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I am submitting herewith a dissertation written by Swapna Anil Purandare entitled "Gender in Head Start preschool classrooms: Children's experiences and teachers' perceptions." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Child and Family Studies.

Hillary N. Fouts, Major Professor

We have read this dissertation and recommend its acceptance:

Greer L. Fox, Carin Neitzel, Terri C. Orme

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(Original signatures are on file with official student records.)

Gender in Head Start preschool classrooms: Children's experiences and teachers' perceptions

A Dissertation Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Swapna Anil Purandare
August 2012

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ABSTRACT

Researchers who have studied the process of socialization have found that preschool is one of the first social exposures to direct teaching of societal norms including norms about gender-roles. Further, it has been found that there is a difference in teachers' behavior toward boys and girls in preschool classrooms but most studies on gender differences in preschool classrooms have been conducted with middle-class populations. Thus, the primary purpose of this study was to examine how preschool age children from low-income families (in Head Start) might have different experiences in their classrooms depending on their gender.

In order to achieve the purpose of the study, a mixed-methods approach was employed thus bringing together context-specific focal-child observational data, observational field notes, and interviews with the teachers in four classrooms. 20 boys and 20 girls from four preschool classrooms in Head Start were observed and lead and assistant teachers from the classrooms in which children were observed were interviewed in order to obtain their perceptions on gender-roles.

Findings from focal-child observations indicated generally low levels of teacher modifications, directions, assistance and responses to children regardless of gender. It was also found that boys were modified by teachers more than the girls across all classrooms. A main effect for context was also revealed and on further analysis it was found that there were significantly more teacher-child interactions during snack/meal time than during group and free play times. Findings from teacher interviews showed that most teachers perceived boys as louder and harder to manage than girls. The majority of teachers also mentioned that children engaged in gender-based play in the classroom and that teachers made attempts to reduce gender-based play and to let children know that gender is not a barrier and that they can do whatever they want regardless of gender.

Results are discussed in relation to children's experiences and teachers' perceptions, teachers' role in gender-role development, and gender-based play by children. Some implications for future research and practice include teacher education and training, reducing stereotypical gender-roles in children and aiding in development of nonbiased preschool curriculum.

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CHAPTER I
INTRODUCTION

Studies conducted with middle-class children have shown gender differences in children's behavior as early as preschool age, with girls showing greater sadness, anxiety and fear than boys and boys showing greater anger and aggression than girls (Brody, 1998; Cole, 1986). Children, beginning from the very early years of their lives, are taught to behave differently according to their gender through various activities, opportunities, encouragements, discouragements, overt behaviors, covert suggestions, and guidance (Witt, 1997). Gender differences have also been found in teacher's behavior with children at preschool age where boys are reprimanded, given instructions and directions more than girls (e.g., Murphy, 1986). It should be noted that there are very few studies on gender in preschool settings and all of these studies have been conducted with middle-class populations and thus little is known about gender socialization in low-income populations.

It is estimated that 23% (about 5.6 million) of children under the age of 5 in the U.S. live in poverty (American Community Survey, 2009). Children living in poverty are at elevated risk for psychological problems, difficulties with emotion expression and regulation (Cicchetti & Curtis, 2006) and reduced cognitive achievement as measured by standardized intelligence tests (e.g., Bradley & Corwyn, 2002). In addition, low-income families often have more stressors (e.g., worries about paying bills, threats of being evicted, multiple residence changes, unsafe neighborhoods) and have fewer positive opportunities (e.g., access to good school systems and extracurricular activities) than middle-income families (Chaplin, Casey, Sinha and Mayes, 2010). In short, poverty often means inadequate access to quality child care, stressful family relations, and environments lacking in crucial stimuli, all of which can have a negative impact on the development and functions of a young child.

Studies with young adolescents have shown that poverty has differential effects on boys and girls (Kroneman, Loeber & Hipwell, 2004). Due to the various stressors experienced by families in poverty, adolescent girls accounted for more internalizing symptoms which then could lead to depression (Carlson & Grant, 2008). On the other hand, boys from low-income families have higher exposure to violence and exhibit more externalizing behaviors as compared to girls (Carlson & Grant, 2008), and likewise exhibit more aggressive and delinquent behavior than girls (Cummings, Lannotti, & Zahn-Waxler, 1989; Olweus, 1979). Although several studies have examined the long-term outcomes of poverty on adolescent girls and boys, there is very little known about the differential effects of poverty on young girls and boys and further research is needed to study how child poverty affects girls differently from boys (Minujin, Delamonica, Gonzalez & Davidziuk, 2005).

There were gaps in the overall literature on gender discrepancies among preschool children but of greatest interest to the present study was the absence of literature on the differential experiences of boys and girls in low-income classrooms. The Head Start program represents the nation's largest and longest-running compensatory initiative among preschool children in poverty. It is a national, comprehensive early child development program that primarily serves at-risk preschool age (ages three to five) children and their families earning at or below the federal poverty level. Thus, in this study observations were conducted in Head Start classrooms to examine if girls and boys from low-income families received different experiences in preschool depending on their sex.

In this study specific emphasis was given to children's environment and their experiences in daily routine. Since children's experiences with their teachers were observed within the context of their classroom, this study was informed by the bioecological model proposed by

Bronfenbrenner and Morris (2006). Many theories have been proposed to explain the construction and development of gender. This study was based on the idea that a developing child is exposed to many factors in his or her culture that influences their attitudes and behaviors regarding gender roles and the developing child actively participates in incorporating these attitudes and beliefs into his or her life. Gender schema theory (Bem, 1981) as well as the Social cognitive theory of gender development and differentiation (Bussey & Bandura, 1999) place emphasis on a common process that there are agents in the society who pass their beliefs about gender roles onto children (Cahill & Adams, 1997). Gender development and differentiation theory does so by describing three models of development: modeling, enactive experience and direct tuition. Gender development is promoted through these models by different individuals present in the child's immediate environment. Gender schema theory reflects on the society as a whole including various models in the society such as the family, teachers, peers, etc., for introducing the society's ideals of femaleness and maleness to the developing child. Since both these theories emphasize children's immediate environment (including parents, teachers and peers) to pass gender-related beliefs on to the developing child, both these theories were used to inform the theoretical framework for this study.

The primary purpose of this study was to examine how preschool age children from low-income families might have different experiences in their classrooms depending on their gender. In order to examine children's experiences, observations were conducted in Head Start classrooms and teacher's interactions and behavior with children were analyzed in an attempt to examine if children's experiences differ depending on their gender. To investigate the above issues, the following research questions were explored:

1. Are children's experiences in preschool classrooms (Head Start) differentiated by the sex of the child in the following contexts?

a) Free play/center time

b) Group time

c) Mealtime

2. How do preschool teachers (in Head Start) conceptualize children's gender roles?

3. How and to what extent do children's experiences and behavior in the classroom relate to teachers' conceptualizations of young children's gender-roles?

In order to explore these issues, it is first important to review the available literature and have a better understanding of what is currently known about differential experiences of children depending on their gender. The following chapter includes a literature review that addresses (a) process of socialization, (b) gender in preschool classrooms, (c) effects of poverty on children, (d) child-care in low-income families, (e) effects of teachers' perceptions on behavior in classrooms and (e) theoretical underpinnings of this dissertation. This review discusses both literature related to the purpose of this research study and provides evidence supporting the investigation of the current problem.

CHAPTER II
LITERATURE REVIEW

Process of Socialization

Individuals belong to a society that they are born into. Every society has rules, customs, and values that bind its people together and make the society exist (Renzetti & Curran, 1999). Rogoff (2003) stated that "People develop as participants in their communities. Their development can be understood only in the light of the cultural practices and circumstances of their communities – which also change." (p. 3). In order to participate in the community that they belong to and meet the expectations and requirements of their society, it is important that individuals learn the rules, customs, and values of that society. This process is called socialization. Through the process of socialization, an individual from a very young age is encouraged to behave in ways that obtain social approval. Gender socialization, which is a major component of overall socialization, is a process through which individuals learn to perform certain roles considered appropriate for each sex (Renzetti & Curran, 1999).

Children, beginning from the very early years of their lives, are taught to behave differently according to their gender through various activities, opportunities, encouragements, discouragements, overt behaviors, covert suggestions, and guidance (Witt, 1997).

Construction of Gender: Gender Socialization and Gender-Role Development

It is believed that sex is ascribed by biology and is related to anatomy, hormones, and physiology of an individual (West & Zimmerman, 1987). The term sex has been used to in fields related to biology and medicine in context with males or females (Kessler 1998). On the other hand, gender can be explained as an achieved status which is constructed through psychological, cultural, and social means (West & Zimmerman, 1987). Gender is also related to the

characteristics and traits that are socio-culturally considered appropriate to males and females (Unger, 2007).

Although sex and gender are correlated with each other they are not synonymous (Fox & Murray, 2000). It is important to understand that for the purposes of this study the socio-cultural explanation – gender – is going to be considered. Most usually the roles that one enacts in their life are sex-linked (Gagnon & Simon 1973). A sex role usually involves the acting out of one's biological predisposition. Gender roles are those behaviors imposed overtly or covertly by society (Gagnon and Simon 1973) and a gender role is a set of expectations which define some behaviors as appropriate and some as inappropriate for individuals of a particular sex (Cahill & Adams, 1997).

In every socio-cultural system, gender concepts and behaviors are significant and are learned at an early age (Munroe & Munroe, 1997). In the past, researchers have shown that children learn the concept of gender and the characteristics that define masculinity and femininity beginning well before age three and after age three there is an orderly progression of these concepts (Munroe & Munroe, 1997; Williams & Best, 1990). Developing a gender identity is the process by which children come to believe they are either male or female. On the other hand, a gender role is a set of expectations which define some behaviors as appropriate and some as inappropriate for individuals of a particular gender. A gender role consists of many components such as activity choices, interests, skills, dress, etc. In the process of learning roles specific to a certain gender, a person accepts the exclusion and inclusion for certain behaviors depending on the norms of the society they are living in. A major part of learning these gender roles is via the process of gender socialization. Gender socialization is the process by which

children learn the values and behaviors corresponding to their sex that are accepted in their society (Cahill & Adams, 1997).

Researchers who have studied the process of socialization of children have found that the process of gender construction occurs from exposure to models in the child's environment from which the child acquires an understanding of desirable ways to think and act (Yelland & Grieshaber, 1998). Such models are present in the child's immediate environment that include parents, teachers, peers, siblings and other influences with whom the child comes into regular contact (Witt, 1997). Thus, a child's stereotypes of characteristics related to men (e.g., aggressiveness) and women (e.g., nurturance) often reflect those of adults present around them (Munroe & Munroe, 1984, 1986; Williams & Best, 1990). Thus, these adults act as agents of gender socialization for a developing child. It is important to note that these stereotypes are not universal and may vary depending on the society and culture the child is in.

A child's earliest exposure to what it means to be male or female comes from parents (Lauer & Lauer, 1994; Santrock, 1994; Kaplan, 1991). It is found that parents often treated sons and daughters differently right from the time their children were babies. Some examples of this would be dressing their infants in gender-specific colors (blue for boys and pink for girls), giving gender-differentiated toys (dolls for girls and trucks for boys), and expecting different behavior from boys and girls (Thorne, 1993). Another important agent of gender-role socialization for children is school. As discussed earlier, gender role socialization begins at a very early age and thus the context of preschool plays a very important role in gender-role development of young children.

Although parents are the first and possibly most important socialization agents for a child, the teacher also becomes a significant agent of socialization in the child's life once the

child begins school. Greenberg (1978) stated that when children disagreed on an aspect of adult life, they requested their teacher to be their 'judge'. Different cultures have different norms, values and expectations according to the gender of the child. Since teachers are the products of the societies that they belong to, they reflect the values and expectations of their societies (Edge, Fisher, Martin, & Morris, 1997). Moreover, teachers not only educate, but also transmit the values, norms, and traditions shared in a society. Teachers may directly influence how, what and how much students learn as well as how they interact with each other and the people around them (Korkmaz, 2007). Thus, each teacher (similar to each parent) will transmit his/her own gender role expectations to children, reinforcing appropriate behaviors and discouraging inappropriate ones by various means (Burns, 1986).

Since teachers play an important role in the socialization of a child and they are a significant part of the preschool classroom, it is essential to review and understand the role of teachers in the process of gender-role development and gender socialization.

Teachers' Role in Gender-Role Development of Children

In the United States, 12.7 million (63%) children younger than five years of age receive some type of regular child care setting every week – this includes children of both working and stay-at-home mothers. Of all U.S. children younger than five years of age, 42.5% receive total organized care which includes center-based care (33.7%) and family child care homes (8.8%); 39% are cared by relatives (mostly grandparents), 24.6% have multiple arrangements from multiple caregivers including parents and other family members as well as center-based care (U.S. Census Bureau, 2010). Thus, a substantial percentage of U.S. children are cared for by teachers in early childhood settings. Although the home environment is studied and perceived as

the most salient agent of gender role learning, early childhood teachers likely also play important roles in the gender socialization of young children.

For many children, preschool is one of the first social exposures to direct teaching of societal norms (Huston, 1983). Corrado (2008) stated that when in school, children are socialized by various factors such as their interactions with peers, by their school's formal curriculum and teachers' differential expectations of boys and girls. Fagot (1984) found that early childhood teachers used gender role stereotypes to guide their behavior with children. It is also believed that the gender role beliefs of early childhood teachers may be predictive of teacher behaviors that would then shape children's gender role perceptions and behaviors (Delamont, 1990).

Lindley and Keithley (1991) stated that attitudes of teachers affected the expectations they had of their students and these expectations had a dramatic impact on their students. Teachers, whose expectations varied depending on the sex of the child, were more likely and probably unknowingly to restrict their students' areas of interest and goals, reduced their potentials, and thus adversely affected their growth and development (Edge et al., 1997). This gives rise to the issue of sexual inequality in classrooms. As children in the preschool learn and receive feedback from teachers and peers about socially appropriate and inappropriate behavior with regard to gender, preschool proves to be a very important agent for learning about gender and gender-roles.

Gender in Preschool Classrooms

Issue of sexual inequality in classrooms

The issue of sexual inequality in the classroom has been of concern for over 30 years. Scholars in the academic field have shown concern with regard to differential teacher attention to boys and girls. The issue of who receives the teacher's attention and who dominates classroom

interactions raises questions about equity of educational opportunity for students sharing the same classroom environment (Beaman, Wheldall & Kemp, 2006).

Several studies have indicated that teachers interact differently with male and female students. Studies of preschool aged children's home and school environments suggested that girls received more adult structuring of their everyday activities than boys. Girls spent more time than boys in activities organized and directed by adults that involved asking for help and compliance to adults, while boys spent more time in activities that involved providing leadership to their peers and aggression toward other peers in the classroom (Carpenter & Huston, 1983; Fagot, 1978). During free-choice periods in preschool classrooms, girls spent more time than boys in activities that had high rates of adult feedback (e.g. instructions, task-related interactions) and in activities that were frequently modeled by adults (Carpenter, 1984; Carpenter & Huston-Stein, 1980).

In a study by Murphy (1986), 28 teachers (14 male and 14 female) and 268 preschool children (half male and half female) ranging from 2 years to 4 years enrolled in urban day care centers were studied. It was found that boys were criticized more often; received more disapproval; received more remedial feedback; and were given more reprimands from their teachers as compared to girls. Boys were given more instruction and direction in order to complete a particular task while girls were given assistance and it was also found that teachers often completed the tasks for girls but not for boys. Furthermore, it was found that teachers not only called on male students more frequently and engaged them in longer discussions (Guzzetti & Williams, 1996; Mewborn, 1999), but also interrupted girls more frequently than boys during their conversations (Hendrick & Stange, 1991). Also, boys were more often referred for remedial educational services and had higher levels of conflict with female teachers in nursery school

(Brophy, 1985), whereas girls in nursery schools were less likely to be criticized by teachers overall (Eccles & Blumenfeld, 1985).

In a study by Serbin, O'Leary, Kent, and Tonick (1973) fifteen preschool classrooms were observed and observational criteria for disruptive behavior and dependent behavior were developed in order to effectively record teacher-child interactions. Disruptive behaviors were coded when the children indulged in the following behaviors: ignoring teacher's directions, destruction of materials, and aggression toward others (physical and/or verbal). Dependent behaviors were crying, proximity to the teacher (within arm's reach), and solicitation of teacher attention. Teacher responsive behavior was divided into 13 different categories; a few examples of these are praise, loud reprimand, soft reprimand etc. The observers scanned the classroom for any occurrence of these behaviors and recorded the frequency of child behaviors and teacher responses during each 20-second observation period. Results of this study suggested that teachers were more likely to react to aggressive behavior by boys and were more likely to use loud reprimands in responding to boys than to girls. Another interesting finding from this study was that teacher reactions to solicitation by boys included more directional and instructional responses, thereby encouraging them directly to become involved in various activities in the classroom. On the other hand, teacher reactions to solicitation by girls contained fewer directions and instructions but equivalent amounts of nurturant forms of attention such as praise, physical contact, and helping.

Block (1983) suggested that it is important to understand the gender differences in personality of children in order to better understand the differential experiences children might be having in the classroom. It is consistently indicated in literature that males were more aggressive than females and from a very early age boys engaged in more rough and tumble play

than girls; engaged in more physical aggression and attempted more antisocial behavior as compared to girls. Block (1983) mentioned that the gender differences in personality can be grouped into seven conceptual domains: aggression, activity, impulsivity, susceptibility to anxiety, achievement-related behaviors, self-concept, and social relationships. Thus, the differential treatment of boys and girls could be partially attributed to the personality of individual children as well.

Results of a study with four preschool teachers and 38 boys and girls suggested that boys had more verbal interactions with teachers. In this study teachers were required to carry a small cassette tape recorder with them to record the spontaneously occurring conversations between teachers and children. Each of the four teachers carried the recorder on 5 different days in two situations per day, this led to collection of 40 data samples of 30 minutes or less, totaling more than 16 hours of recording. The analysis of this data showed that teachers' used more directive speech – like request for an action or object in the form of an imperative or an interrogative – with boys, while more verbal acknowledgements were used in teachers' speech with girls. (Cherry, 1982).

Thus, from the review of existing research it is clear that children receive differential treatment in classrooms depending on their gender. It can be concluded that overall teachers tend to be more directive and reprimanding toward the boys while girls received more acknowledgements, praise and assistance from the teachers as compared to boys. It is important to note that these research studies were conducted predominantly with children from White middle-class families and thus were not representative of children from low-income families. More research in low-income preschools is needed to understand if children from low-income families also receive differential treatment from teachers in classrooms depending on their

gender. It is established from past research that poverty has many adverse effects on the wellbeing of children (Cicchetti & Cohen, 2006) and thus it is essential to understand the various impacts of poverty on girls and boys before understanding the gender-related differences for children in poverty.

Effects of Poverty on Children

The national poverty rate is the highest it has been for the last 11 years, growing to 13.2% in 2008 from 12.5% in 2007. Further, over the last several years, the United States has experienced a rising trend in child poverty making it a nation with the highest child poverty rate among 16 of the other wealthiest countries in the world (The Connecticut Commission on Children, 2004). Between 2007 and 2008, the child poverty rate has gone up from 18% to 19%, thus continuing the growing trend in poverty in the United States.

Research has demonstrated that living in poverty has a wide range of negative effects on the physical and mental health and wellbeing of children (Cicchetti & Curtis, 2006). Poverty impacts children within their various contexts: at home, in school, and in their neighborhoods and communities. Poverty is linked with negative conditions such as substandard housing, homelessness, inadequate nutrition and food insecurity, inadequate child care, lack of access to health care, unsafe neighborhoods, and under resourced schools which have been found to adversely affect children in the United States (e.g. Moore, Vandivere, & Ehrle, 2000; Elder, Van Nguyen, & Caspi, 1985; Linver, Brooks-Gunn, & Kohen, 2002; Yeung, Linver, & Brooks-Gunn, 2002). When compared with children from more affluent families, children and teens living in poverty are at an elevated risk for reduced cognitive achievement, school failure, school dropout, behavioral and socio-emotional problems, physical health problems, and developmental delays. These linkages are particularly strong for children whose families are poor during early

childhood and for children who live in poverty for a long period of time (Moore, Redd, Burkhauser, Mbwana & Collins, 2009). Further, adolescents living in poverty are particularly at-risk for delinquency, involvement in criminal activities, alcoholism and problems that are caused due to drug use and abuse (O'Donnell, Hawkins & Catalano, Abbott & Day, 1995).

Growing up in poverty is associated with reduced cognitive achievement as measured by standardized intelligence tests. Beginning as early as preschool and persisting throughout childhood and beyond, individuals living in poverty perform below their middle class counterparts on tests of intelligence and school achievement (e.g., Bradley & Corwyn, 2002). School drop out rates are significantly higher for teens residing in poorer communities. In 2007, the dropout rate of students living in low-income families was about 10 times greater than the rate of their peers from high-income families. Moreover, the academic achievement gap for youth living in poverty is particularly pronounced for low-income African American and Hispanic children compared with their more affluent White peers (U.S. Department of Education, 2007).

Further, children living in poverty are at greater risk of behavioral and emotional problems. Some behavioral problems may include impulsiveness, difficulty getting along with peers, aggression and conduct disorder (Moore, Glei, Driscoll, Zaslow & Redd, 2002; American Psychological Association, 2000; American Psychological Association, 2007). Also, emotional problems such as feelings of anxiety, depression, and low self esteem are not uncommon among poor children (Magnuson & Votruba-Drzal, 2009; American Psychological Association, 2000; American Psychological Association, 2007). Poverty and economic hardship are particularly difficult for parents who may experience chronic stress, depression, marital distress and exhibit harsher parenting behaviors. These are all linked to poor social and emotional outcomes for

children causing stress for children (Berliner, 2009). Due to this stress, various problems such as short and long-term behavioral and emotional problems may persist and increase the risk for psychopathology and physical health disorders into adulthood (Gunnar, Herrera & Hostinar, 2009).

In addition to cognitive, behavioral and emotional problems, children living in poverty are at increased risk for a wide range of physical health problems. Low birth weight and poor nutrition which includes inadequate food and lack of access to healthy food are common problems among families living in poverty. Lack of nutrition may lead to chronic conditions such as asthma, anemia, and pneumonia. Moreover, children living in poverty have more chances of being exposed to environmental contaminants like lead paint and toxic waste dumps which may hamper the timely development of the child (American Psychological Association, 2009).

Thus, it is established that poverty has a negative effect on children. All the above studies have examined effects of poverty on children but have not examined if poverty has differential effects on children based on their gender. For the purposes of this study, it is important to review if and to what extent poverty affects boys and girls differently.

Differential Effects of Poverty on Girls and Boys

Although studies with young adolescents have shown that poverty has differential effects on boys and girls (Kroneman, Loeber & Hipwell, 2004), the differential effects of poverty on girls and boys has not been addressed among young children. In a study by Carlson and Grant (2008), relations among gender, psychological symptoms, stress, and coping in 1,200 low-income adolescents ranging in age from 10 to 15 years were examined. They found that boys living in poverty experienced more stress than girls in the following four categories: controllable

events, exposure to violence, major events, and sexual stressors. This study also suggested that since both boys and girls living in poverty were exposed to stressful life experiences, poverty posed significant risk for psychopathology in all adolescents as compared to adolescents living in middle-income households. Due to the unusually high rates of exposure to violence that boys faced as compared to girls, it was reported that these experiences lead the boys to engage in more delinquent behavior as compared to girls (Carlson and Grant, 2008).

Further, studies have shown that due to the various stressors experienced by families in poverty, adolescent girls accounted for more internalizing symptoms than adolescent boys which then could lead to psychological problems such as depression and anxiety (Beitchman, Kruidenier, Inglis & Clegg, 1989; Davis, Matthews & Twamley, 1999). A study by Grant, Lyons, Finkelstein, Conway, Reynolds, O'Koon, Waitkoff & Hicks (2004) concluded that girls reported significantly higher rates of anxious-depressed symptoms relative to male peers in a sample of low-income, urban, predominantly African American adolescents. The reason for more internalizing symptoms in girls as compared to boys could be because females from a very young age were socialized to (1) be more sensitive to the needs of others, (2) invested more time and energy in the problems and lives of friends and family, and (3) based their self-esteem on the status of their relationships with others (Boggiano and Barrett, 1991; Kaplan, 1986; Robbins and Tanck, 1991). Thus, girls were more likely than boys to be exposed to heightened rates of stressors in the lives of significant others and were more likely to experience distress in response to interpersonal difficulties (Kaplan, 1986; Kessler and McLeod, 1984; Boggiano and Barrett, 1991; Robbins and Tanck, 1991).

On the other hand, boys from low-income families tended to have higher exposure to violence and exhibited more externalizing behaviors than girls (Beitchman et al., 1989; Offer &

Schonert-Reichl, 1992). This seems to cause them to be more aggressive and they engaged in more delinquent behavior than girls (Cummings, Lannotti, & Zahn-Waxler, 1989; Olweus, 1979).

As previously stated, although several studies have examined the long-term outcomes of poverty on adolescent girls and boys, there is very little known about the differential effects of poverty on young girls and boys and further research is needed to study how child poverty affects young girls differently from young boys (Minujin, Delamonica, Gonzalez & Davidziuk, 2005). Moreover, many low-income families depend on child care for their employment and the number of children receiving child care has been increasing in families that are living in poverty (Lippman, Vandivere, Keith & Atienza, 2008). Thus, it is also important to understand how schools and teachers would be influential in the differential impact on girls and boys living in poverty. The next few sections will emphasize the importance of early childhood education among low-income families and how the institutions for early childhood education influence young children living in poverty.

Child-Care in Low-Income Families

Data from the National Survey of Children's Health (NSCH) (2003) found that of the total number of children between ages 0 – 5 that are living in poverty, 58 percent children were enrolled in some kind of non-parental child care arrangement. The various non-parental child care arrangements are: family-based child care outside the home (6 percent children); child care provided by a nanny or relative other than a parent or guardian in the home (3 percent children); nursery school or preschool or a Head Start or Early Start program (24 percent children) and relative care (25 percent children). Thus, over half of the children living in poverty are cared for by someone besides their parents (Adams, Tout & Zaslow, 2007).

It is also known that more than a third (38 percent) of all children younger than 6 in low-income families are in care for more than 15 hours a week (Zaslow, Acs, McPhee & Vandivere, 2006), with 22 percent in care for 35 or more hours a week. Some groups of low-income children (specifically children of single parents and children with working mothers)are even more likely to be in full-time care. For example, 39 percent of low-income children younger than 6 of single parents (Zaslow, Acs, et al. 2006) and 42 percent of low-income children younger than five with employed mothers (Capizzano & Main, 2005) are in care of others for 35 or more hours a week. Fifty-one percent of low-income children younger than 5 whose mothers work full-time are in care for 35 or more hours a week (Capizzano & Main 2005).

A large number of families living in poverty use center-based care for their children. Center-based care includes child care centers and Head Start or Early Head Start programs as well as nursery schools and preschool programs. In the United States, among low-income children under age five who are in any non-parental child care arrangement, more than one half (57 percent) used center-based care (Lippman, Vandivere, Keith & Atienza, 2008).

For many low-income families, employment of the adult members of the family depends on securing reliable and affordable child care for their children. Yet these parents living in poverty may face greater challenges as compared to higher-income and middle-income parents in obtaining affordable and high quality child care arrangements that complement their work schedules (Lippman, Vandivere, Keith & Atienza, 2008).

Children in low-income families were found to experience other social and demographic disadvantages, for example, more than three in ten low-income children (31 percent) lived in households in which English was not typically spoken as compared to less than one in ten higher-income children (8 percent). Moreover, children in low-income families were more likely

to have someone in the household who had attained less than a high school diploma (21 percent, compared with 3 percent in higher-income families) (Adams, Zaslow, & Tout, 2006; Halle, Hair, Zaslow, Lavelle, Martin, Scott, et al., 2005). Such differences are remarkable because children from these families often lag behind other children on measures of school readiness (Vandivere, Pitzer, Halle, & Hair, 2004).

It is important to note that a substantial body of research has linked child care quality to child outcomes (e.g., Adams, Tout, & Zaslow, 2007; Zaslow, Halle, Guzman, Lavelle, Keith, Berry, et al., 2006). Moreover, some findings from previous research suggested that the benefits of attending high quality child care from a young age were greater for children from disadvantaged backgrounds (National Institute of Child Health and Human Development Early Child Care Research Network & Duncan, 2003). It is also known that children who came from low-income families but attended high-quality early childhood programs demonstrated better math and language skills, better cognition and social skills, better interpersonal relationships, and better behavioral self-regulation than poor children who did not attend and receive care in an early childhood setting (e.g., Campbell & Ramey, 1995 Campbell, Ramey, Pungello, Sparling & Miller-Johnson, 2002; NICHD, 1998).

Since the demand for child care is high among families living in poverty and it is essential to provide high quality child care to young children, high quality child care programs such as Head Start have been established that serve children in families earning at or below the federal poverty level.

Head Start

Head Start is a national comprehensive early child development program established in 1965. It primarily serves at-risk preschool age (ages three to five) children and their families.

Head Start serves children in families earning at or below the federal poverty level, which for a family of four in the contiguous states and the District of Columbia is $22,350 during the year 2011.

During the year 2009-2010, a total of 904,153 children between ages of three and five were enrolled in Head Start. Children enrolled in Head Start are of a diverse racial composition. In the year 2009-2010, Head Start served 39.9% White, 30% Black/African American, 7.8% bi-racial/multi-racial, 4% American Indian/Alaskan Native, 1.7% Asian, 0.6% Native Hawaiian or other Pacific Islander, 16.7% unspecified/other race children (U.S. Department of Health and Human Services, 2011).

Head Start promotes school readiness by providing a range of services including comprehensive education, health, nutrition, parent involvement, and family support services to at-risk children and their families (Hindman & Morrison, 2011). Family and Child Experiences Survey, or FACES sampled 258 Head Start classrooms in Fall 2005. The results of this survey indicated that most Head Start classrooms show "good" quality (a total score of 5 indicates good overall quality) when observed using the Early Childhood Environment Rating Scale-Revised, or ECERS-R (Harms, Clifford, and Cryer 1998). Head Start Impact Study was conducted with children from Head Start preschool classrooms in the year 2002-2003. The key finding of this study was that access to Head Start had a positive impact on children's preschool experiences. Specific results showed that children who attended Head Start were more ready for school in the domains of cognitive, socio-emotional and health than their peers in the control group who attended other early childhood programs that accepted subsidy (National Head Start Association, 2002-2003).

That being said there is no research to be found on whether these effects are consistent over both genders or if there are differential effects of attending Head Start preschool on children depending on their gender. Since there were gender differences observed in the experiences of adolescent females and males from low socio-economic background it is important to understand if young children from low socio-economic background have different experiences in preschool depending on the gender of the child.

Moreover, Head Start is shaped by Bronfenbrenner's (2005) ideas about the central roles that both teachers and families play in child development (Hindman & Morrison, 2011). The Head Start program deems both the families and teachers very important and believes that in order to optimize young children's competence it is important to build connections between teachers and families (e.g. Zigler & Valentine, 1979). Head Start believes that teachers have a prominent role in the development of a young child (Hindman & Morrison, 2011), but previous studies in Head Start do not reflect the role of teachers in development of gender-roles of children.

In each Head Start preschool classroom there is one lead teacher (LT) and one assistant teacher (AT) and these teachers have very distinct roles in the classroom. Some responsibilities of the LT include establishing a safe and healthy environment using appropriate classroom organization, schedules and routines, teaching developmentally appropriate learning activities, directing and supervising classroom aides and providing leadership, training, monitoring and assistance necessary for satisfactory personnel performance. Some responsibilities of the ATs include assisting the LT with and maintaining a safe and healthy learning environment; assisting the LT in implementing developmentally appropriate learning activities that the LT has planned; and assisting the LT in provision of parent involvement services and social services. To sum, the

LTs are responsible for all the activities in the classroom and the ATs provide help to the LTs with the activities (Personal communication with the director of Head Start, July 2012).

Research with children from middle-class families has indicated that teachers play a great role in emphasizing the appropriate and inappropriate use of toys, activities and clothing in the classroom and this is influential in shaping gender construction especially in very young children (MacNaughton, 1998). Since teachers' behavior in the classroom plays a huge role in shaping children's ideas about gender-roles, it is important to understand how teachers themselves conceptualize gender-roles. Thus, in the following section a review will be presented on how teachers' attitudes and perceptions about gender-roles might influence their behavior with girls and boys in the classroom.

Effects of teachers' perceptions and attitudes on their behavior in the classroom

Shepardson and Pizzini (1992) reported that elementary school teachers considered boys to be more skillful in tasks that required mental or abstract operations (example analyzing, synthesizing, hypothesizing, evaluating, interpreting, questioning, etc.). On the other hand girls were perceived as more competent in skills related to completing a task (example: observing, measuring, communicating, graphing, manipulating equipment and materials, etc.). According to Elwood and Comber (1996) elementary school teachers generally perceived girls to be more motivated and conscientious than boys but boys were perceived as more self-assured and anxiety free.

There are only a few studies that focus on if and how teachers perceive differences between genders in preschool age children. A study with children below age 6 showed that boys were viewed as always creating trouble in the classroom and teachers mentioned that they were difficult to manage and took up more than their share of room in the classroom (Shaffer &

Gordon, 2000). Studies have also shown that boys below 6 years of age tend to be more active (Block, 1983) and aggressive (Maccoby & Jacklin, 1980) than girls. Perhaps as a result, boys also tend to be nurtured less and disciplined more by their teachers (King & Gartrell, 2004).

Several empirical studies have provided supporting evidence that teachers' personal attitudes and beliefs had an effect on their perceptions and behaviors in the classroom. Delamont (1990) proposed that the gender role beliefs of early childhood teachers may be predictive of teacher behaviors that would then shape children's gender role perceptions and behaviors. Brody (1998) pointed out that teacher beliefs had an impact on their behaviors in the classroom, their preparation and delivery of instruction, and their learning from their own teaching practices.

Although previous research states that teacher's gender-role attitudes were predictive of teacher behaviors it was thought that studying teacher's gender-role attitudes and their behavior in the classroom was complex and contradictory (Taylor and Mardle, 1986). This could be because it was found that individuals often adhered verbally to the expression of equality, but that was not necessarily reflected in their behavior. Thus, previous literature revealed inconsistencies in the relationship between individual attitudes and behaviors (Deaux & Wrightsman, 1984).

Although the attitudes and behaviors of both elementary and secondary school teachers with respect to the gender roles of their students have been investigated extensively (Tsvi-Mayer, Hertz-Lazarowitz, & Safir, 1989; Eccles, 1989; Elwood & Comber, 1996; Gillborn, 1990; Sadker & Sadker, 1986; Shepardson & Pizzini, 1992), there is no research found on how preschool teacher's attitudes might relate to their behavior in the classroom. Thus, this study will attempt to examine if preschool teacher's conceptualizations of gender roles relate to their behavior with the children in the classroom.

It is important to note that previous research has established that beyond the attitudes conveyed to children by the teachers, there exists a collection of experiences in the classroom that teachers encourage or discourage that strongly affect a child's ideas about gender and gender roles (Ricks and Pyke, 1973). One important aspect is the different contexts/routines that the children are involved in the preschool classroom.

Classroom Contexts

One of the earliest and most prominent differences in the experience of girls and boys appeared in the kinds of play activities in which they engaged in. Boys and girls both engaged in different types of play activities from very early childhood. Studies have shown that in free-choice/free-play settings, girls and boys selected sex-stereotyped play activities as early as 18 months of age (Huston, 1983; O'Brien, Huston, & Risley, 1983).

Martin (1998) found that boys played with blocks in the block area much more than girls did. Moreover, when girls were seen playing in the block area they were seen playing with toys (e.g. animals, cars, figures etc.) that were available in the block area instead of actually building a structure with the blocks. Some other differences in play observed were: boys played at the water table (standing and splashing) while girls painted at the easel, when boys were seen playing superhero (running around and in play house) girls were seen playing with dolls, playing dress-up, coloring, reading stories and cutting out pictures. Thus, even though both boys and girls were in the same space and were exposed to the same kind of material, they were seen using the material for different kind of activities.

In a sample of 106 boys and 101 girls whose age ranged from 37 months to 54 months it was observed that boys were given significantly more criticism by the teacher when they engaged in dress-up behavior. On the other hand, girls received more criticism from the teacher

when they played in the outside sandbox as opposed to being inside the classroom and playing in the imaginary play area. It was also observed that teachers had a positive reaction when boys played with blocks and girls engaged in art activities (Fagot, 1977).

Studies that focused on the types of play in preschool age children in the U.S. concluded that boys between 3 to 5 years of age preferred physical activities such as climbing, playing with large vehicles (Pellegrini & Perlmuter, 1989), playing with blocks and different tools (LaFreniere, Strayer & Gauthier, 1984). On the other hand, girls between 3 and 5 years of age played more with dolls and doll accessories, soft toys (LaFreniere, Strayer & Gauthier, 1984) and did more art and craft activities (Pellegrini & Perlmuter, 1989). Thus, from the above findings it can be concluded that boys' play was different from girls' play in preschool classrooms in the United States.

Various researchers have observed children in preschools engaging in different activities. A few examples are: Girolametto & Weitzman (2002) observed 26 caregivers during book reading and play dough activities; Rhyner, Lehr, & Pudlas, (1990) observed preschoolers in group or circle time with teacher-initiated activities; Massey (2004) observed preschoolers during pretend play activities. It was found that children who chose traditional sex-role behaviors which were socially appropriate and approved. For example boys who chose rough-and-tumble play were given more positive reactions from their teachers as compared to girls who chose rough-and-tumble play. The literature in this area indicated that teachers preferred that boys and girls adhere to conventional gender roles that were approved by the society (Arndt, 1991; Fagot, 1977).

From the review of previous research it is obvious that the context of free play/center time has been the most commonly represented context in studies examining gender differences in

the classroom. There is a lack of research that examines gender differences in other contexts in the classroom and thus, not all contexts in the classroom are typically represented. From previous research it can be concluded that free play/center time is an important context in which discrimination based on gender of the child is observed. Since most of the previous research in this area is conducted with children from middle income families, it will be interesting to examine free play/center time as one of the contexts for observation in this study with children from low-income families. As there is not much known about children's experiences based on their gender in the contexts of meal time and group time, these two contexts will be used in this study to examine if children's experiences differ in these contexts depending on their gender.

Theoretical Perspective

In this study specific emphasis is given to children's environment and their experiences as they go about their daily routine. As children's experiences with their teachers were observed within the context of their classroom, this study was informed by the bioecological model by Bronfenbrenner & Morris (2006). Moreover, this study is based on the idea that there are several agents in the society who pass their beliefs and attitudes about gender-roles onto the developing child and the developing child actively participates in incorporating these attitudes and beliefs into his or her life. Specifically, Gender-schema theory (Bem, 1981) and Social Cognitive Theory of Gender Development and Differentiation (Bussey & Bandura, 1999) provided the theoretical framework in order to answer the proposed research questions about children's differential experiences in the classroom depending on their gender.

Bioecological model

The four defining properties of the bioecological model are (1) Process, (2) Person, (3) Context, and (4) Time (Bronfenbrenner & Morris, 2006). This model proposes that human

development occurs through "processes of progressively more complex reciprocal interactions" between active, evolving "biopsychological" human beings and the individuals, objects, and symbols in the environment (Bronfenbrenner, 1995, p. 620). More specifically, *process* encompasses particular forms of interaction between organism and environment, called *proximal processes,* which operate over time and are posited as the primary mechanisms producing human development. In relation to this study, gender-socialization and gender-discrimination are considered as the processes (Bronfenbrenner, 2005).

It is important to note that the power of such processes to influence development is presumed, and shown, to vary significantly as a function of the characteristics of the developing *Person.* Three types of *Person* characteristics are distinguished as most important in shaping the future development: demand, resource and force characteristics. Demand characteristics are those that act as an immediate stimulus to another person. A few examples of these characteristics are age, gender, skin color, and physical appearance. These type of characteristics could form immediate expectations and in turn influence the initial interactions between individuals. On the other hand, resource characteristics are not immediately apparent. These characteristics partly relate to mental and emotional resources. Some examples of resource characteristics are past experiences, skills, and intelligence. Force characteristics are those that have to do with differences of temperament, motivation, persistence, etc. (Bronfenbrenner & Morris, 1998). The theory posits that when the *Person* component is expanded and distinguished in the above way, it will lead to a richer understanding of the immediate and/or more remote environmental *context.* The person characteristics in this study are the teacher's perceptions and attitudes about gender-roles and the gender of individual children which are observed in specific contexts in the preschool classroom (Bronfenbrenner & Morris, 2006).

The last component of the model is the *Time* periods. These are the periods of time in which the proximal processes take place at three successive levels: micro, meso and macro. (Bronfenbrenner & Morris, 2006). Micro-time refers to the continuity versus discontinuity within ongoing episodes of proximal processes. Meso-time refers to periodicity of these episodes across various intervals of time (days or weeks). Macro-time refers to the changing expectations and events in the larger society (Bronfenbrenner, 2005). In this study, participants were observed in the context of micro and meso times. Micro time was the number of occurrences of differential behavior by the teacher and how this varied depending on the gender of the child. Meso time was the periodicity of these episodes across the data collection period.

Also a critical element in the definition of the bioecological model is experience. Here experience indicates that the scientifically relevant features of an environment for human development not only include its objective properties but also the way in which the properties are subjectively experienced by the person living in that environment. In this study specific emphasis is given to children's environment and their experiences in daily routine and children are considered as active participants in incorporating these experiences. Thus, although this study gives importance to understanding the teacher's conceptualization of gender-roles and how these would affect the teacher's behavior in the classroom, it also gives high importance to how the child experiences the teacher's behavior and reacts to it. Thus, it is important to consider how properties such as teacher's attitudes and behavior are subjectively experienced by the child.

In this study the Process-Person-Context-Time model is used to examine the process of gender-socialization and gender-differentiation; the person characteristics of teacher's perceptions and attitudes about gender-roles and the gender of individual children in the classroom; the context of group time, free play/center time and meal time routines in micro-time

(the number of occurrences of differential behavior by the teacher) and meso-time (periodicity of these episodes over 4-5 days).

Gender-schema theory

The Gender-schema theory (Bem, 1983) proposes that a typical American child observes from various elements in the society like parents, teachers, and peers what they consider to be appropriate behavior. This behavior varies as a function of sex of the child, toys, clothing, occupations, hobbies, and domestic chores. All these behaviors vary as a function of the sex of an individual and a developing child observes this and incorporates it in his/her behavior.

Bem (1983) suggests that Gender-schema theory begins with the observation that the developing child consistently learns the definitions of femaleness and maleness that are specific to his or her society's culture. In many societies, these definitions comprise of an extensive and diverse network of sex-linked associations that involve a variety of features such as male and female anatomy, reproductive function, division of labor, and personality attributes. When children learn the contents of the society's gender schema, they also learn which attributes are to be linked with their own sex and which attributes they can apply to themselves. After observing these different attributes of gender, the child learns to choose only those particular subsets that are applicable to his or her own sex.

Bem (1981) suggests that the society teaches the developing child two things about gender that the child then incorporates into his or her gender schema. First, it teaches the enormous network of associations related to the sex of the child that can then serve as a cognitive schema. Second, it teaches that the dichotomy between male and female has widespread and intensive relevance to nearly every aspect of life (Bem, 1981). That being said, it is also important to take into consideration the role of the developing child in the theory. Gender

schema theory assumes that the child plays a very active role in his or her own gender development (Martin, Ruble, & Szkrybalo, 2002).

The present study emphasizes the child's experiences within a specific context in the classroom and believes that the child is an active member in that context instead of passively obtaining the information from some other source. The developing child will be able to actively incorporate the experience with the help of schematic processing which is a highly selective process that makes it possible for the individual to give structure and meaning to the vast array of incoming stimuli. Schema theory interprets perception as a constructive process. This means that what is perceived by an individual at any particular time is a product of the interaction between the incoming information and the perceiver's preexisting schema (Hyde, 2007). For this study, this means that the children's experiences in the classroom (whether they are differential based on the sex of the child or not) are a combination of what the child is presently experiencing in the classroom and what the child already knows and has previously experienced about gender-roles.

Social cognitive theory of gender development and differentiation

There are various modes through which the child is exposed to the information in the society. Social cognitive theory of gender development and differentiation by Bussey and Bandura (1999) describe three modes of influence by which gender development is promoted.

The first mode is *modeling* where information that is linked to a particular gender is demonstrated by models in the child's immediate environment such as parents and peers, and other significant persons in social and educational contexts. The second mode is *enactive experience* in which information about the construction of gender is provided via evaluative social reactions on an individual's actions. This means that people in the social and educational repertoire of the child have views about what is appropriate conduct for each of the two sexes

and thus influences how they react to the child's gender-linked behavior. The third mode of influence is through *direct tuition*. It serves as a convenient way of informing people about different styles of conduct and their linkage to gender. Verbal instruction is the main method through which information is directly delivered to the child by different individuals present in the immediate environment. It is possible for teachers to deliver information to children by using any of the above means and thus, in the process of examining children's experiences in the classroom, this study will examine the ways in which the information to create these experiences is transmitted to the children.

Overall this theory suggests that the conception of gender-role behavior is the product of a broad network of social influences operating not just within the family but also in the many societal systems that are encountered by the child in his/her everyday life. Thus, it favors a *multifaceted social transmission model* that includes teachers, peers and other significant members around the child rather than a *familial transmission model* which includes only parents. As mentioned earlier, this study assumes that the child is an active participant in obtaining any knowledge from various things he/she is exposed to in different contexts. Thus this study in no way attributes the entire child's knowledge about gender-role to the child's experiences in the classroom but child's experiences in the classroom with teachers and other peers are going to be considered as a part of the *multifaceted social transmission model.*

CHAPTER III
METHODS

Research Design

In order to address all the research questions, a mixed-methods approach was employed. Using a mixed methods research approach this study brought together context-specific focal-child observational data, observational field notes and interviews with the teachers in each of the classrooms. Focal-child observations were used to observe and examine children's experiences in the classrooms and since these observations were recorded on a checklist they are quantitative in nature. Field notes that were taken before the observations were useful in obtaining more information about various aspects of the classroom (for example, the structure of the classroom, materials that are present in the classroom, etc.). In addition, retrospective field notes were beneficial in terms of supplementing the quantitative observations with qualitative descriptions of experiences of girls and boys in the classroom. Teacher's conceptualizations of gender-roles were obtained from interviews with the teachers. These interviews were semi-structured and qualitative in nature. Thus, the qualitative interview data were useful in providing context to the quantitative focal-child observation data. All interviews and focal-child observations were conducted in Head Start classrooms.

Setting

In the academic year of 2011-2012, the Head Start program in a mid-size city in the south east, (in which this study was conducted) served 860 children between ages three and five from low-income families across 44 classrooms in six centers located throughout the county. The program offers full- and part-day high quality early education, transportation services, as well as healthcare and developmental screenings for all children (Personal communication with the

program manager, September, 2011). Head Start was an integral and supportive partner in this study.

Data collection for this study took place in four preschool classrooms in one Head Start center. This Head Start center consists of preschool and infant-toddler classrooms in their building. They have 3 full-day and 6-part day preschool classrooms and serve a total of 180 preschool age children with approximately 20 children in each of the classrooms (Personal communication with the director of the center, May, 2011). Out of the 6-part day classrooms, 3 classes meet in the morning and 3 classes meet in the afternoon.

Recruitment

Pre-recruitment procedures

Before recruiting teachers and children to participate in the study, the primary researcher met with the director and the program manager of Head Start in a mid-size city in the south east to obtain her permission and support for conducting the study in Head Start classrooms. A letter of support signed by the program manager was obtained (this letter is not included in the appendix for confidentiality purposes, but a copy of the support letter was submitted to the Institutional Review Board (IRB) at the University of Tennessee, Knoxville). Also, approval from the IRB at the University of Tennessee and the primary researcher's dissertation committee was obtained before beginning the recruitment of the participants.

Recruitment procedure for teachers

After obtaining approval from the IRB**,** recruitment of teachers and children from four Head Start classrooms began. With the help of the program manager of Head Start, four classrooms were selected and lead teachers and teaching assistants from all four classrooms were invited to participate in the study. The director of that center informed the teachers about the

study and then the primary researcher met with each of the teachers to hand them the consent form (See Appendix A: Teacher Informed Consent Form) and answer any questions that they had about the study. All nine teachers (four lead teachers and five assistant teachers) agreed to participate in the study and signed the consent forms. Once both lead and assistant teachers from a particular classroom agreed to participate in the study, an invitation to participate in the study was extended to ten randomly selected English-speaking children.

Recruitment procedure for children

The director of that Head Start helped with the recruitment of the children by allowing the primary researcher to distribute flyers to the parents of the children. The teachers who consented to be in the study helped with the recruitment by hand-delivering the recruitment packets to parents of all the children who were randomly selected to be a part of the study.

The recruitment process for children began with random selection of ten English-speaking children (five girls and five boys) in each classroom. A list of English-speaking children in each classroom was obtained from the director of the center before starting recruitment. After random selection of the children, a recruitment packet was hand-delivered by the child's class teacher to the parents of randomly selected children. Since the children do not have any mailboxes/cubbies in the classroom, teachers always hand-deliver any notes that need to be sent to the parents. The program manager and director had repeatedly informed the primary researcher that this would be the most efficient way to make sure the recruitment packet reached the parents. The recruitment packet consisted of a flyer (see Appendix B: Recruitment Flyer), a cover letter (see Appendix C: Cover Letter for Informed Consent), two copies of the parent consent form – one to keep with them (printed on blue paper) and one to return to the primary researcher investigator (printed on yellow paper) (see Appendix D: Parent Informed Consent

Form) and demographic survey form (see Appendix E: Child Demographic Form:). An envelope was provided in the recruitment packet for the parents to seal the signed consent forms in. The cover letter had a note for the parents to return the consent form to their child's preschool teacher by a particular date (this date was ten days from the day they received the form). A gentle reminder note was sent to the parents (see Appendix F: Reminder to return Informed Consent) who failed to return the form in five days after the packet was delivered to them. The primary researcher was in contact with the director of the center and collected the consent forms as the director received them from the class teachers. Parents of five children did not return the consent forms after ten days. A child (English speaking) of the same gender was randomly selected from the same classroom and a recruitment packet was hand-delivered to that child's parents and the same procedures were employed in order to return the consent forms. Out of these, parents of three children failed to return the consent forms after ten days and thus three more English-speaking children were selected from the same classroom and recruitment packets were sent to their parents. All these parents returned the signed consent forms.

Out of the 35 parents who had initially returned the signed consent forms, three children either dropped out from the program or transferred to another center before the data collection started. Thus, three more English-speaking children from the same classroom were randomly selected and the same recruitment procedures were followed in order to obtain consent. One child transferred to another center in the middle of data collection. 87% data were already collected from this participant and thus, another participant was not selected in their place. For children who dropped out/transferred to another center before data collection started, a letter was sent by the primary researcher informing them that dropping out or transferring from the center automatically withdrew the child from the study.

Inclusion criteria for participants

Approximately 39% of the children enrolled at the Head Start center where the data were collected were dual-language learners (DLL). The director of the center defined dual-language learners as, "Any child whose primary language is anything other than English" (Personal communication with the director of the center, May, 2012). The number of DLL children in each preschool classroom ranged anywhere from 1 to 11 (out of 20). Various languages such as Spanish, Vietnamese, French, Russian, Conjabul, Arabic and Indian were spoken by children and the parents at the center. The program manager also mentioned that there were certain parents who do not read English. Thus, in order to make sure all the parents who received the consent forms in English understood the content of the form before signing it, dual-language learner children were not included in the study. Moreover, due to the other variations (such as race) that were already present in the sample, not including DLL children helped in having a focused sample.

Since this study required 10 children (5 boys and 5 girls) in each classroom, classrooms that had 50% or more DLL children, or less than 5 boys or 5 girls that were English-speaking, were excluded from the study.

Incentives for participation

Parents of participating children and teachers received a small financial incentive for their participation in the study. Parents of each child and each teacher who participated in the study were eligible to receive a gift card worth $10 to a local grocery store. The parents of each child were given the incentive on successful completion of the observation. After the completion of the observation a gift card worth $10 to a local grocery store was hand-delivered to the child's parents by the teacher. Parent of each child was required to sign a sheet confirming that they

have received the gift card (see Appendix G: Gift Card Signature Sheet) and return the sheet to the teacher immediately. After repeated attempts of contacting the parents of the child who transferred to another center, the teachers and the director of the center were unable to contact the parents of this child and thus, a gift-card was not delivered to this participant.

All participating teachers received a financial incentive of a $10 gift card from a local grocery store upon completion of the interview and demographic form. All teachers were required to sign a sheet confirming that they had received the incentive. The primary researcher who interviewed all the teachers gave the gift card immediately after the interview and at the same time obtained the teacher's signature on the gift card signature sheet.

Participants

This study took place in four preschool classrooms in one Head Start center in a mid-size city in south east of the United States. Out of the four preschool classrooms, three were part-day (1 morning and 2 afternoon classes) and one was a full-day classroom. Two classrooms had 19 children and two classrooms had 20 children when the children for this study were recruited. The racial/ethnic composition of each classroom was obtained from the lead teachers. Out of 78 children in all four classrooms, 33 (42.31%) were Caucasian/White (non-Hispanic), 25 (32.05%) were African American/Black, 11 (14.10%) were Hispanic, eight (10.26%) were bi-racial and one (1.28%) was Arabic.

From a total of 78 children (38 girls and 40 boys) in four preschool classrooms, ten children (five girls and five boys) from each classroom were randomly selected and consent letters were sent to their parents to invite them to participate in the observation part of the study. Furthermore, each classroom had a lead teacher and a teacher assistant and both teachers were invited to participate for the interview part of the study.

Of the final 40 children that participated in the study, ten children (five girls and five boys) were from each of the four classrooms. Demographic information like the birth month and year of the child, the child's ethnicity, age when child started preschool were obtained from the parents in a form attached to the consent form. The parent of one child did not return the demographic form and parents of two more children failed to give information on age at which their child started child care. Thus, demographic information on one child is not available and information on age at which the children started child care is missing for total of three participants. Details of demographic information for participating children are found in Table 3.1 (See Appendix H: Tables).

Overall, the mean age for girls was 51 months; the youngest girl was 40 months old and the oldest was 63 months old. The mean age for boys was 51.65 months; the youngest boy was 33 months old and the oldest boy was 62 months old. Out of the 20 girls that participated in the study, 8 were White (non-Hispanic), 5 were African American, 4 were bi-racial, 2 were Hispanic and ethnicity of one girl was not obtained. Out of the 20 boys that participated in the study, 10 were White (non-Hispanic), 4 were African American, 4 were bi-racial and 2 were Hispanic. The average age at which girls first started child care was 22.05 months (ranging from 2 months to 48 months) and the average age at which boys started attending child care was 27.83 months (ranging from 4 months to 48 months).

A total of nine teachers (four lead teachers and five teacher assistants) participated in the study. One assistant teacher left the program while child observations were still in process. Since the interviews were scheduled to be conducted after all the child observations were complete, it was not possible to conduct an interview with that teacher. All teachers who participated in the study were female and 3 were African American/Black, 4 were White (non-Hispanic), and 1 was

bi-racial. Out of the 8 teachers, all 4 lead teachers were college graduates, while the highest degree of all 4 teacher assistants was trade/technical schools. Demographic information for each teacher is found in Table 3.2 (see Appendix H: Tables).

Procedures

Data collection occurred in two stages: (1) Focal-child observations and field notes, and (2) Teacher interviews.

Focal-child observations and field notes

In order to capture children's experiences in the classrooms, naturalistic observations using a focal child sampling technique were conducted in the classroom with participating children. The observer observed each focal child while he or she engaged in the daily classroom routine. During the observation the observer did not interact with the child and stood at a distance where he/she could see and hear the child and at the same time was able to avoid distracting the child from his or her routine behavior. These focal-child observations were used to observe and record the focal child's behavior and experiences and the teacher's behavior toward the focal child.

Observations of ten focal children (five randomly selected girls and five randomly selected boys) were conducted in each of the four preschool classrooms. Thus a total of forty focal-child observations were conducted. Each focal child was observed in three contexts: meal time (this included morning snack and lunch for children in the morning group and lunch and evening snack for children in the afternoon group), free play/center time, and group time. Each day, the children were in meal time anywhere between 25 and 45 minutes, in group time for approximately 25 minutes and in free-play for approximately 1 hour and 20 minutes. To avoid any discrepancies in the behavior of the child (example, if a child is having a "bad day" on a

particular day) each child was observed for five minutes in each context each day over a period of five days. Thus, a total of 25 minutes of data were collected from each child in each context. Each child was observed for 25 minutes each (except one child who was observed for 20 minutes in group time and snack/meal time due to his switching schools in the middle of the study) and a total of 40 children were observed. Thus, a total of 49 hours and 50 minutes of focal-child observations were collected.

Focal-child data were collected naturalistically using an on-the-mark 30-second time-sampling technique and was recorded on a checklist of behaviors (See Appendix I: Definitions of Observational Categories and Appendix J: Observational Checklist). The observational checklist enabled the observer to observe and record various experiences that the focal-child had. Following are some examples of experiences the checklist helped identify and record: the state in which the child is (fussy/crying etc.); child attachment behaviors; caregiver responses and behavior; availability of the caregiver and the setting in which the child is in. This observational checklist was adapted from Belsky, Gilstrap, and Rovine (1984) and has been used in many different contexts in various parts of the world (e.g., Hallam, R., Fouts, H., Bargreen, K., & Caudle, L., 2009; Ahnert & Lamb, 2000; Fouts, Hewlett, & Lamb, 2005; Fouts, Roopnarine, & Lamb, 2007; Leyendecker, Lamb, & Schölmerich, 1997).

This on-the-mark 30-second time-sampling technique includes a 20-second observation period and a 10-second record period. Observer used a pocket-sized digital player with an ear phone that prompted the observer to observe and record. At the precise moment when the digital player announces ‘record,’ the observer captured behaviors of the focal child and behaviors directed toward the focal child at that moment and these behaviors were recorded onto the behavior checklist. Behaviors of the focal-child were recorded precisely at the 20-second mark of

each 30-second time segment and the observer had 10-seconds to record the behavior on a behavior checklist.

The primary researcher is reliable on three previous adaptations of this coding system and served as the anchor for this adaptation. All of the observations were conducted by the primary researcher. One additional observer was trained in order to check in-field reliability. This additional observer obtained 90% reliability with the primary researcher prior to collecting data. 10% of the total field observations were conducted by two observers and an inter-rater reliability analysis using the Cohen's Kappa statistic was performed to determine consistency among raters. The upper limit of Cohen's kappa is 1.00 which occurs only when there is a perfect agreement between the observers (Cohen, 1960). Cohen's kappa for each dependent variable is given in Table 3.3. Overall, the inter-rater reliability observed for each dependent variable was very high.

During focal-child observations, the observer had rest periods when the children were transitioning between one activity to another and during outdoor play time. The observer confirmed the approximate routine with the lead teacher in each classroom before beginning the observations. The observer remained in the classroom during short transition periods within the classroom but when the children went outside on the playground, the observer waited in the common waiting area in the school or in the observer's car and returned to the classroom around the time children were expected to be back in the classroom.

Before each observation the observer took field notes describing the setting, number of girls and boys in the classroom, materials available in the classroom, and structure of the classroom. After each observation the observer also took retrospective notes reflecting on the observation and took notes on any patterns of differences or similarities in children's experiences based on their gender.

Precautions were taken to ensure the participants' confidentiality. The children's names were written on a master list and each child was assigned a participant identification number and was referred to by this number.

Teacher interviews

Teacher interviews were an important aspect of this study since this was the only way in which the teacher's conceptualizations of gender-roles were examined. The purpose of the interview was to ask questions about teacher's experiences that were specific to his/her classroom and obtain examples of some of the gender-role related conceptualizations that the teachers might be having.

Semi-structured interviews (Spradley, 1979) were used to examine teachers' conceptualizations of gender-roles. The questions guided the interviewer through the interview and the interviewer had follow-up questions for the teachers depending on their answers on each questions. Each teacher in the classroom (lead teacher and assistant teacher) was interviewed (see Appendix K: Teacher Interview Questionnaire). Interviews lasted between 20 minutes to 35 minutes and were conducted in a room in the school which the director had reserved for the primary researcher to conduct teacher interviews. Each teacher was also asked to fill out a short demographic information questionnaire (see Appendix L: Teacher Demographic Questionnaire) before the interview.

The primary researcher conducted all the interviews. All interview data were audio-taped, transcribed, and analyzed by the primary researcher. The interviewer had obtained prior permission from the teachers to record the interview and the interviews were recorded on a digital recorder. The interview data were analyzed using a grounded theory technique (Strauss & Corbin, 1994). All the teachers who participated in the study were given participant

identification number and was referred to by this number. During analysis, the key points in each interview were marked with a series of codes relevant to those sets of points. The codes were then grouped into similar concepts in order to make them more workable. From these concepts, a few categories were formed which were then be used to identify conceptualizations of teacher's gender-roles. Two members from the research team helped the primary researcher to conduct reliability coding. Both of these members signed a pledge of confidentiality before they obtained access to any information.

Procedures to Protect Human Subjects

Measures were taken to protect all participants from any risks due to their participation in the study. This study utilized a naturalistic observation method. Thus, participation in this study did not pose any risk to children greater than the ones usually encountered in their everyday settings. The only possible risk was the discomfort of being observed. To avoid risks related to this, all participants were informed before the study that they could, at any time during the study, choose to withdraw from the study without being penalized for it. In addition, as mentioned earlier, the observer sat as far as possible from the child and the teachers were notified that if they observed any noticeable discomfort from the child they were allowed to notify the observer to withdraw the child from the study.

The questions in the interviews with teachers were not expected to be uncomfortable or embarrassing to the participants. The interview consisted of questions about teacher's views and conceptualizations about gender-roles. All questions about gender-role expectations were designed to not show bias toward a particular gender. These questions were designed to elicit answers that reflected the teachers' own gender-role beliefs. Although the questions were designed to not make the teachers uncomfortable in any way, there was a possibility that the

teachers might feel some discomfort. Thus, prior to the beginning of the interview, the teachers were informed that they had the choice to ask the interviewer to skip a question or entirely withdraw from the interview at any point if they felt any discomfort with the questions. None of the teachers informed the observer of any discomfort and none of them withdrew from the study.

Demographic surveys were obtained from the parents as well as the teachers. Demographic questionnaires are common topics in most social science research and none of the questions included in the demographic survey are expected to be uncomfortable. Also the participants had the choice to not answer a particular question if they did not wish to. Parents of one child did not return the demographic form and it was assumed that the parent did not want to give that information to the observer and thus there were no attempts made to obtain that information.

Precautions were taken to ensure the participants' confidentiality. The participants' names were written on a master list, and each individual (teachers and children) were assigned a number. The list with the original names of participants is locked in a separate cabinet from the data and only the numbers were used for data entry, analyses and discussion of results. The list with names will be stored for a minimum of 3 years and a maximum of 10 years before being destroyed. All electronic data (after data entry and transcribing of interviews) is stored on a password protected server that is specifically assigned to the faculty advisor's research laboratory. A backup of all the electronic data is stored on a password protected hard drive that belongs to the primary researcher. All members of the research team who are involved in observations, data entry and/or transcribing interviews were required to sign a pledge of confidentiality (see Appendix M: Research Team Members' Pledge of Confidentiality).

Data Analysis Overview

As the data collected in this study is quantitative as well as qualitative, the analysis took place in several different forms. This section will explain the analysis conducted for each of the research questions of this study.

Research question 1

Are children's experiences in preschool classrooms (Head Start) differentiated by the sex of the child in the contexts of a) Free play/center time; b) Group time; and c) Mealtime?

To answer the above question, descriptive statistics were obtained on all the dependent variables (See Table 4.1). Further, focal children were grouped according to their gender and then according to the context they were in before analyzing any of the observational data.

A 2 x 3 multivariate analysis of variance (MANOVA) was conducted to determine whether children's experiences in classrooms differed as a function of child's gender (boys and girls) and context (snack/meal time, free play time, and group time). The dependent variables used in this analysis were: modify non-physical and physical, scold non-physical and physical, direct, praise non-physical and physical, stimulate, assistance, response, vocalize.

Univariate analyses of variances (ANOVAs) were conducted for each significant multivariate effect. Tukey's post hoc tests were used for pair-wise comparisons between the three contexts of snack/meal time, free play time and group time. Cohen's *f* was used to quantify effect sizes. Cohen (1988) has categorized effect sizes into small, medium and large. Small effect sizes range from .10 to .24, medium from .25 to .39, and large as .40 or greater (Cohen, 1988).

Further, field-notes from the observations were systematically examined to identify concepts that were related to the quantitative findings of the data. These field notes were then categorized by gender and context and utilized to provide additional information on the

quantitative data. Even though ethnicity and race was not a part of the research question, due to great ethnic diversity in the participating children, multivariate analysis were run to determine if ethnicity predicted children's experiences in the classroom. No effects were found and thus ethnicity was not considered in any further analyses.

Research question 2

How do preschool teachers in Head Start conceptualize children's gender roles?

In order to answer the above question, the interview data were analyzed using a grounded theory technique (Strauss & Corbin, 1998). The teachers and director preferred the interviews to be conducted in the school premises. The director arranged the teachers' schedules in such a way that the interviews could be conducted during the teachers' work hours. Thus, all interviews were conducted within a span of 2 working days and data analysis did not begin until after the first two interviews. The primary researcher listened to the audio tapings of the first two interviews and these informed the future interviews. A constant comparison method was used during the process of data analysis and in which codes and themes emerging from the previous analysis were constantly compared with the new and emerging analysis (Chenitz, & Swanson, 1986; Creswell, Ryan & Bernard, 2000).

After all the interviews were transcribed, initial codes were determined by using the line-by-line coding approach (Charmaz, 2006). With the help of line-by-line coding, each line of the written data were named (Glaser, 1978). Each line was read in order to search for the answer for what is going on here? Or, what is being described here? Microsoft Office Word 2007 was used to make comments and conclusions on each line of the written data. During line-by-line coding, fairly abstract categories of data emerged.

In order to contextualize these fairly abstract categories of data that emerged in line-by-line coding, axial coding was employed. Axial coding is the process of relating codes, categories and properties to each other (Glaser & Strauss, 1967). Microsoft Office Excel 2007 was used to reflect on groupings of codes from line-by-line coding and create meaningful lists on separate tabs of excel sheets to examine the emerging themes from one participant. Once a category was established, it was used as a standard to examine other statements and thus various categories emerged

Further, selective coding helped in the process of choosing one category as the core or primary category and relating the other categories to that one core category. Memos were written throughout all the coding phases and also through the transcribing phases. These memos helped define the core category for each aspect of the qualitative interview data during the selective coding phase.

To ensure reliability in qualitative research, examination of trustworthiness is crucial (Seale, 1999). To ensure that the analysis of the data were credible, two other graduate students at the University of Tennessee who had experience studying and conducting qualitative research were consulted. These two individuals read, coded and categorized the transcripts from the first two interviews. Codes and categories from these two individuals were compared with the codes and categories of the primary researcher. It was found that although there was a fresh perspective in a few of the codes, most of the codes were very similar to the codes from the primary researcher.

Research question 3

How and to what extent do children's experiences and behavior in the classroom relate to teachers' conceptualizations of young children's gender-roles?

Teacher's perceptions on gender-roles were organized according to each teacher. Codes and themes from the analysis in research question 2 were used in the analysis for this question. Further, children's experiences in each classroom were examined to understand how the teacher's perceptions related to the children's experiences in each classroom.

To examine children's experiences according to their classroom, classroom profiles of children's experiences were created by first grouping children in two groups of boys and girls and then running descriptive analysis by gender and classroom experiences. Children's experiences used for these profiles were physical and non-physical modifications experienced by boys and girls; stimulation experienced by boys and girls; and vocalizations experienced by boys and girls. Free play context was further analyzed and descriptive statistics were run to find out the amount of time children spent in each of the areas of housekeeping, blocks, manipulatives and art. This information was examined because during interviews teachers mentioned the importance of these areas in gender-based play by children.

CHAPTER IV

RESULTS

Preliminary analyses were conducted in order to provide descriptive information about specific experiences of boys and girls in the three contexts of free play, snack/meal time and group time. Further, this chapter is organized according to the three research questions and combines the multiple sources of data across the duration of the study.

Overall Trends

To obtain information on children's experiences, the following behaviors were examined: child being physically and non-physically modified by the teachers, child being physically and non-physically scolded by the teachers, child being physically and non-physically praised by the teachers, child being directed by the teachers, child being stimulated by the teachers, child receiving assistance from the teachers, child being responded to by the teachers and child being vocalized to by the teachers. Means and standard deviations for each of the behaviors in three contexts of snack/meal time, free play time and group time are shown in Table 4.1 (see Appendix H: Tables).

Overall trends showed that, regardless of gender and context, there was no scolding (physical or non-physical), a low amount of modification (1.2% of total observation), a low amount of direction (1.3% of total observation), very little assistance from teachers (.99% of total observation), and even less praise (.23% of total observation) experienced by the children. It was also found that teachers vocalized with individual children 8.3% of the entire observation and high amount of stimulation (20.68% of the total observation) was experienced by children from the teachers.

Even though ethnicity and race was not an aspect of any of the research questions, due to great racial/ethnic diversity in the sample, a multivariate analysis was run to determine if ethnicity predicted children's experiences in the classroom (see behaviors in Appendix H: Table 4.1). No effects were revealed and thus ethnicity was not considered in subsequent analyses.

Research Question 1

To answer research question 1 (Are children's experiences in Head Start preschool classrooms differentiated by the sex of the child in the following contexts: a) Free play/center time; b) Group time; c) Mealtime), a 2 x 3 MANOVA was conducted entering gender (male = 1, female = 2) and context (snack/meal time = 1, free play time = 2 and group time = 3) as the independent variables. Each of the behavioral codes shown in Table 4.1 (see Appendix H: Tables) were entered as the dependent variables representing children's experiences in classrooms.

The MANOVA of the children's experiences revealed a significant main effect for gender, Wilks' $\lambda = .743$, F (9, 106) = 4.065, $p < .001$, observed power = 1.00, Cohen's $f = 0.59$ and a significant main effect for context, Wilks' $\lambda = .046$, F (18, 212) = 43.245, $p < .001$, observed power = 1.00, Cohen's $f = 1.92$. No interaction effect was found between gender and context.

Subsequent univariate analyses revealed significant gender differences for non-physical modification as boys experienced more non-physical modification than girls, $F(1, 114) = 25.18$, $p \leq .001$, Cohen's $f = 0.47$. Similar gender differences were revealed for physical modification as boys experienced more physical modification than girls, $F(1, 114) = 5.68$, $p \leq .05$, Cohens' $f = 0.22$. Univariate analyses did not show significant gender differences for physical and non-

physical scold, teacher vocalizations, directions received by teachers, physical and non-physical praise, stimulation, assistance and response to children by the teachers.

It was observed in the field notes that regardless of the context the majority of boys observed were modified several times by several teachers whereas some girls were not modified at all. Some examples of non-physical modifications that the boys received were: "Don't put your hands on her, we don't do that" (Group time); "If you want me to throw the bean bag to you, you need to sit on your bottom" (Group time) "I asked you to leave the blocks alone" (Free play time); "Don't do it like that, that is too rough" (Free play time); "No, pay attention and do as I say" (Snack/Meal time); and "Don't touch your shoes at lunch table" (Snack/Meal time).

In order to further address the main effect for context, subsequent univariate analyses were conducted and showed differences by context for teacher vocalizations toward the children ($F(2, 114) = 3.830$, $p < .05$, Cohen's $f = 0.26$), directions received by the children ($F(2, 114) = 3.802$, $p \leq .05$, Cohen's $f = 0.26$), stimulations received by the children ($F(2, 114) = 408.94$, $p \leq .001$, Cohen's $f = 2.68$), assistance by the teachers to the children ($F(2, 114) = 43.07$, $p \leq .001$, Cohen's $f = .87$) and responses toward the children by the teachers ($F(2, 114) = 21.15$, $p \leq .001$, Cohen's $f = .61$) but not for physical and non-physical modifications, physical and non-physical scold and physical and non-physical praise.

Tukey's HSD post hoc tests were conducted to determine the specific contexts in which there were significant differences for children's experiences. These tests revealed that children received more vocalizations from the teachers during snack/meal time than group time, Tukey = .034, $p \leq .05$. Similarly, children also received more directions from the teachers during snack/meal time than during group time, Tukey = .009, $p \leq .05$. The in-field and retrospective field notes were consistent and showed that during group time the teachers vocalized more

toward the whole group of children while during snack/meal time children experienced more one-to-one conversations with teachers. It was also noted that group times were generally teacher-lead as the teachers either read a story to the children or did some activity depending on the time of the day and children had to "sit on their bottoms" and group times were more structured. On the other hand, during snack/meal time there was more flexibility for children to move around before they began to eat. Children were "helpers" who helped the teachers pass food from one table to the other or bring forks and spoons from the food cart to the tables. Thus, there were more vocalizations to individual children and also more directions. An example of the direction that a child received was:

> Hold the fork down, the sharp points should face the ground so if you fall it doesn't hurt you, okay? Okay, now take this fork to [LT2] and then bring some tortillas from [LT2] because some friends on this table need tortillas.

For stimulations received by the children, it was revealed that children received more stimulations from teachers during snack/meal as compared to free play time, Tukey = .039, $p \leq .05$, also children received more stimulations during group time than during snack/meal time, Tukey = -.377, $p \leq .001$, or free play time, Tukey = .416, $p \leq .001$. Field notes showed that during free play time children played with other children and teachers "floated" around the classroom and interacted with the children mostly when the children approached them. It was also noted that stimulations during snack/meal time revolved around the food that they were eating that day. Following are a few examples of how teachers stimulated the children during snack/meal time: "What vegetable do you have on your plate?"; "Vegetables come from the…f…f…farm?"; "What color is the milk?" Some teachers sang to the group while passing the food: "Take 1 scoop of apple sauce and pass it around."

For Tukey's HSD post hoc tests on assistance received by the children, it was revealed that children received more assistance from teachers during snack/meal time as compared to free play, Tukey = .019, $p \leq .001$, and group time, Tukey = .0323, $p \leq .001$. Likewise, children received significantly more responses from the teacher during snack/meal than free play, Tukey = .029, $p \leq .001$, and during snack/meal time than in group time, Tukey = .034, $p \leq .001$.

In summary, the context of snack/meal time was quite distinct from free play and group time as children tended to experience more vocalizations, stimulations, directions, assistance and responses from their teachers in that context.

Research question 2

To answer research question 2 (How do preschool teachers (in Head Start) conceptualize children's gender roles?), teachers from the four classrooms in which children were observed were interviewed regarding their perceptions about gender-roles. Teachers explained various aspects of gender-roles including how they see children in their classroom playing on the basis of gender, their role while children are developing gender-roles, and how teachers see different behavioral tendencies in children based on their gender. Some teachers talked about their personal background and beliefs on gender-roles and how they may or may not use these personal beliefs and experiences while teaching children about gender-roles.

This section includes all of these areas that the teachers explained and talked about in their interviews. This section is organized by the main themes that were identified in the analysis which include (a) gender-related play in the classroom, (b) teachers' observations and perceptions of gender-differences and behavioral tendencies of children, (c) teachers' role in gender-role development of children and (d) teachers' descriptions of their personal backgrounds. In line with grounded theory approach, codes derived from the participants' own

words (in-vivo codes) are included in the analysis and writing of the findings (Charmaz, 2006). The quotes that are provided throughout this section are representative examples of what the teachers mentioned during the interviews. Other teachers or the same teacher may have similar responses at another point during the interview, but only a few quotes were selected that best described the teachers' perceptions.

Gender-related play in the classroom

Children show play styles typical of their gender

All the teachers mentioned seeing boys and girls in the classroom engaging in some kind of play that they believed was typical to their gender. For example all the teachers mentioned that boys were very inclined to play in the block area. Most teachers mentioned that the boys in their classroom were in fact very "possessive" about the block area and thought of that area as their "territory".

> LT3: I can see the boys get very possessive of their things when a girl does come in there [block area]. And I feel like they feel like she is messing up with what they are doing, whether they are working together or not. I see a little more conflict when a girl does go in there, they feel like this is mine and you can have that but this is mine.
>
> LT1: Normally when they are dismissed to go play, and if the girls go first and they will beat the boys to blocks…the boys be mad…because that's where they feel like they go. That's their place, that's their zone. They are just there. I mean in blocks the boys just feel like that's where they go, is like when anybody is, like they don't want their territory. That's their territory and the girls are invading it when they are there.

All teachers except for teachers in one classroom also talked about how boys and girls engaged in play typically related to their gender even when they were not in an area that was

typically related to their gender. Teachers noticed that even when boys were playing in the housekeeping area, they did not generally pretend to cook or clean and that is what the girls did and boys dressed-up or pretended to be a doctor.

> AT2: It's always the same girls in housekeeping and they do some sort of dress-up that involves cooking, babies and marriage and then the boys will always go in housekeeping and play…like you saw the other day…some sort of power rangers or something…
>
> AT1: …for like in housekeeping you see more of the girls cooking food and more of the boys putting dress-up clothes, neck-ties and the hats and the shirts and the pants and stuff and you see the girls more tend to like taking care of the babies and washing dishes.
>
> LT1: Uh hmm. Because the boys are mostly playing doctors a lot. Whereas the girls are doing girly things, you know cooking and things like that.
>
> AT3: Now we do see boys but they play more of a…I don't know…not more of a housekeeping model over there as part of housekeeping. It's more like…um…I don't know how to see [say] it…it's not like a house area to them… I see them more like lounging on the couch or play doctor and stuff like that. The boys are not as much apt to as far as cooking, I mean they do but they don't as to the excess as the girls. You know what I am saying?

Teachers mentioned that some boys do play with nail polish and hair curlers in the housekeeping area but there are very few times this happens when compared to the boys who play with male-oriented things in the housekeeping area. Further, all teachers mentioned that girls play "girly" when in the block area and boys play "masculine" in the block area.

> AT1: You see that boys want to do more of the hard blocks for like building and you can see the girls using more of the animals like the foam animals or let's see like the…the

hard blocks and the boys have to do more of the harder blocks because they like to do race trucks or their cars and all and they have a tendency of using the cars putting up on top of the hard blocks and let them slide down. Whereas the girls have the tendency of using the foam animals and making them like a little foam house or like having those little kids and having them talk to each other and stuff like that.

LT1: The boys are mostly playing doctors a lot. Whereas the girls are doing girly things, you know cooking and things like that, like taking care of the babies. You do have some boys that like to take care of the babies also. But, mostly no, their role is mostly, they will sit over and like they are reading or like I said play doctor among each other or something like that. Not too much of a female role

AT2: Um…yeah. The girls tend to come up with more like a taking care of nature I think [even in block area]. They build like a house for the animals to stay in and they pull the people out to go take care of them. They are more nurturing. The boys are building something to knock over. Like a big monster truck, usually something involving destruction.

AT4: With the girls I notice it is the animals some of the softer structures. The boys are more toward the cars, the jump trucks, the block structures is where I see the boys with.

Family influences in gender-role play in classrooms

All the teachers mentioned the huge role that families played in gender-role development. Some teachers felt that due to what children see at home, it was difficult for the teachers to teach them gender-roles that integrated both genders. Overall, all teachers thought that the family plays the primary role in development of gender-roles for young children and the children imitate what they see adults doing at home.

LT3: Mmm…well I have a lot of young girls and a lot of older boys. Mmm also the family dynamics I have a lot of boys who have no father figure in their life and a very strong woman figure in their life. Mmm my girls a lot of them have both in their life, so well I actually get to meet the parents and talk to the parents and all that so I can kinda see a lot of my boys are you know raised by very strong women. So, that may be a very big difference.

LT1: You know, they are just, I mean they just act out roles, they act out what is going on at homes and that is how we know what is going on at home. Like from what they are acting out and what they are saying. And they boys, they got this thing where they got to be tough, masculine; I mean that is just the role that they play. And it is not really a good role to me because I mean they are taking on what they are used to seeing in the environment and it is just not good. Whereas the girls, I don't know, they feel like their role is in the home and I have noticed a difference between some of the Hispanic children, some of the girls, that is how it is their role is at home and with the other children, their role might not be at home. I mean, you just never know. And I hate for them to grow up feeling like their role is only at home. I don't think it is but you know due to the different cultures and things like that.

AT4: Some of my boys seem to like will go in and kind of dominate like you know, this is our area. I have noticed that a lot. Yes, like this is for us. Because I think they are taught that at home.

Some teachers felt that there should be a better way for parents and teachers to talk about gender-roles so there is a consistency between what the children experience at home and in school.

AT4: I would like you know not particularly for teachers in the classroom but for programs like this to be able to maybe during parenting classes to teach them that it is okay for the kids to you know explore and that all little girls don't have to go and play in housekeeping, all little boys don't have to go to blocks.

Differences in teachers' perceptions of gender-based play by girls and boys

Although teachers said that they did not encourage gender-based play, it was found that there were some discrepancies in their interpretations of play by girls and boys. For example, when the boys played dress-up or wore heels teachers mentioned that it did not mean anything and they were "just being children" but when girls showed interest in playing in the block area the teachers thought of that as positive and encouraged it because girls might also build structures and buildings when they grow up (i.e., have a career related to building).

LT3: …and it's mainly the boys and my dads that are involved in the boy's lives, if they see their sons in housekeeping wearing a necklace, it is a very hard concept. So for my boys in particular I want them to understand that that does not mean anything, that does not signify anything. You are a child. You know that he is a child.

AT3: One year I had a little boy that did nothing but play in housekeeping and his dad came in and he saw him with a dress, you know, and a hat and a purse and jewelry, which we don't discourage because this is free play and the dad got very upset and he says, "I don't want my boy playing in there." So I explained to him and I said, "Sir, here we give the children free choice. This is their classroom, everything is open to them." I said that I can't tell him that you cannot go into housekeeping. But I said that this doesn't mean that in life that is the way he is going to dress. This is the way he [unidentifiable text] plays with the other children. You know, it's just, it's just they are children, you know?

LT2: And I am too that way in my classroom too. Like the boys will put dresses on and I am like okay they are exploring. I mean it doesn't mean that they are gay, it doesn't mean, like, they are just being a mom.

AT3: Oh, I have heard the boys saying that this is for the boys and not for the girls. But we always try to tell them that there is girls that build houses too… I think it is better to go ahead and encourage it. I think there is nothing wrong with that. Like I said before that could be the job they choose in their career and in their life so you know, I have always been a firm believer that earlier in the years usually chooses their decision in the entire life. So yeah…

Teachers' observations and perceptions of gender-differences and behavioral tendencies of children

A question about the nature and behavioral tendencies of boys and girls was not asked during the interviews however most of the teachers addressed this issue. Since it was a common theme that all the teachers mentioned and some teachers mentioned it repeatedly, it was found to be an important theme overall. One teacher from one classroom had a different opinion about boys in the classroom and mentioned that boys were more polite than the girls. But she also mentioned that "I would expect like in general for my boys to be like just a little rough around the edges a little more." All of the other teachers had a different opinion about the behavioral tendencies of boys than this teacher.

LT3: Um…some of my boys are more polite, like yes ma'am and no ma'am, you know I will bring this up for you but some of the girls would be like huh. The boys are more like more gentlemen-like. More like, I will get this for you than some of the other girls are and that is a definite gender thing.

LT1: Boys are harder. It is a lot harder to deal with the boys than it is the girls. The boys try you. And as whereas the girls, sometimes they try but they go on, but it is so bad with the boys. The attitudes when you say something to them [the boys]. It is the attitude, the ongoing attitude. Especially the older boys and even this is the time of the year when they are growing up and growing out but um yeah, I mean yeah, that is what you are dealing with the boys now-a-days is the attitudes, you know?

AT2: The only thing I will step in is when they [the boys] are fighting or just boys being boys like if they are doing anything unsafe… like boys like to wrestle, I don't…I like that's unacceptable behavior…I will step in or…I mean they [boys] are more aggressive

AT4: I have found that the boys, when I have more boys in the classroom, it is a little more, they are a little more aggressive, they are a little more active and children are louder with the boys there.

Similar to the opinions of behavioral tendencies of boys, one teacher had a different opinion on the behavioral tendencies of girls than the other teachers. This teacher mentioned girls to be "catty" but also mentioned that, "I would expect like in general you would expect the girls to be a little more matured a little softer." On the other hand, all of the other teachers mentioned girls being more polite and better communicators than boys.

LT1: Yeah, girls are more quiet and solemn and they are going to do whatever you ask, whereas not with the boys. Girls more like to cuddle than the boys. The boys are not, they don't care, they don't want you really hugging on them, very seldom, you know? Yeah, but the girls, you can hug them all day long and it doesn't matter.

AT4: And sometimes when there are majority girls it is a little bit calmer, they seem to be a little more engaged, than our boys are.

Teachers believe they play a huge role in gender-role development of children

Although all teachers mentioned the family playing a major role in gender-role development of children, all teachers except for 2 assistant teachers mentioned that they (the teachers) also play a huge role with regard to telling children about gender-roles. This was mostly mentioned in relation to the careers that the children are going to choose in the future. All the teachers who believed they played a substantial role in the child's life regarding gender-role development mentioned that they teach the children that there are no barriers related to their specific gender. Teachers mentioned teaching children about how they can achieve anything and have any careers regardless of their gender and that gender is not a barrier.

> LT3: So I think I play a huge role. Especially in preschool, kindergarten years, that's where they learn everything. I try my best to incorporate with my girls sports in general and and ideas of and they are very very young but asking about what they want to do in the future, like what do you want to be, what do you want to do? And specifically at the girls because I mean we all know that women have, you know, as much part in job force as much as…so I do try to incorporate that in sports with specifically my girls.
>
> AT4: You want to be a firefighter, you, I tell my girls, like we were learning about community helpers, you know and there was a female in one of the books and when we were driving on the bus we would say, oh it is a mail lady or it is a mail man, you know, we always hear man, and so I try to teach them mail person. So…yeah
>
> LT2: Yeah like if a boy wants to have a baby doll I was like…that's great…if that's what they like then kinda encourage that and not push them away from that I kinda feel like that's important to let them know that there is not one set thing that you have to be even after you are an adult. That they boys have to be manly or you know tough… And even

we will do races sometimes and I will sometimes put the boys against the girls so they can kinda see that…I mean like I won't point it out but just for them to explore and see that they are equally competent.

Teachers also mentioned teaching boys that it is not important for boys to always be strong and when boys get older and have children they need to be nurturing.

AT2: I will try to think of something like there is daddys that also stay home with their babies…daddy also has to take care of the baby.

AT4: So we try to teach them like boys will grow up someday and need to nurture a child, whether be a sibling or their own child, just to try to get the parents familiar with boys just don't have to play with blocks

Teachers also mentioned that since in this population (Head Start) a lot of children grow up without one parent it is especially important for the teachers to bring a balance of gender-roles into the child's life. Overall, they mentioned that this population is "very interesting" and there are so many different types of children that it is essential for them to promote gender-roles that are not stereotypical.

LT1: Basically, we model. We model; I mean because as I said they seek something that they may not get at home. So therefore they can seek it here, I mean if they are not getting it there.

LT3: We are dealing with a lot of them that are growing up without a father figure. So um…I believe that every child needs a well balance in their life um when it comes to gender roles. I said like I see my boys getting what they need but my girls lacking in some areas because of the lack of a father figure so…I think it is interesting to see how some of these children grow up without one of the gender typically the father in their

lives. It is almost like, you can't replace that but you can do your best to try to…I don't know I guess teach the children about different things. I think with this population it is a very different scenario than any other…we are dealing with a lot of single mothers…So I just, this population is very interesting especially when it comes to gender-roles.

AT2: I don't really see too much of a stereotypical anything especially here because there are so many different types of children that we end up here at Head Start

Teachers believe they promote all kinds of play regardless of gender

Despite teachers' perception that children play differently according to their gender and that boys and girls have completely different behavioral tendencies, all of the teachers believed that they promote all kinds of play in the classroom regardless of the child's gender. They also mentioned that when the children showed play atypical to their gender, they did not redirect or modify unless the child was restricting some other children from playing with certain material in the classroom. The reason most teachers mentioned for this was that the program is based on a play-based curriculum and thus they believed in children leading their play and the teachers "going with the flow" and following the lead of the children unless it was going against the learning of the other children.

AT3: Oh, I have heard the boys saying that this is for the boys and not for the girls. But we always try to tell them that there is girls that build houses too. So we try to encourage the boys to understand that it is not just a boy's play and girls can also play with it. So you know, and they understand it but you still hear that often, you know not a lot, but you still hear that every now and then. You can't always catch it but yeah, when I do catch it I am like, "Okay we need to go there and talk about this."

LT2: I let them go wherever. Usually you know if they make a wrong choice then they got to go make another choice. But I don't limit the girls to specific areas and the boys to certain areas. Um…I mean I am fine with it. I do like try to encourage them to try other things because you know, but I am not like…I can't…if they are not doing anything wrong…if they are not like beating each other up

LT4: Um, I, I don't pressure them to choose a certain activity. I want them to pick it, like, based on their own interest and what they are feeling that they want to explore.

AT2: You know…like I am pretty much, wherever they go, I mean that's that's the way we are over here. That's what we are taught to do is let them play wherever they want and they can do whatever they want as long as they are in kind of a safe environment. So I just kind of go with the flow, whatever they are playing.

Most lead teachers who are responsible for the curriculum in the classroom mentioned that they specifically add different materials in each area in the classroom that they know would attract the boys and girls to the areas that are not often attractive to them.

LT3: Yeah, what we try to do is take whatever topic we have and to incorporate it in every area. In the block area we decided to add, you know when we did winter, blocks of ice and this and that thinking maybe the girls would like enjoy playing with the ice and different and not just the cars. We try our best, in different areas; we try to incorporate things that might interest the boys and the girls. Yeah, let's see housekeeping we add um gosh…fire helmets, men's suits, the dinosaur costume for the dinosaur stuff and then like I said in the block area at one point before you came in here we added like ribbon and different fun things for the girls to be able to make something for, if they want to make

something for the girl oriented. For this dinosaur it has been a bit of a struggle to be able to find something for the girls.

LT2: Um…well one example…well I guess when I buy different color wigs you know…when I first saw that I was like the girls are going to love this…just not even thinking…and then…um…I will try to make sure like when I buy tops…like the tops that I get like I will buy…because I buy like the princess one and I will buy the car ones…just to have a mixture in there

Teachers' description of their background

Teachers' personal background

There was diversity in teachers' responses when asked to describe their personal background related to gender-roles. The majority of the teachers described their background as coming from "traditional"/"big" families.

LT3: Um…I think I come from a very traditional family. Gender roles I guess have been ingrained to me with traditional family gender roles…my mother never worked a day in her life, she is a is a traditional house mom, my dad does not want my mom to work no matter what the financial situation is. And my dad had always worked. Um…I have taken that a little bit, in my own life I want to be a stay at home mom at some point but also I want to be able to support myself. So I do come from a very traditional family where the women play their role and the man plays…and my parents still married and we still…all the people in my family are still married…it's a very traditional family.

LT2: I was very girly girl when I was little, um…I am kinda still a girly girl I guess, but um, I don't know, like I think growing up I kinda saw like my mom stayed at home. So I was always going to be a mom when I grew up. My mom later went to teach when we all

grew up, so I kinda saw the traditional boys work and girls stay at home and have babies. I remember like first hearing girls they don't want kids, and I was like what? Why would you not want kids?

Teachers who mentioned growing up in traditional families also mentioned that as they grew up they wished and still wish to have a balance in work and life. Namely, they expressed the desire to be able to spend time with their children but would also like to support themselves financially and not be dependent on someone else.

Three teachers did not describe their background in gender-roles as "traditional." There were teachers who came from single-parent families, teachers who thought they were tom-boyish because of the influence of brothers while growing up, and teachers who had both parents working and providing financially while growing up.

LT1: My mom was the dominant role model in my family. My father had 2 families, just seeing them occasionally. Mostly, near Christmas time or some, it was always like a money thing, he was never really a part, you know. But, if we ever needed he did basically give, you know to us. You know he did…but, you know, I grew up in a low-income environment.

AT4: I grew up, I mean my mother and father were married for like 35 years so I had both parents in the house. Two sisters and I am the oldest of the two and both my parents worked. So it was like I did not have a stay-at-home mom or a stay-at-home dad, it was both parents worked, both parents provided and it was just like an equal partnership as far as men and women in my household.

There was much diversity in teachers' background in relation to gender-roles. Although a direct question about connection between personal experiences and teachers' influences on

children's development of gender-roles was not a part of the interview, all of the teachers who described themselves coming from a "traditional" family themselves made the connection and talked about how they do not bring their personal experiences in the classroom while teaching children about gender-roles.

> AT2: …I come from a traditional family but when I clock in for work it's not in my head. That might be my beliefs but not in the classroom. I mean that's what we are taught to do…I try not to put too much of my, like I said I have my beliefs…So I try to just, like go with the flow as much as possible. I don't, I try not to affect them gender-wise too much. I mean for instance we have a little boy who cries all the time or for anything he cries. You know I try not to bring up how typically…like you are a boy, toughen up, don't do that…I try not to do that. I try to pull back even though if I wasn't at work I would say completely different.

Teachers who did not describe themselves as coming from "traditional" families also did not mention anything about the connection or disconnection between personal experiences/background and their influences in the classroom. Specific questions related to specific scenarios that will be discussed later in this chapter were asked of the teachers in order to elicit responses about personal experiences and classroom influences.

Influence of training that the teachers receive

A few assistant teachers (but none of the lead teachers) mentioned that the training that they receive at Head Start requires them to let the children lead their own play. This in turn causes the assistant teachers to leave their personal beliefs and attitudes about gender-roles behind and teach all children that they can play with all the material in the classroom regardless of their gender. A few lead teachers also mentioned that they don't bring their personal beliefs

about gender-roles in the classroom but the lead teachers did not attribute that to the training they received at Head Start.

> AT4: Um…not really. I just kinda…wherever they want to go whatever they want to do I just kinda go from there…I come from a traditional family but when I clock in for work it's not in my head. That might be my beliefs but not in the classroom. I just…if the boys want to put on dresses and get married then go for it you know like. You know…like I am pretty much, wherever they go, I mean that's that's the way we are over here. That's what we are taught to do is let them play wherever they want and they can do whatever they want as long as they are in kind of a safe environment. So I just kind of go with the flow, whatever they are playing.
>
> AT3: One year I had a little boy that did nothing but play in housekeeping and his dad came in and he saw him with a dress, you know, and a hat and a purse and jewelry, which we don't discourage because this is free play and the dad got very upset and he says, "I don't want my boy playing in there." So I explained to him and I said, "Sir, here we give the children free choice. This is their classroom, everything is open to them." I said that I can't tell him that you cannot go into housekeeping because we just can't do that in the school.

In sum, it was found that all the teachers mentioned both boys and girls showing play styles typical to their gender in various areas of the classroom and also boys and girls played in areas that were typical to their gender. Majority of teachers mentioned that children's family predominantly influences the gender-roles of children and that children continue those patterns in the school which might be the reason for children's gender-typical play in classroom. Lead teachers mentioned that they play a huge role in the gender-role development of the children in

their classrooms and that they feel the need to bring a balance in gender-roles into the children's lives. Teacher assistants did not talk much about the roles that they played with regard to gender-roles, they mentioned letting the child take the lead in all kinds of play because that was what they were trained to do. When teachers were asked about their personal background on gender-roles all lead teachers explained their background in detail and it was found that all but one lead teacher came from "traditional" family background where the father worked and the mother stayed at home with the children. Teacher assistants did not answer this question in as much detail as the lead teachers but the majority of assistant teachers mentioned not bringing their personal attitudes and perceptions on gender-roles into the classroom and letting the children explore different roles in the classroom.

Thus, to sum these responses of teachers a conceptual model was created (see Appendix N: Figure 4.1). This model started with teachers believing that children engage in gender-based play and play atypical to their gender. The teachers mentioned that one major reason for children to engage in gender-based play could be the influence of family on their gender-role development and they imitate what they see at home in the classroom. Due to gender-based play by children and various other reasons like teachers' personal background and experience, the training that they have received and their beliefs about behavioral tendencies of boys and girls, the teachers felt the need to try and promote all kinds of play regardless of the child's gender but also promote gender-integration in each area of the classroom. Even though the teachers tried to promote all kinds of play regardless of the child's gender, teachers found girls and boys engaging in gender-based play in the classroom. Teachers' desire behind promoting gender integration in play is for boys and girls to engage in gender-neutral roles in preschool classrooms but also in the future when they become adults and are choosing their careers.

Research Question 3

To answer research question 3 (How and to what extent do children's experiences and behavior in the classroom relate to teachers' conceptualizations of young children's gender-roles?), teacher's perceptions of gender-roles were organized according to each teacher and profiles of children's experiences were created first by classroom and then by each teacher within that classroom. These profiles were created by first grouping children in two groups of boys and girls and then analyzing the data by running descriptive statistics by gender and teacher in each classroom. Descriptive statistics were run on children's experiences of modifications, stimulations and teacher vocalizations. Also, free play context was further analyzed to find out the amount of time boys and girls in each classroom spent in each of the classroom areas of blocks, housekeeping, manipulatives and art.

Three distinct themes were identified from the analysis: first, boys experienced more modification than girls in all classrooms regardless of teacher perceptions of their roles in gender-role development. The second theme was related to children's experiences in the classroom in relation to teacher's perceptions of the behavioral tendencies of boys and girls in the classroom. It was found that all lead teachers believed that boys were "difficult to manage" compared to girls. During focal-child observations it was observed that lead teachers modified the boys more than the assistant teachers, and the majority of assistant teachers, in their interviews, did not mention anything about behavioral tendencies of children in their classroom. It was also observed that overall girls received similar amounts of modifications from all teachers (lead and assistant). It was also found that boys and girls experienced similar amounts of vocalizations and stimulations from all the teachers (lead and assistant) regardless of teacher perceptions of their behavioral tendencies. The third theme related to how children in all the classrooms played in areas that were more typical to their gender regardless of whether teachers

made attempts to make those play areas that were more atypical to their gender attractive to them by putting in materials that were typical to their gender.

Modifications and directions experienced by children in relation to teacher's perceptions of gender-roles

Although majority of the teachers mentioned that they play a major role in children's gender-role development, there were 2 teachers who mentioned that they did not feel it was the teacher's responsibility to teach children about gender-roles. Regardless of these perceptions of the teachers from different classrooms, it was consistently found that boys experienced more modifications from all the teachers than did girls.

LT1 (lead teacher from classroom 1) thought she played a huge role in children's gender-role development because:

> Yes [I play a role in children's gender development]. Whether it is a girl or a boy they still look at their teacher like almost like a parent. You know they seek, they seek what they may not seek at home. This is what they do; I mean they look at me as a mother role.

In spite of believing that she played a major role in children's gender-role development it was found that LT1 (lead teacher from classroom 1) modified boys twice as much as girls (boys = 1.87% of total observations in classroom 1; girls = 0.80% of total observations in classroom 1). Similarly, LT2 (lead teacher from classroom 2) modified boys 1.2% of all observations in classroom 2 which is much more than she modified girls, which was 0.27% of all observations. Although she modified boys more than girls, she mentioned that she feels it was important to let both boys and girls know that there is not one set thing that they have to be or can do and that it is not always important for the boys to be manly or tough.

AT1 and AT2 (both assistant teachers in classroom 2) had different views about their role in children's gender role development but they both were observed modifying boys more than girls. Boys experienced modifications from AT1 1.33% of all observations in classroom 2 whereas girls experienced much less modifications from AT1 (0.13% of all observations classroom 2). Similarly, boys experienced modifications 0.40% of all observations from AT2 in classroom 2 and girls experienced modifications 0.27% of all observations from AT2 in classroom 2.

> AT1: …if needed modify and encourage them to understand the difference between the roles of boys and girls…just to show them that actually there is no difference.
>
> AT2: I try as a teacher, I try to just let them figure it out for themselves. I try not to put too much of my, like I said I have my beliefs...That's what we are taught to do is let them play wherever they want and they can do whatever they want as long as they are in kind of a safe environment. So I just kind of go with the flow, whatever they are playing.

LT3 (lead teacher from classroom 3), AT3 (teacher assistant from classroom 3) and LT4 (lead teacher from classroom 4) all thought that they played a major role in teaching children about gender-roles. It was observed that boys received more modifications than girls from all three teachers during observations in each classroom (see Appendix N: Figure 4.2).

> LT3: I think it is a huge responsibility for me to teach the children about gender-roles because I mean our society is based on it…So for my boys in particular I want them to understand that that does not mean anything, that does not signify anything. You are a child. You know that he is a child.
>
> AT3: So you try to teach them that gender, that it doesn't have to with anything…So and we also encourage, like on field trips we always tell the children you might see a girl and

you might see a man doing the same thing. Just because it looks like a man's job doesn't mean women can't do the same things

LT4: like since we have been doing community helpers for example, I have heard some of the say, like that's mostly for a boy or that's a girl's job or whatever, and then I like to encourage them and say no…pretty much anyone, boy or a girl can have any job that you want to have. So I like, I like, um I don't like saying that boys should be doing this and acting this way, or this is what boys do and girls don't do. I just like to encourage kind of openness.

On the other hand, AT4 (assistant teacher from classroom 4) mentioned not having a role at all in teaching children about gender-roles and that it was a parent responsibility but still was observed modifying boys more than the girls. Boys received modifications 0.14% of the entire observations from AT4 in classroom 4 while girls did not receive any modifications from this teacher.

AT4: I don't think it's, I think it is more of a parent responsibility to talk to them about gender-roles, I think my responsibility is you know just to make sure they are safe first of all, and that they are having a good time and they are learning.

In summary, boys received more modifications from the teachers than girls and this was apparent across all classrooms and from all teachers (see Appendix N: Figure 4.2). It was also clear that boys received more modifications than girls regardless of whether teachers viewed themselves as playing a huge role in teaching children about gender.

Children's experiences and teacher's perceptions of their behavioral tendencies

Modifications

All of the lead teachers perceived that the boys were "louder" and "difficult to manage" compared to the girls. Most assistant teachers (except 1) did not mention anything about behavioral tendencies of boys and girls in their classrooms. It was observed that all lead teachers (LT1, LT2, LT3 and LT4) modified boys more than the three assistant teachers (AT2, AT3, AT4) who did not mention anything about children's behavioral tendencies. Graphical representations comparing modifications by each of the above teacher can be seen in figure 4.2 (see Appendix N: Figures). Following are lead teachers' perceptions of boys' and girls' behavioral tendencies.

> LT1: Girls are more, boys are harder. It is a lot harder to deal with the boys than it is the girls. The boys try you. Their attitudes when you say something to them. It is the attitude, the ongoing attitude. I mean yeah, that is what you are dealing with the boys now-a-days is the attitude. Yeah, girls are more quiet and solemn and they are going to do whatever you ask, whereas not with the boys.
>
> LT2: Well I know when it's all boys they usually get a lot louder, but not with the girls or even when there are girls and boys playing…together you know.

Although LT3 observed her boys and girls particularly in this year's class both engaging in cooperative play she expected boys to be rough and girls to be softer.

> LT3: I would expect like in general for my boys to be like just a little rough around the edges a little more… like I said you expect your girls to be a little more mature…a little more softer but particularly with this class, I don't see the distinction too often…

LT4: I think, well I think they argue less when they play together…otherwise boys tend to be a little rough…not that that is bad but you know…

As mentioned before three assistant teachers were observed modifying less than the lead teachers. One exception was AT1 (assistant teacher from classroom 2) who modified boys 1.33% of the total observation in classroom 2 which is closer in percentage to the lead teachers' modifications. It is also important to note that AT1 mentioned the girls to be better communicators than girls.

AT1: Well like some girls are like more direct than the boys are. And the boys kinda like try to say what they want to say but they don't really get it out…so you know it is hard to understand them sometimes…but with the girls…the girls have a tendency of blurting out more faster than the boys do. They are more quick and then it is easier with the girls, you know.

It was observed that regardless of teachers' perceptions of girls' behavioral tendencies there were very low (less than 1%) modifications experienced by girls from all lead as well as assistant teachers. See Appendix N: Figure 4.2 for comparisons in modifications received by girls by each teacher.

Stimulation and vocalizations

It was found that regardless of most teacher's perceptions of behavioral tendencies of boys and girls, all children received similar amounts of stimulations (includes stimulations when children were in a group with other children) and vocalizations from all the teachers.

Even though LT1 perceived boys to be "harder" and girls to be more "quiet and solemn" it was observed that boys received similar amounts of stimulation from LT1 (15.20% of the total observation in classroom 1 for boys and 14.53% of the total observation in classroom 1 for girls)

. It was observed that boys and girls also received similar amounts of vocalizations from LT1 (4.0% of the total observation in classroom 1 for boys and 4.67% of the total observation in classroom 1 for girls).

LT2 (lead teacher from classroom 2) mentioned boys usually being a little “louder” than girls in her classroom. In spite of that it was observed that boys received similar amount of stimulations (boys 18.13% of the total observations in classroom 2 and girls 16.13% of the total observation in classroom 2.) and vocalizations (boys 3.73% and girls 2.93%) from LT2 during the entire time of the observation in classroom 2.

LT3, the lead teacher from classroom 3, expected boys to be a little “rough” and girls to be a little “softer and mature”. Even though there were different expectations that LT3 had from boys and girls, boys and girls received similar amounts of stimulations from LT3 (13.07% time of the total observation in classroom 3 for boys and 11.60% of the total observation for girls) Similarly, LT3 vocalized with boys 6.0% of the total observation in classroom 3 which is not much higher than her vocalizations with girls, 4.53% of the total time of observation in classroom 3.

LT4, who was the lead teacher from classroom 4, mentioned boys playing “rough” when they were playing with other boys but when girls and boys played together they argued less. Like all other lead teachers, boys and girls received similar amounts of stimulations and vocalizations from LT4 (stimulations for boys were 16.16% of the total observation, stimulations for girls were 16.13% of the total observations; vocalizations for boys were 6.57% of the total observation and vocalization for girls were 6.67% of total observation in classroom 4).

Although only one assistant teacher (AT1) talked about boys’ and girls’ behavioral tendencies in classrooms, it was observed that boys and girls received similar amounts of

stimulations and vocalizations from the assistant teachers. See Appendix N: Figure 4.3 for comparisons between stimulations received by boys and girls by all the teachers.

With vocalizations, regardless of whether assistant teachers mentioned anything about their perceptions of behavioral tendencies that boys and girls have, boys and girls received similar amounts of vocalizations from the assistant teachers in all the classrooms. See Appendix N: Figure 4.4 for graphical representations of comparisons of vocalizations that boys and girls received by all the teachers. Thus, to summarize, boys and girls in the majority of classrooms received similar amounts of stimulations (see Appendix N: Figure 4.3) from their teachers. Also, in the majority of classrooms boys and girls experienced similar amount of vocalizations from their teachers (see Appendix N: Figure 4.4).

Children playing in areas typical to their gender and teachers attempt to include specific materials for boys and girls in all the areas

All teachers, in their interviews, talked about boys and girls playing in areas that were typical to their gender in their classrooms. Majority teachers mentioned boys playing more in the block and manipulative areas more than the girls and girls playing more in the housekeeping (dramatic play) and art areas in the classroom. Thus, the context of free play was further analyzed and percentages of time boys and girls in each classroom spent in the above four areas was identified.

All teachers were asked questions regarding what they take into consideration when they pick materials in the classroom. All lead teachers answered this question but since lead teachers were responsible for the curriculum and managing the material in the classroom, the assistant teachers did not answer this question.

Lead teachers from two classrooms mentioned that they try to make certain areas in the classroom more appealing to both boys and girls by including materials that they think the boys might like in the housekeeping area and things that they think the girls might like in the block area. By doing this the teachers expected the boys to play more in the housekeeping area and the girls to play more in the block area because they usually did not prefer to play in those areas during free play time.

> LT2: well I guess when I buy different color wigs you know…when I first saw that I was like the girls are going to love this…just not even thinking…um…I will try to make sure like when I buy tops…like the tops that I get like I will buy…because I buy like the princess one thinking that the girls will like then and then I will buy the car ones…like you know the boys will wear them…you know just to have a mixture in there
>
> LT3: whatever topic we have and to incorporate it in every area…I try my best, and we try to incorporate every area thinking about what would the boys want to do and what would the girls want to do?...let's see housekeeping we add um gosh…fire helmets, men's suits, the dinosaur costume for the dinosaur stuff...and then like I said in the block area at one point before you came in here we added like ribbon and different fun things for the girls to be able to make something for, if they want to make something for the girl oriented. For this dinosaur it has been a bit of a struggle to be able to find something for the girls.

Lead teachers from two other classrooms mentioned that they take individual children and their personalities into consideration when they make decisions on the material in the classroom. These two teachers did not mention child's gender has a role in this decision-making process.

LT1 : Well, basically when I plan, I plan to meet the child's needs. And then umm as far as their interest and stuff I pull that from parent input. Individualization. I pull it from there.

LT4: I have always kind of thought of them [the children] as a whole. And you know like, individual interests but never really thinking like, oh my boys like I am going to get this because of them. But now that I think of it, I have heard others say that before but I have never thought about it.

After further analysis of the free play context it was found that whether or not the lead teachers attempted to include certain materials in housekeeping that they thought the boys would like and certain materials in the block area that they thought the girls would like, girls and boys in all classrooms still played in the areas that were typical to their gender similar to what the teachers had previously mentioned.

In classroom 1, boys were in the block area 49.6% of the whole free play time while girls were in the block area for 20.8% of entire free play time. Similarly, boys were in the manipulatives area much more than the girls, (boys: 16% and girls: 3.20% of the total free play time in classroom 1). On the other hand, girls were in housekeeping 26% of the free play time while boys were in the housekeeping area only 12.80% of the free play time and boys were never observed in the art area while girls were in the art area 34% of total the free play time in classroom 1. During the teacher interview the lead teacher in this classroom emphasized the gender differences in the block and housekeeping areas. For example, she mentioned observing more boys in the block area as compared to the girls and more girls in the housekeeping area as compared to the girls but did not mention the lack of boys in the art area. See Appendix N:

Figure 4.5 for graphical representations of time boys and girls spent in each of the areas in classroom 1.

This pattern continued in classroom 2 where boys were in the block area 29.2% of the free play time which was much higher than the girls who were in the block area 7.6% of the free play time. Similarly, boys played in the manipulatives area for 25.6% of the free play time while girls played in the manipulatives area only 12.8% of the free play time in classroom 2. The situation reversed in the housekeeping area where girls played for 19.2% of the total free play time which was twice as much as boys playing in there for 8.4% of the free play time in classroom 2. Similar to classroom 1, boys played in the art area only 1.6% of the free play time while girls played in the art area 15.2% of the free play time in classroom 2. Comparisons by gender for all the above areas in classroom 2 can be found in Figure 4.5 (see Appendix N: Figures).

Further, it was observed in classroom 3 that boys played in blocks twice as much as the girls (boys 8% of the free play time in classroom 3 and girls 4.8% of the free play time in classroom 3) and boys also played in the manipulatives area for 34.4% of the free play time which was much more than the girls who played with manipulatives for 12% of the total free play time in classroom 3. It was observed that girls dominated the housekeeping and the art areas and boys played there much less than girls. Boys played in the housekeeping area 22.8% of the free play time and girls played in the housekeeping area 43.6% of the free play time in classroom 3 which is almost twice as much as the boys. In this classroom, boys and girls both were observed spending almost equal amount of time in the art area (boys: 11.6% and girls: 11.2% of the free play time). See Appendix N: Figure 4.5 for comparisons for the time boys and girls spent in each of the above areas.

Most of these trends continued in classroom 4. Boys in this classroom spent 15.2% of their free play time in block area whereas girls spent only 4.4% of their free play time in block area. Boys also spent more time in the manipulatives area during the free play time in the classroom (15.2%) than the girls (10.8%). On the other hand, boys spent 19.6% of their free play time in housekeeping area which was much less than the girls who spent 34.4% of their free play time in the housekeeping area. Similar to the housekeeping area, boys spent less time, 4.4% of their free play time in art area, were girls spent 16.8% of their free play time. Graphical representations of time spent in each of the above areas in classroom 4 can be found in Figure 4.5 (see Appendix N: Figures).

Thus, it can be concluded that whether or not teachers attempted to make different areas in the classroom more attractive to both boys and girls, boys played more in areas that are typically considered as boy areas and girls played in areas that are typically considered as girl areas.

To sum, from the focal child observations it was found that boys received more modifications as compared to girls in all the classrooms. It was also found that children's experiences differed depending on the context in which they were in, for example children experienced more stimulations, vocalizations, directions, responses and assistance in snack/meal time as compared to group time and free play time. Modifications and praise did not differ by context.

In the teacher interviews, all teachers mentioned that all children engage in gender-based play in the classroom lead teachers in all the classrooms thought that they played a major role in children's lives with regard to teaching them about gender-roles. All of the teachers mentioned creating and promoting an atmosphere that is gender-integrated in the classroom. Teachers also

mentioned that boys and girls show different behavioral tendencies and the teachers have some expectations from the boys and girls to behave in certain ways. Lastly, teachers who talked about their personal background and past experiences regarding gender-roles did not mention consciously connecting these experiences to teaching children about gender-roles in the classrooms.

The next section will look at the findings with a more broad and reflective lens and discuss interpretations, explain the implications, and suggest future research.

CHAPTER V

DISCUSSION

The purpose of this dissertation study was two-fold. First to identify and describe the different experiences boys and girls have in Head Start preschool classrooms with the help of focal-child observations. The second purpose was to interview the teachers to better understand their perceptions and conceptualizations of gender-roles in children so it could be identified if there was any relation between teachers' perception of gender-roles and children's experiences in the classroom.

Children's Experiences and Teacher's Perceptions

There is limited research available on differences in experiences of boys and girls in preschool classroom and the available research is not recent as most research on this topic occurred in the 1970s and 1980s. Past research suggests that boys were criticized more often by teachers in preschool classrooms; received more disapproval; received more remedial feedback; and were given more reprimands from their teachers as compared to girls (Murphy, 1986). Another study showed that teachers used more directive speech with preschool aged boys as compared to preschool aged girls (Cherry, 1982). In the present study it was found that boys consistently and significantly experienced more modifications (physical and non-physical) from the teachers. Although the current study was conducted with children from low-income families, the findings were consistent with the previous literature found in the area of gender differences in children's experiences from middle-class families (e.g., Murphy, 1986; Cherry, 1982; Serbin etal, 1973).

Some teachers mentioned that they selected materials for the classroom thinking about what the girls and boys in the classroom would like to play with, thus gender of the children was

a factor in selecting the materials for the classroom. On the other hand, some teachers mentioned picking materials according to individual differences in children and not based on gender. It was expected that children's experiences would vary depending on teachers' behavior but the focal child observations showed that children played in similar fashion in all the classrooms and it was mostly gender-based. One reason could be that although the teachers added materials in the classroom they did not mention talking to the children about materials depending on the child's gender. Another reason could be what teachers mentioned as the influence of children's family, which will be discussed later in this chapter.

Existing literature consistently indicates that males were more aggressive than females and from a very early age boys engage in more rough and tumble play than girls; and more physical aggression than girls (for review see Block, 1983; Carpenter & Huston, 1983; Fagot, 1978). Moreover, Shaffer and Gordon (2000) found that teachers viewed boys under 6 years of age as always creating trouble in the classroom and were difficult to manage. In the present study, although teachers were not asked a direct question about their perceptions on children's temperament, most teachers mentioned that boys and girls seemed to have different behavioral tendencies. Consistent with the previous literature, most teachers perceived the boys in their classroom to be a little "louder" and "harder [to manage]" than the girls. Teachers also mentioned the boys being more aggressive than the girls and thus it felt to the teachers like the boys "tried" them and they did not feel this with the girls.

Since most teachers viewed boys to be more aggressive, loud and hard to manage, and expected the boys to be a little rough on the edges, it was not a surprise to find out that boys in comparison to the girls, consistently over all the classrooms, experienced more physical and non-physical modifications from all the teachers. This could also relate to the second mode, *enactive*

experience, in social cognitive theory of gender development and differentiation by Bussey and Bandura (1999). In this mode, people in the social and educational repertoire of the child have views about what is appropriate conduct for each of the two sexes and this influences how they react to behavior of children. Similarly, in this study teachers might have used their views about boys being louder and aggressive to modify their behavior to what they thought was more appropriate in that situation. Another explanation could be that perhaps boys might have behaved differently than girls and this could have precipitated in teachers' behavior which would then be different for boys and girls. There is also a possibility that both the above factors together could be responsible for the boys experiencing more modifications than the girls.

Most of the teachers mentioned in their interviews that they believed and perceived themselves to be role-models for the children and modeled the right way of doing things in the classroom. This could be related to the first mode of *modeling* in social cognitive theory of gender development and differentiation by Bussey and Bandura (1999). In this mode, information that is linked to a particular gender is demonstrated by models in the child's immediate environment such as parents and other significant persons in social and educational contexts. As teachers are integral members of children's immediate environment at school, their beliefs in this study that they model appropriate behavior for children is consistent with modeling mode in social cognitive theory of gender development and differentiation.

Since there were more modifications experienced by the boys, data on stimulations and vocalizations experienced by both boys and girls was analyzed. It was hypothesized that girls would experience more stimulations from the teachers but surprisingly boys and girls received almost similar amounts of stimulations and vocalizations from the teachers. These findings are different from findings in some previous research (Guzzetti & Williams, 1996; Mewborn, 1999)

where teachers engaged in more and longer discussions and thus interacted more with boys under 6 years of age than girls. Boys and girls receiving similar amounts of stimulations and vocalizations could be considered as a positive thing because although the boys are modified more, they are also receiving stimulations and communications with the teachers as much as the girls. Thus, it can be hoped that in spite of the excess modifications experienced by the boys, overall all children are having similar kinds of educational experiences in the classroom.

Moreover, past research showed that boys experienced more instruction and direction while girls received more assistance (Murphy, 1986), praise, and physical contact, from the teachers in preschool classrooms (Serbin etal, 1973). Contrary to past research this study showed gender differences only in modification but both boys and girls experienced the same amounts of stimulations, directions, praises, assistance and vocalizations. One of the reasons for that could be the fact that teachers mentioned how they let the children lead in the classroom and go with the flow. Thus, it could be that when teachers interacted with the children they just tried to stimulate and encourage the children in whatever they were doing regardless of their gender. In addition to gender children's experiences in the classroom also varied by the classroom context they were in.

Experiences of Children by Classroom Context

It was expected that gender and context would interactively relate to the children's experiences in the classroom but there were no interaction effects observed between context and gender. It was surprising to find out that gender and contexts were not intertwined in any way. One reason for this could be that boys' and girls' behavior might not differ in different contexts and thus the teachers' responses to their behavior are consistent over all the contexts.

The differences in children's experiences that were found could be a result of the structure of the context they were in. It was found in the field notes that there were some structural differences in each of the contexts. Group time was found to be the most structured and where the teacher had specific tasks that she planned on accomplishing, for example, reading a book or working on a chart of community helpers. The highly structured nature of this context could be the reason for children experiencing more stimulation in this context. Snack/meal time was structured but not as much as group time. During snack/meal time the teachers had some specific rules like all the children had to serve themselves food before everyone started eating and each child had to have all the food items on their plates whether or not they would eat them. In spite of these rules the teachers had a lot of flexibility where they considered children as "helpers" and included them in the organization of the snack/meal time. This could be the reason why children experienced most vocalizations, directions, assistance and responses during snack/meal time. On the other hand all teachers in their interviews mentioned that free play time was child-led and they let the children have a lot of freedom during this time. Thus, this was considered to be the most unstructured of the three contexts and could be the reason for the least amount of interactions between the children and teachers during free play time.

In several reports with recommendations for early child care, it is suggested that meal time in child care is a prime time that the teachers need to take advantage of because there are natural opportunities during that time for children to learn and for teachers to incorporate developmental challenges to existing routines (Child care plus, 1992; Department of Health and Ageing, 2009; Making Mealtimes Positive, 2009). Early childhood scholars such as Shaw (2009) mentioned in her recommendations that meal times provide great opportunities for developing children's independence, social skills and teaching them about healthy eating. In spite of the

above recommendations to encourage opportunities during meal time in child care centers, snack and meal time is an understudied area of research. In the present study it was found that most teacher-child interaction occurred in snack/meal time as compared to group time and free play time. In the current study it was also found that children received significantly more vocalizations, directions, assistance, responses, and stimulations in snack/meal time than in either group time or free play time. The interactions during snack and meal times consisted mostly of talking about the food that they were eating that day and then asking and explaining concepts related to that food. Thus, it could be assumed, consistent with the recommendations of early childhood educators, that teachers were taking this as a natural opportunity to introduce concepts to the children.

Teachers' role in development of children's gender-roles

Past research has shown that teachers may directly influence how, what and how much students learn as well as how they interact with each other and the people around them (Korkmaz, 2007). Thus, each teacher, similar to each parent, will transmit his/her own gender role expectations to children, reinforcing appropriate behaviors and discouraging inappropriate ones by various means (Burns, 1986). In the current study, during the analysis of teacher interviews, it was found that all lead teachers expressed that they played a huge role in teaching children about gender-roles. It was interesting that three out of four assistant teachers expressed that they don't play a huge role when it came to teaching children about gender-roles. This could be because of various reasons; one could be the role of assistant teachers in the classroom. As mentioned earlier, the assistant teachers are mostly responsible for preparing the classroom for different activities and while they spend most of their time doing that, most responsibilities that involve interactions with the children were on the lead teachers. Another reason could also be

because most assistant teachers mentioned that they were trained to let the children lead their play activities and intervene only when the children were doing something unsafe. Since there is not much research on this topic, more research is needed to understand the different influences lead and assistant teachers may have on children's lives.

The different roles that lead and assistant teachers play in the classrooms could have considerably impacted the quantitative as well as the qualitative findings in the study. During the interviews many of questions that were related to the selection of material in the classroom were not answered in detail by the assistant teachers and they mentioned that the lead teachers are responsible for the curriculum and selection of materials of classroom. On the other hand, lead teachers in their interviews seemed more confident about having control over the classroom and showed more ownership over the activities in the classroom by mentioning that they picked material for the classroom and did not mention the assistance of assistant teachers with that. Similarly in the field notes it was noted that the lead teachers were usually the ones who interacted with the children more because they planned the activities in the classroom and the assistant teachers played more of a supporting role as they made sure the materials were ready and the areas were cleaned while the lead teachers interacted with the children. These differences in the roles of assistant and lead teachers could have affected the qualitative and quantitate findings. The roles of the lead and assistant teachers could be the reason there were more vocalizations experienced by the children from lead teachers and less from assistant teachers. Also during the interviews the assistant teachers did not assertively answer questions about the organization and materials in the classroom and this could have been due to the more supportive role that they play in the classroom.

In the current study it was seen that all lead teachers found the boys “louder” and “harder [to manage]” while the majority of the assistant teachers did not mention anything about the temperament of boys and girls in their classroom. It was observed during the focal-child observations that all lead teachers modified (physically and non-physically) the boys more than the girls. It was also observed that boys received less modification from the assistant teachers as compared to the lead teachers. Past research has shown that early childhood teachers used gender role stereotypes to guide their behavior with children (Fagot, 1984). Delamont (1990) has posited that gender-role beliefs of early childhood teachers may be predictive of teacher behaviors that would then shape children's gender role perceptions and behaviors. Thus, in the current study it could be assumed that teachers’ beliefs that “boys are harder to manage” could be linked to the teachers’ behaviors of modifying boys more than the girls.

Teachers who did not describe themselves as coming from “traditional” families, i.e. who did not grow up in families where only the father worked outside of home and earned money and the mother stayed at home, also did not mention anything about the connection or disconnection between personal experiences/background and their influences in the classroom. It is important to note that although the teachers mentioned that they came from traditional families, they are now working women and also some of these teachers mentioned that even in the future they plan to continue to support themselves. Thus, even though teachers do not directly talk about connecting their personal background of coming from a traditional family to gender-roles in the classroom, they try to teach girls to be independent and that they can choose whatever career they want regardless of their gender when they are adults. This might connect to the fact that all these teachers are working and independent women as adults. They also try to teach boys that

when men become fathers they need to be nurturing and caring and that it is not essential that men should always be rough and strong.

There is a lack of research regarding different behaviors of lead and assistant teachers in preschool classrooms. In the current study, boys received fewer modifications from assistant teachers than lead teachers and this may be due to several factors. One reason could be that the assistant teachers believed that they did not play a role in teaching children about gender-roles. Assistant teachers talked more about how they were trained to keep their personal beliefs aside and "go with the flow" of children. Assistant teachers, more than the lead teachers, believed that they need to let the children take the lead in the classroom and intervene in their play only when they are being unsafe. Another reason could be because assistant teachers overall had fewer interactions with the children as compared to the lead teachers and thus modified the boys less than the lead teachers. One research study in this area found that sometimes the distinction between the job or roles of lead teachers and assistant teachers in the classroom is blurred although teachers with higher education and/or higher experience tend to have more contact and interactions with the children (Shim, Hestenes & Cassidy, 2004). In the current study, the teachers who had higher education were the lead teachers and their role was clearly to lead all the activities in the classroom and this likely led to them having more interactions with the children than assistant teachers. It can be assumed that the hierarchical nature of teachers in preschool classroom is important and thus, there is more research needed to identify the different roles lead and assistant teachers play in the children's lives during preschool years.

Further, while explaining their role in teaching children about gender-roles, teachers also talked about the different kinds of play and behavior children displayed in the classroom.

Gender-based play by children

Past literature has shown that boys played with blocks in the block area much more than the girls (Martin, 1998). On the other hand, girls between 3 and 5 years of age played more with dolls and doll accessories, soft toys (LaFreniere, Strayer & Gauthier, 1984) and did more art and craft activities (Pellegrini & Perlmuter, 1989). Consistent with the past research, in this study all teachers' mentioned gender-based play by children. Furthermore, it was observed that when girls were seen playing in the block area they were seen playing with animals, cars, and human figures that were available in the block area instead of actually building a structure with the blocks. It was mentioned by the teachers and observed in the focal child observations that boys were playing in blocks and manipulative areas more than the girls and girls playing in housekeeping and art areas more than the boys.

Teachers also mentioned that when the boys were in housekeeping area they played doctor or just lounged on the couch or played with the superhero costume and when the girls were in blocks they played with the animals, soft blocks, and human figures rather than building structures with blocks. Bem (1981) suggests that the society teaches the developing child several things about gender that the child then incorporates into his or her gender schema. The theory further mentions the importance considering the role of the developing child in gender-role development. Gender schema theory assumes that the child plays a very active role in his or her own gender development (Martin, Ruble, & Szkrybalo, 2002). Thus, when children show gender-based play they could be actively incorporating what they see around them. For example, most of the super heroes that are seen in the media are male and thus boys may feel like those costumes in the housekeeping area are for them and they play with them more than they play with the baby dolls or the kitchen materials in the housekeeping area. Similarly for girls, they might be seeing their mothers at home involved in cooking and caregiving of the children and

thus when the girls are in housekeeping they tend to play with the baby dolls and the cooking materials more than they play with the superhero and dinosaur costumes.

A few teachers mentioned that they were trying to make certain areas in the classroom more gender-integrated by adding things that they thought girls would like to play with in the block area and adding things they thought the boys would like to play with in housekeeping. Some examples of these efforts are putting ribbons and beads in block area for the girls and putting dinosaurs and super hero costumes in the housekeeping area for the boys. By adding these materials in the areas the teachers could actually be encouraging children to play with things that are typical to their gender instead of encouraging them to play with all the materials in the classroom. Even if children went more to the areas that they did not visit before, if they played with material typical to their gender within the areas they are still showing gender-based play. Thus, it might be more effective if teachers focused more on encouraging children to play with all the materials in the classroom rather than enticing them in certain areas by putting materials that are typical to their gender.

Teachers also mentioned that this gender-based play by children could be due to various influences outside of the school. One of the main influences the teachers mentioned was the family and this warrants further investigation which is beyond the scope of this study.

Other influences

All teachers consistently mentioned the role of family in gender-role development. Past literature has mentioned that a child's earliest exposure to what it means to be male or female comes from parents (Lauer & Lauer, 1994; Santrock, 1994; Kaplan, 1991). It was also found in previous studies that parents often treated sons and daughters differently from the time their children were babies. Some examples of this would be dressing their infants in gender-specific

colors (blue for boys and pink for girls), giving gender-differentiated toys (dolls for girls and trucks for boys), and expecting different behavior from boys and girls (Thorne, 1993). In the current study, parents were not interviewed and thus there is no way to directly examine the influence of family on children's gender-roles. The teachers that were interviewed mentioned the huge role that families played in the children's lives with regard to gender-role development. Teachers consistently mentioned that children come to school and role-play what they saw at home or what they saw the adults doing outside the school.

Due to the vast ethnic/racial diversity in the sample it was assumed that the race and ethnicity of the children would play some role in children's experiences in the classroom. Past research on the role of race/ethnicity on children's relationships with teachers in preschool, kindergarten and first grade classrooms has determined that African American children tend to have less positive relationships with their teachers than do White or Hispanic students (Hamre & Pianta, 2001; Hughes, Gleason, & Zhang, 2005; Saft & Pianta, 2001). It was surprising to find that race and ethnicity of the children did not predict their experiences in the classroom. This could actually be because of the vastness of diversity in each classroom. It was seen that the classrooms were balanced with children from various backgrounds and thus instead of there being just one or two minority children, all children seemed unique to the teachers. In fact a few teachers expressed in their interviews that this population is very different because the children came from all different backgrounds. Although there is no research to support this, it could be hypothesized for future study that since there was so much diversity in the classrooms; teachers did not group the children according to their race or ethnicity but considered all the children as one unit. Further, past research has also shown teachers' own ethnicity, independent of child's ethnicity, relating to their perceptions of children's behavior (Beady & Hansell, 1981;

Zimmerman, Khoury, Vega, Gil, & Warheit, 1995). Analysis on match and mis-match of children and teachers according to their ethnicity was beyond the scope of this study and thus, taking the past research into consideration a prediction could be made about teachers' own ethnicity contributing toward their behavior with children in the classroom.

Teacher Interviews

During the interviews it was consistently apparent that when teachers were asked about their perceptions of gender-roles they focused almost entirely on the children's actions, rather than their own beliefs. For example, when AT3 was asked about her personal background and experiences with regard to gender-roles, her response was:

> AT3: There are three boys and five girls and I am the youngest. I am actually number seven. So, um that's it. But as far as gender, yeah growing up you see different things, different role-models, different things that children want to do. But, inside the classroom we try to encourage them to play in all areas to kind of get the feel of…you know because sometimes the husband has to be at home and cook, you know, because the wife is either working a second job or you know…so we try to, try to teach them to do all those different things and then the girls to be into blocks so they can be doing different things there too in case that might be the career that they choose. So it might be a good jump-on in actual life.

All other teachers, at some point in the interview, turned to the experiences of children and what they observed in the classroom when asked about their perceptions. Although there is no past research related to this specific issue, this pattern could be related to the fact that the observations were done before the interviews and the teachers may have assumed that they had to answer the questions in relation to their classrooms rather than their own characteristics.

Another reason could be that some teachers may not have wanted to share their personal background with the interviewer or thought that it was not relevant information. The interviewer did some probing when the questions were not answered to-the-point but some more probing could have been done to elicit more accurate responses.

The teachers mentioned during their interviews that they try to not group the children according to their gender but consider the entire class as one group. In the past research has found that individuals often adhered verbally to the expression of equality, but that was not necessarily reflected in their behavior (Deaux & Wrightsman, 1984). In this study, after inspecting the field notes, it was found that teachers sometimes assumed that if there is noise in the classroom it would be the boys who would be contributing more to the noise. For example, LT3 once not even looking at the block and playdough area said "boys we don't use load voices in the classroom so stop shouting in the classroom." It was observed that this teacher assumed that there were all boys in the classroom when in fact there was a mixture of both boys and girls in the block and play dough area. Thus, there is some discrepancy between what the teachers said in their interviews and what the teachers did in the classrooms. Studying this was beyond the scope of the study but is consistent with the limited past research conducted in this area.

The responses of most teachers in this study were consistent with the developmentally appropriate practices (DAP) in the classrooms. Two important aspects of DAP are 1) knowing the children well and meeting children where they are and 2) enabling them to reach goals that are both challenging and achievable (National Association for the Education of Young Children, 2009). The teachers often mentioned that they knew the children and their families well and knew the sort of gender-role influences children experienced at home. The teachers mentioned that they based their teachings on gender-roles according to what the child was already receiving

from home and tried to fill the gap if there was one. For example, if the teachers knew that the child did not have a father figure at home they tried to fill-in that gap at school by role-modeling to bring a balance of both gender-roles in the child's life. Thus the teachers understood and attempted to meet the children where they were when it came to gender-roles. The teachers also mentioned that they let the children know that gender is not a barrier and they could do anything that they want. They mentioned that they brought different materials in the classroom for both boys and girls to play with and in the observations it was found that both boys and girls experienced similar amounts of stimulations from the teachers to achieve the goals that they set while using these materials. Although no questions were asked of the teachers about their knowledge of DAPs, overall it seemed that most of the teachers' behavior in the classroom was consistent with the DAPs.

Reflecting on Theories Informing the Study

Other than the amount of modifications experienced by the boys and girls the results of this study are not consistent with the literature on children's experiences in preschool classrooms from the 1970s and 1980s (Fagot, 1978; Murphy, 1986; Brophy, 1985; Eccles & Blumenfeld, 1985). Considering the time component of bioecological theory (Bronfenbrenner & Morris, 1998), it's important to acknowledge that this study was conducted almost two decades after most of the other studies on the topic of children's gender-related experiences in preschool classrooms. Research on change in gender-roles in the United States has suggested that a ubiquitous shift toward more egalitarian gender role attitudes in the younger generations (e.g. young adults) has occurred in the past two or three decades (Harris & Firestone, 1998; Rogers & Amato, 2000). Thus, the inconsistency of the results of this study with the older studies may be attributed to the time period as there is a huge amount of time that has elapsed between the

previous studies and the current one. Thus, with this time change there is a possibility that the attitudes of teachers with respect to gender-roles have become more egalitarian and this may be related to why boys and girls in this study experienced similar amounts of stimulations, praise and directions from the teachers.

On the other hand, considering the context component of bioecological model (Bronfenbrenner & Morris, 1998), this study was conducted with children from low-socioeconomic background while past research on this topic has been conducted with children from middle-class backgrounds. Lareau (2003) has identified powerful ways in which parents' social class impacts children's life experiences. To explain further she mentions that middle-class parents share a set of beliefs and raise their children according to those beliefs while low-income parents share a set of beliefs and raise their children according to that. Thus, it can be assumed that the children would be socialized based on the norms and rules of the social class that they were living in. Thus, the inconsistencies found in the findings of this study could be attributed to the different socio-economic contexts in which these studies were conducted. Although the bioecological theory explains both the time and context, it is difficult to speculate whether the findings of this study are result of time or context because these two elements were not specifically examined in this study. It could be possible that they are a result of time, context or both time and context.

Looking further at the idea that a child is socialized according to the society he or she is living in, none of the theories focused on gender take social class into consideration. The Gender-schema theory (Bem, 1983) proposes that a typical American child observes from various elements in the society like parents, teachers, and peers what they consider to be appropriate behavior. In spite of the above proposal of the gender-schema theory, the theory does

not delve deep into the issue of how this socialization could vary depending on social class. Also not only is the social class of the child is important to consider but also since teachers are major socializing agents the social class of the teachers would be important to consider. Thus, although the gender-schema theory lists parents, teachers and peers as socializing agents it is important to consider that these three agents might come from different social classes and from societies that might have different beliefs for gender-roles from the society that the child is in.

Limitations of the Study

First of all, due to the small sample size in this study, generalizability and the ability to apply findings of the study to other sites is limited. Even with this limitation it is important to note that substantial amount of observational points were gathered with each child in various contexts in the classrooms

Another limitation would be the possible inclusion of children with identified disabilities. Although children who were dual-language learners (DLL) were excluded from the study, children who had identified disabilities were included in this study. Also information about the nature of disabilities was not obtained and thus these children cannot be identified in the sample. Three classrooms did not have any children with identified disabilities but one classroom had four children with disabilities and it is not known if any child with disability from this classroom was included in the study.

Due to one teacher leaving the program in the middle of the observation, an interview was not conducted with her. Thus, the analysis from that classroom is based only on the lead teacher who was present for the entire duration of the observations. Similarly, one child transferred to another school before the observation finished and thus it was not possible to collect the final 10 minutes of data for that participant.

None of the teachers in the classroom were male and all the teachers who were interviewed were female and thus teachers' gender-role perceptions are all from a female perspective. If there were male teachers working in the school and if it was possible to interview them, it may have provided some variability in the teacher interviews.

Some teachers in their interviews mentioned that whether children come from a single-parent or a two-parent family makes a difference in the ideas and beliefs that they have about gender-roles. Information about the parents' marital status was not obtained as it was not thought to be relevant before the interviews. If this information was obtained it would have been possible to find out if the family composition of the child predicted their gender-based behavior.

Implications for future practice and research

There is a paucity of research on gender differences in children's experiences in low-income child care centers. This study has contributed to an understanding that boys and girls have different experiences in preschool classrooms of a low-income child care center and that teachers' perceptions on gender-roles play a role in children's experiences in classrooms. Thus, studies with a larger sample in this population will have various implications for low-income child care centers. Data could be used in training the teachers, anywhere from in-service training in low-income child care centers or teacher preparation programs at universities. With the help of findings from this study it can be understood why and how teachers might be treating boys and girls differently. Thus, teachers can be trained to plan curriculum in a more nonbiased way in which they plan themes for the classroom, field trips and just conversations during group time that would encourage boys and girls to understand that regardless of their gender boys and girls can do the same things.

Several studies have identified gender differences in adolescent girls and boys where boys exhibit high aggressive and delinquent behavior than girls and adolescent girls are more prone to depression than adolescent boys in low-income families (Cummings, Lannotti, & Zahn-Waxler, 1989; Olweus, 1979; Carlson & Grant, 2008). This study showed similar expectations from girls and boys at preschool age where teachers expected girls to be more compliant and boys to be more rough. Previous research has also mentioned that it is before or around age 3 that children start developing ideas about gender-roles for themselves (Munroe & Munroe, 1997; Williams & Best, 1990). Thus, a big implication of this study is to help in identification and intervention when the teachers behave according to their stereotypical beliefs about behavioral tendencies of boys and girls.

The findings of this study can also aid in appropriate choice of materials for the classrooms to make the classroom more nonbiased. It was noticed that the teachers, in their attempt to make the classrooms more nonbiased, were making particular areas in the classrooms more biased toward a particular gender by adding ribbons and beads to the block area so girls go to the block area more. With the help of these findings, teachers can be trained to identify and add materials in the classroom that both boys and girls would like. For example, rather than adding a dinosaur toy with a purple bow and purple skirt so the girls will play with the dinosaurs more, the teachers could add a family of dinosaurs and let the children know that everybody can play with all the dinosaurs.

A more immediate implication will come from the project report with the findings from this study that will be submitted to the program manager of Head Start. The findings can be used for several purposes like making an attempt to promote better communications between the parents and teachers so there is not so much discrepancy between the gender-roles in the school

and family. Also this study may inform the teachers about the differences in experiences boys and girls have in the classroom and perhaps encourage them to take measures like altering the curriculum to make it more anti-bias so boys and girls may have more similar experiences in the classroom. Also, it was found that although the teachers felt that they were not biased for or against either boys or girls it was found in the field notes that sometimes teachers assumed the behavior in the classroom depending on their ideas of behavioral tendencies of girls and boys. When training teachers for making the curriculum and children's experiences anti-biased, it is important to train the teachers to become aware of the above tendencies and behaviors they may express in the classroom.

One area for future research would be interviewing the parents in addition to observing the children and interviewing the teachers. It is established from previous research and also from teacher interviews in this study that family may have a great influence on children's gender-role development. Teachers mentioned that children imitate the adults in their lives and play the roles they see the adults playing and sometimes when they are role-playing in the classroom they are really imitating the things that they see at home. Teachers also mentioned that children's ideas about gender-roles may depend on their family composition (e.g., single-parent families versus families where both mother and father are present). Since children's gender-roles are influenced by various factors and family is a major one, even when looking at the children's experiences based on gender in preschool classrooms, it is important to understand the parent's perceptions of gender-roles.

Since it is established that family has a substantial role in gender-role development of children, the beliefs or practices that parents have about gender-roles in turn influence children's gender-roles. Most studies on children's gender socialization in families focus on White,

middle-class populations, in spite of the recognition that a parent's ethnicity and/or social class provide important cultural contexts for gender development (Leavell, Tamis-LeMonda, Ruble, Zosuls & Cabrera, 2012). For example, Latino families, when socializing their children, often promote high masculinity in males and self-sacrificing, child-care and family-oriented behaviors in females (Denner and Dunbar, 2004), whereas African American parents have been found to display relatively equitable childcare responsibilities, with mothers' and fathers' roles often overlapping (McAdoo, 1988). Although children's race and ethnicity effects were not found in this study, more studies need to be done on diverse populations to find out if there is a race/ethnicity effect on the experiences of boys and girls in preschool classrooms.

In the focal child observations it was found that girls as a group played in certain areas like housekeeping and art more than the boys. On the other hand, boys as a group played more in certain areas like blocks and manipulatives more than the girls. This study did not look at sex-segregation as a reason for children playing in a particular area. Future research related to this could specifically examine if the choices the children make are due to sex-segregation in addition to gendered play by children.

There is a paucity of literature on the description of differences in roles of lead and assistant teachers in preschool classrooms. In this study if was found that the role of the teacher in the classroom could have been a factor due to which children had different experiences with the two teachers in the classroom. Thus, differences in roles of lead and assistant teachers should be considered when studying children's experiences, teacher-child interactions in preschool classrooms.

Information on the current social class of the teachers was not obtained in this study. Moreover, information about the social class in which teachers were born in was not obtained

from the interviews. It has been established that when it comes to socialization of children, adults in the society teach children about the requirements of their society and also socialize them according to the rules, customs, and values of that community or society (Renzetti & Curran, 1999). The social class that the teachers belong to or belonged to while growing up might explain a lot about how they were socialized when it comes to gender-roles. Thus, one area of future research is to find out the current and past social class of the teachers to find out if social class has any impact on the teachers' gender-role related behavior in the classroom. As mentioned earlier, since parents, teachers and peers may belong to different social classes and are all important agents of gender socialization it would be a fruitful area of future research to identify the social class of various socialization agents and study the possible effects of social class on children's gender-based experiences in the classroom.

Future studies of this kind should take into account the context in which the children are in. In this study it was found that there were more interactions during snack and meal time as compared to group or free play time. A study with a larger sample including outside time in addition to snack/meal time, free play time and group time would be important to understand children's experiences in preschool.

Conclusion

This dissertation study contributes new knowledge to the area of experiences of children based on gender in preschool classrooms because most studies on this topic have been done with children from White middle-class families, whereas this study was done with children from low-income families. Moreover, the majority of studies on gender differences in preschool classrooms are from the 1980s and thus this study gives a more recent perspective of gender in preschool classrooms (Murphy, 1986; Brophy, 1985; Eccles & Blumenfeld, 1985).

From the focal child observations conducted in this study, it was found that boys experienced more modifications than the girls which was consistent with the previous research (e.g., Cherry, 1982; Serbin etal, 1973). In this study it was also found that children's experiences differed depending on the context in which they were in, for example children experienced more vocalizations, directions, responses and assistance in snack/meal time as compared to group time and free play time.

Further, teachers were interviewed to understand their perceptions and conceptualizations of gender-roles. Lead teachers in all the classrooms mentioned of playing a major role in children's lives with regard to teaching them about gender-roles. All teachers mentioned creating and promoting play that integrates both genders in the classroom but also mentioned that they are trained and believe in letting the child take the lead in the classroom. Teachers also indicated that boys and girls show different behavioral tendencies and the teachers have some expectations from the boys and girls to behave in certain ways. It is suspected that these expectations might be influencing teachers' behaviors with boys and girls in the classroom. Teachers who talked about their personal background and past experiences regarding gender-roles did not mention consciously connecting these experiences to teaching children about gender-roles in the classrooms. Lastly, teachers mentioned that all children engage in gender-based play in the classroom as they play in areas typical to their gender and also when they go to the other areas they show play styles typical to their gender. Teachers said that the family plays a huge role in children's gender-role development and when children showed gender-based play in the classroom they were essentially imitating what they see going on at home.

Thus, future research studies in this area could also include parents' beliefs and perceptions about gender-roles to get a more holistic picture of whether children's experiences in

the classroom are based on gender. This study has implications for classrooms as the findings can be used to create a nonbiased curriculum and to identify and pick materials for the classroom that integrate both genders. The study also has implications in teacher-training especially in low-income child care because the teachers in this study indicated that the needs of children with regard to learning about gender-roles from low-income families are different from children in middle-income families.

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APPENDICES

APPENDIX A
TEACHER INFORMED CONSENT FORM

Gender Socialization in Head Start Classroom
(Personal copy to keep for your records)

Children, beginning from the very early years of their lives, learn about gender roles from various people, like parents, teachers, peers, media, etc. The purpose of this study is to understand how boys and girls in preschool classrooms may have similar or differing experiences in their classrooms. This project will help researchers at the University of Tennessee study various experiences boys and girls have in preschool classrooms. We expect this study to provide helpful information about how teachers play a role in forming these experiences of the child and we invite you to be a part of this study.

The parents of each child that we will be observing have given consent for the child to participate in the study. In this study we would like to observe the child in their normal daily routine in the classroom. If you choose to participate, one research team member (observer) will observe the interactions between each participating child and his or her teachers for 30-minutes each on five different weekdays. The child will be observed during free play/center time, group time and meal time in the classroom. The observer will not observe any child during bathroom time or outdoor play time. We will not ask you to change your classroom routine in any way. The observer will not talk to the child or you at any times during the observation. The observer will simply watch the child while doing what he or she normally does. You will be allowed to ask the observer to withdraw a particular child from the study if you observe noticeable discomfort from the child that is being observed. In this situation, the parents of the child will still receive the $10 gift card for participation.

After we finish observing all the participating children in your classroom we will interview you to about your ideas and conceptualizations of gender-roles in the classroom. This interview will last between 45-minutes to 1 hour and it will be recorded on a digital recorder that will later be transcribed. In addition to this interview there will be a short questionnaire about your demographic information that the observer will request you to fill. We will give you a $10 grocery store gift card after the interview.

Although the questions are designed to not make the teachers uncomfortable in any way, there is a possibility that you might feel some discomfort while answering questions. Thus, it is important for you to know that you always have a choice to skip a question if you are not comfortable answering it. Other than this you will not be placed in any risk beyond those of everyday life. We will not share your identity with anyone nor will your name be attached to any information you provide. To make sure your name is not attached to any of the data, you will be assigned a participant number after the transcription of the interview and you will be referred to by this number. During the study all the forms, observation data and transcribed interviews will be stored in a locked cabinet in a locked office. A master list with participant's name and assigned participant number and the signed informed consent forms will be stored in a locked cabinet separate from all other data.

Only the research team will be able to review the forms completed by you and information from the interview. The data will be used for research purposes only. This may include using the data for conference presentations, publications, etc. Your name will not be on any reports or presentations. Although the overall findings could be used for research purposes, none of your specific answers will be shared with Head Start during or after the study. After the study has been completed all of the observation and interview data will be destroyed. The research team is legally required to report child abuse if we witness it.

Your participation in this study is your choice. You may choose not to participate without any punishment. If you decide to participate and later change your mind, you may do so without any consequences to you.

At any time if you have questions about the study you many contact the principal researcher of the study. Her name is Swapna Purandare. She can be reached at The University of Tennessee's Department of Child and Family Studies, 1215 W. Cumberland Avenue, Room 115, Knoxville, TN. You can call her at (865) 974-3521 or email her at spuranda@utk.edu. If you have questions about your rights as a participant, contact the Compliance Section. Their phone number is (865) 974-3466.

I have read and understand the explanation of the study. I understand there are no expected risks other than what has been stated. I know that it is my free choice to participate. I have received a copy of this form to keep with me. I agree to participate in this study.

Name _____
(Please Print)

Signature _____ Date _____

Teacher Informed Consent Form

Gender Socialization in Head Start Classroom
(Research Team Copy)

Children, beginning from the very early years of their lives, learn about gender roles from various people, like parents, teachers, peers, media, etc. The purpose of this study is to understand how boys and girls in preschool classrooms may have similar or differing experiences in their classrooms. This project will help researchers at the University of Tennessee study various experiences boys and girls have in preschool classrooms. We expect this study to provide helpful information about how teachers play a role in forming these experiences of the child and we invite you to be a part of this study.

The parents of each child that we will be observing have given consent for the child to participate in the study. In this study we would like to observe the child in their normal daily routine in the classroom. If you choose to participate, one research team member (observer) will observe the interactions between each participating child and his or her teachers for 30-minutes each on five different weekdays. The child will be observed during free play/center time, group time and meal time in the classroom. The observer will not observe any child during bathroom time or outdoor play time. We will not ask you to change your classroom routine in any way. The observer will not talk to the child or you at any times during the observation. The observer will simply watch the child while doing what he or she normally does. You will be allowed to ask the observer to withdraw a particular child from the study if you observe noticeable discomfort from the child that is being observed. In this situation, the parents of the child will still receive the $10 gift card for participation.

After we finish observing all the participating children in your classroom we will interview you to about your ideas and conceptualizations of gender-roles in the classroom. This interview will last between 45-minutes to 1 hour and it will be recorded on a digital recorder that will later be transcribed. In addition to this interview there will be a short questionnaire about your demographic information that the observer will request you to fill. We will give you a $10 grocery store gift card after the interview.

Although the questions are designed to not make the teachers uncomfortable in any way, there is a possibility that you might feel some discomfort while answering questions. Thus, it is important for you to know that you always have a choice to skip a question if you are not comfortable answering it. Other than this you will not be placed in any risk beyond those of everyday life. We will not share your identity with anyone nor will your name be attached to any information you provide. To make sure your name is not attached to any of the data, you will be assigned a participant number after the transcription of the interview and you will be referred to by this number. During the study all the forms, observation data and transcribed interviews will be stored in a locked cabinet in a locked office. A master list with participant's name and assigned participant number and the signed informed consent forms will be stored in a locked cabinet separate from all other data.

Only the research team will be able to review the forms completed by you and information from the interview. The data will be used for research purposes only. This may include using the data for conference presentations, publications, etc. Your name will not be on any reports or presentations. Although the overall findings could be used for research purposes, none of your specific answers will be shared with Head Start during or after the study. After the study has been completed all of the observation and interview data will be destroyed. The research team is legally required to report child abuse if we witness it.

Your participation in this study is your choice. You may choose not to participate without any punishment. If you decide to participate and later change your mind, you may do so without any consequences to you.

At any time if you have questions about the study you many contact the principal researcher of the study. Her name is Swapna Purandare. She can be reached at The University of Tennessee's Department of Child and Family Studies, 1215 W. Cumberland Avenue, Room 115, Knoxville, TN. You can call her at (865) 974-3521 or email her at spuranda@utk.edu. If you have questions about your rights as a participant, contact the Compliance Section. Their phone number is (865) 974-3466.

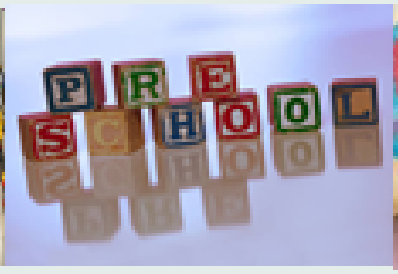
I have read and understand the explanation of the study. I understand there are no expected risks other than what has been stated. I know that it is my free choice to participate. I have received a copy of this form to keep with me. I agree to participate in this study.

Name _____
(Please Print)

Signature _____ Date _____

APPENDIX B
RECRUITMENT FLYER

You are invited to be a part of a research project!



What is the purpose of this study?

To understand how girls and boys in preschool classrooms may have similar to different experiences in their classroom.

How can I participate?

Sign and return the approval form attached with this flyer to the teacher of your child.

What will I get?
If you allow your child to participate, you will receive a gift card worth $10 to a local grocery store.

If you have any questions, please call Swapna Purandare at 865-974[redacted], Department of Child and Family Studies at University of Tennessee

APPENDIX C
COVER LETTER FOR INFORMED CONSENT

Dear Parent,
Your child has been invited to participate in a project conducted by the University of Tennessee. Attached you will find a form explaining the details of the project. Please review the form to see if you are interested in having your child participate in the project. If you are interested please sign and return the blue copy to your child's teacher by date _____ and you can keep the yellow copy at home.
Thank you for your time and cooperation,
Swapna Purandare
Doctoral Student
Department of Child and Family Studies
University of Tennessee, Knoxville

APPENDIX D
PARENT INFORMED CONSENT FORM

Gender Socialization in Head Start Classrooms
(Personal copy to keep for your records)

Children, beginning from the very early years of their lives, learn about gender roles from parents, teachers, peers, media, etc. The purpose of this study is to understand how boys and girls in preschool classrooms may have similar or different experiences in their classrooms. This project will help researchers at the University of Tennessee study the experiences of boys and girls in preschool classrooms. It will also provide helpful information about how children learn about gender roles in preschool classrooms. We invite you and your child to be a part of this study.

If you choose to participate, your child will be observed in his or her classroom. Observing your child would mean that a member of the research team will watch your child's interactions with his or her teachers. This will take place for 30-minutes each on five different weekdays. Your child will be observed during free play/center time, group time and meal time in the classroom. Your child will not be observed during bathroom time or outdoor play time. The teachers will be informed to continue their normal classroom routine during the observation. The observer will simply watch your child doing what he or she normally does and your child will not be asked to change his or her classroom routine in any way. The observer will not talk to your child at any time. In addition there will be a sheet with a few questions about the child that we would like for you to fill out. These questions will include information about the child's age, gender, etc. We will give you a $10 grocery store gift card at the end of all five days of observations.

By participating in this study your child will not be placed in any risk beyond those of everyday life. The only possible risk is that the child may feel uncomfortable while being watched. To minimize this discomfort the observer will sit as far as possible from the child. Also, the teachers will be allowed to withdraw your child from the study if your child seems uncomfortable with the observation. In this situation, you will still receive the $10 gift card for participation.

We will not share your name or your child's name and other information with anyone. Your child will be assigned a participant number and this number will be used to label all of the information from the observations. This will ensure that your child's name is not attached to any of the other information. During the study all the forms and observation data will be stored in a locked cabinet in a locked office. A master list with participant's name, assigned number and the signed informed consent forms will be stored in a locked cabinet separate from all other data.

Only the research team will be able to review the forms completed by you and information from the observations. The information will be used for research purposes only. This may include conference presentations, publications, and teaching. Your name, your child's name, or the classroom teacher's name will not be on any reports or presentations. After the study has

been completed all of the data forms will be destroyed. The research team is legally required to report child abuse if we witness it while observing your child.

Your participation in this study is your choice. There will be no punishment to you, your child, or your child's teacher if you decide not to have your child in the study. If you decide to participate and later change your mind, you may withdraw your child from the study at anytime without any consequences to you or your child. If you withdraw your child from the study before data collection is complete, you will still receive the $10 gift card and you may request to have your data destroyed.

At any time if you have questions about the study you many contact the principal researcher of the study. Her name is Swapna Purandare. She can be reached at The University of Tennessee's Department of Child and Family Studies. Address: 1215 W. Cumberland Avenue, Room 115, Knoxville, TN. You can call her at (865) 974-3521 or email her at spuranda@utk.edu. If you have questions about your rights as a participant, contact the Compliance Section. Their phone number is (865) 974-3466.

I have read and understand the explanation of the study. I understand there are no expected risks other than what has been stated. I know that it is my free choice to participate. I have received a copy of this form to keep with me. I agree to allow my child to participate in this study.

Child's Name _____
(Please Print)

Parent's Name _____
(Please Print)

Parent's Signature _____ Date _____

Parent Informed Consent Form

Gender Socialization in Head Start Classrooms
(Research Team Copy)

Children, beginning from the very early years of their lives, learn about gender roles from parents, teachers, peers, media, etc. The purpose of this study is to understand how boys and girls in preschool classrooms may have similar or different experiences in their classrooms. This project will help researchers at the University of Tennessee study the experiences of boys and girls in preschool classrooms. It will also provide helpful information about how children learn about gender roles in preschool classrooms. We invite you and your child to be a part of this study.

If you choose to participate, your child will be observed in his or her classroom. Observing your child would mean that a member of the research team will watch your child's interactions with his or her teachers. This will take place for 30-minutes each on five different weekdays. Your child will be observed during free play/center time, group time and meal time in the classroom. Your child will not be observed during bathroom time or outdoor play time. The teachers will be informed to continue their normal classroom routine during the observation. The observer will simply watch your child doing what he or she normally does and your child will not be asked to change his or her classroom routine in any way. The observer will not talk to your child at any time. In addition there will be a sheet with a few questions about the child that we would like for you to fill out. These questions will include information about the child's age, gender, etc. We will give you a $10 grocery store gift card at the end of all five days of observations.

By participating in this study your child will not be placed in any risk beyond those of everyday life. The only possible risk is that the child may feel uncomfortable while being watched. To minimize this discomfort the observer will sit as far as possible from the child. Also, the teachers will be allowed to withdraw your child from the study if your child seems uncomfortable with the observation. In this situation, you will still receive the $10 gift card for participation.

We will not share your name or your child's name and other information with anyone. Your child will be assigned a participant number and this number will be used to label all of the information from the observations. This will ensure that your child's name is not attached to any of the other information. During the study all the forms and observation data will be stored in a locked cabinet in a locked office. A master list with participant's name, assigned number and the signed informed consent forms will be stored in a locked cabinet separate from all other data.

Only the research team will be able to review the forms completed by you and information from the observations. The information will be used for research purposes only. This may include conference presentations, publications, and teaching. Your name, your child's name, or the classroom teacher's name will not be on any reports or presentations. After the study has been completed all of the data forms will be destroyed. The research team is legally required to report child abuse if we witness it while observing your child.

Your participation in this study is your choice. There will be no punishment to you, your child, or your child's teacher if you decide not to have your child in the study. If you decide to participate and later change your mind, you may withdraw your child from the study at anytime without any consequences to you or your child. If you withdraw your child from the study before data collection is complete, you will still receive the $10 gift card and you may request to have your data destroyed.

At any time if you have questions about the study you many contact the principal researcher of the study. Her name is Swapna Purandare. She can be reached at The University of Tennessee's Department of Child and Family Studies. Address: 1215 W. Cumberland Avenue, Room 115, Knoxville, TN. You can call her at (865) 974-3521 or email her at spuranda@utk.edu. If you have questions about your rights as a participant, contact the Compliance Section. Their phone number is (865) 974-3466.

I have read and understand the explanation of the study. I understand there are no expected risks other than what has been stated. I know that it is my free choice to participate. I have received a copy of this form to keep with me. I agree to allow my child to participate in this study.

Child's Name _____
(Please Print)

Parent's Name _____
(Please Print)

Parent's Signature _____ Date _____

APPENDIX E
CHILD DEMOGRAPHIC QUESTIONNAIRE

Child Characteristics

1. What is your child's birth month and year?

_____ _____
month year

2. How old was your child when he/she started regularly attending child care (cared for by someone besides immediate family members)?

_____ _____
years months

3. Has your child been attending his/her current preschool classroom since the beginning of the school year?

- ☐ Yes
- ☐ No, please specify start date: _____

4. What is your child's gender?

- ☐ Female
- ☐ Male

5. Which best describes your child's racial/ethnic group?

- ☐ African American
- ☐ Asian American
- ☐ Hispanic
- ☐ Native American/Native Hawaiian
- ☐ White (non-Hispanic)
- ☐ Other, please describe _____

APPENDIX F
REMINDER TO RETURN CONSENT FORMS

Reminder!

A few days back you received a packet with material giving you information and inviting your child to be a part of a project.

If you would like for your child to be a part of this project please read and sign the blue copy and fill out the child information sheet (Child Demographic Questionnaire) that you received a few days back. Please put these 2 sheets in the envelope provided to you in that packet and return it to your child's teacher.

If you have any questions please call Swapna Purandare at 865-974-**** or email her at spuranda@utk.edu

Thank you,

Swapna Purandare

Department of Child and Family Studies

University of Tennessee

APPENDIX G
GIFT CARD SIGNATURE SHEET

I acknowledge by signing this form I have received a $10.00 gift certificate from the University of Tennessee, Child and Family Studies Department for participation in a study for the Gender Socialization in Head Start Preschool Classrooms Project.

Name: _____

Address: _____

_____

_____

Signature: _____ Date: _____

APPENDIX H
TABLES

Table 3.1 Child demographic information.

Participant ID.	*Gender*	*Child's age (in months)*	*Age (in months) when entered child care*	*Ethnicity of the child*
1	Male	40	6	Bi-racial
2	Female	51	12	African-American
3	Female	53	6	Hispanic
4	Female	Missing	Missing	Missing
5	Male	56	11	Bi-racial
6	Male	42	36	Bi-racial
7	Female	49	46	White
8	Male	44	40	White
9	Female	52	36	White
10	Male	52	42	White
11	Male	47	45	White
12	Female	42	18	White
13	Female	39	2	White
14	Male	45	36	White
15	Male	53	Missing	White
16	Male	47	15	White
17	Male	51	6	White
18	Female	50	2	White
19	Female	62	12	African-American
20	Female	44	24	Bi-racial
21	Male	55	24	African-American
22	Male	60	48	White
23	Male	51	36	African-American
24	Female	60	48	African-American

Participant ID.	*Gender*	*Child's age (in months)*	*Age (in months) when entered child care*	*Ethnicity of the child*
25	Female	50	24	Bi-racial
26	Male	60	24	White
27	Female	55	6	Bi-racial
28	Female	49	46	Hispanic
29	Male	61	8	Bi-racial
30	Female	44	40	White
31	Female	42	38	Bi-racial
32	Male	50	Missing	White
33	Female	60	5	White
34	Male	61	48	Hispanic
35	Female	41	36	White
36	Female	57	6	African-American
37	Male	32	4	African-American
38	Female	61	12	African-American
39	Male	53	36	Hispanic
40	Male	53	36	African-American

Table 3.2 Teacher demographic information.

Teacher ID	*Gender*	*Race/ Ethnicity*	*Education*	*Role in classroom*	*Experience in childcare (years)*
LT1	Female	African American/Black	College Graduate	Lead Teacher	19.4
LT2	Female	White (non-Hispanic)	College Graduate	Lead Teacher	1.3
LT3	Female	Bi-racial	College Graduate	Lead Teacher	0.8
LT4	Female	White (non-Hispanic)	College Graduate	Lead Teacher	1.4
AT1	Female	African American/Black	Trade/technical school	Teacher Assistant	8.6
AT2	Female	White (non-Hispanic)	Trade/technical school	Teacher Assistant	4
AT3	Female	White (non-Hispanic)	Trade/technical school	Teacher Assistant	13.1
AT4	Female	African American/Black	Trade/technical school	Teacher Assistant	20

Table 3.3 Cohen's kappa inter-rater reliability for dependent variables.

Dependent variable	***Cohen's kappa inter-rater reliability***
Modify physical	1.00
Modify non-physical	1.00
Scold non-physical	1.00
Scold physical	1.00
Direct	1.00
Praise physical	1.00
Praise non-physical	1.00
Stimulate	0.99
Receive assistance	1.00
Receive response	0.99
Vocalized to	0.97

Table 4.1. Means and standard deviations of children's experiences in preschool classrooms

	Snack/meal time		Free play time		Group time		Total	
	Girls *M (SD)*	Boys *M (SD)*	Girls *M (SD)*	Boys *M (SD)*	Girls *M (SD)*	Boys *M (SD)*	Girls *M (SD)*	Boys *M (SD)*
Modify non-physical	1.50 (.02)	3.65 (.03)	.40 (.01)	2.90 (.03)	1.10 (.02)	3.85 (.04)	1.00 (.02)	3.46 (.03)
Modify physical	.10 (0)	.42 (.01)	0 (0)	.40 (.01)	.10 (0)	.95 (.02)	.07 (0)	.60 (.02)
Scold non-physical	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Scold physical	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Direct	1.30 (.01)	2.52 (.02)	1.40 (.02)	.80 (.01)	.60 (.01)	1.42 (.01)	1.10 (.01)	1.58 (.02)
Praise physical	0 (0)	0 (0)	0 (0)	0 (0)	.10 (0)	0 (0)	.03 (0)	0 (0)
Praise non-physical	.40 (.01)	.20 (.01)	.30 (.01)	.40 (.01)	.70 (.01)	.60 (.01)	.47 (.01)	.40 (.01)
Stimulate	9.30 (.06)	9.70 (.05)	6.10 (.06)	5.10 (.06)	47.90 (.07)	46.60 (.11)	21.10 (.20)	20.47 (.20)
Receive assistance	2.60 (.02)	2.20 (.02)	.60 (.01)	.30 (.01)	.10 (0)	.10 (0)	1.10 (.02)	.87 (.01)
Receive response	4.90 (.03)	4.65 (.03)	2.20 (.02)	1.50 (.02)	1.30 (.02)	1.42 (.02)	2.80 (.03)	2.52 (.03)
Vocalized to	9.60 (.04)	10.92 (.07)	7.50 (.06)	8.50 (.07)	6.60 (.04)	7.10 (.04)	7.90 (.05)	8.84 (.06)

Note: Means represent the percentage of observation points that each behavior was observed in each context.

APPENDIX I
DEFINITIONS OF OBSERVATIONAL CATEGORIES

During coding periods a check mark will indicate that a behavior is present but not directed at another individual. When a child's behavior is directed to another individual the coder must record who the behavior is directed to using the codes included below in "caregivers present." When another person's behavior is directed toward the child, the coder must record the individual who is directing the behavior. On the data sheets, "A" refers to any individual other than the focal child, "T1" refers to the lead teacher, "T2" refers to the assistant teacher, any other teacher will be termed "T3", "T4" etc. "I" refers to the focal child, "JM" refers to any juvenile male and "JF" refers to any juvenile female other than the focal child.

Behavioral Codes	Definition
I INDIVIDUALS PRESENT	At the beginning of each observation, the coder will fill in details related to who is present in the classroom. In this section, list all individuals present in the same room as the focal child and assign each teacher a unique letter abbreviation, such as T1 (lead/primary teacher), T2 (assistant teacher), T… (any adult caregiver, 18 and older, except lead/assistant teacher), and JM and JF (peers).
II. STATE OF THE CHILD	
I DROWSY/SLEEPING	The child yawns and/or manifests other signs of drowsiness, of imminent sleep, or is actually asleep. This code includes indicators like an apparent lack of focus, looking without blinking, falling eyelids. Record a (D) if the child is drowsy and an (S) is sleeping. Sleep is coded when the child's eyes are closed and the body is still. When children are in the process of falling asleep and it's impossible to see their face (e.g., they are facing a wall or head is covered by a blanket), then code sleep after 1 to 2 minutes of deep breathing and lack of motion.
I FUSS/CRY/TANTRUM	'F' should be used to indicate fussing, 'C' for crying, and 'T' for tantrum according to the following definitions. Fussing is indicated when the child is awake and manifests signs of agitation and/or is upset. The child is bothered and emits moans, whines, and whimpers, but does not cry. If the child is fussing for an individual, indicate who the person is. Crying is indicated when the behavior of the child leaves no doubt that he/she is crying out of the eyes (tears). If the child is crying for an individual, indicate who the person is. Tantrum is indicated when fussing and crying has escalated in intensity and involves physical frustration such as intense stomping, flaying arms, throwing or hitting objects, throwing their body to the ground, and kicking. Physical frustration is also paired with yelling, shouting, screaming or crying.

	Fussing, crying, and tantrum should be considered as different levels of irritation with the lowest level being fussing, crying being the medium level, and tantrum being the most intense level.
I AGGRESSIVE A (P/NP)	I AGGRESSIVE A - PHYSICAL (P) The child is attempting physical harm to another person (or object) through hitting, kicking, biting, scratching, pushing, etc. In order to code aggressive-p, the child's face must be expressing anger or frustration. Indicate which individual the child is attempting to harm. Note if aggressiveness is expressed toward an object by writing "o" in the data slot. Should be coded with "Proximal". I AGGRESSIVE A - NON-PHYSICAL (NP) The child is attempting psychological harm to another person through yelling, screaming, stamping feet, clenching fists, flaying arms, etc. In order to code "I Aggressive-NP," the child's face must be expressing anger or frustration.
I CONFLICT A	The focal child has a conflict with another individual. This is expressed through physical or verbal a contest over an object or an individual. This includes the focal child taking away an object from a child (object was not willingly given), blocking another child's path of travel or access to an object or individual. Conflict may also have been initiated by someone other than the focal child, for example another child takes away an object from the focal child, or blocks their path of travel or access to an object or individual. This may be coded in cases of escalated conflict involving aggression, in those cases also "I Aggressive A" and/or "J Aggressive I" should be coded. Continue to code conflict as the focal child continues their response to the episode.
I PLAY A	The focal child plays with other individuals. Identify the gender of the juvenile the focal child is playing with (JM for Juvenile Male and JF for Juvenile Male), identify if the focal child is playing with a teacher.
I OFF TASK	The focal child is overtly engaged in an activity that is not congruent with instructions of the teacher of the designated activity
I REFUSES A	The focal child refuses a request, stimulation, or social or physical cue from an individual. This includes a refusal to respond (ignoring), a verbal refusal (negation such as "No") or a physical refusal (moving away, turning away). This could be coded simultaneously with "I Aggressive NP/P" if a child physically pushes, hits, kicks, or screams (or

	equivalent) at an individual away in response.
III. CAREGIVER BEHAVIORS These behaviors can be coded for any teacher.	
A MODIFY I (P/NP)	A MODIFY I – PHYSICAL (P) A caregiver modifies the focal child's behavior in response to or prevention of an accident or conflict, or to change the child's behavior to align with the caregiver's expectations (i.e., to comply with norms, rules, or to clearly promote a more desirable behavior). The caregiver modifies the child's behavior using physical means such as distracting the child with gestures or presentation of an object, physically moving the child away from someone or something, moving an individual or object away from the child, or taking an object way from the child. The child may be visibly upset or not. If child is visibly upset, also code Soothe. This should not be coded with Stimulate. Should also be coded "Proximal." A MODIFY I – NONPSHYSICAL (NP) A caregiver modifies the focal child's behavior in response to or prevention of an accident or conflict, or to change the child's behavior to align with the caregiver's expectations (i.e., to comply with norms, rules, or to clearly promote a more desirable behavior). The caregiver modifies the child's behavior with positive or neutral affect using non-physical verbal means such as distracting the child with verbal cues (suggestion to engage in a different behavior). This should not be coded if the child has in some way requested assistance (A respond I and/or A assist I). The child may be visibly upset or not. If child is visibly upset, also code Soothe. This should not be coded with Stimulate.
A SCOLD I (P/NP)	A SCOLD I – PHYSICAL (P) A caregiver modifies the focal child's behavior in response to an irritable state (fuss, cry, tantrum), conflict or in prevention of conflict, or an accident or prevention of an accident. The caregiver modifies the child's behavior using punitive physical means such as swatting the child, spanking, roughly moving the child away, or placing the child in time-out (or equivalent scolding area). The child may be visibly upset or not, but it should be clear that the caregiver is attempting to discourage the child from an undesired behavior. This may be coded simultaneously with "A Scold I Non-physical." Should also be coded "Proximal". A SCOLD I – NONPHYSICAL (NP) A caregiver modifies the focal child's behavior in response to an irritable state (fuss, cry, tantrum), conflict or

	in prevention of conflict, or an accident or prevention of an accident. The caregiver modifies the child's behavior with negative affect using nonphysical verbal means such as talking sternly to the child, yelling or shouting at the child. The child may be visibly upset or not, but it should be clear that the caregiver is attempting to discourage the child from an undesired behavior. This may be coded simultaneously with "A Scold I Physical." Scold should not be coded with "A Modify I."
A SOOTHE I (P/NP)	A SOOTHE I - PHYSICAL (P) An individual tries to physically quiet or calm the irritable or crying child; indicate which individual. This can include: rocking, patting, and swaying. Not to be coded simultaneously as affection. The variable "A Soothe Physical" is only coded while the child is irritable or crying. If the child calms for a complete 20 second period while the adult continues the same behavior, then it will be coded as "A Affect Physical." This may be coded with Modify or Scold. Should also be coded "Proximal". A SOOTHE I - NON-PHYSICAL (NP) Through verbal or visual expressions an individual tries to calm or quiet the irritable or crying child; indicate which individual. This can include vocalizations or verbal expressions intended to distract the child. If the attempt is verbal "A Vocalize" is coded simultaneously. The variable "A Soothe Non-Physical" is only coded while the child is irritable or crying. If the child calms for a complete 20 second period while the adult continues the same behavior, then it will be coded as "A Affect Non-Physical." This may be coded with Modify or Scold.
A RESPOND I	An individual responds to a child's positive social cue or request for assistance.
A ASSISTS I	An individual gives solicited or unsolicited help to a task the focal child is already engaged in. Help may include aiding with a task, game or toy, climbing into a lap or chair or on an object, preventing a physical accident (cup tipping over, child falling down), or manipulation of an object (holding utensil). In order to distinguish between solicited and unsolicited help, solicited help should be coded simultaneously with "A respond I" or "A respond chain I" to indicate that the assistance was solicited by the child. When not coded with "A respond I" or "A respond chain I," it is assumed that the assistance was not solicited by the child.
A STIMULATE/AROUSE I	This variable includes any action on the part of an individual which intends to focus the child's attention on a

	specific event. It also indicates attempts to stimulate by poking, pulling on limbs, shaking, tickling, presenting interesting objects, etc. Identify the individual. This should not be coded with "A Modify I." Stimulate/Arouse should not be coded if the child is irritable.
A AFFECTION I (P/NP)	A AFFECTION PHYSICAL (P) An individual shows positive affect to the child; touching, nuzzling, kissing. This code is reserved for demonstration of overt affection. Identify the individual. Affection should not be coded is the child is irritable. Should also be coded "Proximal". A AFFECTION NONPHYSICAL (NP) An individual expresses positive affect to the child but not in a physical form, rather it is verbal, or a smile. Identify the individual. Affection should not be coded if the child is irritable.
A Praise I (P/NP)	A PRAISE I – PHYSICAL (P) An individual expresses approval or admiration to the focal child with the help of physical means. The caregiver does this by presenting a child with an object e.g. a star on their hand, or by showing appreciation by actions such as a pat on the back, etc. Should also be coded "Proximal". A PRAISE I – NON-PHYSICAL (NP) An individual expresses approval or admiration to the focal child by non-physical means. This could be done with the help of gestures like clapping, putting thumbs up to appreciate a specific behavior of the focal child. This can also include vocalizations or verbal expressions such as "good job", "keep it up" etc. If the attempt is verbal "A Vocalize I" should be coded simultaneously.
A GIVE DIRECTION I (NP)	A GIVE DIRECTION I – NON-PHYSICAL (NP) An individual gives verbal direction to focal child for a specific behavior with no physical prompts. This code must contain a verbal description of the behavior (e.g. "go line-up"). Also may include non-verbal and non-physical direction to the child for a specific behavior with no physical prompts. This code must contain a non-verbal and non-physical description of the behavior (e.g. "pointing out"). Include general directions that inform the child of what they need to be doing, including routines or the prevention of an accident. This code should not be used if the individual vocalizes to the focal child during didactic, assisting, scolding, modifying, scaffolding, affectionate, soothing, or engaging. A physical give direction is either modify or assist.
A TAKE AWAY	A child or an adult takes away an object that the focal child

	was playing with or holding. The focal child did not offer to give the object way.
A VOCALIZES TO I (A VOC I)	An individual speaks to the child; identify the individual. Singing to the child should also be coded.
A VOCALIZES TO GROUP THAT CHILD IS A PART OF (A VOC G)	An individual talks to a group of children (or mixed group of children and adults) that the focal child is a part of. The identity of the individual should be record. This code should not be used if the individual speaks directly to the child (A Voc I). A group is defined as at least two individuals, including the focal child.
IV. I SOCIAL A	
I VOCALIZES	The child makes sounds, vocalizes, or talks, but nothing which indicates irritability should be coded, nor should hiccups, coughs, or sneezes. Identify who the child is vocalizing towards. In addition, use 'o' for object (e.g., toys), 'tv' for television, 'co' for computer, 'pe' for pet, or a check mark to indicate vocalizing that is not directed toward an individual or object (e.g., singing, talking to themselves).
I SEEKS ASSISTANCE	The focal child seeks assistance through gestures or vocalizations. Assistance may be sought for aid with a task, manipulation of an object, access to a person or object, or need/desire for physical care such as wiping nose, cleaning their hands, changing of clothes, etc.
I RESPONDS A	The child shows positive response to an individual's vocalization, affection or stimulation, including smiles, laughter, visual focusing, arm/leg movements, and vocalizations. Indicate who the child is responding to.
V. CAREGIVER AND LOCATION OF CHILD	
A PHYSICAL CONTACT	An individual and the focal child are in physical contact. This includes sitting closely together, holding onto a limb, leaning on the individual, and an individual leaning on them. This should also be coded with specific types of active positive (non-conflict) touching, including A Affection – I (Physical), A Physical Care I, A Soothe P, and A Modify P. Should also be coded "Proximal".
T PROXIMAL	Identify the teachers who are within an adult forearm's distance of the child. Indicate which teacher is proximal. May be coded with "Physical Contact" if present.
I ON TABLE/CHAIR	Child is using a table and/or chair. Code "C" if focal child is sitting on a chair, "T" if focal child is standing at a table, and "✓" if focal child is sitting on a chair at a table.
SOCIAL GROUP	Solitary: Child is involved alone in an activity. No peers or teacher are located within 2 child arm lengths. Small Group: Child is engaging with/or similar activity as one to four other children and a teacher(s) (total of two to five children, including focal child).

	Large Group: Child is with more than 5 other children and less than the whole group of children and a teacher(s) (minimum number is six children, including focal child) Whole Group: Child is with whole group of children in the classroom. This includes intended whole group activities even if one child is not in the group (e.g. a J is in the bathroom)
CLASSROOM CONTEXT	Describe the activity that the focal child is participating in. Identify any activity that the child is involved for more than a 20 second period. Snack/meal time: Child is eating a meal or snack. Transition time: Child is moving from one activity to another through teacher's direction. (e.g. standing in line, clean-up, waiting between activities, waiting for materials) Free choice/center: Child is freely playing in various classroom areas not directed by teacher. Child is able to select what and where they would like to play/work/learn. Activity is child selected. Work time: Child is involved in teacher-initiated activities devoted to teaching/learning skills. Child assigned to work with teacher and activity is teacher organized (meaning teacher decides what children are doing and who participates). Teacher does not have to participate as part of the group. Group time: Child is involved in teacher-initiated large or whole group activities. Teacher-initiated activity, child focus is on teacher, teacher is leading and present. Playground: Child is involved in free play activities in the playground. This is to be coded only when the child is outside of the classroom. Other: Any activity context that can not be classified in one of the above codes. Make a note of the specific context on the observation sheet.
I ACTIVITY	The activity the child is involved for more than 10 of the 20 seconds coded. Codes for activity include: Art (A), Dramatic play (DP), Manipulatives (M), Reading (R), Blocks (B), Sensory (S), Writing (W), Computer (C), Science/inquiry (SI), Undefined (✓). Not applicable (NA) is used whenever the child cannot be observed and no codes are recorded, such as when toileting is occurring or other situations when it is not feasible to observe due to privacy. Observers should record NA for each interval in which this occurs and add a brief explanation on the data sheet.

APPENDIX J
OBSERVATIONAL CHECKLIST

Sub ID: setting: coder: date: time: page:

Adults Present

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
I Sleep/drowsy																														
I Fuss/Cry/Tantrum																														
I Aggressive-P A																														
I Aggressive-NP A																														
I Conflict A																														
I Refuses A																														
I Play A																														
I Off Task																														
A modify I-P																														
A Modify I-NP																														
A scold I-P																														
A scold I-NP																														
A soothe I-P																														
A soothe I-NP																														
A respond I																														
A assists I																														
A stim/arouse I																														
A affect I-P																														
A affect I-NP																														
A praise I-P																														
A praise I-NP																														
A gives direct I-NP																														
A Take away																														
A voc I																														
A voc G																														
I vocalizes																														
I seeks assistance																														
I responds A																														
Physical Contact																														
T Proximal																														
I on table/chair																														
Social group																														
Classroom context																														
I activity																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Additional notes:

Social group -Solitary (S), Small group (SG), Large group (LG), Whole group (WG)

Classroom context - Snack-meal (SM), Transition time (T), Work time (W), Free play (F), Group time (G), Other (O)

Classroom activity -Art (A), Dramatic play (DP), Manipulative (M), Books (B), Blocks (BL), Sand/water (SW), Sensory (S), Computer (C), Music (MU), Science/inquiry (SI)

APPENDIX K
TEACHER INTERVIEW QUESTIONNAIRE

Gender Socialization in Head Start

Thank you so much for agreeing to participate in this project and for agreeing to talk with me today. I am interested in learning about your thoughts on girls' and boys' experiences in the classroom. I will be audio taping our conversation using this digital recorder but please feel free to ask me to quit recording if you become uncomfortable. Let's begin.

Following are a few guiding questions and the interviewer will follow-up with the teachers on several questions.

- Could you tell me a little bit about your background and your ideas about gender-roles?

- I would like to know a little about the routine activities preschool girls and boys engage in at school.
  - What kind of activities do you generally see boys in your classroom engaging in?
  - What kind of activities do you generally see girls in your classroom engaging in?

- Tell me about your role in the choice of activities girls and boys in your classroom engage in. Probing questions:
  - Do you give them choices on what material/activities girls and boys should work with?
  - If yes, what options do you give for girls and what options do you give for boys?

- Now I will give you a 5 brief scenarios and I would like you to answer a few questions keeping that scenario in mind:

  - **Scenario:** A girl in your classroom is playing only with trucks and cars during free-play.
    - How often do you see this in your classroom?
    - What is the reaction of other girls and boys in the classroom to this?
    - What is your reaction to this?
    - Do you encourage or redirect/modify or ignore this play?
  - **Scenario:** A boy in your classroom is playing only in the dress-up or doll house area during free-play in your classroom
    - How often do you see this in your classroom?
    - What is the reaction of other boys and girls in the classroom to this?
    - What is your reaction to this?
    - Do you encourage or redirect/modify or ignore this play?
  - **Scenario:** A girl and a boy in your classroom are both playing with dolls together.
    - How often do you see this in your classroom?
    - What is the reaction of other children to this?
    - What is your reaction to this?
    - Do you encourage or redirect/modify or ignore this play?
  - **Scenario:** There are only boys in the block area.
    - How often do you see this in your classroom?

    - What is the reaction of other children to this?
    - What is your reaction to this?
    - Do you encourage or redirect/modify or ignore this play?
- **Scenario:** There are only girls in the dress-up or doll house area.
    - How often do you see this in your classroom?
    - What is the reaction of other children to this?
    - What is your reaction to this?
    - Do you encourage or redirect/modify or ignore this play?

- Is there any particular way in which you would expect girls and boys in your classroom to behave?
    - Do you believe there is any kind of play that is not appropriate for girls or boys to engage in because of their gender? (Gender conforming and gender non-conforming play).
    - What is your reaction if you see girls and boys engaging in play that you feel are not appropriate for them due to their gender?

- What role do you as a teacher have with regard to how children learn about gender-roles? Probing questions:
    - Do you feel like you are supposed to tell the children in your classroom about gender-roles?
    - Do you think the children should be free to explore their gender-roles within the classroom rather than being modeled by the teachers?

- Is there anything else you would like to share about experiences of girls and boys in your classroom?

APPENDIX L
TEACHER DEMOGRAPHIC QUESTIONNAIRE

Classroom Characteristics

1. **How many children are currently enrolled in your classroom?**

   _____ Children

2. **How many boys and girls are in your class?**

   _____ Boys
   _____ Girls

3. How many children in your class belong to each of the following racial groups?

   _____ African American
   _____ Asian American
   _____ Hispanic
   _____ Native American/Native Hawaiian
   _____ White (non-Hispanic)
   _____ Other, please describe _____

4. **How many children in your class have identified disabilities (receive early childhood special education)?**

   _____ Children

5. **Do you use a curriculum in your classroom?**

   ☐ No
   ☐ Yes If YES, specify _____

Teacher Characteristics

6. **How long have you worked as a lead teacher in a pre-k classroom?**

   _____ _____
   years months

7. **How long have you worked in the field of early childhood education?**

   _____ _____
   years months

8. **What is the highest level of education you have completed?**

   ☐ Grade School
   ☐ Some High School
   ☐ High School Graduate

- ☐ Some College/Trade School, Technical School
- ☐ College Graduate
- ☐ Post Graduate Degree
- ☐ GED
- ☐ Other Please specify: _____

9. Do you have a degree in early childhood or child development?

- ☐ No
- ☐ Yes If YES, specify _____

10. What is your gender?

- ☐ Female
- ☐ Male

11. Which best describes your ethnic/racial group? (Check all that apply)

- ☐ African American
- ☐ Asian American
- ☐ Hispanic
- ☐ Native American/Native Hawaiian
- ☐ White (non-Hispanic)
- ☐ Other, please describe _____

APPENDIX M
RESEARCH TEAM MEMBER'S PLEDGE OF CONFIDENTIALITY

As a member of this research project, I understand that I will be hearing tapes of confidential interviews and viewing forms containing confidential interview and observational data. The information on these tapes and forms have been revealed by research participants who participated in this project on good faith that their interviews and observations would remain strictly confidential. I understand that I have a responsibility to honor this confidentiality agreement. I hereby agree not to share any information on these tapes or forms with anyone except other members of this research team who have also signed a pledge of confidentiality. Any violation of this agreement would constitute a serious breach of ethical standards, and I pledge not to do so.

_____ _____

Research Team Member Date

APPENDIX N
FIGURES

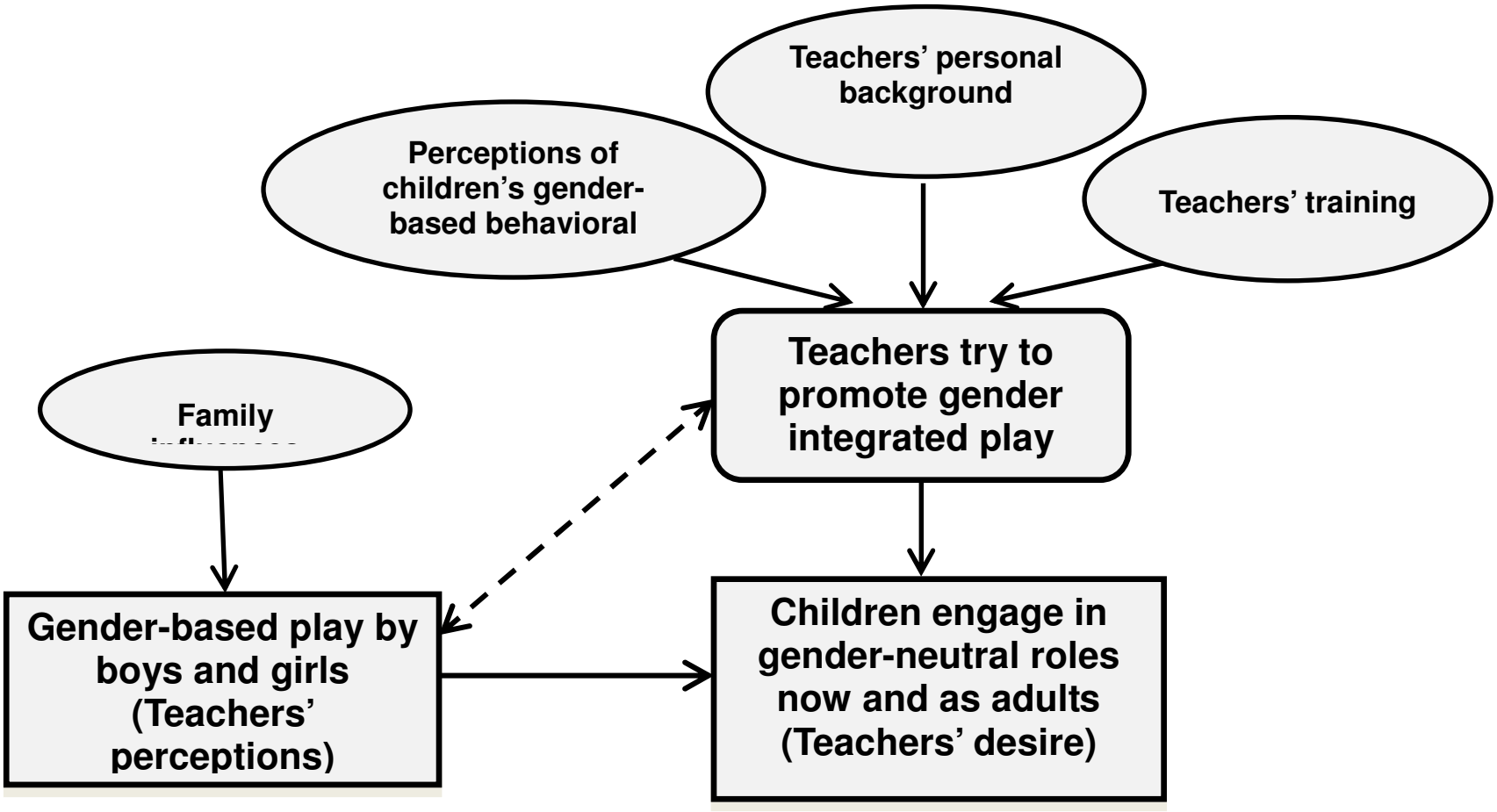


Figure 4.1 Conceptual model for teachers' responses on their perceptions of gender-roles

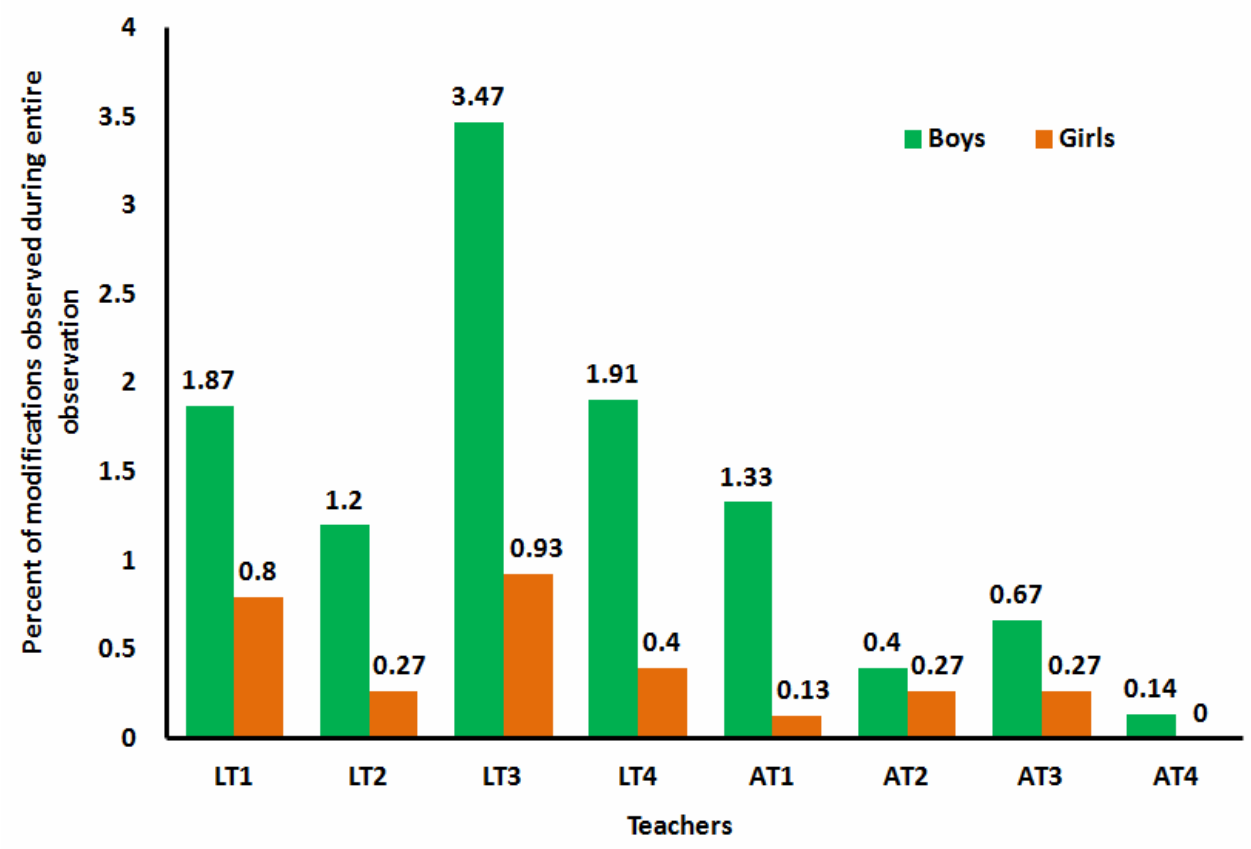


Figure 4.2 Modifications experienced by boys and girls from each teacher

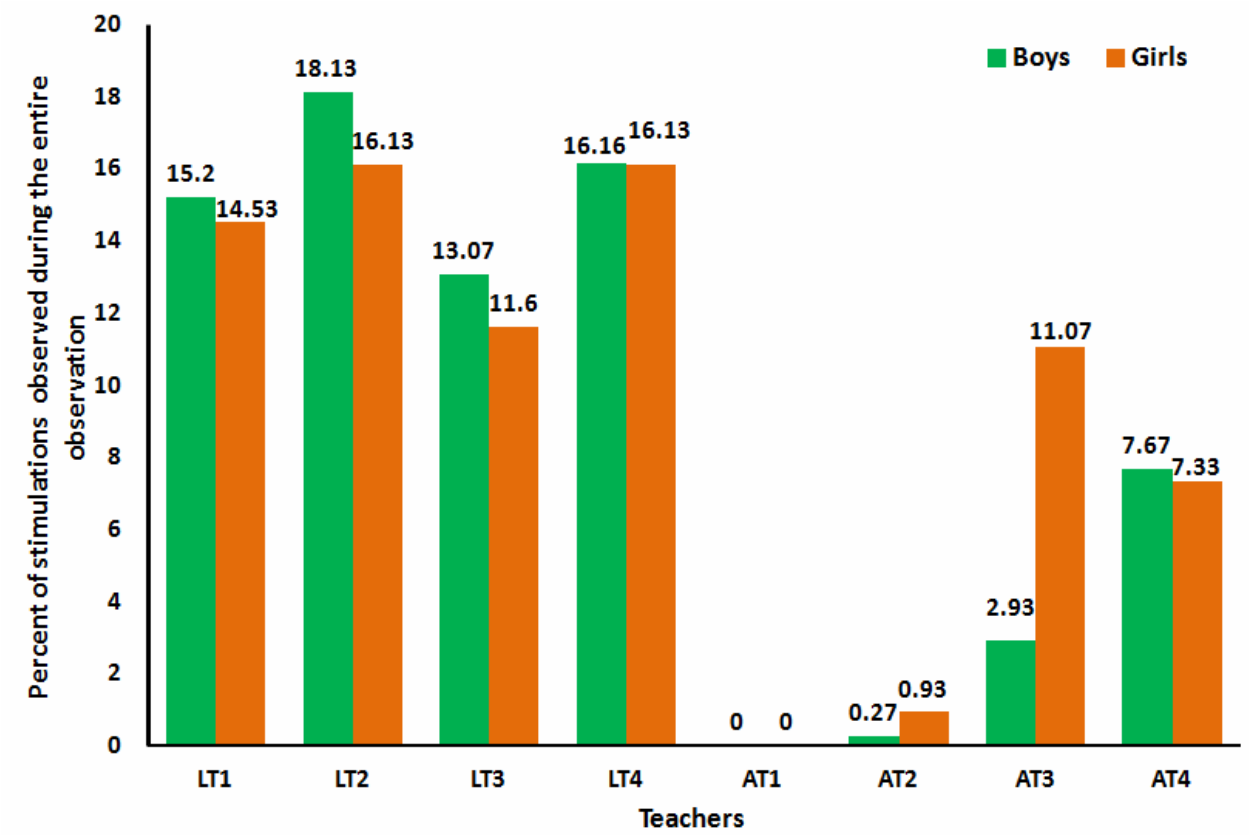


Figure 4.3 Stimulations experienced by boys and girls from each teacher

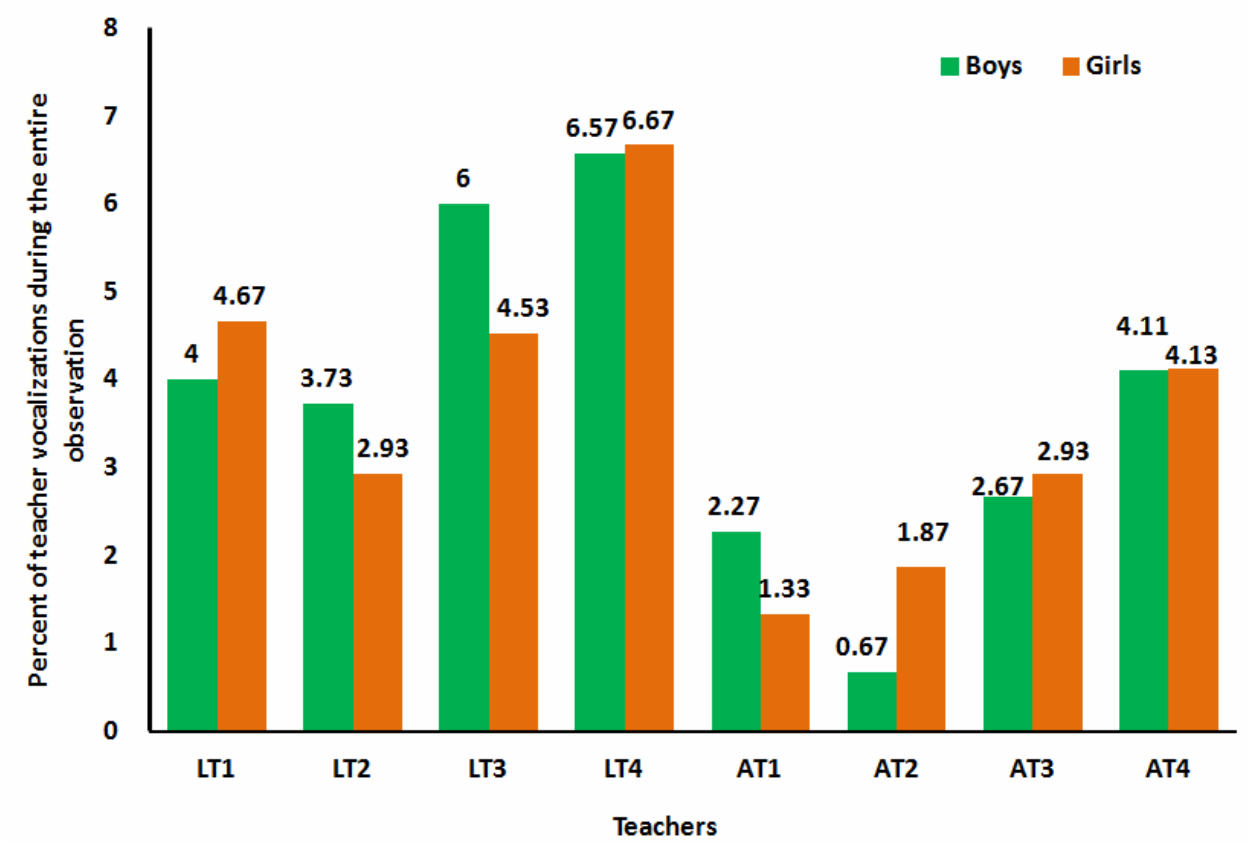


Figure 4.4 Percentage of vocalizations experienced by boys and girls from each teacher

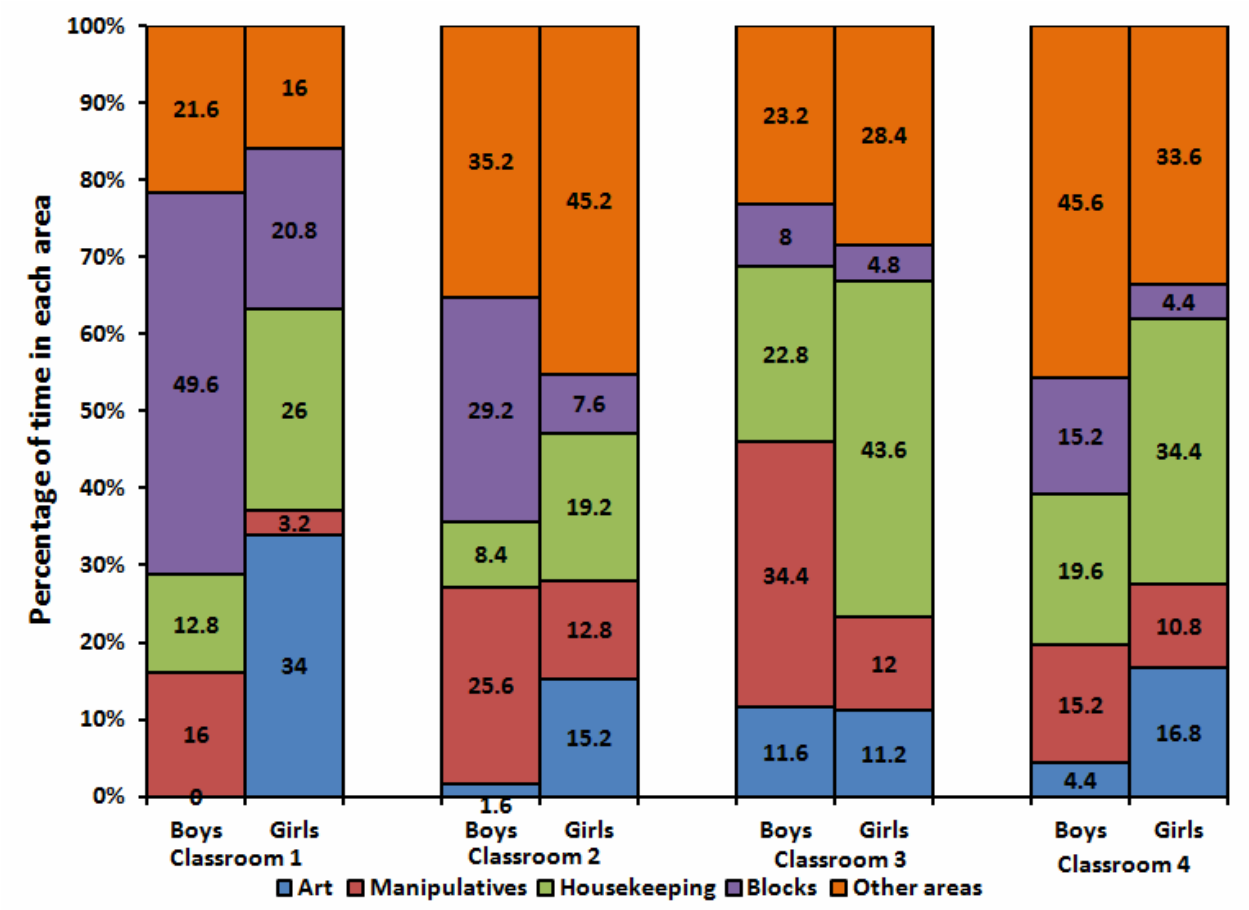


Figure 4.5 Percentage of time boys and girls spent in each area in the classrooms

Note: Other areas were the areas that were not constant in all the classrooms and included sand table, water table, sensory area, books, computer and music.

VITA

Swapna Purandare completed her Bachelor's degree with specialization in Human Development in 2004 and her Masters in Human Development in 2006, both from the University of Mumbai, India. To gain more teaching experience, Swapna worked for a year in a pre-K teacher training institute, Kangaroo Kids Education Ltd. She also worked part-time as a research assistant at Tata Institute of Social Sciences (TISS) for a few months in 2007 before she was admitted to the PhD program at the University of Tennessee, Knoxville.

At the University of Tennessee, Knoxville, Swapna received several teaching and research opportunities during which she realized her passion for research and teaching in diverse populations. Swapna completed her Doctor of Philosophy degree in Summer 2012 from Department of Child and Family Studies at the University of Tennessee. Swapna hopes to continue her work as an engaged scholar through teaching and research in the field of Child Development and Early Childhood Education.