

**EXAMINING AFFECTION IN LOW-INCOME CHILD CARE CENTERS:
THE ROLE OF AFFECTION IN TEACHER-TODDLER RELATIONSHIPS**

by

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THE ROLE OF AFFECTION IN TEACHER-TODDLER RELATIONSHIPS**

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TABLE OF CONTENTS

LIST OF TABLES	vi
LIST OF FIGURES	vii
ABSTRACT	viii

Chapter

1	INTRODUCTION	1
	Emotional Development (0-3 years old)	1
	Defining Affection.....	3
2	ECOLOGICAL THEORY: PROXIMAL PROCESSES	4
	Process	5
	Person	5
	Context	6
	Time.....	7
	Why is Affection Important In The Child Care Setting?	7
	Frequency of Affection.....	9
	Gender	13
	Classroom Context	16
	Present Study	20
3	METHODS.....	22
	Setting and Participants	23
	Measurements.....	23
	Procedure	24
	Analysis	25
4	RESULTS.....	28
	Frequency of Affection.....	28
	Gender Difference in Overall Affection.....	31

Affection by Classroom Context	32
Free Play	33
Mealtime	34
Group Time	35
Toddler's Experience in Child Care	36
5 DISCUSSION.....	41
REFERENCES	46

LIST OF TABLES

Table 1	Definition of affectionate behaviors	26
Table 2	Total number and percentage of teacher-child interaction that occurred during the observed period	29
Table 3	Frequency of child and teacher affectionate behaviors during the observed period	29
Table 4	Frequency of affection that boys and girls received from teachers during the observed period.....	31
Table 5	Frequency of child and teacher affectionate behaviors during free play	33
Table 6	Frequency of child and teacher affectionate behaviors during mealtimes.....	34
Table 7	Frequency of child and teacher affectionate behaviors during group time.....	36

LIST OF FIGURES

Figure 1	Percentage of time that each focal child spent in different classroom contexts based on the overall observation period.....	32
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ABSTRACT

Affection is a neglected topic in the field of early child care research. The purpose of this study is to create and pilot a framework for examining affectionate behaviors in toddler group care environments using a focal child technique. Twelve toddlers (6 boys and 6 girls) were observed for the first three hours of the morning classroom session. The affectionate behaviors that were studied included: physical affection, non-physical affection, touch, smiling, physical contact, and hold. Teacher-child affectionate displays were observed during free play, group time, and mealtime. The following research questions were examined: (1) What is the frequency of affection between toddlers and teachers in high subsidy classrooms? (2) Does the frequency of affectionate behaviors displayed by teachers vary by the gender? (3) Does affection between toddlers and teachers vary by classroom context? Study findings show that teacher-child affectionate behaviors in observed toddler classrooms were extremely low and that the incidence of affection varied by classroom context. Physical contact occurred more often than any other form of affection. Boys received more affection from teachers than girls. The highest frequency of affection occurred during free play and less frequently during group time. Implications for future research are presented.

Chapter 1

INTRODUCTION

In the United States, most young children are enrolled in some form of child care (Jones-Branch, Torquati, Raikes, & Edwards, 2004). In child care settings, teachers and caregivers are responsible for educating, nurturing, encouraging, and supporting children's overall development. Thus, the relationship that children form with a teacher can provide them with security and a safe learning environment. Affection can promote positive teacher-child relationships and children's social-emotional development (Twardosz, Botkin, Cunningham, Weddle, Sollie, & Shreves, 1987; Owen & Gillentine, 2011). Unfortunately, the overall level of teacher-child expressions of affection in child care is alarmingly low (Twardosz et al., 1987; Zanolli et al., 1997). Researchers have suggested that although most teachers are aware of the benefits of affection on children's development, past research on affection notes low levels in early childhood classrooms. Researchers also discovered that gender, classroom context, and fear of being accused of inappropriate touching could influence the type and frequency in teachers' affectionate expressions (Botkins & Twardosz, 1988; Own & Gillentine, 2011; Piper & Smith, 2003; Twardosz et al., 1987).

Emotional Development (0-3 years old)

From the ages of birth to three years old, infants and toddlers experience growth in all areas of development as they observe and interact with individuals and

their environment. Within the first three years of development, a child's emotional skills are often developed as early as infancy. Smiling is the first affectionate expressions that occurs between birth and two months in which infants will show interest by turning their heads towards an object or a person and smile (Sroufe, 1997). At three months, infants will begin to express social smile and laughing as a form of reciprocated interaction with other individuals (Benson & Haith, 2009; Sroufe, 1997). From the ages of four to nine months, infants' emotional expressions will continue to expand and become more intense. They will respond to facial and vocal expressions but it is not until nine months that infants develop joy. Infants at this stage (4-9 months) will view their caregivers as security and will begin to initiate interaction with the caregiver as well as hesitate or show discomfort when meeting strangers (Sroufe, 1997). As development continues, infants' emotional expressions will expand to anger, fear, and surprise.

At a year old, toddlers strive to become independent. As they become independent, emotions such as joy and shame will develop as toddlers become aware of their success and failures (Benson & Haith, 2009). They become self-aware and are able to express their emotions such as affection and frustration. At this age, affectionate expressions such as smiling and laughing become a form of interaction and communication in dyad relationships (Benson & Haith, 2009). At the age of two years old, children will often engage in parallel play (next to but not with other children) as well as imitate other people in play. They are also more likely to form an attachment with caregivers in which they will seek to be held, comforted, soothed, and guided (Benson & Haith, 2009). They need a sense of security from parents and teachers. They are also able to express their feelings and desires to peers and adults.

By age three, children will directly display and respond to emotional expressions towards peers and caregivers (Benson & Haith, 2009). It is through emotional expressions (verbal and facial) that infants begin to understand people, such as caregivers, and their environment. Through interactions, infants and toddlers are also able to distinguish their emotions as well as the emotions of others. As infants develop into toddlerhood, they become more aware of their environment and find ways to make sense of it.

Defining Affection

Zanolli et al. (1997) define affection as “expression of positive feelings towards another person” (p. 100). Affection is often misinterpreted as simply the physical contact between individuals such as hugging, stroking, or holding. Although physical contact is one form of affection, there are many different aspects. Affectionate behaviors can be expressed through verbal praise, physical and non-physical affection, and smiling. In a child care setting, teachers often use physical affection as a nurturing and healing method (e.g., rubbing a child’s back when he/she is feeling sad). Verbal praise is often used to encourage and motivate toddlers to participate in classroom activities and build high self-esteem. Smiling is an affectionate behavior that is often used by teachers to bring emotional comfort and security for toddlers. Affection, as it relates to teacher-child relationships, is an understudied topic. The purpose of this research is to examine the type and the amount of affectionate behaviors that occur during teacher-child interaction in low-income center-based care.

Chapter 2

ECOLOGICAL THEORY: PROXIMAL PROCESSES

Often, parents are the primary adults that children interact with the most. In the child care environment, teachers adapt the parental role by contributing to children's development as they interact, teach, and guide them. Thus, developing and maintaining positive relationships with teachers is very vital for children's classroom experience. Bronfenbrenner (2006) explains the importance of children's environment and the individuals within that environment that can influence their development. More specifically, he explains that children's developmental outcomes are affected by five environmental systems known as the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Within the ecological framework, proximal processes between children and their caregivers explain that children's immediate environment and organisms are influential factors in children's development. Bronfenbrenner and Morris (2006) use the Process-Person-Context-Time (PPCT) model to explain how children view and understand their world. From the perspective of child care, PPCT is relevant model to demonstrate the importance of affectionate expressions in teacher-child relationships. Research have discovered that affection is an important contributing factor to children's social-emotional development, relationships with teachers and peers, as well as classroom experiences (Botkins et al., 1991; Botkins & Twardosz, 1988; Field et al., 1994; Owen & Gillentine, 2011; Zanolli et al., 1997). Within the child care environment, the relationship that toddlers form with their teachers can impact their future relationship with teachers and peers, as well

as their development. Below are the definitions of the PPCT model and its relevance to affectionate behaviors within child care settings.

Process

Process is a reciprocal interaction between the child and the environment such as objects, symbol, and people. Bronfenbrenner and Morris (2006) state that for a relationship to be effective, it has to occur on a regular basis. For the children who participate in center-based child care process is how the children interact with teachers or how teacher-child relationships are formed within the classroom environment. The relationships that they form become very crucial to children's relationship with peers, development, and overall classroom experience. Affectionate teachers can educate toddlers about expressing healthy emotions, forming positive relationships, and encouraging affectionate behaviors. How children perceive the relationship that they have with their teachers can influence how they approach or interact with their peers and future relationships with teachers.

Person

Person is defined as the biological, cognitive, emotional, and behavioral characteristics of an individual (Bronfenbrenner & Morris, 2006). In child care, personal characteristics are an important aspect in building positive teacher-child relationships. Characteristics such as gender, work satisfaction, and personal experiences may all be influential factors in teachers' ability to display and receive affection. The characteristic of both teachers and children can influence the frequency in teacher-child interaction. Toddlers who have high self-esteem and confidence are more likely to initiate teacher-child interaction and had higher rating of closeness with

teachers (Rudasill & Rimm-Kaufman, 2009). Toddlers who are shy or have low self-esteem are often hindered from forming relationships and expressing affection to teachers and peers for fear of being rejected.

Teachers who are stressed or lack job satisfaction may express infrequent affection. Mil and Romano-Whites (1999) have discovered that most teachers who displayed affectionate behaviors had larger classes, higher educator salaries, good relationship with supervisors, and were pleased with their job. Teachers who form positive relationships with their children may view their jobs as rewarding. Teachers who had fewer job rewards and less support from supervisor displayed negative behaviors (Mil & Romano-Whites, 1999). Personal characteristics of toddlers can also impact the type of relationship that they form with their teachers. Researchers have suggested that the sex of the child can affect the type and the frequency of teacher's affectionate expressions in classroom settings. Specifically, teachers were more likely to express affection to girls than boys, individuals than groups, and same sex children than opposite sex children (Botkins et al., 1991; Botkins & Twardosz, 1988; Perdue & Conners, 1978). Overall, the personal characteristics of both toddlers and teachers can impact the affectionate behaviors within teacher-child relationships.

Context

Context, according to Bronfenbrenner and Morris (2006), is another contributing factor in children's development. The physical environment in which the child spends adequate time, such as child care, is defined as context. For some children, the majority of their time is spent in some form of child care where they are likely to explore and adapt different behaviors (e.g. affection) as they interact with teachers and peers. Children also have the opportunity to explore their social skills,

emotions, and affectionate behaviors. As teachers interact with children, they can demonstrate positive affectionate behaviors, which can build children's self-esteem and impact their overall development. Within child care, the classroom context that children spend the majority of their time in can influence the frequency of teacher-child interaction and affection. For example, prior research has documented higher levels of affection during free play (unstructured) time. Affectionate behaviors occurred less frequently during group time and mealtime (Twardosz et al., 1987). The majority of children's time is spent in some form of free play, which may explain the higher level of frequency in teacher-child affection while in that context (Twardosz et al., 1987; Zanolli & Saudargas, 1990).

Time

Time is focused on the consistency or changes of activities or interactions that children experience within their environment (Bronfenbrenner & Morris, 2006). For teachers to be effective in forming positive relationships with their children, teachers' display of affection must be consistent over periods of time. Thus, affection, frequency of affection, or the lack of affection can have a lasting impact in toddler's development, self esteem, future relationships, classroom performance, and overall development (Botkins et al, 1991; Botkins & Twardosz, 1988; Field et al., 1994; Twardosz et al, 1987; Zanolli et al., 1997).

Why is Affection Important In The Child Care Setting?

Within the child care setting, teacher-child relationships and positive affectionate expressions are imperative for the development of infants and toddlers. Having an affectionate teacher-child relationship can be beneficial for teachers as well

as toddlers. Benson and Haith (2009) discovered that both caregivers and infants are able to respond to each other's emotional expressions during positive caregiver-infant interactions. For example, when a caregiver smiles, the infant will respond by smiling back. Infants and toddlers who receive affection are known to have positive cognitive, social, and emotional developmental outcomes (Andrzejewski & Davis, 2008; Zanolli, Saudargas, & Twardosz, 1997). Toddlers who receive positive affection will begin to understand not only their own emotions but the emotions of others as well. They are also more likely to imitate and reciprocate affectionate behaviors toward their teachers and peers.

Teachers are often encouraged to provide affection during teacher-child interactions (Shreve, Twardosz, & Weddle, 1983). In a teacher-child relationship, affectionate teachers provide children with comfort, protection, trust, approval, and security that they need for positive development. When teachers provide children with verbal praise after completing a task, children feel a sense of encouragement and empowerment. Zanolli and Saudargas (1990) discovered that children responded at a higher rate to teachers' smiling more than any other form of affection. Children who often feel a connection with a teacher or caregiver can form attachment relationships. In childcare, toddlers learn new skills as they observe and mimic teacher's behaviors. Affection is a form of behaviors that should be taught as well as demonstrated for toddlers to grasp the importance and the proper way to express affection. Teachers who demonstrate affectionate behaviors in the classrooms can encourage and teach children to form positive and trusting relationships. Toddlers are more likely to display affectionate behaviors if they observed their teachers being affectionate (Perdue & Conner, 1978).

As discussed, affection can be beneficial for both teachers and children. However, the lack of affection can also have negative outcomes for children. Some children might find it difficult to display affectionate behaviors towards their peers and teachers. Children who may not receive affection from teacher can face risk factors such as poor classroom performance, peer rejection, family conflict, and insecure attachment (Zanolli et al., 1997).

The following section highlight current empirical understanding of teacher-child affectionate behaviors in child care settings. The following section will focus on the importance of the frequency of affections, the relationship between gender and the display of affectionate behavior, and the impact on children's development during the first five years of life.

Frequency of Affection

The following literatures observed the frequency and influential factors that are associated with the expressions of affectionate behaviors within teacher-child relationships. Twardosz et al., (1987) conducted a study on affectionate behaviors of teachers and children in a child care setting. In particular, they focused on the facial, verbal, and physical affectionate behaviors of teachers and children. A 90-sec interval was divided into three sets to observe smiling and affectionate words during the first interval; active and passive affectionate physical contact during the second interval; and social interactions were observed during the third interval. A 2-year study was conducted in seven child care centers with 65 female teachers and 123 children. Children included both boys and girls from infants to 6-year-olds (Twardosz et al., 1987).

The results revealed that affectionate behaviors occurred less frequently than social interaction. They also discovered that teachers expressed different types of affectionate behaviors at a higher rate than children. For example, affectionate words were most often used by teachers and very rarely expressed by children. Smiling was expressed both by teachers and children more often than any other affectionate behaviors (Twardosz et al., 1987).

In similar research, Zanolli et al., (1997) examined children's response to teachers' affectionate words, affectionate contact, and smiling. The participants were 10 middle-class children ages 14-20 months and 6 full-time female teachers, 25-38-year old. The children were enrolled in a university child care setting. The observation was conducted during indoor and outdoor free play activities. Children were observed for 42-48 days. Researchers used event sampling as a method of data collection. For teachers, the affectionate behaviors that were observed were smiling, passive and active physical contact, and affectionate words. For children, researchers focused on children's responses which were coded as affectionate, negative, neutral, no response, and not visible (Zanolli et al., 1997).

The results revealed that most teachers displayed passive and active physical contact more frequently than any other forms of affection. Children were more receptive and responsive to smiling and smiling with contact than any other affectionate behaviors. Very rarely did children respond to teachers' affectionate behavior in a negative manner (Zanolli et al., 1997). Although teachers and children display some affectionate behaviors more frequently than other (2 teachers showed less affection than the remaining 4), the overall frequency of affection was very low (7 affectionate behaviors per 100 minutes observation) (Zanolli et al., 1997).

Field et al.'s, (1994) research examined touch in children's relationship with peers and teachers. Participants for this study included twenty-eight infants (5-12 months), thirty-one toddlers (19-30 months), and forty-four preschoolers (32-63 months). Children from three classrooms were observed during small group and freeplay activities using a time sampling method. Within two months, researchers observed positive touch, negative touch, and caregiving touch. Results revealed an increase in positive touch, such as holding, kissing, hugging, hand-holding, and casual touch. However, there were no significant changes in caregiving touch and negative touch (Field et al., 1994).

Jacobson and Owen (1987) also observed the association between caregiver-infant interaction and the caregiver's education, training, parenting, infant care experience, age, and personal characteristics. A time sampling method was used in which researchers observed and recorded the interactions of infants and caregivers. Researchers observed for 15 seconds and recorded for 15 second. The observation was conducted in 28 child care centers with 43 female caregivers. The results revealed that the overall interaction was positive and caregivers initiated the majority of the interactions. Although the tone of the caregivers was usually positive, positive affection such as singing, soothing, or laughing were not frequent (Jacobson & Owen, 1987).

The results for Jacobson and Owen's (1987) research revealed that caregivers training and educational background were not related to the frequency of the caregivers-infant interaction. There was also no apparent difference between caregivers who were mothers and non-mothers in the amount of interactions. However, the results varied when considering the caregivers' age and experience.

Older and more experienced caregivers were more likely to carry and hug infants than younger and less experienced caregivers (Jacobson & Owen, 1987).

Mill and Romano-White (1999) observed teachers' affectionate behavior and anger in child care setting. Researchers predicated that teachers' behavior would impact children's development. They were also interested in examining teachers' characteristics, work environment, and personal resources as possible association on teachers' anger or affectionate behavior towards the children. The participants included 78 female teachers from 37 child care centers. Using a time sampling method, four types of affectionate behaviors, smiling, affectionate words, and active and passive affectionate physical contact were observed. For the anger scale, researchers used the Affection Scale to observe four adult behaviors (e.g. whether the teachers were rough, yelled, threatened, or behaved inappropriately with a child in any way)(Mil & Romano-White, 1999).

The findings revealed that most caregivers were warm, caring, and affectionate toward the children. The most frequent affectionate behavior that occurred within the child care center was smiling. Most teachers expressed some form of positive affectionate behaviors. Only a small amount of teachers expressed anger towards the children. The teachers' education had an influence on the quality of interaction but not as a predictor of anger or affectionate behaviors. Results also indicate that teachers who had larger classes displayed more affection than teachers with smaller classes. Work environment had influential factor in teachers' affectionate behaviors. The negative behaviors, such as anger, were associated with teachers' concerns and lack of satisfaction with their jobs as well as lack of support from supervisor. Teachers who

showed satisfaction in their jobs and overall positive work environment expressed a higher level of affection (Mil & Romano-White, 1999).

Across studies, researchers have found some similarities in results. Specifically, smiling was the most frequent form of affection that teachers displayed to children. Infants and children also responded to smiling more than verbal and physical affection. The results also revealed differences in the findings. Jacobson and Owen (1987) discovered that caregiver's background had little influence in their abilities to provide affection. On the other hand, Mil and Romano-White's (1999) results indicated that teachers' educational background and job satisfaction could interfere with their affectionate behaviors towards children. The overall findings indicated that affection occurs infrequently. Based on the above research, it can be suggested that teachers' characteristics (personal behaviors, job satisfaction, experience, etc.) can influence how they view and understand affection. It can also determine the type or amount of affection, if any, that teachers provide during daily interaction with young children.

Gender

Prior research on affection suggests that gender impacts the expression of affectionate behavior between young children and their child care teachers (Botkins et al., 1991; Garner & Waajid, 2008; Perdue & Conner, 1978). In Perdue and Conner's (1978) research, they observed the patterns of touch between teachers and children in preschool. Researchers observed four types of touch: friendly, helpful, attentional, and incidental. Three touches (friendly, helpful, attentional) focused on intentional touches and incidental touch were document when accidental touches occurred. A total of 56 children between 38-63 months old and 8 teachers with an average age of 20 years

(four male and four female), were observed. Teachers and children were observed twice a week for 5 weeks in which examiners conducted 5-second observation intervals followed by 5-second recording intervals.

Results indicated that female and male teachers felt more comfortable about touching children of their own sex more often than children of the opposite sex. The majority of the time, male teachers touched female children to be helpful and male children to be friendly (Perdue & Conner, 1978). Most of the touches that children expressed to teachers were friendly or incidental touches. Similar to male teachers, boys touched male teachers more often than female teachers. On the other hand, there was no difference in frequency in which girls and boys touched female teachers. There was also no difference in the amount of touch that girls provided to male and female teachers (Perdue & Conner, 1978).

Botkins et al.'s (1991) study examined the difference in the amount and the type of affectionate behavior that boys and girls expressed to their teachers. The research was conducted in six child care centers which served children from the ages of 3 to 6 years. The participants included 32 males and 44 females. The participants were observed during a natural setting for two years. Each observation consisted of nine 10-second intervals in which researchers observed affectionate words, active and passive affectionate physical contact, and smiling (Botkins et al., 1991).

The results revealed some similarities in the affectionate behaviors of boys and girls (Botkins et al., 1991). For example, there was no difference in the amount of affection that girls and boys displayed. Smiling was expressed both by boys and girls more than any other form of affection. Children also displayed affectionate behaviors to individuals rather than groups of children. Study findings indicate that toddlers

demonstrated higher rates of affection to children and teachers of their own gender (Botkins et al., 1991). The type of affection expressed also varied by gender. For example, girls expressed smiling and affectionate words more often than the other affectionate behaviors. On the other hand, boys displayed active and passive physical affection more than other forms of affection (Botkins et al., 1991).

Botkins and Twardosz's (1988) research focused on observing the difference in teachers' affectionate expressions to individuals versus groups of children and male versus female children. The observation was conducted in six federally funded and university-based child care centers which served children from the ages of 3 to 6 years (Botkins & Twardosz, 1988). Participants included 47 female teachers and 316 children (156 males and 160 females). Teachers and children were observed on an average of 37 weeks in each center during natural settings. Researchers used nine 10-second intervals to observe teacher-child affectionate behaviors. The affectionate behaviors that were observed were smiling, physical contact, and affectionate words (Botkins & Twardosz, 1988).

The results revealed that teachers' display a higher frequency of affection to individual children than to groups of children (Botkins & Twardosz, 1988). Individual children received more affectionate words, active physical contact, and passive as physical contact than groups of children. There was no difference in teacher's smiling towards individuals and groups of children. Teachers expressed affection at a higher frequency to female children than male children. Smiling, active and passive affectionate physical contact were displayed more often to female children than male children (Botkins & Twardosz, 1988).

Past research suggests that the type and the amount of affection that both teachers and children display can vary by gender with girls typically receiving more affection than boys (Botkins & Twardosz, 1988; Botkins et al., 1991; Perdue & Connor, 1978). In return, boys received and provided less affection to teachers than girls (Botkins et al., 1991; Perdue & Connor, 1978). The findings indicate that teachers expressed affection to children who played in same-sex groups versus children who played in groups with the opposite sex (Botkins & Twardosz, 1988).

Classroom Context

Classroom context is an important aspect to consider when observing teacher-child interactions. The daily activities that teachers and children are involved in have the potential to influence affectionate behaviors in child care. Past research suggests that some affectionate behaviors tend to occur in some contexts more than others. The following literatures will evaluate the contextual differences in teacher-child affectionate behaviors. In the previously mentioned study conducted by Twardosz and colleagues (1987), the researchers also observed teacher-child affectionate behaviors based on context in 10-second intervals. Since all affectionate behaviors could not be captured simultaneously, affectionate behaviors were divided into three sets of intervals. They observed teacher-child affectionate interaction during indoor and outdoor free-play, small and large groups, and mealtime. They discovered that affectionate physical contact and smiling occurred at lower frequency during mealtime than in any other context. Affectionate words were expressed at a higher frequency during small group activities and vary rarely during outdoor free-play (Twardosz et al., 1987).

Fleck and Chavajay (2009) study focused the comparison of physical contact between preschoolers and kindergartners in child care. A video recorder was used to observe children while they were mainly in circle and center time. The subjects included 29 children and 14 teachers who were observed during their natural setting in a child care center. The 15 preschoolers were 3 to 4 years old and the 14 kindergartners were between 5 and 6 years old. Researchers defined physical contact as “body-to-body contact between individuals” (Fleck & Chavajay, 2009, p. 49). They observed different forms of physical contact such as affectionate, physical retrieval contact, caretaking, control of behavior, instructive, aggressive, play, and incidental (Fleck & Chavajay, 2009).

The study found that physical interaction was low during circle and center time for both preschool and kindergarten classes. There were some similarities in affectionate behavior that were displayed in both circle and center time, therefore researchers combined the results for both contexts (Fleck & Chavajay, 2009). They discovered that preschoolers were involved in purposeful touches and affectionate touches with teachers than kindergartners during circle and center time. Preschoolers also expressed incidental touches (touches with no purpose) more often than kindergartners. Preschoolers were more likely to initiate the majority of affectionate behaviors towards their teacher than kindergartners (Fleck & Chavajay, 2009).

Shreve, Twardosz, and Weddle (1983) studied an intervention to promote positive affectionate behaviors between teachers and children in two child care settings. Eight female teachers (25-50 years old) and children were observed during indoor and outdoor free-play, small and large group activities, and mealtime (breakfast and lunch). Researcher used group affection activities, prompt cards, and graphic

feedback to motivate teachers to express their affections for children during their daily classroom activities (Shreve et al, 1983). Affectionate activities included songs, games, role playing, and prompt cards with suggestion on ways to express affection. Each affectionate behavior was recorded in 10-sec intervals. The affectionate behaviors observed were smiling, affectionate words, and active and passive affectionate physical contact (Shreve et al, 1983).

Researchers did not indicate any difference in affectionate expressions based on classroom context (free-play, mealtime, and group activities) (Shreve et al, 1983). Their results instead revealed that the intervention showed a small increase in both centers when teachers used affectionate activities and prompt cards during interaction. When researchers conducted a follow-up with the centers, they discovered that Center 1 increased in affectionate words and a decrease in physical contact. In Center 2, there was an increase in overall affectionate behaviors during all contexts except during breakfast time. It was also observed that teachers used prompt cards during the follow-up visit. Out of eight teachers, only one teacher increased her affectionate behavior after the intervention was implemented (Shreve et al, 1983).

De Schipper, Riksen-Walraven, and Geurts (2006) evaluated two research questions. The first question examined whether the caregiver-child interaction during play time is influenced by the effect of child-caregiver ratio (3:1 vs. 5:1). The second question focused on whether caregiver-child interaction during play time was correlated with the morning and lunch activities. 217 female caregivers from the age of 18-56 years participated in the study. The caregiver-child interactions were videotaped and measured using 7-point scales to reflect caregiver behavior toward a group of

children, the ORCE scale, and the Erickson et al.'s for child avoidance and compliance (De Schipper et al, 2006).

The results suggested that child-caregiver was greater when the ratio of child-caregiver reduced from 5:1 to 3:1. The quality of caregiver-child interactions during lunch time was lower than structured play time. Both caregivers and children benefited when there was a low child-caregiver ratio. Research indicated that caregivers' display of positive affect towards children was not affected by the amount of children they had in the classroom. Affection was also stable during structured play and lunch time (De Schipper et al, 2006).

Jun Ahn (2005) used qualitative methods to observe teachers' responses to children's emotional expressions within the contexts of free play, snack time, and teacher-lead activities. This study observed 3 child care centers which included a male teacher and 11 female teachers. Each teacher was observed between 120-180 minutes at a time using event-sampling method. Results showed that teachers used three positive emotional expressions towards their children such as interaction, compliments, and encouragement of children's own emotional expressions. Teachers provided empathy through verbal and facial expressions when they thought children felt loneliness or anger. Empathetic teachers had positive teacher-child relationship and they were more likely to help children in identifying and expressing their emotions and affections (Jun Ahn, 2005). However, researchers did not indicate a difference of emotional expressions by context (Jun Ahn, 2005).

In sum, researches on classroom context have produced consistent findings (Fleck & Chavajay, 2009; Jun Ahn, 2005; Shreve et al., 1983; Twardosz et al., 1987). The findings indicate that teacher-child affectionate expressions were displayed more

often in the context of indoor and outdoor free-play time (Ahn, 2005; Schipper et al., 2006; Twardosz et al., 1987). Mealtime was considered to have the lowest form of teacher-child interaction or affectionate display (Ahn, 2005; Schipper et al., 2006; Twardosz et al., 1987). The difference in the expressions of affectionate behaviors during circle and center time was very minor (Fleck & Chavajay, 2009).

Present Study

Affection research was predominant in the 80s and 90s (Botkins & Twardosz, 1988; Twardosz, et al., 1987; Zanolii & Saudargas, 1990; Zanolli et al., 1997) and much has been initiated to improve child care quality and therefore, a contemporary examination on the frequency of affection is needed. Past research suggests that affection may be impacted by gender and context. Methodologies to study affection have included event sampling and time sampling of affectionate. The current research is a descriptive study that uses an innovative focal child technique to examine the frequency of teacher-child affection in toddler classrooms in an effort to pilot an observational framework that integrates classroom context and longer observational periods for individual children rather than environmental scans of larger groups of children.

Using focal child observation method to assess children in classroom settings provides a clear indication of the individual experiences of children within a classroom or a bottom-up approach (Hallam, Fouts, Bargreen, & Caudle, 2009; Katz, 1994). This approach captures each focal child's affectionate experiences as they interact with teachers in different classroom contexts. As Bronfenbrenner and Morris' (2006) theory and past literatures have revealed, context is an important and influential factor in the behaviors of both children and teachers. Thus, the current study will

examine teacher-child affectionate behaviors as they occurred in the context of free play, mealtime, and group time and provide a framework for further study for affection between toddlers and their caregivers in formal child care settings. Furthermore, the affectionate expressions that teachers display to boys and girls will also be analyzed to determine if gender continues to influence teachers' affectionate behaviors. The following three questions are examined; (1) What is the frequency of affection between toddlers and teachers in child care classrooms? (2) Does the frequency of affectionate behaviors displayed by teachers vary by child gender? (3) Does affection between toddlers and teachers vary by classroom context?

Based on prior research, it is hypothesized that toddlers in observed classrooms will demonstrate low levels of affectionate behaviors. Teachers' affectionate expressions are also predicated to occur at a low frequency. It is also hypothesized that gender and context will have influential factors on teachers' affectionate displays towards toddlers. Past literature indicate that teachers are more likely to be affectionately expressive to children of their own sex at a higher rate than children of the opposite sex. Since all the teachers for the current study are females, it is predicted that teachers will more likely display affection to girls than boys. It is also anticipated that the majority of teacher-child affectionate expressions will be displayed during free-play activities than in any other context.

Chapter 3

METHODS

The current study is a secondary analysis of the Daily Experiences Project designed to document the daily experiences of low-income toddlers using extended time sampling observation of very young children and their caregivers across home and child care setting (Hallam, Fouts, Bargreen, & Caudle, 2009). Children's classroom experiences were examined by observing child-caregiver behaviors, child-caregivers relationships, and classroom environment. The results for the toddlers who were observed in their home environment will be excluded from this study. Instead, the focus will be on the toddlers who attended child care. By using secondary analysis, the current study will examine affectionate behavior between toddlers and their caregivers in center-based classroom settings.

The current study used descriptive analysis to describe teacher-child affectionate behaviors in child care classrooms. The goal of the study is to provide a framework for a contemporary examination of the type and frequency of affection in which each focal child expressed or received from teacher. The analysis includes toddler's individual experience within the first 2 to 3-hours of classroom morning activities. The morning activities were examined by analyzing the overall affection that the toddler received during each 30-second interval. The results for each toddler were then compared across all toddlers. Toddler's individual experiences were then examined by classroom context to determine the place in which teacher-child

affectionate behaviors occurred. The overall results of affection for each toddler were examined by gender to determine if affection varied based on the sex of the child.

Setting and Participants

The primary study was conducted in 3 nonprofit child care centers that received the highest quality rating for Tennessee in the state's Quality Rating and Improvement System. The data was collected from 5 different classrooms. Each classroom had one lead teacher and at least one assistant teacher; all of the teachers were female. Child care programs selected for participation in the study resided in low-income areas of mid-sized town and all three centers served a high density of children receiving child care subsidy. The child care centers serve children 6 weeks through 12 year-olds. The larger study observed a total of 22 toddlers who were recruited using flyers and word of mouth. Of those participants, 13 toddlers attended child care during the time that the larger study was conducted. Out of the 13 toddlers, there were no data available for one child during the morning sessions of child care and thus was excluded from this study. Therefore, 12 toddlers who participated in child care during the morning sessions were included for this study. Out of the 12 toddlers, 6 were boys and 6 were girls. Toddlers were between the ages of 12-34 months. The ethnicities of the chosen participants are five Caucasian, three Multiracial, two African-American, and the remaining two did not identify their ethnicity.

Measurements

The larger study conducted a direct observation using a time sampling method in which two trained graduate students documented specific behaviors that occurred

involving the focal child and the focal child's overall classroom experience in toddler child care classrooms. Affectionate behaviors that were listed on a behavior checklist will only be included for the current study (see Table 1). To acquire children's overall classroom experience, researchers used both qualitative and quantitative observation. The larger study used a quantitative observational checklist that was originally adapted from Belsky, Gilstrap, and Royine (1984) and has been used by previous researchers (e.g., Fouts, Hewlett, & Lamb, 2005; Hallam et al., 2009). The quantitative observation included using a behavioral checklist in which observers used an on-the-mark 30-second time sampling method to observe behaviors during a teacher-child interaction. For 20 seconds, a tape recorder prompted researchers to observe a focal child's behavior. When the tape recorder prompted observers to "record", a behavior checklist was used for the remaining 10 seconds to mark observed behaviors for the time interval. The qualitative observation focuses on a detailed description of the teacher-child interaction as well as the physical (size, space, furniture) and social setting (individuals that were going in and out of the classroom).

Procedure

Although the larger study focused on various behaviors, only those variables that are related to affection will be analyzed for this study. As previously stated, the chosen participants were derived from 3 centers and 5 different classrooms. Of those 5 classrooms, 3 classrooms were in the same center and the remaining two were each in separate centers. Of the 12 toddlers, 2 toddlers were in classroom 1, 6 toddlers were in classroom 2, 1 toddler was in classroom 3, 2 toddlers were in classroom 4, and 1 toddler was in classroom 5.

Toddlers were observed once in their classroom setting. Data collection for the overall study was approximately 1-year and 3 months. Toddlers were observed between 4-8 hours in a child care setting. The participant toddler's arrival time and nap time varied, the first 3 hours (8 am to 11 am) of the morning activities will be analyzed for this study. The 3 hours of observation were broken down to hourly observation in which researchers observed for 45 minutes and rested for the remaining 15 minutes. Each 30-sec interval within the 45 minutes of observation consists of 90 observation points. For the 12 participants, the observation points for the first 3 hours of observation ranged from 120 to 270 (some children came late). Toddlers that participated for the full 3 hours had a total of 270 observation points.

Two trained graduate students simultaneously conducted qualitative and quantitative observations. Prior to the observation, observers had a broader training on the coding categories and the field note measure. The training requirement was to view videos, live observation, and meet with research team to discuss as well as get feedbacks about the observation. To qualify as an observer, each observer was required to obtain a 90% inter-observer reliability on the quantitative behavioral coding system.

Analysis

The six types of affectionate behaviors included in this study were physical affection, non-physical affection, touch, smile, hold (hold on lap and arm were combined), and physical contact. Affectionate behaviors such as physical affection, non-physical affection, hold (hold on lap and arm were combined), and physical contact were analyzed to determine teachers' affectionate behaviors towards their teachers. The definitions of those behaviors are described in Table 1. The current

study includes data collection points only while toddlers were awake. Intervals that occurred at the same time were not counted twice. Since each classroom had more than one teacher, teachers' affectionate behaviors that were directed toward the focal child were combined.

Table 1 Definition of affectionate behaviors

Affectionate Behaviors	Definition
Affection Physical (P)	A caregiver shows positive physical affection to the child, such as touching, nuzzling, kissing, hugging, patting. This code is reserved for demonstration of overt affection. Affection should not be coded if the child is irritable.
Affection Non-Physical (NP)	A caregiver expresses nonphysical affection to the child verbally or nonverbally. For example, the individual may use affection speech such as "I love your hugs!" and/or use nonverbal affection including smiles or blowing kisses. Affection should not be coded if the child is irritable.
Touch	The child touches a caregiver
Smile	The child smiles at a teacher. This is not to be coded while the child sleeps.
Physical Contact	A caregiver and the focal child are in physical contact. This includes sitting closely together, holding onto a limb, leaning on the individual, an individual leaning on them.
Hold	A caregiver holds the child; indicate whether the child is held in a lap or arms.

Quantitative data were used to analyze the frequency of teacher-child affectionate behaviors. For the observed morning sessions, the total number of observation for participating toddlers ranged from 150 to 270 observation points. To determine the frequency of affection for each toddler, the amount in which each particular affectionate behavior that the focal child received or reciprocated were analyzed. After examining each focal child's affectionate experiences based on their observed time in the classroom (3hrs or less), the results were then compared by boys and girls. Teachers' affectionate behaviors, which included physical and non-physical affection, hold, and physical contact, were analyzed to determine gender difference.

For the contextual analysis questions, qualitative and quantitative data were used to determine where the toddlers were during teacher-child affectionate interaction. The data for the contexts were derived from the qualitative field notes that explained the context that the toddlers were in as well as the behaviors that occurred within the contextual framework (mealtime, group time, and free play). For this study, the contextual frameworks that were analyzed are free-play, group time, and mealtime. Free-play time includes any affectionate behaviors that occurred during indoor and outdoor free-play. Group time included activities such as circle time and story time. Mealtime consisted of any affectionate interaction that took place during breakfast, lunch, and snack time. For the contextual analysis questions, the affectionate behaviors for each focal child were examined based on their time spent in the classroom and the results were then analyzed by context (free play, group time, and mealtime).

Chapter 4

RESULTS

Frequency of Affection

The current study used descriptive data to capture the frequency of toddler's affectionate experience within the observed time. Gender differences were analyzed based on the occurrence in which teachers expressed affectionate behaviors to boys and girls. Teacher-child affectionate behaviors were also observed while in the context of free play, group time, and mealtime are revealed below. All affection codes that occurred during the observation period in all three classroom contexts were included for this study. However, when analyzing the total teacher-child interaction, codes that occurred during the same time were not counted twice, as to not inflate the overall teacher-child interaction value.

Prior to analyzing the affectionate behaviors, the frequency of overall teacher-child interaction was calculated for the toddlers and teachers in the study. Results are presented in Table 2. Of the 12 chosen toddlers, child 3 (4.81%) had the lowest percentage of interaction with teachers during the observed time. Two toddlers had higher levels of interaction with teachers than the remaining ten toddlers. Child 6 had 26.66% of total interactions with teachers and child 10 had 25.56%.

Table 2 Total number and percentage of teacher-child interaction that occurred during the observed period

Participants	Total Number of Observation Points	Number of Observation Points with Observed Interactions
CH1	270	59 (21.85%)
CH2	270	30 (11.11%)
CH3	270	13 (4.81%)
CH4	230	47 (20.43%)
CH5	270	24 (8.89%)
CH6	150	38 (25.33%)
CH7	270	22 (8.15%)
CH8	180	14 (7.78%)
CH9	200	19 (9.50%)
CH10	180	46 (25.56%)
CH11	270	20 (7.41%)
CH12	270	37 (13.70%)

Six affectionate behaviors were analyzed to determine the frequency of affection that each focal child received or reciprocated during teacher-child interactions (see Table 3). Affectionate behaviors, which include hold, physical contact, affection non-physical, and affection physical, were analyzed to determine teachers' affectionate behaviors. Toddler's affectionate expressions to teachers were analyzed by observing toddler's smile and touch. Across all toddlers observed, the most prevalent teacher affection behavior was physical contact and the least frequent behavior was affection non-physical during the morning observations.

Table 3 Frequency of child and teacher affectionate behaviors during the observed period

Participants	Toddler's Affection		Teachers' Affection				Total
	Touch	Smile	Affection P	Affection NP	Physical Contact	Hold	
CH1	-	(4) 6.67	(1) 1.67	-	-	-	(5) 8.33

Table 3 continued

CH2	-	-	-	-	(6) 20.00	-	(6) 20.00
CH3	-	(1) 2.00	-	-	-	-	(1) 2.00
CH4	-	(2) 4.00	(1) 2.00	-	(16) 32	(2) 4.00	(21) 42.00
CH5	-	(1) 5.00	-	-	-	-	(1) 5.00
CH6	N/A	N/A	N/A	N/A	N/A	N/A	-
CH7	-	-	-	-	-	-	-
CH8	-	(3) 7.50	-	-	-	-	(3) 7.50
CH9	-	-	-	-	-	(2) 6.67	(2) 6.67
CH10	-	(5) 8.33	(1) 1.67	-	-	(2) 3.33	(8) 13.33
CH11	-	(2) 4.00	-	-	(1) 2.00	-	(3) 6.00
CH12	-	(1) 1.67	-	-	(5) 8.33	-	(6) 10.00

The results indicated that teachers' frequency of affectionate expressions varied by child. For two toddlers, physical contact was the only affection that they received from teachers. Within the observed time, child 8 received 4.44% of physical contact from teachers and child 11 received 2.96%. Of the chosen participants, child 6 received the high percentage of physical contact from teachers, 19.33%. Child 4 and child 10 were the only toddlers who received all four affections (affection physical, affection non-physical, physical contact, and hold) from teachers.

Regarding toddler's behavior, the majority of the toddlers were also affectionately expressive when interacting with their teachers. The results indicate that all but one toddler expressed affection to teachers during classroom interaction. From those toddlers, smiling was the main form of affectionate expressions that toddlers displayed to teachers. Child 1 expressed smile at a higher frequency (5.93%) than the other participants. Only 2 out of the 12 toddlers expressed affection to teachers through touch. Child 1 expressed touch at 0.74% and child 4 expressed 0.87% of the observed time. The results indicate that both teachers and toddlers expressed infrequent affection during their daily interactions.

Gender Difference in Overall Affection

Gender differences in teachers overall affectionate behaviors towards the participating toddlers were analyzed (see Table 4). The differences in toddler's affectionate expressions based on teachers' gender were excluded for this section since all the teachers that participated were all females. The results revealed a difference in the overall amount of affectionate behaviors that teachers expressed to boys and girls. Boys received 11.09% of teachers overall affection during interactions compared to girls who received a total of affection 9.32%. Teachers expressed physical contact to both genders at a higher frequency than the other three affectionate behaviors. Physical contact was also the only affection that girls (7.33%) received from teachers at a higher rate than boys (6.72%). Another noticeable difference was that teachers never expressed non-physical affection to girls during the observation period. On the other hand, boys received 0.22% of affection non-physical during classroom interactions and it was also the lowest percentage of affection that boys received from teachers.

Table 4 Frequency of affection that boys and girls received from teachers during the observed period

Participants	Affection P	Affection NP	Physical Contact	Hold	Total
Boys	10 (0.73%)	3 (0.22%)	92 (6.72%)	47 (3.43%)	152 (11.09%)
Girls	3 (0.21%)	-	107 (7.33%)	26 (1.78%)	136 (9.32%)

Affection by Classroom Context

Within a child care setting, teacher-child interactions often occur in various classroom contexts. The type and frequency of affection that toddlers received or displayed to teachers were analyzed in the context of free play, mealtime, and group time during classroom morning activities. All the toddlers were observed in the context of free play and mealtime. However, only 8 out of the 12 children were observed during group time since group time did not occur for the 4 toddlers in the sample. Figure 1 displays the time that toddlers spent in each classroom context during the observed period. The results showed that the majority of the toddler's time was spent in free play, which included both indoor and outdoor free play. The least amount of toddler's time was spent in group time.

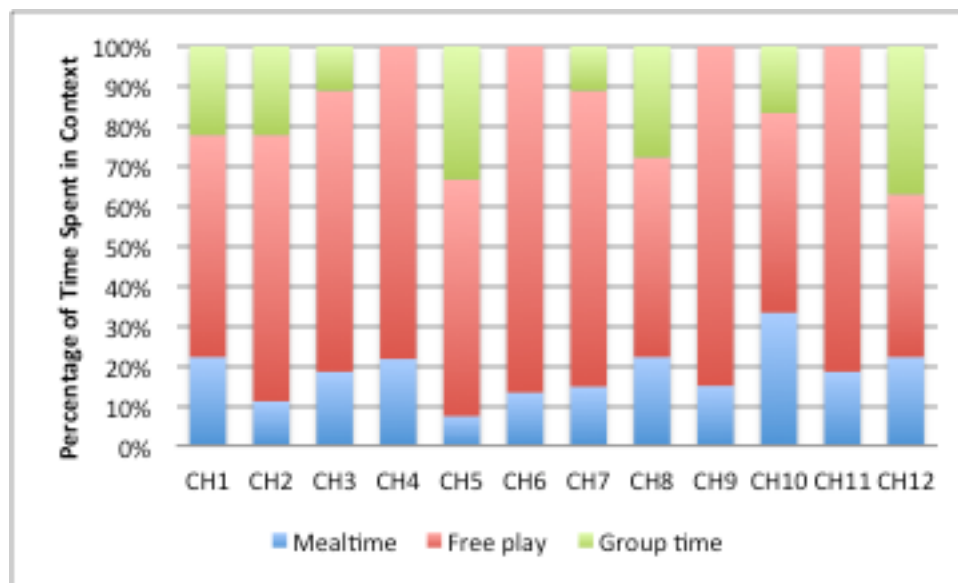


Figure 1 Percentage of time that each focal child spent in different classroom contexts based on the overall observation period

Free Play

Teacher-child affectionate interactions during both indoor and outdoor free play were included in this study. All the toddlers participated in free play (see Table 5). The overall results suggest that the majority of teacher-child affectionate expressions occurred in the context of free play. Child 4 received all of the affectionate behaviors from teachers however, child 1 had the highest percentage of overall affectionate compared to the other participants. In the context of free play, physical contact was the only affection that child 8 and child 11 received from teachers. Child 8 received physical contact 3.33% of the observed time and child 11 received 3.18%. It should also be noted that child 8 had the lowest percentage of overall affection from teachers during free play. Child 1 (1.33%) and child 4 (1.11%) were the only toddlers who expressed affection to teacher through touch. Overall, teachers infrequently expressed affection non-physical and toddlers rarely expressed touch as a method of interaction during free play.

Table 5 Frequency of child and teacher affectionate behaviors during free play

Participants	Toddler's Affection		Teachers' Affection				Total
	Touch	Smile	Affection P	Affection NP	Physical Contact	Hold	
CH1	(2) 1.33	(8) 5.33	-	-	(38) 25.33	(2) 1.33	(50) 33.32
CH2	-	(4) 2.22	-	-	(8) 4.44	(11) 6.11	(23) 12.77
CH3	-	(6) 3.16	(2) 1.05	-	(3) 1.58	-	(11) 5.79
CH4	(2) 1.11	(3) 1.67	(1) 0.56	(1) 0.56	(22) 12.22	(2) 1.11	(31) 17.23
CH5	-	(5) 3.13	-	-	(8) 5.00	(1) 0.63	(14) 8.76
CH6	-	-	-	-	(29) 22.31	(11) 8.46	(40) 30.77
CH7	-	(4) 2.00	(2) 1.00	-	(12) 6.00	(2) 1.00	(20) 10.00
CH8	-	(1) 1.11	-	-	(3) 3.33	-	(4) 4.44
CH9	-	(6) 3.53	-	-	(10) 5.88	(1) 0.59	(17) 10.00
CH10	-	(2) 2.22	(1) 1.11	-	(2) 2.22	(19) 21.11	(24) 26.66
CH11	-	(12) 5.45	-	-	(7) 3.18	-	(19) 8.63
CH12	-	-	-	-	(11) 10.00	(1) 0.91	(12) 10.91

Mealtime

Teacher-child affectionate behaviors were observed in the context of mealtime, which included breakfast, lunch, and snack. The majority of toddler's mealtime lasted between 10-15 minutes. One toddler was omitted from this section because the focal child spent mealtime with his mother rather than a teacher. Therefore, no affectionate behaviors between the focal child and teachers were observed during that time. The remaining 11 toddlers were observed in mealtime while they interacted with peers and teachers (see Table 6). However, not all the toddlers received affection within the context. Child 7 did not receive or express any form of affection during mealtime. Child 3 and child 8 did not receive affection from teachers as well but both toddlers were observed smiling at teachers during interaction. Child 3 smiled at teachers 2% of the observed time and child 8 expressed smiling 7.50% during the mealtime observation. For the children that received affections from teachers, majority of the toddlers experienced only one form of affection within the observed time. Child 4 and child 10 were the only participants who received two or more different types of affectionate behaviors from teachers. Child 2, child 7, and child 9 were the only toddlers that did not display any affectionate behaviors to teachers. Affectionate expressions such as affection non-physical and touch did not occur during mealtime.

Table 6 Frequency of child and teacher affectionate behaviors during mealtimes

Participants	Toddler's Affection		Teachers' Affection				Total
	Touch	Smile	Affection P	Affection NP	Physical Contact	Hold	
CH1	-	(4) 6.67	(1) 1.67	-	-	-	(5) 8.33
CH2	-	-	-	-	(6) 20.00	-	(6) 20.00

Table 6 continued

CH3	-	(1) 2.00	-	-	-	-	(1) 2.00
CH4	-	(2) 4.00	(1) 2.00	-	(16) 32.00	(2) 4.00	(21) 42.00
CH5	-	(1) 5.00	-	-	-	-	(1) 5.00
CH6	N/A	N/A	N/A	N/A	N/A	N/A	-
CH7	-	-	-	-	-	-	-
CH8	-	(3) 7.50	-	-	-	-	(3) 7.50
CH9	-	-	-	-	-	(2) 6.67	(2) 6.67
CH10	-	(5) 8.33	(1) 1.67	-	-	(2) 3.33	(8) 13.33
CH11	-	(2) 4.00	-	-	(1) 2.00	-	(3) 6.00
CH12	-	(1) 1.67	-	-	(5) 8.33	-	(6) 10.00

Group Time

Group time includes activities such as circle time and story time. The lowest frequency of affection occurred within the context of group time. Out of the 12 participants, only 8 toddlers participated in group time (see Table 7). Toddlers that were not observed during group time were omitted from this section. The majority of the toddlers that participated in group time received very little to no affections from teachers during the overall group time observation. Child 1 and child 7 were the only toddlers who did not receive affection from teachers during group time. However, both participants expressed smiling (6.67%) as the main form of affection towards teachers. Child 10 and child 12 received the majority of the overall affection from teachers compared to the other participants. Child 10 had 46.67% of teachers' overall affection and child 12 received 20% of teachers' affection during group time. All but one toddler expressed smiling during teacher-child interactions. Touch was the only affectionate behavior that was not expressed during group time observation.

Table 7 Frequency of child and teacher affectionate behaviors during group time

Participants	Toddler's Affection		Teachers' Affection				
	Touch	Smile	Affection P	Affection NP	Physical Contact	Hold	Total
CH1	-	(4) 6.67	-	-	-	-	(4) 6.67
CH2	-	(1) 1.67	-	-	(3) 5.00	-	(4) 6.67
CH3	-	-	-	(1) 3.33	-	-	(1) 3.33
CH4	N/A	N/A	N/A	N/A	N/A	N/A	-
CH5	-	(5) 5.56	(1) 1.11	-	(3) 3.33	-	(9) 10.00
CH6	N/A	N/A	N/A	N/A	N/A	N/A	-
CH7	-	(2) 6.67	-	-	-	-	(2) 6.67
CH8	-	(2) 4.00	-	-	(5) 10.00	-	(7) 14.00
CH9	N/A	N/A	N/A	N/A	N/A	N/A	-
CH10	-	(2) 6.67	(2) 6.67	(1) 3.33	-	(9) 30.00	(14) 46.67
CH11	N/A	N/A	N/A	N/A	N/A	N/A	-
CH12	-	(4) 4.00	(1) 1.00	-	(7) 7.00	(8) 8.00	(20) 20.00

Toddler's Experience in Child Care

Below are descriptions of two participants experience in a day in child care during the first three hours of the morning activities. The two chosen participants were in the same center but in different classrooms. Child 3 was from classroom 1 and child 6 was from classroom 2. These toddlers were chosen for analysis because child 6 had the highest overall percentage of teacher-child affection and child 3 had the lowest overall percentage of affectionate interaction with teachers. The analyses are based on the six observed affectionate behaviors that the focal toddlers received or reciprocated during teacher-child interactions.

Child 6 is a white male who was 20 months old during the observed time. The focal child had the highest overall percentage of affection within the observed period.

The child arrived at the child care center at 9:30, which is his routine schedule. The child started eating breakfast before interacting with peers and teachers. The focal child's mother stayed to help him eat breakfast from 9:30-9:40. The mother left after the toddler finished eating breakfast. During this time, the focal child did not receive any affection from teacher since breakfast time was spent with the toddler's mother.

The rest of the focal child's time (9:40-10:45) was spent in free play. The focal child had a hard time separating with the mother so the teacher told the toddler to "come on". At 9:42, the focal child joined the teacher in which she smiled and held the child while saying "gotcha!" The teacher interacts with the focal child by singing to him while he sat on her lap and started banging on a drum. The toddler responded to teachers singing by smiling. Teacher then grabbed a book for the focal child and proceeded to show and ask him questions about the book. At 9:50, the teacher encouraged the child to hit the drum toy and the focal child occasionally responded by tapping the drum. The toddler played with teacher until the teacher got up to clean up the tables at 9:55. During the focal child's interaction with the teacher, the teacher displayed physical contact and hold as the main form of affectionate expressions towards the focal child. Both teacher 1 and teacher 2 provided the focal child attention by frequently holding him on their laps and reading to him.

In the second hour, the focal child moved into a play area to play with a musical toy. The first teacher left for a break and another teacher came into the classroom. The second teacher interacted with the focal child by talking to him about the musical toy and his new baby sister. The focal child and teacher then moved into the book area. The toddler grabbed a book and began to talk to the teacher about the book. The teacher responded to the toddler's questions and read to the focal child

while he sat on her lap. At 10:05, teacher started singing to the class. The focal child moved away from the teacher to look at a book while he still took an interest in teachers' singing "if you're happy....".

After singing, the teacher got up to move to a different area and the focal child followed her around the classroom. The teacher provided a child with a xylophone toy in which he played briefly and then placed it on the floor to follow the teacher. He then proceeds to the kitchen area by himself. Teacher then brought the focal child back to the reading area. At 10:14, the focal child climbed on the teacher to look at a book. The second teacher then left the room and the first teacher returned at 10:20. At this time, the teacher provided the focal child with physical contact and hold as a form of affection

At 10:35, the focal child goes outside on the playground with his classmates. The focal child played by himself most of the time. He began to play in a restricted area (a hole on the ground) and the teacher tells him to "get out of there". Teacher then gets up and pulls the focal child by shirt and moves him away from the hole. The focal child then goes to play on the slide with other toddlers until 10:45. The focal child did not receive or reciprocate affection between 10:30-10:45. Overall, the focal child seemed to be with a teacher or in close proximity to a teacher majority of the time. Most of the focal child's time was spent in free play. The toddler interacted more often with teachers than peers while in the classroom, which might explain the high frequency of affection compared to other participants. At the end of the second hour, the toddler rarely interacted with teachers and no affectionate expressions were exchanged.

Child 3 is a male participant who was 27 months old during the time of the observation. The child's ethnicity is multiracial, White and African-American. Child 3 had the lowest overall frequency of affection during teacher-child interaction. The focal child arrived at the child care center at 8 am. The first hour of the morning activities consisted of free play. From 8 to 8:15, the toddler played by himself but within close proximity to teachers. The focal child then began playing with other toddlers and teachers. At that time, the toddler received affectionate physical and physical contact from teachers but the toddler did not express any affectionate behaviors to teachers. From 8:15 to 8:30, the toddler was still in free play where he played independently for a short while and then played with other toddlers. The focal child took a toy away from another toddler and the teacher told him to "stop". The toddler then gave the toy back to his peer. This time is mostly spent with the teacher instructing the toddler (several times) to stop taking toys away from other children and running around the room. The toddler then sat in a table between 8:30-8:45. The teacher provided him with art supplies and instructs him to "make something". When the toddler was finished, the teacher instructed him to clean up. From 8:15-8:45, the focal child smiled at teachers during interaction but did not receive affection from teachers.

The second hour consisted of breakfast time. The child was seated in a small chair waiting for breakfast. Breakfast time lasted from 9 to 9:20. The focal child did not receive affection from teachers but the toddler expressed affection by smiling at teachers. After breakfast, the toddler moved on to free play (9:25-9:45) in which a teacher provided him with physical contact.

During the beginning of the third hour (10:05-10:15), the toddler played with a toy truck and interacted with other toddlers while waiting to do art activities. While

child was playing in a big block, teacher instructed him to “get down”. The toddler moved on to play in the truck area. Teachers continued to give focal child instructions during this time frame. At this time, the focal child smiled at teachers but there were no affections expressed by teachers. At 10:18, the toddler moved on to group activities. He sat with a teacher at a table and the teacher instructed the toddler to paint. Toddler painted with another individual but teacher came back to check on him at around 10:21. The teacher provided the focal child with non-physical affection by telling him, “you done a good job” and then took the painting to dry. However, the focal child did not express affection to teachers. After the toddler was finished with his artwork, he talked to the teacher while remaining in a seat. From 10:31-10:33, the child played with a file drawer in which the teacher told him to stop and to go over to a play area. At 10:34, the teacher called the toddler and when the child failed to respond, she went over to get him. The toddler then took a toy away from another child so the teacher threatens him with a timeout. While the focal child was playing, he temporarily stopped and approached a teacher to show her what he has done and then returned to playing. Teacher then instructed the child to clean up at 10:40. During this time, the teacher displayed physical affection and the toddler expressed affection by smiling.

The first three hours of the toddler’s time was spent in mealtime, group time, and mostly in free play. The overall results indicate that, although the highest frequency of affection between teachers and the toddler occurred during the third hour, the total percentage of teacher-child affectionate interaction in the observed period occurred at a very low frequency.

Chapter 5

DISCUSSION

The purpose of the present study was to provide a contemporary descriptive analysis of teacher-toddler affectionate behaviors in low-income child care centers by piloting an innovative focal child method. The first question examined the frequency of affection between toddlers and teachers in child care classrooms. The findings indicate that the frequency of overall affectionate behaviors within the child care settings is extremely low. The results are consistent with past studies that examined teacher-child affectionate behaviors within the child care settings (Field et al., 1994; Twardosz et al., 1987; Zanolli et al., 1997). The findings revealed low levels of interaction, particularly verbal interaction. Non-physical affections were rarely expressed. Physical contact was the most common affectionate behavior expressed by teachers in the study. This illustrates some inconsistency with past research that states that teachers were reluctant in displaying physical contact in fear of crossing personal boundaries and the negative consequence associated with inappropriate touching (Perdue & Conner, 1978). On the other hand, toddlers almost never expressed physical contact (touch) during interactions with their teachers. Instead, smiling was the main form of affection that toddlers displayed to teachers. This is in agreement with past research that found that smiling was the main form of affection that both teachers and toddlers often felt comfortable in expressing (Botkin & Twardosz, 1988; Mill & Romano-White, 1999).

The second research question focused on the frequency of teacher affectionate behaviors in relation to child gender. The results revealed that gender had an influential role in teachers' display of affection in this small sample. Contrary to the previous prediction, the overall findings indicated that boys received the majority of affection from teachers compared to girls. Earlier research that focused on the influence of gender on teacher-child affectionate behaviors, however, indicated that teachers often expressed affection to girls at a higher frequency than they expressed to boys (Field et al., 1994; Perdu & Connor, 1978). Prior research also suggested that teachers were more likely to express affection to toddlers of their own sex than opposite sex (Botkin, Townley, & Twardosz, 1991). However, all the teachers from the current study, which were all females, exhibited affection to toddlers of the opposite sex.

The third research question examined the variance of affection between toddlers and teachers by classroom context. The results revealed that context is an important factor in affectionate expressions. Consistent with previous findings, the overall results indicated that teacher-child affectionate expressions occurred at a higher frequency during free-play (Ahn, 2005; Schipper et al., 2006; Twardosz et al., 1987; Zanolli & Saudargas, 1990). On the other hand, the lowest frequency of affection occurred during group time rather than mealtime, as previous researchers have discovered (Ahn, 2005; Schipper et al., 2006; Twardosz et al., 1987). The results for the infrequency of affection during group time may be influenced by the fact that some of the toddlers did not participate in group time activities. For those toddlers that did participate, group time often lasted 30 minutes or less compared to free play which lasted the majority of the 3 hours observation period. It can then be assumed teachers

and toddlers may not have enough time to be affectionate during group time activities. Twardosz et al (1987) stated that most of the day in child care is occupied with highly structured tasks and that affectionate expressions are more likely to occur during free-play because it is an unstructured activity in which both teachers and children have the freedom to freely interact instead of focusing on completing a specific task. The overall findings suggest that perhaps having more unstructured activities in child care classrooms may provide teachers and children the opportunity to express affection to one another and in turn lead to a higher frequency of teacher-child affectionate interactions.

The profiles for the two chosen toddlers suggest that teachers who have the opportunity to spend individual time with toddlers may increase the likelihood of affectionate expressions. For example, child 3, who received the lowest affection from teachers, spent the first three hours interacting with peers than teachers. Most of the interaction that occurred with teachers was in a negative matter in which a teacher was instructing the child (several times) to stop doing a specific task (e.g. taking toys from kids, running around the room, etc.). Child 6 received the highest affection from teachers. The majority of the toddler's observed time was spent with teachers, which may explain why he received a higher affection compared to the other participants.

Although the current study describes affectionate behaviors that occurred between teachers and toddlers in child care, it does not explain the causes of the infrequent affectionate behaviors. Researchers have identified some contributing factors that may influence teachers' affectionate expressions. Characteristics, job satisfaction, and personal beliefs are thought to be influential factors in the type and frequency of affection that teachers provide to toddlers (Mill & Romano-Whites,

1999). Others suggest that teachers may not know how to be affectionate in a child care setting (Twardosz et al., 1987; Jacobson & Owen, 1987). All these factors can impact how teachers perceive affection and therefore, training in positive affectionate display may provide teachers with the knowledge and confidence in expression affection and supporting toddler's emotional needs.

There is limited research that focuses on affectionate behaviors within the child care settings. The majority of the previous studies on teacher-child affectionate behaviors were conducted in the 80s and 90s. The current study offers a contemporary analysis on affectionate expressions between teachers and toddlers and offers an observational methodology that documents children's individual experiences in group care across classroom contexts. The findings for this study revealed some differences and similarities compared to the earlier research. Similar to previous findings, the overall results indicate that teacher-child affectionate behaviors exist in early childhood classrooms and that gender and classroom context are contributing factors.

The current study provides in-depth data on a small number of toddlers. However, the purpose for this research was to pilot a focal child observational methodology to assess affection in toddler classroom and to use these preliminary descriptive results to help frame future research. This small sample does not allow for generalizable findings but does provide insight into needs for future research and considerations for practice.

As teachers and children interact with one another, they create opportunity to develop positive relationships. Affection is a component that can maintain and strengthen teacher-child relationships. As the current study and previous studies have discovered, affection occurred at an extremely low level between toddlers and

teachers. Future research should consider examining the cause of infrequency in affectionate behaviors. Furthermore, examining other behaviors, such as negative behaviors, as it relates to infants and toddlers should also be considered for future study. As researchers have indicated the importance of affection in teacher-child relationships, additional research on the topic of affection in child care might provide a clear picture of what occurs between teachers and young children during their daily classroom interactions.

REFERENCES

- Andrzejewski, C. & Davis, H. (2008). Human contact in the classroom: Exploring how teachers talk about negotiate touching students. *Teaching and Teacher Education, 24*, 779-794.
- Belsky, Jay; Gilstrap, Bonnie; & Rovine, Michael. (1984). The Pennsylvania Infant and Family Development Project, I: Stability and change in mother-infant and father-infant interaction in a family setting at one, three, and nine months. *Child Development, 55*(3), 692-705.
- Benson, J. & Haith, M. (2009). Social and emotional development in infancy and early childhood. Denver, CO: Academic Press
- Berlin, L. J., Brooks-Gunn, J., Spiker, D., & Zaslow, M. (1995). Examining observational measures of emotional support and cognitive stimulation in Black and White mothers of preschoolers. *Journal of Family Issues, 16*, 664-686.
- Botkin, D. & Twardosz, S. (1988). Early childhood teachers' affectionate behavior: Differential expression to female children, male children, and groups of children. *Early Childhood Research Quarterly, 3*, 167-177.
- Botkin, D., Townley, K., & Twardosz, S. (1991). Children's affectionate behavior gender differences. *Early Education & Development, 2*(4), 270-286.
- Bradley, R., Corwyn, R., McAdoo, H., & Garcia Coll, C. (2001). The home environments of children in the United States part I: Variations by age, ethnicity, and poverty status. *Child Development, 72*, 1844-1867.
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology, Vol. 1: Theoretical models of human development* (6th ed., pp. 793-828). New York: John Wiley.
- De Schipper, E., Riksen-Walraven, M., & Geurts, S. (2006). Effects of child-caregiver ratio on the interactions between caregivers and children in child-care centers: An experimental study. *Child Development 77*(4), 861-874.

- Dixon, S., Tronick, E., Keefer, C., & Brazelton, T. (1981). Mother– infant interaction among the Gusii of Kenya. In T. M. Field, A. M. Sostek, P. Vietze, & P. H. Leiderman (Eds.), *Culture and early interactions* (pp. 149–170). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Field, T., Harding, J., Soliday, B., Lasko, B., Gonzalez, N., & Valdeon, C. (1994). Touching in infant, toddler, and preschool nurseries. *Early Childhood Development and Care*, 98, 113-120.
- Fleck, B. & Chavajay, P. (2009). Physical interaction involving preschoolers and kindergartners in a childcare center. *Early Childhood Research Quarterly*, 24, 46-54.
- Fouts, H. N., Hewlett, B. S., & Lamb, M. E. (2005). Parent-offspring weaning conflicts among the Bofi farmers and foragers of Central Africa. *Current Anthropology*, 46(1), 29-50.
- Fouts, N., Roopnarine, J., Lamb, M., and Evans, M., (2012). Infant social interactions with multiple caregivers: The importance of ethnicity and socioeconomic status. *Journal of Cross-Cultural Psychology*, 43, 328-348.
- Garner, P. & Waajid, B. (2008). The associations of emotion knowledge and teacher-child relationships to preschool children’s school-related developmental competence. *Journal of Applied Developmental Psychology*, 29, 89-100.
- Goossens, F. & IJzendoorn, M. (1990). Quality of infants’ attachments to professional caregivers: Relation to infant-parent attachment and day-care characteristics. *Child Development*, 61(3), 832-837.
- Halberstadt, A. & Lozada, F. (2011). Emotion development in infancy through the lens of culture. *Emotion Review*, 3(2) 158–168
- Hallam, R., Fouts, H., Bargreen, K., & Caudle, L. (2009). Quality from a toddler’s perspective: A bottom-up examination of classroom quality. *Early Childhood Research & Practice* 11(2), <http://ecrp.uiuc.edu/v11n2/hallam.html>.
- Ispa, J. M., Fine, M. A., Halgunseth, L. C., Harper, S., Robinson, J., Boyce, L., Brooks-Gunn, J., & Brady-Smith, C. (2004). Maternal intrusiveness, maternal warmth, and mother-toddler relationship outcomes: Variations across low-income ethnic and acculturation groups. *Child Development*, 75, 1613-1631.
- Jacobson, A. & Owen, S. (1987). Infant-caregiver interactions in day care. *Child Study Journal*, 17 (3), 197-209.

- Jones-Branch, J., Torquati, J., Raikes, H., & Edwards, C. (2004). Child care subsidy and quality. *Early Education and Development*, 15(3), 327-342
- Jun Ahn, H. (2005). Child care teachers' strategies in children's socialization of emotion. *Early Child Development and Care*, 175 (1), 49-61.
- Katz, Lilian G. (1994). Perspectives on the quality of early childhood programs. *Phi Delta Kappan*, 76(3), 200-205.
- McGinley, H., Blau, G., & Takai, M. (1984). Attraction effects of smiling and body position: A cultural comparison. *Perceptual and Motor Skills*, 58, 915-922.
- McLoyd, V. (1990). The impact of economic hardship on black families and children: Psychological distress, parenting, and socioemotional development. *Child Development*, 61(2), 311-346.
- Mill, D. & Romano-White, D. (1999). Correlates of affectionate and angry behavior in child care educators of preschool-aged children. *Early Child Research Quarterly*, 14(2), 155-178.
- Owen, P. & Gillentine, J. (2011). Please touch the children: Appropriate touch in the primary classroom. *Early Child Development and Care*, 181(6), 857-868.
- Perdu, V. & Connor, J. (1978). Patterns of touching between preschool children and male and female teachers. *Child Development*, 49 (4), 1258-1262.
- Phillips, D., Voran, M., Kisker, E., Howes, C., & Whitbook, M. (1994). Child care for children in poverty: Opportunity or inequity? *Child Development*, 65 (2) 472-492
- Pianta, R. (1999). *Enhancing relationships between children and teachers*. Washington, DC: American Psychological Association.
- Piper, H. & Smith, H. (2003). 'Touch' in educational and child care settings: Dilemmas and responses. *British Educational Research Journal*, 29(6) 879-894.
- Rudasill, K. M., & Rimm-Kaufman, S. E. (2009). Teacher-child relationship quality: The roles of child temperament and teacher-child interactions. *Early Childhood Research Quarterly*, 24, 107-120.
- Shreve, C., Twardosz, S., & Weddle, K. (1983). Development and evaluation of procedures to encourage teacher affectionate behavior in day care centers. *Behavior Therapy* 14, 706-713.

- Sroufe, A. (1997). *Emotional Development: The organization of emotional life in the early years*. Cambridge University Press, United Kingdom.
- Twardosz, S., Botkin, D., Cunningham, J., Weddle, K., Sollie, D., and Shreve, C., (1987). Expression of affection in day care. *Child Study Journal*, 17 (2), 133-151.
- Warren, H., Denham, S., and Bassett, H., (2008). The emotional foundations of social understanding. *Zero to Three*, 28 (5) 32-39.
- Zanolli, K. and Saudargas, R. (1990). Two-year olds' responses to affectionate and caregiving teacher behavior. *Child Study Journal*, 20 (1) 1-14.
- Zanolli, K., Saudargas, R., and Twardosz, S., (1997). The development of toddlers' responses to affectionate teacher behavior. *Early Childhood Research Quarterly*, 12, 99-116.