

THE ROLE OF SIBLING ORDER IN THE LANGUAGE USE PATTERNS,
PRACTICES, AND IDEOLOGIES AMONG SECOND-GENERATION LATINO
CHILDREN IN NEW JERSEY

by

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ABSTRACT OF THE DISSERTATION

The role of sibling order in the language use patterns, practices, and ideologies among
second-generation Latino children in new jersey

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Although there are a burgeoning number of studies on second-generation immigrants in the U.S., research examining the effects of birth order on language use patterns and the expression of ideologies has been largely neglected. A small but growing number of studies has begun to examine the critical role siblings play in the language patterns of bilingual children (e.g., Bridges and Hoff, 2014; Kheirkah and Cekaite, 2018; King, 2013; Shin, 2002), which suggests that older siblings play a significant role in the language practices of younger family members, such that first-born children bring home English through homework, peer networks, and media. To my knowledge, however, no study has simultaneously addressed the linguistic and language socialization perspectives of bilingualism in the family, nor examined the expression of ideologies among U.S. Spanish-English bilingual sibling pairs. In this study, I combined insights gained from language socialization and child language development studies within the larger field of sociolinguistics, examining the individual and family factors involved in Spanish-language maintenance in six sibling pairs. More specifically, the project uses qualitative and quantitative approaches to answer the following research questions:

1. How do children's reported age of initial exposure to English and their reported

- linguistic proficiencies in Spanish compare between older and younger siblings?
2. How do older and younger siblings compare in their knowledge of expressive vocabulary and morphosyntax in Spanish and English?
 3. What are the siblings' Spanish-language use patterns as captured in their oral narratives? More specifically:
 - What is the distribution of verbal tense, mood, and aspect (TMA) morphology in older and younger siblings' Spanish narratives?
 - What relationship exists between sibling order and use of Spanish linguistic-features (e.g., gender article agreement) in oral narratives in Spanish?
 - What relationship exists between sibling order and use of English lexical insertions in children's oral narratives in Spanish?
 4. What is the nature of siblings' language ideologies?
 5. What are the siblings' observed and reported language practices within the home and school domain?

The study was conducted using mother and child interviews, ethnographically-informed observations in the home and school domain, and English-Spanish language assessments. In short, the study revealed differences between older and younger siblings' language use patterns, as captured by their reported proficiencies in Spanish and language assessments. The findings further revealed that all younger siblings were exposed to English at an earlier age than their older brother or sister. Furthermore, in the production task, statistical differences were found between older and younger siblings' use of Spanish-linguistic features, such as gender article agreement and verbal morphology, and their use of English lexical insertions in Spanish narratives. Qualitatively, these diverse language

patterns were instantiated in the ways focal siblings viewed and used language in the Otter Creek community. Mother and child interviews, audio-recorded interactions, as well as ethnographically-informed observations, revealed younger siblings' overall preference for using English. These data also documented explanatory factors in describing the siblings' language choices, such as their social and family networks. These networks and ideological predispositions toward the heritage language played a key role in the siblings' agentive choices when using their languages in school, attesting to significant resources for language maintenance, which went undetected and even unappreciated by the school's language education policy. The findings contribute to a deeper understanding of language maintenance and shift, showing how these siblings' agency and ideological orientations toward the heritage were reflected in their comparatively unequal amounts of exposure and, concomitantly, their language patterns in Spanish in one purposefully selected community in New Jersey.

Keywords: language policy, language socialization, child bilingualism, heritage language maintenance

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Chapter I. Introduction

1.1 Background

According to the 2015 U.S. Census, the Hispanic¹ population constituted 17%, or 55 million, of the nation's population. Despite the continuing arrival of Spanish-speaking immigrants, however, work on language use among Latinos in the U.S. supports the position that a shift to English is taking place in Spanish-speaking communities (e.g., Bills, Chávez, and Hudson, 1995; Bills; Hudson, and Chávez, 1999; Hudson, Hernández, Chávez, and Bills, 1995; Wong Fillmore, 1991; Hakuta and D'Andrea, 1992; Hakimzadeh and Cohn 2007; Portes and Rumbaut, 2001; Potowski, 2004; Valdés, Fishman, Chávez, and Pérez, 2006). That is, language choice among U.S. Latinos outside the home domain consistently shifts toward English with increasing generational presence, as observed by Hakuta and D'Andrea (1992), Wong Fillmore (1991), among others.

The study of language maintenance and language shift has been extensively researched in numerous contexts around the world (e.g., Veltman, 1983; Portes and Hao, 1998; Tse, 2001; Canagarajah, 2008). At its most basic level, Fishman (1991) posited that language maintenance refers to the intergenerational transmission of a minority language from parents to children and the subsequent use of that language in society. Language shift, then, concerns the gradual curtailment of minority language use within a speech community, which is characterized by a majority-minority language dichotomy. Scholars have traditionally noted the unstable and transitional nature of bilingualism in minority language contexts, maintaining that the shift to monolingual English occurs within three generations (e.g., Grosjean, 1982; Veltman, 1983; Fishman, 1991). More recently,

¹ Hispanic and Latino are used interchangeably throughout.

however, researchers now argue that language shift is best understood as the collective outcome of individual decisions and practices within the family (e.g., Pease-Álvarez, 2002; King, 2013, Potowski, 2016). That is, a complexity of factors is involved at the individual, community, and societal-level, which cannot be easily accounted for by using the standard three-generational model. Language shift does not occur in a linear fashion. For instance, regarding Hispanic families in the U.S., Potowski (2016) posited that both societal and individual factors are crucial variables favoring the maintenance of Spanish. That is, language use in bilingual families is multifaceted and requires study of both the sociolinguistic and linguistic factors (e.g., Schecter and Bayley, 2002; Pearson, 2002, 2007). One must consider both the individual and social factors involved in language maintenance, such as the speaker's language exposure, identity, and ideologies toward speaking Spanish and English.

There are a number of studies on second-generation immigrants² in the U.S. that examine the macro and micro-level factors concerning language maintenance, ranging from the sociopolitical structures to the individual linguistic outcomes among bilingual children. To date, however, research at the meso-level, what Faist (2000) defines as family structures, kin relationships, and group memberships, has received little attention in the literature. With the exception of a few studies (e.g., Shin, 2002, Bridges and Hoff, 2014), research examining the effects of birth order on language use patterns, practices, and ideologies has been largely neglected and is sorely needed to better understand what factors lead to variability in bilingual outcomes. Thus, this study combined insights gained from language socialization and child language development studies within the

² This study follows Silva-Corvalán's (1994) definition, referring to those individuals who were born in the U.S. to immigrant parents or who were brought before the age of six

larger field of sociolinguistics, examining the individual and family factors involved in Spanish-language maintenance (e.g., King, Fogle, and Logan-Terry, 2008; Ochs and Schieffelin, 1984; Silva-Corvalán, 2014; Spolsky, 2004). More specifically, this study aimed to contribute to a deeper understanding of the processual aspects – that is, the systematic and dynamic changes - of language maintenance and shift by analyzing language use patterns, practices, and ideologies within sibling pairs from Mexican-descent families in one purposefully selected community in New Jersey (NJ).

1.2 The focus of this study

This section explains how the research questions for this study have emerged. With the development of the above research interests, this study was guided by the following research questions:

1. How do children's reported age of initial exposure to English and their reported linguistic proficiencies in Spanish compare between older and younger siblings?
2. How do older and younger siblings compare in their knowledge of expressive vocabulary and morphosyntax in Spanish and English?
3. What are siblings' Spanish-language use patterns as captured in their oral narratives? More specifically:
 - What is the distribution of verbal tense, mood, and aspect morphology (TMA) in older and younger siblings' Spanish narratives?
 - What relationship exists between sibling order and use of Spanish linguistic-features (e.g., gender article agreement) in oral narratives in Spanish?
 - What relationship exists between sibling order and use of English lexical

insertions in children's oral narratives in Spanish?

4. What is the nature of siblings' language ideologies?
5. What are the siblings' observed and reported language practices within the home and school domain?

1.3 Outline of the dissertation

The order of this dissertation is as follows. In Chapter II, several strands of research motivating this current study are reviewed. The chapter begins with an introduction of the case of Spanish in the U.S. that highlights research from three broad areas: linguistic outcomes related to Spanish-English bilingualism, expression of language ideologies, and language socialization practices in bilingual families. I then highlight the small but growing number of studies investigating the role of sibling order on language use patterns in bilingual families and address the gap in the literature.

Chapter III presents the design and methodological procedures of the study. First, I provide a detailed description of the local context in which the study took place. I then describe the criteria for participant selection and the focal families who participated in this study. I then explain the study's procedures how the data were gathered using mixed-methods and analyzed quantitatively and qualitatively, as well as my positionality as a researcher.

Chapter IV presents an examination of the linguistic features using a quantitative approach. First, I examine children's reported age of initial exposure to English (AoEE) and reported proficiencies in Spanish. Next, I present results from the EOWPVT-4: SBE expressive vocabulary and the BESA/BESA-ME morphosyntax subtests in Spanish and English. Finally, I describe siblings' Spanish narratives, as captured in the production

task elicited through Mayer's (1969, 1973, 1974) Frog Stories, through which I examine the use of verbal TMA and the use of other Spanish linguistic features (e.g., gender article agreement), and English lexical insertions.

Chapter V reports findings from the qualitative analyses, which addressed siblings' language ideologies and language practices. In this chapter, I first report on siblings' language ideologies, highlighting common themes among all children that were captured in the child interviews. Second, I provide an account of both observed and reported language practices within the home and school domain, examining the highly complex and diverse language ecologies in the siblings' sociolinguistic environments.

Chapter VI summarizes the major findings of the current study and answers each of the research questions on hand. Next, Chapter VII discusses these findings and describes how answering each of the research questions has triangulated this study's findings and illuminated the experiential and social factors involved in the sibling pair differences. This section is then followed by a discussion on the triangulated findings to reframe the debate on heritage language maintenance, as well as its implications for linguistic continuity in the Otter Creek community. The chapter concludes by discussing theoretical implications of the current study.

Finally, Chapter VIII discusses limitations of the study and proposes directions for future research.

Chapter II. Review of the literature

This chapter reviews several strands of research motivating the current study.

First, I summarize work on the linguistic outcomes of related to Spanish-English bilingualism among Latino children, focusing on the social and linguistic factors associated with child bilingualism. Next, I describe how the expression of language ideologies are crucial components to language maintenance in the U.S. and are illustrative of family language socialization practice. I ultimately highlight the few studies on the role of birth order in multilingual contexts.

2.1. Linguistic outcomes related to English-Spanish bilingualism

With regard to the linguistic effect of Spanish in contact with English, a prolific number of studies have also examined, through both qualitative and quantitative lenses, how age and sociolinguistic contexts in the U.S. have resulted in different linguistic outcomes for Spanish-English bilingual children (e.g., Austin, Blume, and Sánchez, 2013; Anderson, 1999; Bayley and Pease-Álvarez, 1997; Hakuta and D'Andrea, 1992, Zentella, 1997; Lipski, 1993; Montrul and Potowski, 2007; Montrul, 2008; Shin and Vanburen, 2016; Silva-Corvalán, 2014). Their work suggests that in a language contact situation, one language has an effect on another language, commonly described in the literature as cross-linguistic influence (e.g., Yip and Matthews, 2007). Debate prevails, however, on when and to what extent transfer occurs in bilingual children.

One important factor in determining cross-linguistic influence and the degree of proficiency in the second language (L2) is age of first exposure to each of a child's languages. According to an Austin, Blume, and Sánchez (2015), bilingual children generally fall into two linguistic dimensions: (1) simultaneous bilingualism, a situation in

which a child acquires both their languages from birth; or (2) sequential bilingualism, the case in which a child acquires their second language (L2) after birth, often the case in minority language situations. Considering the differences in language development, a multitude of studies agree that children acquiring an L2 after the age four already have some knowledge of their first language (L1), cross-linguistic transfer will occur between the children's languages (e.g., Austin, Blume, and Sánchez, 2015; Guasti, 2002; Snyder, 2007; De Groot, 2011). Thus, language environments have direct consequences on the linguistic outcomes of Spanish and English bilingual children in the U.S.

In the case of Spanish-speaking Latinos in the U.S., bilingual children may be exposed to different language input patterns within the home and community, which directly impact their knowledge and production of both Spanish and English.

(e.g., Anderson, 1999; Montrul, 2008). In a widely cited longitudinal study on Latino children in the U.S., Anderson (1999) argued that when bilingual children become more proficient in the dominant language, their linguistic skills in their L1 are affected. That is, Anderson (1999) claims that in language contact situations, particular linguistic features such as gender and number agreement may be vulnerable to L1 attrition. Anderson (1999) supports the general position that children's later age of acquisition and exposure to English will favor a stronger Spanish system, a finding also found in more recent studies by Montrul (2008), Bedore, Peña, Griffin, and Hixon (2016), among others.

Linguistic research on Spanish-speaking Latinos in the U.S. has also considered general measures to language proficiency and dominance, such as children's vocabulary knowledge (e.g., Duursma, Romero-Contreras, Szuber, Proctor, and Snow, 2007; Gamez and Levine, 2013), knowledge of morphosyntax (e.g., Bedore, Peña, Gillam, and Ho, 2010; Bedore et al., 2016), and narrative discourse skills (e.g., Fiestas and Peña, 2004;

Uccelli and Paéz, 2007) to determine bilingual language performance. A central tenant to research on child bilingualism concerns the difficulty in measuring and comparing language performances, such that dominance patterns may fluctuate longitudinally by domain (e.g., Yip and Matthews, Kohnert and Bates, 2002). However, one domain that has been shown to be a sensitive indicator of bilingual language performance is vocabulary knowledge (e.g., Nagy, García, Durgunoglu, Hancin-Bhatt, 1993; Pearson and Cobo-Lewis, 2007; August, Carlo, Dressler, and Snow, 2005; Oller, Pearson, and Cobo-Lewis, 2007; Bialystok, Luk, and Kwan, 2005; Peets and Bialystok, 2013; Duursma, Romero-Contreras, Scuber, Proctor, Snow, 2007). In particular, Páez, Tabors, and López (2006) posited that English vocabulary skills are limited among Spanish-English bilingual children kindergartners, showing wide gaps among monolingual Spanish-speaking children. Bialystok and Feng (2009) advised, however, that one should exercise caution when making conclusions about the vocabulary knowledge of bilingual children. Children may encounter different words in different domains, such as those described by Baker (2011), insofar that bilingual children's vocabularies could be equivalent or even larger than a typically developing monolingual child. Thus, there is a need for bilingual normed assessments in future research to measure children's language experiences in a more accurate manner.

A number of studies have also shown morphosyntax and grammatical competence to be critical measures in examining bilingual language proficiencies among Spanish-speaking Latinos (e.g., Bohman, Bedore, Peña, Mendez-Perez, Gillam, 2010; Hammer, Komaroff, Rodriguez, Lopez, Scarpino, Goldstein, 2012; Bedore, Peña, Gillam, and Ho, 2010; Bedore, Peña, Summers, Boerger, Resendiz, Green, Bohman, and Gillam, 2012; Bedore et al., 2016). For instance, Bohman et al. (2010) examined the factors that

contribute to children ‘gaining traction’ in each of their languages, investigating how language input is related to children’s performance on morphosyntactic and semantic development. Bohman et al. (2010) posited that the amount of language input and output is differentially important across each linguistic domain in English and Spanish, such that children’s performance on the Spanish morphosyntax subtest rests heavily on both input and output, while English semantics relates more to language input. Thus, of all the relevant factors involved in language dominance and language proficiency, Pearson (2007), De Houwer (2003), among others, maintain that family language patterns and community support are critical variables in the development of child bilingualism.

A third way to measure bilingual language performance uses elicited narrative production to examine children’s microlevel (i.e., words or syntactic categories) and macrolevel (i.e., discourse or story grammar) components in oral speech. To produce an oral narrative, children are required to plan, organize, and monitor their speech to produce a coherent message, which has been shown to serve as a productive tool in analyzing language dominance and proficiency (e.g., Fiestas and Peña, 2004; Uccelli and Páez, 2007; Bedore et al., 2010; Lucero, 2015; Gamez and Levine, 2013). For instance, in an analysis of oral narrative retells among U.S. Latino children, Simon-Cerejido and Gutiérrez-Clellen (2009) found a strong relationship between a child’s ability to produce a larger number of different words and generate complex syntax. The authors argue, however, that different languages reveal different discourse patterns and that growth trajectory of syntactic complexity in Spanish narratives varies from those in English. Simon-Cerejido and Gutiérrez-Clellen (2009) recommend future research to consider age of first exposure to English and bilingual type. Sequential bilinguals, or children who were exposed to English after the age of 4, may initially rely on Spanish when learning

English, therefore there is a pressing need to analyze narrative production with older school-age students, as well.

Furthermore, research on oral discourse considers the productivity and quality of narratives (e.g., Pearson, 2002; Muñoz, Gillam, Peña, Gully-Faehnle, 2003). In a one-year longitudinal study on Spanish-English bilingual children from low-income backgrounds, Uccelli and Pérez (2007) investigated the relationship between expressive vocabulary and oral language, as measured by narrative productivity (i.e., microstructure) and quality (i.e., macrostructure). While all children made significant gains in narrative productivity in both Spanish and English, the quality or macrostructure of each language proved to be a more sensitive indicator of cross-linguistic narrative competence. Thus, Uccelli and Pérez's study (2007) provided further evidence that research on bilingual performances among Spanish-English Latino students should consider a number of measures, including narrative retells and vocabulary knowledge in both languages.

Next, I describe literature on language socialization practices and literature on family language policy (FLP) in multilingual settings.

2.2. Language socialization practices and FLP

Much of the literature on language maintenance and shift has examined the critical role of children's agency through the lens of a language socialization framework (e.g., Garrett and Baquedano-López, 2002; Ochs and Schieffelin, 1984). According to Ochs and Schieffelin (1984), child language socialization is considered the process through which children acquire language as a linguistic code and develop social roles and relationships through the use of language. Research in this area primarily deals with the discursive strategies employed in the promotion of child bilingualism (e.g., Döpke, 1988,

1992; Lanza, 1997; Li Wei, 1994; Ochs, 1988; Saunders, 1988; Taeschner, 1983). One of the long-standing tenants of this framework relates to the acquisition and socialization as a bidirectional process in which both adults and children are agents in socialization (e.g., Ochs & Schieffelin, 1984; Döpke, 1992; Burton, 1994; Lanza, 1997; De Houwer, 1999; Schecter & Bayley, 1997, 2000; Garret & Baquedano-López, 2002; Bhimji, 2005; Lanza, 2009). That is, as noted by Baquedano-López and Kattan (2009), the theoretical framework provides a descriptive and analytic understanding of parent-child interactions and the socializing practices in multilingual communities. The current study draws upon this research in order to explore siblings' socializing practices in the focal community and reveal their orientation toward to the heritage language.

Language ideologies are also central component to speakers' identities and language practices among speakers of minority languages because of the emotional significance attached to in-group membership (e.g., Lipski, 2008; Phinney, Romero, Nava, and Huan, 2001; Romaine, 2011; Schecter and Bayley, 1997; Zentella, 1997). That is, speaking Spanish and even a particular variety of Spanish serve as markers for in-group identity and solidarity. While several definitions of language ideologies have been offered, Kroskrity (2000) speculated that language ideologies are the commonsense notions about the nature and purposes of language. Spolsky (2004) further argued that language ideologies or language beliefs are the goals, plans, interventions, and attitudes concerning language.

Family language policy (FLP) is one recent trend in language socialization research that addresses the relationship between language use and language ideologies in bilingual families (e.g., Hua and Li Wei, 2016; King et al., 2008; King and Lanza, 2017; Schwartz, 2008, Spolsky, 2004, 2012). As noted by King et al. (2008), FLP has emerged

from two distinct fields of linguistics: language policy and language socialization. The researchers posit that the amalgamation of the research perspectives from these two fields is important and significant, such that FLP research is not only concerned with family language socialization practices, but also the ideological perspectives regarding what language/s is/are used among multilingual families.

In approaching multilingual families using the FLP framework, a number of studies position themselves in relation to Spolsky's (2004) language policy framework (e.g., Chatzidaki and Maligkoudi, 2013; King et al., 2008; Schwartz, 2008). As summarized by King et al. (2008), Spolsky's (2004) language policy framework attempts to shed light on the intimate context of the home by examining family's language beliefs or ideologies, practices, and the efforts to influence the use language through intervention or management (p. 1). For this reason, several FLP and language socialization studies have focused on the critical role that language ideologies play in Latino children's socialization practices in multilingual and transnational settings (e.g., Curdt-Christiansen, 2016; De Houwer, 2009; Gallo and Hornberger, 2017; King and Fogle, 2006; King, 2013; King and Fogle, 2013; Paug, 2005; Schecter and Bayley, 1997). Thus, in examining the language socialization practices and FLP, scholars have examined the expression of language ideologies and the ways in which they manifest themselves in multilingual settings (e.g., Curdt-Christiansen, 2016; Dauenhauer and Dauenhauer, 1998; King, 2000; King et al., 2008; Smith-Christmas, 2016; Woolard, 1998). For instance, as King (2000) revealed in her study on Quichua language ideologies in the southern Ecuadorian Andes, positive attributes assigned to the minority language do not necessarily implicate language maintenance. Speakers' language ideologies often conflict with other deeply ingrained beliefs and attitudes toward the minority language. Herein,

Latinos who view Spanish as a fundamental element in their life are reported to use the language more often and participate in social networks composed of Spanish-speakers both in the U.S. and abroad. Thus, ideology is inextricably linked to the agentive decisions children make to pursue opportunities in Spanish, suggesting that children who positively view the heritage language may be exposed to more opportunities and increased prospects to maintain their home language.

Together, the comparative perspective adopted by language socialization and FLP increases the visibility of child-caretaker interactions, language ideologies, and child language development, which reflect overall societal attitudes about language and parenting. That is, research in language socialization and FLP also acknowledges that children are active agents in the socialization process (e.g., Corsaro, 2005; Luykx, 2005; Duranti, Ochs and Schieffelin, 2012; Smith-Christmas, 2014; Fogle, 2012; King and Fogle, 2013; Kyratzis, 2004). As an example, Smith-Christmas' (2014) study on Gaelic and English-speaking families in Scotland suggests that extended family members, such as grandparents and children, socialize each other into the norms of language shift. That is, while mothers negotiated and reified a strongly Gaelic-centered FLP, Smith-Christmas (2016) found that extended family members participated in stronger English-centered interactions. Furthermore, Fogle (2012), Fogle and King (2013) and Li Wei (1994) reported on findings of transnational families to describe how child agency and language patterns influence parental behaviors. The findings from Spanish-English, Russian-English, and Chinese-speaking families reported that children can also become agents of language shift in the family insofar that identity frames language preferences and proficiencies. However, research by Fogle (2012), King and Fogle (2013) and Li Wei (1994) focused on interactions between generations - that is, grandparents, parents, and

children- with the goal of highlighting cross-generational patterns and differences. The scholars highlight that future research must consider intergenerational practices (i.e., between siblings) and language ideologies that concern child agency. Put differently, the examination of the ‘meso-level’ (i.e., kin relationships and group memberships) will contribute to a deeper understanding of the processual aspects involved in language maintenance and shift, which I attempt to do so in the current study.

In the next section, I turn to discuss the small, but growing number of studies investigating the role of birth order in multilingual contexts.

2.3. The role of birth order in bilingual families

Existing research from monolingual speakers has long shown that birth order plays a critical role in siblings’ access to different kinds of language learning experiences (e.g., Amita and Hesser, 1993; Pine, 1995; Oshima-Takane, Gooz, and Derevensky, 1996; Hoff-Ginsberg, 1998). According to Pine (1995), first-born children tend to have more possibilities to experience one-to-one interactions with mothers and caretakers, while second-born siblings hear less adult-directed speech. As a result, Hoff-Ginsberg (1998) stated that monolingual English older siblings typically show more development in aspects of language that tend to respond more to language input and exposure, such as lexical and morphosyntactic knowledge.

Although it has been shown that older siblings have access to different kinds of learning experiences in monolingual households, little research has examined the role of birth order on home language use patterns in bilingual families, which according to Baker (2006), is “an almost unexplored territory” (p. 63). Such a sibling effect in bilingual families has been observed in several case studies in other languages and cultural context,

which qualitatively suggest that older siblings bring home the majority language through schoolwork, television, and peers (e.g., Barron-Hauwaert, 2011; Kheirkhah and Cekaite, 2018; Niño-Murcia and Rothman, 2012; Salvador, Nicoladis, and Diego, 2017; Silva-Corvalán, 2014; Yamamoto, 2001; Yip and Matthews, 2007). For instance, in Yamamoto's (2001) study on Japanese and English-speaking families in Japan, the author claimed that first-born children's earlier exposure and preference for the minority language (i.e., English) initiates language shift. That is, of the 118 families the author questioned in her study, Yamamoto (2001) found that first-born children growing up in Japan were more likely to speak English while younger siblings were more oriented to speaking Japanese. In another study, Salvador, Nicoladis, and Diego (2017) examined the language choice between Tagalog-English bilingual siblings growing up in Edmonton, Alberta, Canada, focusing on the use of English when at least one of the siblings was attending school. Salvador et al. (2017) found that in the local linguistic ecology, children mostly spoke English regardless of whether they or their sibling were attending school. That is, no matter the age and school attendance, older and younger siblings spoke English to each other, such that the transition of school did not affect the children's language choice. Rather, in this context, the siblings were shown to use more English than Tagalog in both public and private domains. Providing several interpretations, the authors suggested that siblings' English dominance and their preference for English could explain the children's tendency to use English with each other across all contexts. Nonetheless, one must exercise caution when comparing the results of studies across different language pairs and cultural contexts. Family language preferences and expectations may look starkly different in countries whose dominant ideologies espouse either assimilationist or multicultural values.

Survey and demographic research on bilingual families in the U.S. provide evidence for the phenomenon that birth order impacts language use patterns (as seen in Barron-Hauwert, 2011; Kibler, Palacios, and Simpson-Baird, 2014; Shin, 2002; Ishizawa and Stevens; 2007; Parada; 2013). For instance, using survey data on Asian, Middle Eastern, and Hispanic groups, Ishizawa and Stevens (2007) revealed that household dynamics and family attributes impact children's language use and preferences. These two researchers found that first-born children are more likely than second- or third-born children to speak to their caregiver in the minority language, suggesting that the traditional three-generation model is too simplistic to account for within-household variation between second-generation siblings. Furthermore, the trend that sibling order is a predicting factor of language use is also presented in Kibler et al.'s (2014) survey research on Latino families. The results of the survey show that for every additional older sibling present in the household, younger siblings are less likely to only Spanish with their caregiver.

Likewise, language use patterns and socialization practices among bilingual siblings have been investigated through qualitative and ethnographic lenses (e.g., Shorrab, 1986; Jarovinski, 1995; Obied, 2004; Reynolds, 2009; King, 2013). King (2013) documented the ways in which identities are constructed, constrained, and performed by three sisters in a longitudinal case study of a bilingual and transnational Ecuadorian-U.S. family. By adopting an ethnographically informed discourse analysis of family interactions and interviews, the author-researcher showed how dominant ideologies about the Spanish language and language learning shape the ways in which the three daughters construct and enact their identities and family roles. Thus, King (2013) evidenced the complexities of language competencies and linguistic identities, which vary within one

generation of siblings such that the eldest child is often the anchor in maintaining the minority language.

Siblings in bilingual families have also been shown to serve as mediators in language brokering and literacy in the majority language (e.g., Gregory, 1998; Williams and Gregory, 2001; De la Piedra and Romo, 2003; Kibler, Palacios, Simpson-Baird, Bergey, and Yoder, 2016; Orellana, 2009). Kibler et al. (2016) found that older siblings act as models and enact their expertise in English language and literacy practices alongside their younger siblings by revealing the agentive behaviors on behalf of sibling pairs. That is, Kibler et al. (2016) revealed that both older and younger siblings take initiative in beginning and sustaining literacy practices in the dominant language (i.e., English). Given their findings, Kibler et al. (2016) position their research as complementary to Kibler et al.'s (2014) quantitative study on sibling language preferences. Both studies suggest that older siblings play a critical role in the school preparation of young bilingual children, both academically and socially, playing a role in younger siblings' language preferences for English within the home. In response to their study's limitations, however, Kibler et al. (2016) posited that future research should examine the ways in which school practices are imported into the home and how children export language and literacy practices into school interactions. To do so, they believed that future research had to leverage ethnographic observations of siblings in both the home and school.

Concerning the linguistic development of sibling pairs, studies on child language acquisition accord a critical role to language input and exposure (e.g., David and Li, 2008; DeHouwer, 2009; Gathercole and Hoff, 2007; Gathercole and Thomas, 2009; Pearson, Fernández, Lewedeg, and Oller, 1997; Silva-Corvalán, 2014). As such,

differences in exposure and language input and output patterns have been shown to be the most relevant factors in explaining the differential outcomes in language dominance and proficiency among sibling pairs (e.g., Jia, Aaronson, and Wu, 2002; Jia and Aaronson, 2002, 2003; Duursma et al., 2007; Montrul and Sánchez, 2008; Bridges and Hoff, 2014). For example, longitudinal research on Chinese children learning English in the U.S. by Jia and Aaronson (2003) highlights how younger children who use English in school may differ in their language preferences, language environments, and proficiency in English. The major findings by Jia and Aaronson (2003) showed that younger participants with arrival ages of 9 or younger switched their language preference to English within the first year and were exposed to richer English environments through school, family, and peer networks, pointing to the influence that older siblings may play in initiating language shift in young siblings' language preferences and proficiencies.

While older siblings may play a pivotal role in the decreasing use and acquisition of the minority language by younger siblings, studies on child bilingualism have also found the first-born child to facilitate younger siblings' English language development in Latino households (e.g., Hoff, 2006; Bridges and Hoff, 2014). Presenting two studies on the influence of older siblings on language environments and language development of Spanish-speaking toddlers in the U.S., Bridges and Hoff (2014) posit that the presence of older siblings is a valuable source of English exposure to young Latino children. Both studies depict older siblings as significant contributors to younger siblings' exposure to English, which appeared in young siblings' grammatical and vocabulary developments in English.

Lastly, general language proficiencies and childcare context may be considered in the investigation of sibling language use patterns. For example, Palacios, Kibler,

Simpson-Baird (2017) examined the association between childcare type and the language-use and vocabulary of second-generation Latino immigrant children. That is, the authors explore whether children in parental care had lower English and Spanish vocabulary scores, on average, compared to children attending other types of childcare, such as Pre-K. In their study, Palacios et al. (2017) found that children in parental care exhibited, on average, lower scores on English and Spanish picture vocabulary compared to children in enrolled other childcare settings. Children in parental care were also more likely to speak mostly English when there were a greater number of siblings. Presenting several possible explanations for their data, Palacios et al. (2017) suggested that these findings provide evidence that families with greater composition of siblings create a context in which older siblings introduce English to their younger siblings. These findings demonstrate that the investigation of child language use patterns in bilingual siblings requires the study of the entire family system that recognizes both the sociolinguistic and language exposure for children's linguistic development.

Given the bulk of the literature as described above, this current study aimed to increase our understanding of the experiential factors associated with language use patterns, as well as the relevance of language ideologies and family roles among Spanish-English bilingual sibling pairs in one purposefully selected community in Central New Jersey (NJ) using a mixed methods approach. I combined both qualitative and quantitative measures to triangulate findings from multiple points of view. The five research questions are as follows:

1. How do children's reported age of initial exposure to English and their reported linguistic proficiencies in Spanish compare between older and younger siblings?
2. How do older and younger siblings compare in their knowledge of expressive

vocabulary and morphosyntax in Spanish and English?

3. What are siblings' Spanish-language use patterns as captured in their oral narratives? More specifically:
 - What is the distribution of verbal TMA in older and younger siblings' Spanish narratives?
 - What relationship exists between sibling order and use of Spanish linguistic-features (e.g., gender article agreement) in oral narratives in Spanish?
 - What relationship exists between sibling order and use of English lexical insertions in children's oral narratives in Spanish?
4. What is the nature of siblings' language ideologies?
5. What are the siblings' observed and reported language practices within the home and school domain?

The guiding theme in the above research questions is the search for answers that account for both the (1) internal factors of siblings' language use patterns, notably the linguistic and lexical features in narratives; and (2) the external factors related to the entirety of siblings' sociolinguistic environment, which explain children's ideologies toward – and the amount of exposure to and use of - English and Spanish in the home and school domains. That is, research questions one, two, and three are attended to using quantitative methods, and research questions four and five are attended to using qualitative methods. Below I describe how each question intersects with one another and triangulates the study's findings from multiple points of view.

The first research question attends to the nature of children's age of first exposure to English and each child's reported proficiencies in Spanish, as reported by mothers (i.e.,

How do children's reported age of initial exposure to English and their reported linguistic proficiencies in Spanish compare between older and younger siblings?). This research question not only informs the fifth research question concerning siblings' language practices, but also informs the second and third research question, which examine siblings' expressive vocabulary, morphosyntax knowledge, and language-use patterns in their Spanish oral narratives. The second research question examines siblings morphosyntax and expressive knowledge in English and Spanish (i.e., How do older and younger siblings compare in their knowledge of expressive vocabulary and morphosyntax in Spanish and English?). The third research question explores siblings' language use patterns with respect to verbal TMA, Spanish linguistic features, and use of English lexical insertions (i.e., What are siblings' Spanish-language use patterns as captured in their oral narratives?). That is, Verbal TMA and English lexical insertions were selected to generate patterns of language use. The Spanish linguistic features (e.g., gender article agreement), however, were selected to examine differences in siblings' proficiencies in Spanish and whether they showed vulnerabilities in the heritage language. Triangulating these data, the second and third research questions not only intersect with the first research question, but also with the observed and reported language practices in the fifth research question, which is outlined below.

Regarding the qualitative data of this study, the fourth research question explores siblings' language ideologies (i.e., What is the nature of siblings' language ideologies?). The data uncovered point to children's orientations toward speaking English and Spanish. Next, the fifth research question addresses the qualitative description of sibling-pairs' language practices (i.e., What are the siblings' observed and reported language practices within the home and school domain?). These findings are captured using parent and child

interviews, as well as ethnographically informed observations (e.g., Garrett, 2008). A knowledge of siblings' language ideologies informs the study's understanding of their language practices, pointing to children's agentive decisions to speak or resist the heritage language. Thus, it is the goal of this mixed-methods study to triangulate findings from multiple points of view to unpack the role of sibling order in children's language use patterns, practices, and ideologies.

To my knowledge, the literature shows a gap that has not addressed the critical role that birth order plays in Spanish-speaking Latino families in the U.S., which fully examines siblings' performance on bilingual-normed language assessments, language ideologies, as well as language practices home and school language environments. Furthermore, comparing the home and school language environments of each sibling pair is a critical step in understanding the variables that contribute to children's differential outcomes in language use patterns. That is, it was within the scope of this current study to be the first that is able to capture not only the specific combinations of age of first exposure to English and maintenance of Spanish, but also the quality of language input in the home for each sibling pair. Furthermore, few studies have compared siblings' performance on general measures on language proficiency, specifically each child's expressive vocabulary, knowledge of morphosyntax, which use measures that were normed on Latino bilingual populations. This current study contributes to the field of child language development, as well as accounts for the expression of language ideologies among Spanish-speaking Latino sibling pairs in one purposefully selected community in Central NJ. Together, this study has aimed to investigate the linguistic and social factors involved in Spanish-language maintenance through the combination of insights gained from language socialization and child language development studies

within the larger field of sociolinguistics. Overall, the objective of this study is to provide a deeper understanding of the processual aspects of language maintenance and shift.

Chapter III: Methodology

This chapter presents the methodological procedures of the current study. First, I provide a detailed description of the local context in which the study took place, as well as a summarization of previous research that I conducted in the focal community. Following is a section on the criteria for participant selection and the focal families on which the study focuses. The chapter ends with the study's procedures and an explanation of how the data were gathered using mixed-methods and analyzed quantitatively and qualitatively, as well as my positionality as a researcher.

3.1 Local context of NJ Latino community

New Jersey (NJ), one of the top ten states with a large Latino population, has a diverse population of families from Puerto Rican, Mexican, Dominican, Puerto Rican and descent, among others (U.S. Census, 2015). Approximately 19.7% of the nine million residents of NJ is Latino, which has increased 2% in just four years (U.S. Census, 2015). Furthermore, one needs to also consider the immigrants' children, not recognized in the Census, who attend public schools and contribute to further increasing the number of Latinos in NJ. Many of the Latino residents of NJ and their children who attend public schools reside in highly populated Hispanic regions, such as in Perth Amboy, Union City, North Bergen, West New York, among others.

The city under observation in this study, which I refer to as Otter Creek³, is a microcosm of a linguistic minority community in central NJ, located approximately 40 miles southeast of New York City. Both the primary and middle school historically served both low-income and middle-class families from a predominantly white and African-American families. In the past decade, however, increased numbers of immigrant families from Latin America, mostly from Puebla, Mexico, had settled in this area, shifting the demographics and outlay of the city. Residents of Otter Creek often describe the city as divided by train tracks, which traverse across the northeastern and southwestern city limits. The northeastern quadrant of Otter Creek is recognized in NJ as a highly affluent community. Its residents, predominantly of Italian and German descent, commute to and work in financial and pharmaceutical businesses within the New York City (NYC) metropolitan area. The area resembles that of an opulent NYC suburb, which showcases upscale boutique stores and luxury car dealerships that line Main Street, the central avenue that traverses the northeastern quadrant. In contrast, however, the southwestern quadrant, a neighborhood located a quarter of a mile from Main Street across the NJ Transit train line is home to mostly Mexican immigrant adults predominantly from the south-central state of Puebla. The streets are lined with Mexican bakeries, small supermarkets, and barbershops, whose windows are decorated with signs and advertisements in Spanish. Interestingly, however, residents in each of the two quadrants in Otter Creek have constructed two separate worlds; one would rarely see members from the northeastern mostly-white suburban neighborhoods in the southwestern quadrant, despite their proximity to one another.

³ Note: All names in this paper are pseudonyms to protect the anonymity and confidentiality of participants.

Given the increase in Hispanic immigration the past decade, the community and, concomitantly, the public schools have undergone drastic demographic changes. Over the years, the school had observed what Teoharis and O'Toole (2013) describe as a "white flight" (p. 667) where each year, mostly white, non-Hispanic families chose to send their children to the private elementary, middle, and high school located in the northeastern quadrant of Otter Creek. During the 2015-2016 school year, 81.15% of the student population attending Otter Creek Primary and Middle School were Hispanic, up from 79.2% in 2014, and 78.4% in 2013 (NJDOE, 2017). In a two-year ethnographic study on the locally held ideologies and language curriculum at Otter Creek schools, Kinsella (2018) reported that many of the non-Hispanic parents whose children attended Otter Creek Primary viewed immigration negatively. Residents believed that the quality of education was weakened by the increased presence of Spanish-speaking Latino students. This prevailing ideology, coupled with recent immigration, had resulted in an increase of Spanish-speaking Latino students who attend Otter Creek Primary, such that the overall majority of students reside in households in which both sets of parents emigrated from Mexico and Spanish is used as a home language.

Concerning the school's curriculum, Kinsella (2018) uncovered that English is the dominant language of instruction in both the primary and middle school, despite offering a transitional bilingual program. That is, Otter Creek schools created two tracks in which students could be placed: classrooms that provided native language (L1) support to Spanish-speaking students and monolingual English classrooms with ESL instruction. One teacher who held both an ESL and bilingual certification was distributed across each grade level in order to support those students with lower English proficiencies as determined by their World-Class Instructional Design and Assessment (WIDA, 2014) –

Access Placement Test. In the bilingual classrooms, instructors were supposed to provide Spanish support when needed.

One of the most important findings of Kinsella (2018) revealed that Otter Creek's language policy was not linearly implemented, but rather appropriated and shaped through the actions of administrators and teachers. That is, Otter Creek established an instructional program that consisted of two tracks in which students could be placed: transitional bilingual classrooms that provide native language (L1) support to Spanish-speaking students and monolingual English classrooms with ESL instruction. However, different interpretations of the bilingual program and even disagreements that the school held a transitional bilingual program were observed among teachers and administrators. In the study, Kinsella (2018) showed patterns between educators' overtly expressed language ideologies and their covert expression in the curricular alternative where (1) bilingual teaching was equated only in relation to the Latino students' purported limited English proficiency and, (2) the belief that monolingual English instruction has the sole purpose to remedy students' so-called language gaps. The language ideologies found in the discourses of teachers and administrators consistently positioned the Spanish-speaking students and their parents as linguistically deficient, such that it was the Latino families who turned their children into limited language users.

In a second study conducted in Otter Creek, Kinsella (in progress) examined the FLP and language socialization practices of five Mexican-origin families whose children attended Otter Creek schools. The study included two parts: mother interviews and an audio-recorded book reading with child recounting a story in Spanish following Lanza's (2009) work. Lanza's (2009) categorization of parent discourse strategies were adopted to analyze and describe how Mexican-immigrant mothers responded to their child's use of

non-target linguistic features in Spanish (e.g., gender article agreement, adjectival agreement, etc.) and negotiated language practices through various discourse moves. In Kinsella (in progress), the sequential analysis of mother-child interactions revealed that while the mothers initiated repair attempts in response to their child's language practices to varying degrees, they were also shown to disregard, or move on, after their child's use of English lexical insertions and grammatical mixings. Triangulating these data, interviews were conducted with the mothers in Kinsella (in progress), which confirmed the language practices uncovered in the child-dyads. That is, Kinsella (in progress) showed that mothers were aware that they did not always correct their child when he or she produced non-target like forms in Spanish.

Findings from Kinsella (in progress) also pointed to the marginalization of Spanish-speaking mothers in their children's academic life in Otter Creek. Participating mothers maintained that they were unable to assist their children with homework and academic work in English and left these responsibilities to siblings and/or their peer networks. These mothers also accepted the division of language-use based on domain. That is, Otter Creek schools were designated as the institution where children would acquire English, and the home as the domain in which parents should take the responsibility to teach Spanish. In sum, while these five mothers negotiated and reified a strongly centered Spanish FLP within the home domain, each of the families were oriented differently toward their role in modifying their child's speech and supporting the home language.

Collectively, Kinsella (2018) and Kinsella (in progress) highlight the political influences of bilingual education and intersections between language policy and language ideologies in a school district that was given flexibility to create its own program. Otter

Creek is a unique microcosm of the rich linguistic fabric of NJ in which Latino students and their parents are marginalized in the schools and the community. The language policies and programs at the public schools are appropriated by teachers and administrators who espouse negative language ideologies toward English-Spanish bilingualism and believe that monolingual English instruction remedies students' so-called language gaps. These beliefs were shown to permeate within the home, insofar that parents also accepted the division of languages based on domain.

In the current study, I have investigated the role of birth order in determining the language use patterns, practices, and ideologies toward speaking Spanish. This study connects to previous research, such that it not only acknowledges siblings' socialization practices and ideological orientations to the minority language (e.g., King et al., 2008; Spolsky, 2004; Schieffelin and Ochs, 1984), but also the linguistic impact these comparatively unequal levels of input and output in Spanish have on siblings' language-use patterns (e.g., Silva-Corvalán, 2014).

The next section introduces the criteria used to select participating families through purposeful sampling. After, I present a biographical description of participating sibling pairs and their mothers.

3.2. Participants of current study

In this section, I introduce the families on whom this study focuses. I first describe the criteria in selecting sibling pairs. After, I present the participating families and provide a brief biographical description of the caregiver and siblings.

Recall that the purpose of this study was to investigate the language use patterns, practices and ideologies toward speaking English-Spanish bilingualism, therefore

purposeful sampling was the preferred method in selecting participating families. To be considered for this study, siblings had to have met the following criteria. Children must have been:

- Considered a second-generation immigrant⁴
- Between the ages of 5 and 12 years old and enrolled in either the primary and/or middle school
- The two eldest children in the household
- Residing in a household whose caretakers immigrated from a Spanish-speaking country.

Following previous literature on sibling differences, such as Shin (2002) and Kibler et al. (2016), among others, this current study focuses only on school-aged children between the ages of 5 and 12 years old. The purpose of focusing on this age group was to capture family and school socialization practices, as well as to standardize the family profiles. Following these scholars, older siblings were considered as those children who were the eldest in the family according to birth order and younger siblings who had at least one older sibling. Only the two eldest siblings who fit the age range were selected to standardize the families under investigation.

To recruit participants, I asked teachers who taught grades kindergarten through sixth grade to recommend students in their classes who fit the criteria for my study. I then contacted mothers of sibling pairs using an IRB-approved parent letter and consent form to inform them of the study and its confidentiality. If they were interested, I met with mothers at their convenience on the phone and answered any questions they had. I also

⁴ Following Silvia-Corvalán (1994), a second-generation immigrant refers to those children who were born in the U.S. to immigrant parents or arrived before the age of 6.

visited a local adult ESL class provided by Otter Creek Primary. The families who were interested and fit the criteria of the study were then scheduled for an initial home visit.

In total, six families that fit the criteria for the study were purposefully selected. The number of participating families was chosen given the study's focus on FLP and language socialization. That is, to gain a deeper understanding of the role of sibling order in the language use patterns and language ideologies in the focal community, a total of six families was deemed appropriate and follows previous literature on FLP and sibling caregiving (e.g., Curdt-Christiansen, 2016; Kibler et al., 2016; Shin, 2002). All the chosen sibling pairs resided in households in which the mother was from Mexico⁵. Their homes were all located in the southwest quadrant of the Otter Creek community where Spanish could be heard outside their homes, grocery stores, and clinics. However, the family structures were different in three of the families, such that not all families were comprised of two children and their mother and father. In Families 4, 5, and 6, extended family members (i.e., grandparents, cousins, and aunts and uncles) also resided in the household whereas in Families 1, 2, and 3, the household was comprised of only the two siblings and their mother and father. The six participating families in this study are depicted in Table 1.

⁵ Both caregivers in the selected families were born in Mexico except for the father in Family 5 who was from Costa Rica. Regardless of this concern, he was not included in the interview or data collection procedures.

Table 1: Profile of participating families according to mother's country of origin, and siblings' names, age, and household members

Family	Mother	Mother's country of origin and education level	Children	Age	Other household members
1	Mariana	Puebla, Mexico-University Degree	Daniel (O) ⁶ Mia (Y)	10 6	Father
2	Amanda	Puebla, Mexico-Secondary	Brent (O) Kyle (Y)	11 9	Father
3	Elena	Puebla, Mexico-High School (GED)	Benito (O) Oscar (Y)	8 7	Father
4	Ana	Puebla, Mexico-Primary School	Samuel (O) Kendra (Y)	12 6	Uncle (Ana's brother) and nephew (9 years old)
5	Laura	Puebla, Mexico-Associate Degree	Lani (O) Leo (Y)	9 5	Grandmother (Laura's mother); preverbal infant (9 months); Father
6	Carolina	Tabasco, Mexico-Secondary	Bryce (O) Melvin (Y)	11 8	Aunt (Carolina's sister); Preverbal infant (6 months)

In the following sections, I describe each the focal families, the home environment, mothers' educational attainment, and siblings' extracurricular and social activities. Further details concerning siblings' language use patterns, practices, and ideologies are addressed in Chapters IV and V.

3.2.1. Family 1: The Álvarez family

⁶ In the remaining tables, older siblings will be marked "O" and younger siblings will be marked "Y" to mark birth order throughout.

The first family in this study was comprised of older sibling, Daniel, younger sibling, Mia, and their parents, Mariana and José. In 2002, Mariana and her husband immigrated from Puebla, Mexico. Since their time of arrival, Mariana had worked full-time at a jewelry store in the southwest quadrant while her husband was a manager at a supermarket. Their home, a recently renovated four-bedroom home in a cul-de-sac, was located a quarter mile from the primary school and comprised of neighbors who were mostly African-Americans. Inside, the kitchen was adorned with traditional Mexican cookware as well as brand new appliances from their recent remodeling. Past the kitchen was the living room with a large television in front of which the family watched shows in both Spanish and English. The living room opened toward the staircase that led upstairs. On the second floor, Daniel and Mia had separate bedrooms each located side-by-side across the hallway from their parents' bedroom. Furthermore, outside the home, the family's front yard was delicately cared for with flowers, Halloween decorations, and signs that "Otter Creek Pride" and "My Child is an Honor's Student".

With respect to the family's education, Mariana completed her university studies in business administration in Mexico before immigrating to the U.S. She was deeply concerned about the academic and emotional development of her two children, so she attended all parent teacher conferences and workshops. Her children, Daniel and Mia, were born in Otter Creek and began their schooling in Pre-K. During the time of data collection, Daniel and Mia were enrolled in the middle and primary school, respectively. Each night, Mariana checked her children's homework and discussed their school work in only Spanish, despite the mother being proficient in English. Although Daniel and Mia spoke only Spanish with their mother, they did not know how to read or write in Spanish.

Mariana encouraged them to read only in English, since she believed that learning to read in both languages would hinder their academic development in English.

In addition to the family's education, the siblings were involved in multiple extracurricular activities. For instance, Daniel and Mia participated in an after-school soccer league at the middle and primary school. Many of their team peers were also their neighbors with whom they regularly interacted. Other social gatherings included extended family members from both Mariana's and her husband's side, also immigrants from Puebla, Mexico, who resided in Otter Creek. Their closest family members included Mariana's sister, Abril. Since both Mariana and her husband worked full-time, Mariana's sister would watch over her children in the home.

3.2.2. Family 2: The Blanco family

The second family in this study was comprised of older sibling, Brent, younger sibling, Kyle, and their parents, Amanda and Gregorio. Amanda and her husband immigrated to Otter Creek, NJ from Puebla, Mexico in 2004. During the time of data collection, Amanda worked as a cleaning lady for a family who resided in the northeastern quadrant of Otter Creek. Her husband, Gregorio, was a car mechanic. Their home, a small one-bedroom apartment above a pizza restaurant and Poblano Mexican grocery store, was located a quarter mile to the middle school on Main Street in the southwest quarter. The living room was the main common area in the apartment. Since there was only one bedroom, the living room was divided by using moveable panels to create a separate bedroom for Brent and Kyle. On the other side of the moveable panel, two beds were located, which was where Brent and Kyle slept.

Regarding the family's education, Amanda completed her high school degree in Mexico before immigrating to Otter Creek. Her children were born in Otter Creek. Brent and Kyle began their schooling in Pre-K in the Otter Creek community and were enrolled in the middle and primary school, respectively. Since Amanda did not know how to know how speak or read in English, Brent tended to help his younger brother complete homework assignments. Only Brent, the older sibling, knew how to read and write in Spanish, a skill he developed when he was in primary school and learning how to read with his mother. However, at their current ages, Amanda did not encourage Brent or Kyle to read in either English or Spanish. Each night, after the siblings completed their homework, Brent and Kyle spent the evening hours playing video games on either the desktop computer or their mother's tablet.

In addition to the family's education, the siblings were also involved in the local Boy Scouts chapters. The chapter, located in a nearby town, was comprised mostly of white English-speaking children and their families. Brent and Kyle attended the meetings twice a week. Other social gatherings and cultural celebrations were spent with family friends since neither Amanda nor her husband had immediate family members living in the U.S. The siblings' mother, Amanda, displayed a wide social network that included other mothers and their families from Mexico. She met most of these individuals at Spanish-speaking mass and often congregated both in person and social media during which she provided tips and suggestions to the women as they attempted to integrate themselves in the community.

3.2.3. Family 3: The Sánchez family

The third family in this study was comprised of older sibling, Benito, younger sibling, Oscar, and their parents, Elena and Luis. In 2000, Elena and her husband arrived in Otter Creek from Puebla, Mexico, following Elena's sister, Diana, who arrived two years earlier. Since then, Elena held several part-time jobs until her children, Benito and Oscar, were born. Her husband worked full-time as a local contractor, so Elena stayed home to care for her children. Their home, a two-bedroom apartment in the southwestern quadrant, was located on the second floor nearby a Mexican grocery store and Poblano restaurant. Inside, the living room led directly to the kitchen and the siblings' bedroom that Benito and Oscar shared. Although there was no television in the common area, Benito and Oscar shared the only television in the household on which they could play video games and watch programs in English. Below the family's apartment on the first floor lived Elena's sister and several other women with whom Elena had become close.

With respect to the family's education, Elena completed her secondary education at age 14 in Mexico. At the time of the study, Elena was attending community college at which she was studying for her high school equivalency diploma (GED), so she often read with her children in English to practice. Both her children, Benito and Oscar, were born in Otter Creek. They first attended Pre-K in Otter Creek and were currently enrolled in the primary school, in third and second grade. The siblings completed their homework each night, sometimes together since they shared a room. Furthermore, since Elena could read and write in English, she checked her children's work before allowing them to play video games or watch television in their room. Nevertheless, whenever possible, Elena did encourage her children to read only in English since neither Benito nor Oscar could read in Spanish. The siblings brought home books in English from the school library and read with their mother before going to bed.

In addition to the family's education, Benito and Oscar engaged in several extracurricular activities and social events together. The siblings were very similar in age, which set them at only one grade apart. Therefore, the sibling pair shared many of the same friends and participated in the same sports, such as the primary school's basketball team. The siblings' mother also exhibited a wide kinship network that included her sister, Diana, and several other women who lived in her same apartment complex. Since Elena did not work, she often cared for her sister's and neighbors' young children. Benito and Oscar spent the evenings, as well as other social gatherings, with these families and their children.

3.2.4. Family 4: The Rubio family

The fourth family in this study was comprised of older sibling, Samuel, younger sibling, Kendra, and their mother, Ana. In 2002, Ana and her then husband immigrated to Otter Creek from Puebla, Mexico, with their eldest child, Samuel, who was 2-years-old at the time of arrival. Since their arrival, both she and her husband worked several jobs in service, mainly in Mexican restaurants. In 2014, however, Ana divorced from her husband and moved with her brother into a large three-bedroom house, located in the southwest quadrant of Otter Creek, near the primary school. In the home where Ana and her two children were now living also resided Ana's brother, Eduardo, and his 7-year-old son, Daniel, a student at Otter Creek primary. The home was located in a quiet suburban street, lined by oak trees and a painted street sign that read "Mexico Street". Outside Ana's home, two large pickup trucks were parked on the lawn, which led to the stairs and porch that was furnished with retired sofas and arm chairs. Inside, the living area was empty except for two large plastic tables and chairs that laid against the side-wall, which

were taken out only during social gatherings. Behind the common area was the kitchen. All three bedrooms were located upstairs. Samuel and his younger cousin, Daniel, shared a room while Ana and her daughter, Kendra, shared a bed together. The only television was located in Eduardo's room.

With respect to the family's education, Ana completed her primary education at the age of 12 in a small village in Puebla, Mexico. Even though she could read and write in Spanish, she preferred listening to her children recount stories in English to practice and learn vocabulary since she struggled learning English. Ana spoke only Spanish to her children, but often encouraged them to speak English in her presence so that she could learn vocabulary. Regarding the siblings' education, Samuel was born in Mexico and came to Otter Creek at the age of two, and his younger sister, Kendra, was born in NJ. Both Samuel and Kendra began their schooling in Pre-K in the Otter Creek community and were enrolled in the middle and primary school, respectively. Each night, the siblings completed their homework in the home with the help of their cousins and uncle who lived in the home and spoke English. After, the children then either watched television in English or read books in English they brought home from school. These English language practices were also encouraged by the mother who wanted to improve her English proficiency and read book picture books with her youngest daughter, Kendra.

In addition to the family's education, the siblings also exhibited a wide family-network that was comprised of their cousins and extended family members with whom they interacted daily in both English and Spanish. Ana and her sister, Abril, shared responsibilities taking care of the younger family members during the week, so the siblings were not involved in after school extracurricular activities. Rather, each day the siblings returned home after school with several of their cousins and assisted one another

in completing homework assignments. Either Ana or her sister was present in the house during these hours, watching over the siblings and their cousins, as well as tending to the home responsibilities and preparing dinner.

3.2.5. Family 5: The Ruiz family

The fifth family in this study was comprised of older sibling, Lani, younger sibling, Leo, and their parents, Laura and Mateo. The focal siblings also had a younger baby sister, Suti, who was 9 months old during the time of data collection. Their mother, Laura, immigrated to Otter Creek with her family from Puebla, Mexico, at 14 years old in 1996, and attended and graduated from the local regional high school. Her husband, Mateo, was originally from Northwest Costa Rica and immigrated to Otter Creek in 2002. Both worked full-time; Laura worked in hotel management in an adjacent community outside Otter Creek meanwhile Mateo owned a contracting company. Their newly renovated three-bedroom apartment was located in the southwest quarter near the middle school on Main Street above a beauty salon and Mexican barber shop. Inside, the kitchen was adorned with colorful ceramics and cultural artifacts from family trips to Puebla, Mexico, which opened to a large living room and hallway. Siblings, Lani and her younger brother, Leo, shared a room, while their baby sister slept in their mother and father's room. Furthermore, Laura's mother, Guadalupe, had been residing with the family since early 2016 after her husband, Laura's father, had passed away. The grandmother helped watch over Lani and Leo after school while the parents were working, as well as assist in the cooking and cleaning of the apartment. She spoke only Spanish.

With respect to the family's education, Laura attended and graduated from the regional high school in a nearby NJ community, later returning to community college as an adult where she completed her bachelor's degree in business administration. She was fully bilingual in Spanish and English. Her children, Lani and Leo, were both born in Otter Creek and began their schooling in Pre-K. During the time of data collection, Lani and Leo were enrolled in the primary and middle school, respectively. Laura tended to recount stories and picture books in Spanish before bed with Leo, who only responded in English. The oldest sibling, Lani, only brought home books in English from school since she was beginning to read young adult fiction and longer texts that were assigned in her fifth-grade class. She tended to read these books with her father, who wished to improve his English skills.

In addition to the family's education, the sibling pair also engaged in several extracurricular activities and social events with extended family members. For instance, both Lani and Leo played soccer for a local team with other children in the Otter Creek community. Other social gatherings and cultural celebrations were spent with Laura's mother, Guadalupe, who resided with the family. Guadalupe was an important figure in the home who watched over both Lani and Leo after school while their parents were working. Guadalupe did not speak English with her grandchildren, and therefore encouraged both Lani and Leo to respond as best they could in Spanish. Other direct family members, such as Laura's brother and sister, lived outside the Otter Creek community. These family members and their children, all the same age as Lani and Leo, visited Otter Creek on several weekends for social gatherings and other celebrations, such as Christmas and New Year's Eve.

3.2.6. Family 6: The González family

The sixth family in this study was comprised of older sibling, Bryce, younger sibling, Melvin, and their mother, Carolina. The focal siblings also had a younger baby brother who was eight months old during the time of data collection. Before moving to Otter Creek, Carolina and her then husband immigrated to Los Angeles, California, from Tabasco, Mexico, in 2000, residing in a predominantly Latino suburb for seven years. During this time, Bryce and Melvin were born. Their mother, Carolina, stayed home to care for her children meanwhile their father worked full-time as a car mechanic. In 2007, the family decided to move to Otter Creek, NJ, where Carolina's sister was also living. Shortly thereafter, however, Carolina and her partner separated. The father moved away to a nearby city in Central NJ. Carolina and her two children moved in with her sister into a three-bedroom house in the southwest quadrant of Otter Creek. After Carolina's separation with her ex-husband, she had begun dating another man, Oscar, from Puebla, Mexico, who also resided in Otter Creek, having a baby together in March 2016. Carolina's partner, Oscar, did not live with her children and sister during the time of data collection. The family's home, a three-bedroom house near the train tracks, traversed the southwestern quadrant that was located a quarter mile from the middle school. The living room had a large couch facing toward the television, adjacent to the hallway where Carolina's sister's room resided. Following this hallway was the kitchen and dining space, which led out to the family's backyard, an open space whose boundaries were marked the traversing train tracks. Upstairs, siblings, Bryce and Melvin, shared a room, that was furnished with two beds and a television. Opposite to the siblings' room was Carolina's, where her newborn baby also slept.

With respect to the family's education, Carolina completed her high school degree in Tabasco, Mexico. Since Carolina did not speak English, she only read and spoke to her children in Spanish, in addition to discussing all homework and academic matters in Spanish, as well. As mentioned above, both Bryce and Melvin were born in Los Angeles, first attending Pre-K in a predominantly Latino community. At ages 6 and 9, Bryce and Melvin moved to Otter Creek and were enrolled in the primary and middle school, respectively, during the time of data collection. Each night, Carolina checked her children's homework before allowing her children to play videogames or watch television. The family had a Netflix account in Spanish, so the siblings watched many cartoons and Disney channel shows in Spanish. The siblings also had several short stories in Spanish that they read with their mother, speaking to their heightened levels of input in Spanish.

In addition to the family's education, Bryce and Melvin engaged in several extracurricular and social events. For instance, older sibling, Bryce, played basketball for the middle school team and participated in several after school clubs, like chess and homework club. Melvin, on the other hand, did not participate in any after school clubs or sports, preferring to stay home with his mother. As the two siblings had begun establishing deeper roots in the community, they also created friendships with both recently arrived immigrants and other children born in Otter Creek to Spanish-speaking parents. The siblings met many of these children at social gatherings with their mother, Carolina, who had a wide social network that included many recently arrived mothers from Mexico. Like Carolina, many of these individuals did not speak English. Carolina met many of these women at Spanish-speaking mass and other social gatherings during

which they shared tips and advice in integrating themselves in the Otter Creek community.

3.2.7. Summary of participating families' demographics

In sum, the six focal families above were purposefully selected to take part of this study because they fit the study's criteria, such that each sibling pair was between the ages of 5 and 12 and enrolled in either the primary and/or middle school in Otter Creek, NJ. Furthermore, siblings resided in a home whose mother immigrated from Mexico and were the two eldest children in the household. However, while family profiles were standardized based on children's age, generation in the U.S., and family structures, each sibling pair was growing up in diverse and highly complex language ecologies that distinguished each family. Siblings resided in households in which their mother was from Mexico, but heard and spoke Spanish in varying levels, and were exposed to different social networks. Mothers also had differential levels of education. For example, several of these women had achieved advanced degrees (Families 1 and 6) while others completed high school (Families 2, 3, and 6) or only primary school (Family 4). Furthermore, mothers reported speaking Spanish to their children, but maintained that their children did not always respond in the target language, rather preferring English with peers, younger family members, and with their siblings. Collectively, this description contextualizes each of the home language environments among the focal siblings with the objective of capturing the diversity of family profiles. Further details concerning siblings' language use patterns, practices, and ideologies will be addressed in Chapters IV and V.

The next section addresses the methodological procedures and the protocols used to respond to the research questions.

3.3. Data collection procedures

In this section, I discuss how the study's data were collected and describe the protocols used. After, I dedicate the remaining subsections to describe each procedure and explain how protocols were employed. The purpose of this mixed methods study was to determine language use patterns, practices, and ideologies toward speaking Spanish among selected sibling pairs. Therefore, to capture the world of language in each of the sibling pairs, triangulation of protocols using mixed methods were needed to account for both the qualitative and quantitative aspects of bilingual siblings. Recall the research questions in this study were:

1. How do children's reported age of initial exposure to English and their reported linguistic performances in Spanish compare between older and younger siblings?
2. How do older and younger siblings compare in their knowledge of expressive vocabulary and morphosyntax in Spanish and English?
3. What are siblings' Spanish-language use patterns as captured in their oral narratives? More specifically:
 - What is the distribution of verbal TMA in older and younger siblings' Spanish narratives?
 - What relationship exists between sibling order and use of Spanish linguistic-features (e.g., gender article agreement) in oral narratives in Spanish?

- What relationship exists between sibling order and use of English lexical insertions in children's oral narratives in Spanish?
- 4. What is the nature of siblings' language ideologies concerning their use of English and Spanish?
- 5. What are the observed and reported language practices among siblings within the home and school domain?

Research questions one, two, and three respond to siblings' language use patterns, which used quantitative approaches. Research questions five and six respond to siblings' language practices and ideologies, using qualitative approaches to explore the world of language among the focal siblings. This mixed methods study was conducted at four interrelated levels to respond to each research question in the current study. In Table 2, a summary of the protocols and the research question each aims to answer is provided:

Table 2: An overview of the four protocols used in the current study and research questions

Protocols	Description
Mother interview and language surveys (Research questions 1 and 6)	<ul style="list-style-type: none"> • Mother interview • Language background questionnaire • Bilingual Input Output Survey (BIOS)
Home and school observations (Research question 6)	<ul style="list-style-type: none"> • Home observations and audio-recorded interactions • School observations
Child language assessments (Research question 2, 3, and 4)	<ul style="list-style-type: none"> • Expressive Vocabulary One Word (EOWPVT-4: SBE) • Bilingual English Spanish Assessment (BESA) / Bilingual English Spanish Assessment Middle Elementary • Elicited narrative production
Child interview (Research questions 5 and 6)	<ul style="list-style-type: none"> • Open-ended questions about language use pattern and ideologies

The first three protocols used in the study included the mother interview, language background questionnaire, and BIOS survey⁷, which were administered during the initial home visit. The mother interviews, which responded to the fourth and fifth research questions, unpacked siblings' language ideologies toward English-Spanish bilingualism, current and previous language practices, and the family's structure. Following the mother interview, mothers completed the language background questionnaire and BIOS survey, which responded to the first and fifth research question. These surveys provided additional data on children's upbringing, acquisition of English, and language practices in the home.

⁷ Peña, Gutiérrez-Clellen, Iglesias, Goldstein, and Bedore (2014)

The second protocol included home and school observations, which responded to the fifth research question. Observations examined siblings' everyday communicative interactions through ethnographically informed field-notes and audio-recorded interactions in the home and school. These observations contributed to an overall depiction of siblings' language profiles, triangulating interviews and child language assessments to accurately capture the world of language in each of the participating families.

The third protocol used in this study were the child language assessments provided in both English and Spanish. The assessments employed were the Spanish and English versions of the EOWPVT-4: SBE⁸ and BESA⁹/BESA-ME¹⁰, which responded to the second research question. These protocols provided a quantitative measure of each child's expressive vocabulary and morphosyntax knowledge in English and Spanish. Furthermore, the elicited production task in Spanish aimed to answer the third and fourth research, which explored differences in the Spanish-language profiles of selected siblings. In this task, children recounted Mayer's (1969, 1973, 1974) *Frog Stories*. These protocols served as quantitative measures to depict siblings' overall language profiles in Spanish and English, which also triangulated qualitative data on children's language ideologies and practices.

The fourth protocol was the child interview¹¹, which responded to research questions five and six. The interviews with children corresponded to reported sibling language ideologies, as well as highlighting their language practices. These data

⁸ Martin (2011)

⁹ Peña, Gutiérrez-Clellen, Iglesias, Goldstein, and Bedore (2014)

¹⁰ Peña, Bedore, Iglesias, Gutiérrez-Clellen, and Goldstein (n.d.)

¹¹ Included guided reading of *Pepita talks twice/Pepita habla dos veces* (Lambart, 1975).

intersected with mother interviews and language assessments to provide a nuanced understanding and triangulated picture of siblings' language practices and ideologies.

The data collection process for this study occurred during a four-month period October 2016 to January 2017. The order in which the protocols were administered was as follows: First, for each sibling pair, I visited the home at least once, interviewing siblings' mothers, conducting the mother survey, language background questionnaire, BIOS, and ethnographically informed observations. After this initial visit, I then visited children's schools daily during the four-month period and observed children in their classrooms, in the cafeteria, and during recess. I met with each child during school hours and conducted three separate interview sessions. The first session was conducted in only English, which included the completion of the EOWPVT-4: SBE and BESA/BESA-ME English subtests. The second session was conducted in only Spanish, which included the EOWPVT-4: SBE, BESA/BESA-ME, and an elicited production in Spanish. The final session was dedicated to the child interview, which was conducted in the participant's language of choice¹². Table 3 summarizes each session and the protocols used with participants.

¹² All children preferred the interview to be conducted in English.

Table 3: Instruments used and duration of interaction according to meeting

Meeting	Duration	Instruments
Home visit	2 hours	Mother interview, language background questionnaire, BIOS, Observations
School visit	4 hours daily	Observations in classroom, cafeteria, hallways, and recess
Child session 1	1 hour	EOWPVT-4: SBE, BESA/BESA-ME in English
Child session 2	1 hour	EOWPVT-4: SBE, BESA/BESA-ME, Frog Stories in Spanish
Child session 3	30 minutes	Child interview

In the following subsections, each of the protocols is described in detail. I first describe the mother interview and language surveys. Next, I explain the language assessments tasks, which include the EOWPVT-4:SBE, morphosyntax subtests of the BESA/BESA-ME, and elicited oral production using Mayer's (1969, 1973, 1974) *Frog Stories*. And lastly, I describe the child interview and ethnographically-informed observations.

3.3.1 Mother interview and language surveys

The first meeting with mothers was conducted within the home and included an open-ended interview, a language background questionnaire, and the BIOS survey. The goal of these protocols was to unpack siblings' language ideologies toward English-Spanish bilingualism, current and previous language practices, and the family's structure. The first protocol conducted with mothers was the open-ended interview (see Appendix A). The interview lasted approximately 30 minutes and was guided by open-ended questions about the caregiver's ideologies toward English-Spanish bilingualism, practices within the home to support the home language, and goals in relation to each of their child's maintenance of

Spanish. For instance, I asked mothers to describe if and how their child's language practices have changed, their perceived attitudes toward speaking Spanish, anecdotal examples of their children either rejecting or accepting the use of Spanish in the home.

After the interview, mothers then completed a brief language background questionnaire in writing designed by the researcher (see Appendix B). The questionnaire included several questions on the family structure, such as the presence of other family members in the household. Furthermore, the questionnaire inquired the age at which each sibling began Otter Schools, as well as diachronic use of Spanish among siblings and family members over time. The questionnaire also included a self-reported language proficiency component. Each mother was asked to report their children's proficiency in Spanish when speaking and comprehension¹³ on a scale 1 through 10. Mothers were instructed that '1' was defined as very weak, such that their child was unable to produce or comprehend spoken Spanish. Mothers were then told that a score of '10' was defined as very strong, which indicated that their child could fully produce or comprehend spoken Spanish.

The third protocol conducted with mother was the BIOS survey designed by Peña et al. (2014) (see Appendix C). The purpose of the protocol was to provide additional data on children's upbringing and acquisition of English. Mothers completed the surveys in Spanish and completed one for each child. The mother first reported their child's Age of Initial English Exposure (AoEE), the age at which the mother reported that their child began being exposed to English on a regular basis. This section was comprised of chart in which the mother would mark the languages present in their children's environment from years 0 through the child's actual age, as shown in Table 4¹⁴.

¹³ Given the nature of sibling pairs academic instruction is in only English, I only focus on children's reported proficiencies when speaking and listening in Spanish, rather than reading and writing in Spanish.

¹⁴ From Peña et al.'s (2014) BIOS survey.

Table 4: Initial English exposure and languages used in the home and school environment according to the children's age

	At home			At school/preschool/daycare			
Ages	Both	Spanish	English	Both	Spanish	English	NA
0-1							
2-3							
3-4							
4-5							
5-6							
6-7							
7-8							
8-9							
9-10							
10-11							
11-12							
Total number of years in:	Both	Spanish	English	Both	Spanish	English	NA
Year of first exposure to English:							

As shown in the Table 4, mothers indicated to the best of their knowledge the language/s used in the child's home environment. By using the provided chart, mothers then indicated the age at which their child was first exposed to English.

The subsequent section of the BIOS survey concerned each child's home language routine. The purpose of the protocol was to provide additional qualitative data on children's language practices, which responded to the fifth research question (i.e., What are the observed and reported language practices within the home and school domain?). For each child, the mother completed the BIOS home and school language routine, which served as a guide to discuss children's everyday communicative activities. The left column represented the number of hours during the day that each child was awake, from 7:00 a.m. until 8:00 p.m. Next to this column followed the individuals, if any, who were present during that hour. To

the right in the column title, “waking hours,” the number “1” was placed for each hour, which mothers were instructed to circle if the child was awake during that hour. And finally, the last two right columns represented the language/s each child heard (i.e., input) and spoke (i.e., output) during the day. The BIOS Home Language Routine Survey is depicted in Table 5¹⁵.

Table 5: BIOS Home Language Routine as reported by mothers

			Languages	
	Participants (parents, siblings, peer)	Waking hours	Participant input	Participant output
Time			Spanish- English- Both	Spanish- English- Both
7 a.m.		1		
8 a.m.		1		
9 a.m.		1		
10 a.m.		1		
11 a.m.		1		
12 p.m.		1		
1 p.m.		1		
2 p.m.		1		
3 p.m.		1		
4 p.m.		1		
5 p.m.		1		
6 p.m.		1		
7 p.m.		1		
8 p.m.		1		

This task was comprised of tables representing the hours in a typical week and weekend in which the hours of the day were listed on the left column and language/s in child’s environment above (i.e., Spanish, English, both Spanish and English). For each row, mothers were instructed to circle every ‘1’ to represent the number of hours the child was

¹⁵ From Peña et al.’s (2014) BIOS Home Language Routine Survey.

awake. Mothers were also instructed to place an 'X' over the language/s used by their children, as well as indicate the individuals, if any, who were present during the interaction. The purpose of the protocol was to provide additional qualitative data on children's language practices that triangulated findings from the mother interview.¹⁶

The next subsection details procedures followed when conducting observations in the home and school setting.

3.3.2 Home and school observations

Ethnographically informed observations were conducted in the home and school setting, as outlined by Garrett (2008). In this subsection, I first outline the procedures taken to observe children in the home environment. After, I describe school observations and ethnographic note taking.

The first observation was conducted in the homes of each of the six families immediately following the mother interview. Special precautions were taken to create rapport with each family, such as culturally appropriate forms of address when talking to family members, politeness, and greeting/leave-taking routines. During this time, I observed home language practices using field notes and digital audio-recorder, paying special attention to the Spanish and English the language patterns among siblings, peers, and mothers. I was present during family interactions, such as children's arrival from school and the preparation of meals, homework sessions, and times when siblings played games/videogames with their peers. In Families 2, 3, 5, and 6, I was given permission to provide children with an audio-voice recorder that was worn around their neck when I was not present in the home. The

¹⁶ This study used the BIOS survey as a qualitative tool during the mother interview during which mothers described their children's language practices. The quantitative fraction from children's input/output language patterns of language exposure were not calculated.

caregivers and siblings were instructed to interact with their family members during dinner time conversation and/or friends while they were playing.

Additional observations occurred in families 2, 4, and 5 in the home. After the initial visit to these families' homes, the mothers asked that I return once a month to tutor their children in reading and math. These additional visits provided me with the opportunity to further develop my relationship with the children and their families, as well as observe numerous instances in which siblings and their families negotiated their language practices during everyday events. Furthermore, these three families also agreed to record dinner time conversations and homework sessions using a digital audio-recorder when I was not present in the home. The total number of home observations for each family is presented in Table 6:

Table 6: The number and duration of observations conducted in the home according to each of the six participating families

Family	Mother	Children	Total number of home observations	Total duration of observation/s
1	Mariana	Daniel (O) Mia (Y)	1	1 hour and 30 minutes
2	Amanda	Brent (O) Kyle (Y)	3	4 hours
3	Elena	Benito (O) Oscar (Y)	1	1 hour
4	Ana	Samuel (O) Kendra (Y)	5	7 hours
5	Laura	Lani (O) Leo (Y)	3	3 hours
6	Carolina	Bryce (O) Melvin (Y)	1	1 hour and 30 minutes

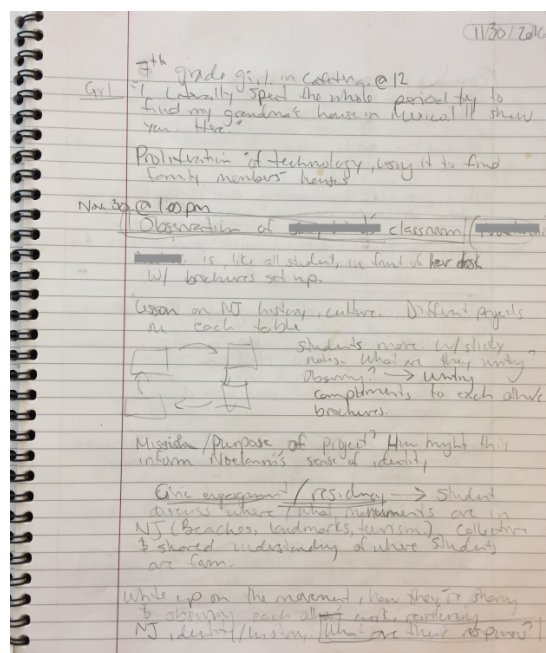
The second set of observations took place during the school day and in the school environment. The main motivation for visiting and observing both the school and home environments follows the recommendation by Kibler et al. (2016). That is, Kibler et al. (2016) maintains there is a dearth of research that examines child language use in both domains. For this reason, school observations occurred every day for a four-month period between October 2016 and January 2017. A typical day began at 8:30 a.m. during first period in either the middle or primary. I spent the entire day with one focal sibling of the study, attending class, eating lunch in the cafeteria, and accompanying the child to recess with her/his peers. The total number of observations for each child is outlined in Table 7.

Table 7: The total number of observations conducted during school hours in the classroom and cafeteria according to focal sibling pairs

Family	Children	Classroom observations	Cafeteria/recess observations	Total number of observations
1	Daniel (O)	6	5	11
	Mia (Y)	5	6	11
2	Brent (O)	5	6	11
	Kyle (Y)	5	5	10
3	Benito (O)	4	5	9
	Oscar (Y)	5	6	11
4	Samuel (O)	4	6	10
	Kendra (Y)	4	5	10
5	Lani (O)	5	6	11
	Leo (Y)	4	5	9
6	Bryce (O)	5	10	15
	Melvin (Y)	5	7	12

Bringing only a pencil and paper, I recorded my observations using field notes that I documented after the observation. In the classroom, I noted what language/s the focal child used with her/his peers. I quietly sat in the back corner and observed what language/s the focal child spoke with his or her classmates and when. In the cafeteria, I sometimes took an active role in the observations. I asked the participating children if I could sit and have lunch with their friends during which I listened to their conversations and asked them follow-up questions. An example of the field notes is shown Figure 1.

Figure 1: Example of observational field notes during ethnographically informed observations in the school environment



After returning from the Otter Creek community, I prepared my field notes on a laptop computer and further reflected on what I observed each day. In each journal entry, I included the date, time, place of observation, as well as the specific child that I was observing. From the brief words and phrases that I recorded using pencil and paper, I expanded these jottings and described everything I could remember about the occasion, focusing on my guiding questions on language use patterns, practices, and ideologies. In total, over 50 sets of field notes were written, running to over 10,000 words. These field notes were also triangulated using publicly available data on Otter Creek Schools, such as policy documents on the language curriculum and ESL Parent Handbook. The purpose of these data was to provide an in-detail description of the siblings' language practices within the school environment, and the language input within the classrooms.

The next subsection details the three language assessments used to measure children's expressive vocabulary and morphosyntax knowledge in Spanish and English, and their use of Spanish linguistic features in oral narratives.

3.3.3 Child language assessments

In this subsection, I describe the three language assessments used to determine siblings' expressive vocabulary and morphosyntax knowledge in both English and Spanish, as well as their Spanish linguistic features used in oral narratives. To conduct these assessments, children were met on school grounds in a quiet space on two different days, first in English and then in Spanish. The reason for conducting the languages on two separate days in two languages was two-fold: First, each session lasted approximately 40 minutes; therefore, dividing the task in two days was appropriate for the age group of participants. And second, it is customary in child bilingual research to administer the assessment on two different days to avoid cross-linguistic transfer (e.g., Uccelli and Pérez, 2007; Fiestas and Peña, 2004). Below I describe the methodological procedures and protocols.

According to the research questions on hand, one of the aims of this study was to examine siblings' expressive vocabulary and morphosyntax knowledge in both Spanish and English. Thus, the study examined the Spanish linguistic features (e.g., gender article agreement, verbal morphology) instantiated in siblings' narrative recounts. The three protocols to measure these variables were:

- EOWPVT-4: SBE in English and Spanish
- The English and Spanish morphosyntax subtest of the BESA/BESA-ME
- Elicited production of Spanish using *Frog Stories* (Mayer, 1969, 1974).

In the following subsections, the procedures for each task are outlined in detail. I first describe the instrument and the purpose in choosing the protocol. Next, I explain how each assessment was administered in both English and Spanish.

3.3.3.1 Expressive vocabulary

To chart the expressive vocabulary of each child, I used the Expressive Vocabulary One-Word Picture Test Spanish Bilingual Edition (EOWPVT-4: SBE; Martin, 2011)¹⁷. The instrument, which is comprised of 180 items that are presented in order of difficulty, was chosen because it was normed on bilingual children, thus being the most reliable measure for my study's population. It is important to note, however, that the EOWPVT-4: SBE task was modified to chart the expressive vocabulary of each language and directly compare item-level results cross-linguistically, following Anaya (2013), Benson-Villegas (2015), Grasso (2014), among others. That is, the original version of the assessment gives children the opportunity to respond in either of their languages, Spanish and English, which provides a more comprehensive evaluation of the child's naming abilities. However, instead of allowing children to respond in either of their languages (i.e., Spanish or English), I administered the test in two independent sessions: first in only English and then in only Spanish. This modification was deemed the most appropriate to compare item level results in both languages since the EOWPVT-4: SBE was normed on English-Spanish bilingual populations and provided culturally sensitive test items that best reflected children's expressive vocabulary.

¹⁷ Martin (2011) defines expressive vocabulary as the ability to retrieve and access the item from memory, and generate the word that best describes the object, concept, or action shown.

To administer this protocol, the child's chronological age was determined prior to testing. This score calculated the item number at which children began the item recall. Next, instructions were read verbatim in the designated language from the test manual. The child was instructed to identify in the target language the object, action, or concept when provided with a picture and would have 20 or 30 seconds to do so. After providing instructions, the test was administered. Following the test manual, children obtained a basal score - that is, the entry level and ceiling score - during which they began at the designated item according to their age. A basal score of eight consecutive correct answers needed to be established for each child. If an error was made during the first eight items, the picture sequence was reversed until the child obtained eight consecutive correct responses, and then continued forward. That is, if the child was unable to name eight consecutive items, which established the basal score, the order in which the pictures were shown was reversed until the child obtained eight consecutive correct responses. Once the starting point was determined, the child then named as many items as possible during which responses were written in the test booklet. When necessary, prompts and cues that strictly followed the test manual were provided in the target language. For instance, for most objects, the prompt *¿Qué es esto?* (What is this?) or *¿Para qué usas estos?* (What do you use these for?) was used to help keep the child on task and maintain a steady testing pace. Correct answers adhered to the test manual, such that children's responses followed the list of accepted words for both Spanish and English. Once the child reached a ceiling, six consecutive incorrect responses, the test was discontinued and the number of correct responses was documented.

After the completion of the EOWPVT-4: SBE, the morphosyntax subtest of the BESA/BESA-ME was then administered in the target, as outlined below.

3.3.3.2 Bilingual English Spanish Assessment (BESA/BESA-ME)

The second assessment administered was the morphosyntax subtest of either the BESA or BESA-ME (Peña et al., 2014, 2016). Both the BESA and BESA-ME measured morphosyntax knowledge through a Cloze protocol and sentence repetition task, comprised of the same constructs. The BESA was used for siblings younger than 7 years old and the BESA-ME for children aged 7 and older. Table 8 depicts the age-appropriate assessment each child took.

Table 8: The BESA morphosyntax subtest version according to each child's age

Family	Pair	Age during study (year; month)	BESA Version
1	Daniel (O)	10;4	BESA-ME
	Mia (Y)	6;11	BESA
2	Brent (O)	11;3	BESA-ME
	Kyle (Y)	9;4	BESA-ME
3	Benito (O)	8;10	BESA-ME
	Oscar (Y)	7;6	BESA-ME
4	Samuel (O)	12;4	BESA-ME
	Kendra (Y)	6;0	BESA
5	Lani (O)	9;7	BESA-ME
	Leo (Y)	5;0	BESA
6	Bryce (O)	11;2	BESA-ME
	Melvin (Y)	8;9	BESA-ME

The main rationale behind the use of the BESA and BESA-ME was that each assessment was normed on child bilingual English-Spanish populations in the U.S. and

best reflected the children's morphosyntax knowledge relative to their age group. That is, the specific items on the BESA-ME tested age-appropriate structures that more accurately depicted children's morphosyntax knowledge. An outline of each task is outlined in Table 9.

Table 9: The number of items in BESA and BESA-ME morphosyntax subtests (Cloze and sentence repetition sections) according to language

Task	BESA		BESA-ME	
	English	Spanish	English	Spanish
Cloze	23	15	18	18
Sentence repetition	33	37	22	22

As observed in Table 9, the BESA and BESA-ME were comprised of two parts, one in English and one in Spanish, which included a Cloze protocol containing blank items and a sentence repetition task. In the English BESA morphosyntax subtest, the Cloze procedure included 23 items and the sentence repetition task included 33 items. The items tested third person singular verbs, plural nouns, possessive –s, regular and irregular past tense, auxiliary verbs, embedded prepositions, and conjunctions. An overview of the forms and number of items tested in the English morphosyntax subtest of the BESA are provided in Table 10.

Table 10: The distribution of morphosyntactic features tested in the BESA English subtest (Cloze and sentence repetition task)

Cloze task		Sentence repetition task	
Forms tested	Number of items	Forms tested	Number of items
Possessive -s	3	Third person singular present	2
Third person singular	3	Auxiliary	2
		Infinitive	1
Regular past	4	Regular and irregular past	5
Plural nouns	3	Embedded prepositions	5
Present/past auxiliary + progressive -ING	3	Present aux + progressive -ING	1
Copula	3	Copula	1
Negatives	3	Conjunctions	3
Passives	3	Noun phrase	13
Total	24	Total	33

The Spanish morphosyntax subtest of the BESA was comprised a Cloze procedure that included 15 items and a sentence repetition task that included 37 items. Forms tested in the Spanish morphosyntax subtest included regular and irregular past, imperfect tense, subjunctive, direct and indirect object clitics, progressives, embedded prepositions, and conjunctions. An overview of the forms and number of items tested in are provided in Table 11.

Table 11: The distribution of morphosyntactic features tested in the BESA Spanish (Cloze and sentence repetition task)

Cloze task		Sentence repetition task	
Forms tested	Number of items	Forms tested	Number of items
Articles	4	Embedded prepositions	4
		Preterite	2
Present progressive	3	Imperfect	8
		Conditional	1
Direct object clitics	4	Infinitive	1
		Subjunctive	3
		Direct/indirect Object clitics	2
Subjunctive	4	Noun phrases	9
		Conjunctions	7
Total	15	Total	37

The BESA-ME used with children older than 6;11 was also comprised of a Cloze protocol containing blank items and a sentence repetition task. In the English morphosyntax subtest, the Cloze procedure included 18 items and the sentence repetition task included 26 items. These items tested regular and irregular past, possessive -s, relative clauses, passives, and question inversions, conjunctions, and embedded prepositions and noun phrases. An overview of the forms and number of items tested in the English morphosyntax subtest of the BESA-ME are provided in Table 12.

Table 12: The distribution of morphosyntactic features tested in the BESA-ME English (Cloze and sentence repetition task)

Cloze task		Sentence repetition task	
Form tested	Number	Form tested	Number
Possessives	3	Third person singular	4
		Present aux + progressive -ING	1
Regular and irregular past	4	Regular and irregular past	3
Relative clauses	3	Infinitives	2
		Embedded prepositions	5
Passives	4	Conjunctions	1
Question inversion	4	Noun phrase	6
Total	18	Total	26

In the Spanish morphosyntax subtest of the BESA-ME, the Cloze protocol contained 18 items and the tense repetition task included 26 items. These items tested irregular and regular past, imperfect tense, subjunctive, conditional, relative clauses, direct and indirect object clitics, adverb placement, and adjective agreement. An overview of the forms and number of items tested in the BESA-ME are provided in Table 13.

Table 13: The morphosyntactic features tested in the BESA-ME Spanish subtest (Cloze and sentence repetition task)

Cloze task		Sentence repetition task	
Forms tested	Number	Forms tested	Number
Irregular past	3	Embedded prepositions	4
		Conjunctions	4
Relative clauses	4	Preterite	2
		Imperfect	3
		Conditional	1
Subjunctive	4	Subjunctive	2
		Adverb placement	1
Imperfect	4	Direct/indirect Object clitics	3
		Noun phrases	2
Adjective agreement	4	Adjective agreement	2
		Direct object markers	2
Total	18		26

To administer the BESA/BESA-ME, instructions were carefully read verbatim from the test manual in the target language. The child was audio-recorded so that I could go back and re-listen to responses. The child began the Cloze task by first completing practice items according to the test's instructions. I presented the demonstration items and pointed to the picture while the complete prompt was read, stressing the target structure that was being elicited. It was important that the child understood that he or she must complete the phrase, rather than to comment. Once testing had begun, additional models other than those in the prompt were not provided, which strictly followed item scripts. Scoring followed the items indicated in the protocol. After the completion of the

Cloze protocol, children were then instructed that they were to begin the sentence repetition task. The sentence repetition test items were only presented once. In the test booklet, target words and phrases were shown in bold. Each child was instructed that they would hear a complete sentence and would then have to repeat the sentences verbatim, word for word. The child must have produced the word or phrase to receive credit for that item, regardless of word order. If the child produced the target item, the child received one point and the answer was documented in the test booklet. After the completion of both tasks, the number of correct responses were added from both the Cloze protocol and the sentence repetition tasks to obtain a total English and Spanish morphosyntax scores.

Next, I describe the elicited production task in Spanish used in the second session.

3.3.3.3 Elicited production task

The final measure consisted of an oral narrative retell task in Spanish using wordless picture books. Children could select from one of three books, *Frog, Where Are You?* (Mayer, 1969), *Frog on His Own* (Mayer, 1973), *Frog Goes to Dinner* (Mayer, 1974). The rationale behind the use of this protocol is that Mayer's *Frog Stories* have been widely used by researchers working with bilingual children, allowing for objective comparison between participants and languages (e.g., Berman and Slobin, 1994; Fiestas and Peña, 2004; Sánchez, 2003; Uccelli and Páez, 2007). The stories contained the same informational content but offer some ambiguities to allow for elaborations of the storyline.

To administer the task, I sat across from the child and presented the story while s/he viewed the book in a quiet space. Narratives were digitally audio-recorded. Following the model, I gave the book to the child and asked that the child retell the story in the target language. Once the child started to narrate, I assented and used expressions,

such as *Ah sí* (Ah yes) and *Muy bien* (Very good). Where they needed help and/or prompts, I asked them open-ended questions such as *¿Qué más pasó?* (What happened next?) or *¿Algo más?* (Anything else?) until the child had ended the narration (see Appendix D). After the completion of the task, each child's digitally audio-recorded narratives were then transcribed in full.

3.3.4 Child interview

The fourth protocol, the child interview, protocol shared the goal of understanding children's language ideologies and their reported language practices (see Appendix E). To begin, the interview was conducted in a quiet space during school hours. I sat across from the child and explained that we would be talking about using Spanish in the family and school, and how they feel when they talk in Spanish. Special consideration was taken when speaking with children (e.g., McCarty, Romero-Little, Warhol, Zepeda, 2009; López, 2011; King, 2013). For instance, following previous research by López (2011) on youth language ideologies, the interview used Dumas-Lachtman's (1975) book, *Pepita speaks twice/Pepita habla dos veces*, which recounts a fictional story of a Mexican-American girl who often feels frustrated speaking Spanish with her friends, family members, and pet dog.

To conduct the interview, the child was instructed to first listen to the book reading of Dumas-Lachtman's (1975), *Pepita Speaks Twice/Pepita Habla Dos Veces*. After listening to the book being read by the researcher, the child then answered a series of questions about the use of Spanish and English with friends, family, and siblings. For instance, the child was first prompted to talk about how s/he related to the book's main character, Pepita, and whether there was a time he or she also felt frustrated speaking two languages. Follow-up questions were then asked, such as the language the child prefers to speak with family members, siblings, friends, and why.

Where they needed help and/or prompts when talking about their attitudes and reported language

practices, I asked them open-ended questions such as “Anything else?” or “What happened next?” until the child had ended talking. In total, the interview lasted approximately 30 minutes. This mixed methods study employed both qualitative and quantitative approaches to allow for triangulation of data. The four protocols used were mother interviews and surveys, ethnographically informed observations, child interviews, and three language assessments in both Spanish and English. The next section outlines the procedures taken to quantitatively and qualitatively analyze data.

3.4 Quantitative and qualitative data analysis

In this section, I detail the procedures taken to quantitatively and qualitatively analyze data from the four protocols described in section 3.3. These data were analyzed using mixed methods according to the research questions on hand to capture siblings’ language use patterns, practices, and ideologies toward speaking Spanish.

The next subsection provides a detailed account of the quantitative analyses used to analyze the language assessment data, which include siblings’ reported AoEE, Spanish-language proficiencies, and expressive vocabulary and morphosyntax knowledge in Spanish and English.

3.4.1 Procedures for coding and analyzing language assessment data

This section provides a detailed account of how the quantitative analyses were conducted to analyze the children’s AoEE, EOWPVT-4: SBE, and morphosyntax subtests in English and Spanish. The focus of these analyses was to respond to the first and second research questions:

- How do children’s reported age of initial exposure to English and their reported linguistic performances in Spanish compare between older and younger siblings?
- How do older and younger siblings compare in their knowledge of expressive vocabulary and morphosyntax in Spanish and English?

To attend to these analyses, two methods were used. First, I converted the raw scores of the Spanish and English versions of the EOWPVT-4: SBE into percentile ranks¹⁸. Next, raw scores from the morphosyntax subtests of the BESA and BESA-ME were converted into standard scores according to the test manual. For the BESA morphosyntax subtest in Spanish and English, a scaled score was derived for both the Cloze protocol and sentence repetition task, and then added together. The resulting number was then used to calculate the morphosyntax standard score for each language adherent to the test manual. For the BESA-ME morphosyntax subtest, the raw scores of the Cloze procedure and sentence repetition task were converted into standard scores using the formula provided in the test manual.

After the calculation of the percentile rank of EOWPVT-4: SBE and the standard scores of the BESA and BESA-ME protocols, descriptive and inferential statistics were calculated. The mean, standard deviations, and t-tests were calculated for children's:

- Reported AoEE
- Reported language proficiencies in Spanish
- EOWPVT-4: SBE percentile rankings in English and Spanish

Morphosyntax subtest of the BESA/BESA-ME standard scores in Spanish and English.

Next, I discuss the coding procedures from the elicited production task to quantitatively analyze siblings' Spanish linguistic features and use of English lexical insertions that respond to the third research question, which were:

¹⁸ The percentile rank reflected each child's performance in English and Spanish relative to that of the normative population, which accounted for the child's age. That is, the reasoning behind the use of the percentile rank as the preferred score is that the percentile rank better depicted the child's expressive vocabulary knowledge according to his or her age interval, since vocabulary skills develop over time. The percentile rank was only available for the EOWPVT-4: SBE assessment.

- What are siblings' Spanish-language use patterns as captured in their oral narratives? More specifically:
 - What is the distribution of verbal TMA in older and younger siblings' Spanish narratives?
 - What relationship exists between sibling order and use of Spanish linguistic-features in oral narratives in Spanish?
 - What relationship exists between sibling order and use of English lexical insertions in children's oral narratives in Spanish?

Below I describe how the coded data from the elicited production task in Spanish were coded and analyzed.

3.4.2 Procedures for coding and analyzing elicited production data

This section outlines the second set of quantitative analyses used to code and analyze elicited production data, as addressed in the third research question. To answer the third research questions, two quantitative analyses were conducted. The first quantitative analysis examined the distribution of children's use of tense, mood, and aspect (TMA) verbal morphology. The second quantitative analysis examined children's use of selected linguistic features in children's Spanish narratives (e.g., gender article agreement) and English lexical insertions in their narratives. In what follows, I first describe the coding procedures that examine children's verbal TMA, followed by the selected Spanish linguistic features and use of English lexical insertions.

First, before carrying out the analysis, the digital audio-recording of children's oral narratives were transcribed by the researcher. After transcribing oral narratives, I identified the main verb in each clause and marked it as one entry token, following Labov and Waletzky

(1967). Labov and Waletzky (1967) indicate that the clause contains the main verb as the basic unit, as well as its complements, modifiers, and other grammatical devices. Multiple clauses connected by conjunctions were marked and entered as separate entries. After identifying each clause, only clauses with a Spanish verb were included in the quantitative analysis.

According to Comrie (1976) and Dahl (1985), tense is defined as a deictic category that locates an event on a time line. For past tense in Spanish, the preterite tense form morphologically encodes a situation in the past as completed. In contrast, the imperfective past-tense form, the imperfect in Spanish, is characterized by habituality and continuousness. Perfective and imperfective meanings in oral past-time narratives are conveyed in the inflectional morphology, as in the following examples:

(1) *El niño **leyó** el libro.*

The boy read the book. (perfective aspect)

(2) *El niño **leía** el libro cuando entró su mamá.*

The boy was reading the book when his mother entered. (imperfective aspect)

Examples (1) and (2) are illustrative of the contrast between the perfective form, *leyó* ‘the boy read,’ with the imperfective form, *leía* ‘the boy was as reading,’ despite that both instances express past events. Preterite denotes completion of an action and imperfect denotes incompleteness, progressive, and habitual. Thus, it would be of interest in the current study to understand the aspectual use of verbs used among sibling pairs.

Mood, on the other hand, is expressed by means of inflectional morphology, which is governed by several of syntactic, semantic, and pragmatic rules in determining the selection of either the indicative vs. subjunctive mood. While these rules governing

the selection of mood are complex, subjunctive is frequently used to talk about desires, doubts, wishes, and possibilities¹⁹. For instance, consider the following examples:

- (3) *Juan quiere que vengas/*vienes.*
 Juan wants that you come-SUBJ/*vienes-INDIC
 Juan wants you to come
- (4) *Es importante que vayas a la reunión.*
 It is important that you go-SUBJ/*go-INDIC to the meeting
 It is important that you go to the meeting

As observed in the above examples, Spanish morphologically marks the subordinating verb that is inflected in the subjunctive mood. The verb's lexical meaning, like volitional predicates, as in example (3), or other nominal expression, as in example (4), govern the selection of subjunctive. Studies investigating mood selection among native and second-generation Spanish heritage speakers in the U.S. have documented that the subjunctive mood is produced less often than other verb forms (e.g., Lipski, 1993; Lynch, 1999; Silva-Corvalán, 1994). Thus, given the population of the participating siblings pairs, this study aimed to examine the distribution with which older and younger siblings use the subjunctive mood in their narratives. To analyze narratives, each Spanish verb was coded according to the verb's TMA morphology²⁰ as outlined above. Each Spanish verb was coded as being the present tense, preterit, imperfect, and subjunctive mood, as outlined in Table 14.

Table 14: Examples of TMA coding procedures in children's Spanish narratives

Code	TMA	Example from the data
1	Present ²¹	<i>La rana está feliz.</i> (The frog is happy.)

¹⁹ For a more in-depth treatment of Spanish subjunctive, see Pérez Saldanya (1999) and Zagana (2012).

²⁰ Verbs that were inappropriately formed (e.g., *hació* vs. *hizo*) were included in the analysis, but later coded for accuracy in a separate statistical model, outlined in section 3.4.2.2.

²¹ Present progressive using the copula verb 'estar + present participle' was coded as present tense.

2	Preterite	<i>El hombre se espantó.</i> (The man got scared.)
3	Imperfect	<i>El gato estaba en los arboles</i> (The cat is in the trees)
4	Subjunctive	<i>La mama dice que esté calladito.</i> (The mom tells him to be quiet.)
5	Other	All verb types that did not fall under the forms listed above.

Once the coding was completed, data was uploaded into SPSS and analyzed using descriptive statistics. The first analysis examined the distribution of each coded TMA form for younger and older siblings, calculating the frequency with which each sibling group used TMA verbal morphology. After, the distribution of each coded verb type within each sibling pair was calculated, such that the frequency with which each child issued TMA was examined in the six sibling pairs. This analysis did not presuppose that verbal TMA was a measure of children's linguistic knowledge. Rather, it was coded to provide a depiction of siblings' language-use patterns.

The second quantitative analysis of siblings' Spanish oral narratives, which analyzed children's Spanish linguistic variables and use of English lexical insertions in each marked clause (see Appendix F). After identifying each clause and marking it as a separate entry, five variables were coded within each clause. These variables were:

- Gender article agreement in the subject and object position
- Gender adjective agreement
- Verb-number agreement
- Verb formation and meaning appropriateness
- The presence of English lexical insertions per clause

Below, I explain each of the variables under study and describe the coding process.

The first four linguistic variables were selected to examine children's linguistic knowledge in several vulnerable morphosyntactic areas. The first linguistic variable under examination was article gender agreement. That is, in Spanish, as other Romance languages, the grammatical category gender categorizes nouns into two genders, feminine and masculine, and is predominantly morphologically and phonologically based. According to Corbett (1991), gender assignment for each noun in Spanish is a lexical property, which is generally observed in the inflectional morpheme *-a* for feminine and *-o* ending for masculine (e.g., *el perro*/ 'the dog' and *la mamá*/ 'the mother'). This feature was chosen because several researchers have revealed that gender article agreement is a common grammatical pattern associated with L1 and/or language shift, such that children often use the default masculine gender with nouns that take the feminine article assignment (e.g., Anderson, 1999; 2001; Bedore et al., 2010; Leadholm and Miller, 1995; Lipski, 1993; Peña and Bedore, 2008; Uccelli and Paéz, 2007). To analyze children's use of gender article agreement, the analysis examined articles in both the subject and object positions. First, Table 15 illustrates the procedures for coding gender article agreement in nouns in the *subject* position.

Table 15: The coding for the variable of article gender in subject position and examples

Code	Description	Example from the data
1	Appropriate	<i>La rana saltó.</i> (The frog jumped.)
0	Inappropriate	<i>*El mamá está allí.</i> (The mother is over there.)

To code gender article agreement in the subject position, noun phrases (NP), which included the article and its lexical item, were analyzed according to the item's gender assignment. That is, if the form supplied by the child appropriately selected the article gender in the subject position, such as *La mujer camina* (The woman walks), the item was coded as appropriate. If the selected gender article by the child inappropriately agreed with lexical item in the NP, such as **El mamá dice* (The mother says), the item was coded as inappropriate.

However, there were cases in which the children produced NPs with the definite and indefinite article in Spanish and the lexical item in English. Since gender assignment could not be ascertained within the schema of the coding of appropriateness, these tokens were then eliminated from the analyses. For instance, the NPs *El owl* (The owl), *El deer* (The deer), *Los antlers* (The antlers), all assign the default masculine gender to the English lexical insertions. Next, articles in the object position were then coded for gender assignment appropriateness, as observed in Table 16.

Table 16: The coding for the variable of article gender in the object position and examples

Code	Description	Example from the data
1	Appropriate	<i>El niño ve la mariposa.</i> (The boy sees the butterfly.)
0	Inappropriate	<i>Quiere tocar *el rana.</i> (He wants to touch the frog.)

Definite and indefinite articles in the object position were also coded as appropriate and inappropriate according to the lexical item's gender assignment. Furthermore, this analysis also included direct object clitics (i.e., *lo* (it - masculine), *la* (it- feminine), *los* (them- masculine), and *las* (them - feminine), which function as items that take reference from a previously used NP. Thus, if the form supplied by the child appropriately selected the article gender in the object position (e.g., *El niño ve la mariposa.* / The boy sees the butterfly.), the item was coded as appropriate. If the selected gender article by the child inappropriately agreed with lexical item in the NP, such as *Quiere tocar *el/la rana* (He wants to touch the frog), the item was coded as inappropriate. Similar to gender article agreement in subject position, articles with English lexical insertions in the object position were not included in the analysis. For instance, the NP *El niño tiene el toy* (the boy has the toy) assigns the default masculine gender to the English lexical insertions. Since gender assignment could not be ascertained within the schema of the coding of appropriateness, these tokens were then eliminated from the analyses.

The second linguistic feature under analysis was gender adjective agreement. Several researchers, such as Anderson (1999), Leonard Anderson and Souto (2005), among others, report that many English-Spanish bilingual children in the U.S. experience difficulties with gender adjective agreement. Thus, this study attended to children's appropriate and inappropriate assignment of adjective gender, as observed in Table 17.

Table 17: The coding for the variable of adjectival agreement and examples

Code	Description	Example from the data
1	Appropriate	<i>La mujer está sorprendida.</i> (The woman is surprised.)
0	Inappropriate	<i>La mama está *contento/contenta.</i> (The mother is happy.)

As observed in Table 17, narrative coding also attended to the adjectival forms supplied by the child in order to discern whether or not the items appropriately or inappropriately agreed with their modifiers. Adjectives were coded only when it was the adjective inappropriately agreed with his modifier. That is, when the adjectival form was present in the VP, it was coded as appropriate when the item supplied by the child correctly reflected the gender assignment of its modifier, such as in *La mujer está sorprendida* (the women is surprised). However, when the adjective supplied by the child did not appropriately agree with the gender assignment of its modifier, the item was coded as inappropriate, such as in *La mamá está *contento/contenta* (The mother is happy).

The third linguistic feature attended to the Spanish verbs supplied by each child and whether they appropriately or inappropriately agreed in person-number agreement. That is, Spanish verbs are morphologically encoded to reflect the VPs subject, which agree in person and number. Researchers, such as Anderson (2001) and Leonard Anderson and Souto (2005), report that verb number agreement is another vulnerable feature associated with English-Spanish bilingual children. For this reason, the current analysis aimed to examine verb number agreement, as observed in Table 18.

Table 18: The coding for the variable of verb-number agreement and examples

Code	Description	Example from the data
1	Appropriate	<i>El sapo brinca.</i> (The frog jumps.)
0	Inappropriate	<i>La rana y el niño *camina/caminan en el parque.</i> (The frog and the boy walk through the park.)

To code for verb number agreement, each verb was highlighted and analyzed according to its subject. That is, if the verb form supplied by the child appropriately agreed in number, the item was coded as appropriate, such as *El sapo brinca* (The frog jumps). If the verb supplied by the child inappropriately agreed in number, the item was coded as inappropriate, such as in *La rana y el niño *camina/caminan en el parque* (The frog and the boy walk in the park).

The fourth linguistic feature attended to each verb's appropriateness in its formation and meaning. A large body of research has reported that TMA morphology, irregular verb formation, and semantic violations are vulnerable areas in English-Spanish bilingual children, and often confused in spontaneous oral production (e.g., Montrul, 2002; Roca and Lipski, 1993; Silva-Corvalán, 1994, 2014). For this reason, the current analysis aimed to examine the appropriateness in each verb's formation and meaning.

Table 19: The coding for the variable of verb formation and meaning appropriateness and examples

Code	Description	Example from the data
1	Appropriate	<i>La mama se cayó.</i> (The mother fell.)
0	Inappropriate	<i>El niño *ponió la rana allá.</i> (The boy put the frog there.)

As observed in Table 19, the coding of verbal morphology also attended to each verb's formation and meaning appropriateness. That is, the analysis examined constructions, such as the following:

- Overgeneralization of irregular verb morphology (e.g., *El niño *ponió/puso su juguete allí* /The boy put his toy there).
- Inappropriate use of preterite tense for imperfect (e.g., *La rana salió mientras la mujer *caminó/caminaba* /The frog jumped while the woman was walking.)
- Absence of reflexive pronouns in clauses without a complement (e.g., *El niño *cayó/se cayó* /The boy fell.)
- Semantic violations that obstructed meaning (e.g., *Él estaba sentándose*. /He was in the process of sitting down. versus *Él estaba sentado* /He is sitting.)

Verbs were coded as appropriate when the item supplied by the child was accurately formed and did not obstruct meaning. Spanish verbs supplied by the child were coded as inappropriate when the verb form was not accurately formed or was obstructed in meaning. These forms supplied by the child were coded only when it was clear from the context what the participant was referring to.

The fifth and final variable coded was siblings' use of English lexical insertions. After the coding of the above linguistic features was completed, the analysis examined the use of English lexical insertions in each clause. This variable corresponded to the third research question (i.e., What relationship exists between sibling order and use of English lexical insertions in children's oral production in Spanish?). This variable was selected to descriptively examine siblings' language-use patterns. That is, children's difficulty accessing their lexical knowledge has been documented in numerous studies on child bilingualism (e.g., Weltens and Grendell 1993; Zentella, 1997). For instance, Zentella (1997) presents evidence on lexical insertions which she describes as the increased use of English vocabulary

items in a child's Spanish production. Empirical data supporting this phenomenon has been observed in several languages, which suggests that bilingual children's utterances often consist of noun insertions (e.g., Bentahila and Davies, 1994; Romaine, 1995). While there are numerous definitions of code-switching, this study adopted Muysken's (2010) definition of English lexical insertions. Muysken (2010) defines lexical insertions as the overt use of single-word switches, which do not show phonological and/or morphological adaptations like those found in loanwords. Following Muysken's (2010) distinction between insertions and loanwords, the coding procedures for this variable are provided in Table 20.

Table 20: The coding for English lexical insertions and examples.

Code	Description	Example from the data
1	Use of at least one English lexical insertions in clause	<i>El niño vio el beehive.</i> (The boy saw the beehive.)
0	Entire clause issued in only Spanish	<i>El niño está con su tortuga.</i> (The boy is with his turtle.)

As observed in Table 20, each clause entered in the analysis was coded for the children's use of at least one English lexical insertions in Spanish narratives. Only noun insertions were entered in the quantitative analysis. In other words, the analyses only examined insertions at the lexical level. The analysis did not count calques or items that were transferred directly from English and morphologically adopted into Spanish (e.g., *La mama carió el bebé.*/The mother carried the baby.), or the progressive auxiliary verb *estar* 'be' with the English present participle (*El gato está climbing.*/The cat is climbing.)²². Thus, if an English lexical item was issued in the clause, it was coded as having the presence of English lexical insertions.

²² Following Meyer-Scotton (2006), these items could not be categorized as English lexical insertions, therefore were not entered in the analysis.

After the completion of all coding, an inter-rater reliability check was carried out to ensure the coding of the five linguistic variables in Spanish were deemed reliable. The outside rater was a speaker of the Mexican Spanish variety. The rater's role was to review the list of items marked in the transcripts and confirm that each item was accurately marked for appropriateness and inappropriateness. No discrepancies were found in the coded entries.

Once the coding was completed, the coded data from the Spanish oral narratives were uploaded into the Statistical Package for Social Science (SPSS) and analyzed using a Generalized Linear Mixed Model (GLMM). GLMMs are extensions of linear mixed models that allow for binary responses (i.e., appropriate vs. inappropriate responses). The principal reason a GLMM was chosen to analyze the narrative elicited task was that numerous observations from each child were entered, thus each observation was not independent. Each child produced on average 60 tokens and 722 total tokens were entered into the analysis. In using a GLMM model, the analysis could control for non-independence of observations and segregate out binary responses (i.e., appropriate vs. inappropriate responses).

After completing the analysis for each variable, the results of the GLMM were then expressed as marginal means, the computed probabilities of siblings' performances based on the mean values of analysis. In other words, the marginal means are estimated from the specified variables for each of the independent variables (e.g., gender article agreement in subject positions, verb number agreement, etc.). For each independent variable, the marginal means calculated the probability of siblings' performance based on the GLMM model, as well as discerned its statistical significance using a chi-square analysis. For example, to compute the marginal means of siblings' selection of gender

article agreement in subject position, the GLMM used the mean values of the independent variables generated from the analysis. These mean values were then used to calculate the probability that, on average, an older sibling will appropriately select gender article agreement as compared to the probability that a younger sibling will do the same. Once computed, the marginal means were reported as percentages.

Next, I describe how interview data and ethnographically-informed observations were qualitatively analyzed. These qualitative analyses explored the language ideologies and language practices of sibling pairs within the home and school domains, as well as triangulating quantitative findings on siblings' language use patterns.

3.4.3 Procedures for coding and analyzing qualitative data

This section provides a detailed account of how the qualitative analyses were conducted. The focus of these analyses was to answer the fourth research question (i.e., What is the nature of siblings' language ideologies toward Spanish?) and the fifth research question (i.e., What are the siblings' observed and reported language practices within the home and school domain?). To do so, the analysis combined a FLP approach (King et al., 2008; Spolsky, 2004) with language socialization framework (Ochs and Schieffelin, 2008) to examine siblings' language ideologies and language practices. According to Spolsky (2004), language ideologies²³ are the goals, plans, interventions, and beliefs concerning language. Language practices are defined by Spolsky (2004) as the observable behaviors and language

²³ Spolsky's (2004) language policy model also used "language beliefs" as a synonymous term for "language ideologies." This study uses the term "language ideologies" to reflect the preferred terminology in FLP research.

choices.²⁴ In what follows, I outline the qualitative protocols used in this study and describe the analysis procedures. First, the following protocols were used in the qualitative analysis:

- Mother and child interviews
- Audio-recorded interactions of siblings within the home
- Ethnographically informed observations.

As shown above, the qualitative protocols used in this study included mother and child interviews, ethnographically informed observations, and audio-recorded interactions of siblings and their family members within the home. These data were also triangulated using publicly available data on Otter Creek Schools, such as policy documents on the language curriculum and documents from the school websites. The purpose of using these protocols was to examine siblings' language practices and ideologies, providing a triangulated view of the world of language in each of the participating families. Below I detail the qualitative protocols used to answer research questions five and six, as well as the procedures used to code and analyze the data. First, I detail how data were prepared. Then, I describe how each protocol was analyzed with respect to research questions five and six.

To attend to these analyses, the first step was to prepare the data. Audio-recorded interviews with mothers and children were transcribed in full. These transcriptions were sorted according to each family in separate files, such that all interviews from the mother and two focal siblings were included in one document. The second qualitative protocol to be prepared were audio-recorded interactions. Recall that in families 2, 3, 5, and 6, I was given

²⁴ Spolsky's (2004) also considered "language management" in his language policy framework, defined as the explicit and observable effort over participants to modify their practices. This current study only focuses on language practices and language ideologies since language management is subsumed under language practices as it relates to observable choices about language use.

permission to provide children with an audio-voice recorder that was worn around their neck when I was not present in the home. The caregivers and siblings were instructed to interact with their family members during dinner time conversation and/or friends while they were playing. An independent transcriber who spoke the Mexican Spanish variety checked the transcriptions and coding for accuracy. The last qualitative protocol analyzed were completed field notes from ethnographically informed observations. Completed field notes were written and expounded for each observation, and then organized according to each family in a separated folder.

Once all data were transcribed and organized, interviews and field notes were analyzed inductively using standard procedures for qualitative data (e.g., Creswell, 2007; Saldaña, 2015). That is, following Saldaña (2015), I read and re-read the qualitative data in two cycles to generate codes. The first cycle of coding looked for common themes or behaviors across families, such as sibling differences and similarities, communicative activities, and ideologies toward Spanish. The second cycle of coding refined these themes and identified clusters of coded data that were then collapsed into categories.

With respect to the interview data, the first objective of these analyses was to examine siblings' language ideologies. Following De Fina, Schifffrin, and Bamberg (2006), interview data were approached as settings in which speakers share personal knowledge and experiences, as well as position themselves with respect to locally held ideologies and their role in the family. Thus, the codes from interview data were refined and collapsed into two categories concerning siblings' language ideologies. These categories were:

- Language ideologies in support of bilingualism
- Negative language ideologies toward bilingualism.

The second objective of the interview protocol was to examine the siblings' reported language practices. These data were again analyzed following Saldaña (2015) through two cycles of coding, which identified categories and themes. Data generated from field notes were analyzed using standard procedures for qualitative data, as outlined by Saldaña (2015). These data corresponded to the fifth research question, which addressed siblings' language practices within the home and school environment. First, completed field notes were coded in two cycles during which I identified themes and categories. In the first cycle of coding, I looked for common themes that provided background information on siblings' observed language practices in the home and school environment. The second cycle of coding refined these themes and identified the most salient language practices, triangulating the siblings' reported practices found in interview data. Children's language practices were categorized according to the following interlocutors:

- Extended family members
- Parents
- Peers
- Older or younger sibling in the home.

To triangulate, transcriptions of audio-recorded interactions between siblings, peers, and their mothers were analyzed using a conversation analytic approach, as outlined by Schlegoff (2007) (see Appendix G). This analysis was informed by Ochs and Schieffelin's (2008) language socialization approach, the process in which children are socialized through - and into - language. Thus, of importance in this analysis was the negotiation of languages between siblings and their parents and peers, as well as the agency with which the focal siblings navigated these linguistic spaces in the home. Furthermore, the analysis of audio-recorded interactions acknowledged the relevance of power and language use as a form of

social action with social consequences (e.g., Blom and Gumperz, 1972; Fairclough, 2013; Gumperz, 1982). Therefore, I attended to siblings' language choice when relevant, examining how participants positioned themselves in the community vis-à-vis their language practices and the wider social and cultural structures of Otter Creek, NJ.

In sum, these protocols contributed to an overall depiction of siblings' language practices and ideologies, as well as triangulating the quantitative data to accurately capture the world of language in each of the participating families.

3.5 Researcher positionality

I must consider how I positioned myself as a researcher, following Griffiths (1998), who suggests that a participant observer in ethnographic observations positions him or herself as an insider and an outsider within the community of observation. As a non-Mexican, I carry my identity as a second language learner of Spanish and as a researcher, which guides my view toward analyzing child language ideologies and the discourses issued in sibling pair speech. In other ways, I am an insider who shared language and cultural knowledge of the Hispanic community in Otter Creek, having conducted research and volunteered as a Spanish interpreter for parents for three years in Otter Creek Public Schools. A candid expression of my background, however, must acknowledge that I am a white male and a member of a dominant group with unearned privilege. As much as I support the efforts of Spanish-language maintenance, I have never had the experience growing up and speaking more than one language or going through my daily life as a member of a minority group. In this regard, I am an outsider who is dedicated to learning more about this research topic; therefore, I was careful to take the appropriate steps to avoid study bias. Following Duranti (1997), I engaged in triangulation of multiple perspectives and analytic tools, which allowed

me to draw from both qualitative and quantitative measures. I also took appropriate measures to act as a passive participant during observations. To help identify potential biases, I reviewed audio-recordings in the creation and revision of my field notes to make distinctions between what I observed, and the interpretations that I made.

To conclude, this chapter has provided a detailed description of the current study's design, data collection procedures, and analysis. In the next two chapters, results of the quantitative and qualitative analyses are presented and discussed to address the research questions of the current study.

Chapter IV. Results of siblings' language use patterns

This chapter examines children's language patterns of language use through quantitative analysis. More specifically, this chapter reports on children's age of initial exposure to English, reported proficiencies in Spanish, expressive vocabulary and BESA/BESA-ME child language assessments in Spanish and English, as well as the coded linguistic variables explained in the previous chapter. Recall the research questions I aim to answer in this chapter are the following:

- How do children's reported age of initial exposure to English and their reported linguistic proficiencies in Spanish compare between older and younger siblings?
- How do older and younger siblings compare in their knowledge of expressive vocabulary and morphosyntax in Spanish and English?
- What are siblings' Spanish-language use patterns as captured in their oral narratives? More specifically:
 - What is the distribution of verbal TMA in older and younger siblings' Spanish narratives?
 - What relationship exists between sibling order and use of Spanish linguistic-features (e.g., gender article agreement) in oral narratives in Spanish?
 - What relationship exists between sibling order and use of English lexical insertions in children's oral narratives in Spanish?

The order of this chapter is as follows. First, I examine children's reported age of initial exposure to English (AoEE) and reported proficiency in Spanish. I draw from data generated from mother interviews and language background questionnaire to highlight

linguistic differences, if any, between older and younger siblings. Next, I present results from the EOWPVT-4: SBE assessment, which aimed to measure each child expressive vocabulary in Spanish and English. I then examine children's morphosyntax knowledge in both their languages, as measured by the BESA and BESA-ME morphosyntax subtest in Spanish and English. Finally, I describe siblings' Spanish narratives, as captured in the production task elicited through Mayer's (1969, 1973, 1974) Frog Stories. Through these data, I describe the distribution of verbal TMA in children's oral production and examine the role of sibling order in children's use of Spanish linguistic features (e.g., gender article agreement) and English lexical insertions.

With respect to the first research question, which explores older and younger siblings' initial exposure to English and their reported language proficiencies in Spanish, I now turn to discuss data generated from the BIOS survey and language background questionnaire.

4.1 Siblings' Age of English exposure (AoEE) and reported proficiency

In this section, I report on data yielded from the BIOS survey and language background questionnaire to assess siblings' AoEE and reported Spanish language proficiencies. At the onset of this study, I met with the mothers from the selected families in their homes and asked them to talk about their children's general language development patterns, as well as the proficiencies of each of their children. The instruments guiding these conversations were the BIOS survey, which examined siblings AoEE, and language background questionnaire, which asked each mother to rate their children's proficiency in speaking and comprehension in Spanish. In what follows, I examine siblings' reported AoEE and discern differences, if any, between older and

younger siblings. Next, I explore differences, if any, between older and younger siblings' reported language proficiencies in Spanish.

First, to assess siblings' AoEE, the BIOS survey was administered during which I asked mothers to report when their children were first exposed to English. Mothers reported their child's AoEE by either the full year or half (i.e., 6 months). In Table 21, children's reported AoEE are reported, as well as their current age during which the interview took place:

Table 21: Child's current age during time of study and his or her age of initial exposure to English (AoEE)

Family	Pair	Child's age during study (year; month)	Child's AoEE (year; month)
1	Daniel (O)	10;4	3;6
	Mia (Y)	6;11	2;0
2	Brent (O)	11;3	4;0
	Kyle (Y)	9;4	3;0
3	Benito (O)	8;10	4;0
	Oscar (Y)	7;6	2;0
4	Samuel (O)	12;4	4;0
	Kendra (Y)	6;0	2;0
5	Lani (O)	9;7	4;0
	Leo (Y)	5;0	2;0
6	Bryce (O)	11;2	4;0
	Melvin (Y)	8;9	3;0

Table 21 provides a glimpse into children's initial exposure to English. Generally speaking, younger siblings were exposed to English at a much earlier age than their older brother or sister. That is, while older siblings were reported to be first exposed to English no earlier than 3;6 years, younger siblings were reported to be exposed to English by or before age 3;0. Furthermore, in several families, the reported age at which the oldest sibling was first exposed to English, occurred two years before their younger siblings'

AoEE, such as in sibling pairs Benito and Oscar (family 3), Samuel and Kendra (family 4) and Lani and Leo (family 6).

To further analyze these data, an independent samples t-test was conducted to compare inter-group differences. Table 22 reports on these data:

Table 22: Results of independent t-test comparing siblings' AoEE

Group	Age of initial English Exposure		t	df
	M	SD		
Older	3.92	.20	6.98	10
Younger	2.33	.52		
p<.0001				

As observed in the above table, a significant difference was found between older siblings' AoEE (M=3.92, SD=.20) and younger siblings' AoEE (M=2.33, SD=.52) conditions, $t(10)=6.98$, $p=0.0001$. That is, older siblings were reported to not receive English exposure before attending pre-K and Kindergarten, while younger siblings began hearing English before school enrollment. These findings will be further discussed in section 5.2, during which I examine siblings' language practices and exposure to English through television, homework, and peer networks.

Next, I examine data drawn from the language background questionnaire and siblings' reported language proficiencies in Spanish. When I met with each mother during the initial home visit, I asked them to rate their children's Spanish language proficiencies on a scale from 1 to 10 in two categories: comprehension and production. The objective was to explore whether any discernable differences existed between older and younger siblings' language proficiencies in their reported abilities to speak and comprehend spoken Spanish. Table 23 reports on these findings:

Table 23: Results from each child's Spanish-language proficiency reported by mother during language background questionnaire

Family	Pair	Comprehension	Speaking
1	Daniel (O)	10	10
	Mia (Y)	10	10
2	Brent (O)	10	10
	Kyle (Y)	9	7
3	Benito (O)	10	7
	Oscar (Y)	6	5
4	Samuel (O)	10	10
	Kendra (Y)	10	5
5	Lani (O)	10	8
	Leo (Y)	9	2
6	Bryce (O)	8	8
	Melvin (Y)	9	9

Two general patterns can be observed from Table 23. The first pattern shows that the majority of older siblings were ranked higher than their younger siblings in their linguistic proficiencies in Spanish. That is, with the exception of siblings, Daniel and Mia (Family 1), and Bryce and Melvin (Family 6), older siblings were reported to be outperform their younger sibling in their production and comprehension of spoken Spanish. Furthermore, Table 23 also conveys the pattern that children were reported to be more proficient in comprehending the language, while struggling more with speaking. Such differences were found in the sibling pairs but were more marked in siblings Benito

and Oscar (Family 3), Samuel and Kendra (Family 4), and Kendra and Leo (Family 5). For instance, Lani and Leo (Family 5) contrasted starkly with one another, such that Lani was reported to be able to speak and understand spoken Spanish. Lani's younger brother, Leo, however, was reported showing weak levels in production but was still able to understand spoken Spanish. Thus, despite the limitations of self-rated proficiency data in linguistic research (e.g., MacIntyre, Noels, and Clément, 1997), the results from the language background questionnaire depict the overall pattern that older siblings were reported being more proficient in speaking Spanish, while younger siblings exhibited weaker levels in Spanish production, but stronger levels in comprehension of spoken Spanish. Subtle variances were found among siblings, such as Daniel and Mia (Family 1) who were reported to speak and comprehend Spanish at both highly proficient levels. Furthermore, younger sibling Melvin (Family 6) was reported to speak and comprehend Spanish more proficiently than his older brother, Bryce. These patterns will be further addressed in sections 5.2 and 5.2, which qualitatively examines sibling language practices in the home and school domain.

In sum, this section depicted the general language profiles of each sibling as reported by mothers, yielding general patterns of children's AoEE and language proficiencies, which respond to the first research question (i.e., How do children's reported age of initial exposure to English and their reported linguistic proficiencies in Spanish compare between older and younger siblings?) The next section discusses these linguistic differences in greater depth, highlighting the most salient patterns yielded from the child language assessments, the EOWPVT-4: SBE and BESA/BESA-ME morphosyntax subtests in Spanish and English.

4.2 Results from expressive vocabulary and morphosyntax language assessments

This section aims to answer the second research question, which examines how older and younger siblings compare in their knowledge of expressive vocabulary and morphosyntax in Spanish and English. First, I present results from the expressive vocabulary assessment, EOWPVT-4: SBE, in Spanish and English. I then present the results from the BESA/BESA-ME, examining siblings' morphosyntax knowledge in both Spanish and English.

4.2.1 Siblings' knowledge of expressive vocabulary in Spanish and English

As explained in the methods section, the EOWPVT-4: SBE task was modified to chart the expressive vocabulary of each language and directly compare item-level results cross-linguistically, following Anaya (2013), Benson-Villegas (2015), Grasso (2014), among others. That is, instead of allowing children to respond in either of their languages (i.e., Spanish or English), I administered the test in two independent sessions: first only in English and then only in Spanish. Raw scores were converted into percentile rankings based on the child's age, reflected each child's performance in English and Spanish relative to that of the normative population, which accounted for the child's age. The results of siblings' percentile ranking in each of their languages is depicted in Table 24:

Table 24: Results from EOWPVT-4: SBE expressive vocabulary percentile ranking scores for each child and sibling pair based on age

Family	Pair	English percentile ranking	Spanish percentile ranking
1	Daniel (O)	75th	70th
	Mia (Y)	25th	39th
2	Brent (O)	13th	3rd
	Kyle (Y)	18th	1st
3	Benito (O)	25th	1st
	Oscar (Y)	37th	1st
4	Samuel (O)	61st	4th
	Kendra (Y)	45th	4th
5	Lani (O)	95th	4th
	Leo (Y)	99th	1st
6	Bryce (O)	62nd	77th
	Melvin (Y)	96th	92nd

As observed in Table 24, siblings' percentile ranks in both languages varied immensely and evidenced a significant range of scores within each group. First, with respect to children's expressive vocabulary in English, we observe that younger siblings in pairs 2, 3, 5, and 6 outperformed their older siblings, such that the younger sibling consistently scored higher than their older brother or sister in the task. That is, although variances existed between older and younger sibling groups, the table reveals that younger siblings exhibited more expressive English vocabulary than their older sibling. In Family 2, for instance, younger sibling, Kyle, scored at the 18th percentile for his age

in English expressive vocabulary, while his older brother scored at the 13th for his age. Furthermore, in family 6, younger brother, Melvin, scored at the 99th percentile for his age in English expressive vocabulary, while his older brother, Bryce, scored at the 95th percentile for his age. However, in families 1 and 4, older brothers, Daniel and Samuel outperformed their younger siblings. For example, older sibling, Daniel scored at the 75th percentile in English expressive vocabulary for his age, while his younger sister scored at the 25th percentile for her age.

With respect to siblings' expressive vocabulary scores in Spanish, a different patterned emerged. In Families 1, 2, and 5, older siblings outperformed their younger siblings in their knowledge of expressive vocabulary in Spanish, such that the older sibling scored higher percentile rankings for their age, as compared to their younger brother or sister. For instance, in Family 1, older sibling, Daniel, scored at the 70th percentile ranking, while his younger sister, Mia, scored at the 39th percentile. Furthermore, older sibling, Lani (Family 5), scored at the 4th percentile ranking, while her younger brother, Leo, scored at the 5th percentile ranking in Spanish. However, in sibling pairs 3 and 4, both older and younger siblings scored at the same percentile ranking for each child's age. And lastly, in Family 6, younger sibling, Melvin, again outperformed his older brother, Bryce, in Spanish expressive vocabulary. While Melvin scored at the 92nd percentile ranking, Bryce scored at the 77th percentile ranking in Spanish expressive vocabulary.

With respect to a cross-comparison of siblings' knowledge of expressive vocabulary in both languages, a pattern of English language dominance emerged among all siblings, suggesting that siblings knew more words in English than in Spanish. That is, in all of the sibling pairs, with the exception of younger sibling, Mia (Family 1), and

older sibling, Bryce (Family 6), all children scored higher percentile rankings in English than in Spanish, suggesting that as a whole, siblings were more dominant in English than in Spanish. For instance, Benito and Oscar (Family 4) scored at the 25th and 37th percentile ranking in English, respectively, but both scored at the 1st percentile ranking in Spanish. Samuel and Kendra (Family 5) scored at the 61st and 45th percentile ranking in English, respectively, but also both scored at the 4th percentile ranking in Spanish. This pattern was not evident in Mia's (Family 1) expressive vocabulary knowledge, who scored at the 25th percentile in English, but at the 39th percentile in Spanish. Furthermore, older sibling Bryce (Family 6) also exhibited more Spanish expressive vocabulary knowledge than English, scoring at the 62nd percentile ranking in English and the 77th percentile in Spanish. In what follows, I further analyze older and younger siblings' expressive vocabulary percentile ranking scores in Spanish and English, drawing comparison between sibling groups.

To better understand these differences, I first conducted an independent sample t-test to compare English expressive vocabulary percentile scores between older and younger siblings. There was no significant difference between older ($M=55$, $SD=30.78$) and younger siblings ($M=53.33$, $SD=35$), $t(9.8) = -0.09$, $p=0.53$. That is, given the small population size and large variance in standard deviations, no statistical significant relationship was attested between older and younger siblings' English expressive vocabulary.

Next, to compare older and younger siblings' Spanish expressive vocabulary percentile scores, a second independent samples t-test was also conducted. Again, no statistical difference was found between older ($M=28$, $SD=35.55$) and younger siblings ($M=22.83$, $SD=37.06$), $t(9.98) = 0.25$, $p=0.41$. That is, given the small population size

and large variance in standard deviations, no statistical relationship was attested between older and younger siblings' Spanish expressive vocabulary percentile scores.

Lastly, a third independent samples t-test was conducted to compare all percentile ranking scores in English with all scores in Spanish. That is, despite the large variance in each group, the percentile rankings depicted above convey the general pattern that siblings scored better in English than in Spanish. Thus, to compare each individual's English expressive vocabulary to Spanish expressive vocabulary scores mentioned above, a third independent t-test was conducted, as shown in Table 25:

Table 25: Results of independent t-test comparing English and Spanish Expressive Vocabulary of all children

Protocol	Older and younger siblings combined			
	M	SD	t	df
English ExpVocab	54.17	31.68	2.77	11
Spanish ExpVocab	25.42	34.73		

p<.009

We can observe in the above table a significant difference between each individual's English expressive vocabulary (M=54.17, SD=31.68) and Spanish expressive vocabulary percentile ranking (M=25.41, SD=34.73) conditions, $t(11) = 2.77$, $p = 0.009$. That is, collectively, the siblings were able to express more words in the English than in Spanish. This finding also lends support to the results of the mother language background questionnaire and observations generated above. In other words, the siblings' expressive vocabulary scores in English are congruent with mothers' observations regarding their children's production and comprehension levels, supporting the claim that siblings express more knowledge in English than in Spanish.

In sum, the above results suggest that there is no significant relationship between sibling order and expressive vocabulary in Spanish or English. At first glance, higher scores in English were attested for each participant of the current study. The results of an independent t-test confirmed that regardless of sibling order, the children were able to express more words in English than in Spanish. I now turn to examine children's morphosyntax knowledge, as measured by the BESA and BESA-ME assessments. I first provide the standard scores for the BESA and BESA-ME results, highlighting general patterns gleaned from the data set. I then examine inter-group relationships using three independent t-tests.

4.2.2 Siblings' knowledge of morphosyntax in Spanish and English

This section examines how older and younger siblings compare in their knowledge of morphosyntax in Spanish and English, as captured in the morphosyntax subtest of the BESA and BESA-ME assessments. First, I examine results from children's BESA/BESA-ME morphosyntax subtests in both Spanish and English. After, I compare older and younger siblings in their knowledge of morphosyntax in both Spanish and English

As previously indicated in the methods section, each child took the age appropriate version of the language assessment (i.e., BESA or BESA-ME) on two separate days, first in English and then in Spanish. Raw scores for both the BESA and BESA-ME were converted into standard scores according to the test manual, which allowed for a cross-comparison among all sibling pairs. Table 26 provides the results for each sibling's standard scores in the BESA/BESA-ME subtests, revealing older and younger siblings' morphosyntax knowledge in each of their languages.

Table 26: Standard BESA/BESA-ME scores in Spanish and English

Family	Pair	English morphosyntax score	Spanish morphosyntax score
1	Daniel (O)	91.89	93.13
	Mia (Y)	98.00	98.00
2	Brent (O)	85.21	102.99
	Kyle (Y)	89.64	21.17
3	Benito (O)	102.99	63.46
	Oscar (Y)	115.00	83.00
4	Samuel (O)	93.13	60.09
	Kendra (Y)	103.00	80.00
5	Lani (O)	102.41	53.81
	Leo (Y)	109.23	53.48
6	Bryce (O)	90.49	79.25
	Melvin (Y)	111.88	87.14

As observed in Table 26, there is a wide range of scores for each child taking the morphosyntax subtest of the BESA or BESA-ME assessment. However, several patterns can be observed in each sibling pair with respect to their standard scores in the English and Spanish morphosyntax subtest. First, younger siblings outperformed their older brother or sister regarding their English morphosyntax scores. That is, all younger siblings achieved a higher standard score in the English morphosyntax subtest, indicating that they showed greater morphosyntax knowledge, relative to their age group, in English. Consider the results from Bryce and Melvin (Family 6) who both took the BESA-ME version of the morphosyntax subtest. While Bryce achieved a 90.49 standard

score in the English morphosyntax subtest, his younger brother achieved 111.88 standard score. Attesting to these quantitative differences, Bryce and Melvin produced two different responses for several items in the Cloze section of the BESA-ME morphosyntax subtest in English dealing with relative clauses. For instance, in one item that prompted the use of the relative pronoun, “that”, Bryce omitted the relative pronoun used as a subject of a restrictive relative clause. His younger brother, Melvin, however, provided the appropriate response, such as in the sentence “Here the boy is walking the dog (that/who) has brown spots”²⁵. This pattern was also observed in the sentence repetition task. In several items, Bryce omitted the relative pronoun used as a subject of a restrictive clause when asked to repeat each sentence. Again, his brother, Melvin, produced the entire sentence using the appropriate relative pronouns.

With respect to older and younger siblings’ standard scores from the Spanish morphosyntax subtest, the majority of older siblings were outperformed by their younger siblings. That is, older siblings in Families 1, 3, 4, and 6, actually produced lower scores than their younger brother or sister in the Spanish morphosyntax subtest, suggesting that younger siblings showed greater morphosyntax knowledge, relative to their age group, in Spanish. For instance, consider older siblings Benito, and younger sibling, Oscar (Family 3), who both took the BESA-ME morphosyntax subtest in Spanish. While older sibling, Benito, scored a 63.46 in the assessment, his younger brother scored an 83. Results from the BESA-ME morphosyntax subtest in Spanish attested to these patterns and exhibited qualitative differences between Benito and Oscar’s responses. While both children showed similar patterns in the Cloze section, older sibling, Benito, showed difficulty in

²⁵ This example is adopted from Peña et al., (2016) BESA-ME as to not share materials from the original test and only used as clarification for the reader.

the sentence repetition task, such that he omitted in relative clauses “que” (that) and indirect objects “les” (them). Kyle, the younger sibling, on the other hand, mostly produced entire sentences using the appropriate relative pronouns and indirect objects, outperforming his older brother, Brent, on the sentence repetition task.

In Family 2, older sibling, Brent, outperformed his younger sibling in the Spanish morphosyntax subtest. Attesting to these quantitative differences in Family 2, Brent and Kyle produced two different responses for several items in the Cloze section of the BESA-ME morphosyntax subtest in Spanish. For instance, in one item that prompted the use of the past-tense morphology of “poner” (to put), younger brother, Kyle, responded with “*ponió” (he put), overextending the regular morphology onto an irregular verb. In the same test item, however, his older brother, Brent appropriately responded with “puso” (he put). This pattern was also observed in the sentence repetition task. Across all sentence repetition items, Kyle omitted relative pronouns and differential object markers, meanwhile his brother, Brent, fully produced the entire sentence using the appropriate test items.

To determine whether a statistical difference existed between groups, an independent sample t-test was first conducted using siblings’ standard English morphosyntax scores. As expected, there was no significant difference between older ($M=97.04$, $SD=9.19$) and younger siblings ($M=104.46$, $SD=9.51$), $t(9.99)=-1.37$, $p=0.90$. Likewise, a second independent samples t-test was conducted comparing standard morphosyntax scores. Again, there was no significant difference between older ($M=64.43$, $SD=11.12$) and younger siblings ($M=70.47$, $SD=28.29$), $t(6.5)=-0.49$, $p=.068$. Older siblings were not shown to perform better or worse than their younger siblings on the English morphosyntax subtest.

However, despite the variances in each group, one may ask whether any statistical difference exists between each individual's English and Spanish morphosyntax score. That is, do children, as a whole, perform better in one language than the other? To answer this question, a third independent t- test was conducted to compare each individual's English morphosyntax standard score to their Spanish standard score. We again observe the general pattern that siblings scored better in English than in Spanish, as shown below in Table 27:

Table 27: Results of independent t-test comparing English and Spanish morphosyntax scores across all children

Protocol	Older and younger siblings combined			
	M	SD	t	df
BESA English	100.75	9.73	5.59	5.59
BESA Spanish	67.45	20.74		

p<0.0001

The above table shows a significant difference between children's English morphosyntax knowledge (M=100.75, SD=9.73) and Spanish morphosyntax knowledge (M=67.45, SD=20.74), $t(11)=5.59$, $p=0.0001$. Said differently, when we compare siblings' standard scores in each language, the children collectively showed greater morphosyntax knowledge in English than in Spanish. These data again intersect with mother reports and data from the EOWPVT-4: SBE scores. By comparing these findings to the mother interviews, the results here suggest that regardless of sibling order, the participants possessed greater knowledge in English than in Spanish.

In sum, the above results suggest that there is no significant relationship between older and younger siblings' morphosyntax knowledge in Spanish or English. However,

comparing all siblings as a collective group, higher scores were attested for each participant in the BESA/BESA-ME morphosyntax English subtest.

I now turn to examine the third language assessment, elicited narratives using Mayer's (1969, 1973, 1974) Frog Stories. In this section, I provide an overview of the task and an introduction to siblings' narrative competencies. In the remaining subsections, I present an explanation of the statistical analysis used to investigate sibling differences and the results of each variable under study.

4.3 Siblings' oral narratives in Spanish

This section examines siblings' Spanish narratives elicited using Meyer's (1969, 1973, 1974) Frog Stories, which explores siblings' Spanish-language use. More specifically, this section reveals the distribution of verbal TMA siblings' Spanish narratives and the relationship between sibling order and use of Spanish linguistic-features (e.g., gender article agreement) and English lexical insertions in children's oral production in Spanish. The section is organized in three parts. First, I examine the distribution of verbal TMA in children's Spanish oral narratives. Second, I then examine the relationship between sibling order and use of Spanish-linguistic features (e.g., gender article agreement), providing qualitative examples that were evidenced in children's oral narratives. And lastly, I document the relationship between sibling order and use of English lexical insertions in children's oral narratives.

4.3.1 Distribution of verbal TMA morphology in siblings' oral narratives

In what follows, I examine the distribution of verbal TMA morphology between older and younger siblings. After, I explore the distribution of present, preterite, imperfect, subjunctive, and other verb types by presenting the frequency of verbal TMA

within each sibling pair. Table 28 reveals the contribution of each verbal TMA category to the total number of coded verbs by older and younger siblings.

Table 28: Distribution of each verbal TMA category of total verb tokens in older and younger siblings' Spanish oral narratives

TMA	Older siblings	Younger siblings
Present	127 (35.98%)	85 (18.72%)
Preterite	145 (41.08%)	250 (55.07%)
Imperfect	67 (18.98%)	113 (24.89%)
Subjunctive	6 (1.70%)	2 (0.44%)
Other	8 (2.27%)	4 (0.88%)
Total number of verb tokens	353 (100%)	454 (100%)

We can gather from Table 28 that there were several differences in the manner in which older and younger siblings' used TMA verbal morphology. First, we observe that older siblings tended to prefer the present tense when narrating the Frog Stories, as compared to the younger sibling group. That is, 35.98% of the verbs issued in older siblings' oral narratives were produced using the present tense while 18.72% of verbs issued in younger siblings' oral narratives were produced in the present tense. Furthermore, we also observe that the contribution of verbs produced using the preterite and imperfect was greater than the contribution provided by older siblings. While younger siblings produced 55.07% of their verbs using the preterite and 24.89% of verbs using the imperfect, older siblings produced only 41.08% of their verbs using the

preterite and only 18.98% of verbs using the imperfect aspect in their Spanish oral narratives. That is, we can gather from this table that when older and younger siblings are compared together, we observe little consistency in the manner in which older and younger siblings used the verbal TMA in their Spanish oral narratives. It must be noted, however, that the task required the children to look at the story pictures and narrate. This task effect is suggestive of the fluctuation in the use of verb tenses as each child was narrating the story.

Next, with respect to the use of subjunctive in siblings' narratives, Table 28 also reveals that this verb form was produced in higher frequencies among older siblings. Furthermore, other verb forms included the conditional, periphrastic future, and imperative tenses. Table 28 reveals that 2.27% of older siblings' oral narratives were produced using these other verb forms, meanwhile 0.88% of younger siblings' oral narratives were produced. With caution, these tokens were represented in low numbers; therefore, I cannot more completely elucidate this tendency.

In what follows, I provide a closer look at the contribution of each TMA category from each child, as well as provide examples from siblings' Spanish oral narratives. While the above results provide general tendencies between older and younger siblings, they do not show the distribution of each verbal TMA category according to each sibling pair. First, consider Table 29, which reveals the distribution of the use of present tense for each of the selected sibling pairs:

Table 29: Distribution of verbs in present tense across sibling pairs

Family	Siblings	Distribution of present tense in each sibling's narrative	Total number of verb tokens in each sibling's narrative
1	Daniel (O)	4 (7.14%)	56 (100%)
	Mia (Y)	22 (31.88%)	69 (100%)
2	Brent (O)	23 (37.70%)	61 (100%)
	Kyle (Y)	9 (15.52%)	58 (100%)
3	Benito (O)	29 (47.54%)	61 (100%)
	Oscar (Y)	29 (46.77%)	62 (100%)
4	Samuel (O)	49 (85.96%)	57 (100%)
	Kendra (Y)	4 (5.97%)	67 (100%)
5	Lani (O)	4 (6.56%)	61 (100%)
	Leo (Y)	13 (26.00%)	50 (100%)
6	Bryce (O)	16 (28.57%)	56 (100%)
	Melvin (Y)	8 (20.97%)	62 (100%)
Total number of verbs tokens in present tense		210 (29%)	720 (100%)

The above table reveals the contribution of verbs issued in the present tense by each sibling. More specifically, out of the total number of verbs produced by each child, Table 29 shows each child's contribution of verbs produced in the present tense in her or

his Spanish narrative. While Table 28 above revealed that older siblings preferred the present tense to narrate the Frog Story, Table 29 reveals variance in siblings' narratives with regard to their use of the present tense. Looking at all sibling pairs, we observe two patterns. The first and most common pattern shows tokens in which the distribution of verbs in the present tense in older siblings' narratives was greater than the distribution among younger siblings, which occurred in Families 2, 3, 4, and 6. For instance, in Families 3 and 6, mild differences in the total distribution of the preterite tense produced between older and younger siblings were found between older sibling, Benito, and his younger brother, Oscar (47.54% and 46.77%, respectively) and older sibling, Bryce, and younger sibling, Melvin (28.57% and 20.97%, respectively). However, the pattern in which older siblings issued a greater contribution of verbs in the present tense was most marked in Families 2 and 4. That is, in Family 2, 37.70% of the verbs issued by older sibling, Brent, were produced using the present tense, while only 15.52% of verbs issued by younger sibling, Kyle, were produced in the present tense. Furthermore, in Family 4, 85.96% of the verbs issued by older sibling, Samuel, were produced using the present tense, meanwhile only 5.97% of verbs issued by his younger sibling, Kendra, were produced in the present tense. Attesting to these quantitative differences, consider Examples 1, 2, and 3 from Brent (Family 2), Benito (Family 3), and Samuel (Family 4), which show older siblings' preference for the present tense in Spanish oral narrative (verbs in present marked **bold**):

- (1) Y el niño **se cae** y su perro estaba como espantado en el agua, pero el niño lo **escucha** y luego él **va** y **dice** "**vamos** 'pacito". Este **sale** y **dice** adiós. (Brent - Older sibling, Family 2)
(And the boy falls and his dog was like scared in the water, but the boy hear him and later he goes and says "let's go slowly". This one leaves and says goodbye).

- (2) El niño y el perro **están viendo** adentro. El niño **se está durmiendo** con el perro y el frog **se está saliendo**. Y lo **están buscando** pero **están buscando** donde **vive** y **están buscando** en los zapatos pero no **está**. (Benito - Older, Family 3)
(The boy and the dog are looking inside. The boy is sleeping with the dog and the frog is getting out. And they're looking for him, but they're looking where he lives and they're looking in the shoes, but he's not there.)
- (3) La rana **sale** y **agarra** la mano de la mujer. Y ahora la rana **tiene** la taza y **está** en un árbol. Ahora el niño y una mujer **están jugando** con un barco pequeño. Y luego la rana **brinca** y se cae encima del barco y el niño **se ve** sorprendido. (Samuel – Older sibling, Family 4)
(The frog leaves and grabs the woman's hand. And now the frog has the cup and is in the tree. Now the boy and the woman are playing with a small ship. And later, the frog jumps and falls on top of the ship and the boy looks surprised.)

The second pattern we can detect from Table 29 shows cases in which older siblings contributed fewer tokens of the present tense in their narratives than their younger siblings, which occurred in Families 1 and 5. For instance, in Family 1, of the total number of verbs produced by older sibling Daniel, 7.14% of the verbs were issued using the present tense, while 31.88% of verbs issued by his younger sibling, Mia, were produced in the present tense. Furthermore, in Family 5, we observe differences in the contribution of verbs produced in the present tense. Of the total number of verbs produced by each sibling, only 6.56% of verbs issued in Lani's narrative were produced using the present tense, while 26% of verbs issued by her younger sibling, Leo, were produced in the present tense. Consider Examples 4 and 5 from Mia's and Leo's Frog Stories in Spanish, which attest to the variance in sibling pairs and the two younger siblings' contribution of the present tense in their Spanish oral narratives (verbs in present marked in **bold**):

- (4) El niño **está agarrando** una cubeta con la rana y la tortuga. **Están caminando** y el perro **está viendo** arriba a la mariposa. Después la rana **entra** la canasta. (Mia – Younger sibling, Family 1)

(The boy is grabbing a bucket with the frog and turtle. They're walking and the dog is looking up at the butterfly. After the frog enters the basket.)

- (5) Él **tiene** frogs y un perro y un turtle. Y **sale** de la casa. Pero la perro **quiere** quedar en la casa. Y ellos **están jugando** a música y ellos **están comiendo**. Y eso no **está** bien porque un frog **sale**. (Leo – Younger sibling, Family 5)
(He has frogs and a dog and a turtle. And he leaves from the house. But the dog wants to stay in the house. And they're playing music and they're eating. And that's not good because a frog leaves.)

Collectively, Table 29 reveals that the majority of older siblings tended to prefer the present tense to narrate their oral narratives in Spanish. However, contrary to Table 28, we observe a variance in the distribution of verbs produced in the present tense. That is, these findings are representative of the spontaneous speech given the task at hand, implicating a diversity of language use patterns uncovered in each the select sibling pairs. There was no violation of the use of this tense since the task required each child to look at the story and narrate. These variances in verbal TMA will be further investigated in the remaining section.

Next, we turn to Table 30, which shows the contribution of verbs produced in the preterite tense.

Table 30: Distribution of verbs in preterite tense across sibling pairs

Family	Siblings	Distribution of preterite tense in each sibling's narrative	Total number of verb tokens in each sibling's narrative
1	Daniel (O)	34 (60.71%)	56 (100%)
	Mia (Y)	23 (33.33%)	69 (100%)
2	Brent (O)	22 (36.07%)	61 (100%)
	Kyle (Y)	26 (44.83%)	58 (100%)
3	Benito (O)	25 (40.98%)	61 (100%)
	Oscar (Y)	23 (37.10%)	62 (100%)
4	Samuel (O)	3 (5.26%)	57 (100%)
	Kendra (Y)	33 (49.25%)	67 (100%)
5	Lani (O)	34 (55.74%)	61 (100%)
	Leo (Y)	24 (48.00%)	50 (100%)
6	Bryce (O)	27 (48.21%)	56 (100%)
	Melvin (Y)	36 (58.06%)	62 (100%)
Total number of verb tokens in preterite tense		310 (43%)	720 (100%)

Table 30 reveals the distribution of verbs produced in the preterite tense form in each child's Spanish oral narrative. We observed variance in the distribution of verbs produced in the preterite tense and marked differences in the use of preterite tense forms

by older siblings. For instance, Table 30 shows that in Families 1, 3, and 5, older siblings were observed contributing more verbs in the preterite tense in their oral narratives, as compared to their younger siblings. These differences were most marked between Daniel and Mia in Family 1, and Lani and Leo in Family 5. For instance, consider siblings Daniel and Mia in Family 1. Of the total number of verbs produced by older sibling, Daniel, 60.71% of the verbs were issued using the preterite. For Mia, 33.33% of the total verbs issued by the younger sibling were produced using the preterite. This pattern also occurred between Lani and Leo in Family 5. Of the total number of items produced by Lani, 55.74% of the verbs were issued using preterite tense forms. For Leo, only 48.00% of verbs produced the younger sibling were issued using preterite tense forms. Examples 6 and 7 attest to these quantitative examples, revealing Daniel's and Lani's tendency to produce verbs in the preterite tense (verbs in preterite marked in **bold**):

- (6) Un perro y una rana **se fueron** para dormir. Luego el niño **se fue** a dormir y la rana **se escapó**. En el mañana, el niño **fue** a ver la rana pero no estaba allí. El niño **trató** de encontrar la rana y el perro **se metió** en la jarra. (Daniel – Older sibling, Family 1)

(A dog and a frog go to sleep. Later the boy went to sleep and the frog escaped. In the morning, the boy went to see the frog, but he wasn't there. The boy tried to friend the frog and the dog put himself in the jar.)

- (7) Eso es cuando él **vio** la rana y después la rana **se fue** y ella **tiró** su taza de café. Y después **vio** a un niño y que estaba jugando y después el niño **se espantó** porque **vio** la rana y **dijo** que es por eso no lo sabía. (Lani – Older sibling, Family 5)

(That is when he saw the frog and after the frog went and she threw the cup of coffee. And after she saw a boy that was playing and after the boy got scared because he saw the frog and said that it was for that reason he didn't know.)

The second pattern from Table 30 shows cases in which older siblings contributed fewer tokens of preterite tense forms in their narratives than their younger siblings. Again, there was no violation of the use of this tense nor any obstruction in the narrative since the task required each child to look at the story and narrate using spontaneous

speech. This pattern occurred among Brent and Kyle in Family 2 and Samuel and Kendra in Family 4. For example, of the total number of verbs produced by older sibling, Brent, 22.95% of the verbs were issued using preterite tense forms, while 41.38% of the total verbs issued by younger sibling, Kyle, were produced using the preterite. Similarly, this pattern also was found in Family 4. That is, only 5.26% of the verbs issued by older sibling, Samuel, were produced using preterite tense forms, while 49.25% of the total verbs issued by Kendra were produced using the preterite. Recall from Table 29 that Samuel's Spanish oral narrative was predominantly issued in the present tense, meanwhile the narrative of his younger sister, Kendra, was produced using mostly preterite tense forms. Consider Examples 8 and 9 from Kyle's and Kendra's Frog Stories in Spanish, which attest to the use of verb tenses in the sibling pairs (verbs in preterite marked in **bold**):

- (8) El perro **se cayó** de la ventana entonces el niño **salvó** a su perro. El niño estaba enojado entonces **dijo**, "Frog, ¿Donde estás?". Y el niño **se cayó** al piso. (Kyle – Younger sibling, Family 2)
(The dog fell from the window so the boy saved his dog. The boy was upset so he said, "Frog, where are you?". And the boy fell to the floor.)
- (9) El niño **buscó** en un árbol. Después el niño **se cayó**. El perro **paró** y el perro corrió. El niño **se cayó** en el agua. (Kendra – Younger sibling, Family 4)
(The boy looked in the tree. After the boy fell. The dog stopped and the dog ran. The boy looked in the water.)

Table 30 clearly reveals that the distribution of preterite verbs supplied by siblings were diverse. That is, similar to verbs produced in the present tense, a diversity in the verbal TMA patterns emerged among sibling pairs, such that distribution of verbs issued in the preterite varied across sibling pairs and were more marked by older siblings in several of the pairs. These findings again emphasize the variance in siblings' past tense

morphology and diverse linguistic repertoires, which will be further investigated in the next paragraph.

With respect to siblings' use of the imperfect tense, we turn to Table 31, which reveals the distribution of the use of imperfect tense for each of the selected sibling pairs:

Table 31: Distribution of verbs in imperfective tense form across sibling pairs

Family	Siblings	Distribution of imperfect in each sibling's narrative	Total number of verb tokens in each sibling's narrative
1	Daniel (O)	17 (30.36%)	56 (100%)
	Mia (Y)	22 (31.88%)	69 (100%)
2	Brent (O)	14 (22.95%)	61 (100%)
	Kyle (Y)	23 (41.38%)	58 (100%)
3	Benito (O)	5 (8.20%)	61 (100%)
	Oscar (Y)	10 (16.13%)	62 (100%)
4	Samuel (O)	1 (1.75%)	57 (100%)
	Kendra (Y)	29 (43.28%)	67 (100%)
5	Lani (O)	19 (31.15%)	61 (100%)
	Leo (Y)	12 (24.00%)	50 (100%)
6	Bryce (O)	11 (19.64%)	56 (100%)
	Melvin (Y)	16 (25.81%)	62 (100%)

Total number of verbs in present tense	179 (25%)	720 (100%)
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Table 31 exposes the distribution of verbs produced in the imperfect in each child's Spanish oral narrative, which showed a diversity of usages given the task at hand. That is, the contribution of verb tense forms in the imperfect varied across pairs since the task required each child to look at the story and narrate using spontaneous speech. As a whole, two patterns can be observed. The first pattern drawn from Table 31 is observed in Family 5, which revealed cases in which the older sibling contributed more tokens of imperfect verb forms in their narratives, as compared to the younger sibling. That is, of the total number of verbs produced by older sibling, Lani, 31.15% were issued using the imperfect. For Leo, on the other hand, only 24% of verbs produced the younger sibling were issued using the imperfect. Consider Example 10, which attest to this pattern in Lani's Spanish oral narrative (verbs in imperfect marked in **bold**):

- (10) Unos muchachos **estaban haciendo** un picnic. Y después **estaba tomando** algo y ella **estaba viendo** lo que estaba adentro. Después la rana se metió y después **estaba diciendo** "¿Qué es eso?". (Lani- Older sibling, Family 5)
(Some boys and girls were making a picnic. An after they were drinking something and she was looking at what was inside. After the frog got inside and after she was saying, "What is that?")

Next, the second and most prevalent pattern that was uncovered in Table 31 shows pairs in which older siblings contributed fewer tokens of imperfect tense forms in their narratives, as compared to their younger siblings, which occurred in Families 1, 2, 3, 4, and 6. Among these cases, this difference in the distribution of imperfect verb forms was most marked between 2, 3, and 4. Of these sibling pairs, the most marked differences were found in Families 3 and 4. For instance, consider Benito and Oscar from Family 3 in which only 8.20% of the verbs produced by older sibling, Benito, were issued in the

imperfect form. However, 16.13% of verbs produced by younger sibling, Oscar, were issued using the imperfect. Furthermore, in Family 4, only 1.75% of the verbs produced by older sibling, Samuel, were issued using the imperfect verb forms, while 43.28% of verbs produced by his younger sibling, Kendra, were issued in the imperfect. Attesting to these quantitative differences, consider Examples 11 and 12 from Oscar and Kendra's Frog Stories in Spanish (verbs in imperfect marked in **bold**):

(11) El frog le dejó y se fue el niño. Y era el niño que **estaba tomando** café y el niño no **estaba tomando**. Y el frog se escondió dentro de la comida y ahora también ellos **tenían** que terminar su café. (Oscar, Family 3)
(The frog left him and went to the boy. And it was the boy that was drinking coffee and the boy wasn't drinking. And the frog hid himself inside the food and now also they had to finish their coffee.)

(12) El niño y la niña **estaban buscando** algo y la mamá y el papá **estaban hablando**. Y el niño, la mamá, el papá, y la niña **estaban buscando** qué **querían** comer. (Kendra, Family 4)
(The boy and the girl were looking for something and the mother and father were talking. And the boy, the mother, the father, and the girl were looking for what they wanted to eat.)

Thus, Table 31 reveals the distribution of verbs supplied by siblings using the imperfect. Similar to verbs produced in the preterite, no pattern was observed among sibling pairs, such that distribution of verbs issued in the imperfect varied across sibling pairs and were more marked by younger siblings. Across nearly all sibling pairs, older siblings were observed contributing fewer verbs in the imperfect in their oral narratives, as compared to their younger siblings. Again, the task required each child to look at the story and narrate using spontaneous speech. Next, I report on the variation in siblings' use of subjunctive and other verb types found in the Spanish oral narratives.

Next, with respect to the subjunctive mood and other verb types to emerge in siblings' Spanish oral narratives, too few tokens were found for each child to describe in detail (for a full list of verb distribution, see Appendix H). Briefly, regarding verbs issued

in the subjunctive mood, a total of 8 tokens, or 0.99% of the entire corpus, were documented. Among these cases, siblings Daniel and Mia (Family 1), Benito (Family 3), Samuel (Family 4), Lani (Family 5), and Bryce and Melvin (Family 6) produced one verb using the subjunctive mood. One pattern that merits recognition is that in only two pairs, Families 1 and 6, both the older and younger sibling issued at least one verb using the subjunctive mood. In Families 3, 4, and 5, only the older sibling produced at least one verb using the subjunctive mood²⁶. Attesting to siblings' use of the subjunctive mood, consider Examples 13-17 (verbs in subjunctive marked in **bold**):

- (13) El perro estaba haciendo mucho ruido entonces el niño le dijo que **bajara** el volumen (Daniel, Family 1)
(The dog was making a lot of noise so the boy told him to turn down the volume.)
- (14) Luego el perro estaba ladrando al gato y el niño estaba enojado. Entonces el niño le dice que **se vaya**. (Mia, Family 1)
(Later the dog was barking at the cat and the boy was upset. So the boy told him to go way)
- (15) El niño manda su perro para que **ladre** al gato (Samuel, Family 4)
(The boy sends his dog to bark at the cat)
- (16) Allí estaba la rana con su familia y sus hijos. Entones estaban felices que los **encontraran**. (Bryce, Family 6)
(There the frog was with his family and his kids. So they were happy that they found them).
- (17) Viene el perro y rescata el sapo. Porque el niño le dice a su perro que **espante** el gato. (Melvin, Family 6)
(The dog comes and rescues the frog. Because the boy is telling the dog to scare the cat.)

In sum, this section has examined siblings' use of verbal TMA as captured in the Spanish oral narratives. We observed that, as a whole, the distribution of verbs produced

²⁶ Samuel (Family 4) produced 2 instances, or 3.5% of the total verbs issued in his Spanish oral narrative using the subjunctive mood.

by older siblings was greater in the present tense, followed by the preterite and imperfect past-tense forms. On the other hand, younger siblings, as a whole, showed a preference for preterite and imperfect tense forms, followed by the present tense. While these findings could be indicative of older siblings' ability to narrate in the past, a closer look at the distribution of each TMA category for each sibling pair showed that the manner in which older and younger siblings used the present, preterite, and imperfect verb forms was diverse. Each sibling exhibited a diverse range of tense forms. Furthermore, more complex verbal morphology, such as the use of the subjunctive and conditional verb forms, was also observed among the older siblings. But with caution, these tokens were represented in low numbers, therefore I cannot elucidate on this tendency further. Thus, the data attested to a wide range of tenses, suggesting that the children exhibited knowledge of all verbal TMA. It must also be noted that these examples varied given the purpose of the task at hand. Siblings were narrating while looking at the Frog Story, therefore using their imagination, which was not constrained to the use of one tense over the other. This finding could suggest that several verbal TMA categories were more salient in the input and production among each of the sibling pairs. These data will be further addressed in the discussion chapter, alongside the triangulated findings, to discuss sibling differences from multiple points of view.

In the next subsection, I further describe siblings' language use patterns as captured in the elicited production task, examining the relationship between sibling order and use of Spanish-linguistic features (e.g., gender-article agreement).

4.3.2 Analysis of Spanish linguistic features in siblings' oral narratives

This section examines the relationship between sibling order and use of Spanish-linguistic features (e.g., gender article agreement), as well as providing qualitative

examples that were evidenced in children's oral narratives. I report only on the statistically significant analyses for the coded variables (for full set of analyses, see Appendix H). First, in Table 32, we observe the five linguistic and lexical categories coded in the analysis and the statistical significance of each:

Table 32: Outline of statistical significance for each GLMM analysis

Linguistic feature	Description	Statistical significance
Gender article agreement (object and subject position)	Form supplied by participant appropriately or inappropriately produces article gender in clause.	Significant
Gender adjective agreement	The adjectival form supplied by participant appropriately or inappropriately assigns gender agreement for NP	Not significant
Verb number agreement	The verb supplied by participant appropriately or inappropriately agreed in number in clause	Not significant
Verb formation and meaning appropriateness	The verb supplied by participant was appropriate in its formation and meaning	Significant
Use of English lexical insertion	The item supplied by speaker is in English. Calques or loanwords not counted.	Significant

Table 32 shows that the GLMM analyses yielded several statistically significant results (i.e., gender article agreement in subject and object position, verb formation and meaning appropriateness, use of English lexical insertions). The coded variables that *did not* yield statistically significant results were gender article agreement and verb number agreement. While these variables were not statistically significant in the GLMM analyses, qualitative differences between older and younger siblings' language practices will be further addressed in sections 5.2. and 5.3, which examine siblings' everyday

communicative behaviors in the home and school domain. The statistically significant coded variables of the quantitative analyses included:

- Gender article production in subject and object position of clause
- Verb formation and meaning appropriateness
- The presence of English lexical insertion in each clause.

In what follows, I first report on the statistically significant results from each analysis by examining the linguistic and lexical features highlighted above. In each section, I provide the differences in marginal means for each sibling group, which are the computed probabilities of siblings' performances based on the mean values of analysis. After revealing the probability of siblings' performance based on the GLMM model, as well as discerning its statistical significance using a chi-square analysis, I provide qualitative examples from children's Frog Story narratives in Spanish.

I initially divulge the relationship between sibling order and gender article production in both the subject and object position.

As noted in the methods section, each clause was analyzed separately, such that siblings' production of gender article was examined in two separate GLMMs for the subject and object position within each noun phrase. First, with respect to siblings' production of the gender article in subject position, I present the GLMM results on the differences in marginal predicted means in Table 33:

Table 33: Differences in marginal predicted means in appropriately producing gender in subject position

Sibling group	Predicted means	z	CI Lower	CI Upper
Older	98.97%	64.71	.96	1.02
Younger	79.88%	7.93	.60	.99

The above table shows that there is a significant difference between older and younger in their production of article gender, $\chi^2(1)=4.71$, $p=0.001$. That is, older siblings appropriately employed the gender article in subject position more frequently, 98.97%, as compared to the younger siblings, 79.88%. Taking a closer look within and between sibling pairs, I turn to Table 34, which reveals the distribution of appropriate and inappropriate cases of article gender in the subject position for each of the selected sibling pairs.

Table 34: The distribution of appropriate and inappropriate tokens of article gender in the subject position for each of the selected sibling pairs

Family	Sibling pair	Appropriate	Inappropriate	Total tokens in each siblings' narrative
1	Daniel (O)	25 (100%)	0 (0%)	25 (100%)
	Mia (Y)	38 (100%)	0 (0%)	38 (100%)
2	Brent (O)	31 (100%)	0 (0%)	31 (100%)
	Kyle (Y)	20 (90.91%)	2 (9.09%)	22 (100%)
3	Benito (O)	33 (97.06%)	1 (2.94%)	34 (100%)
	Oscar (Y)	14 (70%)	6 (30%)	20 (100%)
4	Samuel (O)	38 (100%)	0 (0%)	38 (100%)
	Kendra (Y)	41 (87.23%)	6 (12.77%)	47 (100%)
5	Lani (O)	8 (100%)	0 (0%)	8 (100%)
	Leo (Y)	1 (16.67%)	5 (83.33%)	6 (100%)
6	Bryce (O)	24 (100%)	0 (0%)	24 (100%)
	Melvin (Y)	32 (100%)	0 (0%)	32 (100%)
Total number of tokens of article gender in subject position		305 (94%)	20 (6%)	325 (100%)

The above table demonstrates the total number of appropriate and inappropriate cases in which the child supplied the article gender in subject position. We observe that across the majority of children, the distribution of tokens in which the article gender was

appropriately produced was greater (94%) than those cases in which the article gender was inappropriately produced (6%). That is, for the majority of children, siblings mostly employed the appropriate article gender in their Spanish narratives. The only exception was found in the narrative of younger sibling, Leo (Family 5). Of all the cases in which Leo produced an article in the subject position in the oral narrative, 83.33% of these articles were inappropriate in the production of gender²⁷.

In total, three patterns emerged among all sibling pairs. The first pattern that emerged from the table shows the distribution of tokens according to younger and older siblings. That is, both older and younger siblings appropriately assigned article gender in subject position, which occurred in Families 1 (Daniel and Mia) and 5 (Bryce and Melvin).

The second pattern shows cases in which older siblings appropriately employed article gender, but younger siblings inappropriately employed article gender in the subject position. This pattern was found in Families 2, 4, and 5. For instance, consider younger siblings, Kyle (Family 2), Kendra (Family 4), and Leo (Family 5), who inappropriately produced the article gender in subject position in their oral narratives (9.09%, 12.77%, and 87.23%, respectively). Cases in which younger siblings from Families 2, 4, and 5 inappropriately produced the article gender in subject position attest to these patterns, which are shown in Examples 18-20 (article gender and NP shown in **bold**):

- (18) Luego ***los abejas** fueron allí y el búho fue a dormir. (Kyle – Younger sibling, Family 2)
(*Later the bees went there and the owl went to sleep*)
- (19) ***El tortuga** se ***metó** en el niño, su sueter. Pero **el tortuga** no cabe allí. (Kendra – Younger sibling, Family 4)
(*The turtle got into the boy's sweater. But the turtle didn't fit there.*)

²⁷ The few number of tokens in which younger sibling, Leo (Family 5) produced NPs with gender article shown in Table 34 is attributed to the fact that only articles issued with lexical items in Spanish were counted. A total of 13 items (68.45% of all coded NPs) were not included in the analysis.

- (20) ***La perro** quiere quedar en la casa pero ellos van a salir de la casa.
 (Leo – Younger sibling, Family 5)
(The dog wants to stay in the house, but they are leaving from the house.)

The third pattern shows cases in which both the older and younger sibling in each pair inappropriately produced article gender in subject position, which occurred in Family 3. That is, both older sibling, Benito, and younger sibling, Oscar, inappropriately employed the article gender in the subject position in several cases (2.94% and 30%, respectively). Attesting to these patterns, consider the following examples from Benito's and Oscar's oral narrative, which exemplify the siblings' production of the inappropriate article gender in subject position (article gender and NP shown in **bold**):

- (21) El niño se cayó y un pájaro vino y el perro está corriendo porque ***los abejas** le quieren atacar el perro. (Benito – Older sibling, Family 3)
The boy fell and a bird came and the dog is running because the bees.
- (22) Y allí ***el mama** fue entro el agua pero no puede ir porque dice que no puedes nadar (Oscar – Younger sibling, Family 3)
And there, the mother went into the water but she can't go because it says you can't swim.

Together, Tables 33 and 34 suggest that while both older and younger siblings appropriately produced the article gender in subject position more often than the inappropriate production, statistically significant differences were found between older and younger siblings. Table 33 shows the results from the GLMM analysis, which shows significant differences between older and younger siblings in their production of the appropriate article gender. That is, older siblings outperformed their younger siblings in the appropriate production of article gender in subject position. Furthermore, Table 33 captures other variances among the families, such that several older and younger siblings evidenced accurate production of the article gender (Families 1 and 5), meanwhile only

the older sibling appropriately employed the article gender (Families 2, 4, and 5). In Family 3, however, older sibling, Benito, inappropriately produced the article gender in subject position, albeit at a significantly reduced distribution compared to his younger brother, Oscar. These variances, alongside the triangulated data will be addressed in the discussion chapter.

I now turn to examine siblings' production of the gender article in object position. First, I present the GLMM results from the differences in marginal predicted means, as shown in Table 35:

Table 35: Differences in marginal predicted means of appropriately producing gender article in object position

Sibling group	Predicted means	z	CI Lower	CI Upper
Older	96.91%	49.24	.927	1.00
Younger	75.76%	10.08	.590	.912

p < 0.001

The above table shows that a significant difference was found between older and younger in their appropriate production of article gender $\chi^2(1)=4.71$, $p=0.001$. The analysis yielded results, which suggest that older siblings appropriately employed the gender article in subject position more frequently, 96.91%, as compared to the younger siblings, 75.76%. Taking a closer look within and between sibling pairs, I turn to Table 36, which reveals the distribution of appropriate and inappropriate tokens of article gender in the object position for each of the selected sibling pairs.

Table 36: The distribution of appropriate and inappropriate tokens of article gender in the object position for each sibling

Family	Sibling pair	Appropriate tokens	Inappropriate tokens	Total tokens
1	Daniel (O)	28 (100%)	0 (0%)	28 (100%)
	Mia (Y)	25 (92.59%)	2 (7.41%)	27 (100%)
2	Brent (O)	21 (100%)	0 (0%)	21 (100%)
	Kyle (Y)	9 (60%)	6 (40%)	15 (100%)
3	Benito (O)	14 (87.50%)	2 (14.29%)	16 (100%)
	Oscar (Y)	14 (82.35%)	3 (17.65%)	17 (100%)
4	Samuel (O)	27 (93.1%)	2 (7.41%)	29 (100%)
	Kendra (Y)	10 (58.82%)	7 (51.18%)	17 (100%)
5	Lani (O)	19 (100%)	0 (0%)	19 (100%)
	Leo (Y)	4 (50%)	4 (50%)	8 (100%)
6	Bryce (O)	23 (100%)	0 (0%)	23 (100%)
	Melvin (Y)	25 (96.15%)	1 (3.85%)	26 (100%)
Total number of tokens of article gender in object position		191 (88%)	27 (12%)	218 (100%)

The above table reveals the total number of appropriate and inappropriate tokens in which the child appropriately supplied the article gender in object position. Like the results from article gender production in the subject position, we observe that across the

majority of children, the article gender was appropriately produced, exceeded those cases in which the article gender was inappropriately produced in the object position. That is, both older and younger siblings appropriately produced article gender in the object position in the majority of cases in which this feature was expressed. An exception to this tendency, however, was found in younger sibling, Leo (Family 5), who produced the appropriate and inappropriate article gender in object position in equal quantities (i.e., 50%).

Therein, Table 36 reveals two patterns. The first in the table suggests that older siblings had a tendency of appropriately producing article gender, but younger siblings exhibited a tendency to inappropriately produced article gender in the object position. For instance, in Families 1, 2, 5, and 6, older siblings appropriately produced the article gender in object position, while their younger counterparts inappropriately employed article gender in several cases. For example, consider younger siblings, Mia (Family 1) and Melvin (Family 6), who inappropriately produced the article gender in object position in several tokens (7.41% and 3.85%, respectively), while their older brother, Daniel (Family 1) and Bryce (Family 6), evidenced accurate article gender production in their narratives. In Families 2 and 5, however, the distribution of inappropriate article gender production was greater. Younger siblings Kyle (Family 2) and Leo (Family 5), inappropriately employed the article gender in higher frequencies (40% and 50%, respectively), while the older sibling evidenced accurate article gender production in their narrative. Examples of tokens in which younger siblings from Families 1, 2, 5, and 6 inappropriately employed the article gender in object attest to these patterns, which are shown below in Examples 23-26 (article gender and NP shown in **bold**):

- (23) La rana saca ***el lengua** con una mosca. (Mia, Family 1)
(The frog takes out his tongue with a fly.)

- (24) Él vio el hoyo y besó a esto y el perro trataba de garrar su **honey**. Y el perro tiró ***los abejas** (Kyle – Younger sibling, Family 2)
(He looked in the hole and kissed this and the dog was trying to grab the honey. And the dog took the bees.)
- (25) Él va a ir a su cuarto. Y él salió ***del cama**. (Leo – Younger sibling, Family 5)
(He is going to his room. And he left the bed.)
- (26) La bee salió y picó ***la perro**. (Melvin – Younger sibling, Family 6)
(The bee left and stung the dog.)

The second pattern in the table revealed that both the older and younger siblings inappropriately employed article gender in object position. This pattern was attested in Families 3 and 4. First, among the children in Family 3, the distribution of the inappropriate production article gender in object position was similar among older sibling, Benito, and younger sibling, Oscar (14.29% and 17.65%, respectively). Among the children in Family 4, however, younger sibling, Kendra, inappropriately employed the article gender in the object position in a higher frequency (51.18%), compared to her older brother, Samuel, who inappropriately employed the article gender in only 7.41% of his tokens. That is, younger sibling, Kendra, employed expressed inappropriate article gender agreement in her Spanish narrative, as compared to her older brother, Samuel. Attesting to these patterns, consider Examples 27-30, which show cases in which both siblings from Families 3 and 4 inappropriately produced the article gender in the object position (article gender and NP shown in **bold**):

- (27) Están gritando y el perro está viendo ***los abejas**. Y después el perro se cayó. (Benito – Older sibling, Family 3)
They're screaming and the dog is seeing the bees. And after the dog fell.
- (28) Y allí el mamá agarra ***el leche** y después vio el frog y el gato también. (Oscar – Younger sibling, Family 3)
(And there the mother grabs the milk and after she saw the frog and the cat, too.)
- (29) Luego el gato ve ***el mamá**. Está con su bebé. (Samuel – Older sibling,

Family 4)

(Later the cat looks at the mother. She is with her baby.)

- (30) El perro estaba arriba. El niño dijo, “shh” y el niño buscó ***un chiquitito tortuga**. (Kendra – Younger sibling, Family 4)
(The dog was above. The boy said, “shh” and the boy looked at the small turtle.)

Collectively, Tables 35 and 36 uncover the general pattern that both older and younger siblings appropriately produced the article gender in object position more often than the inappropriate production. However, as in the above tables, significant differences existed between older and younger siblings in their production of the appropriate article gender in the object position. Table 36 illustrates the results of the GLMM analysis, as well as reveals other variances within and between sibling pairs. That is, in several pairs (Families 1, 2, 5, and 6), only the older siblings appropriately employed the article gender, meanwhile the younger siblings were observed inappropriately producing the article gender (although the number of tokens are low). The second pattern occurred in Families 3 and 4 in which both the older and younger sibling inappropriately employed the article gender in object position. That is, older sibling, Samuel (Family 4) inappropriately selected the article gender in object position, albeit at a significantly reduced frequency compared to his younger sister, Kendra. In Family 4, however, the frequency in which the article gender was inappropriately produced was more consistent among older sibling, Benito, and younger sibling, Oscar. These findings will be further discussed in Chapter VII, the discussion, using the triangulated data that examine sibling differences from multiple points of view.

Next, I discuss the relationship between sibling order and children’s production of verbs that were inappropriate in meaning and formation. First, I present the results from the GLMM analysis and differences in the marginal predicted means. After, I examine

the distribution of verbs that were either appropriate and inappropriate in their formation, as well as provide examples from children's Spanish oral narratives that attest to the patterns captured in the quantitative analysis. With respect to siblings' verb formation and meaning appropriateness, I present the GLMM results from the differences in marginal predicted means, as shown in Table 37:

Table 37: Marginal predicted means in verb formation and meaning appropriateness

Sibling group	Predicted means	z	CI Lower	CI Upper
Older	99.19%	4.62	.981	1.00
Younger	80.79%	5.14	.719	.896

$p < 0.001$

The above table shows that there is a significant difference between older and younger in their production of article gender, $\chi^2(1)=21.30$, $p=0.001$. That is, the results from the differences in marginal predicted means suggest that older siblings, as a whole, formed verbs that were appropriate in meaning in 99.19% of the tokens in which they were produced, as compared to the younger siblings, 80.79%. Taking a closer look at this pattern, I now examine the distribution of appropriate and inappropriate tokens of verb formation and meaning for each of the selected sibling pairs, as shown in Table 38:

Table 38: The distribution of appropriate and inappropriate tokens of verb formation and meaning for each of the selected sibling pairs

Family	Sibling pair	Appropriate tokens	Inappropriate tokens	Total tokens
1	Daniel (O)	56 (100%)	0 (0%)	56 (100%)
	Mia (Y)	63 (91.3%)	6 (8.7%)	69 (100%)
2	Brent (O)	61 (100%)	0 (0%)	61 (100%)
	Kyle (Y)	49 (84.48%)	9 (15.52%)	58 (100%)
3	Benito (O)	61 (100%)	0 (0%)	61 (100%)
	Oscar (Y)	52 (83.87%)	10 (16.13%)	62 (100%)
4	Samuel (O)	57 (100%)	0 (0%)	57 (100%)
	Kendra (Y)	44 (65.67%)	23 (34.33%)	67 (100%)
5	Lani (O)	58 (95.08%)	3 (4.92%)	61 (100%)
	Leo (Y)	35 (70%)	15 (30%)	50 (100%)
6	Bryce (O)	56 (100%)	0 (0%)	56 (100%)
	Melvin (Y)	56 (90.32%)	6 (9.68%)	62 (100%)
Total tokens of verbs according to appropriateness		648 (90%)	72 (10%)	720 (100%)

Table 38 handles the distribution of each verb's appropriateness in formation and meaning for the selected sibling pairs. We observe that, as a whole, the distribution of verbs that were appropriate (90%) exceeded those cases in which verbs were

inappropriate in meaning and formation (10%). More specifically, two patterns can be drawn from Table 38. The first and most common pattern shows cases in which older siblings accurately produced verbs, meanwhile younger siblings produced verbs that were inappropriate in meaning and formation. This pattern occurred in Families 1, 2, 3, 4, and 6. For instance, in Families 1, 2, and 6, subtle variances were found, such that younger siblings, Mia (Family 1) and Melvin (Family 6) seldom produced few verbs that were inappropriate in formation and meaning (8.7%, 15.52%, 9.68%, respectively). In Families 3 and 4, however, younger siblings were observed producing verbs that were inappropriate in formation in meaning in a considerable number of cases. That is, younger siblings, Kyle (Family 2), Oscar (Family 3), and Kendra (Family 4) produced an abundance of verbs that were inappropriate in formation and meaning in their Spanish narratives (15.52%, 16.13%, and 34.33%, respectively). Attesting to these patterns, consider Examples 31-34, which show cases in which younger siblings from Families 1, 2, 3, 4 and 6 produced verbs that were inappropriate in formation in meaning (inappropriate verbs shown in **bold**):

- (31) Y luego la señora ve al lado y luego siente con una rana y el señor ***ponió** una cara. (Mia – Younger sibling, Family 1)
And later the woman looks to the side and later she feels, with a frog and the man made a face.
- (32) Luego el niño ***ponió** eso allí y el perro también. Y luego se cayeron al agua. (Kyle – Younger sibling, Family 2)
(Later the boy put that there and the dog also. And later they fell in the water.)
- (33) El café ***cayó** y también el niño ***cayó**. (Oscar – Younger sibling, Family 3)²⁸
(The coffee fell and also the boy fell.)

²⁸ It should be noted that some regional varieties in Spanish allow for an absence of reflexive pronouns in clauses without a complement. The Mexican variety, however, does not allow for this construction.

- (34) El niño estaba jugando con su tortuga y su perro. El niño estaba durmiendo y *el tortuga ***se saló** del container. El niño no ***sabió**. (Kendra – Younger sibling, Family 4)
The boy was playing with his turtle and his dog. The boy was sleeping and the turtle got out of the container. The boy didn't know.

The second pattern shows cases in which both older and younger siblings inappropriately employed article gender in object position, which occurred in Family 5. That is, older sibling, Lani, and younger sibling, Leo, produced verbs that were inappropriate in formation and meaning (4.92% and 30%, respectively). Furthermore, we observe that while both siblings produced verbs that were inappropriate in their formation and meaning, younger sibling, Leo, was shown to contribute more inappropriate tokens of verbs, as compared to his older sister, Lani. Examples from siblings' Spanish narratives are shown in Examples 35 and 37, which attest to the pattern that both Lani and Leo produced verbs that were inappropriate in formation and meaning (inappropriate verbs shown in **bold**):

- (35) Aquí estaban ***ayendo** (yendo) al City Park con sus pets. Luego pasaron por unas mariposas (Lani – Younger sibling, Family 5)
(Here they were going to the city park with their pets. Later they passed through some butterflies.)
- (36) Fue arriba y la boy ***cayó**. ***Cayó** del tree. Y ***cayó** en agua. (Leo -Younger sibling, Family 5)
(He went and the boy fell. He fell from the tree. And he fell in water.)

Collectively, Tables 37 and 38 reveal the manner in which older and younger siblings produce verbs that were appropriate in formation and meaning. First, results of the GLMM analysis show significant differences between older and younger siblings, such that older siblings more often produced verbs that were appropriate in formation and meaning than younger siblings. Taking a closer look at this pattern, Table 38 illustrates the results from the GLMM analysis and captures other variances among the families. For

example, in the majority of sibling pairs (Families 1, 2, 3, 4, and 6), all older siblings appropriately produced verbs, while younger siblings were observed producing verbs that were inappropriate in formation and meaning at varying levels. In only one family was the production of each verb's formation and meaning inappropriate observed in the narratives of both older and younger siblings. This pattern occurred in the narratives of older sibling, Lani, and younger sibling, Leo (Family 5), during which both children produced verbs that were inappropriate in formation and meaning. These differences between siblings and what they suggest will be discussed in section 6.3, during which I triangulate the findings from multiple points of view.

Next, I turn to examine siblings' use of English lexical insertions in their Spanish narratives.

4.3.3. Siblings' use of English lexical insertions in Spanish oral narratives

In this section, I explore the relationship between sibling order and children's use of English lexical insertions in each coded clause. First, I present the results from the GLMM analysis and differences in the marginal predicted means. After, I document the distribution of children's use of English lexical insertions in each coded clause among the selected sibling pairs, as well as provide examples from children's Spanish oral narratives.

With respect to siblings' use of English lexical insertions in their Spanish narratives, I present the marginal predicted means from the GLMM analysis, as shown in Table 39:

Table 39: Marginal predicted means in the presence of English lexical insertions in each coded clause

Sibling group	Predicted means	z	CI Lower	CI Upper
Older	10.34%	2.83	.032	.175
Younger	22.99%	3.75	.109	.349

P < 0.001

The above table shows that there are significant differences between older and younger siblings' in their use of English lexical insertions in their Spanish narratives, $\chi^2(1)=3.56$, $p=0.001$. The results from the differences in marginal predicted means suggest that younger siblings, as a whole, more often used English lexical insertions, 22.99% as compared to older siblings, 10.34%, in their Spanish oral narratives. Thus, the mixed-effect logistic regression showed that the younger sibling group more frequently used English lexical insertions than to the older sibling group. This finding has several implications, such as the siblings' linguistic environments and comparatively unequal amounts of exposure to each of their languages, which will be further addressed in 6.3.

Taking a closer look at this linguistic pattern, I now examine the distribution of children's use of English lexical insertions in each coded clause among the selected sibling pairs. The results are shown in Table 40:

Table 40: The presence of English lexical insertions in each coded clause among the selected sibling pairs

Family	Siblings	Presence of English lexical insertions in clauses	Total number of clauses in Spanish oral narrative
1	Daniel (O)	4 (7.14%)	56 (100%)
	Mia (Y)	3 (4.35%)	69 (100%)
2	Brent (O)	6 (9.84%)	61 (100%)
	Kyle (Y)	10 (16.95%)	58 (100%)
3	Benito (O)	9 (14.75%)	61 (100%)
	Oscar (Y)	32 (51.61%)	62 (100%)
4	Samuel (O)	4 (7.02%)	57 (100%)
	Kendra (Y)	10 (14.93%)	67 (100%)
5	Lani (O)	4 (6.56%)	61 (100%)
	Leo (Y)	29 (58%)	50 (100%)
6	Bryce (O)	4 (7.14%)	56 (100%)
	Melvin (Y)	4 (6.45%)	62 (100%)
Total number of tokens with presence English lexical insertions		119 (17%)	720 (100%)

Table 40 reveals the distribution of siblings' use of at least one English lexical insertion in each coded clause. We observe that, as a whole, each child issued several

tokens of English lexical insertions in their narratives. More specifically, Table 40 shows variance in the distribution of English lexical insertion, insofar that several children produced an abundance of tokens in which they used English lexical insertions in each of the coded clauses of their narratives. Below, I take a closer look at siblings' use of English lexical insertions and report on two patterns found in Table 40.

The first pattern found in Table 40 shows cases in which the distribution of clauses that included at least one English lexical insertion was greater among younger siblings than older siblings. That is, several younger siblings produced more items in which they used at least English lexical insertion in each coded clause, as compared to her or his older sibling, which occurred in Families 2, 3, 4, and 5. In Families 2 and 4, these differences were subtle, such that the distribution of children's use of at least one English lexical insertion in each coded clause was greater among younger sibling than older. For example, in Family 2, older sibling, Brent, and younger sibling, Kyle, were both observed producing English lexical insertions (9.84% and 16.95%, respectively). This pattern was also evidenced in Family 4 in which older brother, Samuel, and younger sibling, Kendra, were both observed producing English lexical insertions (7.02% and 14.93%, respectively). In Families 3 and 5, however, this pattern was more marked. In Family 3, older sibling, Benito and, younger sibling, Oscar, produced English lexical insertions at differential rates (14.75% and 51.61%, respectively), similar to older sibling, Lani, and younger sibling, Leo, in Family 5 (6.56% and 58%, respectively). In the following examples, we observe younger siblings' tendency to use English lexical insertions in their narratives (English lexical insertions shown in **bold**):

- (37) El niño estaba allí y dice, “¿Qué es eso?”. Y vio un **eyeball**. El **frog** tenía una familia y también tenía sus **kids** y está diciendo, “bye!”. (Kyle – Younger sibling, Family 2)

(The boy was there and says, “What is that?”. And he saw an eyeball. The frog had a family and also had his kids and was saying, “bye!”.)

- (38) Ahora el **frog** ya brincó y el **frog** estaba en la mano del niño. El niño no tiene sus **glasses**. Y el **frog** está allí. (Oscar – Younge sibling, Family 3)

(Now the frog already jumped and the frog was in the boy’s hand. The boy had no glasses. And the frog was there.)

- (39) El perro buscó el **beehive** y **bumblebees**. El niño buscó en un árbol que estaba un hoyo. El niño se cayó porque había un owl. (Kendra – Younger sibling, Family 4)

(The boy looked for the beehive and the bumblebees. The boy looked in a tree that there was a hole. The boy fell because there was an owl.)

- (40) La frog tocó la **nose** y *eso **lady** estaba *enojado at *eso **guy**. (Leo – Younger sibling, Family 5)

(The frog touched the nose and that lady she was upset at that guy.)

The second pattern shows cases in which the distribution of children’s use of English lexical insertions was greater among older siblings than younger siblings, albeit with marginal differences. This pattern occurred in Families 1 and 6. For instance, in Family 1, older sibling, Daniel, was observed contributing slightly more tokens of English lexical insertions in the coded clauses, compared with his younger sibling, Mia (7.14% and 4.35%, respectively). Similarly, older sibling, Bryce, from Family 6 also contributed slightly more instances of English lexical insertions in his Spanish narrative, compared with his younger sibling, Melvin (7.14% and 6.45%). For instance, consider Examples 41-44 from siblings in Families 1 and 6 (English lexical insertions shown in **bold**)

- (41) Y salió **un owl** y el perro estaba corriendo de las abejas (Daniel, Family 1)
(And an owl and a dog was running from the bees)

- (42) Y aquí la rana sacó su **tongue**. Pero no fue una mosca. Fue una **bumblebee**. (Mia, Family 1)
(And here the frog stuck out its tongue. But it wasn’t a fly. It was a bumblebee)

- (43) Y después **el owl** no vio el niño pues el niño se subió una roca y después salió **el reindeer**. Y pues **el reindeer** lo llevó a no sé adónde. (Bryce, Family 5)
(And after the owl didn't see the boy, so the boy climbed ontop of a rock and after out came a reindeer. And well the reindeer carried him to I don't know where)
- (44) El perro miró en **el hive** mientras el niño gritó en el hoyo. Es cuando el **owl** saltó y el niño se cayó. **El owl** lo persiguió. (Melvin, Family 5)
(The dog looked in the hive while the boy screamed in the hole. It's when the owl jumped and the boy fell. The owl followed him)

Taken together, Tables 39 and 40 bring to light the children's tendency to use English lexical insertions in their Spanish narratives. More specifically, results from the GLMM analysis show significant differences between older and younger siblings, such that younger siblings more often used English lexical insertions in their Spanish narratives. Taking a closer look at this pattern, Table 40 shows the results from the GLMM analysis, as well as captures variances among the selected sibling pairs. For example, in the majority of sibling pairs (Families 2, 3, 4, and 5), the distribution of clauses that included at least one English lexical insertion was greater among younger siblings' narratives. In Families 1 and 6, however, the distribution of children's use of English lexical insertions was greater among older siblings than younger siblings, albeit with marginal differences. While this pattern initially points to Mia's Melvin's tendency to use fewer tokens of English lexical insertions in each clause of their Spanish narratives, the marginal differences between older and younger siblings in Families 1 and 6 suggest that these children were relatively uniform. Recall from above that these sibling pairs, Daniel and Mia (Family 1) and Bryce and Melvin (Family 6), were shown to appropriately produce article gender in both subject and object position, as well as produce verbs appropriate in meaning and formation. Thus, Table 40 further reveals that

siblings, Daniel and Mia (Family 1) and Bryce and Melvin (Family 6), seemed to show the most consistency in their use of Spanish lexical features and English lexical insertions. These findings will be further discussed in section 6.3, during which I triangulate the findings from multiple points of view and attempt to unpack the multiple factors that worked to create a unique sibling environment.

4.4. Summary of chapter

In sum, this chapter has examined children's language use patterns by using quantitative approaches to highlight differences within and between sibling pairs. More specifically, the goal of this chapter was to present the siblings' language use patterns as captured in the four protocols:

- BIOS survey and language background questionnaire
- EOWPVT-4: SBE expressive vocabulary assessment in Spanish and English
- BESA/BESA-ME morphosyntax subtest in Spanish and English
- Spanish oral narratives elicited using Mayer's (1969) Frog Stories.

The study yielded several findings. First, we observed the general pattern reported by mothers in the BIOS survey that younger sibling received English exposure at a much earlier age than their older counterparts, insofar that a statistically significant difference existed between older siblings' AoEE and younger siblings' AoEE. Furthermore, we observed the general pattern reported by mothers in the language background questionnaire that the eldest child was more proficient speaking and comprehending Spanish. Subtle differences were found among sibling pairs. These findings have several

implications, specifically on the influence of AoEE and, concomitantly, language exposure. These data will be further discussed in the discussion chapter, during which I triangulate siblings' AoEE and language proficiencies with the other protocols used in the study.

Next, the child language assessments further dissected siblings' language use patterns to include quantitative measures to illustrate children's expressive vocabulary and morphosyntax knowledge in Spanish and English. With regard to the EOWPVT-4: SBE assessments, the results found no significant difference between older and younger siblings' expressive vocabulary in neither Spanish nor English. However, results of an independent t-test confirmed that regardless of sibling order, the children were able to express more lexical items in English than in Spanish. Findings from the BESA/BESA-ME morphosyntax subtests in Spanish and English yielded similar results to those related to the expressive vocabulary assessment. That is, results of an independent t-test confirmed that the siblings collectively showed greater morphosyntax knowledge in English than in Spanish, regardless of sibling order.

The fourth protocol used to examine siblings' language use patterns provided an in-depth analysis of children's Spanish oral narratives as captured in the elicited production task using Mayer's (1969, 1973, 1974) Frog Stories. Data obtained in this assessment allowed for a more open evaluation of each child's language-use patterns, providing a more comprehensive picture of siblings' distribution of verbal TMA in children's Spanish narratives and use of Spanish-linguistic features (e.g., gender article agreement) and English lexical insertions in oral production.

With respect to the distribution of verbal TMA among all older and younger sibling groups, findings revealed older siblings' preference for the present tense, followed

by the preterite and imperfect past-tense forms. Younger siblings, on the other hand, showed a preference for preterite and imperfect tense forms, followed by the present tense. With a closer examination of the distribution of each TMA category for each sibling pair, however, we can observe a diversity in siblings' use of the present, preterite, and imperfect verb forms (e.g., Berman and Slobin, 1994; Schiffrin, 1981). The only difference found was in the distribution of more complex verbal morphology, such as the use of the subjunctive and conditional verb forms, which was used more often among the older siblings than younger siblings. That is, older siblings used subjunctive and conditional forms in greater frequency than their younger counterparts. With caution, however, these tokens were represented in low numbers; therefore, I cannot more completely elucidate this tendency. Overall, these findings showed a diversity in the use of TMA, such that siblings were narrating at the time of looking at the Frog Story and using their imagination, which was not constrained to using one tense over the other. This finding could suggest that several verbal TMA categories were more salient in the input and production among each of the sibling pairs. These data will be further discussed in the discussion chapter alongside the triangulated findings, to address sibling differences from multiple points of view.

Next, with regard to siblings' use of Spanish-linguistic features and use of English Lexical insertions in their Spanish oral narratives, a second analysis was conducted, which examined the following coded variables:

- Gender article production in subject and object position
- Gender adjective agreement
- Production of verbs appropriate in meaning and formation
- The presence of at least one English lexical insertion in each coded clause.

Using a GLMM to analyze siblings' Spanish linguistic features shown above, the results found a statistical difference between sibling order and (1) appropriate production of article gender in subject and object position (2) production of verbs appropriate in meaning and formation; and (3) the presence of English lexical insertions. In each section, we first observed the statistically significant differences in marginal predicted means. After, the distribution for each coded variable for each sibling was presented, which both confirmed the results from the GLMM analysis and captured other variances among the families. Furthermore, while younger siblings were observed using English lexical insertions in each coded clause in greater frequency than their older siblings, variances between older and younger siblings were found among older siblings in Families 2, 3, 4, and 5. However, in Family 1 (Daniel and Mia) and Family 6 (Bryce and Melvin), the siblings were shown to be more uniform in their language-use patterns. Not only did the older and younger siblings evidence more accurate production of article gender in subject and object position, production of verbs appropriate in meaning and formation, they also showed fewer instances of at least one English lexical insertions. These findings will be later expanded in the following chapter on siblings' language ideologies and language practices.

Together, this chapter has revealed children's Spanish language-use patterns and linguistic proficiencies, showing quantitative differences between older and younger siblings':

- Initial exposure to English (AoEE)
- Rated proficiencies in Spanish
- Production of Spanish-linguistic features and English lexical insertions in Spanish oral narratives.

While these data suggest that a richness in the knowledge of Spanish was evidenced, each of the siblings showed differential patterns in uses of article gender, verb production and formation, and use of English lexical insertions. That is, one could suggest that by virtue of having a later AoEE and, concomitantly, differential levels of Spanish language input, older siblings as a whole had a more intact morphosyntactic system, such that they were more likely to accurately produce article gender in subject position. These data raise the question whether a relationship exists between siblings' language use patterns and AoEE – or generally their comparatively unequal levels of language exposure. These findings will be brought to the discussion chapter to address the data from multiple points of view, triangulating protocols to unpack the role of sibling order.

The data revealed in this chapter provide a stepping stone to assess how the focal siblings expressed their ideologies, as well as how they used their language/s in meaningful acts of communication, which will be further discussed in the next chapter.

Chapter V. Results of siblings' language ideologies and practices

The previous chapter discussed siblings' language use patterns as captured by their reported proficiencies in Spanish, initial exposure to English, and language assessments in Spanish and English. The findings revealed that younger siblings were less proficient in Spanish and exposed to English at an earlier age than their older brother or sister. Furthermore, in the production task, statistical differences were found between older and younger siblings' use of Spanish-linguistic features (e.g., article gender agreement) and their use of English lexical insertions in Spanish narratives. Furthermore, analyses of child language assessments showed that all children, regardless of sibling order, expressed more words in English and exhibited greater morphosyntax knowledge in English than in Spanish.

These diverse language patterns were instantiated in the ways focal siblings viewed and used language in the Otter Creek community, which is the focus of this chapter. Herein, I aim to answer research questions five and six, which address siblings' language ideologies and their reported and observed language practices in both the home and school domain. First, I attempt to gain a deeper understanding of children's language ideologies, highlighting common themes among all children that were captured in the child interviews. Second, I provide an account of both observed and reported language practices within the home and school domain, examining the highly complex and diverse language ecologies in the siblings' sociolinguistic environments. This multilayered analysis accounts for the entirety of siblings' sociolinguistic environment, insofar that while I acknowledge the role of birth order in siblings' language ideologies and language practices, I also attempt to unpeel the many layers instantiated in children's everyday language (Hornberger and Ricento, 1996). Thus, this analysis focuses on those

ideological contortions and complex language practices in the school and home domains, which collectively aim to triangulate findings from multiple points of view.

I now turn to discuss data generated from the child interviews, examining siblings' language ideologies.

5.1 Siblings' language ideologies

In this section, I explore the language ideologies that surfaced in children's interview data with respect to their attitudes and beliefs toward using Spanish. The analysis of child interviews uncovered two salient themes with respect to all of the siblings' ideologies toward speaking Spanish. These themes were:

- Language ideologies in support of bilingualism
- Negative language ideologies toward English-Spanish bilingualism.

The next section examines the language ideologies in support of bilingualism that emerged in child interviews. First, I describe the positive attributes siblings assigned to the home language. Then I explore language ideologies and their relationship with siblings' Latino in-group memberships.

5.1.1 Siblings' language ideologies in support of bilingualism

This section addresses the first theme to emerge in child interviews: language ideologies in support of bilingualism. During the child interviews, there was an observable pattern of positive attributes associated with siblings' bilingual proficiencies and their linguistic allegiances toward speaking Spanish, an attitude tied to children's sense of pride in speaking Spanish and their identification with Latino group membership. For instance, during child interviews, I asked participants how they felt toward speaking Spanish and English. The children, except for younger siblings, Kyle

(Family 2) and Leo (Family 5) whose narratives will be detailed in section 5.1.2., viewed speaking both Spanish and English as a positive attribute and an important part of their ethnolinguistic identity. This section is divided in two parts. The first part of this section describes the language ideologies in support of bilingualism, which relate to siblings' association of Spanish with linguistic pride. That is, they viewed speaking both English and Spanish positively, framing their language ideologies in the form of a linguistic pride. After, I describe how siblings' language ideologies in support of bilingualism and linguistic allegiances were related to their Latino in-group membership. Put differently, children discursively linked their language practices with their national origins.

First, with respect to the first theme concerning siblings' language ideologies, children expressed their support of bilingualism the form of a linguistic pride, such that they expressed a sense of honor to be able to use both their languages in the Otter Creek community. Several siblings used the word "proud" or "useful" when describing how they felt when being able to speak in both languages. For instance, consider older sibling, Bryce (family 6). During the child interview, Bryce exemplified language ideologies in support of bilingualism and assigned positive attributes to speaking both languages. When asked how he felt when speaking Spanish, Bryce responded in Excerpt 1:

Excerpt 1: Bryce (December 15, 2016)

Yeah. I feel proud when people tell me, "it's nice you speak two languages and I can't". Like in the doctor, I have to translate to other people. They don't know English and I translate. I feel good because I'm helping out. So some people, like I don't even know them. Or the supermarket. English people who know English and not Spanish.

Bryce viewed his bilingual practices positively, framing them as a skill that could help other Spanish-speakers in the Otter Creek community. That is, not only was he

proud of his ability to speak both languages, but he also expressed a sense of responsibility in being a language broker within the Latino community. Bryce provided anecdotal examples of the praise he received in doctors' offices and supermarkets when interpreting for Spanish-speaking adults, even with those whom he did not know personally. Thus, Bryce's allegiance to using Spanish highlights the older sibling's positive views toward bilingualism and his linguistic commitment to the Latino community. In the same interview, Bryce commented on the languages in which children would learn best at Otter Creek schools. Bryce's response is shown in Excerpt 2:

Excerpt 2: Bryce (December 15, 2016)

I think we should learn Spanish, too. I like bilingual classes because I think they're better. Because for example in math, I would understand better. Like last year, I was in the bilingual class, I had a math teacher who spoke Spanish. And my mom called the teacher all the time and she would ask him how I'm doing. And she would ask him. He can tell my mom how I'm doing.

In the above excerpt, Bryce expressed his interest in learning in both Spanish and English in the school, positing that his mother would be more involved in his academic development if the instructor were able to speak in both languages. Bryce provided an anecdotal example of his previous class that was taught by an instructor who spoke Spanish, reporting that his mother was more involved given that she could communicate in Spanish. This assertion highlights how Spanish served as a mechanism that facilitated both Bryce's and his mother's involvement with school. That is, the older sibling suggested that his understanding of class material would improve if he had the opportunity to learn in both languages. Bryce not only held positive views toward speaking Spanish, but also confirmed the allegiance toward Spanish given that this was his mother's first language.

This ideology was similarly reiterated by older brother, Samuel (Family 3), who expressed a desire that his classes were offered in both Spanish and English to communicate better with his mother. I asked Samuel in what language children learn best. Samuel's response is shown in Excerpt 3:

Excerpt 3: Samuel (December 1, 2016)

English and Spanish. Because there are some teachers here that talk in Spanish and English. And kids talk to their teachers in Spanish sometimes. And others in English. And because we don't lose the touch in Spanish or lose the language. Like sometimes we mess up words in Spanish. So, we keep on saying in Spanish...Like I'll feel frustrated when I talk to my mom and I can't remember a word.

Excerpt 3 provides another example of the focal siblings' allegiance to Spanish, such that the great majority of children expressed an attachment to the home language for reason of community and family. For instance, in the above excerpt, Samuel expressed a desire to learn in both languages to improve his own repertoire in Spanish when speaking with his mother. Samuel remarked: "Because we don't want to lose touch in Spanish or lose the language". This assertion conveyed Samuel's difficulties when trying to remember a word or phrase in Spanish. Thus, reflecting on his own language abilities, Samuel argued that bilingual classroom would connect help him speak Spanish with his mother and maintain a stronger connection with his family.

Siblings' language ideologies in support of bilingualism also surfaced in children's narratives, which concerned mother-child communication and academic advancement. Consider younger sibling, Oscar (Family 4). During the child interview, I asked Oscar in what language children learn best and whether Spanish should be spoken in the classroom. Oscar's response is shown in Excerpt 4:

Excerpt 4: Oscar (November 15, 2016)

I want both. It would help my Spanish. And then when I grow up, I'm gonna know and I don't have to learn Spanish when I go to college. And it'd help my mom. Because I'd help her in English because she doesn't still know English.

Above, Oscar reacted positively to the idea of taking classes in both Spanish and English, suggesting that this linguistic exposure in an academic setting would have a lasting effect on his Spanish skills. More specifically, learning in Spanish at the primary level would achieve two things: a sufficient linguistic competency for his secondary-education and a mechanism through which he could assist his mother learn English. Though it is unclear how Oscar's proficiencies in Spanish would assist his mother in learning English, the excerpt highlights the younger siblings' overall desire to help his mother and allegiance to the home language. Collectively, we gather that Oscar viewed bilingualism positively, demonstrating his linguistic commitment to both Spanish and English.

A third reason supporting bilingualism centered on the children's desire to help newcomer students who did not speak English upon their arrival. This theme appeared in several of the children's narratives, such as in Brent's (Family 2), Benito's (Family 3), and Melvin's (Family 6) interview data. For instance, consider Excerpt 5 during which older sibling, Benito (Family 3) argued that the language of instruction at Otter Creek should be in both Spanish and English:

Excerpt 5: Benito (November 12, 2016)

Spanish and English. Because so they can learn in both languages so they can understand much better. The people who are new here and we could help them to speak much better English and we could help them.

Above, Benito conveyed his support for bilingualism and suggested that his school should offer academic instruction in both Spanish and English. Benito maintained

that dual-language instruction would not only benefit the Latino students born in Otter Creek, but also provide a more inclusive environment for newly arrived children from Spanish-speaking countries who could not speak English. This assertion suggests that the older sibling viewed bilingualism positively, positioning Spanish as a mechanism that brings together the Latino community in Otter Creek. Furthermore, the above excerpt points to generational differences between students who were born in Otter Creek and those who came as newcomer students. Recall that all siblings in the focal study were born in the U.S., except for Samuel who arrived at Otter Creek at age 2. Thus, Benito's critical awareness revealed the exclusion of newcomer students in Otter Creek schools, bringing attention to his linguistic commitment to aiding his Latino classmates who come from Spanish-speaking countries.

The same critical language awareness was also expressed by younger sibling, Melvin (Family 6), who attended the same third grade classroom. I asked Melvin in what language children learn best, to which he responded in Excerpt 6:

Excerpt 6: Melvin (December 13, 2016)

Spanish and English. You know Ms. García's class? She sometimes speaks Spanish. People enjoy it. And because some people really don't know how to say things in English. Only in Spanish.

Melvin, like Benito in Excerpt 5, articulated that he also would enjoy having classroom instruction in both Spanish and English. Supporting his cause, Melvin provided an example of a classroom teacher who sometimes spoke Spanish in the classroom, arguing that Otter Creek students would enjoy learning in both languages. Furthermore, Melvin also highlighted the student perspective. He claimed: "Some people really don't know how to say things in English. Only in Spanish." Thus, speaking for his classmates, Melvin argued that learning in both Spanish and English would be beneficial for

all students, not just for those students who are newly arrived. This perspective is reflective of the children's views toward Spanish and the positive attributes they assigned to the language.

Collectively, these narratives point to these two siblings' allegiance to Spanish and their acknowledgment of the language's role for bringing together family members, friends, and newly arrived Spanish-speaking students to Otter Creek. Furthermore, the siblings' allegiance to Spanish draws attention to how these children positioned themselves as competent members in the Otter Creek Latino community.

Below, I examine how siblings' language ideologies in support of bilingualism and their allegiance to Spanish are related to the children's Latino in-group memberships, namely their orientations and tendency to link discursive Spanish with their national origins.

A prevalent theme in the child interview concerned siblings' language ideologies in support of bilingualism and their allegiance with Latino in-group memberships. That is, the positive attributes that siblings assigned toward speaking Spanish were discursively linked with their national origin. The focal siblings in study were growing up in a community marked by linguistic complexity and diversity. What emerged was a relationship between the emotional significance attached to bilingualism in Spanish and their Latino in-group membership and/or family origins. Language, family ties, and cultural traditions, such as music, food, and Mexican celebrations, were all tightly bounded, creating what Makoni and Pennycook (2007) described as ideological stances that provide a useful way for speakers to understand the world (p. 27). The focal siblings in this study reiterated such ideologies, during which they discursively linked their allegiance to using Spanish with their family's national origin and mapped their language

practices onto Otter Creek's Hispanic community. One of the first questions I asked siblings during the child interview was: Who spoke Spanish in Otter Creek? All siblings stated that Hispanic adults who resided in the southwest quadrant of Otter Creek spoke Spanish. They also reported that many, but not all their children, spoke the home language, which was transmitted from parent to child during their childhood. Consider Excerpt 7 during which Daniel (Family 1) described who spoke Spanish in his community:

Excerpt 7: Daniel (November 11, 2016)

People from different countries speak Spanish, Hispanic People. [...] When children are born, they don't know how to speak. And their parents are Hispanic. Hispanic people are going to teach their children how to speak Spanish.

In the above excerpt, Daniel showed his meta-linguistic awareness by identifying the members of Otter Creek who spoke Spanish and mapping the language practices onto the Hispanic community. Daniel maintained that those children born in Otter Creek learn to speak Spanish by virtue of their parents' national origins, namely Mexico, from where the great majority of adults had immigrated. For instance, the older sibling commented: "Hispanic people are going to teach their children how to speak Spanish". That is, Daniel contended that children were born into the world without language and were therefore socialized into using the home language. This assertion points to the connection between Spanish and the national origin of Daniel's family, such that his mother and father immigrated from Mexico, which again emphasizes the role of language in the family. Thus, the focal siblings viewed Spanish as a cultural artifact that was transmitted from one generation to the next, serving as a discursive link to their families' national origins.

The prevalent theme that tied siblings' language ideologies together with their allegiance to Spanish was families' national origins. Recall that all sibling pairs, with the

exception of Samuel (family 4), were born in Otter Creek, NJ, and sibling pair Bryce and Melvin (family 6), was born in Los Angeles, CA. During the child interview, nearly all the siblings expressed language ideologies in support of bilingualism and an allegiance to Spanish, which were linked to their family members' national origins. For instance, consider Excerpt 8 where Samuel described during the child interview why he enjoyed speaking Spanish:

Excerpt 8: Samuel (December 1, 2016)

I like Spanish because I feel Mexican. I speak Spanish. And because I miss my grandma and grandpa. But they're coming in a week to visit. They got a visa. And we're gonna have parties, take them to NYC to show them around.

Above, Samuel's orientation to birthplace and ethnic heritage was straightforward. Samuel not only authenticated his language practices by discursively linking his linguistic preferences with his family in Mexico, he also achieved intersubjectivity through the Spanish language. This allegiance to Spanish resonates with Buscholtz and Hall's (2005) work on linguistic interaction and identity, namely in Samuel's attempts to construct an identity that could be recognized as someone who had a link to Mexico and a desire to see family he left behind. Thus, Samuel constructed his ethnolinguistic identity by assigning positive attributes to Spanish and discursively linking his linguistic allegiances to his country of birth and family in Mexico.

In a similar vein, while siblings viewed bilingualism positively and expressed an allegiance toward Spanish, they struggled, however, to map their language practices onto their national origins in a straightforward manner like Samuel. Children wavered when responding to the connection between speaking Spanish and their family's national origin because of the complex sociolinguistic environment in which they were growing up. For example, consider older sibling, Lani (family 5). During the child interview, I asked Lani

whether she enjoyed speaking in both languages. Lani's response is shown below in

Excerpt 9:

Excerpt 9: Lani (November 16, 2016)

I like it because I get to learn another culture. Costa Rican and Mexican. Like right now my cousins went to Mexico. They live in Middletown. They go to Middletown school. And why aren't they here? Because they went to Mexico and that makes me feel Mexican inside. They're part of my family. Part of my mom's family. So it makes me feel Mexican. But I feel from NJ when I go to social studies. I feel more from here than other places. Very Jersey. Because I get to learn about it. What's inside the state like monuments and things like that.

Above, Lani expressed an interest in speaking both languages, arguing that Spanish provided her with the cultural knowledge of both Costa Rica and Mexico, her father's and mother's countries of origin. However, Lani felt both Mexican and New Jerseyan, adapting a different identity in the home and school environment. As a way to reconcile these two ethnolinguistic identities, Lani maintained a sense of linguistic and cultural pride by virtue of her family members, constructing herself as sufficiently similar to those family members who shared the same cultural identity. Lani's cousins, like herself, were born in NJ and growing up in highly complex sociolinguistic communities. Therefore, as observed in the above excerpt, Lani achieved what Bucholtz and Hall (2005) called *adequation*, Lani's positioning of herself through her cousins with similar cultural and linguistic backgrounds. This excerpt again points to how children's language ideologies in support of bilingualism were discursively linked to their Latino group memberships.

In addition to siblings' positioning of themselves in relation to family members, they also tended to index their ethnolinguistic identities and language preferences to the languages they heard and spoke in the home and school environment. For instance, consider older sibling, Bryce, who attempted to establish a recognizable ethnolinguistic

identity through contextual factors, given that he was born in California, but whose mother was from Mexico and spoke only Spanish in the home. Thus, when asked whether he felt Mexican, Californian, or New Jerseyan, Bryce expressed the following, as shown in Excerpt 10:

Excerpt 10: Bryce (December 15, 2016)

I feel...I don't know. Mexican? Sometimes I feel more Mexican and other times no. I was born in California, so I feel like I'm more from over there. Six years there. Four years in New Jersey. So I feel from more over there in California. But I do feel more New Jersey when I'm in school. And when I get out of school I feel more Mexican. I like to talk to my friends in Spanish, my family in Spanish. And I love Mexican food. It's so good. We like enchiladas. A lot of stuff my mom makes.

In Excerpt 10, Bryce attempted to establish a recognizable ethnolinguistic identity that mapped his language preferences onto his cultural background. Furthermore, Bryce demonstrated multiple aspects that composed his complex identity in responding to how he felt, albeit Mexican, Californian, or New Jerseyan, as well as constructed an ideological stance that conflated his ethnolinguistic identity with the language of his family and friends. We observe how language, family ties, and cultural traditions, such as food, were all tightly bounded for Bryce, creating a situation where his allegiance to Spanish was linked to his home environment, but recognized the school environment as more being more New Jerseyan. This pattern was also evidenced with his younger brother, Melvin, who indexed his ethnolinguistic identity to the languages he heard and spoke in school and when visiting family abroad, as shown in Excerpt 11:

Excerpt 11: Melvin (December 13, 2016)

Mmm both...Here, more New Jerseyan. In Mexico, I felt Mexican. I had to talk Spanish and only Spanish. So when I came back, I forgot what a dollar bill was called. I was there too long.

Above, Melvin attempted to articulate whether he felt more New Jerseyan, Californian, or Mexican. Recall that Melvin, like Bryce, was born in Los Angeles, CA, and moved to Otter Creek, NJ, four years earlier. The siblings had also spent a summer in Mexico in 2016, visiting aunts, uncles, and cousins. This context dependent identity was evidenced in Melvin's hesitation to respond how he identified himself as a speaker, albeit Californian, New Jerseyan, or Mexican. He argued that he felt both New Jerseyan and Mexican, unlike his older brother who felt more Californian, depicted in excerpt 10. Melvin also indexed his ethnolinguistic identity with each domain. In the school environment, where the interview was taken place, Melvin argued that he felt more New Jerseyan. When returning to Mexico to visit family, however, Melvin suggested that his preference for Spanish made him identify more with Mexican heritage, highlighting an anecdotal example of when he could only remember the Spanish word for "dollar bill" in Spanish (i.e., peso), rather than the word in English.

Another ideological stance concerning the siblings' language ideologies and their mapping of language preferences onto their cultural and linguistic background emerged in the interview of younger brother, Oscar (Family 3). Oscar, like the other children in this study, demonstrated multiple aspects of his ethnolinguistic identity and its relationship to the languages he heard and spoke in different domains, namely the academic and home environment. For instance, Oscar expressed in the interview that his sense of identity adapted depending on the language/s he spoke and the domain he was in. Consider Excerpt 12 during which Oscar described his ideological stances toward the languages he heard and spoke:

Excerpt 12: Oscar (November 15, 2016)

I feel New Jersey when I'm at school. And when I go home I feel more Mexican. Because I eat Mexican food and listen to Mexican music. My parents, they put

songs on in Spanish, but they speak words that I don't know how to speak in Spanish. I don't really like American songs. I like songs in Spanish and sometimes I dance. I feel like I want to speak twice and I feel happy because it makes me want to speak Spanish.

In the above excerpt, younger sibling, Oscar, articulates times when he felt more Mexican or New Jerseyan, indexing his language practices to the home and school domain. For instance, Oscar commented that he felt more New Jerseyan during school hours. On the other hand, he felt more Mexican in the home, conflating his ethnolinguistic identity with the food he ate, the music he listened to, and the languages he spoke. And despite Oscar's inability to understand the music his parents played during social gatherings, he expressed an interest in "speaking twice", the ability to speak both Spanish and English.

In sum, this section has reported on children's language ideologies in support of bilingualism and siblings' allegiances toward speaking Spanish. With the exception of two siblings, Kyle (Family 2) and Leo (Family 5), whose narratives will be detailed in the next section, siblings assigned positive attributes to speaking Spanish and felt an allegiance to their home language, which was often framed as a linguistic pride and identity marker. First, with respect to siblings' linguistic pride, children's positive language ideologies stemmed from their ability to speak both languages and sense of communal responsibility in being a language broker within the language community. This ideology was underscored by several siblings, who asserted their linguistic commitment to Spanish with not only their mothers, but also the Hispanic community at large. Furthermore, language ideologies in support of bilingualism were reiterated several times across children's interviews, namely in siblings' stances toward learning in both languages in the school. The siblings wished they learned in both languages to not only

improve their own linguistic repertoires, but to also bring together their parents and other Spanish-speaking students who had recently arrived from other countries. Furthermore, siblings' language ideologies that support bilingualism concerned their own ethnolinguistic assumptions and their discursive link between language preferences and family's national origin. In the same vein, siblings indexed their ethnolinguistic identities and language preferences to the languages they heard and spoke in the home and school environment, as they attempted to establish intersubjectivity through family members and friends. These narratives not only highlight the positive attributes siblings assigned to speaking Spanish, but also help deconstruct the ideological stances children took up during everyday discourses.

However, despite the great majority of siblings showing respect to their home language, they also acknowledged the demeaning stereotypes that associated bilingualism with unintelligence, frustration, and shame. In the next section, I describe siblings' negative language ideologies toward English-Spanish bilingualism, notably in the form of frustration, linguistic insecurities, and stigmatization.

5.1.2 Siblings' negative language ideologies toward bilingualism

This section addresses those negative language ideologies toward English-Spanish bilingualism. That is, despite children showing respect to the heritage language, they acknowledge the demeaning stereotypes that associated English-Spanish bilingualism with linguistic insecurities, notably in siblings' frustrations, uncertainty, self-doubt, and shame toward using the heritage language. In this section, I first describe siblings' association of Spanish with feelings of exhaustion, stress, and disappointment. After, I

explore siblings' linguistic insecurities and their expression of shame and negatives conceptualization of bilingualism.

With respect to the first theme concerning siblings' negative language ideologies, the children maintained that speaking Spanish was cognitively taxing and/or confusing. The children associated their language practices with feelings of frustration, stress, and disappointment. In these narratives, children reported in the interviews that they often found themselves unable to articulate words, expressions, and stories to adult family members in the home language. For instance, I asked participants to describe a moment in which the child experienced confusion and/or frustration when attempting to speak Spanish. In response, siblings responded with personal experiences that associated Spanish with frustration and confusion. Consider older sibling, Brent (Family 2), who despite his support of bilingualism, responded during his interview that he often felt tired and fatigued having to speak Spanish. For this reason, Brent posited that other children growing up in Otter Creek disliked speaking Spanish, conveying that they experienced disappointment and frustration in the home language. Brent's response is shown in Excerpt 13:

Excerpt 13: Brent (November 11, 2016)

Because sometimes when children speak in Spanish, it bothers them. Like the story you told me. Like they only speak in English. People who only want to speak in English, it makes them tired.

Above, Brent articulated his perspective that explained why children growing up in the Otter Creek community disliked speaking Spanish. Furthermore, he posited that the children who preferred English, grew tired speaking in Spanish. That is, using both languages was cognitively taxing for the speaker. Like the other interviewed children, Brent referenced the book each child read at the beginning of the interview, Dumas-

Lachtman's (1995), *Pepita speaks twice/Pepita habla dos veces*. In this reference, Brent commented that "speaking twice" for many children was bothersome, which prompted them to prefer English. Interestingly, one of these children who preferred English was Brent's younger brother, Kyle (family 2), who fervently expressed his dislike for Spanish during the child interview. That is, when asked what language Kyle preferred to speak, the younger sibling responded: "English. I feel good when I speak English". Thus, Kyle maintained that he exclusively spoke English to friends and his brother. In one instance, however, Kyle described an episode during which his older brother, Brent, chose to speak to him in Spanish in the home. Kyle's frustration and exhaustion from using both Spanish and English prompted him to become upset with his older brother, as observed in Excerpt 14:

Excerpt 14: Kyle (November 12, 2016)

Yeah. One day I was at school and I came back home and I was talking to my mother and brother. This was a day I got a headache from Spanish. My brother talked to me in Spanish and for some reason, I got mad and I punched him and I was like, "learn how to speak English!"

In the above excerpt, we attest to Kyle's dislike for Spanish. In the excerpt, we find that he experienced both physical and emotional distress. Kyle described one day after school where he felt tired from speaking Spanish in the home, giving the younger sibling a headache. This assertion is reflective of Kyle's distaste for the heritage language, as well as highlighting the younger sibling's active avoidance of using Spanish because of his association of Spanish with frustration and exhaustion. This theme emerged in several occasions during Kyle's interview, notably those dealing with Kyle's preference for English and his active dodging to avoid speaking Spanish. For instance, I

asked Kyle how he felt when asked by his mother to broker conversations in Spanish and English. Kyle's response is shown in Excerpt 15:

Excerpt 15: Kyle (November 12, 2016)

I feel like...I gotta go to the bathroom. Like if mom said, "will you teach me this in English?". I'll just run and say, "I have to go to the bathroom".

Again, Kyle emphasized his aversion for not only using Spanish, but also capitalizing on his bilingual language capabilities to teach his mother English. As will be further described in section 5.2.1., siblings' language practices within the home, Kyle's mother did not speak English, therefore relied on her children to facilitate communication in Spanish and English. Here, we observe how Kyle associated Spanish with feelings of frustration and exhaustion, thus rejecting his mother's requests to facilitate communication by using Spanish and English.

While not all siblings were as active as Kyle in avoiding the use of Spanish, frustration toward speaking the home language was a prevalent theme across child interviews. One of these themes, which will be further highlighted in section 5.2.1.5., was Lani's and Leo's (Family 5) rejection of their mother's orientation to using only Spanish within the home. Recall that Lani assigned positive attributes to speaking Spanish and demonstrated a linguistic allegiance to the heritage language. Her younger brother, Leo, however, was one of the two siblings in the focal study to view Spanish negatively, who expressed an aversion and a fervent distaste for the heritage language. Attesting to this ideology, Leo reported in the interview how he felt when Spanish was spoken in the home. Leo's response is shown in Excerpt 16:

Excerpt 16: Leo (December 2, 2016)

Not good because when my mom and dad bring someone who speaks Spanish to my house, I don't like that. Cause like, why not talk in just one language?

In the above excerpt, Leo indicated that his mother and father invited speakers, albeit friends or family, into their home, who spoke Spanish. Remarking on this linguistic ecology, Leo disfavored his parents' multilingual language practices, as well as problematized the sociolinguistic nature of his home. His older sister, however, did not mind that Spanish was spoken in the home. Instead, she reported that both she and her brother grew tired of having to constantly respond to their parents and family members in Spanish. For instance, I asked older sibling, Lani, how she felt when speaking Spanish. Lani's responded, as shown in Excerpt 17:

Excerpt 17: Lani (November 16, 2016)

Gives me a headache. Because I already spoke what I was gonna say to my mom. And I have to say it again but in a different language. Because sometimes my mom asks me questions like que “¿*Qué quieres comer?*” (What do you want to eat?) I'm like oh yeah, can we go to burger king or salad works. And she says, “*No entiendo. ¿Qué?*” (I don't understand. What?) And she tricks me and I have to talk Spanish to her. And I'm like “uggh!” And Leo. He gets frustrated and he's like “Mami, but I've already said it!” He gets frustrated and he doesn't talk [...] But now I know all the words. Well, mostly all the words. I feel more comfortable. Because I'm used to it.

Above, Lani remarked that speaking Spanish sometimes gave her a headache, such that she had to repeat to her mother in Spanish what she had already issued in English. Providing an anecdotal example, Lani described a moment in which her mother asked her she wanted to eat that night. Although Lani chose to respond in English, her mother faked her monolingualism and argued that she was unable to understand her children's English responses. Thus, Lani reported that both she and her younger brother became frustrated when having to speak Spanish, succumbing to feelings of exasperation. In the last line, however, Lani suggested that she feels more comfortable in Spanish

compared to her younger brother, revealing linguistic differences between the focal siblings.

In addition to children's association of Spanish with frustration, they also provided diachronic accounts by looking at their input and age of acquisition of English across the years. These narratives, which resonate with Ochs and Capps' (2000) "free flowing temporal border crossings" (p. 200), attested to confusion and/or frustration through siblings' personal experiences and their relationship to the Otter Creek linguistic ecologies. More specifically, older siblings, Brent (Family 2), Samuel (3), Benito (4), and Bryce (6), and younger siblings, Oscar (Family 4) and Melvin (Family 6) pointed to their changing language practices over the duration of their academic years and their personal experiences speaking both English and Spanish. For instance, consider older sibling, Bryce, who reflected on his first year in school at Otter Creek and his adjustment to the linguistic environment. Bryce's response is shown in Excerpt 18:

Excerpt 18: Bryce (December 15, 2016)

In September when I first came, I felt nervous and my friends came and I was talking Spanish. It was hard for me to speak Spanish and English at the same time. I still speak mostly Spanish with my friends. They respond in English and Spanish.

In the above excerpt, Bryce described his first year attending Otter Creek Primary, during which he reported to speak mostly Spanish. Recall that Bryce was born in Los Angeles, CA and arrived at Otter Creek four years before. Highlighting that he arrived at school speaking Spanish, he quickly realized that his classmates were speaking in both languages. Bryce maintained that using both Spanish and English was a challenge, such that he found it difficult to navigate the complex sociolinguistic environment of Otter Creek. And despite this initial adjustment, Bryce reported that he continued to speak

Spanish with his friend, adapting to speaking and listening to both English and Spanish during the day.

Furthermore, confusion and/or frustrations felt by other siblings were observed in narratives on children's experiences in the home domain. Diachronic accounts of younger siblings, Melvin and Oscar, attested to episodes during which they felt frustrated attending school hours in English and returning home to hear and speak Spanish. During the child interview, I asked Oscar if he ever felt confused or frustrated when speaking Spanish. Oscar's response is shown in Excerpt 19:

Excerpt 19: Oscar (November 15, 2016)

In kindergarten, I didn't know how to speak because first we didn't went to English specials. And first grade, we went to specials and gym and art. And then I learned how to speak in English. I learned English in the school. I liked speaking [English], but if I talk in Spanish they get mad at me and tell me to speak in English. In first grade, I was still six years old. And I told my mom my head hurt from hearing Spanish [sic].

In Excerpt 19, Oscar brought up his concerns about learning to speak English as a kindergartener, which he indirectly linked to the possibility of language shift. To do so, Oscar highlights his changing language practices to seemingly explain why he no longer chose to speak Spanish in the home. That is, as he started learning in school, his professors prohibited the use of Spanish in his classroom. However, Oscar's journey from kindergarten to second-grade, as well as the diachronic changes in his English language practices, made his head hurt when he returned home and heard English in the home. The excerpt confirms that while Oscar assigned positive attributes to speaking Spanish, he also associated the language with feelings of frustration and exhaustion. Oscar's changing language practices will be addressed in section 5.2.3.3., language practices in the home.

In addition to siblings' frustration toward speaking Spanish, the focal children also described their own linguistic insecurities in the child interview, despite conveying language ideologies that supported bilingualism. One pattern that emerged in siblings' interviews revealed children's association with Spanish to feelings of embarrassment and discrimination when speaking Spanish in the public. For instance, I asked participants during the child interview how they felt when speaking Spanish. Despite their support of bilingualism, several of the siblings, such as Mia (Family 1), Brent (Family 2), Kendra (Family 4), and Bryce (Family 6), reiterated such linguistic insecurities and described instances during which they felt discriminated against by speaking Spanish. These moments of embarrassment and discrimination occurred in public spaces, including the mall, the movie theatre, and the supermarket. For instance, consider older sibling, Brent (Family 2) who indicated during the child interview that he felt embarrassed when speaking Spanish in the supermarket. Brent's response is shown in Excerpt 20:

Excerpt 20: Brent (November 10, 2016)

I feel embarrassed because... I don't know. They know I talk English and my mom was talking Spanish with her friend. And I was talking English with my brother. I had to leave the supermarket because it felt weird. I felt like people were listening to me. Like the cashier, like they were looking at me.

Above, Brent revealed an expression of his linguistic insecurities, articulating a moment during which he experienced embarrassment and discrimination for speaking Spanish in public. In this interaction, Brent's mother was speaking Spanish, which incited a sense of linguistic paranoia that embarrassed the older sibling, as if those in public were listening and looking at him. However, despite Brent viewing bilingualism positively during the interview, he conveyed his linguistic insecurities by which he felt embarrassed speaking Spanish in public. This embarrassment reflected Brent's orientation toward

domain-specific appropriateness of using each of his languages, pointing to the prevalence of English within the racialized dynamics of public spaces.

Siblings' association of Spanish with embarrassment and discrimination were also evidenced in younger siblings' narratives, including Kendra (Family 3). When I met with Kendra, I asked her how she felt speaking Spanish. Like other siblings, Kendra also viewed bilingualism positively and showed a sense of pride from speaking Spanish. She also articulated, however, expressions of linguistic insecurities when speaking Spanish, notably in public spaces where others could hear her speak the heritage language. For instance, in Excerpt 21, Kendra responded to whether she spoke Spanish outside the home:

Excerpt 21: Kendra (November 12, 2016)

No. I feel like scared. People might think it's funny. When I'm inside with friends talking in Spanish, I'm happy. But when I talk in Spanish [outside], people might hear me and I might get scared. Like strangers. Because they think that only that one person can talk in Spanish. Not in both languages.

Kendra revealed in Excerpt 21 that she was uncomfortable speaking Spanish outside her home and described the fear she had if passerby strangers heard her speak Spanish. This excerpt reveals two points: First, Kendra revealed the distrustful relations she felt between community members, which determined how safe Kendra felt bringing out her heritage language in public spaces. Second, Kendra showed a critical awareness on domain-specific language practices through her distinction between using Spanish and/or English in the home and public spheres. For Kendra, public spaces were for monolingual English practices only, thus creating a distrustful environment where Kendra felt unsafe bringing out her heritage language.

Furthermore, expressions of shame toward children's Spanish-language abilities emerged in the child interviews. That is, during child interviews, several children were shown to express feelings of embarrassment and even hesitation about speaking the heritage language, an ideology that reflected siblings' orientation to certain societal assumptions about language proficiency. Interestingly, this shame was only observed among the younger siblings, including Mia (Family 1), Kyle (Family 2), Oscar (Family 3), and Leo (Family 6), such that they described how difficult it was to speak Spanish and a shame for not speaking the heritage language better. Among these siblings, these linguistic insecurities were most pronounced among Kyle and Leo, who were the only children in the study to view bilingualism and their ability to speak Spanish and English in a negative light.

Recall from the previous section that both Kyle and Leo associated Spanish with feelings of frustration and confusion, maintaining that they were unable to articulate certain words or expressions. For instance, during the child interview, Leo conveyed these linguistic insecurities and framed them as his inability to speak like a native-speaker. Reflecting on his own language practices, Leo asserted in Excerpt 22:

Excerpt 22: Leo (December 2, 2016)

When I speak [Spanish] I feel like I'm having a hard time learning how to talk real.

In this brief remark, Leo indicated that when he spoke Spanish, he had difficulty learning how to talk. One interpretation of this excerpt suggests that Leo, who revealed a sense of shame for not speaking the language better, oriented himself toward an ideological assumption about what constitutes being proficient in the heritage language. Furthermore, the excerpt raises the question of what "learning how to talk for real" meant

for the younger sibling. One could argue that this example resonates with Lee (2007), who argued that linguistic insecurities are not necessarily just children's shame of the language, but also a shame of self. Thus, in reflecting on his own language abilities, Leo revealed expressions of shame for his own limited Spanish proficiencies, not necessarily with the language itself.

The last theme concerning siblings' linguistic insecurities manifested itself as conceptualizations of bilingualism as double-monolingualism. That is, the focal siblings expressed linguistic insecurities which conceptualized bilingualism as double monolingualism, such that they viewed bilingualism or 'two monolinguals in one' (Grosjean, 1989) as the norm to determine language proficiencies. For instance, Benito (Family 3) worried that speaking Spanish would interfere with his English language abilities, despite having expressed language ideologies in support of bilingualism. I asked Benito to describe whether he had friends or classmates with which he spoke Spanish. Benito indicated that his peers only understood Spanish, but could not speak the home language, as shown in Excerpt 23:

Excerpt 23: Benito (November 12, 2016)

And I feel like I wanna be like that. I just wanna like understand in Spanish, but not speak. Because if I talk more in Spanish, I will not know how to speak in English and I'll forget all my English.

The above excerpt is illustrative of Benito's monoglossic language ideologies. For instance, Benito envied the fact that his friends did not speak Spanish. Rather, they only understood the language. Benito's belief suggested that his friends' lack of spoken-Spanish created a cognitive space to speak more English. Two observations from this excerpt can be made. First, Benito's monoglossic perspective toward his Spanish language practices represents his conceptualization of bilingualism as two monolinguals

in one, notably in his representation of language acquisition: the more he stored in one language, the less he could store in the other. The second point that Excerpt 23 raised was Benito's hegemonic evaluation of English. Benito argued that he preferred to know more English over Spanish, which was indicative of the dominance of the English language in the older sibling's life.

In the current study, I encountered many instances of monoglossic language ideologies, either observed directly or recounted to me during the child interview or informal conversations with teachers, administrators, and staff. One morning, for instance, I was approached by the Spanish-speaking secretary who worked at the Middle School front desk. She described that many Spanish-speaking Latino students were embarrassed to speak Spanish and were often teased or criticized for being enrolled in the bilingual classes. She continued that peers evaluated other students' intelligence based on the classes in which they were enrolled, such that taking a bilingual class implicated that the child needed academic support because of being slow or stupid. Interested in this criticism toward bilingual classes, I asked siblings during the child interviews if they had ever heard or experienced bullying. Out of all the interviewed siblings, only those older siblings who were attending Otter Creek Middle School had encountered such bullying. For instance, I asked Lani (family 5), during the child interview if she had ever seen bullying toward students enrolled in the bilingual classrooms, Lani's response is shown in Excerpt 24:

Excerpt 24: Lani (November 16, 2016)

Yeah. I think they say that because they don't know how it feels. I think they say it because they don't know it's hard. And they don't know how it feels like.

In the above excerpt, Lani confirmed that bullying exists toward those students enrolled in bilingual courses with Spanish-language support. And although it was unclear from the excerpt regarding who and what these bullies said toward the students enrolled in bilingual classrooms, Lani revealed the prevalence of such monoglossic language ideologies, which attest to siblings' shame toward speaking Spanish.

Furthermore, older sibling, Bryce (Family 6), firmly responded to my question concerning bullying toward students enrolled in the bilingual classrooms. In Excerpt 25, Bryce pointed to the presence of bullying of students for being enrolled in bilingual classes with Spanish-language support:

Excerpt 25: Bryce (December 15, 2016)

Yeah. Because they makin' fun like they can't talk in English. Like the ones who speak English. A lot tell me because they don't like to speak Spanish a lot and they don't know how to talk Spanish anymore. Like they wouldn't want to talk in class. I have friends who have been made fun of before. Like they make fun of the students in the bilingual classes.

In the above excerpt, Bryce responded that he had observed bullying at Otter Creek Middle School, claiming that many students evaluated their peers' English proficiencies based on the classes in which they were enrolled. Furthermore, he revealed which students teased and criticized the children enrolled in classes with Spanish-language support. While it was not clear from the excerpt as to which student group teased others, Bryce claimed that students who spoke English and/or those who did not like speaking Spanish made fun of children in the bilingual classes.

In sum, this section examined siblings' expressions of linguistic insecurities, notably in their uncertainty, self-doubt, and shame toward using the heritage language. Furthermore, despite siblings articulating language ideologies in support of bilingualism in the child interview, they also acknowledged negative associations with speaking the

language, thus reflecting siblings' orientations toward societal assumptions on the language. Three salient themes emerged in the interview, which included siblings':

- Embarrassment and discrimination toward speaking Spanish in public
- Shame for their Spanish-speaking abilities
- Negative conceptualizations of bilingualism.

Together, findings revealed that siblings constructed themselves in terms that reflected common conceptualizations of bilingualism and the monoglossic standards imposed by the school curriculum. Furthermore, siblings described how difficult it was to speak Spanish and a shame for not speaking the heritage language better. Among these siblings, these linguistic insecurities were most pronounced among Kyle and Leo, who were the only children in the study to view bilingualism and their ability to speak Spanish and English in a negative light. Siblings' negative language ideologies also took the form of embarrassment, given that several Otter Creek students were reported being bullied or teased for being enrolled in classrooms that required language support. Bilingual teaching was equated only in relation to student's purported limited English proficiencies.

In the following section, we find that such linguistic insecurities played a key role in siblings' agentive choices when speaking Spanish, English, or using everyday words and phrases in their language practices in the home and school domains. I now turn to discuss siblings' language practices, examining the linguistic environments and language practices of each focal sibling pair.

5.2. Siblings' language practices and linguistic environments

The last section discussed children's language ideologies with respect to their attitudes and beliefs toward using Spanish. In this section, I examine the linguistic

environments and language practices of the focal siblings. These data were drawn from ethnographically informed observations, audio-recorded interactions, as well as interview accounts with mothers and their children. First, I examine sibling language practices in the home environment, highlighting the family language policies (FLP) as captured by children's routines and family linguistic environments. I then explore siblings' language practices within the school domain. This section examines language/s used in both the classroom and school cafeteria, exploring the intersection between the school's educational language policy and the children's language practices.

5.2.1 Language practices in the home environment

For each family, I first describe siblings' typical routine as reported by mothers in the Bilingual Input Output Survey (BIOS) survey and one-to-one interview. After, I provide a further description of siblings' language practices in the home environment by drawing upon ethnographically informed observations, mother and child interviews, and audio-recorded interactions. I examine the everyday communicative practices among siblings and their parents, as well as their extended family members, such as aunts, uncles, and grandparents. After, I explore siblings' language practices with peers.

5.2.1.1 The home language practices of Daniel and Mia (Family 1)

Family 1 consisted of older sibling, Daniel, younger sibling, Mia, and their parents. According to the BIOS survey and mother interview, a typical day for Daniel and Mia began at 7:00 a.m. during which the siblings prepare to go to school. The children often watched cartoons in Spanish and talked with their mother and father in Spanish over breakfast. At 8:00 a.m., Mia walked to the primary school with her mother, Mariana, and Daniel took the school bus to the middle school. When the siblings returned to their

home after school at 3:30 p.m., their aunt, Mariana's sister, cared for them until the mother would return home from work at 4:30 p.m. While the aunt prepared an afternoon snack and greeted the siblings' in Spanish upon their return home, the siblings were responsible to complete their homework assignments. After completing their homework, their mother, Mariana, would return home. Daniel and Mia were then allowed to go out to play with friends out on their cul-de-sac street. The siblings would return home for dinner at 7:00 p.m., watch television in either Spanish or English, and then go to bed at 9:00 p.m.

In what follows, I first examine the siblings' communicative interactions when addressing their parents and other family members. Then I describe their language practices when interacting with each other and their peers.

5.2.1.1.1 Daniel's and Mia's language practices with parents and family members

This section describes siblings' language practices within the home when interacting with their parents and extended family members. To do so, I asked the siblings' mother, Mariana, to describe the language/s used by Daniel and Mia with family members. Mariana's response is shown in Excerpt 26:

Mariana: Excerpt 26 (November 2, 2016)

Con la familia a nosotros nos hablan en español. A mi familia de México hablan todo en español. A los familiares, manejan el español. También, tengo un hermano y una sobrina acá y con ella manejan los dos idiomas, pero más inglés. Mi esposo tiene familia aquí y con ellos manejan el español, con los primos manejan los dos idiomas. Pero por lo regular en español con los adultos e inglés con los niños.

With family, they speak to us in Spanish. With my family from Mexico, they say everything in Spanish. With family members, they use Spanish. Also, I have a brother and a niece here and with her, they use both languages, but more English. My husband has family here and with them, they use Spanish, with the cousins they use both languages. But for the most part, Spanish with the adults and English with the children.

As observed above, Mariana indicated that both Daniel and Mia predominantly spoke in Spanish with family members, including their parents, aunts, uncles, and extended family in Mexico. With their younger cousins, however, Mariana reported that Daniel and Mia used both English and Spanish when interacting with each other. The assertion, “por lo regular en español con los adultos e inglés con los niños,” is illustrative of how Spanish served as an authoritative code within the Álvarez family. That is, the distinction among the use of Spanish with adult family members suggests that the siblings’ association of Spanish resided with authority; children addressed adults in Spanish and younger family relatives in English. As direct evidence, Mia reiterated this practice during the child interview when I asked her whether she preferred speaking Spanish with her younger cousins. Mia’s response is shown in Excerpt 27:

Excerpt 27: Mia (November 7, 2016)

Line:

- 1 Ben: What language do you like speaking in with your cousins?
- 2 Mia: In English.
- 3 Ben: Why would you talk to them in English if they know Spanish?
- 4 Mia: It’s easier.

Above, Mia commented on her language practices and preferences in the company of her cousins. This excerpt not only conveys Mia’s preference in using English with her younger family members, but also her awareness of agency. Mia orientated herself toward a stronger Spanish-centered FLP with adult family members, meanwhile she engaged in English language practices with their younger cousins.

With respect to Daniel and Mia’s language practices with their parents, Mariana reported that her children only responded in Spanish. For Mariana, it was very important

to establish a strongly centered Spanish FLP within the home, maintaining that she created an environment in which her children only addressed her and her husband in Spanish. Furthermore, Mariana explicitly rejected the notion of child language brokering as a medium to facilitate language communication. I inquired whether Mariana ever enlisted her children for help in English or facilitated communication with other English-speaking adults. In response, Mariana maintained that her children were not responsible to speak on behalf of their mother in English. Mariana's response is shown in Excerpt 28:

Excerpt 28: Mariana (November 2, 2016)

Soy enemiga de preguntarles a mis hijos. Yo prefiero esforzarme y aprenderlo yo. Si yo tengo que pedir un taxi, ya lo aprendí. Si tengo que ir al pediatra también y si tengo alguna duda, busco un traductor. Pero a mis hijos nunca los utilizo. Por mis propios medios yo prefiero hacerlo yo misma. Una razón es por esforzarme porque me va a servir a mí para un futuro y segunda, soy enemiga de meter a los niños en asuntos que yo tengo que resolver como adulta. Entonces no me gusta estar diciéndole "a ver hijo, tradúceme". No, yo soy enemiga de eso.

I am against asking my children. I prefer making the effort and learn it. If I have to ask for a taxi, I've already learned it. If I also have to go to the pediatric and if I have some doubt, I'll look for a translator. But my kids, I'll never use them. Using my own means, I prefer to do it myself. One reason is to make an effort because it is going to serve me in the future and second, I am against involving my children in matters that I have to resolve as an adult. So I don't like to say, "hey, translate this for me". No, I am against that.

In Excerpt 28, Mariana explicitly rejected using her children as language brokers. First, the mother described herself an enemy toward using her children as linguistic resources, arguing instead that she preferred to take initiative in navigating through the community. Furthermore, Mariana stressed that she did not enlist her children to assist with her adult responsibilities. This example is illustrative of the siblings' language practices in and out of the home, insofar that they were socialized into maintaining a strict Spanish-only FLP with their mother.

In addition to examining the languages used by siblings, I also explored whether Daniel and Mia exhibited linguistic differences when speaking Spanish. When interviewing the mother, I asked Mariana to describe whether her children's Spanish and whether there were salient words or linguistic patterns that characterized her children's Spanish:

Excerpt 29: Mariana (November 2, 2016)

Sí. Mia lo aplica mal. Como por ejemplo, Mia dice “no sabo,” y le digo, “no se dice ‘no sabo’. Se dice ‘no sé.’” Sí, ciertas palabras. Nunca dijo bien esa palabra. Hay varias palabritas que yo siempre se las corrijo. Y le digo “se dice correctamente así.”

Yes. Mia does it badly. Like for example, Mia says “no sabo” (I do not know), and I tell her, “You don’t say ‘no sabo’. You say ‘no sé’. Yes, certain words. She never said that word correctly. There’s several words that I always correct and I tell her, “it’s said correctly this way”.

In the above excerpt, Mariana described a common pattern in Mia's Spanish. Mariana reported that Mia often overextended the use of irregular morphology with the verb “saber” (to know), which she was reported to say “*no *sabo*” rather than “*no sé*” (I do not know). Following this assertion, I asked Mariana whether Daniel ever exhibited these linguistic patterns and why these differences, if any, existed. Mariana's response is shown in Excerpt 30:

Excerpt 30: Mariana (November 2, 2016)

Daniel maneja más el español. A veces no me entiende ciertas palabras, pero por lo regular él y yo hablamos así, como estamos hablando entre tú y yo, normal. Yo creo que es por la edad. Por la edad va cambiando. Por ejemplo, Daniel cuando estaba más pequeño igual me manejaba ciertas palabras que no eran correctas. Entonces el léxico de él ha ido creciendo. Pero Daniel ya entiende perfectamente. Ahorita ya tiene diez años, entonces ya es mejor su español.

Daniel uses more Spanish. Sometimes she doesn't understand certain words, but for the most part, he and I talk just like you and I are talking now, normal. I believe it's because of his age. As he gets older, his language is changing. For instance, Daniel when he was smaller, he also used certain words incorrectly. So his lexicon has been growing. But Daniel understands perfectly. Right now at ten years old, his Spanish is much better.

In Excerpt 30, Mariana conveyed that her eldest son, Daniel, was more proficient than his younger sister in Spanish. And despite not knowing certain words, Mariana explained that Daniel's linguistic repertoire was comparable to two adults conversing, namely myself and his mother. To explain these linguistic differences between her two children, Mariana credited Daniel's Spanish proficiency to his age. She suggested that he also exhibited words and linguistic patterns that were inappropriate when he was younger. However, Mariana maintained that his lexicon has grown over the years.

Next, I further describe Daniel and Mia's language practices, focusing on the language/s used with their school-aged peers, as well as with each other.

5.2.1.1.2 Daniel's and Mia's language practices with each other and peers

This section examines Daniel and Mia's language practices with their peers and each other. First, during the mother interview, Mariana reported that her children had friends who came from both Spanish- and English-speaking families. I inquired whether it was customary that Daniel and Mia engage with their friends in English, to which she responded in Excerpt 32:

Excerpt 31: Mariana (November 2, 2016)

Con amigos, aunque sean latinos, hablan en inglés incluso cuando están jugando con niños de hijos de latinos, de hispanos que hablan español, utilizan el inglés, como si estuvieran en la escuela, con compañeros de escuela hablan el inglés.

With friends, even though they are Latino, they speak in English including when they're playing with kids who are children of Latino families, Hispanics who speak Spanish. They use English, as if they're in school, with their classmates who speak English.

In the above excerpt, Mariana confirmed that her children chose to more often speak in English, despite the fact that many friends also came from Spanish-speaking households. Interestingly, Mariana commented that Daniel and Mia's established preference to talk in English with their friends was not based on their family and language background. Rather, it was a rooted practice originating from students' socialization into English during school hours. Mariana's maintained that her children, like other students, talk in English, "como si estuvieran en la escuela". This reported practice parallels Daniel and Mia's language practices as having the same behavior as those instantiated during school hours. To corroborate Mariana's comments, I met with Daniel during the child interview to ask him the language/s he preferred to speak with friends. Excerpt 32 attests to this language practice:

Excerpt 32: Daniel (November 15, 2016)

Line

- 1 Ben: So do you have any friends who also speak Spanish?
- 2 Daniel: Yeah (.) I have a lot of friends who speak Spanish (.) About ten or fifteen?
- 3 Ben: And do you speak in English with friends even if they know Spanish like you?
- 4 Daniel: Yeah. We mostly talk English. It's easier.

In the above exchange, Daniel responded to my question as to whether he had other friends who spoke Spanish. Despite many of Daniel's peers came from Spanish-speaking households like himself, Daniel claimed that he preferred to interact English because it was easier. Thus, like his sister, we find the capitulation to English is

indicative of the siblings' language practices and orientation toward speaking English, claiming that speaking in English with age-equivalent peers is easier.

In addition to the siblings' established preference for using English with their Latino friends, not all of Daniel and Mia's peer network resided in Spanish-speaking households. For instance, the first day I visited the Álvarez family, I arrived at their home at 4:45 p.m. just in time as Mariana was returning from work. I greeted Mariana in Spanish and observed Daniel at the end of the cul-de-sac, kicking a soccer ball with his neighbor, Tyler, and shouting in English, "Go far!" Mia sat on the curb watching her brother, waiting for Vanessa, Tyler's younger sister to come out and play. As I entered the Álvarez home, I asked Mariana if many of their neighbors were also Spanish-speaking Latinos like the majority of the southwest quarter of Otter Creek. Mariana indicated that their street was mostly comprised of African-American families, a longstanding neighborhood that existed in Otter Creek before the initial arrival of Hispanic immigrants in 2000. For this reason, Daniel and Mia's closest friends were their neighbors, Tyler and Vanessa, also brother and sister, who attended class at the middle and primary school with the sibling pair and spoke English.

With respect to the siblings' language practices with each other, Mariana maintained that her children spoke more often in Spanish in previous years. Currently, Mariana indicated that her children used both English and Spanish during every day communicative interactions but resorted to each language for different reasons. For instance, Mariana reported that the siblings diverged in their language practices when fighting with one another, as observed in Excerpt 33:

Excerpt 33: Mariana (November 2, 2016)

Hasta para pelear a veces, ellos se dicen cosas en español o cosas en inglés. Cuando están molestándose, como por ejemplo, ella dice "tú eres un niño malo, no te

quiero”. Mi hija maneja más el español en ese aspecto. Él a veces le dice que es mala en el inglés y cosas así. A veces le digo “¿Qué le dijiste a tu hermana?” Porque no le entendí. Yo considero que él utiliza el idioma a lo mejor para decir una mala palabra porque piensa que los papas no se dan cuenta.

Even fighting sometimes, they say things in Spanish and English. When they're bothering each other, for example, she says "you're a bad boy. I don't love you". My daughter uses more Spanish in this way. He sometimes says that she's bad in English and things like that. Sometimes I say, "what did you say to your sister?" Because I didn't understand. I think he uses English most likely to say a bad word because he thinks that his parents don't realize.

The above excerpt shows evidence of Daniel and Mia's language practices, attesting to older and younger siblings differences in the context of brother-sister contentions. For instance, Mariana remarked that the siblings argued in both Spanish and English. However, Mia was reported to respond using simple expressions in Spanish. Meanwhile, Mariana explained that Daniel answered in mostly English. Mariana suggested that Daniel resorted more often to English during sibling altercations as a means to hide from his mother the use of coarse language he chose to use with his sister. Daniel's language practices and use of inappropriate words in English also points to the siblings' age difference. Daniel was in the sixth-grade at the Middle School, while Mia was in the first-grade at the Primary School, so each sibling was socialized into different forms of interaction. Thus, one factor in determining the language practices between Daniel and Mia was their age difference. Given their age differences and-concomitantly-different social networks, Daniel commented: “We don't really play a lot or talk a lot”. For this reason, the siblings rarely interacted or worked on homework together.

In sum, we gather that Daniel and Mia were more oriented to using only Spanish with adult family members, namely their mother, father, aunts, and uncles. However, the siblings were also reported to engage more in English with younger cousins, despite these family members also coming from Spanish-speaking households. The distinction between

the use of Spanish with adult family members suggests that the siblings' association of Spanish resided with authority whereby the children addressed adults, rather than younger family relatives, in Spanish. Furthermore, Daniel and Mia predominantly spoke English with their friends. That is, the sibling pair resided in a neighborhood comprised of mostly African-American families, therefore Daniel and Mia were reported to be surrounded by English-speaking families. With each other, however, the siblings were reported to speak both English and Spanish during every day communicative interactions but resorted to each language for different reasons.

In the next section, I address the sibling language practices in the Blanco family. First, I examine the language/s used by Brent and Kyle with their parents and extended family members. Then I describe the siblings' language practices members with their peer network, as well as with each other.

5.2.1.2 The home language practices of Brent and Kyle (Family 2)

Family 2 consisted of older sibling, Brent, younger sibling, Kyle, and their parents. According to the BIOS survey, a typical day for Brent and Kyle began at 7:00 a.m. during which the siblings would eat breakfast and prepare for the school day. Each morning, Amanda, their mother, reported that the siblings would watch cartoons in English and play videogames either on the desktop computer or their mother's tablet. At 8:00 a.m., the siblings would then walk to school. Once the school day was over at 3:00 p.m., the sibling pair stayed in the school cafeteria to wait for their mother to end her shift, during which Brent would work on his homework assignments, as well as assist his younger brother, Kyle, with math and reading. At 4:00 p.m., Amanda, would walk to the middle school to meet her children and accompany them home. Evenings were primarily

spent in the home in which Brent and Kyle played video games during much of the evening. Two times a week, Brent and Kyle attended Boy Scouts in a nearby community outside of Otter Creek. According to the mother and child interviews, all the activities and participating children came from English-speaking families. The siblings returned home at 7:00 p.m., ate dinner, and then ended the day at 9:00 p.m.

In the next two sections, I describe Brent and Kyle's language practices in the home environment, as captured by ethnographically informed observations, audio-recorded interactions, and mother and child interviews. First, I examine the language/s used among the two siblings and their communicative interactions when addressing their parents and other family members. Then I describe their language practices when interacting with each other and their peers.

5.2.1.2.1 Brent's and Kyle's language practices with parents and family members

This section examines Brent and Kyle's language practices when interacting with their parents and extended family members. The first time I visited the Blanco' household, I arrived at their home at 4:30 p.m. to find Amanda approaching her apartment as she accompanied her children home from school. She greeted me and led me upstairs to their apartment, located above a Poblano Mexican grocery store. I was interested in the siblings' language practices, so I asked Amanda to describe the language/s used by Brent and Kyle with their parents and extended family members. During the interview, Amanda reported that most of their family still resided in Mexico, so many of the social and cultural events were celebrated with Amanda's friends, parents of Brent and Kyle's school peers. During these events, Amanda indicated that her children would almost always speak English. With Brent and Kyle's grandparents, however, the children were reported to speak exclusively in Spanish since both sets of

grandparents lived in Puebla, Mexico, and did not speak English. In 2015, Brent and Kyle visited their grandparents for the first time.

With respect to the siblings' language practices with their parents, Amanda reported that both Brent and Kyle almost always spoke English with their father, Gregorio. Gregorio worked as a car mechanic, so for him it was very important to be able to speak in English with his customers and colleagues, therefore his children often spoke to him in both English and Spanish. During the child interview, I also asked Brent whether he preferred to speak English with his father. Brent confirmed these practices during the child interview, as exemplified in Excerpt 34:

Excerpt 34: Brent (November 10, 2016)

My dad already knows how to speak in English. He knows... Like when he's with my mom, he'll ask the grocery store, "how much does this cost." With my dad, I talk sometimes Spanish and sometimes English. When I don't know a word, I can tell him in English. Or when I don't know a word in English, I tell him in Spanish [...] He talks mostly English with Kyle.

In Excerpt 34, Brent reported that he often preferred to speak with his father in English given the fact that he understood and spoke the language. First, Brent provided an example of his father using his English in the community, such as in grocery stores where he asked clarifying questions in English. Furthermore, Brent reported that his father's knowledge of English helped him communicate with his children. This practice usually occurred when Brent did not know a specific word in Spanish, therefore providing the item in English since his father understood. With Kyle, however, the father and son mostly spoke in English. We gather from these reported practices that the siblings' father was an important agent within the home who allowed Brent and Kyle to use English.

Regarding siblings' language practices with their mother, Amanda indicated that she only spoke to her children in Spanish. Amanda reported having very low proficiencies when speaking English, so she encouraged her children to only respond in Spanish. During the interview, I asked Amanda whether there were any differences in the language/s used by her children. Amanda's response is shown in Excerpt 35:

Excerpt 35: Amanda (November 4, 2016)

Kyle a veces me contesta en inglés y yo le pregunto, “¿Qué dices mi'jo? Y pues mi hijo mayor, él sí me contesta en español. Como Brent agarró más el español e inglés los dos. Y mi Kyle, el español le cuesta más. Y mi Brent sabe leer bien en español y lo sabe hablar. Pero mi Kyle, no sabe cómo leer en español. Y pues mi Kyle me lo dice en inglés. Y luego no lo entiendo y le digo a su hermano, “Brent. ¿Qué dice tu hermano?”. Y Brent me ayuda. Y le dice, “Kyle, se dice así”.

Kyle sometimes he responds to me in English and I'll ask him, “What did you say son?” And so my older son, he responds to me in Spanish. Like Brent got ahold of both Spanish and English. And my Kyle, Spanish is harder for him. And my Brent, he knows how to read in Spanish well and knows how to speak it. But my Kyle, he doesn't know how to read in Spanish. And my Kyle, he tells me things in English. And later I don't understand him and I say to his brother, “Brent. What did your brother say?” And Brent helps me. And he says to his younger brother, “Kyle, it's said this way”.

The above excerpt reveals sibling differences, such that Brent was reported to respond in only Spanish, while Kyle was reported to sometimes prefer English. She then portrayed her older son, Brent, as the more proficient speaker among the two siblings. Not only did Brent respond to his mother in Spanish, but he was also shown to be an intermediary between Kyle and his mother during times of language misunderstandings. I asked Amanda to describe a moment when she relied on her oldest son to act as an intermediary between other English-speaking families, which is shown in Excerpt 36:

Excerpt 36: Amanda (November 4, 2016)

Ahorita que van a Boy Scouts, Brent me ayuda porque solo van niños que hablan puro inglés. Y yo soy la única hispana. Cualquier cosa le digo a mi hijo mayor, “¿Qué dice hijo?” y dice, “vamos a ir a un viaje y salimos a las 11:00”. Por ejemplo, ahorita vendemos regalitos de navidad y también nos toca vender. Y le pregunto, “¿Qué dice?”. Y me lo dice. Así le pregunto y me tránsele todo, mi’jo.

Now that they’re going to Boy Scouts, Brent helps me because only children who speak English go. And I’m the only Hispanic woman. For anything, I’ll say to my older son, “What does s/he say?”. And he’ll say, “we’re going to go on a trip and we’re leaving at 11:00 a.m.”. For example, right now we’re selling gifts for Christmas and we’re also responsible to sell them. And I’ll ask him “What did s/he say?”. And he’ll tell me it. So, I’ll ask him, and he translates everything for me

Above, Amanda maintained that her children’s involvement in Boy Scouts was predominately in English given that their peers came from English-speaking families. For this reason, Amanda was the only Hispanic woman who spoke Spanish and therefore had to rely on her oldest son to understand. This framing of Brent is illustrative of his role as a language broker in the family who interpreted on behalf of his mother. To confirm these practices, I asked Brent if he helped his mother when speaking English. Brent’s response is shown in Excerpt 37:

Excerpt 38: Brent (November 10, 2016)

Yeah. I translate. Like she’ll ask “¿Le puede decir gracias?” (Can you tell her thank you?). And I tell her thank you. Or sometimes on the phone she has trouble typing in English and someone calls me to type in English. “Text Christina,” because she always comes and picks us up for Boy Scouts. So I help text her. She’ll ask me “¿Puedes decirle a qué horas va a venir a recogernos?” (Can you ask her what time she’s coming to pick us up?). So, I say to Christina what time she’s gonna pick us up.

In Excerpt 37, Brent confirmed his role as a language broker, explaining that he served as an intermediary between the adult Boy Scout volunteers and his mother. For instance, Amanda did not own a car and was unable to drive her children to and from

extracurriculars, therefore, she depended on other parents to pick up Brent and Kyle. We gather that Brent regularly facilitated communication in the family whereby he engaged in Spanish with his mother and relayed messages in English to other adults.

Brent's younger brother, Kyle, also engaged in language brokering with his mother, but was reported to take longer to respond in Spanish. During the mother interview, Amanda expressed that she found Kyle's effort to interpret in Spanish endearing. She expressed that her younger son, Kyle, was slower in Spanish than her older son, Brent. I asked Amanda to describe what she meant when she described her younger son as slower than her older son. In Excerpt 39, Amanda spoke of the differences in her children's Spanish:

Excerpt 38: Amanda (November 4, 2016)

Las tareas siempre están en inglés. La tele en inglés. Solo conmigo en español (Risa). Yo les hablo siempre en español y entre ellos los dos hablan en inglés. Y me hablan en español pero de diferentes formas. Por ejemplo, mi pequeño siempre dice "yo lo poní, mami. Yo lo poní." No dice puso. Y yo siempre le digo "no se dice poní. Se dice puse. Ya te digo ¡Habla bien en español!" (risa). Pues que sí. Yo les enseño español. Kyle, sí creo que si no le hablara en español, perdería el español.

Homework is always in English. The television in English. Only with me in Spanish (laughter). I always talk to them in Spanish and between themselves, they speak in English. And they talk to me in Spanish, but in different ways. For example, my younger always says, "Yo lo poní, mommy" (I put it). He doesn't say "puso." And I always say to him, "you don't say 'poní', you say 'puso'. I've told you. Speak correct Spanish!" (laughter) So yeah. I teach them Spanish. Kyle, yes, I believe that if I didn't speak to him in Spanish, he'd lose Spanish.

We observe that not only did Brent and Kyle differ in their language practices with their mother, they also were characterized as using divergent morphosyntactic patterns in their speech. For instance, Amanda described in the above excerpt that her children's input is predominantly in English, pointing to herself as the only source of

their Spanish input. She then indicated that even though both her children speak Spanish, Kyle, the youngest sibling, spoke differently, such that he often overextended regular morphology with irregular verbs. As a result, Amanda indicated that she would playfully interact with Kyle, serving as an example of lighthearted corrections to socialize Kyle into using the appropriate verbal forms.

Interestingly, the use of playful interactions as a language practice also emerged in Kyle's interview. I asked Kyle about his language practices and if he ever helped his mother with English questions. Kyle's response is shown in Excerpt 39:

Excerpt 39: Kyle (November 12, 2016)

Line:

- 1 Ben: Do you ever help your mom with English?
- 2 Kyle: No. My mom doesn't know how to speak two languages. Only one language. My mom doesn't even know...I'm like, "say shoes," and she's like "Shooos?" (laughter)
- 3 Ben: Why do you laugh?
- 4 Kyle: Because it sounds funny. Like "say shirts." And she says "Shorts?" (laughter)

In the above excerpt, Kyle's response to my question conveys his language practices as well as the playful devices he and his mother used within the home. In line 1, Kyle maintained that his mother only knew one language, Spanish, therefore did not pronounce English words correctly. As a lighthearted way to shame his mother for not speaking English, Kyle asked his mother to repeat words in English, which he claimed as sounding different in lines 2 and 4. This excerpt exemplifies Kyle's subversion of the traditional mother-child interaction, such that Kyle also playfully interacted his mother for not speaking English. Thus, Excerpts 38 and 39 demonstrate the way Kyle was

socialized into playfully interacting with his mother concerning her pronunciation of English words, revealing his agency in using English in the home.

Next, I further describe Brent and Kyle's language practices, focusing on the language/s used with their school-aged peers, as well as with each other.

5.2.1.2.2 Brent's and Kyle's language practices with each other and their peers

This section describes Brent and Kyle's language practices with their peers and each other. First, I describe the language/s used by Brent and Kyle with their school-aged peers during social events and extracurricular activities. Then I examine Brent and Kyle's language practices with each other.

As reported in the mother interview, both Brent and Kyle actively participated in the local Boy Scouts chapter, located outside Otter Creek in an adjacent community. Since almost all their peers came from English-speaking homes, Brent and Kyle were reported to seldom speak Spanish outside the family domain. Furthermore, the children also preferred speaking English with their peers who attended Otter Creek schools, despite also residing in Spanish-speaking households. Many of these children were present at social and cultural celebrations that the family attended with other Spanish-speaking adults whom Amanda and her husband knew. For instance, when I met with younger sibling, Kyle, for the child interview, I asked him why he chose to speak in only English with his friends, even though many resided in homes where Spanish was regularly used. Kyle responded that he only spoke Spanish with his mother, which is reflective of the younger sibling's FLP. That is, Kyle primarily engaged in Spanish with his mother, rather than with his age-equivalent peers who resided in Spanish-speaking homes.

The siblings also had the experience of visiting family and friends in their parents' hometown in Mexico during their 2016 summer holiday. The siblings traveled together without their mother's or father's presence, therefore they had to navigate the linguistic spaces by themselves. Consider Excerpt 40 during which Brent described his language practices with his friends when visiting Mexico:

Excerpt 40: Brent (November 10, 2016)

So, I speak in both languages. My parents speak Spanish and I speak Spanish. And in school I speak English. Last year when I went to Mexico, I talked to friends in Spanish and that was kind of hard.

Above, Brent reported that spoke with his friends in Spanish during his visit to Mexico. Furthermore, Brent claimed that speaking entirely in Spanish was difficult, such that during his three-week visit, making new friends in a monolingual Spanish environment was mentally exhausting. Thus, while Brent spoke mostly English in the Otter Creek community, he reported to speak in Spanish during his visit to Mexico. These language practices starkly contrast to those of Brent's younger brother, Kyle, who indicated during the interview that he spoke both Spanish and English during his trip to Mexico. I asked Kyle if he ever misunderstood or did not know how to say a particular word to his friends. Kyle responded: "Yeah. Well my brother tells me. He's mostly the translator". That is, Kyle leveraged his brother as a broker when speaking Spanish, such as during his recent trip to Mexico.

With regard to siblings' language practices with each other, data from mother and child interviews showed that the siblings developed a preference for English at an early age. For instance, Amanda expressed during the mother interview that Brent only spoke Spanish before attending Pre-K and even developed literacy skills throughout primary school. Her younger son, however, Kyle, developed a preference for English by the age

of 2 and began to talk in only English with his older brother in the home. Kyle and Brent regularly watched cartoons, read books, and played in only English. As the children progressed through school, Brent began assisting his younger brother with homework and reading in the home, given that Amanda was unable to explain instructions or answer Kyle's questions in English. During the child interview, for instance, Brent reported that he was responsible for helping his younger brother with homework after school while he and his brother waited for their mother. Thus, Kyle's early establishment of English as his preferred language positioned Brent as an intermediary between his younger brother and mother. For instance, Amanda reported Kyle often felt frustrated and hopeless when asked to explain himself in Spanish, as he was unable to capture his daily routine to their parents during dinnertime conversations. When doubts like these occurred, Amanda indicated that her older child, Brent, frequently intervened during everyday interactions to facilitate mother-son communication, as shown in Excerpt 41:

Excerpt 41: Amanda (November 4, 2016)

Mi hijo me lo dice en inglés, mi Kyle. Y yo no le entiendo. Y Brent le enseña. O si no, luego le dice a mi Kyle, "Kyle, ¿Qué me quieres decir?". Y agarra la tableta en Google Translate y dice, "escribelo". Y Kyle dice, "Mira mami, es esto".

My son, he says it to me in English, my Kyle. And I don't understand. And he teaches him. Or if not, later he tells Kyle, "Kyle, what do you want to say?". And he grabs the tablet on Google Translate and says, "Write it." And Kyle says, "Look mommy, it's this".

In Excerpt 41, we observe Brent's role as a language broker who facilitated communication between his younger brother and mother. First, Amanda indicated that whenever misunderstandings arose, Brent was called upon to intervene. Brent either asked his younger brother for further clarification to teach him the words in Spanish or assist Kyle in translating the words from English into Spanish using Google Translate.

This example reveals Brent's role as a language broker, as well as Kyle's orchestration of technology and his older brother to communicate with his mother.

Another example of the siblings' language practices concerned Kyle's use of collective bargaining with his brother when answering their mother by text message. Unlike Brent, Kyle had not developed literacy skills in Spanish and was unable to respond to his mother in Spanish through written text messages. During the child interview, I asked Brent how he and his brother communicated with their mother via text. Brent's response is shown in Excerpt 42:

Excerpt 42: Brent (November 10, 2016)

Yeah, she texts me in Spanish. Kyle doesn't read Spanish. So, I'll tell my brother or text him what she said. So, he responds using WhatsApp audio.

In the above excerpt, Brent explained the process through which he facilitated Kyle's communication with their mother via text messaging. That is, Kyle was unable to understand incoming text messages in Spanish. This excerpt shows Brent's role as a language broker, as well as Kyle's use of collective bargaining with his brother to communicate. Furthermore, it shows Kyle's orchestration of technology to communicate with his mother. Since Kyle was unable to respond by writing in Spanish, Kyle would respond using an audio message through WhatsApp, a phone app used for instant messaging.

Collectively, we gather that Brent played a critical role in the family, such that he served as a language broker with not only his parents, but also his younger brother, too. Furthermore, Kyle utilized his brother as a linguistic resource to communicate with his mother in the home and social environment. Direct evidence of these language practices was captured during a dinnertime conversation during which Brent, Kyle, and their

mother discussed their school day. In Excerpt 43, the siblings and their mother are observed discussing the return of Kyle's classmates to Mexico and Brent's attempt to intervene on his brother's behalf:

Excerpt 43: Brent, Kyle, and mother during dinnertime conversation (December 3, 2016)

Line:

- 1 Kyle: Mami un poco de arroz (.) para el TACO (.) TACO! (*Mommy, a little more rice for the taco, taco*).
- 2 Mother: Mmhm (.) ¿Viste a Mr. Gary? (*Mhmm did you see Mr. Gary?*)
- 3 Kyle: Unos de mis scolas (escuela) se movieron (.) de México. (*Some students from my school moved from Mexico*).
- 4 Mother: ¿Se movieron de México para tu escuela o de tu escuela para México? (*They moved from Mexico to your school or from your school to Mexico?*).
- 5 Kyle: De la escuela a México. (*From school to Mexico*)
- 6 Mother: ¿Quien? (*Who?*)
- 7 Kyle: Ah::: (15s) mmm:: (.) hmm::
- 8 Brent: ¿Cómo se llama? (*What is his name?*)
- 9 Kyle: No sa:bo (.) su nombre (*I don't know his name*) =
- 10 Brent: = Does he go to your class?
- 11 Kyle: Nope. He goes to (.) He's in next door (3s) Oh yeah. Jamir!

The above interaction²⁹ depicts Kyle, Brent, and their mother having dinner, during which Kyle requested his mother for more rice in a jovial and animated voice in line 1. Amanda, affirmed the receipt of Kyle's request in line 2, then asked whether Kyle had seen one of his teachers, Mr. Gary. Kyle did not directly answer his mother's question in line 3, instead asserting that several of his classmates were returning to Mexico. Showing a preoccupation with the directionality of the classmates' departure, Amanda confirmed her understanding of Kyle's assertion by asking whether the students moved from or back to Mexico in line 4. After this exchange, Amanda inquired which one of Kyle's classmates was leaving in line 6 in which Kyle paused. Interestingly, this long pause (15 seconds) prompted Kyle's older brother, Brent, to intervene and provide further contextualizing information to his younger brother, whispering "*¿Cómo se llama?*" (what is his name?). In response to Brent's affirming question, Kyle quickly responded in line 9, "*no sabo su nombre*" (I do not know his name), using the irregular verbal morphology. However, in line 10, we observe Brent latching onto Kyle's assertion and defaulting to English in line 10, asking "Does he go to your class?". Collectively, this adjacent pair, lines 9 and 10, suggest that Kyle's response using the inappropriate verb form had prompted Brent to provide further contextualizing information in English, the preferred language between the two sibling pairs. Not only does the excerpt provide direct evidence of Kyle's collective bargaining with his brother, but also Brent's alignment as a parental figure who gave and requested information in both Spanish and English.

In sum, interviews with siblings and their mother confirmed that Brent and Kyle showed some similarities in their language practices but diverged in their language

²⁹ See Appendix G for transcription guide.

practices with their parents and extended family members. Despite both siblings were reported to predominantly speak Spanish with their grandparents who lived in Mexico, Brent was shown to respond more often in Spanish with father, as well as facilitate communication with his mother. Kyle, on the other hand, preferred speaking only English with his father and even used playful language with his mother to lightheartedly interact with her. Furthermore, we observe that Brent and Kyle only used English as the medium of communication between each other and their peers. For instance, many friends in the siblings' peer network resided in the Otter Creek community whose parents were friends of Amanda. Other peers came from English-speaking families who took part in Boy Scouts with Brent and Kyle. And despite both siblings had developed an early-established preference for English, which continued into primary school, we observed through direct evidence the critical role Brent played in the family through language brokering. Brent not only served as a language broker with his mother, but also his younger brother, too. Likewise, Kyle utilized his younger brother as a linguistic resource to achieve intelligibility and communicative competence in the family.

In the next section, I address the sibling language practices in the Rubio family. First, I examine the language/s used by Samuel and Kendra with their parents and extended family members. Then I describe the siblings' language practices members with their peer network, as well as with each other.

5.2.1.3. The home language practices of Benito and Oscar (Family 3)

Family 3 consisted of older sibling, Benito, younger sibling, Oscar, and their parents, Elena and Luis. According to the BIOS survey and mother interview, a typical day for Benito and Oscar began at 6:45 a.m. during which the siblings prepared for school. The siblings would eat breakfast, watch cartoons in English, and speak in Spanish

and English to their parents during the morning hours. After, Elena walked Benito and Oscar, who both attended Otter Creek Primary, at 8:00 a.m. The siblings returned from school at 4:00 p.m. Since the family lived close their aunt, Elena's sister, Benito and Oscar usually spent time with younger cousins who lived in a nearby apartment. Elena cared for the children and took them to the park or allowed them to play inside their home. Once Benito and Oscar's father returned home at 7:00 p.m., the family ate dinner together. The siblings then watched television, but only viewed shows in English. Between 9:00 p.m. and 10:00 p.m., the siblings went to bed.

In the next two sections, I describe Benito's and Oscar's language practices by drawing upon mother and child interviews, ethnographically informed observations, and audio-recorded interactions. First, I examine the siblings' communicative interactions and language/s used when addressing extended family members and their parents. I then describe their language practices when interacting with peers and each other.

5.2.1.3.2 Benito's and Oscar's language practices with family members and parents

This section examines Benito's and Oscar's language practices with extended family members and their parents. For instance, during the mother interview, I asked Elena whether the siblings spoke in Spanish with her sister who lived in Otter Creek. Elena reported that with her sister, including other family members who frequented their home, Benito and Oscar attempted to respond mostly in Spanish. Elena also attempted to maintain her relationship with her parents who still resided in Mexico, despite the geographic distance. One year earlier during summer holiday, Benito and Oscar had visited their grandparents' home in Puebla, Mexico, for the first time for two weeks. Both Elena and her children indicated during the mother interview that Benito and Oscar

detested this experience and found it difficult to constantly speak in Spanish to their family members. However, the siblings continued to speak with their grandparents once back in NJ. Every few weeks, Elena talked with her parents on the phone, through WhatsApp, or Skype, and encouraged her two children to stay by her side to engage in the conversations. Elena asked that Benito and Oscar to speak with their grandparents in Spanish. For instance, consider Excerpt 44 during which Elena described her children's language practices with their grandparents, as well as the conflicts that arose during phone conversations:

Excerpt 44: Elena (November 9, 2016)

Con su abuela tienen que hablar puro español. Pero a veces hay conflicto porque ellos no hablan tanto tiempo, solo un poquito. Y a veces luego dicen: “¿Qué dice? ¿Qué dice?”

With their grandmother, they have to speak only Spanish. But sometimes there's conflict because they don't speak the entire time, only a little. And sometimes they say, “What does she say? What does she say?”

As shown above, Benito and Oscar were reported to speak only Spanish with their grandparents, predominantly a reflection of Elena's family's monolingual practices and their lack of knowledge of English. However, given that her family only spoke Spanish, Elena reported that her children provided short responses, such that Benito and Oscar could not fully articulate themselves in Spanish and asked for clarification from their mother. Given the siblings' difficulty in speaking Spanish with their grandparents, I asked Elena to further describe these language practices. Elena's response is shown in Excerpt 45:

Excerpt 45: Elena (November 9, 2016)

Oscar más. Él se le dificulta más el español. Benito no tanto, pero él, sí. Él prefiere a veces hablar tantito y ya dice “bye abuelita, bye”. Entonces mi mamá, ella le pregunta a Oscar “¿Por qué ya te quieres ir?” y yo solamente si estoy sentada ahí con ellos. Les empiezo a decir, “Dile, ‘¿Cómo está?’”. Dile, ‘¿Qué haces?’”. Pregúntale si no está enferma.”. Y así le voy diciendo como para que hable un poquito más largo con ellos. Porque si no, ellos nada más “Hola abuela. ¿Cómo

estás?” y “Ok abuela. Cuídate. Te quiero mucho. Te mando un beso.” Y ya... Entonces yo luego le digo, “No, no, no. Sigue hablando con ella.” Oscar dice, “¿Pero qué le voy a decir?”. Sí, a veces como prefieren mejor no hablar tanto, porque no pueden expresarse en español.

Oscar more. Spanish is more difficult for him. Benito, not too much, but him yes. He prefers sometimes to speak a little and he'll say, "bye grandma." So my mom, she asks Oscar "Why do you already want to go?" And I'm there sitting with them. I start telling them, "say, 'how are you doing?'. Say 'what are you doing?'. Ask her if she's sick". And so I go on telling them not to talk so little, but speak longer with them. Because if not, all they say is, "Hi grandma. How are you?" and "Okay grandma. Take care. I love you. I send you a kiss". And yeah. So I later tell them, "No, no, no. Continue talking with her." Oscar says, "But what am I going to say?". Yeah, sometimes they prefer to not speak as much because they aren't able to express themselves in Spanish.

As shown above, both siblings were reported to express short messages and words to their grandparents. However, younger sibling, Oscar, was reported to struggle the most in communicating with his grandparents as compared to his older brother, Benito. The grandparents felt concerned and asked why Oscar wanted to leave the conversation, which prompted Elena to intervene on her children's behalf. Thus, Elena modeled her children's language and provided instructions to Benito and Oscar to allow the siblings to express more language to their grandparents. This excerpt is reflective of the siblings' FLP, notably in their dependency of their mother to communicate with their monolingual grandparents. Elena interpreted this struggle as a reflection of her children's own linguistic capabilities and her role in facilitating the siblings' communication with their family in Mexico.

With respect Benito's and Oscar's language practices with their parents, Elena reported that her children responded to both their father and mother in mostly English. While Elena did not describe in detail the siblings' language practices with their father, she noted that both she and her husband only spoke to their children in Spanish. Her children, however, were aware that both parents understood English and therefore often

responded using English. Consider Excerpt 46 during which Elena commented on the languages Benito and Oscar used with their mother:

Excerpt 46: Elena (November 9, 2016)

Yo les hablo siempre en español. Si ellos no saben alguna palabra en español, me lo devuelven y me lo dicen en inglés. Entonces ellos escuchan el español, como cincuenta por ciento y cincuenta por ciento en inglés porque estamos aquí. Ellos nos escuchan hablar en español o yo les hablo en español.

I always talk to them in Spanish. If they don't know a certain word in Spanish, they respond back to me in English. So, they listen in Spanish, like fifty percent and fifty percent in English because we're here. They listen to us talk in Spanish and I speak to them in Spanish.

Elena, like all mothers in this study, reported that they only spoke Spanish with their children. However, her children often responded in English when uncertain of a word in Spanish. These language practices were reflective of siblings' proficiencies in Spanish, attested by Elena in the excerpts above. Reflecting on these language practices, Elena began to articulate how often the siblings heard and spoke English in the home. Elena expressed that she and her husband only spoke in Spanish, as well as addressed their children in Spanish, accounting for half of the language input they received in the home language. Following this exchange, however, Elena began to contemplate how her children's language practices have diachronically changed over time, which had gradually progressed toward a preference for English after having attended school. For instance, Elena began noticing how her younger son, Oscar, began overextending verbal morphology for irregular verbs in Spanish, such as “*yo sabo” instead of “yo sé” (I know). Elena expressed that these language behaviors began changing when Benito and Oscar entered Pre-K, as shown in Excerpt 47:

Excerpt 47: Elena (November 9, 2016)

Cuando eran pequeños pues puro español yo les hablaba. Por eso ellos hablaban español. Y entre sí también. Cuando empezaron a crecer, pues ellos ya empezaron a hablar como en inglés y viendo caricaturas en inglés. Entonces cuando ellos entran a la escuela, ellos ya van hablando inglés con las caricaturas. Todo en inglés. Pero yo siempre les hablo en español, todo en español. Yo no les hablo en inglés porque no sé mucho.

When they were younger, well I only spoke Spanish to them. For this reason, they spoke Spanish and with each other, too. When they began to grow, well they started speaking more English and watching cartoons in English. So, when they entered school, they were already speaking English with the cartoons. Everything in English. But I only speak to them in Spanish, everything in Spanish. I don't speak English to them because I don't know much.

Following the same pattern revealed in the focal families, Elena noted that her children's language practices have changed over the years after having attended Pre-K and Otter Creek Primary. Benito and Oscar were reported to speak and hear Spanish, but gradually through time, developed a preference for English through television, school, and peer networks. One interesting aspect to these developing language practices was the siblings' similarity in age. That is, both Benito and Oscar began attending school during the same time, such that none of the siblings acted as a linguistic anchor who held on to Spanish longer than the other. I asked Elena about her reaction to these developing language practices and the siblings' preference for English. Elena's response is shown in Excerpt 48:

Excerpt 48: Elena (November 9, 2016)

Pues no me parece muy bien. Porque yo pienso que es importante que ellos hablen bien su español y lo escriban bien su español. Porque a veces ellos hablan su español pero no lo saben leer o no lo saben escribir tampoco. Tienen dificultad. Él (Oscar) casi no escribe nada en español. El otro niño (Benito) está empezando a leer en español, así unas palabras. Benito, cuando yo escribo me dice "¡Yo te lo leo al mensaje!". Cuando mi esposo o mi hermana me manda un mensaje y ya, él me dice "Yo te lo leo en español." Pero hay algunas palabras que no lee bien, entonces yo le voy corrigiendo

Well, it doesn't seem right to me because I think that it's important that they speak Spanish well and that they can write. Because sometimes they speak Spanish, but they don't know how to read and write. They have difficulty. Him (Oscar) basically doesn't write anything in Spanish. The other boy (Benito) is starting to read in Spanish, so a few words. Benito, when I write he tells me, "I'll read the message to you!". When my husband or my sister sends me a message, he'll say, "I'll read it to you in Spanish". But there are some words he doesn't read well, so I'll go on helping him.

Excerpt 48 shows Elena's reaction when asked about her children's preference for English. More specifically, in the excerpt, Elena maintained the importance of communicating in Spanish, albeit in spoken or written form. Benito and Oscar, however, were unable to read and write in Spanish, and unable to respond to their mother via text message. However, despite their difficulties in reading and writing in Spanish, Elena indicated that the eldest sibling, Benito, enjoyed learning to read in Spanish by her side. Asking his mother to read her text messages on her mobile phone, Benito would attempt to read out-loud the messages she sent to her husband or sister in Spanish. Although Benito had trouble reading these messages in Spanish, Elena assisted him in pronouncing the written form.

Next, I further describe Benito's and Oscar's language practices, focusing on the language/s used with their peers, as well as with each other.

5.2.1.4.2 Benito's and Oscar's language practices with peers and each other

This section examines Benito's and Oscar's language practices with their peers and each other. As reported in the section above, Elena maintained during the mother interview that her children only spoke English with their peers, a behavior they adopted after having attended Otter Creek Schools. Elena responded: "*Sí, en sólo inglés hablan con amigos*" (yes, they only speak English with friends). Furthermore, given that Benito and Oscar were very similar in age (9 and 8 years old), the siblings share many of the

same friends and participated in the same sports. These children came from both English- and Spanish-households and preferred to speak English with their friends. For instance, attesting to these language practices, I asked the siblings whether they spoke in Spanish with their peers. Both Benito and Oscar emphatically responded with a resounding “no”. For instance, when asked in what language Benito spoke with his friends, consider Excerpt 49 during which the oldest brother described his language practices:

Excerpt 49: Benito (November 12, 2016)

We don't speak Spanish. We talk in English. The only time I spoke Spanish was when I went to Mexico. When I first went to Mexico and my uncle went to pick me up. And then I started speaking in English with my cousin and she said “¿Qué?”. I told my brother, “Why does she doesn't speak in English?”. And he said, “cause they're from Mexico and they don't talk English because they've never been to our country before”. So, we had to talk Spanish... Sometimes my cousin say, “how to say that word” and I tell her. But with my brother I spoke to him in English.

Above, Benito confirmed his monolingual English practices with friends, despite many of his peers coming from Spanish-speaking households. Benito reflected on his and his brother's language practices. He maintained that the only time he spoke Spanish was his recent trip to Mexico to see his grandparents, aunts, uncles, and cousins. Because Benito and Oscar were unsure of which language to use with family members given that they were unable to speak English, the siblings spoke in Spanish. Reflecting on these language practices, Benito asserted that he only spoke English to his brother, which I will now address.

With respect to the siblings' language practices with each other, data generated from mother and child interviews, as well as ethnographically informed observations revealed that Benito and Oscar exclusively used English to communicate. For instance,

during the mother interview, Elena described her children's language practices with each other, as shown in Excerpt 50:

Excerpt 50: Elena (November 9, 2016)

Cuando ellos se hablan entre ellos hablan más inglés. Casi no hablan en español. O si se regañan o se pelean por un juguete, siempre se están hablando en inglés.

When they speak with each other, they speak more English. They basically don't speak any Spanish. Or if they complain or fight over a toy, they're always speaking in Spanish.

Above, Elena maintained that the siblings exclusively used English to communicate, suggesting that Benito and Oscar spoke more English than Spanish. Furthermore, Elena posited that her children, when arguing or fighting over a toy, issued their responses in English to one another.

In direct evidence of the siblings' tendency to only use English when speaking with one another, consider Excerpt 51 during which Benito and Oscar were playing their favorite board game called "Pie Face", a roulette-style game that resulted in spraying whip-cream onto each other's face. During the home observation, I stayed after the mother-interview to observe the siblings in the home environment and examine their language practices with each other. A digitally-recorded interaction of the siblings playing a game is shown in Excerpt 51:

Excerpt 51: Benito and Oscar playing a board game (November 9, 2016)

Line:

- | | | |
|---|---------|--------------------------------------|
| 1 | Oscar: | Where are yo::u? |
| 2 | Benito: | I think it's this one. The pie face! |
| 3 | Oscar: | Pie face? |
| 4 | Benito: | Dire::ctions. |

- 5 Oscar: @@@ PIE FACE!! (30s) Oh that feels go:::od. It feels like
washing your head! @@@
- 6 Benito: Washing your head?
- 7 Oscar: Mhm
- 8 Benito: Let's do this! Duh duh duh duh duh duh.
- 9 Oscar: Duh duh duh duh duh duh
- 10 Benito: Let's clean this. Throw this in the garbage.
- 11 Oscar: No, you.
- 12 Benito: Here.
- 13 Oscar: Eww so wet! @@@

Although Benito and Oscar's above interaction is an isolated incident, I argue that it is an indicative example of siblings' orientation toward using English with one another. For instance, in the excerpt, Oscar initiated the exchange in line 1 by speaking out loud as he looked for the instructions to the game, using "where are you" as a reference to the instruction manual. In response to Oscar's request, Benito confirmed that he found the manual and then articulated the name of the game and title "directions" that was placed at the top of the page. At the end of the interaction, in line 10, Benito then directed his younger brother to throw the newspaper covering the table into the garbage in English to which Oscar rejected his older brother's request in English. Collectively, this exchange is representative of the siblings' FLP and their orientation to using only English when speaking with one another, such that they were observed only speaking English. Furthermore, the interaction corroborates Elena's responses that her children exclusively spoke in English with each other.

In sum, interview data from both Elena and her children reveal Benito and Oscar's preference for speaking English. The siblings attempted to speak in Spanish with extended family members who visited the home and their parents, Elena and her husband. However, according to Elena, Benito and Oscar were often unable to produce or express themselves using only Spanish, thus responding in English. While both siblings experienced difficulties with Spanish, albeit talking to their grandparents or speaking to other adult family members, Elena maintained that younger sibling, Oscar, showed more linguistic obstacles and Benito showed an interest in reading and speaking in Spanish. Furthermore, findings confirm Benito and Oscar's preference for English with peers and each other. For instance, Elena maintained that Benito and Oscar, who were close in age, exclusively spoke in English with their friends. The siblings confirmed this practice during the child interview and was further expanded by Benito when he described his recent trip to Mexico with his brother. Benito and Oscar were uncertain in which language they should speak with their cousins, who were unable to speak English. The siblings attempted speaking Spanish with their cousins but reported speaking exclusively English with each other. This orientation to favoring English was attested by Elena during the mother interview and further evidenced in the home observation.

5.2.1.4 The home language practices of Samuel and Kendra (Family 4)

Family 4 consisted of older sibling, Samuel, younger sibling, Kendra, and their mother, Ana. Since Ana divorced from her husband in 2014, she and her children lived in a large three-bedroom house with Ana's brother, Eduardo, and his son, Danny. According to the BIOS survey and mother interview, a typical day for Samuel and Kendra began at 7:00 a.m. during which the siblings prepared for school and ate breakfast with their cousin. At 8:00 a.m., Samuel took the bus to the middle school, while Ana walked

Kendra and Danny to the primary school. After school, Samuel, Kendra, Danny, and two cousins from school, David and Vanessa, returned to their home. Each evening, the siblings' mother, Ana, or their aunt, Abril, shared responsibilities taking care of the younger family members. The siblings would return home from school at 3:30 p.m. Each evening, the children were to complete their homework before playing. The siblings and cousins sat together upstairs in one of the bedrooms where each assisted one another in completing these homework assignments. After, the children would play together and watch television in only English. At 7:00 p.m., either Ana or her sister prepared dinner, during which both Samuel and Kendra and their cousins sat together in the kitchen area. Neighbors and close family friends frequented the house at this time to eat dinner in the dining area, which served a communal kitchen for several of their neighbors. At 8:00 p.m., Vanessa and David would return to their home. Shortly thereafter, Samuel, Kendra, and Danny would go to bed.

In the next two sections, I describe Samuel's and Kendra's language practices in the home environment. First, I examine the siblings' communicative interactions when addressing their parents and other family members. Then I describe their language practices when interacting with their peers and each other.

5.2.1.4.2 Samuel's and Kendra's language practices with family members and parents

When I first met the siblings' mother, Ana, in her home, it was a cold evening late October. I walked on the sidewalk toward the front door, stepping around three large pick-up trucks on the front lawn, which belonged to visiting neighbors and the siblings' uncle, Eduardo. When I entered the home, Samuel, Kendra, and their cousins were playing tag in the living room, running in circles and dodging other adult members

present in the home who were in the kitchen area cooking tortillas. I observed a dynamic use of both English and Spanish being employed by the focal siblings in the presence of their neighbors. The children were shouting in English, but in several instances were observed interjecting words and expressions in Spanish, such as “¡Espera!” (Wait), “¡Ven aquí!” (Come here), or “¡Para!” (Stop). Interested in these bilingual practices, I asked Ana what language/s her children most often used in the home during the mother interview. Her response is shown in Excerpt 52:

Excerpt 52: Ana (November 7, 2016)

Mezclan inglés con el español. No hablan solo un idioma completamente como solo inglés-inglés. No. Mezclan inglés con el español. De repente, los escucho decir algo en español y después lo están diciendo en inglés. Los dos idiomas están completamente mezclados.

They mix English with Spanish. They don't completely speak only one language like only English-English. No. They mix English with Spanish. All the sudden, I'll hear them say something in Spanish and then after they're saying it in English. The two languages are completely mixed.

In Excerpt 52, Ana indicated that her children used both languages in the home, maintaining that Samuel and in Kendra mixed their languages on a daily basis and chose to not just speak in only one language. She suggested that when speaking English, she regularly heard them interject something in Spanish and then return to speaking in English. Interestingly, Ana's assertion of the direction of mixing – English into Spanish – is illustrative of the prevalence of English in the home, attesting to my initial observation in the home during which the children spoke mostly English, interjecting words or short expressions in Spanish. This excerpt suggests that while Samuel and Kendra heard and used Spanish on regular basis, the direction of code-mixing favored English. Interested in these bilingual practices, I asked Ana if her children's language preferences had changed

over the years after they had began attending Otter Creek schools. Ana responded and described Samuel's and Kendra's changing language practices, as shown in Excerpt 53:

Excerpt 53: Ana (November 7, 2016)

Samuel sólo hablaba español. Y Kendra, ella empezó a hablar inglés cuando él fue a la escuela. Y ella cuando fue a la escuela es cuando ella prácticamente agarró el inglés porque nunca le hablé en inglés. Ella solo hablaba conmigo en español. Fue entonces cuando empezó a hablar inglés.

Samuel only spoke Spanish. And Kendra, she began speaking English when he went to school. And when she went to school, that was when she practically got ahold of English because I never spoke to her in English. She only spoke with me in Spanish. It was then when she started speaking English.

Excerpt 53 provides direct evidence of Samuel's and Kendra's changing language preference and progression toward using mostly English after attending Otter Creek schools. That is, Samuel arrived at Otter Creek at the age of two with his mother and only spoke Spanish. Later, at age three, his sister, Kendra was born at the same time Samuel was beginning Pre-K. However, after Samuel began attending Pre-K and advanced into the primary school, she observed that Kendra began speaking more English, despite that she only spoke Spanish to both her children.

Given the siblings' bilingual language practices after attending the primary school, I wanted to learn more about the siblings' current language practices with extended family members, including those who resided in Otter Creek and in Mexico. First, with respect to the siblings' family members who resided in Mexico, Ana described how she maintained constant dialogue with her parents who still lived in her hometown in a rural village in Puebla, Mexico. Using Skype and telephone, Ana and her children spoke to these family members once a month. In Excerpt 54, Ana described her children's language practices when speaking with their grandparents over Skype.

Excerpt 54: Ana (November 7, 2016)

Samuel y Kendra siempre dicen “*Okay* abuelita.” Y mi mamá dice “¿Qué es eso? ¿Qué? ¿Qué? ¿Qué es ‘okay’?”. Y tengo que decirle, “‘Okay’, Que sí, Mamá”. O sea, somos de un pueblo y todo está en español y nosotros... ¿Como le puedo decir? Solo vamos hasta sexto grado. No terminé más hasta el sexto grado. De hecho, mi mamá, ni acabó la primaria. Se quedó en cuarto grado. Entonces somos bien bajo de escuela. No tenemos este nivel alto de estudios. Entonces mis padres están tratando de sacarlos lo más que puedan cuando hablan. Entonces imagínese. Ellos no tienen la menor idea de que es este “okay”. Esto pasa con Kendra y con Samuel. Yo le digo que cante canciones en español. Y a ella le canta canciones, pero en inglés. A mi mamá le gusta escuchar. Pero no entiende. Pero dice mi papá que le gusta escucharla, pero no entiende. Entonces les ayudo.

Samuel and Kendra always say, “okay grandma.” And my mom says, “What is that? What? What? What is ‘okay’?”. And I have to tell her, “‘Okay,’ it’s ‘yes,’ Mom”. I mean, we’re from a pueblo and everything is in Spanish and we, how can I say this? We only go up to sixth grade. I didn’t finish anything after sixth. In fact, my mom, she didn’t even finish primary school. She went up to the fourth grade. So, we’re really below education level. We don’t have a high level of studies. So, my parents are trying to get as much out of them as they can when they speak. So, imagine. They don’t have the slightest idea of what this “okay” means. This happens with Kendra and with Samuel. I tell her to sing songs in Spanish. And she sings songs to them, but in English. My mom likes to listen. But she doesn’t understand. But my father say that he likes to listen to her, but he doesn’t understand. So, I help them[sic].

Samuel and Kendra were reported to speak to their grandparents who still resided in Mexico over the phone or Skype. As shown in Excerpt 54, however, the siblings often used English words that were not understood in Spanish. Furthermore, Ana encouraged Kendra to sing to their grandparents in Spanish. Because Kendra only knew songs in English, her grandparents did not understand the songs. Interestingly, the above excerpt highlights Parreñas’ (2014) work, which showed how technology was used to construct a sense of belonging. That is, the use of Skype in the family constructed a sense of belonging between Ana’s children’s upbringing in Otter Creek, NJ and their family in a rural village of Mexico. Ana remarked that in her home town, people only attend through primary school and do not learn English. Thus, to facilitate communicate between her

children and parents, Ana intervened on behalf of Samuel and Kendra, meditating their communicative practices in Spanish.

With respect to siblings' language practices with family members who resided in Otter Creek, Ana's brother, Eduardo, was the most prominent adult family member in the household other than the siblings' mother. Despite Eduardo emigrating with Ana from Puebla, Mexico at the same time, Ana indicated that he only spoke English with Samuel, Kendra, and his son, Danny. That is, Danny, was unable comprehend or speak Spanish, therefore his father was reported to only use English in the home with Samuel and Kendra. Furthermore, one must also consider the other children present in the home during the evening hours. Most days after school, Ana cared for her niece, Vanessa (10 years old), and nephew, David (8 years old), until 8:00 p.m. Since Samuel, Kendra and cousins only spoke English with their uncle, we gather that Eduardo served as a prominent linguistic agent who prompted the use of English within the home. Attesting to this practice, Ana described how the children spoke English with her brother and knew who to seek out when asking for help with questions concerning English. Ana's response is shown in Excerpt 54:

Excerpt 54: Ana (November 7, 2016)

Mi hermano con Danny, sólo hablan en inglés. Y también más inglés con los dos, Samuel y Kendra. Entonces si tengo que preguntar algo, se lo hago en español a cualquier excepto a Danny. Si no encontramos alguna respuesta, yo le pregunto a Vanessa. Ella es más... un poquito de cabeza mejor. Entonces le digo, "Vanessa, esto. Necesito que me traduzcas este papel". Entonces ella me lo lee y lo traduce en español.

My brother with Danny, they only speak in English. And also English with the two, Samuel and Kendra. So, if I have to ask something, I'll in Spanish to anyone except Danny. If I can't find a response, I ask Vanessa. She's more...a little bit better in the head. Som I say to her, "Vanessa, this. I need you to translate this document". So, she'll read it to me and translate it to Spanish.

Above, Ana confirmed that her brother, Eduardo, only spoke English with his son, Danny, who was unable to comprehend or speak Spanish. Furthermore, Eduardo spoke mostly English with her two children, Samuel and Kendra, despite being able to speak in Spanish. Interestingly, Ana's knowledge of who spoke Spanish and to what degree informed her decision on who she tended to ask for assistance concerning questions on English. For instance, she knew that Danny would be unable to help her. However, if her children were incapable of solving the issue at hand, Ana's last stop was her niece, Vanessa, who Ana described as more mature and knowledgeable. Collectively, these diverse language practices and Eduardo's preference for English highlights the autonomy and agency that each family member held when speaking to each other. Danny favored speaking English and as a result, prompted his father to only speak English with the children residing in the home. In effect, Danny's monolingual practices in English created a linguistic environment where a diversity of language practices was instantiated within the home, providing opportunities for the siblings to respond in English with their cousins and uncle. Ana was aware of these language preferences, as well as the children's language proficiencies. When asking for help, Ana ranked each child according to their linguistic proficiencies, preferring to ask her niece, Vanessa, over any of the other children, given her linguistic prowess and ability to speak.

With respect to Samuel's and Kendra's language practices with their mother, Ana contended that she only spoke to her children in Spanish. In response, however, Samuel and Kendra, responded in both English and Spanish. In Excerpt 56, Ana described how the siblings mixed their languages when responding to her commands:

Excerpt 56: Ana (November 7, 2016)

Mixtean. Cuando me hablan, los dos mixtean. Y a mí me encanta. Me gusta porque yo puedo aprender de los dos.

They mix. When they speak, both of them mix. I love it. I like it because I can learn from them both.

Excerpt 56 illustrates that Ana endorsed her children's code-mixing. Recall in Excerpt 55 Ana's assertion that the direction of Samuel and Kendra's language mixing favored English, such that the siblings spoke mostly English and used interjections and short phrases in Spanish. This language practice was welcomed by Ana who used her children's English practices as an opportunity to learn more vocabulary. Ana felt behind and inadequate concerning her English language skills, despite having enrolled in several ESL courses over the years. She felt encouraged when learning from her children and practicing word pronunciation in English. During the interview, I asked Ana if Samuel and Kendra helped her with English. Consider Excerpt 57 during which Ana described how she often enlisted her daughter, Kendra, for help when practicing English:

Excerpt 57: Ana (November 7, 2016)

Kendra me corrige mucho. Ella es la más pequeña, pero me corrige muchas palabras que yo digo en inglés. Ella me da clases. Tiene más paciencia que Samuel. Él todavía este año, Samuel no quería ayudarme a traducir cosas. Como ayer ella estaba diciéndome cómo se dice bruja en inglés. ¿Y cómo se dice "deseo" en inglés? Para mí, Suenan igual. No hay mucha diferencia en escucharlo. Y ella me corrige y me dice cómo hacerlo y me trata de explicar.

Kendra corrects me a lot. She is the youngest, but she corrects many words of mine that I say in English. She gives me classes. She has more patience than Samuel. Even this year, he doesn't want to help me translate things. Like yesterday she was telling me how to say "witch" in English. How do you say "wish" in English? For me, they sound the same. There's not much different hearing it. And she corrects me and tells me how to do it and tries to explain.

In Excerpt 57, Ana indicated that Kendra often corrected her in English despite being the youngest sibling who was enrolled in kindergarten during the time of data collection. Furthermore, Ana claimed that Kendra was more patient than Samuel. Ana expressed how Kendra enjoyed assisting and explaining pronunciation of vocabulary

words in English. Attesting to this practice, Kendra stated during the child interview that she enjoyed helping her mother with her English class by reading picture books in English. Kendra's asserted: "I help my mom with her homework in English. It makes me feel good". Thus, Kendra's relationship with her mother conveys the language socialization practices in the home and the dominance of English in the sibling's language practices. Kendra not only enjoyed but was also encouraged to speak English to her mother, serving as a language instructor for Ana who could provide feedback and input in the language.

In addition to the siblings' bilingual language practices and preference for English, Ana indicated that her children often misunderstood pragmatically sensitive words and cultural displays of knowledge from the Mexican Spanish variety. For instance, I asked Ana if her two children ever experienced confusion because of a linguistic misunderstanding. In response, Ana described how even though Samuel's language proficiencies were higher than Kendra's, such that Samuel spoke faster and knew more words, both he and his sister lacked a pragmatic understanding of expressions or jokes of the Mexican Spanish variety. Consider Excerpt 58 during which Ana described one instance during which Samuel misunderstood a commonly used word in Mexican Spanish:

Excerpt 58: Ana (November 7, 2016)

Siempre hay confusiones. Siempre. Igual con ellos o conmigo por decir, por ejemplo, yo le digo, "Samuel, ve a la tienda". Y se fue y regresó tarde y le digo, "¡Tardaste tanto! ¿Te pediste fiado?" Y dice, "¿Qué, qué, qué es eso mamá?" Entonces ¿Qué es "fiar"? El contexto es de ir a la tienda y decirle a la persona que está vendiendo las cosas, "No puedo pagar esto. Fíamelo". Como prestar, pero para nosotros no. Decimos, "pedir fiado algo". Como, "fíame un kilo de azúcar". Es mexicano. Pero él no entendió.

There's always confusions. Always. Same with them or with me for saying, for example, I'll say, "Samuel, go to the store." He went to the store and returned

late and I said to him, “You took so long! Did you ask to pay back?” And he says, “What? What? What is that, Mom?” So, what is “fiar” (run an account)? The context is going to the store and saying to the person who is selling the things. “I can’t pay for this. Put it on credit and I’ll pay you back.” It’s like borrow, but for us, no. We say, “pedir fiado”. Like, “give this kilo of sugar to me and I’ll pay you back. It’s Mexican. But he didn’t understand.”

As shown above, Ana claimed that her children often encountered confusions in Spanish by providing an anecdotal example in which she described sending her son to the store. This example reveals the siblings’ language practices as being comprised as not only the linguistic performances in each of their languages, but also the Samuel’s and Kendra’s pragmatic sensitivities to their mother’s Mexican Spanish varieties. These same misunderstandings were instantiated in several other occasions, notably in Ana’s use of Mexican “groserías” (bad words), which are cultural displays of knowledge that invoke a vulgar humor. For instance, consider Excerpt 59 during which Ana attested to her family’s use of groserías that referenced the Mexican variety.

Excerpt 59: Ana (November 7, 2016)

Mi hermano habla de una forma ¿Cómo puedo decir esto? Pues venimos de una familia donde nosotros hablamos muy groseramente. Para otra gente es grosero, pero para nosotros es cariñoso. Entonces mis niños me escuchan mentar y decir groserías a mi mamá. Entonces para ellos, está mal porque es una grosería. Pero ellos no entienden. Porque nosotros tenemos nuestra forma de hablar grosero como “¡¿Qué hijos están haciendo?!” Pero si estuviera otra gente de mi propia familia “¡¿Hey niños por tal cuales, qué están haciendo?!” No es cuestión de pelear. Para otra personas no se escucha bien. Yo soy muy grosera. La más grosera. Yo miento mucho. Yo digo tal por cual. Otra gente nos juzga mal. Cuando hablo con mi papá me dice, “Hija de tal. ¿Qué estás haciendo?”. Y no le digo “papá”. Le digo “viejito”.

My brother talks in a certain form. How can I say this to you? Well, we come from a family where we talk very vulgar. For other people, it’s vulgar. But for us, it’s affectionate. So my kids hear me talk vulgar and say course things to my mom. So for them, it’s bad because it’s vulgar. But they don’t understand. Because we have a form of talking very vulgar like, “What the hell are you doing?!” It’s not a question of fighting. For other people it doesn’t sound good. I am very vulgar. The most vulgar. I insult a lot. I say this and that. Other people judge us. When I

... speak with my father, he says, “Hey son of a ... What are you doing?” And I don’t to say to him “father,” I say, “old man”.

As depicted above, Ana captured pragmatic misunderstandings in the home, such that Samuel and Kendra misinterpreted their family’s use of *groserías*. That is, both Ana and her brother, Eduardo, used *groserías* in the home, namely a style of discourse that invoked vulgar humor, but conjuring both a playful and literal meaning (Martínez and Morales, 2014). When talking with each other, addressing their children, or even speaking to their family in Mexico, Ana and her brother engaged in language that was received as offensive and vulgar in the eyes of Samuel and Kendra. This example highlights how language competence did not just reside in Samuel’s and Kendra’s linguistic performances and the productivity of the languages used within the home, but rather what Hymes (1974) described as communicative competence and linguistic dexterity of understanding double-meaning. The siblings’ misinterpretation of their mother’s *groserías* points to the limits of their own language repertoires and linguistic dexterities. Thus, Samuel’s and Kendra’s misunderstanding of *groserías* reflected the linguistic repertoires they had at their disposal, revealing that their language practices were not just the languages they used, but also the communicative competencies and sociolinguistic resources they could draw upon.

Next, I further describe Samuel’s and Kendra’s language practices, focusing on the languages used with their peers, as well as with each other.

5.2.1.4.2 Samuel’s and Kendra’s language practices with each other and peers

This section describes Samuel’s and Kendra’s language practices with their peers and each other. First, I describe the language/s use by Samuel and Kendra with their

family, namely their cousins with whom they interacted the most after school. Then I examine the siblings' language practices with each other.

As reported in the mother interview, Ana described her children's language practices with age-equivalent peers. Interested in learning what languages her children preferred to speak with their age-equivalent friends, I asked Ana whether they spoke English, Spanish, or both languages. Ana's response is shown in Excerpt 60:

Excerpt 60: Ana (November 7, 2016)

Ellos hablan español e inglés. Bueno, depende de los amigos quien sean. Pero ellos hablan español e inglés.

They speak Spanish and English. Well, depends on the friends and who they are. But they speak Spanish and English.

As observed above, Ana indicated that Samuel and Kendra spoke both languages to their friends, depending on the language preferences of their friends. It was unclear in this description whether the siblings spoke in both languages in equal amounts or preferred English with interjections and expression in Spanish. Recall from above that Ana suggested that the direction of her children's code-mixing favored English, such that they intermittently used Spanish words when speaking English. To further discern what language/s the siblings preferred to speak with friends, I asked Samuel and Kendra during the child interview. Samuel responded: "In mostly English". Furthermore, his younger sister responded: "With friends, I speak English. And with cousins, English only". Thus, we gather that both Samuel and Kendra preferred English when speaking with their friends.

In addition to Samuel's and Kendra's peer network, one must consider their cousins who either resided or spent a great majority of time in the siblings' home. Every day, Samuel and Kendra played and socialized with their cousins Danny, Vanessa, and

David. Thus, one unique aspect to the Rubio family was the presence of many age-related family members with whom they regularly interacted in the home. Recall from above that the siblings tended to use English in the home, given that their cousin, Danny, was unable to comprehend or speak Spanish. These language practices transcended across Samuel and Kendra who not only preferred to speak in English, but also listen to music in English, as well. For instance, consider Excerpt 61 during which Ana described the type of music that was played during social gatherings or in the car:

Excerpt 61: Ana (November 7, 2016)

A nosotros nos gusta la música en español. Pero cuando los niños vienen, dicen, “¡pues por qué tenemos que escuchar esta música!”. Decimos pues queremos escuchar esta música. Entonces ellos dicen “¡No! ¡Queremos esta música en inglés!”. Pero como que somos adultos, la mayoría de las veces escuchamos lo que queremos. Pero esto ha pasado más este año porque mi hermano se compró un carro. Y cuando él va en el carro, mi sobrino pone la música en inglés. Entonces no podemos decir “¡Queremos español!”. No. Los niños están felices. Así que estamos dejando que pongan su música.

We like music in Spanish. But when the kids come, they say, “Well, why do we have to listen to this music?” We say that we want to listen to this music. So, they say, “No! We want music in English!”. But since we’re adults, most of the times we listen to what we want. But this has happened more this year because my brother bought a car. And when he goes in the car, my nephew puts on music in English. So, we aren’t able to say, “We want Spanish!”. No. The kids are happy. So, we let them put on their music.

Ana conveyed above that language conflicts arose between children and adults, such that Samuel, Kendra, and cousins criticized their parents for playing music in Spanish during social gatherings or in the car. And while the adults mostly had authority over the music played, Ana indicated that her nephew’s preference for English permitted the children to play music in English in the car. This example provides a new perspective on the Samuel’s and Kendra’s language practices given the siblings’ dense family network and strength of English among their cousins. The focal sibling pair and cousins

preferred the use of English in both the linguistic and cultural aspects, influencing the language environment in which the children were growing up.

With respect to the siblings' language practices with each other, Ana described Samuel and Kendra's preference for English with each other. For instance, Ana expressed that this practice predominantly emerged between Samuel and Kendra given the age and gender differences, issuing arguments in English rather than in Spanish. Thus, we observe how Samuel's and Kendra's teasing routine and arguments were issued in mostly English. Attesting to the siblings' preference for English, I asked both Samuel and Kendra the language in which they spoke with each other. Kendra responded: "With my brother, English and Spanish". However, Kendra did not operationalize nor clarify the extent with which she spoke both languages with her brother. Later when speaking with Samuel, he described what the siblings meant when saying they spoke Spanish and English. His response is shown in Excerpt 63:

Excerpt 62: Samuel (November 12, 2016)

English and Spanish, like mixed. For example, I'll say "*Kendra* come here." Like, I'll say her name in Spanish. She says "okay" in Spanish and English. Like it's "Spanishy" and sometimes "Englishy".

In the above excerpt, Samuel stated what he meant when he spoke Spanish and English with his sister. Most notably, he suggested that Spanish for him was how he expressed words, such as his sister's name, "Kendra", or the word "okay", which he pronounced using Spanish phonology. This practice attests to the language socialization patterns in the siblings' lives and linguistic environment in which they lived. That is, both Samuel and Kendra were socialized into using mostly English with each other, in addition to their cousins and uncle. Thus, the pattern in which Samuel and Kendra spoke

English with each other, pronouncing words using Spanish phonology, underscores the siblings' rich sociolinguistic environment and adaptive language repertoires they used with one another.

In sum, ethnographically informed observations and interviews with siblings and their mother, Ana, confirmed that both Samuel and Kendra favored using mostly English within the home, only using Spanish when interjecting words and short expressions. One of the driving forces of the dominance of English was Eduardo, the siblings' uncle, who only used English with the children. Furthermore, Eduardo's son, Danny, was reported to neither understand nor speak Spanish, thus prompting the use of English in the home. Ana not only welcomed these English language practices, but also encouraged her children to speak English in her presence since she wanted to learn the language, despite having taken several ESL courses of the years. Even though Samuel was more proficient in Spanish than his sister, Kendra, both he and his sister lacked a pragmatic understanding of expressions or registers of the Mexican Spanish variety. Thus, their misunderstandings reflected the linguistic repertoires the siblings had at their disposal, pointing to their language practices as not just the language/s they used, but also their communicative competencies and sociolinguistic resources they could draw upon. Furthermore, findings show siblings' overall preference for using English with their peers and each other. We observed the siblings' peer network was mostly comprised of their cousins, like Danny who resided in the home, and Vanessa and David who visited the home every day after school. These children mostly spoke English with each other, sometimes issuing interjections or expressions in Spanish. Collectively, these children influenced not only the language they spoke with one another, but also their linguistic

environments, such as selecting songs in English in the car or social gatherings. Likewise, with respect the siblings' language practices with each other, Samuel and Kendra mostly spoke English with one another. Sibling arguments and dinner time conversations were issued in English. These data show the sociolinguistic complexity of the Rubio house and how the siblings and cousins served as linguistic agents who prompted the use of English in the home.

5.2.1.5 The home language practices of Lani and Leo (Family 5)

Family 5 consisted of older sibling, Lani, younger sibling, Leo, and their parents, Laura and Mateo. The focal siblings had a younger baby sister, Suti, who was nine months during the time of data collection. Furthermore, the siblings' grandmother, Guadalupe, had been residing in the home for one year after the passing of her husband, Laura's father. According to the BIOS survey and mother interview, a typical day for Lani and Leo began at 7:00 a.m. during which the siblings prepared for school, ate breakfast, and watched cartoons in English. At 7:45 a.m., Lani took the school bus to the middle school, while her father took Leo to the primary school at 8:00 a.m. When the siblings returned home from school, their grandmother, Guadalupe, cared for them and helped prepare dinner. Guadalupe exclusively spoke in Spanish with her grandchildren. Once the siblings' parents returned from work at 7:00 p.m., the family ate dinner together, watched television in either English or Spanish, and went to bed at 8:30 p.m.

In the next two sections, I describe Lani and Leo's language practices in the home by drawing upon mother and child interviews, ethnographically informed observations, and audio-recorded interactions. First, I examine the language/s used among the two siblings and their communicative interactions when addressing their parents and extended

family members, such as their grandmother. I then describe their language practices when interacting with peers and each other.

5.2.1.5.2 Lani's and Leo's language practices with parents and family members

When I first met Laura at her home, I observed a resistance on behalf of her children when attempting to respond to adults in Spanish. Interested in this bilingual practice, I asked Laura what language/s her children most often used in the home. Her response is shown in Excerpt 63:

Excerpt 63: Laura (November 8, 2016)

Con los dos, siempre ha sido en inglés. Pero Lani sí que tiene más curiosidad con el español. Por ejemplo, ella viene y dice, “Mami, ¿cómo se dice cierta cosa en español?” Entonces yo se lo digo. Sí el español lo habla, pero tiene un acento todavía como un español cortado. Pero mucho mejor que Leo. Leo, él más que nada es él que tiene más problemas con el español. Lo que hace es traducir el español al inglés. Por ejemplo, siempre dice, “yo no fui” o “no soy yo” para decir, “no lo hice.” Es quebrada completamente. Yo sé lo que está diciendo porque yo lo conozco. Entonces trata de hacerlo en español como pero inventado (risa).

With both, it's always been in English. But Lani, yes, she has had more curiosity with Spanish. For example, she'll come and say, “Mommy, how do you say a certain thing in Spanish?” So I'll tell her. So yes, she speaks Spanish, but with an accent like a broken a Spanish. But much better than Leo. Leo, he more than anyone is the one who has most problems with Spanish. What he does is translate Spanish to English. For example, he always says, “yo fui” (I went) or “No soy yo” (It's not me) to say, “no lo hice” (I didn't do it). It's totally broken. I know what he's trying to say because I know him. So, he tries to do it in Spanish, but made up (laughter).

In Excerpt 63, Laura remarked that despite her children's longstanding preference for English, they evidenced different language practices within the home. Laura reported that her eldest daughter, Lani, demonstrated more of a curiosity and productive use of Spanish in the home. That is, despite having difficulty pronouncing certain words in Spanish, Laura indicated that Lani would show an interest in understanding the meaning of certain expressions in Spanish. Younger sibling, Leo, however, was reported to not

only evidence low levels of linguistic competence in Spanish, but also transfer words and expressions from English when speaking Spanish. The excerpt points to Leo's language development in Spanish, which could be attributed to language transfer.

During the mother interview, I was interested to learn more about the siblings' language practices with extended family members, such as aunts, uncles, and grandmother. What emerged was a conflict between the siblings' agency and adults' preference for speaking Spanish in family settings. For instance, during the mother interview, I asked Laura in what language her children spoke with these family members. Laura's response is shown in Excerpt 64:

Excerpt 64: Laura (November 8, 2016)

Ellos tratan de contestar en español. Casi la mayoría del tiempo, sí tratan de hablar. Allí vamos en la ayuda con la familia extendida. Y si ellos no quieren contestar en español y nos hablan en inglés, sólo tenemos que decir, "No entiendo lo que estás diciendo". Aunque te dice, "Ahh sí, ¡pues yo te vi hablando en inglés!". Pero es para que se hagan un esfuerzo[sic]. Como Leo. Él trató, trató y trató. No es tan perfecto. Si yo le digo a él, "Leo, ellos no entienden inglés". Entonces hace un esfuerzo y se comunica. Pero para no hacerles incómodos porque queremos que sean parte de nuestras conversaciones. Les dejamos contestar en inglés y español. Porque de repente es cansativo para ellos.

They try to answer back in Spanish. The majority of times, yes, they try to speak. And from there we'll help them with extended family members. And if they don't want to respond in Spanish and they talk to us in English, we only have to say, "I don't understand what you're saying". Although they say to you, "Ahh okay, well I saw you speaking in English!". But is so they make an effort. Like Leo. He tried, tried, and tried. He isn't too good. If I tell him, "Leo, they don't understand English". So he'll make an effort and communicate. But also, not to leave them uncomfortable because we want them to be part of our conversations. We let them answer in English and Spanish. Because all of the sudden, it's exhausting for them.

As shown above, Lani and Leo were reported to attempt speaking Spanish with extended family members. Furthermore, in those instances during which the siblings struggled communicating in Spanish, Laura indicated that extended family members

would encourage Lani and Leo in making the effort to speak. However, Laura claimed that there were moments during which the siblings resisted speaking Spanish and chose to respond in English. Family members would feign their monolingualism in Spanish as if they were unable to understand English. This ubiquitous practice was to encourage Lani and Leo to make the effort to speak Spanish, which served as a ploy to trick the siblings that English would not be understood. However, Laura expressed that speaking Spanish over long periods of time was laborious for her children, so family members did not always impose a strict FLP on the siblings. Rather, the overall objective was to invite Lani and Leo into daily conversations and create an inclusive environment among family members.

Next, with respect to siblings' language practices with their father, the siblings were reported to engage in mostly English. During the mother interview, Laura indicated that her children spent most of the weekend with their father since she had to work. He allowed the children to watch Saturday cartoons and movies in English, which also afforded him the opportunity to learn new words and expressions. Thus, when asked in what language the siblings spoke with their father, Laura responded in Excerpt 65:

Excerpt 65: Laura (November 8, 2016)

¡Pues su papá les habla en inglés! *You see. That's my problem.* Todo el tiempo hablo español mientras él piensa, "*You gotta speak English at home so you gotta practice*". ¡Pero es que no se hace aquí! Dime una cosa. Él me dice que está tratando de hablar inglés con los niños para aprender. Sí, está bien que vayas a tu clase. ¡Pero no vengas aquí a tomar los niños como tus maestros! Pero eso es nada más mi conflicto. Lo que pasa es que el inglés es una lengua mucho más cómoda para ellos hablar entonces de repente, venir y sacarlos de su zona comfortable, se sienten ansiosos.

Well their father talks to them in English! You see. That's my problem. All the time, I speak Spanish while he thinks, "you gotta speak English at home so you gotta practice". But that is not what we do here! Tell me something. He says that he's trying to speak English with the kids to learn. Yeah, that's fine you go to your class. But don't come here and use your kids as your teachers. But that is really

only my conflict. What happens is that English has become a language much more comfortable for them and all the sudden coming and taking them out of that comfort zone, they feel anxious[sic].

In Excerpt 65, Laura who emotionally disclosed the conflict between her FLP and husband's FLP, expressed a frustration in the siblings' English language practices. That is, when asked in what language the siblings spoke with their father, Laura vehemently responded that her husband spoke to Lani and Leo in English. In the first and only assertion in English during the mother interview, Laura expressed anger that her husband practiced his English skills with Lani and Leo, disagreeing on the appropriateness of using her children as language instructors. For these reasons, according to Laura, Lani and Leo felt more comfortable with English because speaking Spanish resided outside their comfort zone. This practice was confirmed by Lani during the child interview, as shown in Excerpt 66:

Excerpt 66: Lani (November 16, 2016)

Yeah, he likes to practice with us. Like we have books that are in English and he reads them with us. Like yesterday I was testing him because he didn't know a word. I like to teach him.

As shown above, Excerpt 67 attests to Lani's role as her father's language instructor and her preference for speaking English. First, Lani indicated that her father enjoyed practicing his English skills with his children. Recall that the siblings' mother, Laura, had arrived to Otter Creek at age 14 and acquired English during high school. The father, however, arrived as an adult and was reported to be less proficient. Thus, he often used Lani's school books as resources through which his eldest daughter tested his knowledge of English words. For example, Lani commented: "I was testing him yesterday because he didn't know a word". This language practice positioned Lani not as

a language broker, but rather a language instructor who evinced her preference for English within the home and practiced the language with her father.

With respect to the siblings' language practices with their mother, the siblings were reported to resist their mother's strongly-centered Spanish FLP, which left Laura to adopt a bilingual policy in the home. For instance, consider Excerpt 68 during which Laura described her children's language practices in Excerpt 67:

Excerpt 67: Laura (November 8, 2016)

La mayoría de las veces es inglés. Pues yo con ellos hablo en español. Y conmigo siempre me contestan en inglés. Allí yo les hablo en español como cuando, “¿Cómo estuvo el día?” y de repente Leo por ejemplo no me entiende entonces yo le digo, “*you know how was school today?*”. Y luego le repetía en español entonces él me lo explicaba. Pues es la única manera. Nosotros se lo decimos algo a él y él no me entiende y yo le trato de explicar en inglés y se lo explicamos en inglés. Y me lo repite en inglés.

Most of the times it is English. So, with them, I speak Spanish. And with me, it's always been in English. So, from there I'll speak in Spanish like “How was your day?” And all the sudden Leo doesn't understand so I say, “You know, how was school today?”. And later I'll repeat it to him in Spanish, so he explains. It's the only way. We'll say something to him in Spanish and he doesn't understand me and I'll try to explain it in English and we explain it in English. And he repeats it in English.

Excerpt 68 reveals the siblings' language practices and their conflict with their mother's strongly-centered Spanish FLP. That is, Laura maintained that though she spoke Spanish with her children, they almost always responded in English. In many instances, Laura suggested that Leo misunderstood much of what she was asking in Spanish, which forced Laura to adopt a bilingual policy in the home. The underlying motivation for Laura to switch to English with Leo was his low proficiency in Spanish, which is characterized as an example of Gafaranga's (2010) medium request, whereby Laura took Leo's silence as a request for clarification to be an implicit demand to switch to English.

Thus, Laura's bilingual language policy solves the issue of comprehensibility, as Leo immediately answered his mother in English.

Direct evidence attesting to the siblings' language practices in the home was captured in Excerpt 68 during which Lani, Leo, their baby sister, Suti, and their mother were talking in the living room. In the below excerpt, Laura was holding her baby, Suti, in her arms and asked Lani how her day went:

Excerpt 68: Laura and Lani play with baby-sister (January 7, 2017)

Line:

- 1 Laura: ¿Qué tal estuvo tu día? ¿Que hicieron? (*How was your day? What did you do?*)
- 2 Lani: ¡Nada! (Nothing!)
- 3 Laura: ¿Nada? Pasaste todo el día solita mi amor? (*Nothing? You spent the day all by yourself my love?*)
- 4 Lani: ¿Eh?
- 5 Laura: Pasaste todo el día solita? (*You spent the day by yourself?*)
- 6 Lani: Uh huh (.) Oh yeah we went to Gianni's
- 7 Laura: Huh?
- 8 Lani: We went to Gianni's and then Papi ordered something from Gianni's again.
- 9 Laura: @@@
- 10 Lani: No (.) but we went with Tío Polo and he's like where did you guys eat and he's like Gianni's and he's like oh I Just ordered Gianni's and I was Gianni's again! So I ate calamari twice in one day!
- 11 Laura: Suti. Sweetie. Dígale a Lani, "Lani por favor. Puedes hablar más

español”. (3s) ¿Leo? ¿Qué haces mi amor? (*Suti. Sweetie. Tell Lani, “Lani, please. Can you speak more in Spanish?”. Leo? What are you doing my love?*)

12. Leo: Shh

13. Laura: ¿Eh?

14. Leo: I’m muting it.

15. Laura: Oh apágalo. Ya no estoy viéndolo. Suti (.) ¿Quieres más agua mami? ¿Por qué Suti tiene dos vasos? (*Oh turn it off. I’m not watching it anymore. Suti. Do you want more water honey? Why does Suti have two glasses?*)

16. Lani: Because she wanted me (4s) Oh::: there goes the other one

17. Laura: Lani ¿Como puedes subir las cosas? (*Lani, how can you raise the things?*) =

18. Lani: = Me dice Nana (*She calls me Nana*)

19. Laura: ¿Nana?

20. Lani: A veces dice mami (*Sometimes she says mommy*)

21. Laura: Suti quien es ella? Ohh! Ohh! Cuidado Ah ah::

22. Lani: @@

23. Laura: ¿Quién es ella? (*Who is she?*)

24. Lani: @@

25. Laura: Oh oh! Mi amor te estás mojando (.) Gracias mi amor (2s) ¿Cómo se dice Suti? (*Oh oh! My love, you’re getting wet. Thank you, my love. How do you say it?*)

26. Suti: [Babbling noises]

- 27 Laura: Gracias Lani! @@ (*Thank you, Lani!*)
- 28 Lani: You're welcome!
- 29 Laura: Suti habla en español y Lani le contesta en inglés. Qué vergüenza.
(Suti speaks in Spanish and Lani responds to her in English. What an embarrassment.)
- 30 Lani: @@@ Not all the time! You should see her.
- 31 Laura: Porque sabe que mami no habla inglés. (*Because she knows that Mommy doesn't speak English.*)
- 32 Lani: Do you want to be a gymnast when you grow up?
- 33 Laura: ¡No entiendo! (*I don't understand*)[talking for Suti]
- 34 Lani: ¡Suti! HI!
- 35 Laura: ¡Hol::::a! (*Hello!*)

In the above interaction, Laura maintained the use of Spanish throughout the entire exchange, even though Lani adhered to using to mostly English. In line 1, for instance, Laura asked her eldest daughter how her day went, to which Lani responded with the simple expression, “Nada!”. In an attempt to encourage Lani to expound upon her assertion, Laura in line 3, requested further information. In line 4, it appears that Lani did not understand her mother’s question, as she asked for clarification ‘eh?’. In a second attempt, Laura asked the question again, but this time, Lani responded in English in lines 8 and 10, providing a more complex narrative of what she had done earlier that day. As a result of Lani’s preference for English, Laura sarcastically issued a command in line 11 to her baby, Suti, to reprimand Lani for speaking in English. This sort of lighthearted shaming was observed throughout the interaction, such that Laura voiced what the preverbal baby would say to Lani for refusing to speak Spanish. For example, consider

lines 25-35, during which Lani was wiping dry a spill that Suti made with her bottle. In an effort to socialize Suti to respond in Spanish, Laura interjected “gracias mi amor” to Lani and repeated the item to the baby. As a response to the interjection in line 26, Suti produced a babbling noise to which Laura re-produced as “gracias Lani!”, voicing what the child would have said. However, Lani responded to this exchange in English with “you’re welcome!”, attesting to the sibling’s resistance to her mother’s Spanish FLP. In line 29, Laura attempted to lightheartedly reprimand her eldest daughter for responding in English, using the pre-verbal baby, Suti, to embarrass Lani for resisting Spanish. Interestingly, in line 30, Lani protested her mother and suggested that she had heard Suti speak English, using this evidentiary example of Suti’s bilingual language practices as a sort linguistic armor to defend that she was not the only one who spoke English. But Laura continued to voice what Suti would be saying across them in lines 31, 33, and 35, mitigating to indirectly tell Lani to speak English.

With respect to Leo’s language practices with his mother, consider Excerpt 69 during which the focal siblings and Laura played hangman in the dining room. Leo opened the scene, demonstrating to his mother the rules of the game:

Excerpt 69: Lani, Leo, and Laura playing hangman (January 9, 2017)

Line:

- | | | |
|---|--------|--|
| 1 | Leo: | This is how we play hangman mami |
| 2 | Laura: | ¿Cómo? (<i>What?</i>) |
| 3 | Leo: | Hangman! |
| 4 | Laura: | Mm okay ¿Pero tienes alguna categoría? (<i>Mm okay. Do you have any category?</i>) |
| 5 | Lani: | Okay |

- 6 Leo: That's how we do hangman!
- 7 Laura: ¿Qué te parece? (*What do you think?*)
- 8 Lani: Seven!
- 9 Leo: No:::o
- 10 Laura: Leo (.) vamos a empezar (*Leo. We're going to start*)
- 11 Leo: You can't see what I'm drawing
- 12 Laura: ¿Cómo? (*What?*)
- 13 Leo: You can't see what I'm drawing
- 14 Laura: ¿Cómo? (*What?*)
- 15 Leo: You can't see what I'm drawing
- 16 Laura: Le:::o!
- 17 Leo: @@ Cover your eyes!
- 18 Lani: @@@
- 19 Leo: Cover your eyes!
- 20 Laura: Okay.

In the above excerpt, we observe Leo and Lani playing hangman with their mother, Laura. In line 1, Leo opened the scene and signaled the rules of the game to his mother in English. Laura who appeared to not understand Leo's previous assertion, responded in line 2 and asked for further clarification in Spanish, analogous with Lanza's (1997) minimal grasp strategy. That is, Laura indicated no comprehension of Leo's language choice, signaling to Leo to repeat the sentence again in the mother's preferred language. In line 3, however, Leo responded once again in English to which Laura used Lanza's (1997) move-on strategy where the conversation merely continued, referencing the rules to her children in lines 4 and 7. Interestingly, in exchanges 10 through 20, we

observe Leo's total resistance to his mother's language practices, such that he consistently rejected Laura's firm requests to speak Spanish. That is, in line 10, Laura signaled to Leo that the game was beginning. Leo responded in line 11: "You can't see what I'm drawing". Analogous to Lanza's (1997) minimal-grasp strategy, Laura requested in Spanish that Leo re-issue his statement in the mother's preferred language. Leo's resistance to his mother's requests in Spanish occurred three times in lines 11, 13, and 15, which prompted Laura to firmly respond in line 16. Laura elongated her son's name, adding emphasis to the sternness of her request. Rather than yielding to his mother's attempts to speak Spanish, characteristic of Döpke's (1986) insisting strategies, Leo burst into laughter and requested that his mother cover her eyes in line 17. Laura's insisting strategy hindered the flow of conversation and even caused a breakdown in conversation whereby the mother eventually moved-on, succumbing to Leo's requests.

From the analysis of these two interactions, we observe that the interactions between Laura and her two children generally operated under what Gafaranga (2010) ascribed as the parallel mode, referring to the interlocutors' use of two separate codes during a conversation (p. 266). That is, while Lani only capitulated to responding in Spanish twice, thus exerting her agency in using mostly English despite her mother's requests to speak Spanish, Leo entirely rejected his mother's requests. In looking at the siblings' language use with their mother, several key observations emerged. First, Lani and Leo's implicit medium request revealed the siblings' agency in responding in English, a phenomenon that Smith-Christmas (2016) referred to as a "stand your ground approach" (p. 61). Second, with respect to Laura's FLP, Laura who instead of succumbing to English, projected a sense of lighthearted shame upon Lani for not speaking Spanish in the family. And third, with Leo, Laura attempted over several

instances to maintain a monolingual environment, characteristic of Döpke's (1986) insisting strategies. However, as observed in the excerpt, Laura's insisting strategy hindered the flow of conversation and even caused a break whereby the mother eventually moved-on, analogous to Lanza's (1997) move-on parental discourse strategy.

In the next section, I further describe Lani and Leo's language practices, focusing on the language/s used with their school-aged peers, as well as with each other.

5.2.1.5.2 Lani's and Leo's language practices with peers and each other

This section examines Lani and Leo's language practices with their peers and each other. First, with respect to the focal siblings' language practices with their peers, Laura confirmed in the mother interview that her children exclusively spoke English with their friends, as shown in Excerpt 70:

Excerpt 70: Laura (November 8, 2016)

Con amigos. Puro inglés. Solamente inglés con los primos si estamos en el parque. Pero en su totalidad hablan inglés. Entonces para ellos, es la manera en que se comunican y se entienden mucho mejor.

With Friends, only English. Only English with cousins if we're in the park. But in total, they speak English. So for them, it's the manner in which they communicate and better communicate.

Laura reported that both Lani and Leo spoke English with their friends. Furthermore, according to Laura, the siblings used English when playing with their cousins in the park. Laura posited that English served as the most convenient medium of communication, such that the siblings and their friends were able to communicate and understand one another much better, as compared to speaking Spanish. Interested in these language practices, I asked both Leo and Lani during the child interview what language/s they spoke with her friends. Leo answered "English", without going into further detail.

Lani, however, confirmed her English language practices and expressed the following in Excerpt 71:

Excerpt 71: Lani (November 16, 2016)

No, all my friends speak English. Some are Mexicans and things like that, but speak English. And some speak Spanish. But we speak mostly English because it's mostly English.

As observed in the above excerpt, Lani stated that she chose to speak only English with her friends. Furthermore, she divided her friends into two categories: (1) those who did not necessarily speak Spanish but resided in Spanish-speaking homes; and (2) those friends who were reported having knowledge of Spanish. Despite her linguistically diverse social network, Lani maintained that she only spoke English with her peers.

With respect to the siblings' language practices with each other, Laura again confirmed that Lani and Leo spoke English with one another. For example, in Excerpt 72, Laura described Leo's English language practices with his Lani:

Excerpt 72: Laura (November 8, 2016)

Cuando Leo era pequeñito, estuvo mucho tiempo conmigo entonces sí entendía bastante más español y hablaba español. Pero eso fue hace dos años con el español se le complicaba demasiado y por la escuela y por constante comunicación con su hermana en inglés, ya no quiere hablar.

When Leo was little, he was with me a lot of time so he did understand a lot more Spanish and spoke Spanish. But yeah, two years ago his Spanish started getting complicated and because of school and constant communication with his sister in English, now he doesn't want to speak.

In the above excerpt, Laura provided a diachronic perspective of Leo's language practices, suggesting that as a young child he spoke and understood only Spanish. As Leo

grew older and began attending school, Leo began speaking only English with his older sibling, Lani. Direct evidence of siblings' language practices with each other was captured in Excerpt 73 during which Lani, Leo, and their mother were playing hangman in the dining room. The interaction is a continuation of Excerpt 70 where Leo is asking that his sister cover her eyes. The siblings sat together at the center table where we first observe Lani asking her mother what she thought to be her favorite Christmas present:

Excerpt 73: Lani and Leo playing hangman with their mother (January 9, 2017)

Line:

- 1 Lani: What was your favorite Christmas present mamá?
- 2 Laura: Mm no sé
 (Mm I don't know)
- 3 Lani: Y el tuyo Leo? What was your favorite Christmas present? *(And yours Leo?)*
- 4 Laura: Cuenta tu regalo favorito Leo *(Tell your favorite gift Leo).*
- 5 Leo: Mm Osmo
- 6 Laura: ¿Cómo? ¿Te gustó? *(What? Did you like it?)*
- 7 Leo: Lani cover your eyes @@
- 8 Laura: Lani no va a contestar nada más si no contestas en español *(Lani is not going to respond at all if you do not answer in Spanish)*
- 9 Lani: Me gustaron la ropa que me dieron Santa y los slider shoes y Osmo
 (I like the clothes that Santa gave me and the slider shoes and Osmo).
- 10 Leo: I'm gonna sit right here so I don't see anything!

- 11 Laura: Leo (.) estamos jugando (.) Eso es trampa (*Leo. We're playing. That's cheating*).
- 12 Leo: Lani cover your eyes!
- 13 Laura: No (.) Lani no va a hacer nada (.) Lani no. Tú tienes que decirle que se cubra los ojos. (*No. Lani is not going to do anything. Lani, no. You don't have to say anything until he covers his eyes.*)
- 14 Leo: Lani (2s) cobre (.) los (.) osos. (*Lani. Cover the bears.*)
- 15 Lani: @@@ Osos! (*Bears!*)
- 16 Laura: ¡Leo! “Cu-bre-te los oj-os.” (*Leo. “Cover your eyes.”*)
- 17 Leo: Ok
- 18 Laura: ¡Leo!
- 19 Leo: Cúbrete (.) los (.) osos
(*Cover the bears*)
- 20 Laura: Okay (.) mejor Leo @@@ (*Okay, better Leo*)
- 21 Lani: @@@

The above excerpt reveals several language practices between Lani, Leo, and their mother. First, we observe in line 1 Lani opening the exchange in English when she asked her mother what her favorite Christmas present was. Laura responded in Spanish in line 2, which seemed to prompt Lani to begin asking her brother a question in Spanish but complete the request in English in line 3. In response to Lani's question in English, Laura intervened between the siblings, issuing the question once again to Leo in Spanish. Leo responded with only the name of the gift in line 5, prompting Laura to request more information in line 6. Instead of responding to his mother's request, however, Leo shifted his attention to Lani and issued a directive in English that Lani cover her eyes. Laura

intervened once more in line 8, threatening Leo that his sister will not answer until he responded in Spanish. Latching onto her mother's assertion, Lani addressed Leo in Spanish in line 11. Leo re-directed the conversation in English. Laura kept issuing commands to Leo, but he continued to address Lani in English in lines 10 and 12. However, in line 13, Laura gave Leo an ultimatum and then turned to Lani once more to command that she not intervene until Leo asked the question in Spanish. Leo responded "cobre los osos" (cover the bear), a mistake that was pronounced as if he said, "charge the bears" in line 14. Lani burst into laughter in line 15. In line 16, Laura once again was firm in requesting Leo give the command in Spanish, articulating the word slowly. Leo acknowledge receipt of his mother's directive, simply responding "okay". But Laura's firmness in line 18 served as a third request to Leo. In line 19, Leo attempted to respond in Spanish, again mistaking the pronunciation of "ojos" (eyes) for "osos" (bears). Laura accepted this response but laughed alongside Lani. Although Laura's strictness in attempting to reprimand Leo for resisting Spanish, Lani's laughter produced an affect that was more playful, rather than strict.

In sum, findings confirm Lani and Leo's preference for English. While Laura maintained that her children showed effort when speaking Spanish with family members, the siblings evidenced agency in choosing to speak English with adult family members. Furthermore, sibling differences were observed in the data, such that Lani demonstrated a curiosity in asking for help and confirming her understanding of Spanish. Leo, however, strongly adhered to English language practices and rejected his family members' ploys to encourage him to use Spanish, namely the grandmothers' faking monolingualism in Spanish. The conflict between Laura's and her husband's FLP also served as opportunities for the two siblings to exercise their preference for English language

practices. Lani and Leo only responded to their father in English, which provided him the opportunity to practice English and learn words from Lani. With respect the siblings' language practices with each other and their peers, findings confirm that they exclusively spoke English with each other. Interestingly, digital recording of sibling interactions in the home reveal that while the siblings tended to speak more English with each other, Leo resisted his mother's Spanish-centered FLP much more than his older sister.

In the next section, I address the sibling language practices in the González family. First, I examine the language/s used by Bryce and Melvin with their parents and extended family members. Then I describe the siblings' language practices members with their peer network, as well as with each other.

5.2.1.6 The home language practices of Bryce and Melvin (Family 6)

Family 6 in this study was comprised of older sibling, Bryce, younger sibling, Melvin, and their mother, Carolina. The focal siblings also had a younger baby brother who was eight months old during the time of data collection. According to the BIOS survey and mother interview, a typical day for Bryce and Melvin began at 6:30 a.m. The siblings prepared for school, ate breakfast, and often watched cartoons in either Spanish or English. At 7:30 a.m., Bryce would walk his younger brother, Melvin, to the bus stop. As the bus arrived, Melvin would then continue walking to the middle school. After school hours, the siblings would return home by 4:00 p.m. and work on homework or watch television in Spanish and English. Melvin tended to stay in the home with his mother and help care for his younger brother and dinner preparation. Bryce, however, often invited friends over to play videogames or play outside. The siblings would return home, eat dinner, and then prepare to go to bed at 9:00 p.m.

In the next two sections, I describe Bryce and Melvin's language practices in the home environment. First, I examine the siblings' communicative interactions when addressing family members and parents. Then I describe their language practices when interacting with each other and their peers.

5.2.1.6.1 Bryce's and Melvin's language practices with parents and family members

To begin, I asked the siblings' mother, Carolina, to describe the language/s used by Bryce and Melvin with family members. Carolina's response is shown in Excerpt 74:

Excerpt 74: Carolina (November 18, 2016)

Pues han hablado con mi mamá que vive en México y allá puro español. Ellos hablan, se entienden muy bien. Mi madre me ha dicho, "pensé que tus hijos iban a llegar hablando puro inglés". Y pues con sus primos también hablan español. Y en casa hablamos puro español. Acá trato de que todos los enseñemos. Por suerte mi hermana vive aquí conmigo, y cada vez que ellos hablan con ella y se equivocan, ella les dice, "pues no, así no se dice". Así como doble maestra (risa). Entonces como que ellos van aprendiendo.

Well they've spoken with my mom who lives in Mexico and there, they only speak Spanish. They speak and understand really well. My mom has told me, "I thought your kids would have started only speaking English". And with their cousins, they also speak Spanish. And in the home, we speak only Spanish. Here I try to teach them. Luckily my sister lives with me here and each time they speak with her and they make a mistake, she says to them, "No, you don't say it that way". So, like double instructor (laughter). And they go on learning.

As observed above, Carolina maintained that her children speak exclusively in Spanish with family members, both those in Otter Creek and Mexico. For instance, the siblings were reported to speak to their grandmother and cousins over Skype in Spanish. Their grandmother, Carolina's mother, lightheartedly joked that she was surprised that her grandchildren were able to speak Spanish given that they had grown up in the U.S. their entire lives. Despite the grandmother's expectations, Carolina indicated that both her children were able to fully understand speak Spanish. Furthermore, Carolina's sister

was also residing in the home during the time of data collection. Carolina asserted that her sister was an important figure within the home who regulated the quantity and quality of Spanish spoken. Since Spanish served as authoritative code within the González household, Bryce and Melvin only addressed their aunt in Spanish and received feedback in Spanish.

With respect to the siblings' language practices with their parents, Carolina reported that both Bryce and Melvin only spoke Spanish with their mother and father. During the mother interview, I asked Carolina the language/s the sibling used when in their presence. Carolina's response is shown in Excerpt 75:

Excerpt 75: Carolina (November 18, 2016)

Aquí la mayoría de las veces se habla español en casa porque yo no sé inglés. Entonces casi siempre mis hijos hablan español. Pero sí, les gusta mucho. Cuando vamos a comprar o vamos a comer o algo así, siempre piden la comida para mí o su papá en español. O cuando vamos a comer comida mexicana yo les digo que ordenen la comida en español. Siempre les digo que aprendan el español porque hay niños que he visto y a veces, les pregunta algo y no saben ni decir en español. Pero a mis niños parece que les gusta mucho, más a mi niño, el más pequeño. A él le gusta mucho. Le gusta traducir. Al niño mayor le da vergüenza.

Here, the majority of times they speak Spanish in the home because I don't know English. So almost always my kids speak Spanish. But yes, they like it a lot. When we go shopping or we go out to eat something, they always order food for me or for their father in Spanish. Or when we go eat Mexican food, I'll tell them to order their food in Spanish. I always tell them that they learn Spanish because there are children who I have seen and sometimes they'll ask them something and they don't know how to say it in Spanish. But my kids, it seems that they like it a lot, more so for my younger son. He likes Spanish a lot. He likes to translate. The older brother gets embarrassed.

We gather in the above excerpt that both Bryce and Melvin were oriented to speaking predominantly in Spanish with their mother and father. For Carolina, it was very important that her children continue to use their Spanish, albeit in the Spanish-

speaking community or restaurants where the children could assist their mother in ordering food. Interestingly, Carolina indicated that though both her children acted as language brokers with their parents, younger sibling, Melvin, enjoyed interpreting much more than his older sibling, Bryce. While Bryce was reported to feel embarrassed or shy when having to interpret for his parents, Melvin enjoyed translating and interpreting in Spanish.

Direct evidence of these sibling differences was captured in the child interview during which Melvin described himself as a language broker for both his mother and father. During the child interview, I asked Melvin if and how he helped his mother and father with English. Melvin's response is shown in Excerpt 76:

Excerpt 76: Melvin (December 13, 2016)

They ask me more. Because sometimes Bryce is at Mario's house or busy. I'm around my mom. She'll ask me for example to order a pizza. I'll call... With my dad... Like one time there was a mechanic. My dad's truck stopped in the middle of the highway, so I helped out. My brother wasn't there. I was telling my dad what he meant.

The interaction above attests to Carolina's statement above, which reveals Melvin's identity as a language broker within the family. In Excerpt 76, Melvin subsumed the adult role by which he spoke for his mother and father, namely because he spent more time with his parents than his older brother, Bryce. That is, his older brother tended to spend more time outside the home with school friends. With respect to the Melvin's language practices with his father, the younger sibling indicated that he also tended to spend more time with his father on the weekends. Recall that the siblings' father had separated from Carolina and was living in a NJ community located thirty-minutes from Otter Creek. Like Carolina, his father did not speak English, therefore

relying on Melvin to facilitate communication with other English-speaking adults. Thus, Melvin provided an anecdotal example of a time he subsumed the parental role when his father's truck broke down on a highway. Melvin spoke to the mechanic on behalf of his father since his older brother, Bryce, was not present.

Next, I further describe Bryce and Melvin's language practices, focusing on the language/s used with their school-aged peers, as well as with each other.

5.2.1.6.2 Bryce's and Melvin's language practices with each other and peers

This section describes Bryce and Melvin's language practices with their peers and each other. First, I describe the language/s used by Bryce and Melvin with their school-aged peers. Then I examine Bryce and Melvin's language practices with each other.

With respect to the siblings' language practices with friends, Bryce and Melvin shared many of the same friends who they met from social gatherings that they attended with their mother. Since the siblings and their mother had arrived in Otter Creek two years earlier from Los Angeles, California, they did not know many students as they began attending school. As the children began establishing deeper roots in the community, the siblings met many new friends at social gatherings that their mother, Carolina, organized with other families who had recently arrived from El Salvador. One of these family friends was named Mario, a newcomer student who attended Otter Creek Middle School and was introduced to Bryce and Melvin through a mutual friendship between his mother and Carolina. Since the siblings' friends were mostly newcomers from Spanish-speaking countries, I was interested to know the language/s used by Bryce and Melvin when interacting with their peers. During the mother interview, I asked Carolina about her children's language practices with friends, which she expressed in Excerpt 77:

Excerpt 77: Carolina (November 18, 2016)

Con sus amigos, usan más el español, dependiendo con qué amigo está. Por ejemplo, Bryce, con su mejor amigo, Mario, habla más español porque habla un poquito más español que inglés. Así que dependiendo del amigo, si el niño habla más inglés, a lo mejor hablan más inglés. Pero Mario habla más español, entonces ellos hablan más español también.

With their friends, they use more Spanish, depending on what friend they're with. For example, Bryce, with his best friend, Mario, he speaks only Spanish with him because he speaks a little more Spanish than English. So depending on the friend, if the friend speaks more English, then at best they speak English. But Mario speaks more Spanish, so they speak more Spanish.

In the above excerpt, Carolina explained that her children's language practices depended on whether their friends prefer to speak either in English or Spanish. Furthermore, Carolina maintained in the interview that Mario preferred speaking Spanish with Bryce. This practice was confirmed in both Bryce's and Melvin's interview, during which they described Mario as a figure who spoke mostly Spanish when he was over in the house. Mario addressed Bryce and Melvin in Spanish, as well as spoke to their mother, Carolina, in Spanish as well, which is further discussed below.

With respect to the siblings' practices with each other, Carolina expressed that her children speak both English and Spanish to one another. This was exemplified by Carolina, as observed in Excerpt 78:

Excerpt 78: Carolina (November 18, 2016)

Ahorita mismo, a veces se hablan en inglés. Yo siempre les digo que traten de hablar español en la casa porque como que en la escuela, ya hablan inglés. Entonces ahora hablan más español en casa.

Right now, sometimes they speak English with each other. I always tell them to try and speak Spanish in the home because like in school, they already speak English. So right now they speak more Spanish in the home.

The above excerpt conveyed the siblings' bilingual language practices with one another, indicating that her children sometimes spoke English with one another. Given that Bryce and Melvin's entire school day was in English, Carolina encouraged her children to speak more Spanish in the home. This encouragement prompted her children to speak more often in Spanish and engage in language practices that used both languages. Melvin confirmed this practice during the child interview, during which he described the languages he spoke with his older brother, Bryce. In Excerpt 79, Melvin described these practices, pointing to his preference for Spanish:

Excerpt 79: Melvin (December 13, 2016)

With my brother, I mostly speak English, but also Spanish. He speaks English or Spanish to me. But I know more Spanish. I like speaking Spanish.

Above, Melvin reiterated what his mother had described to me in her interview. That is, with his older brother, Bryce, he conversed in both languages, but using more English than Spanish. He further expressed that his brother also spoke in both languages to him. These data align with Carolina's interview, highlighting the dynamic bilingual language practices between the two siblings. They also raise an interesting point on sibling differences and who imagined themselves as the authority figure between Bryce and Melvin in using Spanish. For instance, consider Melvin's assertion above when he commented: "But I know more Spanish. I like speaking Spanish". In other words, Melvin considered himself the most proficient speaker of Spanish between the two siblings. Commenting on this behavior, Carolina explained that the two siblings often fought because of Melvin's attempts to undermine his older brother's authority in Spanish and

correct him when he made mistakes. Consider excerpt 80 during which Carolina further described Melvin's language practices with his brother:

Excerpt 80: Carolina (November 18, 2016)

A veces Melvin lo corrige mucho a Bryce. Luego Bryce dice alguna cosa y él le dice “no, así no es”, y ya la explica en inglés. Pero yo creo que Melvin sabe más todavía. Y luego por eso después así él lo corrige, “como que así no es, así no se dice”. Entonces sí, después al otro [Bryce] le da más coraje y dice pues “¡Tú crees que sabes más que yo!”. Y entonces así se pelean.

Sometimes Melvin correct Bryce. Later Bryce says something and he says, “you don’t say it that way,” and he’ll explain it in English. But I do think Melvin still knows more. And later for this reason, after he corrects him like, “you say that, or you say it like that.” So yeah, after the other [Bryce] gets the courage and says, “You think you know more than me!” And so they start fighting.

Above, Carolina indicated that Melvin, although being the youngest son, pronounced his authority as a more competent speaker of Spanish. That is, younger sibling, Melvin, often corrected his older brother's Spanish and explained to him what he said wrong. This behavior upset Melvin's older brother, Bryce, who felt antagonized from Melvin and his belief that he knew more Spanish between the two siblings. Whether it was true that Melvin spoke more than his older brother, Bryce's resistance to his younger brother's linguistic criticisms raises the question as to why these language conflicts arose. One explanation was the role of Spanish and its authoritative code within the family, suggesting that the siblings' association of Spanish resided with authority and the language used with adult family members. Thus, Melvin's linguistic criticisms of his brother's Spanish not only challenged Bryce's knowledge of Spanish, but also attempted to undermine his authority as the older sibling. Bryce became upset and argued with his brother, standing his ground as the most authoritative speaker of Spanish between the two siblings.

Collectively, Bryce and Melvin engaged in bilingual language practices, speaking to one another in both Spanish and English. Furthermore, the siblings were reported to speak in both languages with their friends, such as Mario who was a newcomer student from El Salvador. Attesting to the siblings' language practices, consider Excerpts 81 and 82 during which the Bryce and Melvin were playing with their friend, Mario. First, in Excerpt 81, Bryce, Melvin, and their friend, Mario, were in the home preparing to play with their new toy, a remote-control drone that they would fly in their backyard.

Excerpt 81: Bryce, Melvin, and Mario preparing to play with toy drone (November 18, 2016)

Line:

- 1 Bryce: ¡Melvin! Acuérdate (.) tenemos que poner (2s) Esto para que sirva.
- 2 Melvin: Bryce. It's supposed to be (.) O::oh (.) Wanna go play the drone outside? It's because I was downstairs.
- 3 Bryce: Yo me llevo esto. (*I'll carry this*)
- 4 Melvin: ¿Quieres ir, Mario? (*You want to go, Mario?*)
- 5 Bryce: ¿Sabe dónde está el otro control? (*Do you know where the other control is?*)
- 6 Mario: Oo::o ese (.) Hay una batería (*That one. There's a battery*).
- 7 Bryce: I know (.) but where is the other one for you?
- 8 Melvin: The control?
- 9 Bryce: Yeah (1s) The control
- 10 Melvin: The control? (.) I forgot where (.) it is.
- 11 Bryce: But for real?
- 12 Melvin: Rea::lly. I forgot where it is (.) Mario can you help me find the

control?

- 13 Bryce: I think it fell down. Is it there?
- 14 Melvin: I'm going to put my jacket on (.) Okay Bryce? So I can go outside and play with the drones (3s) Isn't the contro:l?
- 15 Bryce: I can't find it.
- 16 Melvin: How about I start this. This is start. [Drone beeps]. Wait. I won't turn this on yet. Then it's going to go flying all around the house!
- 17 Bryce: I can't find it!
- 18 Melvin: But where did you leave it?
- 19 Mario: ¿No chequeaste debajo de la cama? (*Did you not check under the bed?*)
- 20 Melvin: Oh (.) ¿Dónde está? ¿Dónde está? ¿Bryce? (.) ¡Encontré! (.) Estaba Allí. (*Where is it? Where is it? Bryce? I found it! It was there*).
- 21 Mario: Gracias, Melvin (*Thank you, Melvin*)
- 22 Bryce: Gracias (*Thank you*)

The above interaction exemplifies the siblings' dynamic language practices with their friend, Mario, as well as with each other. The interaction is suggestive of Mario's presence as a critical agent who prompted the siblings' use of Spanish, as well as the instantiation of English by Melvin and Bryce. In what follows, I analyze the interaction, which I divide in three parts.

The first part of occurs between lines 1 through 6. Bryce initiated the interaction in Spanish who addressed his younger brother, Melvin, in lines 1 and 3. Though Bryce's commands were issued in Spanish, Melvin answered back in English in line 2, asking his brother if he wanted to play with the drone outside. In line 4, however, Melvin turned to

his brother's friend, Mario, and asked in Spanish: "¿Quieres ir, Mario?". This capitulation to Spanish prompted Bryce and Melvin to issue two responses in lines 5 and 6, beginning the debate on the location of the drone controller and battery, which is the topic in the second part of the exchange.

The second part of the exchange occurred in lines 7 through 18, which were issued in entirely English between the focal siblings, Bryce and Melvin. First, in line 7, Bryce followed up on Mario's previous response, now addressing his younger brother, Melvin, in English. Melvin responded in English by requesting further clarification in line 8, which Bryce confirmed in line 9. In the remaining exchanges, lines 10 through 18, the siblings instantiated several requests for clarification and commands, continuing to address each other in English to resolve the case of the missing battery and controller. Mario intervened between the two siblings, which initiated the third part of the exchange.

The third and final part of this exchange occurs in lines 19 through 22. First, in line 19, Mario repeated Bryce's concern about the missing battery and controller in Spanish, asking younger brother, Melvin, if he had checked under the bed. Melvin responded to both Mario and Bryce in Spanish in line 20, claiming that he had found the controller and pointing to where it was located. In response, Mario and Bryce thanked Melvin in Spanish for finding the controller in lines 21 and 22. In sum, we observe Melvin's repeating of Bryce and Melvin's previous debate prompted the final exchanges to be completed in Spanish.

The second excerpt was drawn from the same recording that occurred outside the home. In Excerpt 82, we observe Bryce, Melvin, and Mario playing with two remote-controlled drone in the backyard, taking turns controlling the flying paths of the drone.

command to Melvin in line 3 to which the younger brother responded and shouted from across the yard in English in line 4. Next, turning to his friend, Mario, who was controlling the drone, Bryce issued a third command in Spanish in line 5, requesting that Mario did not turn off the drone. Mario, who asked for further clarification, responded in Spanish in line 6, to which Bryce never acknowledged. Instead, Bryce, who appeared to be speaking to himself in line 7, evaluated the drone's flying path and alternated between English and Spanish after several pauses. In Bryce's final interjection, the older sibling alternated between English and Spanish interjections, even using "Qué pende", a euphemistic abbreviation for the explicative "qué pendejo" in Spanish.

In sum, interviews with siblings and their mother confirmed that Bryce and Melvin almost exclusively spoke Spanish to family members, including their aunt who resided in their home, and their grandmother. However, while both siblings were reported to only speak Spanish with their parents, Carolina indicated that her youngest spoke Spanish more often, adopting a language broker identity. Melvin enjoyed interpreting and subsuming adult roles by which he spoke for his mother and father. Furthermore, findings showed that Bryce and Melvin engaged in dynamic bilingual practices with friends and each other. Bryce's best friend, Mario, recently immigrated to Otter Creek from El Salvador, therefore chose to speak mostly in Spanish. Furthermore, Bryce and Melvin code-switched quite comfortably in Spanish and English, which was an attribute of their ability to handle the two languages mirroring what Carolina indicated regarding the siblings' use of both languages. An interesting point raised by Carolina, however, was Melvin's position toward being the most competent Spanish speaker in the family. Not only he did he claim to know more Spanish than his brother, he also corrected and challenged his older brother's linguistic authority. This language behavior is reflective of

the siblings' FLP, notably how Spanish was an authoritative code within the family. Thus, Melvin's linguistic criticisms of his older brother's Spanish not only challenged Bryce's knowledge of Spanish, but also undermined Bryce's authority as the older sibling.

Collectively, this section has examined the linguistic environments and language practices of the six focal sibling pairs, highlighting children's everyday language activities and differences between older and younger siblings. Data from ethnographically informed observations, audio-recorded interactions between siblings, mothers, and their peers, as well as interview accounts with mothers and their children revealed each family's FLP as captured by children's routines and family linguistic environments. The next section explores siblings' language practices in the school environment.

5.2.2 Siblings' language practices in the school environment

The previous section examined siblings' language practices within the home domain by exploring the language/s used by focal siblings in the home with parents, extended family members, friends, and each other. In this section, I examine the language practices in the school environment by describing siblings' language practices in the school environment (i.e., classroom and cafeteria).

To understand siblings' language practices in the school domain, one must first have a sense of language education policies enacted at both Otter Creek Primary and Middle Schools, as well as the general linguistic environment. With respect to the primary school's language education policy, the school provided classrooms taught by ESL/bilingual certified instructors or monolingual English content-course teachers. Otter

Creek’s Parent Handbook from the 2015 to 2016 academic school year provides a formal definition of the language program:

Excerpt 83: The Primary School (2015-2016 Parent Handbook)

[Otter Creek Primary] offers a transitional bilingual program (Spanish and English) in all subjects required by law. The use of native language for instruction is influenced by the English language proficiency and the student’s academic level in their native language. However, the use of Spanish decreases throughout the grades as students gradually transition into all English. Students whose language proficiency is higher based on their ACCESS scores are placed in English monolingual classrooms with daily ESL instruction.

As shown above, the primary school created two tracks in which students could be placed: (1) classrooms that provided language support in the native-language (L1); and (2) monolingual English classrooms. The first track was taught by instructors who held both ESL and bilingual certifications³⁰ who only used Spanish when needed to support those students with lower English proficiencies as determined by their World-Class Instructional Design and Assessment (WIDA) - Access Placement Test. A total of four classrooms were taught by bilingual certified teachers, one classroom for each grade level (i.e., K-3). The second track included all other monolingual English classrooms taught by instructors who did not have knowledge of Spanish. Those Spanish-speaking students who showed higher English language proficiencies were enrolled in these classrooms, receiving English language services by either an ESL instructor or an ESL teacher who “pushed in” during regular intervals.

³⁰ As indicated by NJDOE, a teacher who is bilingual certified must have passed a department-approved test by ACTFL on oral and written proficiency in the target language (NJDOE, 2016).

With respect to the language curriculum at Otter Creek Middle School, the school offered a part-time bilingual program. Otter Creek's Parent Handbook from the 2015 to 2016 academic school year provides a formal definition of the language program:

Excerpt 84: The Middle School (2015-2016 Parent Handbook)

[Otter Creek Middle School] offers a part-time bilingual program. Those students are placed in English program classes, but receive daily instruction by a certified bilingual teacher in Mathematics and Language Arts. Science and Social Studies instruction are in English with language support provided by a bilingual instructional assistant. ELLs at the higher proficiency levels are taught all subject matter using English as the language of instruction.

The description above indicates that the middle school created two tracks for students: (1) classrooms that provided language support in the L1; and (2) monolingual English classrooms. Because most students had exited the ESL program at the primary level, only two classrooms taught by bilingual certified instructors were offered to students. Students enrolled in these bilingual classrooms were classified as newcomers, students who had recently arrived at the Otter Creek from a Spanish-speaking country. Since only two bilingual classes were offered, grades four, five and six, and grades seven and eight were combined and taught by one instructor. The second track included all other monolingual English classrooms in all subject matter taught by content instructors.

However, in Kinsella (2018), data on classroom language practices found that teachers in Otter Creek showed different interpretations of the program and even disagreements that the school actually held a bilingual program since classrooms were taught in predominantly English. For example, Otter Creek educators argued that bilingual teachers only used Spanish when needed, suggesting that English still served as the dominant language in classroom interactions, despite the classrooms being designated as bilingual. Kinsella (2018) documented that the dominant language for instruction and

communication between teachers and students were in English. Teachers greeted students in English. Students would engage with one another in English and question the teacher in only English. Thus, in the context of this study, siblings were exposed predominantly to English in the classroom setting, such that course materials and instruction was imparted in English.

In what follows, I examine each sibling's language practices in the school environment. For each family, I draw from interviews and ethnographically informed observations to describe the language/s used by siblings and their communicative interactions with their classmates and friends in the classroom and cafeteria environment.

5.2.2.1 The school language practices of Daniel and Mia (Family 1)

In Family 1, younger sibling, Mia, attended Otter Creek Primary, and older sibling, Daniel, attended the Middle School. I first describe the language practices of Mia and then Daniel in the school environment.

Mia was enrolled in the first-grade classroom and taught by a bilingual and ESL certified instructor. Mia's instructor, a local resident of Otter Creek and heritage speaker of Spanish descent, knew Spanish and English. During observations, Mia was never observed speaking Spanish in the classroom. Mia addressed her classmates and teacher in English, conducted all course assignments and English, and read only in English. The use of Spanish in the classroom, however, was only observed in several instances by Mia's instructor, primarily in the use of yes-no questions with English-translation equivalents. For instance, in one classroom observation, Mia's teacher was reading a book in English out loud to the students. When she completed the book, she asked the students: "*¿Les*

gustó el libro? Did you all like the book?”. Therefore, the presence of Spanish in the classroom was not robust, but rather took the form of simple translations.

In another classroom observation, Mia’s teacher called upon Mia to come forward so she could read a book with me in Spanish. I recorded this interaction on paper in my field notes, as shown in Excerpt 85:

Excerpt 85: Field notes from Mia’s classroom (November 11, 2016)

Line:

- 1: Teacher: Mia, you’re going to go read a story in Spanish. Vas a leer un cuento en español con el professor ¿Vale? (*okay?*)
- 2: Mia: Mhm

In this typical exchange of when Spanish is used in the classroom, Mia’s teacher called upon her during group work, using both English and Spanish. She first issued the command in English, telling Mia she was going to read a book in Spanish with me. Then, she supplied a word-by-word translation of what she said in Spanish, adding the marker “vale” (okay) to confirm Mia’s understanding. Mia acknowledged receipt of the item, simply responding with “mhm” to confirm her understanding. Although the teacher’s dual-translation when addressing Mia is an isolated incident, it is illustrative of the minimal use of Spanish in the classroom, which was generally relegated as a tool to ask yes-no questions.

In the cafeteria, however, Mia’s language practices took a different form. When Mia and her first-grade classmates entered and sat at their assigned table in the cafeteria, I observed a dynamic and spontaneous use of Spanish. These language practices generally took the form of playful language, such as singing, playing, and laughing with one

another. For example, in one such observation, I noted Mia sitting side-by-side with three girls, laughing and singing Christmas songs in both Spanish and English. Mia was speaking with her friend in English and then switched to Spanish, asking if her friend wanted to try the carrot sticks her mother had packed in her lunch box. The interaction was immediately recorded in my field notes, as shown in Excerpt 86:

Excerpt 86: Field notes from Mia and friend in cafeteria (November 15, 2016)

Line:

- 1 Mia: [Laughter] ¿Quieres probar?
Want to try?
- 2 Girl 1: ¡Sí! [Laughter]
Yes!
- 3 Mia: [Laughter]

Although an isolated example, the above excerpt is representative of Mia's bilingual language practices in the cafeteria. That is, Mia was predominantly observed speaking English with her classmates during lunch hours, but in several instances had issued short interrogative phrases in Spanish. We observe in the above excerpt how Mia broke from a conversation in English, asking her friend if she would like to try a carrot that her mother had packed in her lunch. Mia's friend responded, then laughed as she took the carrot stick. In these cases, Mia playfully spoke Spanish, making jokes and singing songs. Next, I turn to describe the language practices of Mia's older brother, Daniel, at the Middle School.

Older sibling, Daniel, attended the Middle School, and was enrolled in the fifth grade. Daniel had exited the ESL program by third grade and was currently enrolled in monolingual English classrooms taught by non-Spanish speaking instructors. During

classrooms observations, Daniel was exclusively observed using English in the classroom. Furthermore, rather than having one classroom teacher, as in the case of the primary school, Daniel rotated among four teachers in core classes: science, social science, math, and English language arts. That is, Daniel not attend classes with newcomer students who were enrolled in the bilingual and ESL classes, as in the case of the primary school. Daniel's language environment and concomitantly, his language practices, were homogenous and were expressed exclusively in English.

This preference for English in the classroom was also highlighted in Daniel's interview. I asked Daniel whether he or his friends spoke in Spanish in class. Daniel's response is shown in Excerpt 87:

Excerpt 87: Daniel (November 15, 2016)

Well my classmates and I won't talk in Spanish in class. We only talk in English.

In the above excerpt, Daniel confirmed that he did not speak Spanish with his classmates and only spoke in English. That is, we observe the dominance of English in older siblings' classrooms, such that Daniel reported that both he and his classmates rejected the notion of speaking Spanish during class time.

The dominance of English in Daniel's language practices was also attested in the cafeteria. During observations, Daniel entered the cafeteria and dropped his backpack at a table in the back corner where he and five of his friends had lunch. I joined Daniel over the course of observations and noticed that he and his friends seldom talked. Rather, they spent their time in the cafeteria playing videogames on their school laptops and sometimes competing with each other using online games. In the moments that Daniel and his friends were observed interacting, they exclusively spoke English. Daniel and his

friends exchanged tips on playing computer games, cheered each other on, and even issued exclamations (i.e., “Oh man!”, “Dang!” “Shoot!” “Yes!”). Thus, outside the classroom, Daniel was not observed engaging in a robust linguistic ecology, but rather one in which Daniel and his friends used the time in-between classes to play computer games.

In sum, child interviews and ethnographically informed observations in the classroom and school environment confirmed the dominance of English in Mia’s and Daniel’s language practices in the school environment. However, Mia’s language practices were less homogenous than those of her older brother, such that Spanish was observed in her first-grade classroom and in the cafeteria. Mia was enrolled in the bilingual/ESL classroom whose teacher issued several instances of Spanish. Furthermore, Mia’s female classmates were observed engaging in playful language, such as singing Christmas songs and telling jokes in Spanish. These language practices differed considerably from those expressed by Daniel, which were issued exclusively in English. Daniel confirmed that he and his classmates only spoke in English, which was confirmed in ethnographically informed observations in the classroom and cafeteria.

In the next section, I address the language practices of Brent and Kyle (Family 2). I first examine the language practices of Kyle, followed by his older brother, Brent, in the school environment.

5.2.2.2 The school language practices of Brent and Kyle (Family 2)

In Family 2, younger sibling, Kyle, attended Otter Creek Primary and older sibling, Brent, attended the Middle School. This section first reports on the language

practices of Kyle, followed by those language practices of Brent in the school environment.

With respect to Kyle's language practices, the younger sibling had exited the ESL program in the second grade and was enrolled in the third grade during the time of data collection. Kyle received all his coursework in English and spoke to his classmates in English. Furthermore, his teacher, a monolingual native-English speaker, taught students exclusively in English. During the observations, I paid special attention to the language used in Kyle's classroom, as well as the linguistic resources Kyle drew upon to interact with his classmates. The classroom was comprised of majority Hispanic students who had exited the ESL program by the second grade, as well as several African American students whose first language was English. However, despite the students' diverse language backgrounds, neither Kyle nor his classmates were observed speaking Spanish. That is, the general linguistic ecology of Kyle's classroom was one in which the medium of instruction and interaction between Kyle and his teacher and peers were in English. These language practices were confirmed during Kyle's interview during which he maintained his preference for English with his friends. Recall from section 5.2.1.2., Kyle claimed that he only would speak Spanish with his mother whereby Spanish operated as an authoritative code spoken only by members of the family.

These English language practices were also instantiated in the cafeteria. During observation, Kyle entered the cafeteria and sat at his assigned table with his classmates in his third-grade classroom. Both Kyle and his classmates only spoke in English with each other, discussing videogames, movies, and toys that the children were asking for Christmas. For instance, in observation, I sat across from Kyle at the cafeteria table and listened to Kyle and his classmates discuss a recent movie that they had seen over the

weekend. One of the classmates had not seen the movie yet, so Kyle took it upon himself to actively describe the content and plot. Kyle threw his hands in the air and made a loud whirring noise to imitate an explosion, describing in detail the scene of the movie. Although an isolated incident, this observation is an illustrative example of Kyle's preference for English in both the classroom and cafeteria, such that he was never observed speaking Spanish in the school environment. As will be further discussed in Chapter VII, triangulated data from the different protocols reveal that Kyle's opportunities to speak Spanish are limited to the home, implicating challenges in his maintenance of the heritage language. Next, I turn to examine the language practices of older sibling, Brent.

Older sibling, Brent, attended Otter Creek Middle School and was enrolled in the sixth grade during the time of data collection. Brent exited the ESL program by third grade and was currently enrolled in monolingual English classrooms taught by English-speaking instructors. Furthermore, in the moments Brent spoke with his classmates or teacher during classroom hours, the older sibling was only observed speaking English. That is, the classrooms were very teacher-centered, such that Samuel's teacher stood at the front of the room and worked through problem sets while students quietly followed along. In one such observation, I observed Brent sitting at his desk with a classmate, which was positioned toward the front of the room where the teacher led a lesson on dividing fractions. Brent followed along in his course workbook, quietly working through problem sets and checking his answers with the work his teacher had projected onto the screen. In one instance, Brent whispered in an almost inaudible voice and asked his table-mate for help in English on a problem. In response, the table-mate showed his workbook to Brent, but was quickly reprimanded by the teacher who reminded the students to

address their questions by raising their hands. That is, the teacher silenced Brent's interaction with his table-mate and imposed a strict policy that questions only be addressed to her, the instructor.

With respect to Brent's language practices in the cafeteria, however, the older sibling was observed speaking in both English and Spanish. For instance, during observations in the cafeteria, I saw Brent sitting at a corner table with three boys from his homeroom classroom. Eating lunch in silence, Brent and his classmates played videogames on their school laptops and made occasional interjections in English. Located behind Brent's table, however, were children enrolled in the bilingual classroom, all of whom were newcomer students who had recently arrived from a Spanish-speaking country, mostly Mexico. I observed that these students, four girls and one boy, spoke exclusively in Spanish, laughing and comfortably interjecting Spanish expletives in their discourse. Interestingly, though Brent was sitting at a table and spoke only English with his three male classmates, Brent would regularly turn around and talk to the newcomer students in only Spanish. As I continued to take notes, I asked Brent if he knew of the students at the table of students enrolled in the bilingual classroom. Brent indicated that he sat next to the newcomer table because he knew one of the students, Cristina, a family friend who was introduced to Brent by his mother, Amanda. Therefore, Cristina knew Brent from social gatherings and preferred speaking Spanish to Brent and her classmates who were also enrolled in the bilingual class.

In sum, observations in the classroom and cafeteria revealed the dominance of English in Kyle's and Brent's language practices in the school environment. Kyle was enrolled in a monolingual English classroom and was only observed speaking English with his teacher and classmates. Furthermore, Kyle's classmates, who also came from

Spanish-speaking households, were only observed speaking English in the classroom. These homogeneous language practices were also instantiated in the cafeteria. Both Kyle and his classmates spoke exclusively in English with each other, discussing videogames, movies, and toys that the children were asking for Christmas. However, Brent's language environment in the middle school differed considerably from that of Kyle's, notably in the diverse language practices instantiated in the cafeteria. That is, unlike in the classroom where classroom instruction was imparted in only English, observations in the cafeteria revealed Brent's bilingual language practices, such that he spoke English with his classmates and Spanish with Cristina, a family friend who was a newcomer student from Mexico. These observations point to marked differences between the siblings' language practices, as well as their language exposure in the school environment, which will be brought to the discussion chapter.

In the next section, I address the language practices of Benito and Oscar (Family 3). I first examine the language practices of younger sibling, Oscar, followed by his older brother, Benito, in the school environment.

5.2.2.3 The school language practices of Benito and Oscar (Family 3)

In Family 3, both younger sibling, Oscar, and older sibling, Benito, attended Otter Creek Primary. This section examines the siblings' language practices in the school environment by first describing the communicative behaviors by younger sibling, Oscar, and then older sibling, Benito.

First, with respect to Oscar's language practices, the younger sibling was enrolled in the second-grade classroom, which was taught by an ESL-certified instructor. Oscar received all his coursework in English and spoke English with his classmates and

instructor during classroom hours. Furthermore, Oscar's classmates were only observed engaging in Spanish. In one representative observation, I entered Oscar's classroom and noticed all the students working either at their desk seats or on the floor with another peer. I walked around the classroom listening to students as they completed a math worksheet, beginning from the front door and around the desks arranged in four-by-four groups, toward the right corner where the instructor's desk was located. Oscar was lying on the floor near the back of the room, supporting himself with his elbows as he completed math problems with his classmate, another Hispanic student. Oscar mumbled as he counted with his fingers and completed each problem, then voiced the solution in English as he wrote down the final answer. His classmate, who neither confirmed the response nor checked Oscar's work, wrote down the solution in his notebook.

However, despite this general trend toward Oscar's preference for English in the classroom, the younger sibling recounted that his own language practices had changed in primary school. Oscar reported that in previous years, many of his classmates spoke Spanish in the classroom, but moved toward speaking only English by the second grade:

Excerpt 88: Oscar (November 15, 2016)

In kindergarten, I didn't know how to speak [English] because first we didn't went to English specials. And first grade we went to specials and gym in all English. But some students spoke Spanish. In first grade, a new student came from Mexico and I had to talk to her in Spanish because she only speaks in Spanish. And then we learned how to speak in English and we speak in class now (sic).

In the above Excerpt, Oscar shared a brief childhood story to describe a point in time when he only knew Spanish. The younger sibling recounted his linguistic trajectory at Otter Creek Primary, reporting that he did not know English when he first enrolled. As he progressed through first grade onto second, however, he had become more proficient

in the language and preferred speaking the language to seemingly explain why he no longer spoke Spanish in the classroom. Interestingly, however, Oscar highlighted how one student who had recently arrived from Mexico was enrolled in his class the year before. This Spanish-speaking student, referred to as a newcomer in Otter Creek's language program, spoke Spanish in the classroom and served as an important figure who exposed Oscar to Spanish in previous years.

The dominance of Oscar's English language practices during school hours was also instantiated in the cafeteria. Oscar entered the cafeteria and sat at his assigned table with his second-grade classmates. During the observations, Oscar was never observed using Spanish and spoke exclusively to their classmates in English. Oscar and his classmates discussed movies, videogames, and toys that he and his classmates were asking for Christmas, as well as describing his extracurricular and weekend activities. All of these interactions were issued in English. Next, I turn to describe the language practices of Oscar's older brother, Benito, who was also enrolled at Otter Creek Primary School.

Older sibling, Benito, also attended the primary school and was enrolled in the third grade during the time of data collection. Benito had exited the ESL program in the first grade and was taught by an English-speaking instructor in a monolingual English classroom. For this reason, there were no newcomer students in his class, but rather students like himself who exited the ESL program and several English-speaking African-American students. In his classroom, neither Benito nor his classmates were observed speaking Spanish. For instance, during Benito's interview, I asked him if he ever spoke Spanish in his class. His response is shown in Excerpt 89:

Excerpt 89: Benito (November 12, 2016)

Kids in my class don't really speak a lot of Spanish. One of my friends, Paula, don't talk in Spanish at all. Really most of my friends just understands in Spanish (sic).

In this short response, Benito confirmed that his classmates held a strong preference for English language practices in the classroom. By commenting on the general linguistic ecology of his classroom, Benito claimed that his classmates did not Spanish and pointed his classmates' preference for English in the classroom setting. Interestingly, when compared with Oscar's excerpt above, it seems that students enrolled at the primary school gradually develop a preference for English. In monolingual English classrooms, such as Benito's, students spoke only English. These monolingual spaces highlight the diglossic conditions that Benito, among other older siblings had created, generating new regimes of language use that restricted opportunities to maintain Spanish.

The dominance of English in Benito's language practices was also attested in the cafeteria. During observations, Benito sat together with his third-grade classroom peers as a unified structure. Sitting across and beside Benito were four of his friends, all boys, who spoke exclusively to each other in English. Benito and his friends were observed discussing videogames, movies, and toys that they were asking for Christmas, making interjections in each other's speech and animatedly narrating stories in English. Collectively, the cafeteria observations not only confirm Benito's English language practices, but also point to the dominance of English among students in the older sibling's third-grade classroom.

In sum, child interviews and ethnographically informed observations in the classroom and cafeteria confirmed the dominance of English in Oscar's and Benito's language practices in the school environment. While Oscar reported speaking Spanish in

earlier grades, he claimed that his language practices progressed toward a preference for English. These language practices were confirmed in both classroom and cafeteria observations. With respect to Benito's, language practices, the older sibling was only observed speaking English in the classroom and cafeteria. These English language practices were confirmed in Benito's interview, notably in the older sibling's claim that his classmates did not speak Spanish.

In the next section, I address the language practices of Samuel and Kendra (Family 3). I first examine the language practices of younger sibling, Kendra, followed by her older brother, Samuel, in the school environment.

5.2.2.4 The school language practices of Samuel and Kendra (Family 4)

In Family 4, younger sibling, Kendra, attended Otter Creek Primary, and Samuel, attended Otter Creek Middle School. This section first reports on the language practices instantiated by Kendra and then Samuel in the school environment.

First, regarding Kendra's language practices, the younger sibling was enrolled in the ESL kindergarten classroom that was taught by a native speaker of English. During classroom observations, Kendra was only observed interacting with both her classmates and teacher in English. Kendra's coursework, books, and classroom activities were in English. For example, a typical classroom began in which Kendra and her classmates were instructed to sit quietly on the carpeted area toward the back wall of the classroom. The teacher played songs and projected videos onto the screen in front of students, where they sang along in English. After, the teacher provided a short lesson and the students would break into their work areas around the desks where they worked either individually or with a partner. However, despite the dominance of English in Kendra's language

practices, one must consider the linguistic ecology of Kendra's classroom as part of her general language environment. That is, although Kendra was not observed speaking Spanish during classroom observations, her classmates were observed speaking in Spanish to one another in several instances. These students were observed making several exclamatory remarks to each other, such as "¡Sí!" (yes), "¡Aquí!" (here), and "¡Ven aquí!" (come here). Thus, while Kendra did not employ Spanish during school observations, these instantiations of Spanish in the classroom were part of Kendra's classroom environment.

With regard to Kendra's language practices in the cafeteria, findings from ethnographically informed observations also revealed the dominance of English in the younger sibling's language preferences outside the classroom. That is, Kendra created monolingual spaces in the cafeteria as well, contributing to her own diglossic conditions in which she only was observed speaking English in the school environment. At 11:00 a.m., the first lunch hour, Kendra's kindergarten class entered together and sat at their assigned tables. During the course of observations, I visited the table where Kendra was sitting and observed the general tendency among Kendra and her classmates who only used English. However, like in the classroom, despite Kendra's preference for English, several of Kendra's classmates were observed talking to each other in Spanish in several instances, mostly in the form of playful language, songs, and rhymes. That is, these children were observed singing Christmas songs, exchanging compliments, and making exclamations in Spanish. Thus, these observations not only point to the Kendra's preference for English, but also reveal the complex sociolinguistic ecology of the younger sibling's classroom and cafeteria environment in which she was exposed on a

daily basis. Next, I turn to describe the language practices of older brother, Samuel, at the middle school.

Older sibling, Samuel, attended Otter Creek Middle School and was in the seventh grade during the time of data collection. Samuel had exited the ESL program in third grade, so was currently enrolled in a monolingual English classroom taught by non-Spanish speaking instructors. For these reasons, Samuel was only observed using English in the classroom, such that his coursework, books, and interactions with teachers and peers were instantiated in English. Furthermore, it became apparent during observations that Samuel's classmates were also only observed speaking English. One observation entailed the nature of middle school classrooms, namely the division between students enrolled in ESL and monolingual English content courses. Samuel rotated among his four core classes (i.e., science, social science, math, and English language arts) and was only enrolled with non-ESL students. That is, Samuel did not attend classes with newcomer students who were enrolled in the bilingual and ESL classes, as in the case of his sister, Kendra, at the Primary School. Thus, Samuel's language practices in his classrooms were homogenous and were expressed exclusively in English.

In the cafeteria, however, Samuel's language practices differed from those observed in the classroom. Samuel entered the cafeteria the same hour as his cousin, Vanessa, whom I recognized from the home visits. He and his cousin, along with their friends, sat together at the cafeteria table with their school laptops, playing videogames and keeping to themselves. While English was observed as the dominant language of communication, the use of Spanish was used in several instances between Samuel and Vanessa. For instance, consider Excerpt 90 during which Samuel and his cousin,

Vanessa, were eating lunch. Vanessa had bought a snack in the cafeteria line and Samuel was asking to try, which I immediately documented in my field notes:

Excerpt 90: Field notes from Samuel and his cousin Vanessa in the cafeteria
(December 3, 2016)

Line:

- 1 Samuel: Give me a Cheeto!
- 2 Vanessa: No man
- 3 Samuel: Give me one!
- 4 Vanessa: No, buy your own.
- 5 Samuel: Dame uno (*Give me one*). Come on.

The above interaction is illustrative of Samuel's bilingual language practices in the cafeteria. Above, Samuel requested his cousin, Vanessa, give him a Cheeto, issuing the command in English. And although his cousin responded in English, rejecting Samuel's request, he countered the rejection twice in English before capitulating into Spanish. That is, Vanessa's final rejection to give Samuel a Cheeto prompted Samuel to turn to Spanish. Collectively, this interaction and Samuel's default to Spanish depicts the heritage language as an authoritative code whereby Samuel issued the command to his cousin to assume a greater emotional impact.

In sum, observations in the classroom and cafeteria confirmed the dominance of English in Kendra's and Samuel's language practices in the school environment. Kendra was only observed speaking English with her teacher and classmates, such that her coursework, language instruction, and teacher-student interactions were instantiated in English. However, observations in the classroom and cafeteria revealed instances in

which other students employed Spanish pointing to the diverse language repertoires among Kendra's classmates and the general linguistic ecology of the kindergarten classroom. With respect to Samuel, the older sibling's language environment in the middle school differed considerably from Kendra, notably in the homogenous language practices in the classroom. However, unlike Kendra, Samuel was observed in the cafeteria issuing several commands and words in Spanish with his cousin, Vanessa.

In the next section, I address the language practices Lani and Leo (Family 5). I first examine the language practices of younger sibling, Leo, followed by his older brother, Benito, in the school environment.

5.2.2.5 The school language practices of Lani and Leo (Family 5)

In Family 5, younger sibling, Leo, attended Otter Creek Primary, and older sibling, Lani, attended the Middle School. In what follows, I first describe the language practices of Leo and then Daniel in the school domain.

Leo was enrolled in the ESL kindergarten classroom, which was taught in monolingual English by a native speaker. That is, both Leo's instructor and teacher aid did not know or speak Spanish in the classroom, and classroom instruction was only imparted in English. Furthermore, during observations, Leo was only observed interacting with his classmates and teacher in English. In one such instance, I sat at a corner desk as Leo's teacher requested all the students to sit cross-legged on the carpeted area at the front of the classroom. Leo and his peers whom were all Latinos and resided in Spanish-speaking households, sat on the ground and faced their teacher who was holding a book in her hand. The teacher pointed to the front cover of the book and asked the students what the name of the animal was called. Leo's hand energetically shot up and

exclaimed, “It’s a caterpillar!”. The teacher took her seat and then read the book title to the class, *The Very Hungry Caterpillar*, a children’s book that portrays a caterpillar that eats its way through a variety of foods and fruits. The classroom aid, who was sitting at front computer, projected a YouTube video of the story that depicted all of the foods and fruits the caterpillar ate. Leo and his classmates began listing the items shown on the screen. The students started shouting, “Apple! Pear! Cake! Ice Cream!” As the example shows, Leo was fully immersed in a monolingual environment and was only observed speaking English in the classroom.

In the cafeteria, findings from ethnographically informed observations also revealed the dominance of English in the younger sibling’s language practices. At 11:00 a.m., all kindergarten classes and students entered together and sat at their assigned tables according to classroom teacher. I visited Leo’s table and observed the general tendency among students who only used English. That is, Leo, like in the classroom, spoke only English with his friends. The younger sibling sat with his friends and engaged in playful talk, talked about Christmas, and even sang songs and rhymes in English. As I sat observing Leo, however, in several instances I observed his female classmates at the opposite end of the table talking to each other in Spanish. These girls mostly talked in the form of playful language, laughing and singing holiday songs, such as *Feliz Navidad* (Merry Christmas). Thus, while Leo did not employ Spanish during school observations, these instantiations of Spanish in the cafeteria were part of Leo’s classroom environment. Next, I turn to describe the language practices of older sibling, Lani, at the middle school.

With respect to Lani’s language practices at the middle school, the older sibling was enrolled in the fifth grade and observed using only English in the classroom. That is, Lani had exited the ESL program in first grade and was currently enrolled in monolingual

mainstream content courses taught by non-Spanish speaking instructors. Lani rotated among four teachers for her core classes: science, social science, math, and English language arts. Lani was not enrolled with newcomer students and was only exposed to monolingual English language practices in the classroom. Thus, Lani's language practices took on the dimension of diglossia in which she created monolingual English spaces for herself in the school environment, contributing to fewer opportunities to maintaining Spanish.

In the cafeteria, Lani was only observed speaking English with her friends, as well. During the observations, I sat with Lani and four of her female classmates in the cafeteria during which they had lunch together. These friends were white non-Spanish-speaking students in her grade, such that they did not come from a Hispanic background and resided in homes in which only English was spoken. However, although Lani's mother was from Mexico and father from Costa Rica, Lani shared many of the same physical traits as her friends; she was tall, with light brown hair, fair skin, and freckles. And looking across the entire cafeteria, it was apparent that Lani and her friends made up the only table where the white kids were sitting. In one observation, for instance, I sat with Lani and her friends as they discussed their upcoming social science assignment, a poster board project on NJ citizenship. Each of the girls took turns describing their work, such as their emotional attachment to the NJ shoreline, New York City tourism, and NJ history. This observation confirms what Lani had indicated in her interview, notably reporting that she did not have Spanish-speaking friends, but also revealed that Lani achieved intersubjectivity through these NJ cultural artifacts through her English-speaking peer network. Thus, out of all the children in this study, Lani was the only child whose social network was formed entirely by non-Hispanic students.

In sum, findings from interviews and ethnographically informed observations in the classroom and cafeteria confirmed the dominance of English in Leo's and Lani's language practices in the school environment. Leo was only observed speaking English with his teacher and classmates, such that his coursework, language instruction, and teacher-student interactions were instantiated in English. However, observations in the cafeteria revealed instances in which other students employed Spanish pointing to the diverse language repertoires among Leo's classmates and the general linguistic ecology of the kindergarten classroom.

With respect to Lani's, language practices, the older sibling was only observed speaking English in the school environment. Furthermore, out of all the siblings in this study, Lani was the only child whose social network was formed entirely by non-Hispanic students in the cafeteria. Cafeteria observations confirmed what Lani had indicated in her interview, notably not having Spanish-speaking friends, but also revealed that Lani achieved intersubjectivity through her English-speaking peer network.

In the next section, I address the language practices of Bryce and Melvin (Family 6). I first examine the language practices of younger sibling, Melvin, followed by his older brother, Bryce, in the school environment.

5.2.2.6 The school language practices of Bryce and Melvin (Family 6)

In Family 6, younger sibling, Melvin, attended Otter Creek Primary, and older sibling, Bryce, attended the Middle School. This section first describes Melvin's language practices, followed by those language practices by older brother, Bryce.

With respect to Melvin's language practices, the younger sibling was enrolled in the third-grade ESL classroom and taught by a native-English speaking instructor. During

classroom observations, I paid special attention to the languages used in his class since Melvin and his classmates received their coursework exclusively in English. Throughout the duration of classroom observations, I did not attest to Melvin speaking Spanish with his classmates or other students using Spanish. However, despite Melvin's English language practices in the classroom, Melvin reported during the child interview that he sometimes spoke Spanish to his classmates who recently arrived from Spanish-speaking countries:

Excerpt 92: Melvin (December 13, 2016)

All the time. They'll be like, 'What does 'times' mean?'. And I'll help them in class and in Spanish.

In the above excerpt, Melvin claimed that his classmates have asked him for linguistic assistance, evoking the use of Spanish in the classroom. This language practice, according to Antia (2017), is referred to as *siding*, characterized by students' momentary disengagement from ongoing teacher-direct activity while using language to shape understanding. The very nature of *siding* reflects Otter Creek Primary's highly complex sociolinguistic environment and diverse students who attended the school. That is, English continued to be the preferred language in the classroom, meanwhile newcomer students initiated peer interaction in Spanish with Melvin to make meaning from teacher discourse. Melvin attended classes side-by-side with newcomer students who were born in Spanish-speaking countries, notably Mexico. Thus, the excerpt suggests that newcomer students played an important role in shaping the younger sibling's language practices in the classroom, contributing to his maintenance of Spanish. The excerpt also points to Melvin's departure from the diglossic conditions evidenced by other siblings, by which the younger sibling created multilingual spaces in the classroom.

These dynamic language practices were also reported in Melvin's interview and instantiated in the cafeteria. For instance, in his interview, Melvin confirmed that he spoke English and Spanish in the cafeteria. These language practices were corroborated during observations in which Melvin was observed in several instances speaking Spanish, mostly to his female classmates. Melvin sang Christmas songs, engaged in playful language, and made jokes with his friends in both Spanish and English. And while it was impossible to discern which students in the cafeteria were newcomer students from Spanish-speaking countries from those students were born in Otter Creek, NJ, the observation of Spanish during lunch hours suggests that those students who generally preferred and harbored positive attitudes toward speaking Spanish played an important role in the younger siblings' language practices. These findings will be further discussed in Chapter VII, the discussion. Next, I turn to describe the language practices of Mia's older brother, Bryce, at the Middle School.

Older sibling, Bryce, attended Otter Creek Middle School and was enrolled in the sixth grade during the time of data collection. Bryce had exited the ESL program in the fifth grade and was currently enrolled in monolingual English classrooms taught by English-speaking instructors. Like his classmates, Bryce rotated between math, science, social studies, and English language arts each day. For example, in one observation, Bryce was listening to his math teacher give a lesson on division. Bryce's desk was positioned toward the front of the room where the teacher projected a content or homework onto the screen. In the observed classroom, Bryce and his classmates followed along in their course workbook, quietly checking their answers and only raising their hands to ask the teacher questions when necessary. In one instance, one of Bryce's classmates was observed discussing work with his desk-partner. The teacher quickly

silenced this conversation, reprimanding the children for speaking without raising their hands.

All told, English was the exclusive language used in the classroom, insofar that neither Bryce nor his teachers were observed employing Spanish. In other words, the classroom was observed as taking on diglossic conditions in which Bryce spoke only English. Direct evidence of these language practices among Bryce and his classmates was captured in his interview. I asked Bryce whether he ever spoke Spanish in the classroom, to which he responded in Excerpt 93:

Excerpt 93: Bryce (December 15, 2016)

No. Like my friends wouldn't want to talk Spanish in class. They tell me because they don't like to speak Spanish a lot. Or they don't know how to talk Spanish anymore. Like my friend Emily.

Bryce confirms in the above excerpt that he and his friends spoke in English use of English in the classrooms. More specifically, Bryce described how his classmates either disliked Spanish or considered themselves unable to speak the language anymore, such as his friend, Emily, who claimed that she did not know how to speak Spanish anymore. Thus, Bryce's language practices in the classroom were characterized as monolingual English.

In the cafeteria, however, Bryce was observed speaking both English and Spanish. During observations, Bryce entered the cafeteria with his classmates and sat down at a table near the back corner of the cafeteria. Joining Bryce were his friends, Edward, Juan, Luisa, and, Sofia. A rapid and dynamic combination of Spanish and English were in constant use by Bryce and his friends. Observational data revealed how the interactions of Bryce's friends centered around Luisa, a Mexican American student born Otter Creek, who was depicted as the assertive leader of the group. Luisa was a bombastic figure who

- 2 Bryce: ¡Ya! ¡Ya! ¡Ayer! ¿No te acuerdas? (*Yeah! yeah! Yesterday! You don't remember?*)
- 3 Luisa: ¿Qué dije? Oh my god [laughter] What did I say? (*What did I say?*)

The above interaction is illustrative of Bryce's bilingual language practices, many of which were initiated by his friend, Luisa, who played a major role in the instantiation of Spanish in the cafeteria. More specifically, the observation points to the prevalence of Spanish among Bryce's social network. For instance, we observe Luisa opening the argument in English after which she immediately proceeded in Spanish. Bryce responded in Spanish and even challenged Luisa in Spanish in a lighthearted playful language.

In sum, child interviews and ethnographically informed observations in the school revealed the prevalence of Spanish in both Melvin's and Bryce's linguistic environments. For instance, while Melvin was enrolled in a monolingual English classroom, he reported speaking Spanish to his classmates to assist them with classwork. Melvin was also observed engaging in bilingual practices in the cafeteria with his close friends, whom were all female, during which they sang songs, made jokes, and engaged in playful language in both English and Spanish. His older sibling, Bryce, also engaged in similar language practices in the school environment but was exclusively observed speaking English in the classroom. In the cafeteria, however, multiple instances of Spanish were observed among Bryce and his friends, many of which adopted a very playful and flirtatious tone. Like younger sibling Melvin, who employed Spanish with newcomer students, Bryce's social network, specifically his friend Luisa, played a very important role in evoking the use of Spanish and engaging a dynamic use of both English and Spanish during the cafeteria hours.

5.3. Summary of the chapter

In sum, this chapter has brought together findings from mother and child interviews, ethnographically informed observations, and audio-recorded interactions to address research questions five and six. More specifically, the goal of this chapter was to uncover the nature of children's language ideologies and their reported and observed language practices in both the home and school domain.

First, with respect to siblings' language ideologies, the analysis of child interviews uncovered two salient themes. These themes were:

- Language ideologies in support of bilingualism
- Negative language ideologies.

Regarding children's language ideologies in support of bilingualism, most siblings viewed speaking Spanish and English as a positive attribute. More specifically, the children expressed a sense of honor to be able to use both their languages in the Otter Creek community. Interview findings showed that the children's language ideologies in support of bilingualism stemmed from their ability to speak both language and a sense of communal responsibility in being a language broker within the community. Furthermore, siblings' language ideologies in support of bilingualism concerned their own ethnolinguistic assumptions and the discursive link between their language preferences and family's national origins. That is, these children tended to index their ethnolinguistic identities with the languages they heard and spoke at home, such that they attempted to establish intersubjectivity through Spanish-speaking family members and friends.

With respect to siblings' negative language ideologies, findings revealed that siblings constructed themselves in terms that reflected common conceptualizations of bilingualism and the monoglossic standards imposed by the school curriculum. That is,

despite siblings showing respect to the heritage language, they also acknowledged other negative language ideologies that associated bilingualism with feelings of frustration, confusions, and exhaustion. Siblings described how difficult it was to speak Spanish and a shame for not speaking the heritage language better. These linguistic insecurities were most pronounced among Kyle and Leo, who were the only children in the study to view bilingualism and their ability to speak Spanish and English in a negative light. In addition to feelings of shame, the negative language ideologies uncovered in child interviews also took the form of embarrassment. Several siblings reported that Otter Creek students enrolled in the bilingual classrooms with Spanish-language support were teased because they required language support. Bilingualism was equated only in relation to student's purported limited English proficiencies. These findings point to the intersection between siblings' orientations toward the heritage language and their agency, which overall provide comparatively unequal amount of exposure to – and use of - Spanish. These data will be further discussed in Chapter VII, which triangulates the study's findings from each of the protocols to unpack the role of sibling order in language use patterns, practices, and ideologies.

Sibling language practices in the home and school environment were also presented. These data were drawn from mother and child interviews, ethnographically informed observations, and audio-recorded interactions. First, with respect to the language practices uncovered in the home environment, each family was described in detail according to the siblings' daily routines and everyday communicative practices with parents, extended family members, friends, and each other. An abundance of observations and diverse set of language practices were observed and reported in the home environment. For example, in Families 1 and 6, siblings were reported adhering to

a strict Spanish-centered FLP. These siblings, Daniel and Mia (Family 1), and Bryce and Melvin (Family 6), were reported to only speak Spanish with their parents. However, although Daniel and Mia lived an environment in which they only addressed their mother and father in Spanish, they did not socialize with each other or with friends in Spanish, like Bryce and Melvin.

In Families 2, 3, and 4, the families attempted to maintain a Spanish-centered FLP, but variances were found between older and younger siblings in the home, notably in their reported and observed language practices. For example, in Family 2, older sibling, Brent, spoke only Spanish with his mother, but his younger sibling, Kyle, preferred English. Likewise, Kyle used his older brother as a linguistic resource to achieve intelligibility and communicative competence in the family. That is, older brother, Brent, not only served as a language broker for his mother, but also for Kyle, too. Similarly, these English language practices were instantiated in Family 3. While both siblings expressed speaking Spanish in the home, younger sibling, Oscar, was reported to show more linguistic obstacles and require assistance when talking with extended family members. His older brother, Benito, however, showed an interest in reading and speaking in Spanish. Lastly, in Family 4, older sibling, Samuel, and his younger sister, Kendra, were shown to use mostly English in the home, but were observed interjecting words and saying short expressions in Spanish. Furthermore, the siblings lived with their uncle and cousin, Daniel, who did not speak Spanish.

Siblings in Family 5 showed a unique set of language practices. Both older sibling, Lani, and younger sibling, Leo, were reported to have a longstanding preference for English, which they evidenced in interview data and audio-recorded interactions with their mother. Not only did the siblings resist speaking Spanish in the home, they also

showed tremendous agency in only responding in English. Triangulating findings, the siblings' resistance to Spanish was directly correlated to not only their orientations and ideological stances toward the home language, but also the comparatively unequal exposure each sibling has had. That is, despite siblings' preference for English, differences were reported between the Lani and her younger brother, Leo. Leo encountered many linguistic obstacles and experienced difficulties when speaking Spanish. The siblings only spoke English with their father, however, who welcomed the opportunity to practice the language. These findings will be in Chapter VII, the discussion.

Next, with respect to siblings' language practices in the school environment, each sibling was described in detail according to the language of instruction and communicative interactions with classmates and teachers in the classroom and cafeteria. Among all families, siblings employed English in the classroom, such that course materials, student-teacher discourse, and peer interactions were instantiated in English. The classroom, therefore, was characterized as having diglossic conditions in which English was support over Spanish. However, several variances were found in the school environment in which siblings departed from these diglossic conditions. For instance, in Families 1 and 6, younger siblings, Mia and Melvin, spoke Spanish with their classmates. Mia was also the only sibling enrolled in a bilingual classroom. Although Mia was never observed speaking Spanish in the classroom, she and her classmates were observed singing Christmas songs and telling jokes in Spanish in the cafeteria.

In Families 2, 4 and 6, older siblings were observed speaking Spanish in only the cafeteria, departing from the diglossic conditions that were observed in classroom. In other words, these older siblings created multilingual spaces in the cafeteria, speaking

both Spanish and English as a tool of communication with their peers. For instance, in Family 2, the language practices of older sibling, Brent, differed considerably from those of Kyle's, notably in his diverse language practices instantiated in the cafeteria. In several occasions, Brent was observed speaking Spanish a family friend who was a newcomer student from Mexico. Similarly, in Family 4, only Samuel was observed making short interjections in Spanish in the cafeteria with his cousin, Vanessa. Kendra, however, was only observed speaking English. Lastly, in Family 6, both older sibling, Bryce, and his younger brother, Melvin, were observed speaking Spanish. Melvin reported speaking Spanish to his classmates to assist them with classwork. Melvin was also observed engaging in bilingual practices in the cafeteria with his close friends, whom were all female, during which they sang songs, made jokes, and engaged in playful language in both English and Spanish. His older brother, Bryce, was also observed speaking Spanish, but only in the cafeteria. Multiple instances of Spanish were observed among Bryce and his friends, many of which adopted a very playful and flirtatious tone.

Lastly, in Families 3 and 5, neither the older nor younger sibling were observed speaking Spanish in the school domain. First, in Family 3, both siblings, Benito and Oscar, reported speaking only English in the classroom and cafeteria. Younger sibling, Oscar, also confirmed in his interview that his language preferences have gradually progressed toward English. Similarly, in Family 5, younger brother, Leo, was reported or observed speaking Spanish, despite several of his classmates speaking Spanish during cafeteria hours. Older sibling, Lani, was also only observed speaking English in the school environment. Out all the children in this study, Lani was the only sibling whose social network was formed entirely by non-Hispanic students in the cafeteria.

Collectively, this multilayered analysis has accounted for the entirety of siblings' sociolinguistic environment in attempt to uncover the ideological contortions and complex language practices of sibling pairs in the school and home domains. Data from mother and child interviews, ethnographically informed observations, and audio-recorded interactions have provided an on the ground and nuanced understanding of the communicative repertoires of the focal siblings, which triangulated findings from multiple points of view.

In the next chapter, I provide a summary of the findings in Chapters IV and V.

Chapter VI: Summary

6.1. Introduction

The main motivation for this study was to uncover the language use patterns, practices, and ideologies among second-generation Latino sibling pairs. More specifically, the research questions guiding this study were:

1. How do children's reported age of initial exposure to English and their reported linguistic proficiencies in Spanish compare between older and younger siblings?
2. How do older and younger siblings compare in their knowledge of expressive vocabulary and morphosyntax in Spanish and English?
3. What are siblings' Spanish-language use patterns as captured in their oral narratives? More specifically:
 - What is the distribution of verbal TMA in older and younger siblings' Spanish narratives?
 - What relationship exists between sibling order and use of Spanish linguistic-features (e.g., gender article agreement) in oral narratives in Spanish?
 - What relationship exists between sibling order and use of English lexical insertions in children's oral narratives in Spanish?
4. What is the nature of siblings' language ideologies?
5. What are the siblings' observed and reported language practices within the home and school domain?

The five research questions addressed in the chapters have been examined in a wealth of data across the six selected sibling pairs, validating findings from multiple points of view to unpack the role of sibling order in children's language use patterns,

practices, and ideologies. The guiding theme has been the search for answers that account for (1) the internal factors of siblings' language use patterns (e.g., Spanish linguistic features in narratives); and (2) the external factors related to the entirety of siblings' sociolinguistic environment. These factors help explain children's ideologies toward – and the amount of exposure to and use of - English and Spanish in the home and school domains. Findings from the study's protocols revealed that the focal siblings of this study were growing up in highly complex sociolinguistic environment in which they evidenced differences in their Spanish language use patterns, alongside their knowledge of English and Spanish. In what follows, I answer each of the five research questions, describing the major findings uncovered from each of the protocols.

6.2.1 The first research question

With respect the first research question, which examined children's reported age of initial exposure to English and their reported linguistic proficiencies in Spanish compare between older and younger siblings, the language background questionnaire and BIOS yielded or substantiate the general pattern reported by mothers in the BIOS survey which suggested that younger sibling received English exposure at a much earlier age than their older counterparts. That is, younger siblings as a whole were exposed to English at a much earlier age than their older brother or sister. Furthermore, in several families, the reported age at which the oldest sibling was first exposed to English, occurred two years before their younger siblings' AoEE. Thus, a significant difference was found between older siblings' AoEE. That is, older siblings were reported to only receive exposure in Spanish before attending pre-K and Kindergarten, while younger siblings began hearing English before school enrollment.

Furthermore, we observed the general pattern reported by mothers in the language background questionnaire that older siblings were more proficient speaking and comprehending Spanish. That is, the majority of older siblings were ranked higher than their younger siblings in their linguistic proficiencies.

6.2.2 The second research question

With respect to the second research question, which addressed how older and younger siblings compared in their knowledge of expressive vocabulary and morphosyntax in Spanish and English, the EOWPVT-4: SBE and BESA/BESA-ME morphosyntax subtest were employed. Results from the EOWPVT-4: SBE assessments showed no significant relationship between older and younger siblings' expressive vocabulary in neither Spanish nor English. To further dissect these findings, however, results of an independent t-test confirmed that children were able to express more words in English than in Spanish regardless of sibling order. With regard to the results from the BESA/BESA-ME morphosyntax subtests in Spanish and English, findings yielded similar results to those related to the expressive vocabulary assessment. That is, regardless of sibling order, results of an independent t-test confirmed that all children collectively showed greater morphosyntax knowledge in English than in Spanish. Therefore, no relationship was found between sibling order and children's knowledge of expressive vocabulary and morphosyntax in Spanish and English. Rather, the analyses revealed that regardless of sibling order, all children collectively showed greater expressive vocabulary and morphosyntax knowledge in English than in Spanish. In other words, these protocols attest to children's expressive vocabulary and morphosyntax

knowledge in each of their languages, supporting their mothers' claim that siblings express more knowledge in English than in Spanish.

6.2.3 The third research question

Next, to answer the third research question, data from children's elicited oral narratives were used to analyze siblings' language use patterns. More specifically, the findings provided a more comprehensive picture of (1) siblings' distribution of verbal TMA in children's Spanish narratives; (2) use of Spanish-linguistic features (e.g., gender article agreement); and (3) English lexical insertions in Spanish oral narratives. To respond to the first sub-question of the third research question, which explored the distribution of verbal TMA in siblings' Spanish narratives, findings revealed older siblings' preference for the present tense, followed by the preterite and imperfect past-tense forms. Younger siblings, on the other hand, showed a preference for preterite and imperfect tense forms, followed by the present tense. Taking a closer look at the distribution of each TMA category for each sibling pair, the manner in which older and younger siblings used the present, preterite, and imperfect verb forms was diverse, such that children evidenced knowledge of a wide range of tense forms given the task at hand. That is, we observed a variance in the distribution of verbal TMA forms in their Spanish narratives (e.g., Schiffrin, 1981). Given the task at hand, these findings are representative of siblings' spontaneous speech, implicating a diversity of language use patterns uncovered in each the select sibling pairs. The only difference found was in the distribution of more complex verbal morphology, such as the use of the subjunctive and conditional verb forms, which was greater among the older siblings than younger siblings. While these tokens were represented in low numbers, they are suggestive of the

differences in language use patterns between older and younger siblings. This verbal TMA pattern will be addressed in the discussion chapter, alongside the triangulated findings.

Next, to answer the second and third sub-questions of the third research question, which explored the relationship between sibling order and use of Spanish linguistic-features and English lexical insertions in the Spanish oral narratives, a GLMM analysis was used to examine the following coded linguistic variables:

- Gender article selection in subject and object position
- Verb number agreement
- Gender adjective agreement
- Production of verbs appropriate in meaning and formation
- Presence of English lexical insertions in each coded clause.

Using a GLMM to analyze siblings' Spanish linguistic features shown above, the results found a statistical difference between sibling order and two of the four coded linguistic variables. These variables were (1) appropriate use of article gender in subject and object position; (2) production of verbs appropriate in meaning and formation; and (3) presence of English lexical insertions. No co-relation was found between sibling order and verb number agreement and gender adjective agreement in the GLMM analysis.

Taking a closer look at the distribution of the coded variables in each sibling pair's narratives not only confirmed the results from the GLMM analysis, but also captured other variances among the families. The most prominent pattern showed instances in which older siblings appropriately selected the coded variables, but younger siblings inappropriately did so. Below I describe the major findings of three of the coded

variables in the GLMM analysis: (1) article gender in subject and object position; (2) verb formation and meaning; and (3) use of English lexical insertions.

With respect the first linguistic variable, the most prominent pattern that emerged was that older siblings appropriately selected article gender in the subject position, meanwhile younger siblings inappropriately did so. However, the use of article gender in object position, the second linguistic variable, was more challenging for younger siblings. Next, with respect to the third linguistic variable, verb formation and meaning appropriateness, the data yielded the following pattern: Older siblings, as a whole, formed verbs that were appropriate in meaning, as compared to younger siblings. The third quantitative analysis also yielded a statistically significant relationship between sibling order and use of English lexical insertions in children's oral narratives in Spanish. That is, younger siblings, as a whole, more often used English lexical insertions, as compared to older siblings, in their Spanish oral narratives.

6.2.4 The fourth research question

To answer the fourth research question, which examined the nature of siblings' language ideologies, the analysis of child interviews uncovered two salient themes. These themes were (1) language ideologies in support of bilingualism; and (2) negative language ideologies toward the heritage language. In what follows, I summarize the major findings concerning the two themes.

Regarding children's language ideologies in support of bilingualism, nearly all siblings viewed speaking Spanish and English as a positive attribute. Furthermore, the children expressed a sense of honor to be able to use both their languages in the Otter Creek community. Findings from child interviews showed that language ideologies in

support of bilingualism were rooted in their sense of emotional attachment to Spanish. That is, these ideologies in support of bilingualism concerned siblings' own ethnolinguistic assumptions and the discursive link between their language preferences and family's national origins, as well as their language broker roles within the community. Siblings indexed their ethnolinguistic identities with the languages they heard and spoke at home, establishing intersubjectivity through Spanish-speaking family members and friends.

Next, with respect to siblings' negative language ideologies regarding the heritage, findings from child interviews showed that each of the siblings constructed themselves in terms that reflected their linguistic securities and common conceptualizations around bilingualism. That is, despite siblings showing respect to the heritage language, they also acknowledged other negative language ideologies that associated bilingualism with feelings of frustration, confusion, and exhaustion. Siblings described how difficult it was to speak Spanish and a shame for not speaking the heritage language better. In addition to feelings of shame, the negative language ideologies uncovered in child interviews also took the form of embarrassment, which concerned the monoglossic standards imposed by the school curriculum. Several siblings reported that Otter Creek students enrolled in the bilingual classrooms with Spanish-language support were teased because they required language support. Bilingualism, in this case, was equated only in relation to student's purported limited English proficiencies.

6.2.5 The fifth research question

To answer the fifth research question, which examined sibling language practices in the home and school environment, data were drawn from mother and child interviews,

as well as ethnographically informed observations, and audio-recorded interactions. Overall, older siblings tended to act as the anchor in speaking the minority language with family members, while younger siblings showed a growing preference for English. However, an abundance of language practices was observed in the home that revealed salient differences between siblings and families. In several families (e.g., Families 1 and 6), parents and siblings were oriented to using more Spanish than English in the home. The findings also revealed how Spanish served as an authoritative code, such that both siblings spoke Spanish to their parents and adult family members. However, in other families (Families 2, 3, 4, and 5), the findings showed that the home was a contested site for authority, which permitted the use of two codes in parent-child interactions – that is, English and Spanish. That is, these siblings, notably the younger children, employed more English with their parents and evidenced considerable agency in choosing their preferred language. The older siblings in these families (e.g., Families 2, 3, 4, and 5), on the other hand, were oriented to using Spanish more often with their parents.

Next, with respect to siblings' language practices in the school environment, the siblings employed mostly English in the classroom, such that course materials, student-teacher interaction, and peer interactions were instantiated in English. However, differences were found between individual siblings, as well as across pairs, such that several of the sibling pairs departed from the diglossic conditions imposed in the school and created multilingual spaces that contributed to their maintenance of Spanish. For instance, several younger siblings were enrolled in bilingual/ESL classrooms whose teachers knew Spanish (e.g., Megan, Family 1; Marvin, Family 6). Observations attested to these students' use of Spanish with friends, generally in the form of playful language such as singing and playing. Other children, notably older siblings attending the middle

school, were observed speaking Spanish in the cafeteria. These students used Spanish with friends who were from Spanish-speaking countries (e.g., Brent, Family 2) or with other Otter Creek students who were more oriented to speaking Spanish (e.g., Samuel, Family 4; Bryce, Family 6). As a whole, however, school observations attested to siblings' overall preference for English in the school domain.

In sum, this section has reviewed the major findings of this study to answer each of the research questions on hand. Next, I turn to discuss these findings by triangulating the data from multiple points of view.

Chapter VII: Discussion

After reviewing the major findings of this study, I now discuss how answering each of the research questions has triangulated this study's findings. At the onset of this study, I set out to quantify and qualify the role of sibling order in children's language use patterns, practices, and ideologies among six second-generation Latino sibling pairs in one focal community in NJ. These hypotheses were supported from the studies presented in Chapter II, which portrayed birth order as an epiphenomenon of the amount of input in children's bilingual development (e.g., Bridges and Hoff, 2014; Silva-Corvalán, 2014). Indeed, as I revealed in the findings chapters, differences were found between older and younger siblings' language use patterns and comparatively unequal amounts of exposure and opportunities for use of Spanish in the home and school domains. Moreover, analyses of the EOWPVT-4: SBE and BESA/BESA-ME showed that all children, regardless of sibling order, expressed more words in English and showed greater morphosyntax knowledge in English than in Spanish. These differences corroborate studies on siblings acquiring two languages from birth in a minority language context, which show a correlation between language input and bilingual development (e.g., Bridges and Hoff, 2014; Obied, 2009; Silva-Corvalán, 2014). First, consider the age at which each sibling was reported to be first exposed to English. According to a number of scholars, the age of initial English exposure (AoEE) has been shown to be tightly bounded with- and a significant predictor of-linguistic competency (e.g., Bedore et al., 2016; Bohman et al., 2010; Jia, Aaronson, and Wu, 2002; Montrul, 2008). In this study, differences were found between older and younger siblings' AoEE and reported language proficiencies. More specifically, older siblings were reported to outperform their younger sibling in their production and comprehension capabilities in Spanish, as well as have a later AoEE.

Evidence associated with differing levels of proficiency and exposure was uncovered in the elicited production task by triangulating these data. For example, in Chapter IV, results from the GLMM analysis revealed younger siblings' vulnerability in certain morphosyntactic domains, including article gender and verbal morphology, a finding also reflected in studies on bilingual children of Spanish in the U.S. (e.g., Anderson, 1999; Montrul, Foot, and Perpiñán, 2008; Silva-Corvalán). This finding provides strong evidence of the role AoEE – or more generally, the amount of input - has on the language use patterns among the six selected sibling pairs in this study.

The GLMM analysis also yielded younger siblings' tendency to use more English lexical insertions than their older siblings. This finding could be attributed to several reasons. One perspective suggests that younger siblings, who were consistently reported being exposed to English at an earlier age, evidenced more difficulties in accessing lexical items in Spanish given their AoEE. Thus, younger siblings' earlier AoEE and – concomitantly- their differential levels of language input could be explanatory of their difficulty accessing more lexical items in Spanish, as suggested by several scholars (e.g., Pearson and Cobo-Lewis, 2007; Oller, Eilers, and Cobo-Lewis, 2007).

In direct evidence of these triangulated findings, let us consider the language use patterns among each of the sibling pairs. Recall that younger siblings in Families 2, 3, 4, and 5 were all reported having lower proficiencies in Spanish and exposed to English at a younger age than their older siblings. Interestingly, these younger siblings also showed consistency in their inappropriate selection of article gender in subject and object position, as well as their verbal TMA patterns. With regard to other families, the siblings' reported proficiencies, AoEE, and use of Spanish linguistic features were consistent in that they were showed strong signs of maintenance of Spanish. Not only did several older

and younger siblings evidence accurate selection of the article gender and production of verbs, they also showed fewer instances of English lexical insertions. That is, this finding could suggest that older siblings as a whole have a more consistent morphosyntactic system, such that they were more likely to accurately produce article gender in subject position. Furthermore, evidence attesting to these siblings' exposure to Spanish were observed in the marking of verbal TMA, namely the subjunctive mood. Although these tokens were represented in low numbers, these findings may suggest that several siblings demonstrated knowledge of subjunctive as complete as that of Spanish-speaking monolinguals (e.g., Blake, 1983; Silva-Corvalán, 1994; 2014). Nevertheless, we observed a variance in the distribution of verbs produced by sibling pairs. That is, these findings are representative of the spontaneous speech given the task at hand, implicating a diversity of language use patterns uncovered in each the select sibling pairs (e.g., Schiffrin, 1981).

In addition to the linguistic factors associated with siblings' language use patterns, one must also consider the social factors that elucidate siblings' everyday sociolinguistic realities. Thus, the major contribution this study has made is its detailed account of the children's holistic language background and the social factors that created a unique environment in which the siblings were growing up. These factors included:

- Siblings' FLP and sibling interaction in the home
- Peer networks
- The relationship between language ideology and agency.

First, with respect to each of the sibling pair's FLP, the wealth of data presented in this study demonstrate several FLP practices by which parents and siblings were

oriented to using Spanish and English in the home. These orientations reflect what scholars characterize as either strict or laissez-faire FLP practices – that is, the extent to which parents imposed monolingual or bilingual practices on their children as described in FLP and language socialization literature (e.g., Curdt-Christiansen, 2016; Lanza, 2009; Li Wei, 1991; Schwartz and Verschik, 2013). For example, several families adhered to a strict orientation in using only Spanish in the home (e.g., Families 1 and 6). Triangulation of data not only attested to this behavior, but also evidenced that these sibling pairs were the most proficient Spanish-speakers in this study. Furthermore, within these families, observations and mother and child interviews revealed how Spanish served as an authoritative code. That is, the siblings only spoke Spanish to their parents and adult family members whereby the heritage language held an emotional impact factor associate with power. Furthermore, evidence that the home was a contested site for authority was illustrated in Chapter V. Data from the home and interviews that siblings' FLP were analogous to what Curdt-Christiansen (2016), Schwartz and Verschik (2013), among others, describe as laissez-faire language policies, which permit the use of two codes in parent-child interactions (i.e., English and Spanish). That is, in several sibling pairs (e.g., Families 2, 3, 4, 5) the younger children employed more English with their parents (e.g., Gafaranga, 2010; Lanza, 2009; Smith-Christmas, 2016). Furthermore, we observed that siblings' language choices were not only determined by parents. Rather, the siblings had considerable agency in choosing their preferred language (e.g., King et al., 2008; Smith-Christmas, 2016; Luykx, 2005). Older siblings (e.g., Families 2, 3, 4, and 5) were oriented to using Spanish more often with their parents, as compared to their younger counterparts, providing comparatively unequal amounts of exposure and opportunities for use of Spanish in the home. For instance, the data attested to children not only showed

marked differences in their language proficiencies and preferences, but also in their construction of different linguistic roles within the family (e.g., Families 2 and 5). These findings found older sibling representing language brokers (e.g., De la Piedra and Romo, 2003; Dunn, 1983; Mannle and Tomasello, 1987).

Similarly, the findings regarding language preferences also correlated siblings' interaction in English to the influence of school transition. That is, older siblings were reported to bring home English during the transition to school and influence the language choice of their younger brother or sister, corroborating research on the role of sibling order in multilingual families (e.g., Barron-Hauwert, 2011; Luykx, 2005; Obied, 1985; Parada, 2013; Shin, 2002). This finding also helps explain why most the siblings spoke in English with each other. As Paradis and Nicoladis (2007) remind us, children even in the preschool years show sensitivity to the status of English in the community. In the current study, the focal sibling pairs showed awareness that English was the dominant language of the community and therefore chose to make English the preferred language of sibling interactions. Thus, meaning was co-constructed between older and younger siblings in predominantly English, as compared to Spanish, the parents' preferred language of communication. This finding elucidates each child's holistic language backgrounds and differential exposure and uses of Spanish, which worked together to create a unique sibling environment for each family.

The second factor that operated as a major force in mediating children's use of Spanish in the home and school domain was peer networks. That is, the sibling pairs highlighted in this study show how language maintenance was deeply rooted in the language/s they employed with friends, such that peer networks played a key role in mobilizing siblings' use of Spanish and/or English. These findings corroborate

sociolinguistic studies on language maintenance, which maintain that the composition of an individual's social network provide an explanatory predictor for language choice and likelihood of language maintenance (e.g., Lanza and Ailin Svendsen, 2007; Li Wei, 1994; Zentella, 1997). In the current study, most of the children's peer interaction took place in the context of dense social networks that evidenced similar characteristics. Peer networks were equally important in the school environment, which attested to significant resources for siblings' maintenance of Spanish. For instance, recall that Spanish was mostly observed during the cafeteria hours among siblings who were enrolled in the ESL and bilingual classes. Students sat together as a unified structure during lunch hours at Otter Creek Primary School, which were assigned based on the instructor and – concomitantly – classroom type (i.e., bilingual, ESL, non-ESL). In classes that were ESL or with bilingual support, we found that several siblings attended classes side-by-side with newcomer students at the primary level who had recently arrived from Spanish-speaking countries. Thus, we gather that not only the instructional discourse, but also the siblings' peer network (i.e., newcomer students) in the class who played a significant role in their language practices.

At Otter Creek Middle School, peer networks also played an equal importance in siblings' language practices but operated in different ways. That is, unlike in the primary school, cafeteria hours were assigned based on grade level, rather than by classroom, whereby students were not restricted to sit at any particular table. This freedom to sit wherever the student liked comes at a time in which the siblings' structure of peer groups changed. As described by Bagwell, Coie, Terry and Lochman (2000), peer groups at the middle school level change from being a relatively unified whole into clusters of social groups. Thus, most of the children's peer interaction took place in the context of small

social groups that were organized to maximize within-group homogeneity (e.g, Rokin, Farmer, Pearl, and Van Acker, 2000). For example, recall from the findings that several of the older siblings spoke Spanish within their peer networks, which they developed through social and family relationships. While in one family, an older sibling drew upon his mother's wide social network and befriended a newcomer student whom he had met during a social gathering with his family, in another family a child employed both Spanish and English with his cousin who was part of the sibling's peer network. These observations starkly contrasted with another family's peer network and monolingual English practices. That is, out of all the siblings in this study, one older sibling whose social network was formed entirely by non-Hispanic students, was also considerably the least proficient older sibling in Spanish (i.e., Lani, Family 5). Thus, as uncovered in the findings, peer networks played a critical role in mobilizing the each of the sibling's use Spanish, attesting to the linguistic resources several of these children had at their disposal, as well as to their Spanish language proficiencies.

Interestingly, these different orientations toward using Spanish with family and peers raises the question concerning the relationship between children's language ideologies and their agency in the socialization process. That is, in the current study, the findings provided a window into how siblings made meaning through language and positioned themselves in the community vis-à-vis their language ideologies. Those siblings who expressed language ideologies in support of bilingualism and an allegiance to their community, also expressed feelings of embarrassment and even hesitation about speaking the heritage language. That is, the siblings showed multiple affective stances toward the heritage language.

First, several younger siblings associated Spanish with feelings of frustration and confusion, and viewed bilingualism negatively (i.e., Kyle, Family 2; Leo, Family 5). These siblings also exhibited the most resistance to speaking Spanish and most limited proficiencies in the language, illustrated in the findings chapters. One could suggest that in these particular families, the children had considerable agency in resisting Spanish, which could have resided in their formation and expression of negative language ideologies toward speaking Spanish. This finding corroborates research and child language maintenance, which shows that children undergoing language shift express feelings of embarrassment and hesitation about speaking the heritage language (Lee, 2014; Wyman, 2012; Wyman, McCarty, and Nicholas, 2014). That is, according to Wyman et al. (2014), “heritage language learners commonly feel tongue-tied, especially if they have been teased, criticized, or stigmatized for their language” (p.13). Such insecurities played a key role several children (e.g., Kyle, Family 2; Leo, Family 5) whose agentive choices restricted the number of opportunities the siblings pursued to maintain the heritage language.

In other families, siblings showed considerable agency in not choosing to use Spanish in the home or school domain. But rather than expressing linguistic insecurities like other children, younger siblings (e.g., Kendra, Family 4) were overly concerned about the social value associated with Spanish. For instance, this study revealed that younger siblings expressed that strangers may find it odd that she spoke two languages, rather than one. This finding reflects Canagarajah (2014) work, which argues that language ideologies are always complemented by social values, notably speakers’ agentive decisions to use their languages and their positioning of themselves vis-à-vis the community. According to Canagarajah (2014), it was not necessarily what language the

siblings decided to use in public, but rather the social value of each language used and what was expected by speakers. For these siblings, public spaces were for monolingual English practices only, thus creating a distrustful environment where Kendra felt unsafe bringing out her heritage language.

In light of the data uncovered in this study, I now discuss the triangulated findings to reframe the debate on heritage language maintenance, as well as its implications for linguistic continuity in the Otter Creek community. As we observed in the findings, the insights gained from this study closely document how siblings made meaning through language and – concomitantly- positioned themselves in Otter Creek. In doing so, the contributions made in this study affirm, but also break away from widely-cited frameworks espoused by scholars investigating language maintenance and shift (e.g., Fishman, 1991; García, 2009, 2011). Thus, this study has not only demonstrated the difficulties in attaining the intergenerational transmission of the minority language, but also revealed how the role of older siblings takes on a different dimension of language maintenance in one focal community.

First, the linguistic hierarchy of Otter Creek suggests that the dominant position of English as the language of the community posed a considerable challenge to maintaining Spanish. One could say that the sociolinguistic realities among the six sibling pairs illustrate the difficulties in attaining what Fishman (1991) describes as the successful transmission of the minority language in the community, known as Stage 6 in his Graded Intergenerational Disruption Scale (GIDS). That is, in terms of Reversing Language Shift (RLS), Fishman (1991) employs the GIDS to rate the ethnolinguistic vitality of threatened languages. The scholar claims that societal factors and institutions alike influence parenting decisions to use the minority language. Thus, speakers create

diglossic environments in which languages and/or varieties have a functional distribution in each domain, albeit in the school or home. Thus, to achieve successful transmission of the minority language, Fishman (1991) argues for the establishment of stable diglossia in the community. That is, Spanish is assigned to be spoken in siblings' home, while English is spoken in the school.

In the current study, however, the achievement of intergenerational transmission of the minority language and stable diglossia is contested, notably in the permeation of English in the home domain and the linguistic differences uncovered between older and younger siblings. These findings echo what García (2011, 2013) refers to as language sustainability. That is, siblings in the current study are enduring dynamic linguistic changes and engaging with their language practices within the wider socio-cultural context of the Otter Creek community. For instance, throughout this study, I revealed that several younger siblings, resisted Spanish within the family and operated in dual-lingual mode in parent-child interactions. These same siblings, however, drew from the resources around them, such as technology and their older siblings, to communicate. These findings are analogous to García, Morín, and Rivera's (2001) work on language maintenance among Puerto Ricans in New York City, who refer to this dynamic and multilayered process as "linguistic shift with vaivén" (p. 71). That is, contemporary contexts have made evident that language practices among children come and go like the *vaivén* of sea waves, giving the impression that language is in retreat – that is, shifting toward English. But despite these dynamisms on the surface, García, Morín, and Rivera's (2001) metaphor captures that the ground itself is solid, but never static, such that these siblings' sociolinguistic environments are always evolving. From this perspective, this study elucidates the ways in which these second-generation Mexican siblings performed

language practices and language ideologies that are rich and dynamic, pointing to new directions toward a viable future for bilingualism in the Otter Creek.

However, findings from across all sibling pairs and families in this study reveal a limitation to García's (2011) framework on language sustainability to achieve community bilingualism. That is, as first revealed in Kinsella (2018), Otter Creek teachers and administrators consistently positioned the Spanish-speaking students as linguistically-deficient and viewed bilingualism only in relation to students' purported limited English proficiencies. Alarming, in the current study, these language ideologies were shown to have migrated out of the school and into the siblings' homes, such that these children also constructed themselves in monolingual standards – that is, by the evaluative perception that a bilingual is two monolinguals in one (e.g., García, 2013; Grosjean, 1989). First, it was uncovered that students enrolled in bilingual classes were teased for needing extra support, a pattern also uncovered in other Latino communities (e.g., Schechter and Bayley, 2002). Furthermore, siblings in this study expressed a shame for their limited language proficiencies, framing their language practices as a perceived failure to achieve standardized proficiencies in both their languages, which subjected them to what Rosa (2016) calls double-stigmatization. These ideological stances toward bilingual created linguistic insecurities, which, in turn, influenced siblings' agentive decisions to speak Spanish. Thus, as Wyman et al. (2014) postulates, “the boundaries between school, family, community, and larger societal language ideologies are porous and complex” (p. 11).

In concluding this study, I argue that these findings reveal the need for two key areas of support, which aim to fortify the linguistic continuity in the Otter Creek community, as well as in other U.S. Latino diasporas. The first area of support should

seek ways to instill a collective awareness and widespread level of commitment to heritage language maintenance in the community schools. As Palmer and Martínez (2013) argue, there is a need for educators who have questioned “the prevailing assumptions about language that reify linguistic structure and that normalize monolingualism” (p. 288). That is, this study reveals the importance of educators not only acquiring a robust understanding of bilingualism, but also developing a thorough comprehension of their students’ family units and the diversity of the community’s linguistic landscape. In doing so, educators must focus on developing students’ metalinguistic awareness and their sensitivity to the workings behind linguistic communication. This practice, according to Canagarajah (2006), will in turn endow students with a pluralistic orientation to their community.

The second area of support required to ensure the linguistic continuity in the Otter Creek community concerns the reflexive nature between community and family, as well as the critical role older siblings played in heritage language maintenance. As it has been emphasized in this study and others, the mothers’ use of Spanish in the home is just one small part of the language maintenance process (e.g., Canagarajah, 2008; Smith-Christmas, 2016). In an effort to unpack siblings’ language practice, evidence from this study revealed siblings’ generation of new language regimes in which they made conscious choices to speak the heritage language. These findings are analogous to work done by scholars such as McCarty (2014), Wyman (2012, 2014), among others, who maintain that community conditions (dis)empower children to mobilize or limit their linguistic repertoires, giving way for English and/or Spanish practices that yield language maintenance or shift.

As we observed earlier, older siblings were generally the linguistic anchor in using the heritage language, who held familial responsibilities and developed ideologies of language allegiance toward using Spanish. This position echoes work by McCarty et al. (2009, 2013), Smith-Christmas (2016), among others, who posit that children are the most invested and important stakeholders in heritage language process, thus positioned to make critical decisions that are consequential for future speakers in their community. Thus, these ideological stances, according Nicholas (2008), serve as an affective enculturation of language, such that children, older siblings in particular, were shown to develop of an emotional commitment to the ideals and well-being of the Otter Creek community. As emphasized in this study, older siblings played a key role in the community, as they shaped the language learning opportunities, and created and generated ideological choices for their younger counterparts.

With this position in mind, the findings in this research calls upon more powerful language policy agents to both inform and empower Latino parents and their children. That is, as Dauenhauer and Dauenhauer (1998) argued two decades ago, the intergenerational transmission of the heritage language “cannot be done *to* one or *for* one” (p. 97). This research maintains that the maintenance of Spanish in Otter Creek, among other U.S. Latino diasporas, requires a collective awareness and widespread level of commitment throughout the entire community. This galvanizing force must provide the creation of multilingual spaces and ideological support for not just parents, but also their children, which places a special emphasis on the key role older siblings play in the language maintenance process. Thus, to battle against language shift and push forward in the linguistic continuity of Spanish, language policy agents, including educators, policy-

makers, as well as parents and their children, must be aware of the social, cultural, and linguistic complexities within the community in order for bilingualism to flourish.

Chapter VIII. Conclusion

I began this study with the goal of studying the role of sibling order in children's language use patterns, practices, and ideologies among six second-generation Latino sibling pairs who were growing up in one focal community in New Jersey (NJ). In concluding the current study, I discuss the limitations and suggestions for future research in the following sections.

8.1. Limitations of the study

There are several limitations to this current study. The first limitation that has to do with the number of siblings to participate in the study. The participant pool was small in quantity with six sibling pairs and their mothers (N= 18). Families who fit a very specific criterion, namely their background and family structures, were purposefully selected for the study. Thus, the findings presented here may be of limited generalizability given that many families in Otter Creek, NJ, had differential family structures and significant age gaps between older and younger siblings. For instance, the current study did not recruit from families who had recently arrived from a Spanish-speaking country or had children who attended the high school. It could be that other children growing up in the same community have comparatively unequal amounts of exposure and opportunities for use of Spanish in the home and social gatherings. That is, different family structures and ages of arrival could potentially reveal other socialization practices that play a significant role in siblings' exposure and use of the language, as well as their linguistic outcomes.

The second limitation is concerned with the small sampling size of children who took the language assessments. In Chapter IV, the results found no significant

relationship between older and younger siblings' EOWPVT: SBE-4 or BESA/BESA-ME scores in neither Spanish nor English. That is, given the small population size and large variance in standard deviations, no statistical significant relationship was attested between older and younger siblings' English expressive vocabulary and morphosyntax knowledge. The first possible reason is the small sampling size of children who took the language assessment. Six sibling pairs (N=12) took part of this study, therefore only six children were compared across groups (i.e., younger versus older). Thus, one of the reasons concerning the insignificant relationship between older and younger siblings' scores is attributed to the small population size and large variance in standard deviations. Indeed, looked at individually, this finding is insightful and shows the diversity of language-use patterns of children in one community. However, a larger sample size that compares sibling groups could yield a significant relationship between birth order and expressive vocabulary and morphosyntax knowledge.

A third limitation concerns the use of the BESA and BESA-ME language assessments to measure children's morphosyntax knowledge. One reason for the statistically insignificant relationship between older and younger siblings' standard scores in both the English and Spanish morphosyntax subtest could be attributed to the fact that in sibling pairs Families 1, 4, and 5, the older sibling took the BESA-ME while the younger sibling took the BESA. That is, the BESA was designed for children ages 4;0 to 5;11 and the BESA-ME for children ages 6;0 to 12;0. Each assessment included different content, number of questions, and morphosyntactic constructs to allow for a more age appropriate assessment in each language. However, although standard scores allowed for cross-comparison, Elizabeth Peña, a co-author of the BESA-ME indicated that the distribution of standard scores were not normalized given the assessment's newness

(personal communication, February 2017). Thus, BESA-ME standard scores were computed from on a relatively even smaller sample size of children, as compared to those scores created for the BESA assessment.

Lastly, a fourth limitation to this study concerns observation bias and the impact my presence had on the siblings' language practices. That is, during school observations, I sat in the corner of the classroom or cafeteria with only a pencil and paper to observe the language practices among children. The use of Spanish was observed in several instances, notably in the cafeteria. However, in the majority of classroom and cafeteria observations, most children spoke only English with their classmates. Although the triangulated findings illustrated the dominance of English in children's lives, my presence in school observations could have had an effect on the siblings' language practices, which may have deterred children from speaking Spanish with their classmates.

8.2 Directions for future research

Based on the findings of the current study, several suggestions can be made for future research. The first direction of research should examine language use patterns, practices, and ideologies over time, rather than a cross-sectional study as presented in the current study. That is, while the current study was interested in the role of birth order in maintaining Spanish as a minority language, the findings do not represent a longitudinal series of events, but rather a cross-sectional study that only revealed the language use patterns, practices, and ideologies in one timeframe. Indeed, the cross-sectional data presented in the current study suggest that older siblings had an impact on their younger siblings language preferences, as well as the linguistic outcomes as a result of differential opportunities to employ Spanish. However, rather than focusing on multiple families in

one time frame, the literature would benefit from a longitudinal study on one sibling pair from pre-K into the school years. Future research using longitudinal data would be very illustrative of the siblings' socialization practices in the home during the critical years of language input, as well as the changes that occur in the transition to a predominantly English environment. This work could be approached using both qualitative and quantitative data, which triangulate the dynamaticity of siblings' language use patterns, practices, and ideologies over time.

A second direction of research should consider more elicited production tasks, such as story recounts to document the language-use patterns among sibling pairs. In the current study, children only recounted one story, which yielded 60-70 verb tokens to be analyzed for each child. Future research should use several narrative protocols to elicit narrative production, such as Mayer's (1969) Frog Stories, personal stories, spontaneous speech, among others. These data should be compiled into a larger corpus, which would yield further opportunities to analyze linguistic differences between older and younger siblings and ascertain if certain linguistic features are conditioned by narrative type. That is, future work in this direction should further explore the linguistic features associated with older and younger siblings' speech patterns, as well as compare differences in the type of production elicited in each narrative.

A third direction for future studies on sibling differences should be designed in a manner that includes a larger participant pool, which draws from more families. That is, rather than only choosing a small number of sibling pairs, a study that recruits a much larger number of children that accounts for birth order, family structures, age, and linguistic outcomes, could potentially reveal the relevance of input and output other socialization practices that play a significant role in siblings' exposure and use of the

language. This research should be conducted on other U.S. immigrant groups and socioeconomic backgrounds, as well, in order to draw comparisons between families of different linguistic and cultural backgrounds. Thus, while the current study makes a contribution to our knowledge of the role of birth order in second-generation Mexican-descent Latino sibling pairs, little is known on other Latino or U.S. immigrant groups whose minority languages are also at risk of language shift.

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Appendix A: Parent Interview/Questionnaire

1. Describe what language/s your family uses in the following contexts:
 - a. Home
 - b. School
 - c. Public
 - d. With friends
2. Describe what language/s **you** speak with your:
 - a. First-born child
 - b. Second-born child
3. Has there ever been a time when you felt like either or children were confused or misunderstood you when speaking Spanish? What happened?
4. In what language/s do **your children** talk with each other? Has this always been the case? If not, what has changed?
 - a. (Follow-up): How do you feel about your children speaking English to one another?
5. Are there any differences in language proficiencies between your children? If so, what sort of differences do you see in your children's Spanish and English language proficiencies?
6. Describe what language/s your **second-born child** used before entering Otter Creek:
 - a. Have these behaviors changed?

7. If you were to have a question about English, would you ask your first-, second-born child, or both to help? Why?
8. Describe the language/s in which your children watch television, use the Internet, or play video games.
 - a. Are there differences in the language preferences between your first- and second-born children?
 - b. Are there ever disagreements between your first- and second-born children?
9. Is there anything you or your family particularly likes to read? Or regularly reads?
 - a. What language do you read books in? Do you have more books in English or in Spanish?
 - b. Are there differences in your children's writing and reading skills in Spanish?
10. Do you text or send emails to your children in Spanish? If so, are they able to respond using Spanish text?
 - a. Follow-up: Are there differences between your children's ability to text or write in Spanish? Give an example.
11. Could you describe why it is important to speak Spanish in the family? What are your goals for each of your children in relation to speaking Spanish? What significance does it have for you and your family?

12. In twenty years, what language do you think Latino families and children will speak in Otter Creek? More Spanish than English? Equally Spanish and English? More English than Spanish? Or only English?
13. Do you think speaking Spanish has any relevance to family relations? For instance, there are difficulties in maintaining contact with extended family members in other countries.
 - a. How would you describe your children's relationship with extended family members? Are there differences in communication between your youngest and youngest child? Why do you think this way?

Appendix B: Parent language background questionnaire (English version)

1. Since immigrating to the US, have you and your family moved back to your home country for more than six months? Yes/No If so, when? _____.
2. What is the highest academic degree you have? (Circle one)
 - a. Elementary b. Middle School c. High School d. College e. Graduate School
3. How many children do you have? _____.
4. Do you have a Spanish-speaking caretaker? Yes / No
5. Did your children attend Red Bank Primary? Yes / No

(Please identify which schools each child attended)

First-born child:

School: _____ Number of years attended: _____
 School: _____ Number of years attended: _____

Second-born child:

School: _____ Number of years attended: _____
 School: _____ Number of years attended: _____

Language Use

6. Where you live in Red Bank, what language/s do your neighbors speak?

1	2	3	4	5
All Spanish	Mostly Spanish	Equal English and Spanish	Mostly English	All English

7. What language/s do **you** use most often in speaking to each of your children? (Circle one for each child):

First-born child

1 2 3 4 5
 All Spanish Mostly Spanish Equal English and Spanish Mostly English All English

Second-born child

1 2 3 4 5
 All Spanish Mostly Spanish Equal English and Spanish Mostly English All English

How often did your **children respond to you in Spanish before attending** Red Bank
 Primary? (Circle one for each child)

First-born child

1 2 3 4
 Always Spanish Mostly Spanish Equal English and Spanish Mostly English

5
 Always English

Second-born child

1 2 3 4
 Always Spanish Mostly Spanish Equal English and Spanish Mostly English

5
 Always English

Currently, how often do **your children respond to you in Spanish after attending** Red
 Bank Primary?

First-born child

1 2 3 4
 Always Spanish Mostly Spanish Equal English and Spanish Mostly English

5
 Always English

Second-born child

1 2 3 4
 Always Spanish Mostly Spanish Equal English and Spanish Mostly English

5
 Always English

How often does your **oldest child** speak to your younger child in Spanish?

- 1 2 3 4
 Always Spanish Mostly Spanish Equal English and Spanish Mostly English
- 5
 Always English

How often does your **oldest child** speak to your younger child in Spanish?

- 1 2 3 4
 Always Spanish Mostly Spanish Equal English and Spanish Mostly English
- 5
 Always English

Child language proficiency

(From 0 to 10, rate your children's proficiency in Spanish)

First-born child:

Speaking
 Not at all Excellent
 0 1 2 3 4 5 6 7 8 9 10

Listening
 Not at all Excellent
 0 1 2 3 4 5 6 7 8 9 10

Reading
 Not at all Excellent
 0 1 2 3 4 5 6 7 8 9 10

Writing
 Not at all Excellent
 0 1 2 3 4 5 6 7 8 9 10

Second-born child:

Speaking
 Not at all Excellent

0 1 2 3 4 5 6 7 8 9 10

Listening

Not at all

0 1 2 3 4 5 6 7 8 9 10

Excellent

Reading

Not at all

0 1 2 3 4 5 6 7 8 9 10

Excellent

Writing

Not at all

0 1 2 3 4 5 6 7 8 9 10

Excellent

Parent language proficiency

(From 1-10, rate your own proficiency in English in the following contexts)

How would you describe your own proficiency in **Spanish** when:

Speaking

Not at all

0 1 2 3 4 5 6 7 8 9 10

Excellent

Listening

Not at all

0 1 2 3 4 5 6 7 8 9 10

Excellent

Reading

Not at all

0 1 2 3 4 5 6 7 8 9 10

Excellent

Writing

Not at all

0 1 2 3 4 5 6 7 8 9 10

Excellent

How would you describe your own proficiency in **English** when:

Speaking

Not at all

0 1 2 3 4 5 6 7 8 9 10

Excellent

Listening									
Not at all									
0	1	2	3	4	5	6	7	8	Excellent 9 10
Reading									
Not at all									
0	1	2	3	4	5	6	7	8	Excellent 9 10
Writing									
Not at all									
0	1	2	3	4	5	6	7	8	Excellent 9 10

Appendix C: BIOS Survey

Initial English exposure and the languages used in the home and school environment according to the children's age (Peña et al.'s, 2014)

	At home			At school/preschool/daycare			
Ages	Both	Spanish	English	Both	Spanish	English	NA
0-1							
2-3							
3-4							
4-5							
5-6							
6-7							
7-8							
8-9							
9-10							
10-11							
11-12							
Total number of years in:	Both	Spanish	English	Both	Spanish	English	NA
Year of first exposure to English:							

Appendix D: Script for elicited oral productions

English	Spanish
<i>Hi, my name is Ben and today you are going to read a story to me in English. First, you get to choose the book you would like to read. (PI presents two Frog Stories child can choose from).</i>	<i>Hola, Soy Ben y hoy vas a leer un cuento conmigo. Primero vas a elegir qué libro quieres leer. (PI presenta dos cuentos de el niño puede elegir).</i>
(If the child does not respond for more than 1 minute, choose one of the following expressions to elicit more content.)	<i>Cuanto estés listo, puedes empezar</i> (Si el niño no contesta por más de 1 minuto en seguido, se puede usar los siguientes términos para pedir más contenido.)
-Yes?	-¿Ah sí?
-What else happened?	-¿Y qué más pasó?
-Anything else?	- ¿Algo más?
(If the child does not respond to these expressions after an additional 2 minutes, stop the recording.)	(Si el niño no contesta por más de 2 minutos después de esto, ya ha acabado la grabación.)

Appendix E: Child Interview questions



Pepita talks twice/Pepita habla dos veces (Lachtman, 1995).

Questions for book discussion:

1. According to the book, what do you think Pepita's special skill is?
2. How does Pepita feel about speaking Spanish and English?
3. How do you think other characters in the book think about Pepita's ability to speak in Spanish and English?
4. How are you like Pepita? What do you think about your ability to speak in two languages?
5. Has there ever been a time you were frustrated about speaking two languages like Pepita? When and why?

Follow up questions:

1. What languages do you think people in Otter Creek speak? Do you think more people in Otter Creek speak only Spanish, more Spanish than English, equally Spanish and English, more English than Spanish, or just English? Why?

2. What language/s do you usually speak with your mother? What language/s does she speak to you?
3. What language/s do you usually speak with your father? What language/s does he speak to you?
4. How do you feel when your parents speak Spanish to you when you are with friends or in public?
5. What language/s do you usually speak with your friends? What language/s do they speak to you?
6. What language/s do you usually speak with your older/younger brother/sister?
What language/s do they speak to you?
7. What language/s do you like speaking with your younger/older brother/sister?
8. What language/s do you like speaking with your friends?
9. How do you feel when you have to read or write in Spanish? How do you feel when you have to read or write in English?
10. Do you ever help your mother and father with English?
11. How do you feel when you help your family with questions in English?

Appendix F: Coding Sheet for narratives

Non-linguistic variables

Type	Code
Birth order	0 = older sibling; 1 = younger sibling
Speaker's gender	0 = male; 1 = female
Narrative language	0 = Spanish; 1 = English

Coding variables for verbal TMA in Spanish narratives

Type	Example	Code
TMA	<i>Canto; canté; cantaba; voy a cantar; cantaré; cantaría</i>	1= present; 2= preterit; 3= imperfect 4=periphrastic future; 4= Future indicative 5=conditional; 6= present subjunctive; 7= past subjunctive; 8= imperative; 9= form not listed above

The coding for the variable of article gender in subject position and examples

Code	Description	Example from the data
1	Appropriate	<i>La rana saltó</i> (the frog jumped)
0	Inappropriate	<i>*El mamá está allí</i> (The mother is over there)

The coding for the variable of article gender in the object position and examples

Code	Description	Example from the data
1	Appropriate	<i>El niño ve la mariposa</i> (The boy sees the butterfly)
0	Inappropriate	<i>Quiere tocar *el rana</i> (He wants to touch the frog)

The coding for the variable of adjectival agreement and examples

Code	Description	Example from the data
1	Appropriate	<i>La mujer está sorprendida</i> (The woman is surprised)
0	Inappropriate	<i>La mamá está *contento</i> (The mother is happy)

The coding for the variable of verb-number agreement and examples

Code	Description	Example from the data
1	Appropriate	<i>El sapo brinca</i> (The frog jumps)
0	Inappropriate	<i>La rana y el niño *camina en el parque</i> (The frog and the boy walk through the park)

The coding for the variable of verb formation and meaning appropriateness and examples

Code	Description	Example from the data
1	Appropriate	<i>La mamá se cayó</i> (The mother fell)
0	Inappropriate	<i>El niño *ponió la rana allá</i> (The boy put the frog there)

The coding for English lexical insertions and examples

Code	Description	Example from the data
1	Use of at least one English lexical insertions in clause	<i>El niño vio el beehive</i> (The boy saw the beehive)
0	Clause issued in only Spanish	<i>El niño está con su tortuga</i> (The boy is with his turtle)

Appendix G: Key to transcript and conventions used

(Adapted from Schlegoff, 2007)

:	Elongated sound
<u>word</u>	Emphasis
WORD	Increased amplitude
=	Latching
(.5)	Pause (seconds)
(.)	Micropause (less than two-tenths of a second)
@	Laughter

Appendix H: Analysis of Frog Stories

1. Results from TMA verb distribution

Distribution of verbal TMA among older and younger siblings

TMA	Older siblings	Younger siblings
Present	128	83
Preterite	145	162
Periphrastic future	2	10
Future indicative	0	0
Conditional	2	0
Present subjunctive	3	2
Past subjunctive	3	0
Imperative	1	2
Total	30	18

Distribution of verbal TMA: Family 1

TMA	Daniel	Mia
Present	4	22
Preterite	34	23
Periphrastic future	17	22
Future indicative	0	1
Conditional	0	0
Present subjunctive	0	1
Past subjunctive	1	0
Imperative	0	0
Total	56	59

Distribution of verbal TMA: Family 2

TMA	Brent	Kyle
Present	23	9
Preterite	22	26
Periphrastic future	14	24
Future indicative	0	0
Conditional	2	0
Present subjunctive	0	0
Past subjunctive	0	0
Imperative	0	0
Total	61	59

Distribution of verbal TMA: Family 3

TMA	Benito	Oscar
Present	29	29
Preterite	25	23
Periphrastic future	5	10
Future indicative	1	0
Conditional	0	0
Present subjunctive	1	0
Past subjunctive	0	0
Imperative	0	
Total	61	62

Distribution of verbal TMA: Family 4

TMA	Samuel	Kendra
Present	50	4
Preterite	3	33
Periphrastic future	1	29
Future indicative	1	0
Conditional	0	0
Present subjunctive	2	0
Past subjunctive	0	0
Imperative	0	0
Total	57	67

Distribution of verbal TMA: Family 5

TMA	Lani	Leo
Present	5	11
Preterite	34	20
Periphrastic future	20	10
Future indicative	0	9
Conditional	0	0
Present subjunctive	0	0
Past subjunctive	1	0
Imperative	1	1
Total	61	51

Distribution of verbal TMA: Family 6

TMA	Bryce	Melvin
Present	17	8
Preterite	27	37
Periphrastic future	11	16
Future indicative	0	0
Conditional	0	0
Present subjunctive	0	1
Past subjunctive	1	0
Imperative	0	0
Total	56	62

Results from GLMM analysis

Article gender in subject position

Differences in odds in appropriately producing article gender in subject position

Sibling group	Odds ratio	S. Error	z	p	CI Lower	CI Upper
Older	46.323	52.002	3.42	0.001	5.131	418.158
Younger	11.544	11.671	2.42	0.016	1.591	83.740

Article gender in object position

Differences in odds in appropriately producing article gender in object position

Sibling group	Odds ratio	S. Error	z	p	CI Lower	CI Upper
Older	13.409	11.687	2.98	0.003	2.429	74.009
Younger	3.870	1.993	2.63	0.009	1.410	10.622

Adjective agreement

Differences in odds in appropriately producing gender adjective agreement

Sibling group	Odds ratio	S. Error	z	p	CI Lower	CI Upper
Older	25.664	26.722	3.12	0.002	3.334	197.529
Younger	2.11	1.678	0.94	0.345	.446	10.016

Verb-number agreement**

Differences in odds in appropriately producing verb-number agreement

Sibling group	Odds ratio	S. Error	z	p	CI Lower	CI Upper
Older	1 (empty)		-	-	-	-
Younger	1 (base)	7.94	-	-	11.63	45.21

** There were no caes in which older siblings inappropriately produced inappropriate tokens of verb-number agreement, therefore the model was unable to be tested. For this reason, the odds ratio was “empty” for older sibling group.

Verb formation and meaning appropriateness

Differences in odds in producing verb form appropriate in meaning and formation

Sibling group	Odds ratio	S. Error	z	p	CI Lower	CI Upper
Older	29.574	17.699	5.66	0.000	9.152	95.570
Younger	4.737	1.363	5.41	0.000	2.696	8.325

English lexical insertions

Differences in odds in producing at least one English lexical insertion in each clause

Sibling group	Odds ratio	S. Error	z	p	CI Lower	CI Upper
Older	.345	.172	-2.14	0.033	.131	.916
Younger	.248	.097	-3.57	0.000	.116	.534

Tokens not entered in the analysis:

Sibling	Token not entered into the GLMM analysis
Leo (Younger, Family 5)	La frog escaped. (The frog escaped.)
	Un moose is out. (A moose is out.)
	El is crying. (He is crying.)
	La dog is sniffing. (The dog is sniffing.)
	La frog jumpedó into el agua. (The frog jumped into the water.)
	El perro y el boy are mad. (The dog and the boy are mad.)
Kendra (Younger, Family 4)	Allí was an owl. (There was an owl.)

	El niño went down. (The boy went down.)
	El perro found bumblebees. (The boy found bumblebees.)
	El reindeer was chasing the dog. (The reindeer was chasing the dog.)
	La señora was drowning. (The lady was drowning.)
	El señor wasn't surprised. (The man wasn't surprised.)