helps to examine effective behaviors indicative of social competence. There are argued to be a variety of within-child predictors of social competence, including temperament, socio-cognitive skills, communication skills (Fabes et al., 2006), neurological development, and emotional competence (Odom, McConnell,

& Brown, 2008). Additionally, characteristics in a child's environment also affect children's social competence, such as socialization processes, peer interactions, classrooms and teachers, early intervention, and culture (Odom et al., 2008). Though these internal and external influences may affect young children's social competence, the examination of these predictors is beyond the scope of the current study.

Emotional competence as its own construct is conceptualized to include one's ability to express and experience emotions, understand emotions of self and other, and regulate emotions (Denham et al., 2007; Eisenberg et al., 1998). These defined emotional characteristics, such as emotion regulation and emotion knowledge, are argued to shape social abilities (Denham, 2006; Thompson & Goodvin, 2007). The ability to understand that others react differently to emotions develops throughout young childhood and facilitates a sense of self and self-consciousness (Thompson & Lagattuta, 2006). Emotional competence can be facilitated in toddlers within early childhood education classrooms, as teachers act as important socializers in the lives of young children through their management of emotion-laden situations and specific teaching about emotions (Denham et al., 2012).

A synthesis of the definitions of both social and emotional competence reveals the cyclical nature of both social and emotion processes within both definitions. Social *and* emotional competence are therefore considered in the current study as inseparable constructs because children's social development has an inherently emotional component, as children must learn to express and regulate their emotions to successfully engage in social interactions, and children's emotional development thus relies on learning through

interactions with social others. Moreover, both a child's views as well as other's views of what is deemed a "successful" or effective interaction are important in the development of social emotional competence (Rose-Krasnor & Denham, 2009). An integration of research on toddlers' social emotional competence reveals that toddlers' social emotional competence is comprised of the skills needed to navigate the developmentally appropriate expectations of their worlds; specifically, toddlers need the ability to understand that they have emotions and others have emotions (and these emotions differ between self and other), there are causes to emotions, and emotions can be expressed in appropriate ways in order to attain relevant social goals. These abilities may ebb and flow as toddlers master them, and they may change and become more complex throughout toddlerhood, as this age range is the relatively broad period of time between infancy and preschool-age. The current study therefore controls for toddlers' age in the relationship between teachers' emotion language and toddlers' social emotional competence. In research regarding toddlers' social emotional competence, two subscales of social emotional competence have been suggested, including a competence scale and a problem behaviors scale (Briggs-Gowan & Carter, 2006). The current study will examine toddlers' competence and problem behaviors as separate facets of toddlers' social emotional competence.

Longitudinal study of preschoolers suggests that emotion knowledge in preschool predicts school adjustment in kindergarten (Denham et al., 2012), indicating that facets of social and emotional competence orchestrate later competencies across developmental domains. It stands to reason that social emotional competence at earlier developmental

stages is equally, if not more, influential in affecting children's developmental trajectories. Both theory and research support the importance of early childhood education and care in the facilitation of toddlers' social emotional competence. Research has examined the potential socialization role of teachers within early childhood classroom contexts in the development of social emotional competence (Ahn, 2005; Denham et al., 2007). It is important to examine teachers' roles in supporting toddlers' social emotional competence because toddlers rely greatly on caregivers for emotional regulation (Sameroff, 2010), consequently teachers' emotional support in early care and education settings are vital to the development of toddlers' social emotional competence (Lally, 2009). Toddlers' experience of emotions in early childhood classrooms affects concurrent behavior in classrooms as well as later behavior and development because social emotional experiences in toddlerhood form children's growing understanding of how emotions develop and inform toddlers' achievement of social goals (Denham, 2005). Toddlers develop within emotion-laden social interactions (Brownell & Kopp, 2007), and such interactions occur frequently within teacher-toddler and toddler-toddler interactions in early childhood classrooms. Early childhood education and care settings thus act as microsystems for toddlers' growth in competencies, as interactions between teachers and peers are vital processes for social and emotional development (Phillips, McCartney, & Sussman, 2006). Day-to-day teacher-child interactions act as systems that develop within classroom contexts, and are argued to regulate child behavior in classrooms and affect children's cognitive and emotional skills (Pianta, 1999). Positive emotional climates within classroom contexts help emotions to be accessible to young children

(Denham, 2005), thus allowing teachers to guide toddlers through experiencing and expressing emotions in a social context. A positive classroom emotional climate is associated with preschoolers' social competence (Brophy-Herb et al., 2007), and emotion knowledge and emotional behavior (Morris et al., 2013).

Toddlers' social emotional competence develops not only from toddlers' internal skills and external environmental climates (i.e. positive classroom climates), but also from social emotional interactions and specific conversations about both their own and others' mental states (Hughes & Dunn, 2007). Teachers' verbal acknowledgement of toddlers' emotions represents an emotion socialization practice called a contingent reaction to emotional expressiveness (Denham et al., 2007; Denham et al., 2012). There is a significant link between the language toddlers hear and use and their social emotional competencies in classrooms, because "...a toddler becomes a person as he or she builds the skills of language, self-reflection, and internal-state knowledge by continually exercising them in mutually interactive ways within a language community" (Shatz, 2007, p. 243). Research with parents and their children suggests that parents' elicitation of toddlers' emotion language predicts toddlers' sharing and empathetic helping (Brownell et al., 2013), suggesting toddlers' abilities to assign labels to emotions relates to their social behaviors. Parenting research also suggests that mothers' emotion language predicts children's social emotional competence (Denham, 1993), and mothers' explanations of emotions predicts children's emotion understanding, which is a component of social emotional competence (Denham, Zoller, & Couchoud, 1994). There is also research that supports the argument that teaching toddlers emotion labels through

gestures and signing, even at early ages before language production, can facilitate toddlers' emotion knowledge, self-regulation, and caregivers' (both teachers and mothers) ability to respond to children (Vallotton, 2009, 2011, 2012).

Although several studies have examined the overall quality of the classroom environment and young children's social emotional competence (Brophy-Herb et al., 2007; Morris et al., 2013), no studies to date have directly examined the association between teachers' emotion language and toddlers' social emotional competence. Given the complexity of teacher-child interactions and the importance of children's social emotional competence, this research contributes to knowledge of specific language components within teacher-toddler interactions that are associated with toddlers' social emotional competence. Moreover, research in the field of early childhood education has yet to identify the predictors of teachers' emotion language. The current study will be one of the first to examine potential precursors to teachers' emotion language in teacher-toddler interactions, including teachers' beliefs about toddlers and their emotions, teachers' knowledge of toddler development, and teachers' characteristics, and to assess the association between teachers' emotion language and toddlers' social emotional competence.

## CHAPTER IV

### THE CURRENT STUDY

The current study has two main goals: to test predictors of early childhood teachers' verbal expression of emotion language, and to examine the association between types of teachers' emotion language and toddlers' social emotional competence. The first goal of this study is to test models of predictors of teachers' verbal expression of emotion language within naturally occurring teacher–toddler interactions. The first models tested for the first goal include teachers' a) beliefs about toddlers' emotions, b) democratic and traditional beliefs about children, and c) knowledge about toddlers' development as predictors of each type of teachers' emotion language (labeling, questioning, explaining, and minimizing) in toddler classrooms. The second models tested for the first goal include teachers' characteristics as predictors of each type of teachers' emotion language, including teachers' a) education, b) experience, and c) racial identity. Because research has shown that child gender can predict children's emotion knowledge scores (a foundation of social emotional competence), and child age can moderate the effects of classroom quality on children's emotion knowledge, all models controlled for mean child gender and age, as these characteristics may affect toddlers' social emotional competence or teachers' emotion language (Morris et al., 2013). Additionally, program-level quality rating was included in each model as a control variable, as program quality includes assessments of teachers' education and teacher–child interactions within the program,

and therefore may affect the variables of interest. Separate models were run for each emotion language type as dependent variables. The second goal of this study is to examine the associations between type of teachers' emotion language (labeling, questioning, explaining, and minimizing) and toddlers' social emotional competence in early childhood education classrooms (controlling for program quality, and child gender and age, as these variables may be related to toddlers' social emotional competence). Multiple models were tested to assess this goal, first predicting toddlers' social emotional competence, and second predicting toddlers' problem behaviors, thus examining both facets of toddlers' social emotional competence. Each type of teachers' emotion language were included in separate models. Each model controlled for program quality, and child gender and age.

Separate models for each of the two main goals of the current study were tested because, though this study examines predictors of teachers' emotion language and influences of teachers' emotion language on child behavior, teachers' emotion language is a linking variable, not a causal explanation, between teachers' beliefs and knowledge and toddlers' social emotional competence. The current study therefore separated the two main goals in analyses.

### *Research Questions and Hypotheses*

*Research Question 1:* Are teachers' beliefs and knowledge associated with teachers' emotion language (labeling, questioning, explaining, and minimizing) in teacher–toddler interactions?

- a. Are teachers' beliefs about toddlers' emotions associated with teachers' emotion language in teacher–toddler interactions?

*Hypothesis 1a:* Teachers' beliefs about toddlers' emotions will be associated with all types of teachers' emotion language; different subscales of teachers' beliefs will relate to different types of emotion language.

- b. Are teachers' beliefs about children in general (democratic compared to traditional beliefs) associated with teachers' emotion language in teacher–toddler interactions?

*Hypothesis 1b:* Teachers' progressive/democratic beliefs about children will be associated positively with teachers' emotion labeling, questioning, and explaining, and negatively with teachers' emotion minimizing language. Teachers' traditional beliefs about children will be associated negatively with teachers' emotion labeling, questioning, and explaining, and associated positively with teachers' emotion minimizing language.

- c. Is teacher knowledge about toddlers' development associated with teachers' emotion language in teacher–toddler interactions?

*Hypothesis 1c:* Teachers' knowledge about toddlers' development will be associated positively with teachers' emotion labeling, questioning, and explaining, and negatively with teachers' emotion minimizing language.

*Research Question 2:* Are teachers' characteristics associated with teachers' emotion language (labeling, questioning, explaining, and minimizing) in teacher–toddler interactions?

- a. Is teachers' education level associated with teachers' emotion language in teacher–toddler interactions?

*Hypothesis 2a:* Teachers with higher levels of education will use more emotion labeling, questioning, and explaining, and less emotion minimizing language, than teachers with less education.

- b. Are teachers' years of experience as an early childhood educator associated with teachers' emotion language in teacher–toddler interactions?

*Hypothesis 2b:* Teachers with more years of experience teaching young children within early childhood will use more emotion labeling, questioning, and explaining, and less emotion minimizing language, than teachers with less experience.

- c. Is teacher racial identity associated with teachers' use of emotion language in teacher–toddler interactions?

*Hypothesis 2c:* Teachers who identify with a racial identity that is marginalized in our society (i.e. identifies as African American and/or Black) will use more emotion labeling, questioning, and explaining than teachers who identify as European American and/or White, as supported by previous literature (Odom et al., 2014); it is hypothesized that there will be no differences in teachers' emotion minimizing language by racial identity.

*Research Question 3:* Is teachers' emotion language (labeling, questioning, explaining, and minimizing) in teacher–toddler interactions associated with toddlers'

social emotional competence (either toddler's social emotional competence or problem behaviors)?

*Hypothesis 3:* Teachers' emotion explaining will be positively related to toddlers' social emotional competence and negatively related to toddlers' problem behaviors. Teachers' emotion minimizing will be negatively related to toddlers' social emotional competence and positively related to toddlers' problem behaviors.

## CHAPTER V

### METHODS

#### *Participants*

The current study collected data from a purposive, community-based sample of 28 toddler teachers and 115 toddlers in 28 classrooms in early childhood education programs. According to teacher report, toddlers included in the current study were 12 months to 36 months old, with a mean age of 23.33 months ( $SD = 6.54$ ). Forty-seven of the toddlers included in the current study were female (41%). Although racial identities were not reported for specific children included in the study, teachers reported the racial identities of all children in their classrooms. Across all classrooms that reported toddlers' racial identities, two toddlers were identified as Native American, ninety-four toddlers were identified as African American/Black, six toddlers were identified as Asian, one toddler was identified as Native Hawaiian or Pacific Islander, six toddlers were identified as Latino or Hispanic, ninety-nine toddlers were identified as European American/White, and fourteen toddlers were identified as multiracial; racial identity was not reported for 4 of the 28 classrooms. Teachers' highest levels of education ranged from a high school degree to some graduate school; two teachers reported receiving a high school degree, five teachers completed some college (less than 30 hours) with no degree received, four teachers completed some college (more than 30 hours) with no degree received, four teachers completed a 2-year AA or AAS degree in early childhood, three teachers

completed a 2-year AA or AAS degree in another field, five teachers completed a 4-year degree in early childhood, one teacher completed a 4-year degree in a related field, one teacher completed a 4-year degree in another field, and three teachers reported completing some graduate school with no degree received. Twenty-four teachers reported having some training specific to working with toddlers, and four teachers reported no training specific to toddlers, yet teachers did not reliably remember the type of training nor the hours of training they had received (as evidenced by teachers providing written responses to these questions such as “I do not remember”). Teachers’ experience working in a paid position with young children ranged from 1 year to 29 years, with a mean of 11.8 years ( $SD = 8.56$ ). Teachers’ age ranged from 22 years to 63 years old, with a mean of 34.78 years ( $SD = 11.73$ ). Teachers reported their racial and ethnic identities via first an open-ended question, followed by a closed-ended question. Open-ended questions first defined both race and ethnicity separately, and instructed teachers to describe how they identified. For the closed-ended question, teachers were asked to check the boxes for the racial/ethnic categories (census categories) with which they identified (teachers were allowed to check multiple boxes). Teachers’ answers to both open-ended and closed-ended questions aligned; therefore, the current study used teachers’ reporting of their racial and ethnic identities via the closed-ended question. Fifteen teachers identified as African American/Black, seven teachers identified as European American/White, and three teachers identified as multiple racial and ethnic identities; one teacher identified as both African American and European American, and

two teachers identified as both Native American and African American. Racial/ethnic identities were not reported by three teachers.

Stratified random sampling techniques were used to obtain data from comparable groups of three-, four-, and five-star programs with toddler classrooms because program quality was included as a control variable. Program quality is assessed at the program level by the North Carolina Rated License Assessment Program as part of the states' Quality Rating and Improvement System (QRIS) and is rated on a 1 to 5 star scale with 1 being the lowest quality program and 5 being the highest quality program. Data collection was completed from 8 three-star, 10 four-star, and 10 five-star programs. Early childhood education programs are given a quality rating based on the number of points they receive based on staff education and program standards; program standards include structural characteristics such as group size as well as observational measures of quality using an age-appropriate and setting-appropriate Environmental Rating Scale. The program quality variable included in the current study is a program-level analysis of quality and thus does not capture some interactional aspects or general climate components of classroom quality specifically within participating classrooms. Three-, four-, and five star child care programs were chosen for the current study as they represent the star-levels of programs in the county, as the county in which data collection occurred has zero one-star and only two two-star programs serving toddlers (Division of Child Development and Early Education, 2014). A list of child care centers with toddler classrooms in Greensboro, North Carolina was obtained from North Carolina's Division of Child Development and Early Education website, and a sampling frame of 60

programs was randomly generated from the list (representing approximately 45% of the total 133 licensed programs serving toddlers in the city); one toddler classroom was recruited from each program. Classrooms were recruited via an initial email to program directors explaining the opportunity to be involved in the study, followed by phone calls to directors one week after the first email was sent. Recruitment emails and phone calls were completed by the researcher. Initial permission to recruit teachers was obtained from program directors via email, phone calls, or in person. Toddler teachers were thus nominated for participation by their program directors, and direct conversation between the researcher and teachers began after directors' verbally consented to allow the researcher to communicate with teachers in their programs. Informed consent was obtained from teachers involved in the current study prior to data collection. Teachers were compensated \$50 for their participation in the study.

Informed consent for children's participation was obtained from parents via an informational packet and consent forms sent home by teachers. Consent forms were sent home to parents of all children in each classroom in order to inform parents of the research study and offer the opportunity to participate (i.e. to allow the teacher to rate their toddlers' social emotional competence). A separate consent for video recording was obtained from parents to allow their children to be included in the video regardless of participation in the study; if parents did not consent for teachers' ratings of their child's social emotional competence, they also had the opportunity to not allow their child to appear on video of the classroom (though no child data was obtained from classroom videos). Children whose parents were not comfortable with their child appearing on

video were not included in the video recording of the classroom; children were either invited to another classroom, brought outside with another teacher and group of children, or avoided on the video. A total of 5 toddlers (out of a total of 212 toddlers in these classrooms) were not included in the video recording due to parents' request; no more than one toddler in each classroom was excluded from the video recording. Parent response rate for toddlers' participation in the questionnaire portion of the study ranged from 12.5% to 100% within classroom, with a mean participation rate of 68.79%. An average of approximately five focal children participated in each classroom, with a range of one child to nine children. Out of the 60 programs that were contacted, 28 programs completed participation in the current study (46.67% participation rate). For the remaining 32 programs who did not participate, 14 programs responded that they were not interested due to, for example, time constraints, 3 programs responded that they could not participate due to children transitioning classrooms and/or transitions in staff or program ownership, 4 programs had parent forms dropped off but teachers were unable to schedule an observation before the conclusion of data collection, in 1 program all parents were uncomfortable with a researcher in their children's classroom and data was therefore not collected, and, finally, the researcher was unable to contact the director of 10 programs within the sampling frame. Participation rates across star levels were comparable, with a 40% participation rate for 3 star programs, and a 50% participation rate for both 4 and 5 star programs.

### *Procedure*

Data collection occurred during 30-minute video recorded classroom observations of naturally-occurring teacher–child interactions during indoor free-play activity contexts, and from teacher-report questionnaires. Video recorded observations were coded for teachers’ emotion language using an adapted version of a coding scheme by Brownell and colleagues (2013), described below. A questionnaire packet was given to participating teachers that included a demographic questionnaire (to obtain teachers’ education, years of experience, racial identity, and other demographic information), a questionnaire adapted from the Parents’ Beliefs About Children’s Emotions (PBACE; Halberstadt et al., 2013), the Ideas About Children questionnaire (also titled the Parental Modernity Scale; Schaefer & Edgerton, 1985), a questionnaire adapted from the Knowledge of Infant Development Inventory (KIDI; MacPhee, 1981, 2002), as well as a Brief Infant-Toddler Social Emotional Assessment Childcare Provider Form (BITSEA; Briggs-Gowan & Carter, 2006) for each child participating in the study to assess the social emotional competence of focal children in their classrooms.

Data collection occurred over two weeks, on average, for each classroom. First, programs were visited in order to meet the toddler teacher, discuss the research study and answer any questions, as well as to drop off parent consent packets. At this time, an observation was scheduled for a minimum of one week into the future in order to give teachers and parents adequate time to review and return consent documents. At the time of the observation, informed consent procedures were completed with teachers prior to video recording, and parental consent forms were obtained. After the 30-minute video

recorded observation was complete, the teacher was given the packet of questionnaires to complete, including BITSEA questionnaires for each toddler that had parental consent, and the teacher and researcher scheduled a time for the researcher to return to obtain the questionnaires (typically a week later). Upon picking up the questionnaires, the researcher gave the teacher a \$50 gift card for their participation.

### *Measures*

*Teachers' Emotion Language.* Teachers' emotion language was measured by coding teachers' language during video recorded classroom observations of indoor free-play activity contexts. Classroom observations consisted of 30-minute video recorded naturally-occurring teacher-child interactions which were coded for teachers' emotion labeling, emotion explaining, and emotion questioning, as well as emotion minimizing language, by trained coders using a coding scheme adapted from Brownell and colleagues' (2013) coding of parents' emotion language with toddlers. Previous research has indicated adequate reliability of this coding scheme; on average, 86% of the time coders agreed on use of emotion language (Brownell et al., 2013). It is important to note that this coding scheme has only been previously used within parent-child interactions, yet the current study argues that this coding scheme exhibits face and construct validity for assessing teachers' emotion language. The measure has been adapted to exclude coding of children's language, and to include the assessment of asking questions about emotions and using language to minimize emotions.

Teachers' emotion language was segmented into teachers' labeling of emotions through the naming of emotional feelings or behaviors (examples from the current study

include: “The dog is scared” or “He is mad”) and teachers’ explanations of emotions that explain a potential reason for one’s feeling of an emotion (e.g. “If you knock that down when your friends are trying to build, I think they are going to be unhappy”) (Brownell et al., 2013). Teachers’ emotion language also includes coding of teachers asking questions about emotions (e.g. “What’s wrong?” or “Are you still sad?”). Additionally, an “emotion minimizing” code was added to the coding scheme to explore if teachers use language to minimize toddlers’ expression of emotions (e.g. “You’re okay”, “Stop crying”, or “Tell your friend to get it together.”). In the example “you’re okay”, teachers’ use of this phrase to remind toddlers that they were okay, for example if a toddler fell down and a teacher told them that they were okay, was not coded as emotion minimizing; teachers’ emotion minimizing was only coded if it was a direct attempt by a teacher to distance themselves from a toddler’s emotion and to diminish the reality of a toddler’s emotion. Teachers’ emotion minimizing language was coded if teachers label, question, or explain emotions in a way that minimizes toddlers’ emotional expression (e.g. the phrase “You’re not sad” was coded as both emotion labeling and emotion minimizing), and was coded when a teacher does not use labeling, questioning, or explaining but still uses verbal language to minimize toddlers’ emotions (e.g. “Be quiet” was coded only as emotion minimizing language). If teachers’ emotion language included a minimizing component, it was included in analyses *only* as teachers’ emotion minimizing language (i.e. it was not double-coded as both labeling and minimizing). This only occurred eight times total across three teachers (e.g. “Why are you upset?” and “You’re all right, aren’t

you?"), as emotion minimizing language was most often used independently from emotion labeling, questioning, and explaining.

This differentiation in types of teachers' emotion language examines, in detail, the ways in which teachers discuss emotions (which was assessed descriptively as an analysis of which types occur more or less frequently), and also provides evidence for which types of emotion language are associated with toddlers' social emotional competence. This coding scheme assesses the number of times teachers label emotions, explain emotions, ask questions about emotions, and use language to minimize emotions.

Teachers' emotion language was only coded when directed to one or multiple toddlers in the classroom (i.e. emotion language was not coded when directed to another teacher in the classroom or to self). Teachers' emotion language was coded when teachers used emotion language to reference any person or non-person's emotions (language was coded as emotion language if it was in reference to teachers', children's, or book characters' emotions), and present or not-present person's emotions (in reference to people in the classroom or people outside of the classroom, such as children's parents). Coders used coding sheets to denote the number of times teachers reference emotions through labeling, explaining, and questioning, and the number of times teachers use emotion minimizing language. Prior to coding, coders reviewed and discussed the coding manual, then coded a practice video for teachers' emotion language for reliability training. One main coder coded all videotapes for teachers' emotion language, and the second coder coded approximately 20% of the cases for inter-rater reliability ( $n = 6$ ), following conventional language assessment protocol (Degotardi & Torr, 2007;

McQuaid, Bigelow, McLaughlin, & MacLean, 2007). Reliability checks were conducted periodically throughout the coding process; missing or incorrect codes were agreed upon for a consensus code. Inter-rater reliability was acceptable ( $\kappa = .73$ ).

*Teachers' Beliefs about Toddlers' Emotions.* Teachers' beliefs about toddlers' emotions were assessed using a 33-item teacher-report questionnaire adapted from the Parents' Beliefs About Children's Emotions (PBACE; Halberstadt et al., 2013). Items on the PBACE are in a 1-6 Likert scale format and range from "strongly agree" to "strongly disagree." Questions on the PBACE include items such as "Making fun of children's emotions is not a good idea." Items on the PBACE were adapted to change the word "parent" to "teacher" when appropriate, and changed the words "child" or "children" to "toddler" or "toddlers." Additionally, one item was altered to reflect age-appropriate wording; the original PBACE item was "Children may not focus on their commitments if they feel too much happiness" and was changed to "Toddlers may not be motivated to learn if they feel too much happiness" because toddlers may not be viewed as having "commitments" within their classrooms. The PBACE consists of seven subscales (sample items following the title of each subscale) including, Cost of Positivity ("Toddlers may not be motivated to learn if they feel too much happiness"), Value of Anger ("Being angry can motivate toddlers to change or fix something in their lives"), Manipulation ("Toddlers often cry just to get attention"), Control ("Toddlers can control what they show on their faces"), Knowledge ("Teachers should know everything a toddler is feeling"), Autonomy ("It is usually best to let toddlers work through their negative feelings on their own"), and Stability ("Toddlers' emotional styles tend to

remain the same over time”). The PBACE has previously exhibited good construct validity and internal consistency and has been validated for measurement invariance across ethnic groups and thus accurately captures beliefs about children’s emotions across groups (Halberstadt et al., 2013). In the current study, the reliability of the PBACE subscales were as follows: Cost of Positivity  $\alpha = .582$ , Value of Anger  $\alpha = .749$ , Manipulation  $\alpha = .808$ , Control  $\alpha = .715$ , Knowledge  $\alpha = .440$ , Autonomy  $\alpha = .796$ , Stability  $\alpha = .633$ .

*Teachers’ Democratic and Traditional Beliefs about Children.* Additionally, the Ideas About Children 16-item questionnaire (as it is titled in the National Center for Early Development & Learning (NCEDL) study (Early et al., 2005), through it is termed the Parental Modernity Scale when used with parents; Schaefer & Edgerton, 1985) was included, as this measures teachers’ general beliefs about children. This questionnaire was included because it is possible that teachers’ beliefs about children in general, not just their beliefs about children’s emotions, may affect teachers’ emotion language with children. This measure includes subscales that measure teachers’ progressive, democratic beliefs about children as well as teachers’ traditional, authoritarian beliefs about children; both scales have exhibited acceptable reliability ( $\alpha = .66$  for democratic beliefs, and  $.88$  for traditional beliefs) in previous research (Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002). Items on this scale are presented in a 1-5 Likert scale format from 1-Strongly Disagree to 5-Strongly Agree. Sample items include “Children should always obey the teachers” as an example of a traditional belief and “Children have a right to their own point of view and should be allowed to express it” as an example of a democratic

belief. For reliability, traditional beliefs scale  $\alpha = .78$ , and the democratic beliefs scale  $\alpha = .40$ .

*Teachers' Knowledge about Toddlers' Development.* Teachers' knowledge about toddlers' development was measured via a 21-item teacher-report questionnaire adapted from the Knowledge of Infant Development Inventory (KIDI; MacPhee, 1981, 2002). The original KIDI includes 75 items; the KIDI used in the current study has been adapted to only include 21 items that best evaluate teachers' knowledge of toddlers' development (questions that are only applicable to younger infants were omitted). An example item from the KIDI includes "If children are shy or fussy in new situations, it means they have an emotional problem." Teachers' responses on the KIDI were scored for correctness as per the key provided by the questionnaire author, therefore the number of teachers' total correct answers on the KIDI represents teachers' knowledge of toddlers' development. Questions on the KIDI include Agree/Disagree questions (as in the example above) as well as questions that ask at which age toddlers can do something; for this type of question, teachers are asked if they agree with the age range provided, if they think a child could complete the task at a younger age, or if they think a child would need to be older to accomplish the behavior in question (e.g. "Most children are ready to be toilet trained at one year of age"). A shorter 17-item version of the KIDI has been used with pre-service teachers in recent research (Vallotton et al., 2015), underscoring the appropriateness of this measure for use with early childhood educators. The entire measure has exhibited strong internal consistency in previous research with parents of

infants and toddlers ( $\alpha = .82$  and  $.72$ , respectively; Dichtelmiller et al., 1992; Ribas & Bornstein, 2005); in the current study,  $\alpha = .50$ .

*Toddlers' Social Emotional Competence.* Toddlers' social emotional competence was measured with a 42-item teacher-report questionnaire, the Brief Infant-Toddler Social Emotional Assessment Childcare Provider Form (Briggs-Gowan & Carter, 2006), designed to assess social emotional competencies of children aged 12 to 36 months. This measure consists of a problem behaviors subscale (31 items that measure aggression, defiance, over-activity, negative emotionality, anxiety, and withdrawal) and a competence subscale (11 items that measure empathy, prosocial behaviors, and compliance, including indicators such as this child "looks toward you when upset"); both subscales were examined separately in analyses. Teachers were asked to rate focal children on the 3-point scale (0=not true/rarely, 1=somewhat true/sometimes, 2=very true/always). The BITSEA also includes questions regarding children's age and gender, which were included as control variables in all models. Previous research has indicated test-retest reliability ( $r = 0.79-0.92$ ) and internal consistency ( $\alpha = .65$ ) of the BITSEA (Briggs-Gowan & Carter, 2008). In the current study, the competence subscale  $\alpha = .80$ , and the problem behaviors subscale  $\alpha = .68$ . BITSEA scores differed by gender for the competence subscale such that girls were rated higher in competence ( $F(1, 113) = 16.28$ ,  $p = .00$ ); no other relationships were found for BITSEA scores and child gender or age.

#### *Analysis Plan*

To examine the research questions of the current study, generalized linear models (GLM) and hierarchical linear models (HLM) were tested. For research questions 1 and

2 focusing on teacher-level variables, generalized linear models were tested. Because children are nested within classrooms, analyses for research question 3, which included child-level variables, were calculated using HLM software. The concept of nesting is greatly applicable to research in early childhood education assessing teacher variables and child outcomes, as children (Level 1) are nested within classroom contexts (Level 2). This method of analysis accounts for variance and interdependence shared by children within the same classroom, and also statistically corrects for the unbalanced groups of focal children in each classroom. HLM assumes homogeneous Level 1 variances across Level 2 units of analysis, normally distributed Level 1 error terms, independence of predictor to Level 1 error terms, and multivariate normal Level 2 error terms (Raudenbush & Bryk, 2002). To test for these assumptions, tests of homogeneity of variances (comparing Level 1 error terms) and normality (examining Q-Q plots of error terms at both levels) were conducted. HLM uses maximum likelihood estimation to iteratively estimate regression coefficients for missing outcome variables. Multiple imputation (20 imputations) was used to impute missing data for variables (Graham, Olchowski, & Gilreath, 2007), though missing data was less than one percent across study variables.

The first goal of the current study was to examine teachers' beliefs about toddlers' emotions, teachers' beliefs about children (democratic compared to traditional), teachers' knowledge about toddlers' development, and teachers' education, experience, and racial identity, as predictors of teachers' emotion language. To examine this aim, multiple generalized linear models were tested. The first set of four models examined teachers'

beliefs about toddlers' emotions (all 7 subscales), teachers' beliefs about children (both subscales of democratic and traditional beliefs), and teachers' knowledge about toddlers' development, as independent variables predicting teachers' emotion language as the dependent variable (each type examined in a different model), controlling for program quality, and mean child age, gender, social competence, and problem behaviors. These models evaluated the first research question of the current study. The second set of four models examined teachers' education, experience, and racial identity as independent variables predicting each type of teachers' emotion language, controlling for program quality, and mean child age, gender social competence and problem behaviors. These models evaluated the second research question of the current study.

The second goal of the current study was to examine the association of teachers' emotion language with toddlers' social emotional competence. To evaluate this goal, multiple HLM models were tested to answer research question three. The first set of four models separately examined teachers' emotion labeling, questioning, explaining, and minimizing (Level 2) as independent variables as predictors of toddlers' social emotional competence as the dependent variable (Level 1), controlling for program quality (Level 2), and child age and gender (Level 1). Another set of four models examined the same independent and control variables, and instead predicted scores on toddlers' problem behaviors subscale as the dependent variable.

## CHAPTER VI

### RESULTS

#### *Preliminary Analyses*

Means, standard deviations, and ranges of continuous variables are reported in Table 1, and bivariate correlations of study variables are reported in Table 2. All variables were examined for outliers and for skew and kurtosis. Teachers' emotion minimizing language exhibited high kurtosis (16.11) and therefore required transformation. Because when teachers used emotion minimizing language it often occurred in succession (i.e. teachers would often repeat "You're okay" many times in a row), teachers' emotion minimizing language was converted into a categorical variable indicating if teachers used emotion language or did not use emotion language. Fifteen teachers utilized emotion minimizing language and thirteen teachers did not use emotion minimizing language. Of the fifteen teachers who used emotion minimizing language, ten of the teachers used emotion minimizing multiple times in rapid succession; the other five teachers used emotion minimizing several separate times throughout the half hour period.

Descriptive analyses were first conducted to examine variables of interest. In terms of teachers' beliefs about children's emotions (examined on a 1-7 Likert scale), means of the Cost of Positivity, Control, Autonomy, and Stability subscales were relatively low; indicating that, on average, teachers in the current study did not greatly

identify with these beliefs about toddlers' emotions. The mean of the Knowledge subscale was the highest of the beliefs about emotions subscales, suggesting that teachers in this study believe it is important to know what toddlers in their classrooms are feeling. The ranges for teachers' beliefs about toddlers' emotions were relatively variable. Though none of the subscales scored as high as a 7 (Strongly Agree), both the Manipulation and Knowledge subscale had scores up to 6, indicating that some teachers do agree that toddlers use their emotions for manipulative purposes, and that teachers believe they should know how toddlers are feeling. A few of the subscales, namely the Cost of Positivity, Control, and Stability, exhibited scores as low as 1, indicating some teachers strongly disagree with these beliefs.

For teachers' ideas about children, the mean of the democratic beliefs ( $M = 4.05$ ,  $SD = .57$ ) was significantly higher than that of the traditional beliefs ( $M = 2.69$ ,  $SD = .71$ ) ( $t(27) = 7.18$ ,  $p = .000$ ), indicating that teachers in this sample, on average, more strongly believe in democratic/progressive ideals than traditional beliefs in regard to children. As teachers' ideas about children were measured on a 1-5 Likert scale, teachers' traditional beliefs about children exhibited more variability in the range, 1.33-4.08 compared to 3-5 for progressive beliefs.

It is important to note that teachers scored relatively high on their knowledge about toddler development, given that the mean correct score out of 21 was 18, and the lowest score was a 14. This indicates that teachers in the current study do know about toddlers' development, yet where their knowledge comes from (i.e. teacher preparation program, personal experiences in upbringing) is not clear. Recent research using items

from the KIDI to assess 207 pre-service teachers' knowledge of infant/toddler development had a lower average score on the KIDI than in the current study (77% correct compared to 86% correct as in the current study) (Vallotton et al., 2015), indicating that teachers in the current study may have more considerable knowledge about toddlers' development than teachers included in other studies.

Although teachers' emotion minimizing language was converted into a categorical variable for analyses, examination of this variable as a continuous variable reveals that teachers' emotion minimizing ranged from 0 to 61 instances of emotion minimizing, with a mean of 5.18 instances, indicating that this was the most-used type of emotion language. It is important to note, however, that given the kurtotic nature of teachers' emotion minimizing, the mean was pulled higher due to outlying data points; one teacher used emotion minimizing language 61 times, and another teacher used emotion minimizing 30 times. It is because of these outliers and because teachers seemed to either use emotion minimizing language (and use it frequently), or not use emotion minimizing at all, that teachers' emotion minimizing language was converted to a categorical variable for analyses. Teachers emotion questioning was used the second most in terms of type of emotion language, and teachers' emotion explaining was used the least. It is important to note that teachers' use of specific types of emotion language differed across teacher and across type; it was not the case that each teacher used each type of emotion language in the same ways (i.e. if a teacher used a lot of emotion labeling, that did not necessarily mean she used a lot of emotion explaining).

For toddlers' social emotional competence, the problem behaviors subscale exhibited a low range (0-.77), as teachers rated toddlers' behaviors on a scale of 0-2. The competence subscale exhibited higher mean scores and more variability in scores than the problem behaviors subscale. This indicates that, on average, toddlers in the current study exhibited more social emotional competence ( $M = 1.47, SD = .35$ ) than problem behaviors ( $M = .28, SD = .17$ ), and the difference was statistically significant ( $t(114) = 29.83, p = .000$ ).

#### *Teachers' Beliefs and Knowledge and Teachers' Emotion Language*

To address research question one, four generalized linear models assessed the relationships among teachers' beliefs about toddlers' emotions, democratic compared to traditional beliefs about children, knowledge of toddlers' development, and teachers' emotion language (labeling, questioning, explaining, and minimizing), controlling for program quality, and mean child age, gender, social competence, and problem behaviors in the classroom. Results indicate that teachers' beliefs and knowledge were associated with teachers' use of emotion labeling, questioning, and minimizing language, but were not associated with teachers' use of emotion explaining.

*Teachers' Emotion Labeling.* Results of the first generalized linear model suggest that teachers' beliefs about toddlers' emotions, beliefs about young children in general, and knowledge about toddlers' development relate to teachers' emotion labeling. In regard to teachers' beliefs about toddlers' emotions, teachers' scores on the Manipulation subscale of the PBACE were associated negatively with teachers' emotion labeling, and teachers' scores on the Knowledge and Autonomy subscales of the PBACE were

associated positively with teachers' emotion labeling (see Table 3). In regard to teachers' beliefs about young children, teachers' progressive/democratic beliefs were associated positively with teachers' emotion labeling (see Table 3). Also, teachers' knowledge of toddlers' development was associated positively with teachers' emotion labeling (see Table 3).

*Teachers' Emotion Questioning.* Results of the second generalized linear model suggest that teachers' beliefs about toddlers' emotions, beliefs about young children in general, and knowledge about toddlers' development relate to teachers' emotion questioning. Teachers' scores on the Value of Anger and Knowledge subscales of the PBACE were associated negatively with teachers' emotion questioning, and teachers' scores on the Control subscale of the PBACE were associated positively with teachers' emotion questioning (see Table 4). Teachers' traditional/authoritarian beliefs about children were negatively associated with teachers' emotion questioning (see Table 4). Teachers' knowledge of toddlers' development was negatively associated with teachers' emotion questioning (see Table 4).

*Teachers' Emotion Explaining.* Results of the third generalized linear model suggest that none of the variables, including teachers' beliefs about toddlers' emotions, beliefs about young children in general, and knowledge about toddlers' development, relate to teachers' emotion explaining (see Table 5).

*Teachers' Emotion Minimizing.* Results of a fourth generalized linear model suggest that teachers' beliefs about toddlers' emotions, beliefs about young children in general, and knowledge about toddlers' development relate to teachers' emotion

minimizing language. In terms of teachers' beliefs about toddlers' emotions, teachers' scores on the Cost of Positivity, Value of Anger, and Knowledge subscales of the PBACE were associated positively with teachers' emotion minimizing language, and teachers' scores on the Control subscale of the PBACE were associated negatively with teachers' emotion minimizing language (see Table 6). Teachers' traditional/authoritarian beliefs were positively associated with teachers' emotion minimizing language (see Table 6). Also, teachers' knowledge of toddlers' development was associated positively with teachers' emotion minimizing language (see Table 6).

#### *Teachers' Characteristics and Teachers' Emotion Language*

To address research question two, four generalized linear models assessed the relationships among teachers' education, experience, and racial identity, and teachers' emotion language, controlling for program quality, and mean child age, gender, social competence, and problem behaviors in the classroom. Results indicate that teachers' education, years of experience, and racial identity were related to all the specific types of emotion language, teachers' emotion labeling, questioning, explaining, and minimizing language.

*Teachers' Emotion Labeling.* For emotion labeling, teachers with a 4-year degree in a field related to early childhood education were most likely to label emotions, as indicated by the highest positive and significant association with teachers' emotion labeling ( $\beta = 9.02, p = .05$ ), when compared to the eight other groups of teachers' education level; no other differences were found for teacher education. No other teacher characteristics predicted teachers' emotion labeling.

*Teachers' Emotion Questioning.* For emotion questioning, teachers with a 4-year degree in a related field were most likely to use this type of emotion language, as indicated by the highest positive and significant association with teachers' emotion questioning ( $\beta = 19.72, p = .00$ ), followed by teachers with some college (more than 30 hours but no degree) ( $\beta = 6.72, p = .00$ ); teachers with a 4-year degree in another field were least likely to use emotion questioning, as indicated by the highest negative and significant association ( $\beta = -11.60, p = .00$ ), followed by teachers with a 4-year degree in early childhood ( $\beta = -7.16, p = .00$ ). Additionally, teachers' experience working with young children was negatively associated with teachers' emotion questioning ( $\beta = -.25, p = .00$ ). Teachers' racial identity did not predict teachers' emotion questioning.

*Teachers' Emotion Explaining.* For emotion explaining, several levels of education were significantly associated with use of this type of emotion language. Teachers with a 4-year degree in a related field were most likely to explain emotions, as evidenced by the highest positive and significant association ( $\beta = 15.35, p = .00$ ), followed by teachers with some college (less than 30 hours) ( $\beta = 8.35, p = .00$ ), teachers with a 2-year AA or AAS degree in another field ( $\beta = 4.83, p = .04$ ), and teachers with some college (more than 30 hours but no degree) ( $\beta = 4.52, p = .03$ ). Teachers' years of experience working with young children was associated negatively with teachers' emotion explaining ( $\beta = -.20, p = .00$ ). Additionally, although relationships were both positive and significant in predicting teachers' emotion explaining, the strength of the association differed in magnitude by racial identity; teachers who identified as African

American/Black ( $\beta = 16.20, p = .00$ ) were more likely to use emotion explaining than teachers who identified as European American/White ( $\beta = 13.26, p = .00$ ).

*Teachers' Emotion Minimizing.* For teachers' emotion minimizing language, seven of the nine levels of teachers' education were significantly positively associated with teachers' emotion minimizing language; teachers with a 4-year degree in a related field was negatively associated with teachers' use of emotion minimizing ( $\beta = -1.33, p = .00$ ), and teachers who had some college (more than 30 hours but no degree) was not significantly predictive of their emotion minimizing language ( $\beta = .11, p = .53$ ). No other differences were found regarding teachers' experience or racial identity in predicting teachers' emotion minimizing language.

#### *Teachers' Emotion Language and Toddlers' Social Emotional Competence*

Results of the hierarchical linear models suggest that toddlers in classrooms with the teachers who used emotion minimizing language scored lower on the social emotional competence subscale ( $\gamma_{01} = .20, t = 2.38, p = .03$ ), controlling for program quality, child age, and child gender, when compared to toddlers in classrooms with teachers who did not use emotion minimizing language. No other relationships between types of teachers' emotion language and toddlers' social emotional competence or problem behaviors were significant.

## CHAPTER VII

### DISCUSSION

The current study examined predictors of teachers' emotion language in teacher–toddler interactions, and assessed the relationship between teachers' emotion language and toddlers' social emotional competence. Results indicate that aspects of teachers' beliefs, knowledge, and characteristics relate to teachers' emotion labeling, questioning, explaining, and minimizing. Additionally, toddlers rated lower in social emotional competence were in classrooms with teachers who used emotion minimizing language.

#### *Teachers' Beliefs about Toddlers' Emotions and Teachers' Emotion Language*

The current study suggests potential relationships between teachers' beliefs about toddlers' emotions and teachers' emotion language. Vygotsky's theoretical position underscores the potential for teachers' beliefs to influence the words teachers use to symbolize emotions in their interactions with young children (Vygotsky, 1978), and the current study provides empirical evidence for this link. Teachers' beliefs about toddlers' emotions were associated with teachers' emotion labeling, questioning, and minimizing language. Teachers' beliefs about toddlers' emotions were not associated with teachers' emotion explaining. Specific relationships between teachers' beliefs about toddlers' emotions and teachers' emotion labeling, questioning, and minimizing are described below.

*Teachers' Emotion Labeling.* Teachers' emotion labeling was negatively associated with teachers' beliefs that toddlers use emotions for manipulative purposes (Manipulation), and was associated positively with teachers' beliefs that teachers should know how toddlers in their classrooms are feeling (Knowledge), and teachers' beliefs that toddlers can manage their emotions on their own (Autonomy). These findings suggest differences in teachers' emotion labeling in their classrooms based on their beliefs about toddlers' emotions.

Teachers who more strongly believe that toddlers use emotions for manipulative purposes may not think toddlers' emotions are important or serve as worthwhile tools for toddlers to use in their worlds. Consequently, teachers who hold these beliefs may be less likely to provide toddlers the words associated with emotions that may help toddlers to use and understand emotions appropriately. In other literature, parents' higher scores on the Manipulation scale are related to more invalidation of children's feelings (Halberstadt et al., 2013); it may be that teachers who believe toddlers' emotions are used for manipulation are less likely to verbally validate the way a toddler is feeling by naming the emotion. However, it is important to note that not all teachers identify with the Manipulation belief; in the current study, only one teacher scored a 6 (strongly agree) on the Manipulation subscale, two fell between 5 (somewhat agree) and 6 on the subscale, and eight fell between a 4 (slightly agree) and a 5 on the subscale score (meaning 17 of the 28 teachers disagreed with statements in the Manipulation subscale). Additionally, one study suggests that Early Head Start teachers contend that infants and toddlers do *not* use their emotions for manipulative purposes (Brophy-Herb et al., 2009).

Although not all teachers may believe that toddlers use emotions to manipulate others, holding these beliefs may have implications for how much teachers use language to label emotions in teacher–toddler interactions.

Teachers’ beliefs that they should know how toddlers in their classrooms are feeling (Knowledge) were related to more emotion labeling, indicating that teachers who want to know how toddlers are feeling may provide toddlers with more word labels associated with their feelings, potentially in order for teachers to help toddlers label their emotions. Teachers of young children have underscored the importance of being in tune with children’s emotionality in the process of learning in the classroom (Zembylas, 2007), which is important given that in order to respond to a child’s emotion in a contingent manner (Denham et al., 2007), correct knowledge of what a child is feeling is necessary.

The finding that teachers’ beliefs that toddlers are autonomous in their emotion regulation (Autonomy) was associated with more emotion labeling was surprising, as it could be assumed that the belief that toddlers are autonomous in this regard could lead to a more hands-off approach to emotionality. It is possible that there is a difference between thinking that toddlers can manage their own emotions and therefore providing them the linguistic tools that may assist in their understanding of their own or others’ emotions, and thinking that toddlers are autonomous in emotion management and therefore ignoring toddlers’ emotionality. If teachers think toddlers are able to autonomously deal with their emotions, teachers may be recognizing the limited skills that toddlers have, and may be more likely to support toddlers’ developing autonomy by

providing them the linguistic tools to label their own or others' emotions. Though it is not clear if teachers' beliefs of Autonomy are developmentally appropriate, they may influence teachers to provide labels for emotions in order to potentially, in teachers' minds, help toddlers improve their existing emotion understanding.

*Teachers' Emotion Questioning.* Teachers' emotion questioning was associated negatively with teachers' beliefs that toddlers' anger is a valuable emotion (Value of Anger), and with their beliefs that teachers should know what toddlers are feeling (Knowledge), and associated positively with teachers' beliefs that toddlers can control their emotional expressions and behaviors (Control). The functionalist perspective of emotions helps to explain these findings, as this perspective argues that emotions are important due to the functions they serve in our lives (Witherington & Crichton, 2007). The subscale used in the current study to assess the Value of Anger beliefs included items that addressed teachers' beliefs that toddlers' feelings of anger can motivate them to fix something going wrong in their lives. If teachers believe that anger (and potentially other negative emotions) serves a motivational purpose for a toddler, they may be less likely to ask questions to understand more about toddlers' emotions. This may occur because teachers may be less likely to ask questions that may help toddlers' regulation and reduction of their emotion (e.g. "Why do you think you are angry?") in order to instead propel toddlers use their anger to "fix" something in their environment. Additionally, teachers may not ask toddlers about others' emotions if teachers do not feel that anger (or other negative emotions, potentially), is important to address with toddlers.

The findings that teachers' beliefs that teachers should know how toddlers are feeling (Knowledge) was associated negatively with teachers' emotion questioning was somewhat surprising given the positive association between this belief and teachers' emotion labeling. Additionally, it stands to reason that if a teacher believes he or she should know how a toddler is feeling, that teacher would ask *more* questions to toddlers about their feelings. It may be the case, however, that teachers who more strongly believe that they should know how toddlers are feeling may also believe that asking questions about emotions is not the best way to uncover what a child is feeling. Given toddlers' developmental stage and potentially limited emotion understanding, teachers may be more likely to provide labels for toddlers' emotions instead, thus further explaining the positive association with this belief and teachers' emotion labeling. Effective teachers organize their classrooms around what children know and are developmentally able to accomplish (Darling-Hammond & Baratz-Snowden, 2007); therefore, if teachers believe they should know what toddlers are feeling, they may choose specific routes to achieving this goal (i.e. may choose to label emotions instead of ask questions about emotions) based on toddlers' developmental stage. Because teachers' use of emotion questioning also captured teachers asking toddlers questions about others' emotions (i.e. peers or book characters), it is possible that teachers who want to know what toddlers in their classrooms are feeling may not purposely provide toddlers the opportunity to think about others' feelings. It is also possible that the reason *why* a teacher may want to know what a toddler is feeling is important to understanding the influence of this belief on teachers' emotion language. If teachers want to know what

toddlers are feeling in order to give emotional support, then that belief may lead to more emotionally supportive behaviors than if teachers want to know what toddlers are feeling in order to minimize their emotions. Teachers' motivation for knowing what toddlers are feeling was not a focus in the current study, and therefore motivation is unclear in this study.

Teachers' asking questions about emotions included verbalization of why toddlers were feeling in certain ways. For example, teachers would often ask "Are you having fun?" upon seeing a toddler smile, or "Are you sad about your friend not sharing?" after a challenging peer interaction. Teachers who believe more strongly that toddlers can control their emotions (Control) were more likely to ask questions about toddlers' emotions, indicating that holding this belief may make teachers think toddlers would be more likely to answer questions about their own or others' emotional feelings and behaviors, though it is not clear if this belief is developmentally appropriate for this age group. Though teachers' Control beliefs may not be developmentally appropriate for the toddler age group, this subscale may be tapping into teachers' beliefs that toddlers have agency in their emotional behaviors, therefore influencing teachers to ask more questions about toddlers' emotions.

*Teachers' Emotion Minimizing.* Teachers' emotion minimizing language was associated positively with their beliefs that toddlers' positive emotions come at a cost (Cost of Positivity), that toddlers' anger serves a valuable purpose (Value of Anger), and that teachers should know what toddlers are feeling (Knowledge), and was associated negatively with their beliefs that toddlers can control their emotional expressions and

behaviors (Control). Teachers' beliefs that toddlers' positive emotions are distracting and costly for toddlers may be more likely to dismiss toddlers' emotions through emotion minimizing language in order to make toddlers cease in their expression of emotions. This finding is similar to what is found in the parenting literature that suggests a positive relationship between parents' dismissive beliefs about the role of children's emotions and their invalidation of children's feelings (Halberstadt et al., 2013). Teachers' beliefs that positive emotions are costly may increase their minimization of toddlers' feelings, which may be problematic, as children whose emotions are dismissed and disapproved of learn that emotions are wrong or invalid (Gottman, 1997). The functionalist emotion perspective (Witherington & Crichton, 2007) helps to explain this finding, as well as the finding that teachers' beliefs that anger is a valuable emotion for toddlers was associated with teachers' emotion minimizing language. If teachers do not value positivity in the classroom, but do value toddlers' feeling angry, teachers may be more likely to use emotion minimizing language that both minimizes toddlers' feelings of positivity (e.g. "Be quiet.") and allows toddlers to continue feeling angry by not trying to calm the children.

Teachers' beliefs that they should know everything toddlers are feeling in their classrooms (Knowledge) was positively related to teachers' emotion minimizing language. This finding is surprising. However, when analyzed with respect to all of the findings regarding teachers' scores on the Knowledge subscale, it is not clear the reasons behind *why* teachers want to know how toddlers are feeling; yet that may make all the difference in terms of teachers' emotion language. How teachers' scores on the

Knowledge subscale relate to teachers' emotion language may depend on the reasons for which teachers want to know what toddlers are feeling. If teachers are interested in knowing how a toddler is feeling in order to minimize toddlers' feelings and stop their emotional expressions, this finding regarding emotion minimizing language makes conceptual sense, though it may be harmful for toddlers' social emotional development. However, if teachers want to know how toddlers are feeling in order to help toddlers label and understanding their feelings, that will relate positively to teachers' emotion labeling. The Knowledge subscale as it stands is thus difficult to use in understanding the links between teachers beliefs regarding the importance of knowing toddlers' emotions and teachers' behaviors; future research should examine the differences between *why* teachers want to know how toddlers are feeling in their classrooms, and how they are planning to use such information.

Finally, teachers' beliefs that toddlers can control their emotions (Control) was associated negatively with teachers' emotion minimizing language. Teachers who believe that toddlers have control over their emotional expressions and behaviors may acknowledge and respect toddlers' emotional perspectives more readily (even if this belief is not entirely accurate or developmentally appropriate), and may therefore be less likely to use language to minimize toddlers' emotionality.

#### *Teachers' Beliefs about Young Children and Teachers' Emotion Language*

Teachers' beliefs about young children (democratic compared to traditional) were related to teachers' emotion labeling, questioning, and minimizing language. Teachers'

beliefs about young children were not associated with teachers' emotion explaining. Specific relationships are described below.

*Teachers' Emotion Labeling.* Teachers' democratic/progressive beliefs about young children were associated positively with teachers' emotion labeling. Teachers who believe that young children have their own perspectives that matter may be more likely to give children the language needed to label their own and others' emotional perspectives. Research suggests that progressive beliefs are related to higher quality classrooms and caregiving environments (Clarke-Stewart et al., 2002; Pianta et al., 2005); thus, it is possible that teachers' emotion labeling may be a mechanism through which teachers can provide high quality caregiving.

*Teachers' Emotion Questioning.* Teachers' traditional beliefs about young children were associated negatively with teachers' emotion questioning. If a teacher has traditional beliefs about children (i.e. agrees with the belief that children should obey authority above all else, for example), that teacher may be more likely to reject children's unique perspectives and therefore be less likely to want to ask questions about children's internal emotional states or about children's assessment of others' emotional states. Teachers with traditional beliefs about young children may also believe that young children, to use an example from the measure, should be "kept busy with work", thus teachers may be less likely to use instructional time to discuss emotions through emotion questioning.

*Teachers' Emotion Minimizing.* Interestingly, teachers' traditional beliefs about young children were associated positively with teachers' emotion minimizing language.

Because teachers who hold traditional beliefs believe that children should obey authority and be kept busy with work, it may be that teachers' traditional beliefs drive teachers to use language to minimize toddlers' emotions in an effort to prevent toddlers' emotions from becoming distracting from their learning in the classroom. Overall, it is interesting the relationships between teachers' progressive/democratic beliefs and emotion language, and teachers' traditional beliefs and emotion language were not inverse relationships of one another. These findings that teachers' progressive beliefs and teachers' traditional beliefs related differently, but not exactly conversely, to different types of emotion language, suggest that teachers' progressive compared to traditional beliefs about young children are not equal opposites and do not predict the same types of teacher behaviors.

#### *Teachers' Knowledge of Toddlers' Development*

Teachers' knowledge about toddlers' development was associated with teachers' emotion labeling, questioning, and minimizing language. Teachers' knowledge of toddlers' development was not associated with teachers' emotion explaining language. Specific relationships are discussed below. It is important to note that, across classrooms, teachers scored relatively high in their level of knowledge about toddlers' development; therefore, the findings in the current study do not represent a wide range in teachers' knowledge of toddlers' development. Recent research using the KIDI to assess pre-service teachers' knowledge of infant/toddler development had a lower average score on the KIDI than in the current study (77% correct compared to 86% correct as in the current study) (Vallotton et al., 2015). It is therefore possible that the teachers in the current study represent a more prepared group of teachers when compared with a larger,

potentially more generalizable, group. It is also possible that because Vallotton and colleagues studied pre-service teachers and the current study includes in-service teachers, teachers in the current study may have more knowledge of toddlers' development based on experience.

*Teachers' Emotion Labeling.* Teachers' level of knowledge about toddlers' development was associated positively with teachers' emotion labeling. Teachers who know more about toddlers' development may know that emotion labeling is helpful for toddlers to facilitate their assignment of meaning to feelings, and may therefore be more likely to utilize emotion labeling language. This knowledge of toddlers' development may come from teacher preparation programs and/or professional development efforts, as teachers note that they frequently draw upon the knowledge they gained through professional development opportunities, both pre-service and in-service to inform their practice (Gholami & Husu, 2010).

*Teachers' Emotion Questioning.* Teachers' knowledge about toddlers' development, however, was associated negatively with teachers' emotion questioning. This finding may be because if teachers know more about toddlers' development, teachers may know that toddlers may not have the language to answer questions about emotions, and may therefore use less emotion questioning. Research suggests that the knowledge teachers have about effective teacher-child interactions influences teachers' use of effective teaching skills (Hamre et al., 2012), and it may be the case that teachers who know more about toddlers' development may not deem emotion questioning to be as effective a teaching skill as emotion labeling.

*Teachers' Emotion Minimizing.* Teachers' knowledge about toddlers' development was associated positively with teachers' emotion minimizing language, a finding that is contrary to hypotheses. It is possible that the way in which teachers received their knowledge may affect how their knowledge relates to their emotion minimizing language. Because teachers' knowledge of toddlers' development is not associated with teachers' education (See Table 2), it may be that the measure used to assess teachers' knowledge in this study may assess a type of knowledge that is based on personal upbringing or other value-laden sources of information. This type of teacher knowledge may be more likely to shape teachers' emotion language practices in ways that align with how they were parented than what they learned through education specifically about toddlers' development. Although most teachers in the current study reported receiving some type of training regarding toddlers, it is not clear how much formal training teachers received or the type or content of such training. A growing body of evidence suggests that early childhood teacher preparation programs do not provide adequate attention to equipping teachers with the knowledge of learning and development in infant and toddler care (Horn, Hyson, & Winton, 2013; National Association for the Education of Young Children (NAEYC), 2009). Further exploration of how teachers obtain their knowledge specific to toddlers' development, and what knowledge teachers receive, is needed.

It is important to note that teachers' beliefs about toddlers' emotions, teachers' beliefs about young children, and teachers' knowledge of toddlers' development were not associated with teachers' emotion explaining language. Teachers' emotion explaining

may not be predicted by teachers' beliefs and knowledge, and may instead be predicted by other teacher characteristics, as explored in the second research question in the current study.

### *Teachers' Education and Teachers' Emotion Language*

Social development theory (Vygotsky, 1978; 1987) suggests that individual factors affect social interactions (Tudge & Scrimsher, 2003). Accordingly, teachers' education level may represent an individual factor that affects teachers' language within interactions with young children. Teachers' education level was related to teachers' emotion labeling, questioning, explaining, and minimizing language. Specific relationships between teachers' education level and teachers' emotion language are described below.

*Teachers' Emotion Labeling.* In comparing the association between nine levels of education and teachers' emotion questioning, teachers receipt of a 4-year degree in a field related to early childhood education was most strongly positively related to teachers' emotion labeling. This suggests that teachers' education may influence teachers' use of language to label emotions in teacher–toddler interactions. It is interesting, however, that teachers' degrees in early childhood was not associated with their emotion labeling. This finding suggests that teachers who receive degrees in fields associated with early childhood, such as psychology or child development, may use more emotion labeling than teachers who receive degrees in early childhood education. This raises questions about the specific type of preparation our early childhood educators receive in teacher preparation programs. Research suggests that pre-service teachers in early childhood

teacher preparation programs do not receive adequate hands-on experience in infant and toddler classrooms within their preparation (Horm et al., 2013; NAEYC, 2009); therefore, it may be the case that teachers who received degrees in early childhood education may not have had the opportunity to experience a toddler classroom before their entry into the field. That same argument, however, could be made for teachers from degree programs related to early childhood. It is also possible that teachers who received psychology or child development degrees may have had coursework that focused specifically on the developmental processes involved in social emotional competence and/or may have focused more on language development than teachers in programs specifically focused on early childhood education practices. In interpreting these findings, however, it is important to note that the cell sizes of each level of teacher education are quite small given the small sample size; thus, these associations must be further tested in research.

*Teachers' Emotion Questioning.* In comparing the association between nine levels of education and teachers' emotion questioning, teachers' receipt of a 4-year degree in a field related to early childhood education was most strongly positively related to teachers' emotion questioning, followed by teachers with some college. Again, it is interesting to note that these levels of education were more predictive of teachers' emotion questioning than a degree in early childhood education. In fact, teachers' receipt of a 4-year degree in early childhood education was negatively related to teachers' emotion questioning. It is possible that the way we are preparing our early childhood educators in teacher preparation programs may focus teacher practices on content other

than emotion language, and the teachers who have not had such training use more of this language in interactions, but may also have less knowledge about other teacher practices. In short, it may be that teachers who received early childhood education degrees may know more about and may employ other effective teacher strategies, which may limit the time used to discuss emotions. It is also possible that emotional development is discussed more as a content area in psychology or child development degree programs than it is a focus in early childhood education degree programs.

Also, teacher receipt of a 4-year degree in a field unrelated to early childhood was negatively related to teachers' emotion questioning. This finding could be because teachers who did not complete college-level training regarding children may have less knowledge about the role of language in child development generally, which may make them less likely to discuss emotion language in classrooms. Coursework taken for undergraduate degrees in early childhood education have been noted as sources of teachers' knowledge about developmentally appropriate practice and child learning (McMullen & Alat, 2002). However, these findings indicate that it may not be as simple as examining teachers' education as a categorical variable; this notion aligns with the mixed findings in the literature regarding the influences of levels of teachers' education on classroom quality and child outcomes (Early et al., 2007; LoCasale-Crouch et al., 2007). Horn and colleagues (2013) argue that we must also look at the depth of preparation in courses and practica focused specifically on infant and toddler care, not simply the existence of infant/toddler courses. More research is needed regarding the kinds of experiences teachers have throughout their educational background.

*Teachers' Emotion Explaining.* Teachers' receipt of a 4-year degree in a field related to early childhood education was most strongly positively related to teachers' emotion explaining. Again, this may suggest that teachers who were educated in a field related to early childhood education may understand that using emotion explaining may help toddlers' social emotional development, and they may not have had specific training in other types of teacher behaviors that may not allow for such discussion. For example, teachers who have not had specific training regarding how to structure classroom activities may use more emotion language in naturally-occurring interactions not based in specific activities. In preparing early childhood educators, we ask teachers to be knowledgeable and effective regarding a variety of teacher practices, and we know teachers use their knowledge to inform their practice (Gholami & Husu, 2010), therefore this finding may signify differences in the kinds of content we are emphasizing in our teacher preparation programs compared to other degree programs related to early childhood education.

*Teachers' Emotion Minimizing.* Teachers' receipt of a 4-year degree in a field related to early childhood education was the only level of education negatively related to teachers' emotion minimizing. Because this finding continues to be important through these associations, it may be that there is something about these specific teachers in the sample of the current study that are driving these findings. In reference to all findings regarding teachers' education level, it is not clear how the experiences teachers had in their educational settings influence their language practices. Research suggests that teachers obtain their knowledge from a multitude of sources and draw from a variety of

types of knowledge in their practices with young children, such as information gleaned from life experiences, previous interactions with young children, their own upbringing, as well as formal education (Gholami & Husu, 2010; Hedges, 2012); therefore, it is difficult to pinpoint the specific influence of teachers' education on their use of emotion language.

### *Teachers' Experience and Teachers' Emotion Language*

Teachers' experience may also represent an individual factor that may relate to teachers' interactions (Tudge & Scrimsher, 2003; Vygotsky, 1978; 1987). Teachers' years of experience teaching young children were related to teachers' emotion questioning and explaining. Teachers' years of experience teaching young children were not associated with teachers' emotion labeling or emotion minimizing language. Specific significant relationships are discussed below.

*Teachers' Emotion Questioning.* Teachers' years of experience working with young children was negatively associated with teachers' emotion questioning. This finding aligns with previous work examining teachers' mental state talk and teachers' experience (King & La Paro, 2015). This finding may be due to more experienced teachers knowing, through their experiences with young children, that asking toddlers questions about their own or others' emotions may not be the most developmentally appropriate way to discuss emotions with toddlers. Recent research has found a link between parents' elicitation of toddlers' emotion language (which can be accomplished through emotion questioning) and toddlers' prosocial behavior (Brownell et al., 2013); therefore, it may be important to continue training our teachers to use this type of language in the contexts of classrooms. Alternatively, this finding may be reflective of a

need for more professional development opportunities for teachers who have been in the field for a number of years.

*Teachers' Emotion Explaining.* Similarly, teachers' years of experience was negatively associated with teachers' emotion explaining. Conceptually, it seems that with experience teachers would learn that toddlers' interactions may be facilitated by a more competent other guiding toddlers' understanding of their own and other's emotions; therefore, this finding is surprising and does not align with hypotheses. This may be because teachers who have been teaching longer may have received their training in a time when social emotional development was not as much at the forefront of our teacher education programs, or at an institution that did not focus on promotion of social emotional development. Recent research suggests that graduates from 2-year institutions are not as prepared in the facilitation of social emotional development as graduates from 4-year institutions (Hemmeter, Santos, & Ostrosky, 2008). Additionally, teacher preparation for these teachers may not have focused specifically on toddler classrooms, as reports indicate that even recently, teacher preparation programs do not focus enough on infant/toddler care (Horm et al., 2013).

*Teachers' Racial Identity and Teachers' Emotion Language*

Teachers' racial identity was related to teachers' emotion explaining. Teachers' racial identity was not associated with teachers' emotion labeling, questioning, or minimizing language. The relationship between teachers' racial identity and teachers' emotion explaining is further discussed below.

*Teachers' Emotion Explaining.* Teachers who identified as African American or Black were more likely to use emotion explaining than teachers who identified as European American or White; though both associations were significantly positive, the strength of the association differed. This finding aligns with study hypotheses given previous research assessing parental racial and emotional socialization (Garrett-Peters et al., 2008). Difference in parents' and teachers' use of emotion language may potentially be due to parents' and teachers' upbringing based on their racial identities. Mothers' perception of racial discrimination is related to more use of emotion language with their toddlers; it is argued that groups often discriminated against may feel more incentive to instill in their young children an ability to understand others' emotions, as a misunderstanding may lead to more problematic outcomes for marginalized groups (Odom et al., 2014). Although racial discrimination may not be the only predictor of differences in emotion language based on racial identity, racial discrimination may be one explanation for why the study by Odom and colleagues found a difference in levels of emotion language based on racial identity. Additionally, Vygotsky argued that cultural-historical influences affect social interactions (Tudge & Scrimsher, 2003), and language is a meaningful tool that socializes thought and behavior (Ghassemzadeh et al., 2013). From a theoretical perspective, teachers' thoughts and behavior regarding emotion language may have been socialized from the language that occurred in their interactions throughout their upbringing.

### *Teachers' Emotion Language and Toddlers' Social Emotional Competence*

Toddlers rated lower in social emotional competence were in classrooms with teachers who used emotion minimizing language. Vygotsky argues that children develop by internalizing the words they hear in their interactions with others, and using these words to regulate and organize their thoughts and behaviors (Vygotsky, 1987). Teachers' emotion minimizing language may therefore be internalized by toddlers in a way that hinders their social emotional competence. By negating toddlers' emotional experiences and sending the message to toddlers that their emotions are not valid through emotion minimizing language, teachers may alter toddlers' internal dialogue regarding the importance of their emotions. Teachers' minimization of toddlers' emotions may also limit toddlers' expression of emotions in classroom contexts, yet toddlers may still remain emotionally aroused and without an opportunity to learn how to regulate their emotions (Fabes, Leonard, Kupanoff, & Martin, 2001). It may be that teachers' emotion minimizing language diminishes toddlers' ability to learn about and practice emotion regulation, which leads to less social emotional competence.

It is possible that teachers who minimize toddlers' emotional expression and behaviors make toddlers feel less comfortable expressing their emotions around their teachers and within the classroom, and therefore may exhibit less appropriate social emotional behavior due to a lack of emotional support in the environment. Research suggests that a positive emotional climate in preschool classrooms is associated with preschoolers' social competence (Brophy-Herb et al., 2007). It is possible that toddlers need positive emotional climates in their classrooms in order to feel safe expressing and

processing their emotions; thus, minimization of toddlers' emotions may diminish their ability to exhibit social emotional competence.

The findings of the current study align with some of what is found in parenting research; parents who minimize their children's emotions have sadder and more fearful children (Gottman, Katz, & Hooven, 1996), and mothers' emotion minimizing is related to less social competence in toddlers (Eisenberg, Fabes, & Murphy, 1999). These findings continue over time, as research suggests that mothers who minimize toddlers' emotions at age two, defined as mothers' reporting the likelihood of their responding to toddlers' emotions with verbalizations like "there's nothing to be upset about", predict children's internalizing problems across one year (Luebke, Kiel, & Buss, 2011). It is therefore possible that toddlers in classrooms with teachers who use emotion minimizing language may be suppressing toddlers' emotions and therefore not helping toddlers to learn appropriate regulation strategies, thus decreasing their socially emotionally competent behaviors.

However, it is important to note that emotion minimizing may not always be maladaptive. Research utilizing samples of both European American families and African American families has found a relationship between parents' unsupportive reactions to emotions and young adults' depressive symptoms for European American families, but this relationship does not hold for African American families (Leerkes, Supple, Su, & Cavanaugh, 2013). Though suppressing expression of emotion may not be maladaptive in some circumstances, because the current study suggests a relationship between emotion minimizing and less social emotional competence in classrooms with

both children of color and children of more privileged racial identities, it may be that the way teachers use emotion minimizing in this study may not be in an adaptive way. Future research exploring racial socialization in classrooms and emotion language is needed.

Toddlers' social emotional competence is defined as the skills needed to navigate the developmentally appropriate expectations of their worlds. Toddlers may not be able to learn these skills if they are not in emotionally supportive environments, as teachers may act as socializers to young children's emotions (Ahn, 2005; Denham et al., 2007; Lally, 2009). Additionally, toddlers may not be able to learn the language associated with emotions if teachers do not engage in discussion of emotions and simply minimize toddlers' emotional expression. If teachers use language to minimize toddlers' expression of emotions, toddlers may not improve their understanding of how emotions develop and how they relate to social goals. Emotion minimizing language may create an emotionally negative climate, which may make emotions less accessible to toddlers and may make their social and emotional behaviors less competent.

In order to more fully appreciate the findings regarding teachers' emotion minimizing language, more examples of how this type of language occurred in toddler classrooms is helpful. Most of teachers' use of emotion minimizing language occurred in response to toddlers' negative emotionality, and primarily consisted of responding to their emotions by saying "You're okay" in a way that attempted to diminish toddlers' expression of their emotions. It is important to note that teachers simply reminding a toddler that everything is okay around them was not coded as emotion minimizing

language; the “You’re okay” coded as emotion minimizing was clearly employed in an attempt to restrain toddlers’ emotional reaction in a dismissive way. Additionally, teachers often repeated “You’re okay” in response to each bid for attention from toddlers, although the use of this strategy most often was unsuccessful in calming toddlers. It is also significant that, although some of teachers’ emotion minimizing language was said in a sarcastic tone, therefore tone may be a part of this type of language, much of teachers’ emotion minimizing language had cadence and tone similar to other positive phrasing, yet only the words themselves were minimizing. This is discernable in the case of the following teacher–toddler interaction: a teacher was interacting with a few toddlers during free-play when one toddler began to cry after a peer took his toy. The teacher turned to a toddler not involved in the interaction and said “Tell your friend to get it together” within earshot of the upset toddler. This interaction is particularly indicative of teachers’ emotion minimizing language, as this was said in a neutral, almost positive tone, but was clearly said in an effort to minimize the toddler’s expression of emotion.

It is important to note that teachers’ emotion minimizing language was the only type of teachers’ emotion language that was associated with toddlers’ social emotional competence or problem behaviors. It is possible that teachers’ ascribing words to emotions through emotion labeling helps toddlers with their emotion understanding but it has not yet translated into toddlers’ observable behaviors. Toddlers may therefore may have better understanding of their own and other’s emotions, and maybe even understand more about the causes of those emotions through teachers’ emotion explaining for example, yet this knowledge may not have translated to observed behaviors in this age

group and therefore was not measured in the current study. Other research has found an association between mothers' emotion explaining language and preschoolers' prosocial behavior (Garner, Dunsmore, & Southam-Gerrow, 2008), potentially indicating that this type of emotion language may relate to children's behaviors in later ages. It is possible that longitudinal analyses of toddlers' through preschool may reveal effects of other types of emotion language in toddlerhood.

### *Limitations*

Though the current study is of the first to examine predictors of teachers' emotion language and associations between teachers' emotion language and toddlers' social emotional competence, this study is not without limitations. First, the sample size of teachers is relatively small. The small sample of teachers did not allow for a factor analysis to be completed on the Parents' Beliefs about Toddlers' Emotions scale to assess if teachers have different subsets of beliefs about toddlers' emotions compared to parents. This first limitation led to a second limitation of the current study in that the measure used to assess teachers' beliefs about toddlers' emotions was an adapted parenting measure that may function differently in a sample of teachers. It is therefore possible that there are methodological validity issues in the current study due to the assessment of teachers' beliefs using a parenting measure. Third, the current study examined teachers' emotion language and toddlers' social emotional competence at one time point and thus did not allow for longitudinal or cross-lagged analyses that could allow exploration of the effects of teachers' emotion language over time, and the examination of potential bidirectional effects of teachers' emotion language and toddlers' social emotional

competence. Fourth, the sample was limited in its assessment of a sample of teachers who identified mostly as African American/Black or European American/White; a more diverse sample would provide more information regarding how teachers' racial identity may influence the ways in which they use emotion language in teacher-child interactions. Fifth, the measures assessing teachers' beliefs, knowledge, and characteristics, as well as toddlers' social emotional competence, were teacher report. It is possible that an observational assessment of toddlers' social emotional competence may provide more reliable information, and may also provide the ability to assess other aspects of social emotional competence, such as emotion understanding. Sixth, there was limited variability in teachers' reporting of toddlers' problem behaviors in classrooms, though this is consistent with previous research toddler classrooms (La Paro, Williamson, & Hatfield, 2014). This limited range may hinder the ability to detect relationships with toddlers' problem behaviors. Seventh, teachers' emotion labeling, questioning, and explaining were not always in direct response to toddlers' emotionality (i.e. sometimes this language was used while reading a book or discussing what someone might feel if something occurred), though emotion minimizing most often was in direct response to toddlers. Because of this difference, it may be that the assessment of emotion minimizing in the current study is capturing teachers' direct responses to toddlers' emotions more so than the other types of emotion language; by virtue of this more proximal connection, this may be why emotion minimizing is more strongly related to toddlers' behaviors than other types of emotion language. This possibility merits further investigation. Eighth, the generalized linear models used to assess the first and second research question were

quite large given the small sample size, therefore leading to potential analytic problems. Lastly, there are a broad range of toddler characteristics that may influence toddlers' social emotional competence that were not assessed in the current study, including toddlers' temperament or physiological regulation abilities. It is important note that because this study did not control for these factors, these may play an undetermined role the relationships between teachers' emotion language and toddlers' social emotional competence.

### *Implications*

Results of the current study have implications for teacher preparation programs and teachers' professional development efforts. In terms of the predictors of teachers' emotion language, this study suggests that teachers' beliefs, knowledge, and characteristics all must be considered in the assessment of teachers' emotion language, as some variables seemed to influence certain types of emotion language more than others. Specific beliefs that teachers' hold regarding toddlers and their emotions must be addressed and discussed, as this research suggests that beliefs have implications for teachers' behaviors in teacher–toddler interactions.

In order to provide specific recommendations to teacher preparation and professional development programs regarding diminishing teachers' use of emotion minimizing language, the current study suggests that teachers' beliefs about toddlers' emotions, teachers' beliefs about young children, teachers' knowledge about toddlers' development, and teachers' education level were significant predictors of teachers' emotion minimizing language. Specifically, teachers' emotion minimizing language was

associated positively with their beliefs that toddlers' positive emotions come at a cost (Cost of Positivity), that toddlers' anger serves a valuable purpose (Value of Anger), and that teachers should know what toddlers are feeling (Knowledge), and was associated negatively with their beliefs that toddlers can control their emotional expressions and behaviors (Control). These findings illustrate that teachers' beliefs that positive emotions are distracting and negative emotions are helpful may increase teachers' behaviors that minimize toddlers' emotions; though this may depend on the valence of the emotions toddlers are expressing at the time. Also, teachers' beliefs that they should know how toddlers are feeling, and that toddlers can control their emotional expressions and behaviors merits further exploration. It is important to note that the measure used to assess teachers' beliefs about toddlers' emotions was originally a parenting tool, and may not be the perfect measure to assess teachers' specific beliefs. However, especially in regard to teacher preparation and professional development, using the PBACE as a guide to understand more about what teachers believe about toddlers' emotions may still be helpful.

Additionally, teachers' traditional beliefs about young children were associated positively with teachers' emotion minimizing language. This finding suggests that teachers' beliefs about how young children learn and how young children should act have implications for how teachers use language about emotions in teacher-toddler interactions. It is therefore important for teacher preparation programs and for teacher professional development efforts to specifically discuss the role that teachers' beliefs play

in their teaching practices, particularly around the way they choose to talk about emotions.

Teachers' knowledge about toddlers' development was associated positively with teachers' emotion minimizing language, a finding that is contrary to hypotheses. Taken with the finding that teachers' receipt of a 4-year degree in a field related to early childhood education was the only level of education negatively related to teachers' emotion minimizing, the current suggests that specific instruction regarding toddlers and their emotions is needed in order to make sure, regardless of previous teacher training, that teachers have guidance about developmentally appropriate and emotionally supportive practices with toddlers.

The findings that teachers' emotion minimizing language is negatively related to toddlers' social emotional competence has implications for teacher professional development (both pre-service and in-service), and for the field of child development. For pre-service teachers, it is important that we prepare and support our early childhood educators to provide emotionally supportive environments that will facilitate children's development in social emotional domains, as toddlers who lack social and emotional skills may be at risk for developing social emotional problems (Hay et al., 1995). This preparation must consider a variety of teacher variables that may influence the ways in which pre-service teachers learn about supporting social emotional development in young children. Teacher preparation programs must consider the ways that pre-service teachers' beliefs may affect their internalization of the importance of social emotional development, and their teaching practices and behaviors in classrooms. Furthermore,

teacher instructors' beliefs about the importance of social emotional competence may influence the amount of focus this area received in pre-service teacher classes. It is vital that the field of early childhood education examines teachers' preparation to work specifically in toddler classrooms, as both coursework and practicum opportunities focused on toddler development and care may be lacking in our current early childhood teacher education programs (Horm et al., 2013; NAEYC, 2009).

The findings of the current study suggest that, for in-service teachers of toddlers, the field of early childhood education should have coursework and trainings with explicit instruction regarding the potential influence of emotion minimizing language in teacher-toddler interactions. These findings are particularly important in the context that many teacher preparation programs do not provide instruction or experiences specifically related to teaching toddlers (Buell et al., 2000); therefore, in-service teacher professional development programs should include a specific focus on toddler classrooms. Research examining the influence of professional development programs specifically focused on teachers' language use suggests that teachers should be involved in constructing their own learning and action plans (Thornbury, 1996), and also underscores the importance of individual consultations and coaching (Dickinson, Darrow, & Tinubu, 2008; Neuman & Cunningham, 2009; Piasta et al., 2012; Rudd, Lambert, Satterwhite, & Smith, 2009) and assessment and reflection based on video recordings (Bradley & Reinking, 2011; Brown & Kennedy, 2011). A synthesis of the research regarding in-service teachers' professional development suggests that a multitude of factors influence teachers' changes in behaviors, such as teachers' knowledge, skills, prior behaviors and experiences (Pianta

et al., 2014), beliefs about teaching (Bradley & Reinking, 2011; Pianta et al., 2014), classroom and curriculum context (Dickinson et al., 2014), and personal development (Spodek, 1996). Professional development is thus a complex and dynamic integration of experiences and knowledge to inform teaching practices. Because research suggests that teachers receive draw from multiple sources of knowledge and experience in their teaching (Gholami & Husu, 2010; Hedges, 2012), and teachers most often benefit from constructing their own learning and assessment when faced with the opportunity to change their language practices (Thornbury, 1996; Bradley & Reinking, 2011; Brown & Kennedy, 2011), professional development efforts are most successful when they synthesize teachers' previous knowledge and experiences with new, self-directed learning opportunities that illustrate the importance of teachers' emotion language. Though this research has been accomplished with samples of in-service teachers, many of the recommendations suggested from this research align with the hands-on learning approach to teaching pre-service teachers. It is important, however, to note that there are differences in pre-service teachers' experiences with young children that may require the use of additional strategies to influence pre-service teachers' use of emotion language. For example, pre-service teachers may have less experience working with young children than in-service teachers, and may therefore regard young children's emotions as potentially more difficult to handle or distracting. It is possible that, compared to in-service teachers, pre-service teachers may require more specific training on their own emotion regulation in the face of young children's emotionality, and may benefit from more discussion of their roles as reflective professionals. Training regarding these skills

could be facilitated within practicum courses that include hands-on interactions with young children experiencing a range of emotions, and specific discussion of teachers' own emotion regulation strategies could be discussed during class time with the instructor.

Both pre-service and in-service teacher professional development that focuses on teachers' language practices in teacher–child interactions should place emphasis on improving teachers' knowledge of the importance of their language use with toddlers and its impact on development and teacher–child relationships, and build on teachers' previous experiences with children through applied practice of language strategies.

#### *Future Directions*

The current study offers a variety of pathways for future research. The current study suggests an association between teachers' emotion minimizing language and toddlers' lower social emotional competence, yet it is not clear from the current analyses if teachers' emotion minimizing language affects toddlers' social emotional competence or if toddlers' social emotional competence affects teachers' emotion language; it may be that if toddlers in the classroom exhibit lower social emotional competence, teachers may feel overwhelmed by toddlers' emotional expressions and behaviors and may then utilize more strategies that limit toddlers' emotional expressions. Future research can use longitudinal designs with larger sample sizes that allow for an examination of the direct effects of teachers' emotion minimizing language on toddlers' social emotional competence and account for possible bidirectional effects using cross-lagged analyses. Longitudinal designs could be helpful in this vein of research to assess toddler

classrooms from the beginning of the school year to the end, as well as longer studies that address possible associations between teachers' emotion language with toddlers and preschoolers' socially emotionally competent behaviors. Moreover, if the relationship between teachers' emotion minimizing language and toddlers' social emotional competence *is* such that teachers are overwhelmed or stressed in classrooms of toddlers' with low social emotional competence, and therefore use emotion minimizing language to limit toddlers' emotional expressions, future research should address ways to support teacher practices that limit teachers' feelings of stress and allow for behaviors more supportive of social emotional development in toddlers.

Because the current study did not find a relationship between teachers' emotion labeling, questioning, and explaining and toddlers' social emotional competence, future research should explore these components of emotion language using knowledge-based indicators such as toddlers' emotion understanding (a component of social emotional competence), instead of only behavioral indicators. It is possible that teachers' emotion labeling, questioning, and explaining may facilitate toddlers' ability to label and understand causes of their own and others' emotions, yet this may not be translated into toddlers' behaviors at this age. Vygotsky's (1978, 1987) position on the link between language and thought supports this possibility, as young children's exposure to emotion language may facilitate toddlers' emotion knowledge via their understanding of emotions and internalization of emotion labels, but may not yet have translated into the way they observably navigate social emotional situations. Studies that assess toddlers' emotion knowledge through tasks such as an emotion understanding puppet task that assesses

children's recognition and identification of emotional expressions and situations (measure described and used with toddlers in Denham, 1986, and used with toddlers in Laible, 2004; Laible & Thompson, 2002) may shed more light on how teachers' emotion labeling, questioning, and explaining may relate to toddlers' development and learning in terms of emotion understanding. Moreover, studies such as these may help to uncover additional potential influences of teachers' emotion minimizing language on precursors to toddlers' social emotional competence. Because the current study found evidence for a negative relationship between teachers' emotion minimizing and toddlers' social emotional competence, it is possible that teachers' emotion minimizing may also be detrimental to other facets of toddlers' social and emotional skills, including emotion understanding. It may also be possible that teachers' use of emotion minimizing language may dampen any positive effects of teachers' emotion labeling, questioning, or explaining on toddlers' social emotional competence; future research should utilize interaction techniques to assess the interrelationships between these types of emotion language. In terms of coding emotion minimizing language, future research can also assess the culturally bound interpretations of emotion minimizing language; it is possible that coders' cultural interpretations of minimizing language may be different across cultures and thus may alter what is coded as minimizing.

Future research should also address, more specifically, children's behaviors that elicit teachers' emotion language. This may require more specific time-sampling coding of toddlers' behaviors in classrooms, and may need to be done in a longer period of time over a variety of different classroom and interactional contexts. This work could also

address the differential effects of teachers' emotion language depending on the referent of the emotion term; for example, research can assess if the relationships between emotion language and child outcomes differ if teachers talk about their own emotions, compared to toddlers' emotions, compared to book characters emotions. Additionally, it should be explored whether teachers use emotion language in purposeful and direct teaching about emotions, or if this language occurs more during naturally-occurring interactions as assessed in the current study. It is possible that teachers utilize specific activities to use language about emotions, though this may differ by classroom age group as more direct teaching about emotions may be more developmentally appropriate for older age groups. Additionally, it could be that teachers who use more emotion language are using more language as a whole; this should be further explored in future research. It is also unclear the effects of the valence of emotions discussed; it is possible that teachers' discussion of negative emotions may have differential relationships to toddlers' social emotional competence than teachers' discussion of positive emotions.

Another vein of research yet to be explored is the assessment of teachers' racial socialization, both the messages they received in their upbringing as well as their own practices in the classroom about what it means to identify as a part of a racial group (Thornton, Chatters, Taylor, & Allen, 1990), and how these practices may relate to teachers' emotion language. First, research should uncover if teachers identify any emotional practices that may differ based on their own and/or children's racial identities, potentially through qualitative interviews exploring teachers' perception of these constructs and asking if they view their role as an agent of racial socialization. It may be

the case that there is an intersection between racial socialization and emotion language practices in early childhood education practices that should be explored.

There are certainly other teacher-level predictors of teachers' emotion language, such as teachers' emotion regulation abilities, as parenting research suggests that if parents are over-aroused emotionally by their child's emotions, they use more minimization techniques (Fabes et al., 2001). Another specific teacher-level predictor that merits further examination in the study of teachers' emotion language is teachers' education. The results of this study provide some information regarding teachers' education level; however, what remains unclear is the specific content areas that are addressed in teachers' preparation. As research has underscored a potential lack of teachers' preparation for infant/toddler care (Horm et al., 2014; NAEYC 2009), future research should examine characteristics of teachers' education, such as coursework specific to toddlers or focused on ways to support social emotional development, instead of examining teachers' education as a categorical variable. Additionally, in terms of teachers' beliefs, future research should seek to understand more about the categories of the PBACE and how these subscales resonate with teachers. For example, research may further investigate the Knowledge subscale in an effort to uncover the differences in reasons *why* teachers want to know what children are feeling; the current study provides interesting directions for assessing differences in teachers' motives to understand the emotions children are feeling in their classrooms.

Research in early childhood education has underscored the importance of teacher–child interactions in toddlers' social emotional development (Brophy-Herb et al., 2007;

Halle et al., 2011; Morris et al., 2013). The current study adds to this literature by examining the relationship between teachers' emotion language as a specific component of teacher-toddler interactions and toddlers' social emotional competence, and by exploring potential predictors of teachers' emotion language. The current study proposes that teachers' beliefs, knowledge, and characteristics relate to teachers' emotion labeling, questioning, explaining, and minimizing language, and that teachers' emotion minimizing in teacher-toddler interactions has potential consequences for toddlers' social emotional competence in classroom settings. This study has implications for teacher preparation and professional development programs to specifically include discussion addressing teachers' beliefs, knowledge, and characteristics, teachers' emotion language, and how their emotion language can relate to toddlers' social emotional competence.

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APPENDIX A

TABLES

*Table 1. Descriptive Statistics of Study Variables (N = 28)*

|                             | Mean  | St Dev | Min   | Max   |
|-----------------------------|-------|--------|-------|-------|
| Cost of Positivity (PBACE)  | 1.98  | .82    | 1.00  | 4.25  |
| Value of Anger (PBACE)      | 3.99  | 1.04   | 2.33  | 5.83  |
| Manipulation (PBACE)        | 3.41  | 1.20   | 1.25  | 6.00  |
| Control (PBACE)             | 2.54  | .90    | 1.00  | 4.20  |
| Knowledge (PBACE)           | 4.30  | .95    | 2.33  | 6.00  |
| Autonomy (PBACE)            | 2.80  | .96    | 1.29  | 4.14  |
| Stability (PBACE)           | 2.68  | .96    | 1.00  | 4.75  |
| Democratic Beliefs (Ideas)  | 4.05  | .57    | 3.00  | 5.00  |
| Traditional Beliefs (Ideas) | 2.69  | .71    | 1.33  | 4.08  |
| KIDI                        | 18.21 | 1.62   | 14.00 | 21.00 |
| Emotion Labeling            | 3.18  | 2.37   | 0     | 8.00  |
| Emotion Questioning         | 4.21  | 3.63   | 0     | 13.00 |
| Emotion Explaining          | 2.25  | 2.85   | 0     | 11.00 |
| Emotion Minimizing          | 5.18  | 6.91   | 0     | 61.00 |
| Competence (BITSEA)         | 1.47  | .35    | .36   | 2.00  |
| Problem Behaviors (BITSEA)  | .28   | .17    | 0     | .77   |

*Note:* N = 115 for BITSEA scores. Emotion minimizing statistics prior to transformation.

Table 2. Bivariate Correlations of Study Variables ( $N = 28$ )

| Variable                | 1    | 2     | 3    | 4     | 5    | 6     | 7    | 8      | 9    | 10   | 11   | 12     | 13   | 14   | 15     | 16   | 17   | 18    |
|-------------------------|------|-------|------|-------|------|-------|------|--------|------|------|------|--------|------|------|--------|------|------|-------|
| 1. Teacher Education    | ---  |       |      |       |      |       |      |        |      |      |      |        |      |      |        |      |      |       |
| 2. Teacher Experience   | -.19 | ---   |      |       |      |       |      |        |      |      |      |        |      |      |        |      |      |       |
| 3. Star Rating          | .19  | -.18  | ---  |       |      |       |      |        |      |      |      |        |      |      |        |      |      |       |
| 4. Cost of Positivity   | .04  | -.42* | -.07 | ---   |      |       |      |        |      |      |      |        |      |      |        |      |      |       |
| 5. Value of Anger       | .27  | -.24  | .26  | .33   | ---  |       |      |        |      |      |      |        |      |      |        |      |      |       |
| 6. Manipulation         | -.14 | -.24  | -.10 | .56** | .26  | ---   |      |        |      |      |      |        |      |      |        |      |      |       |
| 7. Control              | .01  | -.07  | -.20 | -.08  | -.02 | .05   | ---  |        |      |      |      |        |      |      |        |      |      |       |
| 8. Knowledge            | -.20 | -.26  | -.03 | .00   | -.14 | -.01  | .01  | ---    |      |      |      |        |      |      |        |      |      |       |
| 9. Autonomy             | .21  | -.18  | .05  | .26   | .29  | .13   | .11  | -.66** | ---  |      |      |        |      |      |        |      |      |       |
| 10. Stability           | -.06 | -.08  | .07  | .09   | .28  | .50** | .18  | -.15   | .15  | ---  |      |        |      |      |        |      |      |       |
| 11. Democratic Beliefs  | .11  | .00   | .11  | .31   | .39* | .42*  | -.17 | -.31   | .17  | .38* | ---  |        |      |      |        |      |      |       |
| 12. Traditional Beliefs | -.26 | -.12  | -.26 | .19   | -.32 | .20   | .14  | .21    | -.08 | -.05 | -.23 | ---    |      |      |        |      |      |       |
| 13. KIDI                | .23  | .24   | .16  | -.21  | .02  | -.22  | .01  | -.21   | -.08 | -.01 | -.11 | -.64** | ---  |      |        |      |      |       |
| 14. Emotion Labeling    | .16  | -.03  | .19  | -.17  | .03  | -.40* | .04  | .23    | -.04 | -.16 | -.11 | -.14   | .16  | ---  |        |      |      |       |
| 15. Emotion Questioning | -.15 | -.12  | .07  | -.12  | -.21 | -.19  | .25  | -.26   | .18  | -.23 | .07  | -.33   | .11  | .26  | ---    |      |      |       |
| 16. Emotion Explaining  | .10  | -.03  | -.02 | -.19  | .05  | -.29  | .23  | .06    | -.07 | -.04 | .04  | -.45*  | .33  | .53* | .45*   | ---  |      |       |
| 17. Emotion Minimizing  | .19  | -.16  | .10  | .33   | .26  | .07   | .08  | .29    | .01  | -.02 | .01  | .26    | -.13 | .02  | -.58** | -.19 | ---  |       |
| 18. Competence          | .06  | -.27  | .29  | -.08  | .06  | -.23  | .13  | .27    | -.03 | .20  | -.04 | -.02   | -.16 | .17  | -.08   | .11  | .36  | ---   |
| 19. Problem Behaviors   | -.09 | -.26  | -.36 | .13   | -.02 | .02   | -.13 | .18    | -.14 | -.31 | -.18 | .18    | -.21 | .07  | .12    | .06  | -.25 | -.44* |

Note: For this table, BITSEA score correlations were computed using classroom average scores. \* $p < .05$ , \*\* $p < .01$

*Table 3. Predictors of Teachers' Emotion Labeling: Beliefs and Knowledge (N = 28)*

| Predictor                         | <i>B</i> | Standard Error | <i>p</i> |
|-----------------------------------|----------|----------------|----------|
| Cost of Positivity                | -.52     | .55            | .34      |
| Value of Anger                    | -.37     | .41            | .37      |
| Manipulation                      | -.88     | .45            | .05*     |
| Control                           | .55      | .65            | .40      |
| Knowledge                         | 3.01     | .74            | .00***   |
| Autonomy                          | 2.38     | .66            | .00***   |
| Stability                         | -.02     | .48            | .97      |
| Progressive/Democratic Beliefs    | 2.26     | .87            | .01**    |
| Traditional/Authoritarian Beliefs | -.21     | .80            | .79      |
| Knowledge of Development          | .67      | .31            | .03*     |

Note: \**p* < .05 \*\**p* < .01 \*\*\**p* < .001

*Table 4. Predictors of Teachers' Emotion Questioning: Beliefs and Knowledge (N = 28)*

| Predictor                         | <i>B</i> | Standard Error | <i>p</i> |
|-----------------------------------|----------|----------------|----------|
| Cost of Positivity                | .07      | .60            | .91      |
| Value of Anger                    | -2.02    | .45            | .00***   |
| Manipulation                      | -.01     | .48            | .99      |
| Control                           | 2.78     | .70            | .00***   |
| Knowledge                         | -1.89    | .80            | .02*     |
| Autonomy                          | -.26     | .72            | .72      |
| Stability                         | -.93     | .52            | .07      |
| Progressive/Democratic Beliefs    | 1.16     | .94            | .22      |
| Traditional/Authoritarian Beliefs | -3.18    | .86            | .00***   |
| Knowledge of Development          | -.68     | .33            | .04*     |

Note: \**p* < .05 \*\**p* < .01 \*\*\**p* < .001

*Table 5. Predictors of Teachers' Emotion Explaining: Beliefs and Knowledge (N = 28)*

| Predictor                         | <i>B</i> | Standard Error | <i>p</i> |
|-----------------------------------|----------|----------------|----------|
| Cost of Positivity                | -.07     | .74            | .93      |
| Value of Anger                    | -.38     | .55            | .50      |
| Manipulation                      | -.69     | .60            | .25      |
| Control                           | 1.21     | .86            | .16      |
| Knowledge                         | 1.14     | .99            | .25      |
| Autonomy                          | .63      | .88            | .47      |
| Stability                         | .07      | .64            | .91      |
| Progressive/Democratic Beliefs    | 1.74     | 1.16           | .14      |
| Traditional/Authoritarian Beliefs | -1.81    | 1.07           | .09      |
| Knowledge of Development          | .36      | .41            | .38      |

Note: \**p* < .05 \*\**p* < .01 \*\*\**p* < .001

*Table 6. Predictors of Teachers' Emotion Minimizing: Beliefs and Knowledge (N = 28)*

| Predictor                         | <i>B</i> | Standard Error | <i>p</i> |
|-----------------------------------|----------|----------------|----------|
| Cost of Positivity                | .18      | .09            | .05*     |
| Value of Anger                    | .14      | .07            | .04*     |
| Manipulation                      | .03      | .07            | .71      |
| Control                           | -.30     | .10            | .00***   |
| Knowledge                         | .39      | .12            | .00***   |
| Autonomy                          | .20      | .11            | .06      |
| Stability                         | -.08     | .08            | .29      |
| Progressive/Democratic Beliefs    | .04      | .14            | .77      |
| Traditional/Authoritarian Beliefs | .39      | .13            | .00***   |
| Knowledge of Development          | .12      | .05            | .01**    |

Note: \**p* < .05 \*\**p* < .01 \*\*\**p* < .001