LOW-INCOME LATINO PRESCHOOLER'S LEARNING OF ENGLISH AS A FUNCTION OF CHILD FIRST LANGUAGE PROFICIENCY, CLOSENESS WITH ADULTS, AND TEACHER DOMINANT LANGUAGE

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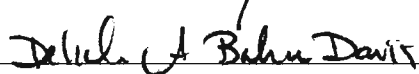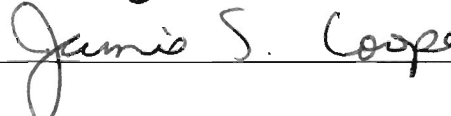George Mason University
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Low-income Latino preschooler's learning of English as a function of child first language
proficiency, closeness with adults, and teacher dominant language

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ABSTRACT

LOW-INCOME LATINO PRESCHOOLER'S LEARNING OF ENGLISH AS A FUNCTION OF CHILD FIRST LANGUAGE PROFICIENCY, CLOSENESS WITH ADULTS, AND TEACHER DOMINANT LANGUAGE

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Speaking more than one language is an important skill in today's global society but

becoming fully bilingual can be difficult for low-income, English language learners

(ELL) while making their transition to school. Previous literature has focused on how

bilingual children perform better than monolinguals on a variety of cognitive tasks, and

on constructing different types of bilingual education programs but not on environmental

or socio-emotional factors that help predict second language (L2) acquisition. In this

study, data from 3,530 four-year-old preschoolers from the Miami School Readiness

Project were used to show how environmental and individual factors predict development

of childhood L2 acquisition. Repeated- measures ANOVAs revealed that there were no

significant differences in the growth of English in preschool between the groups of

English-speaking children and Spanish-speaking children who had either a predominantly

English- or Spanish-speaking teacher. However, a year later ELLs who had an English-

speaking preschool teacher were more advanced in English than those with a predominantly Spanish-speaking teacher. Regression analyses showed that children's first language (L1; Spanish) competence measured in preschool significantly predicted their L2 (English) proficiency later in kindergarten. Also, closeness with adults positively predicted L2 (English) proficiency both within the preschool years and in kindergarten. Finally, teacher's dominant language was the strongest predictor of L2 (English) proficiency although child gender, closeness with adults, children's first language were also related to English proficiency. Overall, it was found that strengthening children's first language, being closer to adults, and having an English-speaking preschool teacher helps ELL children become proficient in L2 (English).

Low-income Latino preschooler's learning of English as a function of child's first

language proficiency, teacher's dominant language, and closeness with adults

Introduction

According to the U.S. Census Bureau (2000), nearly one-in-five Americans speak a

foreign language at home other than English, and 55% of the people who speak a

language other than English report that they speak English "very well." People who speak

more than one language are increasing in the U.S. population and thus, the number of

publications with "Bilingualism" as a keyword has increased exponentially through the

last twenty years (Bialystok, 2007) which indicates growing interest by researchers in

understanding second language acquisition.

"Bilingualism is more than double monolingualism." (Grosjean, 1985, p. 471).

Bilingual children are not only superior in language-related performance compared to

monolingual children (Bialystok, 1988), but also show higher accomplishment in diverse

cognitive tests which are not related to language. There have been various studies which

examine advanced cognitive performance among second language-speaking children

(Bialystok & Senman, 2004; Cummins, 1979; Goetz, 2003; Kan & Konert, 2005; Service

& Craik, 1993). Previous comparisons of monolingual and bilingual children on various

cognitive tasks such as picture identification (Kan & Konert, 2005), and appearance -

reality tasks (Bialystok & Senman, 2004; Goetz, 2003) have shown that bilingual children perform better than monolinguals.

Also, metacognition, such as inhibitory control or flexibility in taking other people's perspectives, is higher in bilingual children (Goetz, 2003). When children are put in an ambiguous situation, since bilingual children are used to the situation when they have to distinguish which language to speak to different people, they develop inhibitory control earlier than monolingual children (Bialystok & Senman; 2004). Cummins (1999) maintains that "… the continued development of academic proficiency in bilingual's two languages is associated with enhanced metalinguistic, academic and cognitive functioning." (p.279)

Considering the benefits of being a bilingual and how the U.S. is a rich place for bilingual education with a large proportion of immigrants from non-English speaking countries, conducting more studies on children who speak more than one language and are getting bilingual education should be natural and easier than in other countries. Since the prohibition of discrimination based on race, Title 4 of the U.S. Civil Rights Act of 1964, bilingual education has been offered (McEachron & Bhatti, 2005). However, it is important to understand the factors which lead to successful second language (L2) acquisition.

In the direction of investigating various factors that relate to L2 acquisition, it is crucial to examine as many aspects as possible. However, the three most relevant and important people in children's L2 acquisition are the child her/himself, teachers, and parents. Throughout this study, influences on children's L2 acquisition will be considered

in terms of children's first language (L1) competence, teacher's dominant language, and closeness with adults.

Child's L1 influence on L2

Various individual factors have been studied regarding the learning of English as a second language. Gender (Andreou, Vlachos, & Andreou, 2005; Fung, 2006), willingness to communicate and low anxiety (Segalowitz, 1997), musical ability (Sleve & Miyake, 2006), and phonological memory (Service, 1992; Service & Kohonen, 1995) are elements that have been associated with second language acquisition. Children with better phonological memory, which is a good remembrance of phonological sounds, show better L2 learning among second language learners (Service & Kohonen, 1995).

Additionally, gender differences in language acquisition are often found in previous studies (Dodd, Holm, Hua, & Crosbie, 2003; Ladegaard & Bleses, 2003) and it is generally stated that girls function better in learning languages than boys. However, consistent results are found in the field of second language acquisition as well. Fifteen-year-old Hong Kong female students performed better in their L2 (English) achievement test than same-aged male students (Fung, 2006). In another study, gender difference in verbal fluency in foreign language was examined among undergraduate students (Andreou et al., 2005). Participants were tested on their semantic, syntactic, and phonological ability in their foreign language. Consistent with existing studies, females outperformed males in the test. Possible gender differences in second language acquisition will be explored within a younger population in the current thesis.

Even musical ability takes account for some individual differences in second

language learning (Sleve & Miyake, 2006). Participants in their study were native speakers of Japanese who have lived in the U.S. for a variety of years and reasons. Phonology, syntax, lexical knowledge, language history, nonverbal intelligence, and musical ability were assessed and with other factors controlled, musical ability predicted phonology. These results suggest that musical ability may facilitate acquisition of L2 sound structure.

Components that are directly related to a second language acquisition have been listed so far. However, there are other factors that are related to first language development. For example, temperament is sometimes related to first language outcomes in infancy studies. Highly interactive children with their mother at 9 months have higher language skills when measured six months later compared to their counterparts (Fish & Pinkerman, 2003). Another study examining temperament during infancy argues that temperament is related to later language outcomes as well (Morales et al., 2000). Fifty two 6-and 12-month-old infants (50% male) were rated on their temperament by parents and their temperament (six subscales) was positively correlated with receptive vocabulary. Infants who were more likely to smile, have higher activity levels, and have longer durations of orienting had greater receptive language. It is clear that whatever the language is, a first or a second language, there are predictors associated with a successful outcome.

Along the lines of predicting language development, a child's first language itself can be one of the factors in successful L2 acquisition. Second language learning can either happen simultaneously with primary language acquisition or sequentially after

children have fully developed their first language (Bhatia & Ritchie, 1999). In the latter case, children's first language influences their second language acquisition. Second language learners sometimes use their L1 knowledge to learn L2 (Ordonez, Carlo, Snow, & McLaughlin, 2002).

For children who have already reached a certain level of first language literacy, those children are more likely to feel comfortable learning a second language compared to children who are not at the same level of first language literacy fluency (Krashen, 1996; as cited in Lao, 2004). Novice L2 learners transfer the second language input information to their first language information for better or faster understanding. If L2 learner's first language is fluent enough, they will take less time in converting their L2 into the first language. Thus, children's first language fluency can be one of the factors in predicting L2 acquisition.

Other studies on children's L1 influencing L2 have been conducted (Ordonez et al., 2002; Verhoeven, 1994). Ninety-eight 6-year-old Turkish children living in the Netherlands with similar socioeconomic backgrounds in Verhoeven (1994) were studied in a longitudinal design. Children were assessed three times, at the start of Grade 1, end of Grade 1, and again at the start of Grade 2. Receptive and productive vocabulary tasks, sentence imitation tasks, and phoneme discrimination tasks were conducted both in Turkish and Dutch to measure lexical, grammatical, and phonological abilities of these children. It turns out that grammatical competence in L1 was not related to L2 development. However, phonological skills in L1 had a positive relationship with L2 development in these children. It seems like not every aspect of L1 proficiency predicts

L2 acquisition but some parts of L1 do influence L2 development (Verhoeven, 1994).

In another similar study, Ordonez and colleagues (2002) examined language performance among eighty eight 4th and 5th grade Spanish-English children. They wanted to know whether bilingual children's Spanish would be predictive for the equivalent task in English as well. He tested the children in both Spanish and English on their skills of defining nouns such as flowers, and their answers were recorded and transcribed. After the transcription, responses were coded from 0-5 according to the level of response in three dimensions such as knowledge of superordinate words (i.e. usage of higherlevel words) in English and Spanish, knowledge of definitions without good representatives (e.g. knife is a tool) word knowledge, and knowledge of definitions. It turned out that impact of Spanish superordinate word performance accounted for 21% of the variance in English superordinate word performance. Children transferred their first language to their second language and it was more frequent with superordinate levels of performance than lower levels of performance. Thus, in acquiring a second language, children's individual level of their first language influences L2 acquisition.

Just as children's L1 fluency has an impact on their second language acquisition, teacher's language may be influential in children's second language development. In the next section, teacher language related to children's L2 acquisition will be examined.

Teacher language influence on L2 acquisition

Bilingual education in the United States began in the 1960s when mass immigration of Cubans settled in South Florida. At first, it was started to help children learn English while maintaining Spanish, but soon after it grabbed attention of politicians and with the

Bilingual Education Act of 1968, it became a law in 1974. Since then, bilingual education has not been formalized and has different goals or programs in different states (McEachron & Bhatti, 2005). Due to enormous variation in bilingual education programs and goals, programs differ from state to state and classroom to classroom (Traub, 1999). Some teachers might focus on transition to English from children's first language but other teachers have eagerness to maintain children's first language and provide them with a genuine bilingual education (Traub, 1999). Among the various reasons that bilingual education programs differ is teacher bilingualism. It is easier to provide genuine bilingual education with bilingual teachers than with monolingual teachers.

When a non-native English-speaking child is talking to a native English-speaking teacher, the child tends to make more effort to speak in English rather than in his/her first language since the child distinguishes between what is English and what is not English (Garcia & Trillo, 2007). When five-year-old English learners were in a learning task situation with teachers, they made more effort to speak in English while interacting with native English-speaking teachers, compared to children who were not interacting with teachers (Garcia & Trillo, 2007). When the children had no interaction with teachers, they were more likely to speak in their first language either by themselves or with peers. Teacher interaction as well as teacher's language is important in encouraging children to use the newly learned language.

While encouraging novice learners to use L2 more frequently is important in becoming a bilingual, children tend to get frustrated when they cannot express themselves well enough in the new language. Shin and Kellogg (2007) compared

teacher's utterance lengths and grammatical errors between only English-speaking teachers and Korean-English bilingual teachers during a lower grade elementary English class. English-speaking teachers made more grammatical errors in Korean when they were talking to children compared to the Korean-English bilingual teachers. Shin and Kellogg (2007) also compared language usage of the children in the presence of different teachers (English-speaking vs Korean-English bilingual). Children used less Korean around English-speaking teachers but also used less English as well (Shin & Kellogg, 2007). It seems that learning a second language cannot be separated from teacher factors.

Likewise, cultural sharing and first language sharing with a child gives socio-emotional comfort in comprehending a second language. Ellis (2004) found that multilingual teachers, who have their own experience of learning a second language, might understand and empathize with their students' English learning. Emotional supports from teachers and feelings that cannot be empathized in the second language between teacher and a child can occur if the teacher shares a first language with a child and this might provide emotional comfort to motivate a child in learning a second language.

A teacher who is sharing L1 with a child might influence the child positively since the child might feel more comfortable around the teacher than a teacher who does not speak the same home language with a child (Ellis, 2004). Another benefit of having bilingual teachers is that they may use their metalinguistics to teach. Teachers can tell how one language's phonology, structure, and grammar might work in another language and they can also tell students more in detail or from the learners' perspective (Ellis,

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2004). Bilingual teachers have more language resources which come from their own experience.

However, subjects in Ellis' (2004) study were adult second language learners and Shin and Kellogg (2007) studied elementary students as participants. It is not clear whether the same phenomenon is applicable to preschoolers. Thus, this study is going to focus on whether teacher's language predicts L2 learning for younger populations as well. To what extent does preschool teacher's language affect children learning a new language? This is one of the questions to be considered.

Thus far, various predictors of second language acquisition have been investigated in terms of a teacher's language and a child's language. What is the role of parents in second language acquisition? In the next section, how attachment with parents might be related to acquiring a second language is going to be examined.

Parent-child attachment influence on L2 acquisition

It has been said that emotional support is an important factor when learning a second language regardless of the age of initial contact (Ellis, 2004). For example, from the previous section of the paper, teacher's language was important in the early stage of learning a second language (Ellis, 2004). Sharing the same background with the teacher or being the same ethnicity helps the learner be more comfortable in the L2 learning situation. However, Duursma and colleagues (2007) found that parents' language preference of the dominant society was a significant factor in children having greater vocabulary in L2, the language that the dominant society is speaking (Duursma et al., 2007). For example, if Spanish-speaking parents who immigrated to the U.S. prefer

English rather than Spanish, their child is more likely to acquire English than Spanish. However, it is not just a parents' preference of the language that is likely to determine a child's L2 acquisition. For children who spend more time at home with parents than with other caregivers, attachment or the relationship with parents might be one of the important predictors of later second language competence.

Parent-child attachment has been an important field of study for years. Emphasis lies not just on the mechanism of attachment itself but also on the extent to which it influences other developmental outcomes. Preschoolers who are securely attached to their parents are more responsive and expressive with their feelings than those who are less securely attached (Thompson, 2000). However, in terms of language, there are few studies which investigate the relationship between attachment and first language development (van IJzendoorn, Dijkstra, & Bus, 1995). In one of the very few studies that examined attachment and language, vocabulary differences among toddlers were found as a function of attachment style among monolingual populations (Meins, 1997). Meins (1997) found that securely attached children are more likely to acquire a high proportion of common nouns in their early stages of language development compared to those who are not securely attached. Given that there is a relationship between attachment and first language development, it seems acceptable to explore a link between parent-child attachment and second language acquisition. Further investigation on how attachment might influence later second language acquisition in the preschool years will be considered.

Gaps in the literature

Thus far, three major factors that might be related to a child's second language acquisition have been examined. A child's first language fluency, a teacher's sharing of the same language with a child, and attachment with parents were the three major factors. However, not all the factors and issues have been examined in the previous literatures. For example, studies on teaching methods, comparisons of teaching style differences, and program quality (Tagoilelagi-Leota, McNaughton, MacDonald, & Farry, 2005) in teaching English as a second language are abundant in the literature. However, there is less study regarding teacher-related factors that influence students' second language acquisition such as teacher's language and/or personality. This is especially important in second language development during early childhood since teacher-student relationships influence child learning outcomes (Baker, Grant, & Morlock, 2008).

The home environment, has not been taken into consideration much in second language studies. In early childhood second language acquisition, the relationship with parents is an essential factor since children spend most of their time with their parents. However, the literature does not tell us much about the relationship between parent-child attachment and second language development. Thus, this study will examine the relationship between attachment and second language acquisition.

The relationship between a child's first language fluency and second language acquisition has been examined in multiple ways. However, the participants in most of the studies are older, and not younger populations such as preschoolers and kindergarteners. Early periods are the most critical times for language development (Kuhl, Conboy, Padden, Nelson, & Pruitt, 2005). Examining the hypothesis that a child's first language

fluency influences her/his second language in the early years will fill gaps in the previous literature.

In this study, data from the Miami School Readiness Project (Winsler et al., in press) will be used. The Early Learning Coalition of Miami-Dade/Monroe County is required to assess the school readiness of low income 3-to 4-year old preschool children receiving childcare subsidies. The goal is to get children, especially for those children whose family is in poverty, to get ready for school. Since 2002, every year, about 8,000 to 10,000 3 to 4 year-old children in Miami/Dade County participated in this project and were assessed. Up until 2007, 5 different cohorts [a cohort every school year. ex. Cohort A is (2002 – 2003)] have been the participants of this study and now they are being followed upon through Kindergarten and even to Grades 1, 2, and 3. The data presented here are from Year 2 (2003 – 2004) from the Miami School Readiness Project which is Cohort B for 4-year-olds that year and their follow up data from Kindergarten.

It is a rich, and perhaps the largest, early childhood education longitudinal data set. This longitudinal study helps children find their weaknesses and strengths in getting ready for school. Due to the location of the region where the project is running, more than half of the population is Hispanic/Latino. Thus, this is a rich data set for topics such as immigrant issues and second language learning.

Children while in preschool were assessed twice a year, once in the beginning of the school year (fall-pre or Time 1) and once at the end of the school year (spring-post or Time 2). Children's and parents' demographics and background information were gathered as well as children's English language proficiency upon entry into Kindergarten.

The research questions that were addressed in this thesis were as follows.

1. For English Language Learners (ELLs), to what extent is kindergarten L2 (English) language performance predicted by L1 (Spanish) skills earlier in preschool?

2. For both ELLs and native English-speaking preschoolers, does growth in their L1 and L2 depend on their preschool teacher's dominant language?

3. For ELLs with a home language of Spanish, does English proficiency a year later in kindergarten depend on their preschool teacher's dominant language?

4. For ELLs, to what extent is preschool and kindergarten L2 (English) language performance predicted by closeness with adults in preschool?

5. For ELLs, to what extent is their L2 (English) in preschool and in kindergarten predicted by gender, L1 (Spanish), closeness with adults, and teacher's dominant language? Is the relationship between closeness with adults and L2 (English) different depending on gender? Is the relationship between teacher's dominant language and L2 (English) different depending on gender?

6. To what extent is children's L2 (English) proficiency in kindergarten related to L1 (either in English or Spanish) change over time from the beginning to the end of preschool year?

The following hypotheses will be tested throughout the study. First, a child who is more fluent in her/his first language will show greater skills in her/his second language. Second, a child who has a preschool teacher who shares a dominant language with a child will learn English faster compared to a child who has teacher who does not share their

dominant language. Third, children who are closer with their parents will acquire English faster compared to children who are not as close with their parents. And lastly, child's first language, child's first language change over time, teacher's dominant language, and closeness with adults will predict English proficiency above and beyond controlling for gender.

Method

Participants

This study involved participants from the Miami School Readiness Project and children who were included are a sub-sample of the project during the 2003-2004 academic year. The children in this larger project consist of the entire four-year-old population of children who reside in Miami-Dade county during the 2003-2004 academic year who were in public school pre-kindergarten programs, or subsidized childcare programs such as non-Head Start, center-based, family daycare, or informal care. However, in this study, the sample is those low-income children who attended center-based childcare through subsidies, and had at least some repeated measures (pre and post) assessment data during their 4-year-old preschool year.

Participants in this study consisted of 3,530 four-year-old preschoolers who attended center-based childcare at the time of pre (2003 fall) assessment. At pre-test, children were an average of 54 months of age, 51.2 % being male. Overall, the majority were Hispanic/Latino (59.6%) and Black/ African-American (32.5%) with an additional 7.5% being White, Asian/Pacific Islander or "other." Although all the children were low

income (*M* = \$16,200, *SD* = \$7,600), the Caucasian and Latino families (*M* = \$17,200,

SD = \$8,700 and *M* = \$16,500, *SD* = \$7,500 respectively) had slightly higher mean

annual incomes than Black families (*M* = \$15,000, *SD* = \$7,900).

Measures

Both assessments (LAP-D and DECA) were administered twice a year. PRE was the

fall (September and October) of 2003 which is the beginning of the academic year and

POST was the spring (April and May) of 2004 which is the end of the academic year.

Participants were four-years-old during that year. Both assessments were provided by the

assessors either in English or Spanish as will be discussed further below.

Cognitive, Language, and Fine Motor Skills. The Learning Accomplishment Profile-

Diagnostic (LAP-D; Nehring, Nehring, Bruni, & Randolph, 1992) was administered

individually to children in a separate room of the child's school. Bilingual assessors

arrived early in the day at a center and escorted children individually into another room

for the approximately hour-long assessment as long as the child was not currently eating

lunch or taking a nap. The assessor chose the language to use for assessment after asking

the teacher which was the child's strongest language. In cases where this was not clear,

the assessor made the language choice after talking with the child and establishing which

language was more comfortable for the child. Assessors used original hands-on

assessment materials for the task items with the child but entered the child's scores using

palm-pilot recording devices which were then later up-synched to the master database.

The subsidized care children at that center who were to be assessed that day were

downloaded into the palm pilot in advance and assessors followed a random order in the

case of multiple children within the same center whenever possible.

The LAP-D was selected by the participating community's multi-agency, early childhood assessment task force on the basis that (a) it corresponded well with the State's Early Learning Performance Standards (Florida Partnership for School Readiness, 2003), (b) it was a nationally standardized, norm-referenced instrument yet was designed with curriculum-based, authentic program assessment in mind (Nehring et al., 1992), (c) it was available in both English and Spanish, (d) it assessed the dimensions of interest to the community (cognitive, language, and motor skills), (e) technology was available for assisting with large-scale, electronic administration and reporting, and (f) it has been shown to have good internal consistency reliability within the norming sample (alphas of .76 to .92) and good content validity and construct validity (correlations ranging from .40 to .87 between the LAP-D and the Battelle Developmental Inventory (DBI; Newborg, Stock, Wnek, Guidubaldi, & Svinicki, 1984), Developmental Indicators for the Assessment of Learning – Revised (DIAL-R; Mardell-Czudnowski, & Goldenberg, 1983), and the Wechsler Preschool and Primary Scale of Intelligence – Revised (WPPSI-R; Wechsler, 1989). The LAP-D yields scale scores in four domains, each with two sub-scale scores. However, for the current study, only the language total score was used to look at either Spanish or English language skills.

Socio-Emotional Protective Factors and Behavior. Children's social-emotional strengths and behavior problems were measured with parent/guardian-report using the Devereux Early Childhood Assessment (DECA; LeBuffe & Naglieri, 1999). The DECA was designed to create a profile of children's social-emotional strengths or "protective

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factors" within a resilience framework (Werner & Smith, 1992). Parents' report on the frequency of children's behavior by rating them on items regarding closeness with adults. Parents/Guardians use a 5-point Likert-type scale to indicate how often within the past four weeks a child has exhibited behaviors described by the assessment items (0 = Never, 1 = Rarely, 2 = Occasionally, 3 = Frequently, and 4 = Very Frequently). Example closeness with adults subscale items include "respond positively to adult comforting when upset," "act happy or excited when parent/guardian returned," and "ask adults to play with or read to her/him."The closeness with adults scale, with bigger numbers indicating greater closeness with adults, is used in this study. The closeness with adults scale measures mutual, strong, and long-lasting relationship between a child and adults in general rather than a specific attachment bond between a child and parent.

Parents/Guardians received the forms in either English or Spanish (based on teacher knowledge of parental language or on direct parent preference when asked) upon picking up the child from the center and were asked to return the completed forms back with their child. Fifty-five percent of the parents completed the English form at pre-test and 45% of the parents completed the Spanish form.

Child Dominant Language in Preschool. Children's dominant language at age 4 was measured by the language in which the child was assessed on the LAP-D. Children's language was determined by informal teacher report and language that the assessor determined through observation at time of testing. About 51% of the children were assessed in English and 48.4% of the children, in Spanish at pre-test but 56.8% of the children were assessed in English and 43.2% in Spanish at post-test.

Child's Home Language. Children's home language was defined as the child's first language according to parents report upon registration for kindergarten. Children who spoke English at home consisted of 40.5% of the participants and 54.5% of the children spoke Spanish at home. The rest of the participants spoke a language other than English or Spanish at home. Most (91%) of the children who were assessed in Spanish on the LAP-D both at pre and post in preschool received the ESOL test in kindergarten which indicates that parents correctly reported home language other than English at home and that assessors chose the correct language for assessment. However, some (35%) children who were assessed in English on the LAP-D in preschool (because their English skills were strong enough) had parents who reported a home language other than English in kindergarten and thus took the ESOL test.

Teacher's Dominant Language in Preschool. Teacher's dominant language was determined by the language in which teachers chose to complete the DECA. At pre-test, about 50.1% of the teachers completed the assessment in English and 49.9% in Spanish. At post-test, about 56.9% of the teachers completed the assessment in English and 43.1% in Spanish. However, we are only selecting teachers who have filled out the assessments in a consistent language. We took only those who completed the DECA in English both at PRE and POST and those who completed it in Spanish both at pre-test and post-test. Teachers who were not consistent in their language choice for the DECA are not considered in this study.

Kindergarten Level of English Language Proficiency. In kindergarten, children whose first language is not English enroll in a program called English to Speakers of

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Other Languages (ESOL). Children who are reported by their parents at the registration of kindergarten to have a language other than English spoken at home receive the Oral Language Proficiency Scale-Revised (OLPS-R; Oral Language Proficiency Scale. ESOL Placement Interview Guidelines - Revised, 1978) upon entry into kindergarten. OLPS-R is a Miami-Dade county-created test which is used to assess English-language proficiency (Abella, Urrita, & Schneiderman, 2005). The test is found to be a reliable and valid measure of English-language proficiency for both the placement and classification for the ESOL program (Abella, 1997). Children are tested again at the end of the school year for placement for the following year. ESOL scores represent second language skills in English development by proficiency levels, a total of five. Level 1 is classified as a "beginner" who is put to at least 2 hours a day of ESOL instruction, Level 2 is "low intermediate" who is put into at least 1 hour a day of ESOL instruction, and Level 3 is "high intermediate" but not enough to proceed without any ESOL instruction. Level 4 is "advanced" and level 5 is "proficient" who no longer require bilingual instruction. When a student receives level 5, the student is considered a former English language learner and is no longer tested.

<div align="center">Results</div>

1. For English Language Learners (ELLs), to what extent is kindergarten L2 (English) language performance predicted by L1 (Spanish) skills earlier in preschool?

To answer this question, only children who were assessed in the LAP-D in Spanish at pre-test in preschool were included. A regression analysis was conducted with Spanish LAP-D language total score assessed at age 4 (pre-test) as the independent variable and ESOL level determined in kindergarten at the age of 5 as the dependent variable.

LAP-D language total score and ESOL level in kindergarten were normally distributed. Minor outliers were found for LAP-D language total score at pre but the outliers did not make a significant difference in the result. Thus, outliers were included in the analyses. Regression revealed that LAP-D language total score at pre accounted for 6% of the variance in ESOL level in kindergarten ($R^2 = .06$), which was significant, $F(1, 1092) = 66.723$, $p < .001$. LAP-D language total score at pre was significant, $\beta = .24$, $t_{(1092)} = 8.17$, $p < .001$, demonstrating a positive relation with ESOL level in kindergarten. A child who is more competent in L1 (Spanish) is more likely to be proficient in L2 (English) a year later. Overall, the hypothesis was supported; children's Spanish proficiency at preschool of age 4 is a predictor of their later English proficiency. That is, children who are more advanced in their first language at the beginning of preschool have a higher chance of getting proficient in their second language a year later when they are in kindergarten. A child who is not competent even with his/her own first language will have a higher chance of having difficulty in learning a second language.

2. For both ELLs and native English-speaking preschoolers, does growth in their L1 and L2 depend on their preschool teacher's dominant language?

Three separate repeated measures ANOVA were conducted in order to answer this question; L2 (English) growth for ELLs, L1 (Spanish) growth for ELLs, and L1 (English)

growth for native English-speaking children respectively, depending on their preschool

teacher's dominant language. Selection of participants differed in each sub-question as

well as independent and dependent variables even though analyses were the same.

L2 (English) growth for ELLs

First, in examining L2 (English) growth for ELLs depending on teacher's dominant

language, children whose reported home language by parents at the registration of

kindergarten is Spanish were selected. Also, only children who were assessed on the

LAP-D in English at both times (pre and post) were selected. Then, a repeated measures

ANOVA was conducted with time as the repeated measure and teacher's dominant

language (English/Spanish) as a between-subject factor, with LAP-D language total score

as the dependent variable. The two time points were PRE and POST which indicates Fall

2003 and Spring 2004 of children's preschool year respectively. Teacher's dominant

language was determined by the language teachers completed the DECA assessment.

Distributions were normal throughout the variables. There were several minor

outliers but they did not affect the analyses. The two groups were different in cell size,

DECA completed in English (N = 501) and DECA completed in Spanish (N = 30). Box's

test of equality of covariance matrices shows that there is not a difference between two

groups. The results were as follows.

There was a significant time effect for LAP-D language total scores, $F(1, 529) =$

$251.57, p < .001$. Regardless of group membership, post LAP-D language total score

(English) was better than pre LAP-D language total score (English) (see table 1).

However, no significant difference in LAP-D language total score (English) was found

between groups, F (1, 529) = .13, p > .05, and no significant interaction between time and teacher language groups, F (1, 529) = .72, p > .05. Thus, it did not matter in which teacher language group children were in, English language trajectories did not differ among the groups. It did not matter whether a child had a dominant English-speaking teacher or dominant Spanish-speaking teacher in improving English proficiency at age 4.

L1 (Spanish) growth for ELLs

Second, the same analysis as was done for the above was conducted for L1 (Spanish) growth for ELLs depending on teacher's dominant language except the selection of participants differed. L1 (Spanish) proficiency was examined rather than L2 (English). In this analysis, children whose reported home language by parents at the registration of kindergarten is Spanish were selected. Also, children who were assessed on the LAP-D in Spanish at both times (pre and post) were selected.

Distributions were normal throughout the variables. There were several outliers but they did not affect the analysis. The two groups were different in cell size, DECA completed by English teacher (N = 61) and DECA completed by Spanish teacher (N = 405). Box's test of equality of covariance matrices shows that there is not a difference between two groups.

There was a significant time effect for LAP-D language total scores, F (1, 464) = 301.37, p < .001. Regardless of group membership, post LAP-D language total scores (Spanish) were better than pre LAP-D language total scores (Spanish) (see table 1). However, no significant difference in LAP-D language total score (Spanish) was found between groups, F (1, 464) = .13, p > .05, and no significant interaction between time and

teacher language group was found, $F(1, 529) = .08$, $p > .05$. Thus, it did not matter in which teacher language group children were in, language (Spanish) trajectory did not differ among the groups. It did not matter whether a child had a dominant English-speaking teacher or dominant Spanish-speaking teacher for improving their L1 (Spanish) proficiency. Within the preschool year, teacher's dominant language by itself did not influence children's L1 development.

L1 (English) growth for native English-speakers

Lastly, to compare language growth for ELLs with native English-speaking children, the same analysis was conducted on L1 (English) growth for native English-speaking children depending on teacher's dominant language. In this analysis, children whose reported home language by parents at the registration of kindergarten is English were selected. Also, children who were assessed on the LAP-D in English at both times (pre and post) were selected as participants.

Distributions were normal throughout the variables. There were several minor outliers but they did not affect the analysis. The two groups were different in its cell size, DECA completed in English (N = 934) and DECA completed in Spanish (N = 34). Box's test of equality of covariance matrices showed that there was not a difference between two groups.

There was a significant time effect for LAP-D language total scores, $F(1, 966) = 263.59$, $p < .001$. Regardless of group membership, post LAP-D language total scores (English) were better than pre LAP-D language total scores (English) (see table 1). However, no significant difference in LAP-D language total score (English) was found

between groups, F (1, 966) = .05, p > .05, and no significant interaction between time and teacher language group was found, F (1, 966) = .37, p > .05. Thus, it did not matter in which teacher language group children were in, language (English) trajectory did not differ by group. It did not matter whether a native English-speaking child had a dominant English-speaking teacher or dominant Spanish-speaking teacher for improving in their English language skill.

In general, during the preschool year, teacher's dominant language did not matter in any language growth for any language-speaking group. Time was the only factor that was important in the growth of language competence either English or Spanish (see Table 1). Children's first language and also second language develop prominently from the beginning of the preschool to the end of the preschool regardless of teacher's dominant language.

3. For ELLs with a home language of Spanish, does English proficiency a year later in kindergarten depend on their preschool teacher's dominant language?

Although, teacher's dominant language did not have an effect on children's language competence in the preschool year, whether teacher's dominant language influences English a year later in kindergarten was examined for further investigation. In order to answer this question, children whose reported home language by parents at the registration of kindergarten is Spanish were selected. An independent t-test was conducted with teacher's dominant language (English/Spanish) as the independent variable and the dependent variable as a child's ESOL level in kindergarten.

Results showed that there was a significant difference between the two teacher dominant language groups, t(1513) = 14.71, *p < .001*, with ESOL level being higher for the dominant English-speaking teacher group (see table 2). That is, when 4-year-old children had a preschool teacher who spoke English dominantly, their English proficiency a year later in kindergarten is better than those who had a predominantly Spanish-speaking teacher in preschool. From the previous results, teacher's dominant language did not seem to matter in preschool but after a year, which teacher a child had in preschool seems to be important for English proficiency. This will be discussed more later in the discussion section.

4. For ELLs, to what extent is preschool and kindergarten L2 (English) language performance predicted by closeness with adults in preschool?

Preschool English proficiency

The hypothesis of children being more close to adults will be more proficient in L2 (English) was examined from two separate time points, that is, within preschool and kindergarten. To answer the question within preschool, children whose reported home language by parents at the registration of kindergarten is Spanish were selected. Also, children who were assessed on the LAP-D in English at pre in preschool were selected. Regression was conducted with closeness with adults score at age 4 (pre-test) as the independent variable and LAP-D language total score (English) assessed at age 4 (pre-test) as the dependent variable.

LAP-D language total score (English) at pre and parent/guardian-rated closeness with adults score at pre were normally distributed. Minor outliers were found for both

LAP-D language total score (English) at pre and closeness with adults score at pre but the outliers did not make a significant difference in the result. Thus, outliers were included in the analysis. Regression revealed that closeness with adults accounted only for 1% of the variance in LAP-D language total score (R^2 = .01), which was still significant, $F(1, 681)$ = 7.50, $p < .01$. Closeness with adults was significant, β = .10, $t_{(681)}$ = 2.74, $p < .01$, demonstrating a small positive relation with LAP-D language total score (English). Thus, a child who is closer with adults in preschool year will be more competent in learning L2 (English) compared to one who is not as close with adults.

Overall, the hypothesis was supported; children's closeness with adults indicated by their parents at preschool of age 4 is a predictor of concurrent English proficiency. That is, children who were closer with adults at the beginning of the preschool year have a higher chance of being proficient in their second language.

Kindergarten English proficiency

For the kindergarten time point, sample selection was different. Participants were the children whose reported home language by parents at the registration of kindergarten is other than English. The same regression was conducted with the same independent variable as the previous analysis, but this time, the dependent variable was ESOL level determined in kindergarten at the age of 5.

The same amount of variance was explained by parent- rated closeness with adults score in ESOL level in kindergarten compared to the amount explained with LAP-D language total score in preschool. Regression revealed that closeness with adults scores at pre accounted only for 1% of the variance in ESOL level in kindergarten (R^2 = .01),

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which was still significant, $F(1, 1765) = 19.02$, $p < .001$. Closeness with adults score at pre was significant, $\beta = .10$, $t_{(1765)} = 4.36$, $p < .001$, demonstrating a positive relation with ESOL level in kindergarten a year later. Again, being closer with adults benefited the child in language acquisition.

Overall, the hypothesis was supported in kindergarten as well; children's closeness with adults indicated by their parents at preschool at the of age 4 is a predictor of their later English proficiency in kindergarten. That is, children who are closer with adults at the beginning of their preschool year have a higher chance of getting proficient in their second language a year later in kindergarten. It seems like a tendency of being close with adults around the age of 4 have a stable influence on second language proficiency throughout the early childhood. Though preschool assessed closeness with adults significantly predicts kindergarten English proficiency, the variance explained was very small.

So far, the analyses done were examining the variables separately in predicting L2 (English) proficiency. However, more analyses were done to examine further how children's first language competence, teacher's dominant language, and closeness with adults combined predict L2 (English) proficiency.

5. For ELLs, to what extent is their L2 (English) in preschool and in kindergarten predicted by gender, L1 (Spanish), closeness with adults, and teacher's dominant language? Is the relationship between closeness with adults and L2 (English) different depending on gender? Is the relationship between teacher's dominant language and L2 (English) different depending on gender?

The upcoming three separate hierarchical multiple regression analyses were done to examine the combined influence of various variables introduced in this study. All three multiple regression analyses looked at gender alone in predicting L2 (English) proficiency as the first model. The next step included all the other variables together such as children's first language competence, teacher's dominant language, and closeness with adults but controlling for gender. The last step looked at the interactions among these variables controlling for the main effect.

Preschool L2 (English) competence

Children whose reported home language by parents at the registration of kindergarten is Spanish was selected. Also, children whose LAP-D language was assessed in English at pre were selected. And the multiple regression model was conducted with gender, parent/guardian-rated closeness with adults score at pre, and teacher's dominant language at pre as independent variables and LAP-D language total score (L2) at pre as the dependent variable. The variables were entered in three different steps, gender first, and teacher's dominant language at pre, closeness with adults score at pre second, and interaction of gender and closeness with adults score and gender and teacher's dominant language third.

Regression analysis revealed that gender alone explained 1% of the variance in LAP-D language total score (English), ($R^2 = .01$), $F (1, 678) = 6.75$, $p < .05$. Child's gender was significant, $\beta = .10$, $t_{(678)} = 2.60$, $p < .05$ (see table 3 model A), having a positive effect on LAP-D language total score (English). Girls were better than boys as consistent with existing literature. However, when the closeness with adults and teacher's dominant

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language variables were added in the next step, 3.3% more variance, for a total of 4.3% including gender was explained in LAP-D language total score (English), ($R^2 = .033$), $F(3, 676) = 10.04$, $p < .001$. All the variables entered in the second model (see table 3 model B) were significant, gender, $\beta = .10$, $t_{(676)} = 2.75$, $p < .01$, closeness with adults, $\beta = .10$, $t_{(676)} = 2.66$, $p < .01$, and teacher's dominant language, $\beta = -.16$, $t_{(676)} = -4.12$, $p < .001$ (see table 3 model B). None of the interactions were significant so model B is the best model that will be interpreted.

Overall, part of the hypothesis was supported; among Spanish-speaking 4-year-old children, English competence within the preschool year is predicted by gender, closeness with adults, and teacher's dominant language together. Note that teacher's dominant language alone was not associated with children's L2 (English) competence within the preschool year in the earlier repeated-measures ANOVA analysis when no other variables were included. In the multiple regression,when teacher's dominant language is considered together with gender and closeness with adults, teacher's dominant language is important. Thus, children who had a predominantly English-speaking teacher had better English competence compared to those who had predominantly Spanish-speaking teacher in preschool.

Gender did not moderate the relationship between children's English competence and teacher's dominant language nor children's English competence and closeness with adults. When interactions were entered, except for closeness with adults being marginally significant, $F(5, 674) = 6.09$, $p < .001$, $\beta = -.22$, $t_{(674)} = -1.76$, $p < .10$, no other variables significantly predicted LAP-D language total score (English).

Kindergarten L2 (English) proficiency

The same multiple regression analysis was conducted with ESOL level in kindergarten as the dependent variable. Children whose reported home language by parents at the registration of kindergarten was Spanish were selected. Results were that gender alone did not explain variance in ESOL level in kindergarten significantly (see table 4, model A). Unlike during preschool, whether a child is a boy or a girl was not important for L2 (English) proficiency in kindergarten. The result is contrary from the existing literature. When closeness with adults and teacher language variables were added in the next step, 13% of the variance was explained in ESOL level in Kindergarten, (R^2 = .13), $F(3, 1344) = 64.18$, $p < .001$. The variables entered in the next step except gender were significant, closeness with adults, $\beta = .08$, $t_{(1344)} = 3.13$, $p < .01$, and teacher language, $\beta = -.34$, $t_{(676)} = -13.45$, $p < .001$ (see table 4, model B). When gender is controlled, a large amount of variance is explained with teacher's dominant language and closeness with adults. Note that each of the variables did not explain as much amount when predicted separately. However, none of the interactions were significant on the next step when main effects were controlled for, but teacher's dominant language alone was significant, $\beta = -.25$, $t_{(1342)} = -3.09$, $p < .01$ (see table 4, model C). So, again, model B will be the main model interpreted.

Overall, part of the hypothesis was supported; among Spanish-speaking 4-year-old children, English competence a year later in kindergarten is predicted by closeness with adults and teacher's dominant language. The closer a child is to adults, the more proficient in English a child will be. Gender did not moderate the relationship between

children's English competence and teacher's dominant language nor children's English competence and closeness with adults. When teacher's dominant language in preschool is combined with other factors, it becomes the most important factor in later English proficiency.

Predicting Kindergarten L2 with L1

The same analysis as above was conducted except that children's first language was added as another variable in the second step this time. Participant selection was similar. Children whose reported home language by parents at the registration of kindergarten is Spanish were selected adding another criterion of children whose LAP-D language total was assessed in Spanish at pre. Likewise, the same multiple regression was conducted with gender, LAP-D language total score (Spanish) at pre, closeness with adults, and teacher's dominant language at pre as the independent variables and ESOL level (L2) in kindergarten as the dependent variable.

Results were that again, gender alone did not explain the variance in ESOL level in kindergarten significantly. It seems like gender influences only the language acquisition in preschool years. However, when closeness with adults, teacher's dominant language, and LAP-D language total score (Spanish) variables were added in the next step, 10% of the variance was explained in ESOL level in kindergarten, $(R^2 = .10)$, $F(4, 582) = 16.53$, $p < .001$ (see table 5, model B). When children's gender was controlled, all the other variables explained some amount of L2 (English) proficiency in kindergarten together. Although the amount the variables explain together is 10%, only two variables in model B were significant (see table 5), LAP-D language total score (Spanish), $\beta = .23$, $t_{(582)} =$

5.88, $p < .001$, and teacher's dominant language, $\beta = -.20$, $t_{(582)} = -5.17$, $p < .001$. LAP-D

language total score (Spanish) explains ESOL level in kindergarten above and beyond

child's gender along with teacher's dominant language. None of the interactions were

significant on the last model (see table 5, model C) but LAP-D language total score

(Spanish) was marginally significant, $\beta = -.27$, $t_{(579)} = .27$, $p < .10$.

Overall, part of the hypothesis was supported; among predominantly Spanish-

speaking 4-year-old children, English competence a year later in kindergarten is predicted

by teacher's dominant language and LAP-D language total score (Spanish). Thus,

children's first language is an important factor in explaining second language proficiency.

Gender did not moderate the relationship between children's English competence and

teacher's dominant language nor children's English competence and closeness with adults.

From the above analyses, gender did not play a role except in preschool L2 (English)

competence. Children's gender did not moderate any relationships, either. However,

teacher's dominant language was significant throughout the analyses. And since

children's first language was significant, in the next set of analyses, further investigation

of child's first language was examined. Instead of looking at only one time point or

growth of child's first language, the influence of a change score of LAP-D language (pre

and post) at age 4 on L2 (English) proficiency was examined.

6. To what extent is children's L2 (English) proficiency in kindergarten related to

L1 (either in English or Spanish) change over time from beginning to the end of

the preschool year?

The same multiple regression analyses as in research question 5 were conducted

with three different selections of participants. The independent variables entered were the same, gender being the first, closeness with adults, teacher's dominant language, and change score of LAP-D language were the second, and the interactions were entered the last. The dependent variable was ESOL level in kindergarten. Detailed participant selection is explained in each section below.

Regardless of child's dominant language

There was no specific selection of the participants in this analysis. The goal was to predict children's language growth regardless of their dominant language. See table 6 for details. Results were that gender alone did not explain variance in ESOL level in kindergarten significantly. However, when closeness with adults, teacher's dominant language, and change score of LAP-D language total from pre to post (either English or Spanish) variables were added in the next step, 16% of the variance was explained in ESOL level in kindergarten, $(R^2 = .16)$, $F(4, 1071) = 51.29$, $p < .001$ (see table 6, model B). Model B explained the most variance in ESOL level in kindergarten. However, note that change score in LAP-D language was not significant in model B. Of the variables entered in the last step, only one variable and one interaction were significant, teacher's dominant language, $\beta = -.23$, $t_{(1068)} = -2.38$, $p < .05$. There was a significant interaction between change score of LAP-D language and teacher's dominant language, $\beta = -.20$, $t_{(1068)} = -2.03$, $p < .05$. Although the interaction was significant, the relationship was not interpretable. When teacher's dominant language is English was selected, correlations between change score of LAP-D language and ESOL level was not significant, (r = .04). Also, when teacher's dominant language is Spanish was selected, correlations between

change score of LAP-D language and ESOL level was not significant, (r = -.06). Thus, even though the interaction was significant in the model, the correlations were not significant, making the interaction hard to interpret.

Overall, regardless of children's preschool dominant language, their English competence a year later in kindergarten is predicted by teacher's dominant language and closeness with adults. If a child has an English-speaking teacher and is closer with adults in preschool, the child is more likely to be proficient in English a year later in kindergarten. Results are consistent with research question 5, where only ELLs were selected. However, since change score in LAP-D language did not predict ESOL level in kindergarten, the same analyses were conducted again differentiating children's dominant language.

PredominantlyEnglish-speaking children

Children who were assessed in English on LAP-D language both at two time points (pre and post) were selected in the analysis. Results were similar as when the study did not select specific participants regarding their language. Children's gender alone did not explain the variance in ESOL level in Kindergarten significantly and only 4% of the variance was explained in ESOL level in kindergarten with model B (see table 7), (R^2 = .04), $F(4, 535) = 4.93$, $p < .01$. Only closeness with adults was significantly predicting ESOL level in model B, $\beta = .18$, $t_{(535)} = 4.33$, $p < .001$. Change score in LAP-D language (English) was still not significant. For the third model, with interactions, none of the variables were significant.

Overall, even though the second and third model were significant, individual

variables did not contribute much to the model except, closeness with adults in the second model. When gender, change score of LAP-D language (English), closeness with adults, and teacher's dominant language are predicting ESOL level in kindergarten all together, only closeness with adults predicts the ESOL level in kindergarten. For predominantly English-speaking children, teacher's dominant language or their change score of English language competence in preschool did not matter for ESOL level in kindergarten. However, closeness with adults was important in children's English language development. Although the variance closeness with adults was explaining in English proficiency was weak (4%), it is important to note that the only significant variable was closeness with adults.

Predominantly Spanish-speaking children

Children who were assessed in Spanish on LAP-D language both at two time points (pre and post) were selected in the analysis. Results were interesting. Change score in LAP-D language was still not significant. However, compared to English-speaking children above, teacher's dominant language was the only significant variable.

Children's gender alone did not explain the variance in ESOL level in kindergarten significantly as in other analyses. However, when closeness with adults, teacher's dominant language, and change score of LAP-D language (Spanish) variables were added in the next step, 4% of the variance was explained in ESOL level in kindergarten, (R^2 = .04), $F(4, 372) = 3.67$, $p < .01$ (see table 8, model B). Only teacher's dominant language at preschool was significantly predicting ESOL level, $\beta = -.17$, $t_{(372)} = -3.32$, $p < .01$. It is interesting to see that the same amount of variance is explained in ESOL level

but a different variable is important in a different population (predominantly English-speaking children vs predominantly Spanish-speaking children). For the third model, with interactions, none of the variables were significant.

Overall, even though the second and third models were all significant, individual variables did not contribute much to the model except, teacher's dominant language in the second model. When gender, change score of LAP-D language, closeness with adults, and teacher's dominant language were predicting ESOL level in kindergarten all together, it was only teacher's dominant language that was significant. For predominantly Spanish-speaking children, having English-speaking teacher at preschool helps them develop more competence in English one year later in kindergarten.

The goal of research question 6 was to see whether change scores in children's first language help predict English proficiency in kindergarten. Results revealed that one time point LAP-D language accounted for more variance than change scores of LAP-D language in explaining variance in ESOL level. Thus, in predicting English proficiency in kindergarten, first language competence measured at one time point was more important than change scores.

Overall, child's first language competence was important along with closeness with adults in predicting L2 (English) proficiency at any time points. Preschool teacher's dominant language only affected kindergarten L2 (English) proficiency. However, when teacher's dominant language was predicting L2 with other variables, teacher's dominant language was the most influencing factor above and beyond gender. Gender was found to be not important in English language acquisition.

Discussion

The primary goal of the current study was to describe predictors of young English language learners' English proficiency including children's first language proficiency (Spanish), closeness with adults, and preschool teacher's dominant language. In general, results show that having strong competence in Spanish, being close with adults, and having a predominantly English-speaking teacher can be a benefit in learning English.

Participants in current study were 4-year-old low-income Spanish-speaking children in Miami. However, considering that the majority of previous studies on bilingual children have not measured socioeconomic status (SES) of their participants (Bialystok, 1999), and knowing that the differences in bilingual and monolingual children's cognitive ability might derive from different SES (Noble, Norman, & Farah, 2005), it is important to focus on specific SES populations when studying bilingualism. Considering that the majority of the previous studies have tended to focus on advantaged children rather than disadvantaged children, understanding the specificlow-income ELL population is imminent. Concentrating studies especially on low-income children who are not as advantaged as compared to high-income children will benefit low-income populations even more. Findings in this study will be more valuable for those children who are less advantaged and linguistically challenged.

For low-income Spanish-speaking preschool children, their Spanish (L1) competence in preschool was an important factor for them to be proficient in English (L2). The result of this study was consistent with the existing literature that for ELLs, their strong first language ability helps them learn English better (Ordonezet al., 2002;

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Verhoeven, 1994). However, most previous studies were conducted with at least elementary school populations or older children. Since the subjects of the current study are 4-year-old, low-income Spanish-speaking children, the current study widens the range of application of first language skill influencing second language skill to the preschool population. Thus, developing and concentrating on L1 competence before being concerned about learning L2 may help children later excel in L2 acquisition.

The study showed that strengthening children's first language is a shortcut to improving English rather than just focusing only on learning English since children's second language proficiency is closely related to their first language competency. However, it would be hard for the low-income children to be proficient in both languages with limited resources. The challenge for them is how to make the best outcome through what they already have. Thus, for this specific low-income, Spanish-speaking population, perhaps a different approach is needed than for children from other populations.

Another important factor explored was preschool teacher's dominant language. The result was interesting that within the preschool years, which language was the preferred language of the teacher did not predict children's English proficiency. However, a year later when preschoolers went to kindergarten, the preferred language of their teacher when they were in preschool mattered. Children who had predominantly English-speaking teachers in preschool performed better on English proficiency exams in kindergarten compared to those who had predominantly Spanish-speaking teachers.

It seems like at the entry of preschool, they are not affected by teachers much but spending time in preschool for a year, and by the entry of Kindergarten, the effect of

preschool teacher language seems to be an important factor in English acquisition. The other reason that teacher's dominant language did not appear to matter within the preschool years might be that the dependent variable was measured differently from preschool to kindergarten. In this study, during preschool, measurement was more a general assessment of language competency which was either in English or Spanish, but in kindergarten, the measure actually was an assessment of specifically oral English proficiency. If the two measurements had been performed the same way, the results could have been different.

There were issues related to assessment. To be assessed in English on the LAP-D meant that children were already strong in English. Teachers or assessors decided on the language in which children will be assessed through examining the children's stronger language. Thus, choosing children who are already proficient in English might have contributed to the results and limited those analyses to only children who were farther along in their attainment of bilingualism. Also, it is unclear how a bilingual child's Spanish responses when being assessed in English on the LAP-D were counted. It is possible the children received credit for Spanish responses when they were being assessed in English. . The fact that the native English speaking children and the ELL children who were assessed in English on the LAPD had the same means on LAP-D total language skills (see Table 1) shows that ELL children who were assessed in English indeed were as good as native speakers of English.   Also of note from Table 1 is that ELLs assessed in Spanish scored lower on overall language skills than ELLs who were

assessed in English on the LAPD. Such a result puts into question the validity of the Spanish LAPD administration.

Another reason for the difference could be the difference between preschool and kindergarten school systems. Kindergarten teachers might care about language development more or value English proficiency more and might encourage children to be better at English. To conclude, the effect of teacher's dominant language in preschool does not show immediately but influence children's later English proficiency.

The current study's findings is not consistent with Ellis (2004). In the beginning of learning a foreign language phase, it was thought that if children had teachers who had the same background as them, they would feel more comfortable in learning their L2 and learn L2 more. However, the current study shows that when children are learning English, having an English-speaking teacher helps children be more proficient in English in the end. Ellis (2004) found that sharing the same background with the teacher helps children learn the second language better. However, the result in this study shows that children's English proficiency is better when they had an English-dominant teacher. The difference might derive from different participants. Ellis (2004) had undergraduate students as participants but the current study had 4-year-old preschool children as participants. Sharing the same background might help children socio-emotionally but not linguistically for low-income Spanish-speaking preschool children. Further study is needed in narrowing the gap between existing research and the current study.

Another study shows that children develop better social skills and build closer teacher-child relationships when teachers spoke some Spanish (Chang et al., 2007).

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However, teacher's dominant language and the actual language teachers speak to children are likely different in these data which leads to different conclusions. Teacher's dominant language was decided based only on the language in which the DECA was completed. It may be teacher's dominant language but also, it may not be the actual language the teacher speaks in classroom. Considering the fact that various languages are spoken in classrooms by children, the language a teacher usually speaks to children might differ from the teacher's dominant language.

However, teacher's language only matters to children whose native language is not English. Only for children who were assessed in Spanish on the LAP-D did teacher's language matter in kindergarten. Thus, when children's native language is not English, exposure to English language is an important factor in improving English proficiency whereas for native English-speaking children, their English does not improve as a function of teacher's language, but more likely relies on other factors. Thus, related to the above, it is important to note that for native English-speaking children, having a teacher whose predominant language is not English did not interfere with their English language development.

Closeness with adults was a critical factor in predicting English proficiency, both within the preschool years and in kindergarten. Closeness with adults only explains about 1% of the variance of English proficiency but it was still a statistically significant amount of explanation. Closeness with adults was positively correlated with English proficiency within preschool, ($r = .10$), and within kindergarten, ($r = .10$). Previous research has made an effort to make links between second language acquisition and socio-emotional factors.

From earlier studies, it was found that when students share the same cultural or linguistic background with the teacher, they tend to feel more comfortable around the teacher and learn a new language better (Ellis, 2004). Seeing that anxiety is the main emotion involved in learning and using the second language (Pavlenko, 2006), being closer with adults (in this case, teachers at preschool and parents), may help children who do not share the same background as teachers benefit in acquiring English.

For children who were already somewhat proficient in English in preschool, being closer with adults was an important factor in becoming proficient in English in kindergarten. However, in all the other cases, teacher's dominant language was more important in explaining English proficiency than being closer with adults. One of the reasons can be that once a child is already proficient in the dominant language that the society speaks (English), teacher's dominant language is no longer a factor which explains English proficiency. It is crucial to note that for children who have already reached a certain level of English proficiency, teacher's dominant language is not as influential as being close to adults but for the early stages of bilingualism, teacher's dominant language was more important than being close with adults.

Finding the relationship between a socio-emotional factor and second language acquisition is new and meaningful in the field. The relationship between socio-emotional outcomes and second language acquisition has not been explored as much as the relationship between cognitive abilities and bilingualism. In the existing literature, cognitive aspects of second language acquisition have been emphasized (Bialystok, 1999; Bialystok & Senman, 2004). However, for preschool ELLs who are experiencing an

extraordinary situation compared to native English-speaking children, taking into consideration socio-emotional competence and outcomes is important. For example, shy and inhibited children might have a harder time in learning English not because they lack the ability to learn English compared to other children but because of their shyness. Since being closer with adults predicts L2 outcome, inhibited or shy children might have a more difficult time learning a new language than outgoing children if they don't reach out to adults, especially at a transition point such as school entry. Teachers might have to pay closer attention to shy ELL children in the classroom to help them open up more easily to the teachers. Cognitive ability and socio-emotional ability is intertwined in learning a second language.

It seems like that the factors examined in this study, children's first language, teacher's dominant language, and closeness with adults, are important in learning English when considered separate. However, they become more influential when they explain English acquisition together as a whole. When gender is controlled, more variance in English acquisition is explained from children's first language, teacher's dominant language, and closeness with adults. One of the reasons might be that girls are generally better in second language acquisition and also closer with adults than boys, making distributions of boys in different teacher language groups not equal when gender, closeness with adults, and teacher's dominant language is considered all together. Also, because of the nature of the neighborhood, if a child speaks predominantly Spanish, he/she is more likely to have predominantly Spanish-speaking teacher. Conclusions can

be made that individual factors are important but what's more important is to integrate the factors all together.

To summarize, children's first language, teacher's dominant language, and closeness with adults were found to be factors in predicting English proficiency in early childhood. The current study was a small step toward contributing to the field of bilingualism. Further limitations will be discussed in the next section.

Limitations

Due to limited information and pre-collected data, some constructs that the current study was trying to capture were not precisely measured. For example, teacher's dominant language was decided upon based on the language in which they completed the DECA. There was no information on how much the teachers actually spoke English or Spanish in classrooms or in which language the teacher used for teacher-child interactions. Also, it is possible that the teaching assistant, not the main teacher, might have completed the DECA just because the teaching assistant knows the child better or speaks the same language. In other words, the data are rich in its outcomes but do not give much of process. There is abundant information on socio-emotional assessment (DECA), cognitive and language assessment (LAP-D), and English proficiency at the entry of kindergarten. However, classroom dynamics are omitted in the data set as well as the interactions between teacher and children.

There was also a limitation of selecting the appropriate subjects for each analysis. The reason the current study conducted many of the analyses separately was that because the sample size decreases significantly when adding each criterion. The restriction is in

line with the above-mentioned limitation of pre-collected data. Also, the language of assessment was confounded with child's first language. It would have been better and is suggested for future research that all the children be assessed in both languages (English and Spanish) with one assessment.

With an increasing population of immigrants (DHS Office of Immigration Statistics, 2008), it is essential to understand the best ways for children from culturally and linguistically diverse backgrounds to help their adjustment and learning of English. One way to facilitate the adjustment is to strengthen the society's dominant language, which is English, in the U.S. With the majority of immigrants coming from Spanish-speaking countries (U.S. Census Bureau, 2007), the current study may contribute to our understanding of how best to facilitate the development outcomes of this growing population.

Table 1. Growth in language as a function of teacher's dominant language (preschool)

	LAP-D language total score at pre	LAP-D language total score at post
	Mean (SD)	Mean (SD)
L2 (English) growth for ELLs		
Teacher language (English)	33.04 (7.64)	42.05 (6.86)
Teacher language (Spanish)	33.04 (6.65)	42.03 (4.55)
L1 (Spanish) growth for ELLs		
Teacher language (English)	28.90 (6.93)	39.00 (7.24)
Teacher language (Spanish)	29.33 (7.11)	38.10 (7.52)
L1 (English) growth for native English-speakers		
Teacher language (English)	34.23 (8.22)	43.10 (6.92)
Teacher language (Spanish)	34.26 (6.82)	42.50 (6.56)

Table 2. L2 (English) differences in kindergarten by preschool teacher language group

	Mean (SD)
Teacher language (English) (N = 944)	4.04 (.96)
Teacher language (Spanish) (N = 571)	3.20 (1.23)

Table 3. Multiple regression predicting preschool L2 (English) competence

			LAP-D language total score at pre		
	F change	R^2 change	β	SE	t
Model A	6.75	.01			
Gender[1]			.01**	.56	2.60
Model B	11.57	.03			
Gender[1]			.10**	.55	2.75
Closeness with Adults			.10**	.07	2.66
Teacher Language[2]			-.16***	.81	-4.12
Model C	.21	.00			
Gender[1]			.15	4.35	.50
Closeness with Adults			.15	.24	1.20
Teacher Language[2]			-.22	2.63	-1.76
Gender * Closeness with Adults			-.12	.15	-.40
Gender * Teacher Language			.09	1.62	.53

***P < .001, **p<.01

1) 1 = Male, 2 = Female

2) 1 = English dominant teacher, 2 = Spanish dominant teacher

Table 4. Multiple regression predicting kindergarten L2 (English) proficiency

	F change	R^2 change	β	SE	t
		ESOL level in Kindergarten			
Model A	2.22	.00			
Gender[1]			.04	.06	1.49
Model B	95.00	.12			
Gender[1]			.04	.06	1.44
Closeness with Adults			.08**	.01	3.13
Teacher Language[2]			-.34***	.06	-13.45
Model C	1.13	.00			
Gender[1]			-.01	.43	-.07
Closeness with Adults			.02	.02	.24
Teacher Language[2]			-.25**	.20	-3.09
Gender * Closeness with Adults			.16	.02	.81
Gender * Teacher Language			-.14	.12	-1.27

***P < .001, **p<.01

1) 1 = Male, 2 = Female

2) 1 = English dominant teacher, 2 = Spanish dominant teacher

Table 5. Multiple regression predicting kindergarten L2 (English) with L1 (Spanish) included

	F change	R^2 change	β	SE	t
		ESOL level in Kindergarten			
Model A	.01	.00			
Gender[1]			-.00	.10	-.08
Model B	22.04	.10			
Gender[1]			-.02	.10	-.44
Closeness with Adults			.04	.01	1.00
Teacher Language[2]			-.20***	.11	-5.17
L1 competence (Spanish)			.23***	.01	5.88
Model C	.34	.10			
Gender			.01	.74	.03
Closeness with Adults			.00	.04	.02
Teacher Language[2]			-.12	.33	-.96
L1 competence (Spanish)			.23***	.01	5.87
Gender * Closeness with Adults			.10	.02	.33
Gender * Teacher Language			-.15	.22	-.74

***P < .001, **p<.01

1) 1 = Male, 2 = Female

2) 1 = English dominant teacher, 2 = Spanish dominant teacher

Table 6. L2 (English) prediction regardless of children's dominant language

		ESOL level in Kindergarten			
	F change	R^2 change	β	SE	t
Model A	.70	.00			
Gender[1]			.03	.70	.83
Model B	68.11	.16			
Gender[1]			.02	.06	.68
Closeness with Adults			.11***	.01	3.95
Teacher Language[2]			-.39***	.07	-13.86
LAP-D change score (pre-post)			-.04	.01	-1.31
Model C	1.70	.00			
Gender[1]			.14	.46	.71
Closeness with Adults			.13	.03	1.45
Teacher Language			-.23*	.23	-2.38
LAP-D change score (pre-post)			.14	.02	1.52
Gender * Closeness with Adults			-.05	.02	-.22
Gender * Teacher Language			-.12	.13	-1.04
Teacher Language * LAP-D change score (pre-post)			-.20*	.01	-2.03

***P < .001, **p<.01, *p<.05

1) 1 = Male, 2 = Female

2) 1 = English dominant teacher, 2 = Spanish dominant teacher

Table 7. L1 (English) prediction among predominant English-speakers

	F change	R2 change	β	SE	T
			ESOL level in Kindergarten		
Model A	.68	.00			
Gender[1]			.04	.07	.82
Model B	6.34	.03			
Gender[1]			.04	.07	.90
Closeness with Adults			.18***	.01	4.33
Teacher Language[2]			.01	.17	.29
LAP-D change score (pre-post)			-.01	.01	-.27
Model C	.89	.01			
Gender[1]			-.05	.59	-.14
Closeness with Adults			.18	.03	1.32
Teacher Language[2]			-.13	.60	-.89
LAP-D change score (pre-post)			-.34	.03	-1.60
Gender * Closeness with Adults			.00	.02	.01
Gender * Teacher Language			.10	.34	.39
Teacher Language * LAP-D change score (pre-post)			.35	.03	1.58

***P < .001, **p<.01, *p<.05

1) 1 = Male, 2 = Female

2) 1 = English dominant teacher, 2 = Spanish dominant teacher

Table 8. L2 (English) prediction among predominant Spanish-speakers

	ESOL level in Kindergarten				
	F change	R2 change	β	SE	T
Model A	.01	.00			
Gender[1]			-.01	.13	-.12
Model B	4.89	.04			
Gender[1]			-.02	.13	-.29
Closeness with Adults			.07	.02	1.46
Teacher Language[2]			-.17**	.18	-3.32
LAP-D change score (pre-post)			.07	.01	-1.42
Model C	.71	.01			
Gender[1]			.29	1.09	.65
Closeness with Adults			.16	.05	1.00
Teacher Language[2]			-.02	.63	-.12
LAP-D change score (pre-post)			.33	.05	1.06
Gender * Closeness with Adults			-.21	.03	-.55
Gender * Teacher Language			-.13	.37	-.41
Teacher Language * LAP-D change score (pre-post)			-.41	.02	-1.32

***P < .001, **p<.01, *p<.05

1) 1 = Male, 2 = Female

2) 1 = English dominant teacher, 2 = Spanish dominant teacher

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CURRICULUM VITAE

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