Article

Spanish-speaking parents' experiences after English-only and Spanish-only interactions with their children

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Abstract

The purpose of this study is to explore L1 versus L2 (or English-only versus Spanish-only) language use during play activities with their children from the perspective of the immigrant parent. Nine primarily Spanish-speaking parents of typically developing children 12–46 months of age were interviewed after completing play activities with their children in English and in Spanish. To develop participant language proficiency profiles, descriptive data were collected and analysed using clinical language tools. Data on participants' perceptions of language were collected using semi-structured interviewing and analysed using thematic analysis procedures. Participant-child forced language interaction data were collected during play activities and analysed using linguistic analysis software. One major theme (forced English as a barrier to authentic communication) and three subthemes (child did not understand parent, parent felt uncomfortable and code-switching)

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Alliete Alfano Email: <u>aalfano@fiu.edu</u> were found based on their experiences. The results from this study show that these Spanish-speaking parents who are learning English feel more comfortable speaking to their children in their native language. The lack of comfort and proficiency in English had a negative impact on parents' language output in quality and quantity which has implications for the children's overall language exposure. The information obtained from this study may be used to educate professionals working with Spanish-speaking parents that are learning a second language.

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Keywords: second language learning, second language learner experiences,
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Introduction

Children in immigrant families are the largest minority and fastest growing group of children in the United States (Toppelberg & Collins, 2010). Roughly 20% of children in the United States speak a language other than English at home, with Spanish being the most spoken language (Kohnert et al., 2009). Many of these children are born to parents who were minimally exposed to English or began to learn English as adults once they immigrated to the United States. These children are exposed to their parents' native language, in addition to the majority language needed to succeed in school (Stipek, 2001).

Bilingualism, a prevalent worldwide phenomenon, can be defined as the use of two or more languages (Grosjean, 2010). Bilingual language acquisition has become the norm in many parts of the world and has led to the current belief that young children can effortlessly learn two or more languages (Petitto et al., 2001). While the literature supports bilingual language development and the advantages an individual gains from being bilingual, past negative attitudes towards immigrants and the belief that intelligence was in part influenced by the language a person spoke, have led to continued widespread belief in the United States that early bilingual exposure may negatively affect young children and their language acquisition. Academics claimed in the past that bilingualism caused mental retardation because there was a lack of brain 'capacity' to store two language systems (Vicol, 2019). This belief has caused many immigrant families to give up their native language and only speak to their children in English (Moore & Pérez-Méndez, 2006; Petitto et al., 2001). However, it is seen in the literature that bilingualism potentially benefits the speaker by providing them with the preservation of the native language and cultural ties, academic advantages, as well as better career opportunities (Mosty et al., 2013).



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The fact that English is neither the parents' native nor dominant language is a bigger cause for concern than the possibility of confusion in children's bilingual language learning as seen in recent studies (Place & Hoff, 2011). The results of Place and Hoff's (2011) study demonstrate that not only is non-native input less useful to language acquisition than rich native input, but that it also interferes with their natural communication, taking away from the advantages of knowing and using their native language. While Lee et al. (2015) found that families believed that maintaining their native language (L1) is important, there is still very little is known about the perspectives of primarily Spanish-speaking immigrant parents and raising their children bilingually in the United States. To fill this gap in the literature, this study aims to explore parent language use in English only and Spanish only play activities with their children, from the perspective of the immigrant parent.

Language competence

Language competence in one language is not a stable construct but rather a fluctuating, dynamic, multidomain entity composed of competences in specific domains of language development (Toppelberg & Collins, 2010). This includes the sound system (phonology), principles that govern word order and word formation (syntax and morphology), and vocabulary and meaning (lexicon and semantics), which all interact with pragmatic language use (Toppelberg & Collins, 2010). It is often agreed upon that the outcomes of second language (L2) acquisition and proficiency are affected by variables such as aptitude, attitude, motivation, age of acquisition, time spent learning new language and context of learning (Albarracin et al., 2019).

Studies that examine factors related to adult L2 success have found age of acquisition (AoA) to be the strongest predictor of ultimate attainment and it negatively correlates with L2 proficiency (Birdsong, 2006). AoA is said to be the age at which learners are immersed in the L2 context and deeply involved in it (Birdsong, 2006). The age at L2 acquisition is an important factor in the speech perception of L2 acquisition because if the L2 is learned later in life when the L1 categories have been established, the L2 phonemes in turn can be assimilated and highly similar to L1 sounds, creating accented speech (Archila-Suerte et al., 2015). Research examining overall degree of foreign accent in the L2 have also revealed strong effects of age (Flege et al., 1995). Flege and colleagues (1995) state that if the L2 learning begins before age seven, it can be spoken without a detectable accent; however, if learned beyond seven years of age, the degree of perceived accent increases with age. The results of the few existing empirical studies examining the effect of age across various linguistic domains agree that the AoA inhibits phonological outcomes more than morphosyntactic outcomes (Flege et al., 1999b). As it

relates to this study, foreign accent may have implications for confidence in language use in parent-child interactions.

Morphosyntax and pronunciation are the two areas of language most commonly investigated; morphosyntactic errors and the degree of judged non-native accent were shown to increase with advanced age of acquisition (Birdsong, 2006). In a study conducted by Flege and colleagues (1999a), they found that Italian speakers who arrived in the United States at a younger age produced L2 vowels and consonants more accurately than those who arrived later in life. Higher rates of nativelikeness in morphosyntax are associated with certain L1–L2 pairings, along with increased L2 use (Flege et al., 1999b). When it comes to pronunciation, native speakers judge learners with high levels of L2 practice, high motivation to sound like a native, and L2 phonetic training to sound the most native-like (Birdsong, 2006).

Quality of language input

According to Vygotsky (1978), language is the most potent tool that culture provides for children. He believed it mediates their social cognitive development, and that it is the channel by which they may organize and shape their thoughts (Vygotsky, 1978). Language is also the instrument by which adults transmit information to children (Menashe & Atzaba-Poria, 2016). Children's early language exposure lays the foundation for their language development (Hoff et al., 2019). Parental language input plays an important role in their child's language acquisition, cognitive development, emotional skills, conscience development, moral understanding and development of brain structures (Menashe & Atzaba-Poria, 2016). The linguistic input children are exposed to is an important environmental factor that causes differences in their development (Hart & Risley, 1992). Both the quantity and quality of parental language input play a large role in language learning. Input quantity is the amount of parental language exposure available to a child, while input quality refers to the type of parental language exposure available to the child (Unsworth et al., 2019). The majority of studies on bilingual experiences focus on the quantity of language input as increased amounts of exposure generally lead to faster language learning; however, the quality of language input also plays a considerable role in the language outcomes of bilingual children (Unsworth et al., 2019). Considering that half of the population of the world is currently bilingual, analysing the impact of language input on language acquisition is very important (Grosjean, 2010).

The quality of input is dependent upon various factors such as the richness of the input, the context and the variety in the source of this input (Unsworth et al., 2019). The use of a varied vocabulary, complex and varied syntax, and decontextualized speech have also been found to be positive predictors

of children's language growth (Moore & Pérez-Méndez, 2006). Quality features also include social pragmatic features such as maternal responsiveness, mutual engagement, joint attention, and turn-taking between adult and child (Zimmerman et al., 2009). Vocabulary size is the most reliably observed difference between native speakers and non-native speakers. Many of the predictors of children's lexical and grammatical development depend on the size of the vocabulary the speaker uses (Bialystok, 2009). In a longitudinal investigation of the role of quantity and quality in child-directed speech in vocabulary development, Rowe (2012) found that by the third year of life, lexical diversity in the parent's input was a stronger predictor of their children's later vocabulary abilities than the quantity of words in the parent's input.

Whether the source of input is from a native or non-native speaker of that language affects the quality of input as well (Fernald, 2006). Although studies have established that being exposed to two languages does not cause confusion or learning delays, it was once believed that when exposed to two languages, children would develop a single fused system to process both languages (Volterra & Taeschner, 1978; Genesee, 2015). Due to this outdated belief, some professionals in the United States continue to advise parents to pick one language and advocate for English only interactions (Hoff & Core, 2015). These professionals are also failing to take into account the fact that differences in proficiency among non-native parents are also related to the language outcomes of their children (Chondrogianni & Marinis, 2011).

Studies on the relation between source of input and the benefit of that input on child language reinforce the idea that input from non-native speakers, especially those with less proficiency in the language, is less supportive for language growth than that of native speakers (Buac et al., 2014; Place & Hoff, 2011). A study on the effect of maternal language on bilingual children's vocabulary and emergent literacy development in kindergarten found that maternal usage of Spanish at home did not have a negative effect on their children's English vocabulary and, therefore, recommend that educators refrain from instructing Spanish-speaking mothers to speak only English to their children, especially when they have minimal English proficiency (Hammer et al., 2009). A study of immigrant families living in an English-speaking Canadian province found that the parent's use of their L2 (English) at home was not a predictor of the children's English skill; however, the children's exposure to English outside of the home through friends and organized activities was a more significant predictor. These findings further suggest that there is a limited value in the input provided by parents who are not highly proficient in the target language, perhaps due to a lack in richness and diversity in their vocabulary in their second language (Hoff & Core, 2015).



Advantages of native language usage

Teaching children their parents' native language can be advantageous because language is a considerable part of one's cultural identity and it leads to the maintenance of their cultural heritage. Children in immigrant families who can speak their parents' native language have better familial relationships and stronger ethnic identities than those who cannot (Oh & Fuligni, 2010). Positive familial relationships and strong ethnic identities are positively correlated to many desired outcomes such as high academic achievement (Tseng & Fuligni, 2000). Parents in a focus group study also mentioned that they believe language and culture are intertwined and their children maintaining their L1 was an important way to stay close to their cultural roots and with the older members of their family (Lee et al., 2015).

Parents may more positively impact their children's language development by providing cognitively stimulating input of higher quality in their native language compared to their L2 (Hoff & Core, 2015). These parents may also help their children acquire school-related skills through their native language because there is evidence that higher-order language comprehension and literacy skills appear to transfer from one language to another. For instance, children who can read well in Spanish, tend to also read well in English (Goldenberg et al., 2011). This is also supported by findings in a study conducted by Babatsouili and Nicoladis (2018) following a Greek–English bilingual child to test the role of input and usage frequency in the English possessive pronouns and 's. Their findings suggest that the child's English possessives were acquired accurately because she had already acquired possessives in Greek.

In a study in which parents were interviewed to explore their perspectives on their children's home language and bilingual development, the parents believed that if their children possessed good language skills in the home language, they would be better prepared to learn a second language (Mosty et al., 2013). Over half of these parents also felt that learning the home language would increase their child's general cognitive development. These beliefs are supported by Cummins (2001) who stated that children who come to school with a solid foundation in the home language develop stronger literacy skills in their school language. The amount of formal home language support a child receives was found to be the most significant predictor of L2 attainment (Thomas & Collier, 2002). The results from these studies indicate that when children have a strong base in their parent's native language, this aids them in acquiring a more solid foundation in their second language.

Bilingualism myths

There is rapidly growing interest regarding bilingual acquisition because there is increased awareness of how common it is in children (Genesee, 2015). Basic research on bilingual development reveals various conclusions that can be used to inform professionals, especially those working with children from bilingual environments that differ from the common misconceptions many adults have (Hoff & Core, 2015). Some professionals were once concerned that simultaneous language acquisition stretched the infant's ability to acquire language and they would be unable to differentiate between the two languages if parents used both languages at home (Genesee, 2015).

It is often mistakenly believed that exposure to two languages may interfere with the rate of development of both languages for young language learners; however, it is possible for bilingual children to exhibit the same rate of grammatical development as children learning only one language (Moore & Pérez-Méndez, 2006). Even children who are strongly dominant in one language are very likely to perform within a normal range of variation for monolingual children (Hoff & Core, 2015). Strong dominance may be exhibited in one language through the ability to produce longer utterances, a more diverse vocabulary, and speak with fewer pauses and hesitations. This however is closely related to the amount of input received and not a lack of ability (Moore & Pérez-Méndez, 2006). Bilingualism does not slow language growth if outcomes are measured appropriately; Pearson and colleagues (1993) found that when a bilingual child's vocabulary in each language is combined, only counting translation equivalents once, this conceptual vocabulary is similar in size to that of monolinguals (Pearson et al., 1993). For monolingual children, word frequency and syntactic complexity in the speech that they hear influences their language skills. The same can be said for bilingual children; however, for bilingual children in bilingual environments, the language exposure varies more across contexts (Carbajal & Peperkamp, 2019).

Bilingual development is a complex topic to study, mainly because there are so many different experiences that depend on each person's language environment. Researchers have commented that every bilingual has their own unique patterns of language experiences and abilities. The two languages may be separated in their experience, or frequently heard within the same sentences or conversations (Place & Hoff, 2011). There is also little to no research regarding the feelings and attitudes of parents who are learning English as a second language as adults and are forced to communicate with their children in this new language, which can play a significant role in parents' satisfaction with conversations with their children. Therefore, this qualitative study aims to explore forced non-native parent language use during play activities with their children, from the perspective of the immigrant parent.



Methods

Research design

A qualitative research paradigm was adopted to explore immigrant participants' experiences in the context of forced language play activities with their children. To develop participant language proficiency profiles, descriptive data were collected and analysed using clinical language tools. Data on participants' perceptions of language were collected using semi-structured interviewing, while participant–child forced language interaction data were collected during play activities. Thematic analysis procedures (Braun & Clarke, 2006) were employed in the examination of the interview transcripts. Linguistic analysis software was used to generate descriptive statistics on the play activity transcripts.

Recruitment

Before this study took place, institutional review board approval was obtained from the research team's university. The call for participants was announced through word-of-mouth in the South Florida community as well as through posts on Facebook.

Screening procedures

Interested parents emailed the research team and were then screened for inclusionary and exclusionary criteria. Inclusion criteria required the parents to: be 18 years or older, have a typically developing child between the ages of 12–46 months of age, and be primary Spanish speakers with 'novice high' to 'advanced low' English oral proficiency levels as indicated by the American Council on the Teaching of Foreign Languages (ACTFL) Proficiency Guidelines (ACTFL, 2015; Appendix A) and as determined by the research team through inclusion questions. This was required in order to ensure that the parent had sufficient English to participate in the English-only portion of this study. Upon determining that inclusion criteria were met, the first session was scheduled at the participants' convenience, where written consent was obtained. At this point in time, participants were assigned a participant identification number to protect their identities throughout the entirety of this study.

Data collection

Data collection was conducted across three sessions in the families' homes. During the first session, participants' English and Spanish language proficiency was measured using select subsections of the Woodcock-Muñoz Language Survey-Revised (WMLS-R) (Woodcock et al., 2010), which included the following subtests: Picture Vocabulary, Verbal Analogies, Letter-Word



Identification, Understanding Directions and Passage Comprehension. The WMLS-R is used to assess individuals from 2 to 90 years old. The subtests yield Cognitive Academic Language Proficiency (CALP) scores for Oral Language, Listening and Reading. As stated by the WMLS-R report, the oral language score measures listening and speaking in the tested language, including language development and verbal reasoning. Listening measures listening ability, comprehension and linguistic competency. Reading measures letter and word identification skills and the ability to comprehend written passages while reading. CALP scores range from Level 1 (negligible) to Level 6 (very advanced). The information collected from this procedure was used to develop participant language proficiency profiles that would be synthesized with the interview and play activity data. The intake forms included their participant ID, and primary caregiver information such as country of origin, languages spoken, time spent learning English, educational level, occupation, as well as the same information for the child's second caregiver. During this first session, a pre-session interview (Appendix B) was also conducted in Spanish wherein each parent was asked a variety of open-ended questions surrounding their perceptions of the Spanish and English language usage as well as their thoughts and opinions on some experiences.

Sessions two and three, held on two separate days, consisted of parentchild play activities, as well as a post-session semi-structured interview conducted in Spanish regarding their experiences following both play samples (Appendix C). Both sessions, which each entailed two play activities (one in each language), were video recorded. During the parent-child play activity, the parent played with their child for two 15-minute intervals, wherein the parent was instructed to speak only Spanish in one interval, and only English in the other. Parents were able to play with any of the toys that they had in their home and were instructed to play with their child as they normally would. The only constraint during play was to maintain the specified language for each activity, that was randomly selected by the research team prior to the start of the activity. For the session 3 play activities, the order of languages was reversed, relative to the session 2 order each for 15-minute intervals to give the parent the opportunity to begin at least one session in the language they felt most comfortable in. The play format was selected because play offers an ideal opportunity for parents to fully engage with their children (Ginsburg, 2007). When children interact with adults in a playful manner, it leads to greater language usage and language facilitation (Zigler & Bishop-Joseph, 2009). Play enhances children's development by incorporating many social and cognitive elements necessary for language learning (Ginsburg, 2007). A post-session semi-structured interview was conducted on both days regarding parents' perceptions of their language usage as well as their experiences during these

forced English-only and Spanish-only play activities. In preparation for analysis, the pre- and post-session interview audio recordings were transcribed in Spanish, resulting in the production of one interview transcript for each parent.

Participants

A sample of nine native Spanish-speaking immigrant adults who were learning English and were parents of typically developing children within the ages of 12–46 months participated in this study. The following demographic table includes their participant number, age, country of origin, child's age, WMLS-R scores in both English and Spanish, and ACTFL level.

Participant	Age	Country of origin	Child's age	WMLS-R English scores	WMLS-R Spanish scores	ACTFL levels
1	31	Venezuela	3;4	OL: 3.5 L:4.5 R: 5	OL:4 L:5 R:6	Advanced Low
2	32	Venezuela	1;11	OL: 3.5 L :4.5 R:4	OL:4.5 L: 5 R: 5	Advanced Low
3	42	Venezuela	1;3	OL:1 L:2 R:2	OL: 3 L: 4.5 R: 5	Novice High
4	42	Mexico	3;6	OL: 3 L: 4 R: 3	OL: 3.5 L: 4.5 R: 4.5	Intermediate High
5	34	Colombia	3;5	OL: 3 L:3.5 R: 3	OL :4.5 L: 4 R: 5	Intermediate High
6	33	Venezuela	1;5	OL:3 L:4 R: 4.5	OL:4 L:4 R:5	Intermediate High
7	39	Venezuela	1;6	OL: 2 L: 4 R: 3	OL: 4 L: 5 R: 6	Intermediate Mid
8	45	Venezuela	1;6	OL:1 L: 3 R: 2	OL: 4 L: 4 R: 5	Novice High
9	32	Mexico	2;5	OL: 4 L: 5 R: 4	OL: 5 L: 5 R :5	Advanced Low

Table 1. Participant demographics. OL = oral language; L = listening; R = reading.

Data analysis

Responses to pre-session questions, which were primarily non-narrative in nature, were reviewed by the research team. Data from two questions about the value participants place on language modelling and exposure (i.e. *Describe how important you feel speaking your stronger language is for your child; Describe how important you feel maintaining Spanish is for your child*) were quantified for the purposes of this manuscript. Data from the remaining questions were not included as they generated responses that related to contexts outside of their child's language learning.

All play activities in Spanish and English were transcribed according to SALT transcription guidelines in preparation for linguistic analysis using SALT software. Variables analysed included total number of utterances, total number of words, and total number of different words spoken by each individual in each of the play activities. Instances of parent code-switching were identified and calculated across all play activity transcripts.

The audio recordings of the pre- and post-session interviews, which were conducted in Spanish, were transcribed in preparation for analysis. Thematic analysis procedures were used to identify, analyse, organize, describe and report themes found in the post-session data (Nowell et al., 2017). The six phases of data analysis described by Braun and Clarke (2006) were followed. This included an in-depth review of the data, coding, categorizing codes to form preliminary groups, ensuring that the groups' content gave rise to the same semantic meaning respectively, and translating the data from Spanish to English.

Reliability

Reliability of themes extracted from the interview data was attained by conducting an interrater reliability check. After two members of the research team collaborated to conduct thematic analysis, the third research team member received the grouped quotes without the theme and subtheme labels. The third researcher then generated their own themes which were compared with the initial themes to check for consistency across the two analyses. Agreement was achieved at 75%, wherein the team had to come to a consensus regarding one of the groupings. As an additional reliability measure, results from the thematic analysis were triangulated with interactional data collected during the four play activities. In doing so, the participants' perceptions were corroborated with their actual linguistic output (number of utterances, number of words, number of different words, number of code-switching incidences) in each language.



Results

Analysis of participants' responses to the pre-session question 'Describe how important you feel speaking your stronger language is for your child' revealed that all participants (n = 9) felt it was important to provide language models for their child in their stronger language. Similarly, in response to the pre-session question 'Describe how important you feel maintaining Spanish is for your child', all participants (n = 9) stated that maintenance of the Spanish language was of importance to them. Four of the nine participants went on to expand on their responses and specifically mentioned that they believe it is important for their child to maintain their native language in order for them to maintain family ties and be able to communicate with family members who only speak Spanish, to be able to fully immerse themselves in their culture, and for job purposes. Additionally, two participants reported only speaking Spanish to their children because they know they will be exposed to English as they grow older.

Throughout the pre-session interview, derivatives of the words 'comfortable' (e.g. 'good', 'normal', 'natural') and 'uncomfortable' (e.g. 'anxious', 'bad', 'unnatural') frequently appeared. Participants often discussed whether they felt comfortable or uncomfortable speaking each language in different situations. Five participants (P3, P5, P6, P7, P8) mentioned feelings of discomfort or not feeling comfortable enough speaking English for various reasons including not being familiar with certain phrases or not using it as much. All nine participants described themselves as feeling 'good' and 'comfortable' when speaking Spanish as it is their dominant language.

SALT transcripts were analysed to find the total number of utterances, total number of words, and total number of different words spoken by each individual in each of the play activities. Averages were found for each language and can be found in Table 2. P1, P3, P5, P6, P7, P8 and P9, all had a higher total utterance average in Spanish than in English while P2 and P4 had a higher average in English. P3, P5, P6, P7, P8 and P9, all had a higher total number of words average in Spanish than in English while P1, P2 and P4 had a higher average in English than Spanish. Finally, all participants with the exception of P4, had a higher average of the number of different words in Spanish than in English.

SALT transcripts and the video recordings of the play samples were also analysed and re-watched to find instances of the parent code-switching. The average number of times the parent code-switched in each language can be found on Table 3. P1, P2 and P3 were found to have code-switched more frequently in the English play samples than in the Spanish play samples. P4, P5, P6, P8 and P9 code-switched more frequently in the Spanish play samples than



Parent	Total uttera langua	rances by uage	Total utterance differential in S (from E)	Total nu	mber of words by language	Total word differential in S (from E)	No. of diffe	No. of different words	Different words differential in S (from E)
	English	Spanish		English	Spanish		English	Spanish	
P1	261.5	293.5	+32	790	1103.5	+313.5	195	261	+66
P2	340	318	-22	1065	1021.5	-43.5	190.5	214	+23.5

Table 2. Parents' mean total number of utterances, words and different words during play activities. E = English; S = Spanish.

Parent	Total utte langu	utterances by anguage	Total utterance differential in S (from E)	Total numbe lang	fotal number of words by language	Total word differential in S (from E)	No. of diffe	No. of different words	Different wo differential i (from E)
	English	Spanish		English	Spanish		English	Spanish	
P1	261.5	293.5	+32	790	1103.5	+313.5	195	261	+66
P2	340	318	-22	1065	1021.5	-43.5	190.5	214	+23.5
P3	150	198	+48	209	366	+160	73	141	+68
P4	429	422	-7	714	544	-170	196	164.5	-31.5
P5	331.5	424	+92.5	654	1033	+379	127.5	229	+101.5
P6	329	391	+62	561	842.5	+281.5	136	171.5	+35.5
Р7	230	448.5	+218.5	509.5	1196.5	+687	58.5	226	+167.5
P8	230	396.5	+139.5	621.5	1212	+590.5	156.5	239	+82.5
P9	246.5	294	+47.5	861.5	1103.5	+242	217.5	244.5	+27

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Participant	Parent CS English sample	Parent CS Spanish sample
P1	4.0	3.0
P2	3.0	2.5
Р3	11.0	1.0
P4	0.5	6.0
P5	5.5	10.0
P6	5.5	11.5
P7	0.0	0.0
P8	0.5	2.5
P9	0.5	4.0

 Table 3.
 Parent code-switching (CS) average.

in the English play samples. P7 did not code-switch throughout play samples in either language.

Thematic analysis of the participants' responses to open-ended questions in the post-session interview about both the English and Spanish play activities gave rise to the major theme forced English as a barrier to authentic communication and three subthemes: (i) child did not understand parent, (ii) parent felt uncomfortable and (iii) code-switching. Responses of four participants contributed to the emergence of first subtheme child did not understand parent. Other barriers experienced led to the second subtheme parent felt uncomfortable where six participants mentioned feeling strange and/or uncomfortable during the English-only portion of the study. They expressed feeling unnatural, feeling limited in what they were able to say, and that the interactions lacked the fluidity they would like to have in conversation. Finally, for the third subtheme, Code-switching, three participants mentioned moments where Spanish words emerged when they were in the English-only portion of the study. Additionally, all participants mentioned that they felt more comfortable and were more natural during Spanish-only play activities as it is how they usually interact with their children.

Multiple quotes from single participants contributed to a single subtheme. Thus, the number of quotes (n = 29) is greater than the number of participants (n = 9) in Table 2. Patterns related to participant language proficiency and feelings expressed during interviews were not identified.

We discuss these three subthemes in more detail in the following section.

Discussion

In this study, data were collected using pre-session (session 1) and post-session (sessions 2 and 3) semi-structured interviews which included open-ended questions to generate narrative responses on the experiences primarily Spanish speaking immigrant parents who are raising their children bilingually in the



Subthemes	n	Participant quotes
i. Child did not understand parent	9	'I feel that she does not understand me because I never speak to her in English. I felt she was not understanding me, and I had the urge to speak to her in Spanish. I feel that in Spanish it is more natural.' [P1] 'I was a bit frustrated in English because I saw she was not understanding what I was telling her.' [P2] 'The English part was complicated because she was not understanding me, and she was responding to me in Spanish so sometimes words in Spanish slipped out because we are not accustomed to communicating in English.' [P5] 'Of course, during the English part, it was a bit interesting because I noticed that [child] did not understand me but it was cool.' [P6] 'In English [child] definitely did not maintain the same level of attention because she did not understand me, so she would look at me with a strange face. For her it was something unfamiliar.' [P6]
ii. Parent felt uncomfortable	6	'I felt a bit restricted in English in saying other things because it is not what I naturally always do with them.' [P1] 'Eh it made me feel a bit uncomfortable in the English part because it is not natural. I am always with my daughters and the predominant language is Spanish, so some of the fluency is lost. The English was a bit forced and there was no connection between us two.' [P2] 'In English when I tried to tell her things and they would not come out fluently, I had to think about it, and I would doubt whether I was using the verb tense correctly' [P6] 'Doing the activity in English made it more difficult to communicate with [child].' [P7] 'Well when you contrast the two languages, it is frustrating to know that you cannot communicate in the same way or in a way that is more efficient with respect to the non-dominant language. Your head hurts because you are predisposed because your mind has to work in another language. It is uncomfortable when you are so limited in one language to expand on.' [P8] 'It was strange for me to talk only in English with her.' [P9]
iii. Code-switching	4	'I had to remember that I could only speak English, sometimes I would switch to Spanish.' [P2] 'Sometimes when we were in English [section] obviously sometimes things would come out. She told me 'the pig' (in Spanish) and I told her 'yes that one' (in Spanish) so sometimes things would come out.' [P5] 'Yes, sometimes suddenly Spanish came out.' [P6]

Table 4. Major theme: forced English as a barrier to authentic communication.

United States. Pre-session interview data revealed that all participants strongly believed that it was 'very important' that their child speaks their native language for cultural, familial and job purposes. As P4 described:

For me it is very important that my daughter speak Spanish for many reasons. Number one, because I am Mexican and I continue to travel to Mexico and for me it is important that she understands my family, and when my mom comes to

visit, my mom understands English but she does not speak it, therefore it is the only way they would be able to communicate.

Similarly, P9 stated:

For me, it is extremely important that my daughter is exposed to Spanish all of the time. That she can communicate with her grandparents correctly, in Mexico, if we go on vacation, she won't be lost without recognizing the language. For the cultural part it is very important to me.

These findings are similar to those in the literature on parental perceptions of bilingualism where it was found that parents believed that language and culture are intertwined and maintaining the family's L1 was an important way to stay close to their cultural roots as well as with the older members of their family (Lee et al., 2015). Research also indicates that children from immigrant families who maintained their parent's native language had better familial relationships and stronger ethnic identities than those who did not (Oh & Fuligni, 2010). Additionally, strong family relationships and ethnic identities were also found to be positively correlated with high academic achievement (Tseng & Fuligni, 2000). Therefore, the instincts and desires of the participants in the current study, as they relate to native language use, have merit.

Others such as P5 stated:

It is extremely important that she speak Spanish because I know that in the future it will give her advantages as to jobs and work opportunities, and even her studies. Also, to socialize with other people when she is traveling and learning other cultures. For many things it will give her advantages over other people.

In the same vein, P3 mentioned '100% [important] because it is necessary to have two languages to be able to communicate with family and for her job.' These quotes are comparable to the literature where a study found that several parents believed that being bilingual would provide their children with better opportunities in life, such as better jobs (Lee et al., 2015).

All of the participants reported feeling very comfortable speaking Spanish in the pre-session interview because it is their 'mother tongue'; however, only three reported feeling comfortable speaking English. For instance, P3 stated 'It makes me a bit uncomfortable to know just a few phrases to be able to communicate well with other people.' P6 stated that since she speaks Spanish more frequently, she gets 'scared' and 'anxious' about not being able to communicate well when she has to speak English. The feelings of discomfort due to being limited in what they can express and how they communicate in English shared by these participants may be due to their lack of proficiency in English as evidenced by their English language proficiency scores on the WMLS-R and



ACTFL (see Table 1). Because these participants learned English as a second language at varying ages, it is possible this has affected their ultimate attainment of the L2 and their confidence in their ability to speak the language. The lack of English proficiency coupled with the subsequent negative feelings about lacking proficiency impacted speech output for five of the participants during the forced English play activity. As revealed in the SALT analysis of play activity transcripts, participants had higher overall averages of utterances, words, and different words in Spanish in comparison to English (Table 2).

Aside from incurring a decrease in speech output during the forced English play activities, participants also perceived communication barriers in general when communicating with their child during the English activity. In their post-session interview responses, many parents commented on how strange and difficult the English activity was for them which gave rise to the first sub-theme, *child did not understand parent*. This perceived lack of understanding led to feelings of frustration wherein P2 stated, 'I was a bit frustrated in English because I saw she was not understanding what I was telling her.' P6 described feeling that she had to try to get her child's attention in another way because it was clear she was not understanding what she was trying to tell her.

The second subtheme supporting the major theme of barriers in English was parent felt uncomfortable. The majority of the participants expressed feeling uncomfortable, strange and limited in what they were able to say and express to their children during the forced English portion of the study. P2 stated that the English section was 'uncomfortable', 'not natural', 'a bit forced', 'there was no connection between us two' and that some of the fluency was lost. Similarly, P6 also questioned her verb usage during her English-only play activities and stated, 'In English when I tried to tell her things and they would not come out fluently, I had to think about it, and I would doubt whether I was using the verb tense correctly.' She mentioned that she noticed she does not know how to use 'phrasal verbs' as well in English, which made it difficult to give her daughter instructions while they were playing. P8 mentioned that it was frustrating not being able to 'communicate in the same way or in a way that was more efficient in respect to the non-dominant language'. The difficulty in communicating in English may again be tied to the parents' proficiency levels and the age that they learned this second language. The existence of a 'critical period' for learning a second language and achieving a high proficiency may be used to explain the difficulties these English-learning parents are experiencing when only using English to communicate (Bialystok & Miller, 1999). All nine participants felt the Spanish-only portion was easier, more natural, and made them feel more comfortable because it more closely resembles their natural play style and what they are accustomed to. This can be seen by their word count, for instance P1 had a higher average number of total utterances



and number of different words in Spanish. P1 also stated that Spanish was 'more natural and spontaneous than English' because she knows more children's songs in Spanish. Even P2, who had a higher number of total utterances average in English, states that the Spanish activity felt more 'habitual' while the English activity felt 'forced and there was no connection between us two'. P4 had higher averages in English overall but when asked which language was easier to complete the activity in, she answered that the Spanish activity was easier for her.

The third subtheme was *code-switching*. Three of the parents mentioned that they noticed they 'accidentally' code-switched during the English-only play activities. As seen in the literature, code-switching may occur for different reasons and in various ways (Bail et al., 2014). Code-switching may be influenced by factors such as the speaker's age, linguistic background and their role in the conversation (Cheng & Butler, 1989). The fact that these participants are interacting with their children, whom they are used to speaking to in Spanish only, may have been what caused them to code-switch. Code-switching can also occur due to proficiency-related factors such as lexical gaps that are filled by borrowing words from the dominant language when interacting in the weaker language (Montanari et al., 2019). Code-switching allows for the speaker to precisely express their intended meaning and bypass lexical gaps (Green & Wei, 2014). Interestingly, only three participants (P1, P2, P3) had more incidences of code-switching on average during their forced English play activities than during the Spanish play activities (Table 3). Based on the literature regarding proficiency-based code-switching, it does not come as a surprise that P3, whose ACTFL English proficiency level is 'Novice High', presented with the highest average of code-switching incidences in English. P1 and P2, on the other hand, both had 'Advanced Low' ACTFL English proficiency ratings; however, their average incidences for code-switching in English differed from those in Spanish by 1 and 0.5 incidences respectively.

Conclusions

The purpose of this study was to learn more about the experiences of Spanish-speaking immigrant parents who are learning English, after forced English-only and Spanish-only interactions with their children. This was done to simulate what their interactions would be like if they followed the advice of speaking English only with their children as opposed to speaking in their native language. Participants were asked many questions about their language usage, their feelings, thoughts and opinions. The results from this study show that these Spanish-speaking immigrant parents who are learning English feel more comfortable speaking to their children in their native language, which



is also the language that they are more proficient in. Even participants who mentioned that they feel comfortable speaking English and had corresponding high WLMS-R scores, later discussed feelings of discomfort and feeling limited and unnatural during the English-only section of the study in their post-session interviews. Most of the participants emphasize the point that because they only speak Spanish with their child, when they were speaking to them in English only, their child was not understanding them.

After being forced to speak one language only, during the post-session interviews, participants discussed having difficulty expressing themselves in English the way they would be able to in Spanish. While the parents knew that they were expected to use only one language throughout each play activity, three parents mentioned having 'accidentally' code-switched during their English-only play activities in which they were told they should only speak English. When looking at the participant's feelings and comments regarding their experiences, it was clear that forcing parents to speak to their child in their non-native language only, whether they are comfortable speaking it or not, caused strains in their interactions. In this case it may be because the majority of participants in this study are accustomed to speaking to their child in their native language only.

Limitations and implications

There is little to no research on Spanish-speaking immigrant parents who are learning English as a second language and their feelings regarding speaking to their children in their non-native language. More research should be conducted in this area to extinguish and further explore the many bilingual myths and paradoxes. This study was limited in size and therefore, the results cannot be easily generalized. If this study were to be replicated, it is suggested that the interview questions be structured differently. For example, an observation we encountered during this study was that after playing with their children during the play activities in their non-native language, many of the parents were tired or frustrated and answered quickly to regain control of their children and complete the session. It is possible that restructuring the way the play activities were conducted and asking more thought provoking questions may have elicited longer and more thorough responses.

The information obtained from this study may be used to educate professionals working with Spanish-speaking immigrant parents that are learning a second language. The data collected and literature found demonstrates that it is not necessarily better for children or their parents to force themselves to use their non-native English skills to communicate with their children but rather that using the language in which they are more proficient in and have



richer vocabulary skills in would lead to greater benefits in both their familial relationships and language growth. From the interviews, it is clear that in this study, the forced interactions in their non-native language made parents feel uncomfortable and limited. It impeded on the nature and fluidity of their interactions which could potentially be detrimental to their relationships. It is important for professionals to be aware of this information to better educate and provide appropriate guidance to these families. This study may also be used as a model to be replicated with children on the autism spectrum, hard of hearing, or any other population of interest to further investigate the impact of immigrant parents using their non-native usage language to communicate with their children.

References

- ACTFL. (2015). Oral proficiency levels in the workplace. Retrieved from <u>www.actfl.org/</u> <u>resources/actfl-proficiency-guidelines-2012</u>
- Albarracin, J., Cabedo-Timmons, G. & Delany-Barmann, G. (2019). Factors shaping second language acquisition among adult Mexican immigrants in rural immigrant destinations. *Hispanic Journal of Behavioral Sciences*, 41(1), 85–102. <u>https://doi.org/ 10.1177/0739986318821703</u>
- Archila-Suerte, P., Zevin, J. & Hernandez, A. E. (2015). The effect of age of acquisition, socioeducational status, and proficiency on the neural processing of second language speech sounds. *Brain and Language*, 141, 35–49. <u>https://doi.org/10.1016/j.bandl.2014.</u> <u>11.005</u>
- Babatsouli, E. & Nicoladis, E. (2018). The acquisition of English possessives by a bilingual child: Do input and usage frequency matter? *Journal of Child Language*, 46(1), 170–183. https://doi.org/10.1017/s0305000918000429
- Bail, A., Morini, G. & Newman, R. S. (2014). Look at the gato! Code-switching in speech to toddlers. *Journal of Child Language*, 42(5), 1073–1101. <u>https://doi.org/10.1017/ s0305000914000695</u>
- Bialystok, E. (2009). Bilingualism: The good, the bad, and the indifferent. *Bilingualism:* Language and Cognition, 12(1), 3–11. <u>https://doi.org/10.1017/s1366728908003477</u>
- Bialystok, E. & Miller, B. (1999). The problem of age in second-language acquisition: Influences from language, structure, and task. *Bilingualism: Language and Cognition*, 2(2), 127–145. <u>https://doi.org/10.1017/s1366728999000231</u>
- Birdsong, D. (2006). Age and second language acquisition and processing: A selective overview. Language Learning, 56, 9–49. <u>https://doi.org/10.1111/j.1467-9922.2006.00353.x</u>
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <u>https://doi.org/10.1191/1478088706qp0630a</u>
- Buac, M., Gross, M. & Kaushanskaya, M. (2014). The role of primary caregiver vocabulary knowledge in the development of bilingual children's vocabulary skills. *Journal* of Speech, Language, and Hearing Research, 57(5), 1804–16. <u>https://doi.org/10.1044/</u> 2014_jslhr-l-13-0055

- Carbajal, M. J. & Peperkamp, S. (2019). Dual language input and the impact of language separation on early lexical development. *Infancy*, 25(1), 22–45. <u>https://doi.org/10.1111/infa.12315</u>
- Cheng, L. R. & Butler, K. (1989). Code-switching: a natural phenomenon vs language 'deficiency'. *World Englishes*, 8(3), 293–309. <u>https://doi.org/10.1111/j.1467-971x.1989.</u> <u>tb00670.x</u>
- Chondrogianni, V. & Marinis, T. (2011). Differential effects of internal and external factors on the development of vocabulary, tense morphology and morpho-syntax in successive bilingual children. *Internal and External Factors in Child Second Language Acquisition Linguistic Approaches to Bilingualism*, 1(3), 318–45. <u>https://doi.org/10.1075/lab.1.3.05cho</u>
- Cummins, J. (2001). Bilingual children's mother tongue: Why is it important for education? *Sprogforum*, 7(19), 15–25.
- Fernald, A. (2006). When infants hear two languages: Interpreting research on early speech perception by bilingual children. *Childhood Bilingualism*, 19–29. <u>https://doi.org/</u> <u>10.21832/9781853598715-003</u>
- Flege, J. E., Munro, M. J. & MacKay, I. R. A. (1995). Effects of age of second-language learning on the production of English consonants. *Speech Communication*, *16*, 126.
- Flege, J. E., Mackay, I. R. & Meador, D. (1999a). Native Italian speakers' perception and production of English vowels. *The Journal of the Acoustical Society of America*, 106(5), 2973–87. <u>https://doi.org/10.1121/1.428116</u>
- Flege, J. E., Yeni-Komshian, G. H. & Liu, S. (1999b). Age constraints on second-language acquisition. *Journal of Memory and Language*, 41(1), 78–104. <u>https://doi.org/10.1006/jmla.1999.2638</u>
- Genesee, F. (2015). Myths about early childhood bilingualism. *Canadian Psychology/ Psychologie Canadienne*, 56(1), 6–15. <u>https://doi.org/10.1037/a0038599</u>
- Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent–child bonds. *Pediatrics*, *119*(1), 182–91. <u>https://doi.org/10.1542/peds.2006-2697</u>
- Goldenberg, C., Reese, L. & Rezaei, A. (2011). Contexts for language and literacy development among dual- language learners. In A. Y. Durgunoğlu C. Goldenberg (eds), *Language and Literacy Development in Bilingual Settings* (pp. 3–25). New York: Guilford Press.
- Green, D. W. & Wei, L. (2014). A control process model of code-switching. Language, Cognition and Neuroscience, 29(4), 499–511. <u>https://doi.org/10.1080/23273798.2014.</u> <u>882515</u>
- Grosjean, F. (2010). Bilingual: Life and reality. Cambridge, MA: Harvard University Press.
- Hammer, C. S., Davison, M. D., Lawrence, F. R. & Miccio, A. W. (2009). The effect of maternal language on bilingual children's vocabulary and emergent literacy development during head start and kindergarten. *Scientific Studies of Reading*, 13(2), 99–121. <u>https:// doi.org/10.1080/10888430902769541</u>
- Hart, B. & Risley, T. R. (1992). American parenting of language-learning children: Persisting differences in family-child interactions observed in natural home environments. *Developmental Psychology*, 28(6), 1096–1105. <u>https://doi.org/10.1037/0012-1649.</u> 28.6.1096

- Hoff, E. & Core, C. (2015). What clinicians need to know about bilingual development. Seminars in Speech and Language, 36(2), 89–99. <u>https://doi.org/10.1055/s-0035-1549104</u>
- Hoff, E., Core, C. & Shanks, K. F. (2019). The quality of child-directed speech depends on the speaker's language proficiency. *Journal of Child Language*, 47(1), 132–45. <u>https://doi.org/10.1017/s030500091900028x</u>
- Kohnert, K., Windsor, J. & Ebert, K. D. (2009). Primary or 'specific' language impairment and children learning a second language. *Brain and Language*, 109(2–3), 101–11. <u>https://</u> doi.org/10.1016/j.bandl.2008.01.009
- Lee, M., Shetgiri, R., Barina, A., Tillitski, J. & Flores, G. (2015). Raising bilingual children. *Hispanic Journal of Behavioral Sciences*, 37(4), 503–21. <u>https://doi.org/10.1177/07399</u> 86315602669
- Menashe, A. & Atzaba-Poria, N. (2016). Parent-child interaction: Does parental language matter? British Journal of Developmental Psychology, 34(4), 518–37. <u>https://doi.org/</u> 10.1111/bjdp.12147
- Montanari, S., Ochoa, W. & Subrahmanyam, K. (2019). A longitudinal investigation of language mixing in Spanish–English dual language learners: The role of language proficiency, variability, and sociolinguistic factors. *Journal of Child Language*, 46(5), 913–37. https://doi.org/10.1017/s0305000919000278
- Moore, S. & Pérez-Méndez, C. (2006). Working with linguistically diverse families in early intervention: Misconceptions and missed opportunities. *Seminars in Speech and Language*, 27(3), 187–98. <u>https://doi.org/10.1055/s-2006-948229</u>
- Mosty, N. L., Lefever, S. & Ragnarsdóttir, H. (2013). Parents' perspectives towards home language and bilingual development of preschool children. *Netla—Online Journal on Pedagogy and Education*. Retrieved from https://netla.hi.is/serrit/2013/rannsoknir_og_skolastarf/006.pdf
- Nowell, L. S., Norris, J. M., White, D. E. & Moules, N. J. (2017). Thematic analysis. International Journal of Qualitative Methods, 16(1), 160940691773384. <u>https://doi.org/10.1177/1609406917733847</u>
- Oh, J. S. & Fuligni, A. J. (2010). The role of heritage language development in the ethnic identity and family relationships of adolescents from immigrant backgrounds. *Social Development*, 19(1), 202–20. <u>https://doi.org/10.1111/j.1467-9507.2008.00530.x</u>
- Pearson, B. Z., Fernández, S. C. & Oller, D. K. (1993). Lexical development in bilingual infants and toddlers: Comparison to monolingual norms. *Language Learning*, 43(1), 93–120. <u>https://doi.org/10.1111/j.1467-1770.1993.tb00174.x</u>
- Petitto, L. A., Katerelos, M., Levy, B. G., Gauna, K., Tétreault, K. & Ferraro, V. (2001). Bilingual signed and spoken language acquisition from birth: implications for the mechanisms underlying early bilingual language acquisition. *Journal of Child Language*, 28(2), 453–96. https://doi.org/10.1017/s0305000901004718
- Place, S. & Hoff, E. (2011). Properties of dual language exposure that influence 2-yearolds' bilingual proficiency. *Child Development*, 82(6), 1834–49. <u>https://doi.org/10. 1111/j.1467-8624.2011.01660.x</u>
- Rowe, M. L. (2012). A longitudinal investigation of the role of quantity and quality of childdirected speech in vocabulary development. *Child Development*, 83(5), 1762–74. <u>https://</u><u>doi.org/10.1111/j.1467-8624.2012.01805.x</u>

- Stipek, D. J. (2001). Pathways to constructive lives: The importance of early school success. In A. C. Bohart & D. J. Stipek (eds), *Constructive & destructive behavior: Implications for family, school, & society* (pp. 291–315). Washington, DC: American Psychological Association. https://doi.org/10.1037/10433-014
- Thomas, W. P. & Collier, V. P. (2002). A national study of school effectiveness for language minority students' long-term academic achievement. Berkeley, CA: Center for Research on Education, Diversity & Excellence.
- Toppelberg, C. O. & Collins, B. A. (2010). Language, culture, and adaptation in immigrant children. Child and Adolescent Psychiatric Clinics of North America, 19(4), 697–717. <u>https://doi.org/10.1016/j.chc.2010.07.003</u>
- Tseng, V. & Fuligni, A. J. (2000). Parent–adolescent language use and relationships among immigrant families with East Asian, Filipino, and Latin American backgrounds. *Journal* of Marriage and Family, 62(2), 465–76. <u>https://doi.org/10.1111/j.1741-3737.2000.00465.x</u>
- Unsworth, S., Brouwer, S., Bree, E. D. & Verhagen, J. (2019). Predicting bilingual preschoolers' patterns of language development: Degree of non-native input matters. *Applied Psycholinguistics*, 40(5), 1189–1219. <u>https://doi.org/10.1017/s0142716419000225</u>
- Vicol, S. (2019). The politics of bilingualism in the United States: A new perspective on the immigration debate. *SURJ: The Stanford Undergraduate Research Journal*, *18*(1), 43–49.
- Volterra, V. & Taeschner T. (1978). The acquisition and development of language by bilingual children. *Journal of Child Language*, 5, 311–26.
- Vygotsky, L. (1978). Mind in society. Cambridge, MA: Harvard University Press.
- Woodcock, R. W., Alvarado, C. G., Ruef, M. L. & Schrank, F. A. (2010). *Woodcock–Muñoz Language Survey, revised, English form A*. Rolling Meadows, IL: Riverside Publishing.
- Zigler, E. F. & Bishop-Josef, S. J. (2009). Play under siege: A historical overview. *Zero to Three (J)*, 30(1), 4–11.
- Zimmerman, F. J., Gilkerson, J., Richards, J. A., Christakis, D. A., Xu, D., Gray, S. & Yapanel, U. (2009). Teaching by listening: The importance of adult–child conversations to language development. *Pediatrics*, 124(1), 342–9. <u>https://doi.org/10.1542/peds.2008-2267</u>



Appendix A: Levels of English proficiency

The American Council on the Teaching of Foreign Languages (ACTFL) Proficiency Guidelines describes oral proficiency levels as follows. The shaded area represents the English oral proficiency levels parents needed to be included in the study.

Distinguished bistinguished audience, persuade, negotiate. Deal with nuance and subtlety.Highly articulate, professional and/or educational experience in the target culture.SuperiorDiscuss topics extensively, support opinions, hypothesize. Deal with linguistically unfamiliar situations.Well-educated native speakers. Educated language learners with extended (17 years) and current professional and/or educational experience in the target culture.Advanced HighNarrate and describe in past, present, and future. Deal effectively with an unanticipated complication.Language learners with graduate degrees in language or a related area and actended educational experience in target environment.Advanced MidCreate with language, initiate, maintain, and bring to a close simple conversations by asking and responding to simple questions.Heritage speakers following 6–8 year sequences of study (eg. AP) or 4–6 sequences of study (ACTFL level	Language functions	Examples of who is likely to func- tion at this level
opinions, hypothesize. Deal with linguistically unfamiliar situations.Educated language learners with extended professional and/or educational experience in the target 	Distinguished	audience, persuade, negotiate. Deal	specialized native speakers. Language learners with extended (17 years) and current professional and/or educational experience in the
High Intermediate Midpresent, and future. Deal effectively with an unanticipated complication.degrees in language or a related area and extended educational experience in target environment.Advanced MidHeritage speakers, informal learners, non-academic learners who have significant contact with language. Undergraduate majors with 	Superior	opinions, hypothesize. Deal with	Educated language learners with extended professional and/or educational experience in the target
Midnon-academic learners who have significant contact with language. Undergraduate majors with year-long study in the target language culture.Advanced LowUndergraduate language majors.Intermediate HighCreate with language, initiate, 		present, and future. Deal effectively	degrees in language or a related area and extended educational experience
LowConsequencesIntermediate HighCreate with language, initiate, maintain, and bring to a close simple conversations by asking and 			non-academic learners who have significant contact with language. Undergraduate majors with year-long study in the target
Highmaintain, and bring to a close simple conversations by asking and responding to simple questions.sequences of study (e.g. AP) or 4–6 semester college sequences.Intermediate LowLanguage learners following 4-year high school sequence or 2-semester college sequence. Language learners following an immersion language program in Grades K–6.Language learners following an 			Undergraduate language majors.
Intermediate responding to simple questions. Language learners following 4-year Intermediate Low Language learners following 4-year Low Language learners following an immersion language program in Grades K-6. Novice High Communicate minimally with formulaic and rote utterances, lists, and phrases. Language learners following content-based language program in Grades K-6. Novice Mid Language learners following 2 years		maintain, and bring to a close	sequences of study (e.g. AP) or 4-6
Low high school sequence or 2-semester college sequence. Language learners following an immersion language program in Grades K-6. Novice High Communicate minimally with formulaic and rote utterances, lists, and phrases. Novice Mid Language learners following 2 years of high school sequence of the school sequence of the school sequence.			
formulaic and rote utterances, lists, and phrases. content-based language program in Grades K-6. Novice Mid Language learners following 2 years of high school language atudy.			high school sequence or 2-semester college sequence. Language learners following an immersion language program in
of high school language study	Novice High	formulaic and rote utterances, lists,	content-based language program in
	Novice Mid Novice Low		Language learners following 2 years of high school language study.

Appendix B: Pre-activity questions

Rate how well you feel you speak English. How balanced a bilingual do you think you are? How often do you need to speak English? Spanish? What language(s) did you go to school? Describe your formal schooling in English? Spanish? Explain how comfortable you are speaking each language. Family (adults/siblings/children) • Work (adults/children) • Social settings How often do you speak in each of the above situations? Describe how important you feel speaking your stronger language is for your child? Describe how important you feel maintaining Spanish is for your child? How do you feel when people switch languages in conversation (code-switching)? How do you feel about people who code-switch? How do you feel about your code-switching? Have you ever been told you need to only speak English to your child? If so: By whom? In what situation(s)? By what types of people? How would you feel if you were told you could only speak English in your current life? How would it impact your work? Social life? Family life? How would you feel if you were told you could only speak Spanish in your current life? How would it impact your work? Social life? Family life?

What language would you pick?



Appendix C: Post-activity questions

How did this activity make you feel?

How did the two languages differ in this activity?

Which language felt easier?

Describe any stress you may have felt during this activity.

Was it uncomfortable for you to have to speak in only one language?

Is it easier to speak in one language versus another language with certain people? With children?

Is there anything else you would like to ask about this activity?

