A comparison of social interactions between preschool students from Spanish speaking homes and preschool students from English speaking homes

Molly Ann Luchtel
Iowa State University

Follow this and additional works at: http://lib.dr.iastate.edu/etd
Part of the Family, Life Course, and Society Commons

Recommended Citation
Luchtel, Molly Ann, "A comparison of social interactions between preschool students from Spanish speaking homes and preschool students from English speaking homes" (2009). Graduate Theses and Dissertations. 11982.
http://lib.dr.iastate.edu/etd/11982

This Thesis is brought to you for free and open access by the Graduate College at Iowa State University Digital Repository. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
A comparison of social interactions between preschool students from Spanish speaking homes and preschool students from English speaking homes

by

Molly Ann Luchtel

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Major: Human Development and Family Studies

Program of Study Committee:
Kere Hughes, Major Professor
Gayle Luze
Katherine Bruna

Iowa State University
Ames, Iowa
2009

Copyright © Molly Ann Luchtel, 2009. All rights reserved
# TABLE OF CONTENTS

## LIST OF TABLES

 iii

## ABSTRACT

 iv

## CHAPTER 1. GENERAL INTRODUCTION

1

- Introduction 1
- Theoretical Background 2

## CHAPTER 2. REVIEW OF LITERATURE PURPOSE

4

- Literature Review 4
- Guiding Research Questions 22

## CHAPTER 3. METHODS AND PROCEDURE

24

- Participants 24
- Design and Procedures 25
- Measures 28
- Analyses 32

## CHAPTER 4. RESULTS

33

- Results 33

## CHAPTER 5. SUMMARY AND DISCUSSION

39

- Discussion 39
- Limitations 42
- Implications and Future Research 44

## BIBLIOGRAPHY

46
LIST OF TABLES

Table 1. Demographics of Caregivers, Teachers, and Children 26
Table 2. Collection of Information by Phases 27
Table 3. Mean Scores by Primary Language, Classroom Language, & Gender 34
Table 4. T-Test Results 35
Table 5. Two-Way Analysis of Variance 36
Table 6. Correlations between Covariates with Outcome Variables 37
Table 7. Analysis of Covariance 38
ABSTRACT

This study examined the differences between preschool students from Spanish speaking homes and preschool students from English speaking homes in the areas of classroom conduct, social skills, and teacher-child relationship quality, as rated by their teachers. Data were taken from the Early Head Start Research and Evaluation Project (EHSRE), a longitudinal study beginning in 1996. Participants in the current study included 1,034 parents, 1,034 children, and 743 teachers. Significant results revealed that students from Spanish speaking homes were rated more positively in the areas of classroom conduct and teacher-child relationship quality than students from English speaking homes. Analyses of sex differences yielded significant results, indicating that females were rated more positively than males in the areas of classroom conduct, social skills, and teacher-child relationship quality. Finally, classroom quality and receptive language scores accounted for some of the variance in the home language groups on the measures of classroom conduct and teacher-child relationship quality. The need for future research and implications for the social development of English learners are discussed.
CHAPTER 1. GENERAL INTRODUCTION

Introduction

The number of non-English speaking children in classrooms across the United States is on the rise. In 2000, 18% of the United States population spoke a language other than English in the home; the percentage of Hispanics\(^1\) who spoke a language other than English in the home was even more astounding at over 75% (Ramirez & Cruz, 2003). The Hispanic population alone increased by 57.9% between 1990 and 2000 and accounted for 12.5% of the entire population in 2000 (United States Census Bureau, 2000). In today’s society, 20% of children in the United States under the age of nine are Hispanic (National Task Force on Early Childhood Education for Hispanics, 2007). This rapidly growing population of school children has commanded much attention from researchers.

English learners (ELs) are those children who are acquiring both the language used in their home setting and English (Roberts, 2008). The sample used in this study contains children from Spanish speaking homes. Their proficiency levels in English are not known; however, they will be referred to as English learners throughout this text because they are acquiring both Spanish and English, as the definition of English learner denotes. Much of the current research on ELs has focused on their cognitive development (Kao & Thompson, 2003; Reardon & Gallindo, 2007). However, few researchers have examined the social development of ELs. In addition, these few studies are limited to school-age children (Dinh, Roosa, Tein, & Lopez, 2002; Vega, Khoury, Zimmerman, Gil, & Warheit, 1995). Because

---

\(^1\) \textit{Note}: The term Hispanic will be used to refer to migrants from Latin America, as studies indicate that this population prefers the term Hispanic over Latino by a margin of 3 to 1 (Tienda & Mitchell, 2006)
of the increase in the number of ELs in early childhood classrooms, it is recommended that more research be focused on how the classroom environment affects the cognitive, linguistic and social development of preschool-age ELs. This information can be used to improve environments and curricula for these children (National Task Force on Early Childhood Education for Hispanics, 2007). The development of such curricula is important not only for the students, but also for teachers. As the number of culturally and linguistically diverse children in the classroom increases, it is imperative that teachers be able to competently communicate with these children and their families (Barrera & Corso, 2002). This is particularly relevant to today’s society, as a recent study found that 54% of teachers teach culturally diverse children with limited English abilities, but only approximately 17% feel very well prepared to meet these children’s needs (National Center for Education Statistics, 2002).

In order to achieve the goals of using appropriate and effective educational strategies, as well as provide the best educational environment for EL children, it is essential to understand all aspects of the development of EL children. The current study aims to begin to address the lack of research on the social development of EL children. The language(s) spoken at home and in the childcare setting will be analyzed to determine their associations with teacher-rated teacher-child relationships and social skills.

Theoretical Background

Vygotsky’s sociocultural perspective provides some of the theoretical groundwork for the current study. A key element in Vygotsky’s theory is the zone of proximal development, or the difference between what a child can do alone and what a child can learn to do with help from a more highly skilled person (Vygotsky, 1978). When a child cannot perform a
skill on his/her own, an adult can scaffold, or provide the minimal assistance needed to help the child become independent. For scaffolding to be successful, one must first know the developmental level of the child, then provide developmentally appropriate scaffolds (physical, verbal, procedural) for the child to learn (Vygotsky, 1978). The ability of adults and peers to scaffold an EL child is limited because they often do not understand the child’s language, do not understand the child’s verbal or social development, and do not have the tools or strategies to provide appropriate scaffolds. Not only does this affect the child’s verbal/language development, but it also affects his/her abilities to interact with others and become socially competent. The current study will examine how various elements of the preschool environment, including teacher-child relationships, languages spoken, language ability, and quality of childcare environment, affect the social development of EL children.

Bronfenbrenner’s (1979) ecological theory focuses on the context in which a child develops. The theory posits that the early environments of a child, such as school, home, and community, as well as the interactions within these environments, shape the child’s development (Bronfenbrenner, 1979). The current study examines the influence of the home and classroom language environments, as well as the quality of the classroom environment, on the child’s social development. These two theoretical orientations complement each other well, as the quality of the environment in which a child develops will contribute to and be affected by the ability of the adults in that environment to appropriately provide scaffolding for the children.
CHAPTER 2. REVIEW OF LITERATURE

Literature Review

Second Language Acquisition

In order to fully understand how the language development of English learners impacts their social development, one must first understand second language acquisition of EL children. There are two forms of second language acquisition: simultaneous and sequential. Simultaneous learners are introduced to two languages from birth. These children are able to acquire both languages and keep the languages separate. Sequential learners start out with one language at birth, then learn a second language at a later point in time (Espinosa, 2008; Tabors, 2008). For example, children who grow up with Spanish as the primary language in the home, but then enter a preschool where only English is spoken, are sequential learners. Sequential learners are the focus of the current study.

Children who are sequential learners (also referred to as English learners in this text) at the preschool age go through several stages upon entering a classroom where their primary language is not spoken. During the first stage, children will continue to speak their primary language and attempt to communicate with children and staff in a language other than English. The duration of this stage may vary, as some children will quickly give up on attempting to communicate in another language, while others will persist, some for several months (Espinosa, 2008; Tabors, 2008). The duration of this stage may be affected by the child’s personality. Children who are more reserved tend to spend a longer period of time in this stage than those who are socially outgoing (Tabors).

Once children realize they are not being understood in their primary language, they enter a nonverbal period in which they forego attempts to communicate in their primary
language (Espinosa, 2008; Tabors, 2008). During this period, children will attempt to communicate through nonverbal communication strategies. For example, a child may hold up a toy to get the attention of peers or teachers. He/she may point to a toy, requesting to play with it. A child in the nonverbal stage might also shriek or squeal as a form of protesting, or he/she may repeat behaviors that make others laugh, in an attempt to joke with them. These examples demonstrate the four primary forms of nonverbal communication of English learners during the nonverbal period: attention getting, requesting, protesting, and joking. Though these behaviors may work in some instances, they are also limited because the child cannot verbally express his/her feelings and motives. For this reason, some children may begin to imitate the nonverbal communications of English speaking children. In doing this, English learners are attempting to be more efficient in their nonverbal communications and use gestures and behaviors that have worked for children who know the language (Tabors).

Remaining in the nonverbal stage can have negative social effects for the child. For example, children who are English learners may frequently be “left out.” Because they cannot verbally communicate with other children in the classroom, they may not be truly included in social activities with other children. Also, peers may treat a child who is an English learner more like an infant than a peer due to the lack of verbal communication. For example, the attempts of English speakers to engage in play with ELs may include tickling, running around, or passing toys back and forth, all of which resemble behaviors an older child would exhibit when playing with an infant. Finally, English speakers may use simplified speech that would normally be directed at an infant, such as, “Me help” or “Me do it” (Tabors, 2008).
During this nonverbal period, children are not only attempting to communicate through nonverbals; they are also observing and learning about the English language from their peers and teachers. For example, English learners will silently watch and observe their English speaking peers. Another learning strategy used during the nonverbal period is rehearsing. EL children will begin making verbalizations in an attempt to replicate and learn the English language. They may also use repetition or rehearsal drills (I ran, I run, I am running) in an attempt to improve their English speaking abilities (Tabors, 2008).

The final stage of sequential language acquisition is known as sound experimentation. During this stage, ELs are learning the sounds of the English language, yet they have not yet mastered the English vocabulary (Espinosa, 2008; Tabors, 2008). They will likely experiment with the sounds of their new language, though these sounds will not make intelligible English words. For example, the child may form an entire sentence that includes sounds from the English language but does not actually include an English word. Eventually, these unintelligible sounds will be filled in with other English words to form a complete sentence (Tabors).

Knowing this information about the language development of English learners provides great insight into their social development. ELs will first try to be socially accepted by speaking their primary language. When this fails, they retreat into a nonverbal period, during which they use only nonverbal communications and observational learning. This stage is of particular interest in the current study. When in the nonverbal, observational period, English learners will likely be very complacent, simply following the actions of others and not causing disruptions. For this reason, teachers may rate them higher on their classroom conduct skills. In the final stage of language acquisition, after practicing their English
language skills and attaining English proficiency, the children are able to be more fully accepted into the socially community of the preschool (Espinosa, 2008; Tabors, 2008).

Social Development of English Learners

In order to further investigate the social effects of being an English learner, some studies have examined the acculturation process of these children. Acculturation is the process of change that occurs when persons from one culture come into continuous contact with another culture (Berry, 1995). One result of acculturation may be that children will lose their native culture; this is known as assimilation. If the child successfully maintains his/her home culture while also learning the new culture, the child is achieving biculturalism, in which he/she maintains and uses aspects of both cultures. All children begin learning the culture in which they live from the time they are born. Their family, community, and environment shape the norms of the culture in which they live. When children begin learning a second language and a second culture, it may be difficult to determine how to balance the standards of each culture, as they may conflict with one another (Saville-Troike, 1981).

In studies of the acculturation of Hispanics into the American society, measures of acculturation include language abilities, immigrant status, discrimination conflicts, family acculturation conflicts, ethnic awareness of prejudice, and conflicted ethnic loyalty (Dinh et al., 2002; Hokoda, Galvan, Malcarne, Castaneda, & Ulloa, 2007; Vega et al., 1995). These elements of acculturation can be stressors for young Hispanics, and in turn, negatively affect other areas of development. In particular, language ability can have negative impacts on the social development and interactions of Hispanic youth (Dinh et al., 2002; Vega et al., 1995). Understanding how language ability impacts social development is of great concern,
especially as the number of EL students in classrooms across the United States continues to rise.

Several studies have investigated the relationship between acculturation and social interactions in school age ELs. For example, self-evaluations of elementary age ELs and English speaking children reveal that EL children have lower academic self-concepts and lower perceptions of social closeness than their English speaking peers (Stanovitch, Jordan, & Perot, 1998). In a study of sixth and seventh grade Hispanic males, acculturative stressors were related to more displays of problem behavior. Acculturative stressors included language conflicts (e.g. difficulties getting along with others because participant doesn’t speak English well), discrimination-related conflicts (e.g. people dislike participant because he/she is Hispanic), and acculturation-related conflicts (e.g. problems with family because participant prefers American customs). Foreign born participants with high levels of language conflict were rated by both parents and teachers as having significantly higher levels of behavior problems (as measured by the Child Behavior Check List and Behavior Problems Scale) than those children with low to moderate language conflicts (Vega et al., 1995). This indicates that children who experience difficulties in language adjustment experience negative behavior displays not only in the classroom, but also in their home setting. In regard to United States born Hispanic youth, some areas of acculturative stress were related to lower teacher ratings. In particular, participants with high acculturative stress ratings in the areas of language conflicts, perceived discrimination, and stresses related to perceptions of a closed society were rated by teachers as having higher levels of problem behaviors than their peers who had low to moderate levels of acculturative stress in these areas. This indicates that even U.S. born Hispanics still struggle with language adjustment, as well as other acculturative
stressors. However, for children born in the United States, these difficulties manifest in the classroom and contribute to negative school performance, yet they are not evident in the home setting (Vega et al.).

Dinh and colleagues (2002) conducted a longitudinal study to examine the effects of acculturation, self-esteem, and parent involvement on predicting problem behavior proneness (PBP) among Hispanic children in grades 4 – 8. Measures of acculturation included immigrant status, language spoken at home, and language used to complete surveys and interviews. Two of the three measures of acculturation are language based, signifying once again the importance of language ability in EL children. Results showed that PBP at time one predicted PBP at time two, indicating that involvement in these negative behaviors remained stable over time. This demonstrates the importance of working with young children to identify problem behaviors and intervene at an early age. The study also revealed that parental involvement was a significant mediator of the relationship between acculturation and problem behavior. Children who were more acculturated also experienced less parental involvement. The low parental involvement was then related to more problem behaviors. This suggests that the process of acculturation may present stressors for Hispanic families that can negatively impact familial relationships, and/or that the amount of familial involvement can affect the process of acculturation.

Dawson and Williams (2008) studied the impact of language status on internalizing (stress, anxiety, and depression) and externalizing (aggression and acting out) behaviors of early elementary Hispanic children. The level of English proficiency was significantly related to externalizing behaviors. In particular, children who were not proficient in English at the end of first grade exhibited more externalizing behaviors in third grade than those children
who were proficient in English. These findings indicate that poor language ability in the early elementary years can be a stressor that negatively affects social development.

The study also highlighted other factors that can contribute to the negative behavior of Hispanic children. For example, externalizing behaviors were also associated with family poverty level and sex of child. Participants whose family income was below the poverty line and/or male children had higher levels of externalizing behaviors than their peers whose families lived above the poverty line and/or were female. Family poverty, child’s place of birth (United States or other) and parental education were all found to have a significant effect on internalizing behaviors. Hispanic children born in the US had higher rates of internalizing behaviors than those born in foreign countries. Similarly, participants whose family income level was below the poverty threshold, and/or participants whose parents had not completed high school showed higher levels of internalizing behavior than their peers who lived above the poverty threshold and/or whose parents received at least a high school education (Dawson & Williams, 2008). These findings are consistent with studies of non-EL children. Many of the same factors pose risks for the social development of all children, including child sex and poverty (Korenman, Miller, & Sjaastad, 1995; McLeod & Shanahan, 1993; O’Brien, 2005). Taken together, the research suggests that being an EL student may be one of a set of risks that can place young Hispanic students at a significant disadvantage with regard to their social-emotional development.

Research shows that preschool EL children are faced with several challenges, including limited English language ability and lower achievement on academic skills tests (Kao & Thompson, 2003; Reardon & Gallindo, 2007), as well as higher rates of poverty than non-Hispanic white children (McLeod & Shanahan, 1993). Because research on the social
development of preschool EL children is lacking, the following literature will examine how these risks or challenges affect non-EL preschool development.

*Language Ability and Social Development*

Language and communication abilities play an important role in social competence. Several studies have demonstrated this link between communication ability and social competence (Goldstein, Kaczmarek, & English, 2002); however, research investigating the connection between the language abilities of ELs and their social development is sparse. English learners lack the ability to adequately or appropriately express themselves in the English language. Similarly, children with speech/language impairments also lack the ability to clearly express themselves. Though these groups lack the ability to verbally express themselves in English for very different reasons, by examining the research on preschool children with speech/language impairments, one can understand how language difficulties may affect social interactions at the preschool age.

Social skills ratings of preschool children with speech/language impairment (SLI) are significantly lower than ratings of their non-language impaired (NLI) peers (McCabe & Meller, 2004; Stanovitch et al., 1998). For example, parents of preschool children with SLI rate their children significantly lower in cooperation, assertion, responsibility, and self-control than parents of children who are NLI. Parents rate preschool children with SLI as exhibiting significantly more internalizing behaviors, particularly withdrawal, than their NLI peers; however the two groups were similar in regard to externalizing behaviors (Stanovitch et al., 1998).

In a more recent study, McCabe and Meller (2004) found similar results when examining teacher and parent rated differences in social behaviors between preschool
children with speech/language impairment and preschool children who are non-language impaired. The study revealed that teachers rated children in the SLI groups significantly lower on the social composite measure (being liked by peers, showing concern for the distress of others, and initiating activities) than children in the NLI group, indicating that children with speech/language impairment experience social difficulties when interacting with peers in the classroom.

Another study (McCabe, 2005) of preschool students revealed that teachers rated children with SLI as significantly lower in social competence and higher in behavioral problems than their NLI peers. Teachers rated children with SLI as significantly lower in the areas of task orientation, behavioral control, assertiveness, and peer social skills. Parents also rated the social competence (task orientation, behavioral control, assertiveness, and peer social skills) of children with SLI as significantly lower than the social competence of NLI peers.

These studies demonstrate a relationship between the inability to clearly express oneself verbally and poor ratings of social skills and social understanding. It is important to keep in mind that while the social effects of speech and language impaired children and English learners may be similar, there are very real differences between the two groups of children. Due to these differences, more research is needed to determine how the inability of English learners to express themselves in the English language affects their social development. If the inability to express oneself with the appropriate verbal communications has the same developmental effects on EL children as it does on children with speech/language impairment, researchers will, once again, likely find that the social skills development of EL children lags behind their native English speaking peers.
A number of studies have documented the language development and academic achievement of English learners. Several of these studies have found that ELs lag well behind their English speaking peers in academic achievement. For example, Reardon and Gallindo (2007) found that Hispanic children start kindergarten lagging behind their peers in academic achievement, and although the gap decreases over the elementary years, a disparity remains through the fifth grade.

Kao and Thompson (2003) noted that although academic differences among racial ethnic groups are decreasing, Hispanic, African American, and Native American students continue to achieve lower test scores and lower grades than their White and Asian counterparts. Similarly, Hispanics, Blacks, and Native Americans have higher high school drop out rates and lower high school completion rates than Whites and Asians (Kao & Thompson, 2003). These inequalities among racial ethnic groups are a concern for the United States. Because minority populations are growing so rapidly, it is important they become well informed, educated, and participatory citizens, so they can contribute to the United States economy and their families can prosper (National Task Force on Early Childhood Education for Hispanics, 2007).

To complicate the task of understanding English learners’ development even more is the fact that ELs speak different languages, come from various cultural backgrounds, and have varying levels of English proficiency. Academic proficiency has been found to be greater for third generation Hispanic children (whose parents and selves were born in the United States), indicating that families who have been established in the United States for longer periods of time and for more generations will have children with higher academic
achievement. Also, Hispanic children from higher SES families have higher academic proficiency. Finally, Hispanic children who live in homes where English is the primary language, as well as children who are proficient in English upon entry into kindergarten, tend to have higher academic achievement through elementary school than their Hispanic peers whose primary language in the home is Spanish or who are not proficient in English upon entering kindergarten (Reardon & Gallindo, 2007). These differences present a unique challenge for teachers when working with children from varying cultural backgrounds.

*Language, Literacy, and Social Development*

In this review thus far, it has been established that many English learners have limited English proficiency and lagging academic achievement. Though only a small amount of research has focused specifically on the social development of English learners, many researchers have examined the relationship between academic achievement, particularly reading, writing, and language development, and social skills. This research offers preliminary groundwork for understanding the social development of preschool English learners. Because a gap in the research exists at the preschool age, by understanding the relationship between academic achievement and social development, as well as typical language development (verbal and written) and social development at the preschool age, we can better understand and make hypotheses about the social development of EL children.

Doctoroff, Greer, and Arnold (2006) examined social behavior and emergent literacy skills among 123 New England preschoolers from diverse ethnic and socioeconomic backgrounds. Classroom behaviors were video taped and coded into four different categories: aggression, prosocial behavior, solitary play, and negative affect. Statistically significant results revealed that lower emergent literacy skills were associated with higher levels of
aggression toward others and objects, as well as higher levels of solitary play and negative affect. When examining the effects of gender, a significant, positive relationship was found between higher levels of prosocial behavior and higher levels of emergent literacy skills in boys, but not girls.

Similarly, Miles and Stipek (2006) performed a longitudinal study beginning when the children were preschool age to assess the connection between social skills and literacy. The study included low-income children from diverse ethnic backgrounds. Results showed that literacy achievement and teacher rated social skills are associated at first grade, third grade, and fifth grade, but not in the same pattern. Aggressive behaviors were more strongly and negatively related to literacy achievement in the older grades (third and fifth grades) while prosocial behavior and literacy achievement were more strongly and positively associated at the younger grades (kindergarten and first grade). In other words, the strength of the association between aggressive behaviors and literacy achievement increased over time, while the strength of the association between prosocial behavior and literacy achievement decreased.

These studies demonstrate that there is a relationship between language development and social skills development. More specifically, children with lower levels of language and literacy skills tend to have more undesirably rated social skills. As mentioned above, EL children struggle with language development and academic achievement (Reardon & Gallindo, 2006). If the development of preschool EL children follows the same patterns set out in these studies, researchers will likely find that EL children lag not only academically, but also socially.
Poverty and Social Development

Statistics show that a higher percentage of children from minority groups, particularly Blacks and Hispanics, are living in poverty than the non-Hispanic white populations (McLeod & Shanahan, 1993). Living in poverty, especially during the preschool years, has been associated with a plethora of poor outcomes. For example, in a study by Walker, Greenwood, Hart, and Carta (1994), lower language ability and IQ were found to correlate with indices of low socioeconomic status (SES). Also, children living in poverty tend lack exposure to vocabulary rich environments and typically have smaller vocabularies than their high SES peers (Hart & Risley, 1995). Because a higher percentage of minority children are living in poverty (McLeod & Shanahan, 1993), they are at greater risk for experiencing this lag in academic and language abilities than are children not living in poverty. As mentioned above, these deficits in language ability may, in turn, lead to poor social outcomes.

A variety of poor social outcomes have been associated with poverty. According to Dawson and Williams (2008), Hispanic children whose family income was below the poverty threshold had higher rates of internalizing symptoms than their Hispanic peers whose families lived above the poverty threshold. Korenman and colleagues (1995) found that children living in chronically poor families in the United States suffer both cognitive and socioemotional developmental deficits, particularly in the areas of vocabulary, math, reading achievement, verbal memory, and problem behaviors. These deficits were greater for children who had experienced poverty for longer periods of time, indicating again that minority children are at greater risk for these cognitive and socioemotional deficits.

Because being poor has an indirect, rather than direct, effect on social development, more recent studies have examined the specific connections between poverty and social
development. Mistry, Vandewater, Huston, and McLoyd (2002) studied a sample of 57% African Americans and 28% Hispanics to determine the specific linkages between this association. Results showed that economic hardship and stressors that accompany it indirectly affect parenting behaviors. These parents feel less capable and are less affectionate when interacting with their children, and this parenting behavior predicted lower teacher ratings of social skills and higher ratings of poor behavior.

Another study of interest in the development of EL children is one by McLeod and Shanahan (1993), which examines the effects of poverty on the mental health of children from various ethnic backgrounds. The effects of two different types of poverty on children’s mental health were observed: (1) persistence of poverty (the percentage of years of child’s life spent living in poverty), (2) current poverty (the conditions under which the child is currently living). A significant and positive relationship was found between persistent poverty and internalizing symptoms, but this association was not found between current poverty and mental health. This indicates that the length of time a child spends in poverty affects his/her feelings of unhappiness, anxiety and dependence. Conversely, a significant and positive relationship was found between current poverty and externalizing behavior, yet this link was not established with persistent poverty. This signifies that the length of time spent in poverty does not affect a child’s external behaviors; rather, these behaviors increase when the child is in a current state of poverty. More minority children live in poverty than non-Hispanic white children, and these studies demonstrate that living in poverty is associated with poor social outcomes. If the development of EL children follows the same patterns set out in these studies, researchers will likely find that EL children exhibit poorer social skills than their English speaking peers.
Classroom Quality and Social Development

Previous research has shown that classroom quality is another factor that can affect the social skill development of preschool children. In particular, rather than the structural quality of preschool programs, it is the quality of a child’s experience in these programs, as well as the quality of the teacher-child relationship, that is most positively associated with favorable social skill development (Howes et al., 2008; Mashburn et al., 2008; Peisner-Feinberg et al., 2001). For example, Mashburn and colleagues (2008) performed a study involving 2,439 children from 671 pre-Kindergarten classrooms to examine how classroom quality affects the academic, language, and social development of four year-olds. Results revealed that higher quality instructional and emotional interactions between teacher and child were positively related to more favorable cognitive, language, and social outcomes for the preschool-aged child. Similarly, Howes (2000) found that a child’s second grade social skills could be predicted by child-teacher relationship quality. Aggressive children received low ratings of teacher-child closeness and high ratings of teacher-child conflict. Conversely, prosocial children were rated high in teacher-child closeness and low in teacher-child conflict.

Peisner-Feinberg and colleagues (2001) performed a longitudinal study beginning when the 733 target children were in preschool and continuing through second grade. A significant, positive relationship was found between teacher-child closeness and sociability; children with closer teacher-child relationships were rated as higher in sociability. In fact, the strength of the teacher-child relationship in preschool predicted the child’s sociability through first grade. Results also revealed a significant, positive relationship between teacher-child relationships and problem behaviors; children with closer teacher-child relationships
exhibited fewer problem behaviors. These findings emphasize the importance of quality teacher-child relationships at the preschool-age.

Pianta and Stuhlman (2004) published a longitudinal study involving 490 children, ages preschool to first grade, to determine the relationship between teacher-child closeness and children’s academic and social skills. Results showed that both conflict and closeness in the teacher-child relationship predicted academic success, even after controlling for gender, socioeconomic status, and child’s skill level. In the first grade, children with whom teachers shared a close bond were rated higher in academic achievement while children with whom teachers had more conflict were rated lower in academic achievement. Significant relationships were also found in regard to problem behaviors and social competence. When teachers rated their relationship with a child as low in closeness, the mother rated the child as exhibiting more internalizing behaviors. Those relationships rated by teachers as high in conflict were related to teachers’ ratings of lower social competence as well as mothers’ ratings of more externalizing behaviors. Similarly, when teachers rated the relationship with the child as low in closeness and high in conflict, associations were found with teacher ratings of more internalizing behaviors. Finally, those relationships rated high in closeness by teachers were associated with higher levels of social competence. This study shows that several aspects of a child’s social development, both in the classroom and at home, are related to the quality of the teacher-child relationship. Based on these findings, we would expect the current study to reveal that children with higher quality classrooms and teacher-child relationship ratings will also likely receive higher ratings of social competence.

Some studies have examined further the teacher-child relationship by assessing what child characteristics contribute to the quality of the teacher-child relationship. Contributing
child characteristics are gender, school adjustment level, and aggression level. For example, an interaction effect exists between gender and school adjustment on teacher-child relationships. Specifically, poor school adjustment is related to more negative ratings of teacher-child relationships for boys than for girls. Also, there is a negative association between aggression and teacher-child relationships, but the strength of this association varies depending on the child’s school adjustment. Children who are aggressive yet are adjusting well to school have more positive ratings of the child-teacher relationship than those children who are aggressive and adjusting poorly to school. This finding indicates that children who are aggressive will not necessarily have a poor relationship with their teacher. If they are able to adjust well to school, follow instructions, and complete their work as directed, they will likely have a more positive relationship with their teacher (Blankemeyer, Flannery, & Vazsonyi, 2002).

Teacher-Child Relationships with English Learner Students

The previous studies establish an association between quality teacher-child relationships and positive social development and also demonstrate that this association can vary by child. English learner children have a unique set of circumstances and characteristics that can also affect the quality of the teacher-child relationship. For example, research has shown that children of color tend to have lower quality teacher-child relationships (Hughes, Gleason, & Zhang, 2005; Murray, Waas, & Murray, 2008). These variations in relationship quality across races have been associated with differential outcomes, particularly in the areas of school avoidance and the extent to which the child likes school (Murray, et al).

However, there is evidence to suggest that when the ethnicity of teacher and child match, teachers tend to rate the children more positively, particularly in regard to teacher-
child conflict and dependency (Saft & Pianta, 2001). In a closer look at this concept, Chang and colleagues (2007) looked at Spanish-speaking children in pre-kindergarten classes to determine factors that affect their social and language development. In this study, about half the teachers reported having one or more Spanish-speaking children in the classroom, while only 34% of the classrooms reported having a teacher or teacher’s aide who spoke Spanish. Results showed that when a Spanish-speaking teacher was present in the classroom, he/she tended to interact more with the Spanish-speaking children, regardless of what language was used. This indicates that Spanish-speaking children in classrooms with no native language teacher may receive less attention. The study also revealed that more Spanish-speaking interactions between teacher and child related positively to higher teacher ratings of closeness to the student, student’s assertiveness, and student’s social skills. More Spanish-speaking interactions also related negatively to bullying behaviors directed at the child. These positive outcomes show that having a Spanish-speaking teacher in the classroom not only provides the children with language opportunities, but it also positively affects their social development. This study suggests that when teachers and children with similar language backgrounds are in the same classroom, teachers are able to create a more positive learning environment for these children, characterized by appropriate scaffolding techniques and supplementary teacher-child interactions. Based on this research, it is hypothesized that the current study will find that when the native language of the children is spoken in their classrooms, the children will receive higher social skills ratings than when the children are in classrooms where their native language is not spoken.
Guiding Research Questions

1. How do the languages spoken at home, the languages spoken in the classroom and the sex of the child affect teacher ratings of social skills?
   Children from homes where English is the primary language be rated more positively on the teacher-rated measures of social skills than children from homes where Spanish is the primary language.
   Children in classrooms that include their native language will be rated more positively on the teacher-rated measures of social skills than children in classrooms where their native language is not spoken.
   Girls will be rated more positively on the teacher-rated measures of social skills than boys.

2. How do the languages spoken at home, the languages spoken in the classroom, and sex of the child affect teacher ratings of quality of teacher-child relationship?
   Children from homes where English is the primary language will score higher on the teacher-rated measure of teacher-child relationship quality than children from homes where Spanish is the primary language.
   Children in classrooms that include their native language will score higher on the teacher-rated measure of teacher-child relationship quality than children in classrooms where their native language is not spoken.
   Girls will be rated more positively on the teacher-rated measure of teacher-child relationship quality than boys.

3. Is there an interaction effect between the primary language of the child and the sex of the child on the measures of social skills and teacher-child relationship quality?
4. Do the covariates classroom quality and child’s language skill account for the significant differences found in primary language groups on the total classroom conduct and total positive relationship scores?
CHAPTER 3. METHODS AND PROCEDURE

Method

Participants

In 1994, the Administration of Children, Youth and Families (ACYF) started the Early Head Start program (Administration for Children and Families, 2002). At the same time, ACYF selected 17 programs and 3,001 families from across United States to participate in a large-scale, longitudinal study known as the Early Head Start Research and Evaluation Project (EHSRE). This study was aimed at providing research and evaluation to explain the value of the Early Head Start program as well as provide information for continuous improvement of the program (Administration for Children and Families). The current study will examine data taken from this large scale, longitudinal study.

Demographic information about the teachers, caregivers, and children in this study was obtained through questionnaires and interviews of the primary caregiver, as well as interviews of the child’s teacher. Parents consented to several interviews, which provided demographic information about the caregivers and children. Parents then gave permission to contact the childcare setting, where, upon teacher consent, teacher demographics and teacher ratings were obtained.

The current study is a subsample of the original 3,001 children, parents, and caregivers, and includes 1,034 caregivers, 1,034 children, and 743 teachers. Some data are missing due to lack of reply from respondents, either because they chose not to answer the question, or because the information was not known. Average age of participants was calculated at the time Head Start teachers filled out the social skills information for children in the study. Caregivers ranged in age from 18 to 49 years, with the average age of 28 years.
Over 99% (1,030) of caregivers were the biological mothers of the target children, and their racial and educational backgrounds were diverse (see Table 1). Children in the study ranged in age from 50 to 71 months, with the average age of 61 months. The racial background of several children is missing because either the respondent did not know or chose not to answer. Most of the children (85%) spoke English as their primary language.

The majority of teachers in the study were female (94%). Eighty percent of all teachers in the study were the lead teacher in the classroom of the target child. The racial composition of the teachers was diverse, and their educational backgrounds varied (see Table 1). The years of experience in preschool settings ranged from 0 to 70 with an average of 11 years of experience. In regard to language(s) used in the classroom of the target child, 45% used English only and 24% used both English and Spanish (31% of the classrooms were missing language data).

*Design and Procedure*

The project took place in three separately funded waves. In 1996, the 3,001 families were randomly assigned to receive either Early Head Start services (experimental group) or any services available other than Early Head Start (control group). Data were then gathered from the families and children in the Birth to Three Phase between 1996 and 2001 when the target child was 14, 24, and 36 months old. Data on use of family services was collected at 6, 15, and 26 months after enrollment, as well as when the child exited the program. The second project wave took place between 2001 and 2004. This Pre-Kindergarten Follow-up Phase examined the child’s development prior to school entry (Administration for Children and Families, 2007). Throughout the first two waves of the project, family interviews were conducted to ascertain family demographics and parent reports of children’s experiences and
Table 1.  
*Demographics of Caregivers, Teachers, and Children*

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Caregivers n = 1034 (%)</th>
<th>Teachers n = 743 (%)</th>
<th>Children n = 1034 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Language</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>875 (85)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>159 (15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Program Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head Start Program</td>
<td>528 (51)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison</td>
<td>506 (49)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type of Child Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center</td>
<td>965 (93)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>69 (7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Age 28 Yrs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1 (.1)</td>
<td>14 (2)</td>
<td>520 (50)</td>
</tr>
<tr>
<td>Female</td>
<td>1030 (99)</td>
<td>697 (94)</td>
<td>513 (49)</td>
</tr>
<tr>
<td>Missing</td>
<td>3 (.3)</td>
<td>32 (4)</td>
<td>1 (.1)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>406 (39)</td>
<td>430 (58)</td>
<td>225 (22)</td>
</tr>
<tr>
<td>African American</td>
<td>353 (34)</td>
<td>138 (19)</td>
<td>229 (22)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>242 (23)</td>
<td>87 (12)</td>
<td>167 (16)</td>
</tr>
<tr>
<td>Other</td>
<td>32 (3)</td>
<td>21 (3)</td>
<td>87 (8)</td>
</tr>
<tr>
<td>Missing</td>
<td>1 (.1)</td>
<td>65 (9)</td>
<td>326 (32)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Diploma or Less</td>
<td>465 (45)</td>
<td>77 (10)</td>
<td></td>
</tr>
<tr>
<td>Some College</td>
<td>335 (32)</td>
<td>266 (36)</td>
<td></td>
</tr>
<tr>
<td>BA or Above</td>
<td>60 (6)</td>
<td>361 (49)</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>174 (17)</td>
<td>39 (5)</td>
<td></td>
</tr>
<tr>
<td><strong>Relation to Child</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological Mother</td>
<td>1030 (99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Family Member</td>
<td>4 (.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teacher Position</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead Teacher</td>
<td>595 (80)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant</td>
<td>24 (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>50 (7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>74 (10)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

devlopment, and children were assessed using a variety of measures (cognitive, language, and social-emotional) and a variety of methods (direct assessment, teacher report, and parent report; Administration for Children and Families, 2006).
For the purposes of this study, demographic information about the child and caregiver, as well as the primary language of the child, were obtained from the first phase of the study from parent interviews (Birth to Three Phase). Data from the second phase of the project (Pre-Kindergarten Follow-up Phase), were obtained from the following measures: Early Head Start Parent Interview, Early Head Start Questionnaire for Child Care Providers in Centers, and Early Head Start Longitudinal Study Teacher Questionnaire about Child Behaviors. These interviews and questionnaires were conducted in the order listed above, and both teacher demographics as well as predictor and outcome variables were obtained from these measures (see Table 2; Administration for Children and Families, 2006). The latter two questionnaires were administered only if the child was in formal child care. There were disparities in the number of participants for each of the measures above due to the fact that some families did not use formal child care settings, and other families dropped out of the longitudinal study over time. In the current study, data were analyzed for all children who were still part of the larger study at pre-kindergarten, and whose child care providers completed the Early Head Start Longitudinal Study Teacher Questionnaire about Child Behaviors \( n \) (caregivers) = 1034; \( n \) (teachers) = 743; \( n \) (children) = 1034].

Table 2.

<table>
<thead>
<tr>
<th>Collection of Information by Phases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1 (Birth to Three)</td>
</tr>
<tr>
<td>Child Demographics</td>
</tr>
<tr>
<td>Caregiver Demographics</td>
</tr>
<tr>
<td>Primary Language of Child</td>
</tr>
<tr>
<td>Phase 2 (Pre-Kindergarten Follow-Up)</td>
</tr>
<tr>
<td>Teacher Demographics</td>
</tr>
<tr>
<td>Classroom Language(s)</td>
</tr>
<tr>
<td>Teacher-Rated Social Skills (Behavior Problems Scale)</td>
</tr>
<tr>
<td>Teacher-Rated Classroom Conduct (Cooperative Classroom Behavior)</td>
</tr>
<tr>
<td>Teacher-Child Relationship Ratings (Student Teacher Relationship Scale)</td>
</tr>
<tr>
<td>ECERS-R Total Score</td>
</tr>
<tr>
<td>Child Receptive Language Scores (PPVT &amp; TVIP)</td>
</tr>
</tbody>
</table>
Measures

Primary language. The primary language of the child was first obtained from the primary caregiver during the application process. However, these data contained 121 missing respondents. Follow-up parent interviews continued to ask the child’s primary language. Data from these interviews were used to determine the primary language of the missing respondents. In the current study, only data from children who spoke only English or Spanish was included, as the number of children who spoke other languages was too small to analyze separately (Administration for Children and Families, 2006).

Social skills of child & teacher-child relationship. The Teacher Questionnaire about Child was conducted when the target child was in Pre-K. It was a self-administered questionnaire to be filled out by the child care provider who spent the most time working with the target child (Administration for Children and Families, 2005a). For purposes of this study, the following sections will be analyzed: Student Teacher Relationship Scale (STRS), Cooperative Classroom Behavior Scale (CCB), and the Behavior Problems Scale (BPS) - Teacher Report [a portion of the Child Behavior Checklist (CBCL)]. Each of these sections is comprised of questions from a well known measure.

Student Teacher Relationship Scale. The Student Teacher Relationship Scale (STRS) is a measure comprised of a variety of questions that seek to ascertain teachers’ thoughts about the quality of their teacher-child relationships (Pianta, 1993). The STRS in the current study contains only 28 questions taken from the original measure and is referred to as the STRS total positive relationship. These questions were answered on a five point Likert Scale, from (1) Definitely Does Not Apply to (5) Definitely Applies. The Head Start Research and
Evaluation Project found the overall local reliability of the total positive relationship to be (Chronbach’s Alpha) \( r = .75 \) (Administration for Children and Families, 2000c).

Reliability for the remaining scales of the Teacher Questionnaire (Behavior Problems Scale and Cooperative Classroom Behaviors) was obtained from the Family and Child Experiences Survey (FACES; Administration for Children and Families, 2000b). In the FACES study, forty-three Head Start programs were selected to participate because they were representative all Head Start programs in the United States. These programs were then stratified, and 2,479 children between the ages of 3 and 5 were randomly selected to take part in the study (Administration for Children and Families).

**Behavior Problems Scale.** The Behavior Problems Scale (BPS) in this study was designed to assess negative behaviors that are related to academic and classroom behavior problems in later years (Administration for Children and Families, 2000a). Questions for this for Ages 1 ½ to 5 (Achenbach, Edelbrock, & Howell, 1987), the Behavior Problems Index (Zill, 1990), as well as some items that were modified from the Personal Maturity Scale (Alexander & Entwisle, 1988). Internal consistency for the BPS questions used in this study (as measured by FACES) is \( r = .86 \) (Cronbach Alpha; Administration for Children and Families, 2000a). The BPS contains 14 questions about the child’s classroom conduct (e.g. Disobeys rules or requests) and will be referred to as BPS total classroom conduct or BPS total CC. Teachers are to respond with Not True (0), Somewhat or Sometimes True (1), or Very True or Often True (2). The scores from each of the questions were then summed to create a composite score, which ranges form 0 to 28, with higher scores indicating more frequent or severe negative behaviors.
Cooperative Classroom Behavior (Teacher Report). The Cooperative Classroom Behavior Scale (CCB) was designed to assess the child’s cooperative behaviors in the classroom (Administration for Children and Families, 2000b). Questions for this measure were taken from the Personal Maturity Scale (Alexander & Entwisle, 1988) and the Social Skills Rating System (SSRS; Elliott, Gresham, Freeman, & McCloskey, 1988). Internal consistency for this measure (as assessed by FACES) is $r = .88$ (Cronbach Alpha; Administration for Children and Families, 2000b). The Cooperative Classroom Behavior (Teacher Report) section of the questionnaire is comprised of 12 questions about the child’s social skills (e.g. Makes friends easily) and will be referred to as CCB social skills. Teachers are to respond with Never (1), Sometimes (2), or Very Often (3). The scores for each of the questions were then added together to create a composite score, ranging from 0 to 24, with higher scores indicating a higher frequency of positive behaviors (Administration for Children and Families, 2000b).

Peabody Picture Vocabulary Test - III. The Peabody Picture Vocabulary Test – III (PPVT – III; Dunn & Dunn, 1997) was administered when the target child was in Pre-Kindergarten. It was designed to measure the child’s receptive language proficiency. Children are shown a flip chart with four pictures on each page, then given instructions to point to a particular picture. For example, “Point to ball.” The starting point of assessment is determined by the child’s age, and the number of items completed depends on the child’s performance. The mean score on the PPVT is 100, with a standard deviation of 15. Internal consistency of the measure ranges from $r = .92$ to $r = .98$ (Dunn & Dunn).

Test de Vocabulario en Imágenes Peabody: Adaptación Hispanoamericana. The Test de Vocabulario en Imágenes Peabody: Adaptacion Hispanoamericana (TVIP) is the Spanish
adaptation of the PPVT – Revised (Dunn, Padilla, Lugo, & Dunn, 1986). It was administered to Spanish speaking target children in Pre-Kindergarten. The TVIP assesses receptive language proficiency in Spanish by using the same procedures as the PPVT. Standardized mean scores were developed for Mexican and Puerto Rican children, as well as a composite standardized score which was developed using a combination of both Mexican and Puerto Rican children. The authors of the TVIP argue that because the test measures the same concepts in the same way as the PPVT, the TVIP has strong concurrent validity with PPVT. Therefore, the validity research findings from the PPVT should hold true for the TVIP as well. For purposes of this study, standard scores of both the PPVT and TVIP will be utilized. It is important to note that the decision to give each target child the PPVT or TVIP was made based on parent reports of the child’s strongest language. However, there were times when a child started the PPVT assessment, but upon realizing the struggles of the child, the assessor switched to the TVIP, or vice versa.

Classroom language. The Teacher Information Questionnaire was developed for the EHSRE study and used to ascertain the language(s) spoken in the classroom of the target child. Through this survey, the child’s primary teacher provided information about the language(s) typically spoken in the classroom. For the current study, classrooms were divided into two groups: those that spoke English only, and those that spoke both English and Spanish.

ECERS-R Total Score. The Early Childhood Environment Rating Scale – Revised (ECERS-R; Cryer, Harms, & Riley, 2005) was administered when the target child was in Pre-Kindergarten. It is an observation tool designed to measure the environmental quality in early childhood classrooms. The measure is comprised of seven subscales, each looks at a
different aspect of the environment: space and furnishings, personal care routines, language-reasoning, activities, interaction, program structure, and parents and staff. According to the ECERS-R manual (Harms et al., 2005) because the ECERS-R is based on the same “conceptual framework” as the ECERS, it too has the same, well-established validity as the ECERS. For purposes of this study, only the ECERS-R total score will be used, which is a summation of the scores from each of the seven categories. Higher scores indicate greater environmental quality.

Analyses

First, t-tests were run to assess differences in primary language groups, classroom language groups, and sex groups on the measures of classroom conduct, social skills, and teacher-child relationship quality. Based on the results of these analyses, a two-way ANOVA was run to examine whether or not there was an interaction effect between primary language and sex on classroom conduct, social skills, and teacher-child relationship quality ratings. Finally, an ANCOVA was run to determine if the classroom quality (ECERS-R) and receptive language (PPVT/TVIP) scores could account for some of the variance in the primary language groups on the measures of classroom conduct, social skills, and teacher-child relationship quality.
Results

Primary language t-test

Statistically significant differences were found between the primary language groups on the measure of total classroom conduct, indicating that on average, children whose primary language was English received a significantly higher total classroom conduct score than children whose primary language was Spanish (see Tables 3 & 4). This shows that teachers rated children whose primary language was English as exhibiting more frequent or severe negative behaviors than children whose primary language was Spanish.

Statistically significant differences were also found between the primary language groups on the measure of total positive relationship, indicating that on average, children whose primary language was English scored lower on the total positive teacher-child relationship score than children whose primary language was Spanish (see Tables 3 & 4). This implies that overall, children whose primary language was English had less closeness, more conflict, and more dependency in their teacher-child relationship than children whose primary language was Spanish.

Classroom Language

There were no statistically significant differences between classroom language groups on the classroom conduct measure, social skills measure, or the teacher-child relationship quality measures (see Table 4). Because of these results, analyses on the interaction effects of classroom language with primary language and gender were not conducted.

Sex
Statistically significant differences were found between the child sex groups on classroom conduct, social skills, and positive teacher-child relationship. On average, males received statistically significant higher classroom conduct scores than females, indicating that males exhibit more frequent or severe negative behaviors than females. Significant sex differences were also found in regard to the overall social skills ratings. On average, males received lower ratings on the social skills measure, indicating that they exhibited a lower frequency of positive behaviors than females. Finally, in regard to teacher-child relationship quality, it was found that on average, males received statistically significant lower total positive relationship scores (see Tables 3 & 4), implying that their relationships with the teacher consisted of less closeness, more conflict, and more dependency than females.

Two-way Analysis of Variance (ANOVA) between primary language and sex

Because previous research shows there are sex differences (Blankemeyer et al., 2002; Doctoroff et al., 2006) as well as primary language differences (Dawson & Williams, 2008; Dinh et al., 2002; Espinosa, 2008; Tabors, 2008; Vega et al., 1995) on measures of social skill development and teacher-child relationship quality, a two-way ANOVA was run to determine whether or not there was an interaction effect between primary language and

Table 3.
Mean Scores by Primary Language, Classroom Language, & Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>BPS Total CC</th>
<th>CCB Social Skills</th>
<th>STRS Total Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child’s Primary Language</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>5.54</td>
<td>17.38</td>
<td>112.77</td>
</tr>
<tr>
<td>Spanish</td>
<td>4.35</td>
<td>17.70</td>
<td>117.16</td>
</tr>
<tr>
<td>Classroom Language</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>5.51</td>
<td>17.38</td>
<td>113.28</td>
</tr>
<tr>
<td>English &amp; Spanish</td>
<td>4.92</td>
<td>17.68</td>
<td>114.45</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>4.10</td>
<td>18.46</td>
<td>115.74</td>
</tr>
<tr>
<td>Male</td>
<td>6.58</td>
<td>16.40</td>
<td>111.18</td>
</tr>
</tbody>
</table>
Table 4.  
*T-Test Results*

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPS Total Classroom Conduct</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child’s Primary Language</td>
<td>1023</td>
<td>2.84</td>
<td>.005</td>
</tr>
<tr>
<td>Classroom Language</td>
<td>918</td>
<td>1.76</td>
<td>.079</td>
</tr>
<tr>
<td>Sex</td>
<td>998.36</td>
<td>-8.46</td>
<td>.000</td>
</tr>
<tr>
<td>CCB Social Skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child’s Primary Language</td>
<td>1023</td>
<td>-0.867</td>
<td>.386</td>
</tr>
<tr>
<td>Classroom Language</td>
<td>917</td>
<td>-1.02</td>
<td>.309</td>
</tr>
<tr>
<td>Sex</td>
<td>992.86</td>
<td>7.91</td>
<td>.000</td>
</tr>
<tr>
<td>STRS Total Positive Relationship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child’s Primary Language</td>
<td>1026</td>
<td>-3.75</td>
<td>.000</td>
</tr>
<tr>
<td>Classroom Language</td>
<td>920</td>
<td>-1.27</td>
<td>.206</td>
</tr>
<tr>
<td>Sex</td>
<td>1000.47</td>
<td>5.42</td>
<td>.000</td>
</tr>
</tbody>
</table>

sex on the measures of classroom conduct, social skills, and teacher-child relationship quality. Although research also shows differences in social skill development and teacher-child relationship quality due to classroom language differences (Chang et al., 2007), the interaction effects of classroom language with primary language and/or sex were not analyzed in the current study because significant classroom language differences were not yielded in the t-test analyses (see Table 4).

Main effect results confirmed the findings of the t-tests, revealing significant main effect differences in primary language groups on the measures of total classroom conduct and total positive relationship, but not on the social skills rating. However, only a small amount of the variance of the total classroom conduct and total positive relationship scores can be accounted for by the primary language differences. Similarly, there were significant main effect differences in sex groups on the measures of total classroom conduct, social skills rating, and total positive relationship. Nearly 4.5% of the variance in the total classroom conduct score can be accounted for by sex of the child. Approximately 3.6% of the variance
in the social skills score and 1.6% of the variance of the total positive relationship score can be accounted for by sex of the child (see Table 5).

Table 5.
Two-Way Analysis of Variance

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>F</th>
<th>η</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPS Total Classroom Conduct</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scores</td>
<td>1</td>
<td>11.06</td>
<td>.011</td>
<td>.001</td>
</tr>
<tr>
<td>Child’s Primary Language</td>
<td>1</td>
<td>.94</td>
<td>.001</td>
<td>.333</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>47.52</td>
<td>.045</td>
<td>.000</td>
</tr>
<tr>
<td>Language x Sex</td>
<td>1</td>
<td>.94</td>
<td>.001</td>
<td>.333</td>
</tr>
<tr>
<td>Error</td>
<td>1020</td>
<td>(21.81)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| CCB Social Skills             |      |       |     |     |
| Child’s Primary Language      | 1    | 1.53  | .001| .216|
| Sex                           | 1    | 38.48 | .036| .000|
| Language x Sex                | 1    | .46   | .000| .500|
| Error                         | 1020 | (17.39)|     |     |

| STRS Total Positive Relationship |      |       |     |     |
| Child’s Primary Language      | 1    | 16.03 | .015| .000|
| Sex                           | 1    | 16.66 | .016| .000|
| Language x Sex                | 1    | .003  | .000| .955|
| Error                         | 1023 | (179.67) |     |     |

Analysis of Covariance (ANCOVA)

Previous research suggests that classroom quality (Howes et al., 2008; Mashburn et al., 2008; Peisner-Feinberg et al., 2001) and language ability (Dinh et al., 2002; McCabe & Meller, 2004; Tabors, 2008) affect the social skill development and teacher-child relationship quality of children. Based on these findings, an ANCOVA was run to determine if the classroom quality (ECERS-R) and receptive language (PPVT/TVIP) scores could account for some of the variance in the primary language groups on the measures of classroom conduct and teacher-child relationship quality. The social skills measure was not included because previous tests revealed there was no significant difference in primary language groups on this measure, and therefore, there was no need to determine the effects of covariates. Preliminary correlations were run to determine the direction of the relationships among ECERS-R scores,
PPVT/TVIP scores, and the dependent variables. Results showed that both ECERS-R and PPVT/TVIP scores were positively related to total positive relationship scores and negatively related to classroom conduct scores. This indicates that higher quality classrooms and greater receptive language abilities are related to more favorable outcomes on the classroom conduct and teacher-child relationship measures. However, it is important to note that the relationship between ECERS-R scores and classroom conduct was not statistically significant (see Table 6).

Table 6. *Correlations between Covariates with Outcome Variables*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>BPS Total CC</th>
<th>STRS Total Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptive Language</td>
<td>-0.11**</td>
<td>0.09**</td>
</tr>
<tr>
<td>ECERS-R Score</td>
<td>-0.06</td>
<td>0.12**</td>
</tr>
</tbody>
</table>

**p < .01, two tailed.

Results of the ANCOVA revealed that receptive language scores, ECERS-R scores, and primary language scores all accounted for a statistically significant portion of the variance in both the total classroom conduct and total positive relationship scores. Receptive language scores accounted for the largest portion of variance in the total classroom conduct scores at nearly 2%. Receptive language scores, ECERS-R scores, and primary language scores contributed approximately equally to the variance in total positive relationship scores, each accounting for just over 1% of the total variance (see Table 7). These models show that while the covariates of receptive language and classroom quality scores account for some of the variance in total classroom conduct and total positive relationship scores, primary language scores still account for a statistically significant portion of the variance in these outcome variables.
### Table 7.
**Analysis of Covariance**

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>df</th>
<th>$F$</th>
<th>$\eta$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BPS Total Classroom Conduct</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receptive Language</td>
<td>1</td>
<td>16.52</td>
<td>.019</td>
<td>.000</td>
</tr>
<tr>
<td>ECERS-R Score</td>
<td>1</td>
<td>4.19</td>
<td>.005</td>
<td>.041</td>
</tr>
<tr>
<td>Child’s Primary Language</td>
<td>1</td>
<td>7.36</td>
<td>.009</td>
<td>.007</td>
</tr>
<tr>
<td>Error</td>
<td>832</td>
<td></td>
<td>(22.97)</td>
<td></td>
</tr>
<tr>
<td><strong>STRS Total Positive Relationship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receptive Language</td>
<td>1</td>
<td>11.37</td>
<td>.013</td>
<td>.001</td>
</tr>
<tr>
<td>ECERS-R Score</td>
<td>1</td>
<td>9.90</td>
<td>.012</td>
<td>.002</td>
</tr>
<tr>
<td>Child’s Primary Language</td>
<td>1</td>
<td>12.61</td>
<td>.015</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>835</td>
<td></td>
<td>(178.68)</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 5. SUMMARY AND DISCUSSION

Discussion

This study focused on the classroom conduct, social skills, and teacher-child relationship quality (as rated by their teachers) differences between preschool students from English speaking homes and preschool students from Spanish speaking homes. Results of preliminary analyses revealed several interesting findings. First, children whose primary language was Spanish were rated by teachers as exhibiting less frequent and less severe negative behaviors than their peers whose primary language was English. Although several studies have shown a relationship between the language conflicts of English learners and problem behaviors, these studies have included samples taken from school age children (Dawson & Williams, 2008; Dinh et al., 2002; Vega et al., 1995). Perhaps being an English learner has different social implications at the preschool age, where all children are still mastering the English language, than it does at the school age, where most children are proficient English speakers.

Second, teachers rated the overall quality of their relationships with students whose primary language was Spanish as more positive than their relationships with students whose primary language was English. Results of this study may be unique in that only children from homes where English or Spanish was the primary language were included. Also, the racial composition of both groups was varied; the sample used in this study included more African American children (229) than Hispanic children (171). Previous studies have shown that children of color tend to have lower quality teacher-child relationships (Hughes et al., 2005; Murray et al., 2008). Perhaps the large number of African American children from English speaking homes affected the teacher-child relationship ratings. This study does not take into
account the ethnic background of the children in the sample. However, as previous research has shown, this can have an effect on teacher-child relationship ratings. Future studies should examine whether or not the ethnic background of the child can account for the differences found in primary language groups.

It is also possible that teachers rated Spanish speakers higher in these areas due to the language acquisition stage of the child. As mentioned above, English learners are sequential learners; they start with their primary language at birth and are introduced to and learn English at a later point in time. Sequential learners go through a nonverbal period in which they are communicating through nonverbal interactions, while also observing and learning from English speaking peers and teachers (Espinosa 2008; Tabors, 2008). If the Spanish speaking children were in the nonverbal period at the time this study was conducted, it is possible that their higher classroom conduct and teacher-child relationship quality scores of Spanish speaking students reflect their language acquisition stage behaviors of limited verbal interactions and frequent observations. Perhaps the teachers saw these children as having better classroom conduct skills because they did not yell or talk loudly, they did not interrupt, and they likely did not get into fights with other children; they simply observed. Although these behaviors may be the reason teachers rated the Spanish speaking students more favorably, this does not reflect the fact that these children are missing out on social interactions because their English abilities are limited.

Another possible reason for these differences could be due to parenting style differences. Previous studies of the parenting practice differences between Hispanic and Anglo-American parents have revealed that Hispanic parents tend to incorporate more discipline and authoritative parenting practices than their Anglo-American counterparts
(Cardona, Nicholson, & Fox, 2000; Varela, Vernberg, Sanchez-Sosa et al., 2004). As a result of these different parenting practices, children may behave differently in their preschool classrooms, which could account for the different ratings in the current study.

Third, there were no significant differences in the areas of classroom conduct, social skills, or teacher-child relationship quality ratings between the two classroom language groups (English only or English and Spanish). These results contradict the findings of Chang and colleagues (2007), who indicated that having a Spanish speaking aide in the classroom has several positive benefits for Spanish-speaking students, including greater teacher-child closeness, greater student assertiveness, and more positive student social skills. In the current study, teachers were asked what language(s) they use in the classroom. There was no indication of how often each language was used, nor did teachers indicate their proficiency in each language. Therefore, there is likely a lot of variation in how much Spanish was used in the classrooms where both English and Spanish were spoken. This variation could contribute to the lack of significant findings.

Fourth, boys were rated more poorly than girls on all measures, including classroom conduct, social skills, and teacher-child relationship quality. However, these ratings were not dependent on the primary language of the child. Previous studies have shown that the relationship between literacy skills and social behaviors may vary by sex (Doctoroff et al., 2006), and that there are differences in teacher-child relationship quality based on sex (Blankemeyer et al., 2002). The results of the current study provide supporting evidence for sex differences in social skills and teacher-child relationship quality. However, because there was no interaction between sex and primary language, these results do not provide insight
into the differences in social development between English speaking preschoolers and English learner preschoolers.

Finally, classroom quality (ECERS-R) and receptive language (PPVT/TVIP) scores accounted for some of the variance in the primary language groups on the measures of classroom conduct and teacher-child relationship quality. This is consistent with previous findings, which assert that classroom quality (Howes et al., 2008; Peisner-Feinberg et al., 2001; Mashburn et al., 2008) and child language ability (Dinh et al., 2002; McCabe & Meller, 2004; Tabors, 2008) affect social skill development and teacher-child relationships. However, even after the effects of these covariates had been removed, primary language still accounted for a statistically significant amount of variance in both variables, indicating that primary language plays a significant role in both the classroom conduct behaviors of children and the quality of the teacher-child relationship. This supports the findings of Sakai, Whitebook, Wishard, and Howes (2003), which assert that when assessing the quality of cultural sensitivity in a preschool classroom, it may be best to supplement the ECERS-R with another cultural assessment because the ECERS-R does not take into account linguistics in the classroom.

Limitations

When interpreting the results of this study, it is important to keep in mind the large sample size of 1,034 children. Because the sample size was so considerable, statistically significant results were often yielded. For instance, although statistically significant differences were found between primary language groups on the measures of classroom conduct and teacher-child relationship quality, these differences were minimal. Spanish speaking students scored an average of 1.19 points lower (out of 28 points) on the classroom
conduct measure than English speaking students, and an average of 4.39 points higher (on a scale ranging from 28 to 140 points) on the total positive relationship measure than English speaking students. These point differences are minimal when compared to the amount of possible points on the scale. This is further illustrated by the primary language main effect results of the two-way ANOVA, which indicated that although primary languages group differences were statistically significant, these differences only accounted for 1.1% of the variance in total classroom conduct scores and 1.5% of the variance in total positive relationship scores.

Similarly, the statistically significant differences found between sex groups were also minimal. Females scored 2.48 points lower (out of 28 points) on the classroom conduct measure than males, 2.06 points higher (out of 24 points) on the social skills measure than males, and 4.56 points higher (on a scale ranging from 28 to 140 points) on the total positive teacher-child relationship measure than males, all of which indicate that females were rated more positively than males. However, these point differences are again minimal when compared to the amount of possible points available on the scale. As the two-way ANOVA results revealed, sex differences accounted for only 4.5% of the variance in total classroom conduct scores, 3.6% of the variance in social skills scores, and 1.6% of the variance in total positive relationship scores.

Finally, results of the ANCOVA revealed that classroom quality (ECERS-R) and receptive language (PPVT/TVIP) scores accounted for some of the variance in the primary language groups on the measures of classroom conduct and teacher-child relationship quality. However, the amount of variance accounted for by these variables was minimal. Classroom quality scores accounted for only .5% of the variance in the total classroom conduct scores
and 1.2% of the variance in the total positive relationship scores. Receptive language scores accounted for only 1.9% of the variance in total classroom conduct scores and 1.3% of the variance in total positive relationship scores. These findings were likely significant even though they accounted for a small portion of the variance due to the large sample size.

**Implications**

The results in this study emphasize the need to further investigate the social development of English learners. Findings that Spanish speaking preschoolers scored higher than English speaking preschoolers on the measures of classroom conduct and teacher-child relationship quality contradict previous findings that assert the opposite is true for school age children (Dawson & Williams, 2008; Dinh et al., 2002; Vega et al., 1995). There is a great need to further the factors that contribute to social development differences between this population and English speakers. This is especially important as the number of English learners in classrooms across the United States is on the rise (National Task Force on Early Childhood Education for Hispanics, 2007; Ramirez & Cruz, 2003; United States Census Bureau, 2000), yet teachers do not feel adequately prepared to meet the needs of this population (National Center for Education Statistics, 2002).

The role of classroom language also needs to be further investigated, as findings from this study contradict those of Chang and colleagues (2007), which indicated that having a Spanish speaking aide in the classroom led to more favorable outcomes for Spanish speaking students. It is possible that the results of the current study did not yield significant differences in child outcomes based on the classroom language because the frequency and/or proficiency of second language usage were not assessed. Future research should further investigate the role of using a second language in the classroom of English learners to ascertain the benefits
to all students, particularly English learners, as well as the necessary frequency and proficiency of second language usage needed to achieve these benefits for children.

Finally, the study emphasizes the importance of classroom quality and language ability, regardless of the primary language of the child. Results indicate that preschool teachers and professionals need to maintain high levels of classroom quality to encourage positive social interactions and high quality teacher-child relationships. Also, it is important to support the language development of all children, regardless of which language they speak, as it will encourage and facilitate their social interactions with peers and teachers. However, as the results stress, these variables are only a small piece of the puzzle in understanding the social development of preschool children, and more research on English learners is necessary to fully understand and facilitate their social development.
BIBLIOGRAPHY


