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Abstract

Over one million immigrants and refugees—many of whom are children—relocate to the U.S. each year. Upon relocation, families often need translation assistance, and youth are regularly asked to step into that role. Researchers call this phenomenon *language brokering*. The present manuscript describes two studies that examined the prevalence, frequency, and sentiments associated with language brokering. Language brokering has predominantly been studied among Latinx and Chinese-American children, and the present studies fill a gap in the literature by expanding this work to include diverse groups of youth (e.g., refugees and immigrants of various cultural and ethnic backgrounds). Researchers distributed questionnaires to high school ESL students in Portland, OR, the majority of whom were immigrants and refugees (Study One), and middle and high school-aged adolescents in an afterschool program in six locations throughout the U.S. (Study Two). Both studies found that language brokering is prevalent. In Study One, older adolescents reported feeling more pressure to, but also more useful when translating. Refugees felt more pressure to

translate than immigrants, and participants from Middle Eastern countries were more likely to report feeling bad when translating than adolescents from African and Latin American countries. Asian adolescents reported greater stress translating than African and Latinx adolescents. In Study Two, Latinx adolescents reported greater prevalence, frequency, and competence language brokering than Black adolescents, and reported feeling more useful translating than those with ethnicities of multiethnic/other. Male participants were more likely to report feeling bad and embarrassed than female participants. These results show that language brokering is occurring among ethnically, culturally, and racially diverse youth, and that youth associate a variety of sentiments with such translation.

*Keywords:* Language brokering, immigrants, refugees, adolescents

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# Language Brokering Experiences Among Racially and Culturally Diverse Youth

by
Svea G. Olsen

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I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

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Svea G. Olsen, Author

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# DEDICATION

To all immigrant and refugee youth, who deserve every opportunity to thrive.

# Language Brokering Experiences Among Racially and Culturally Diverse Youth

Svea G. Olsen

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# Language Brokering Experiences Among Racially and Culturally Diverse Youth

The U.S. is a top destination for immigrants and refugees and has a larger immigrant population than any other country (United Nations Population Division Department of Economic and Social Affairs, 2015). The U.S. currently houses one-fifth of the world's migrants (Zong, Batalova, & Hallock, 2018), nearly half of whom are children or adolescents (United States Census Bureau, 2015). Presently, 19.6 million documented immigrant and refugee children live in the U.S., making up one quarter of all U.S. children (Child Trends, 2018).

When immigrants and refugees relocate, they often are in the cultural and linguistic minority in their country of relocation. Navigating multiple cultures and languages leads to new experiences for youth and adds complexity to their development. With such a large and diverse growing population of young immigrants and refugees in the U.S., there is a need to understand experiences that may uniquely affect their development.

When immigrant and refugee families arrive in the U.S., it is often easier for youth to learn English than their parents due to children's greater cognitive plasticity and increased exposure to English in school (Morales & Hanson, 2005). Studies of immigrant youth have consistently shown that this increased language proficiency means children often serve as translators for their families (e.g., Buriel et al., 1998; Corona et al., 2012; Kim et al., 2014; Morales & Hanson, 2005). Such translation includes verbal interpretation in social situations as well as written translation of documents, such as immigration forms, school paperwork, and bills (Corona et al., 2012; Morales & Hanson, 2005). Researchers call this informal translation and interpretation *language brokering* (McQuillan & Tse, 1995), and it has been widely studied among children in Spanish-speaking families (Morales & Hanson, 2005). Less research has been conducted with families who speak other languages at home, and much remains unknown about

the frequency of language brokering among diverse groups of refugees and immigrants, and how youth feel about such experiences.

**Language Brokering**

Research on translation among immigrants is not itself a new field. What sets language brokering apart from other translation and language research is the fact that it is youth who are serving in the role of translator, interpreter, and mediator of knowledge and culture to adults, and a focus on subsequent youth outcomes. Researchers have explored this as its own field and coined the term ‘language brokering’ to explain it in the literature (Tse, 1995). Previous research on language brokering has focused primarily on adolescents (Shen et al., 2014) and on specific populations of immigrants. The majority of research has been conducted with Latinx (a gender-neutral term for someone of Latin American decent) and Chinese-American youth (Morales & Hanson, 2005; Kim et al., 2014). Little to no research has been conducted with groups of people of various cultural or ethnic backgrounds nor focused on refugees.

Researchers have not reached a conclusive understanding of how language brokering experiences affect adolescents or how adolescents feel about taking on such roles (Morales & Hanson, 2005). Some studies have found that serving as a language broker for one’s family can place a heavy emotional burden on young people, especially when they must translate in high-stress situations such as in an encounter with law enforcement, or situations with unfamiliar and complex vocabulary such as in a medical setting (Niehaus & Kumpiene, 2014; Weisskirch & Alva, 2002). Other studies have shown that language brokering can improve youth’s bilingualism and biculturalism and lead to positive feelings of pride for serving one’s family (Buriel et al., 1998; Corona, 2012). These varied findings have led researchers to come to

differing conclusions as to whether serving as a language broker is beneficial, detrimental, or has negligible implications for adolescents (Weisskirch, 2017).

Gaps also exist in the literature examining which youth perform language brokering and what sentiments are associated with language brokering among culturally and ethnically diverse individuals. In order to better understand the experiences of language brokering for immigrant and refugee adolescents, it is important to acknowledge the situations and contexts in which their development occurs and the influence these youth exert on their contexts. An awareness of this reciprocal person-context system can bring clarity to the potentially varied sentiments youth associate with language brokering and a better understanding of how language brokering may help or hinder their development. A theoretical perspective that can help explain how personal and contextual factors combine to influence language brokering experiences for adolescent immigrants and refugees is the Relational Developmental Systems metatheory.

**Relational Developmental Systems Metatheory**

Relational approaches to human development recognize personal and environmental forces as co-acting throughout the life span to produce each individual's unique developmental trajectory (Overton & Müller, 2012). One specific metatheory under this worldview is Relational Developmental Systems theory (RDS; Overton & Müller, 2012). RDS perspectives see person-context relations as the unit of analysis and explore how individuals or populations are influenced by and simultaneously exert influence over their environments. This theory posits that individual components of development—for example, biology and the environment—can interact in ways that are non-linear/non-additive (i.e., not multiplicative statistical interactions) and therefore derive meaning from their relation as parts of a whole (Overton, 2015). Such action between components creates complex behaviors and development (Overton & Müller, 2012).

This whole-system approach to human development naturally leads to the concept of multifinality: People who begin their lives similarly can follow drastically different developmental trajectories because of their differing contexts (Overton & Molenaar, 2015).

The RDS perspective provides a theoretical framework from which to explore human development through a contextually-informed lens. This framework may be especially helpful in the study of adolescent immigrants and refugees because of the varied and multicultural contexts of their development. This approach can lead researchers to address and intervene by highlighting developmental successes and acknowledging challenges that stand in the way of positive development.

**Specificity Principle**

Another perspective that can inform studies of immigrants and refugees is the specificity principle. Bornstein (2017) describes the connections between individuals and their ecologies through the specificity principle: a concept that highlights how specific domains (such as setting, person, and time) simultaneously influence one's life trajectory. The specificity principle focuses on multifinality and states that it is not enough to say there is an association between a person and his or her context. One must push further to ask what processes occur, whom they benefit, and how (Bornstein, 2017).

The specificity principle originated in parenting literature to explain how certain practices lead to specific effects in a child's development and how such effects depend on the developmental period, context, and child (Bornstein, 2002). Therefore, effective practices by parents at one stage of a child's life may not prove effective at later stages of development with the same child or at the same stage of development with other children (Bornstein, 2002). For example, a parent may successfully sooth a crying infant by speaking in a calm voice and gently

rocking the child. This same approach may be less effective by middle childhood. For another infant, this technique may prove ineffective altogether.

The specificity principle has been applied to the study of acculturation in order to highlight how key factors moderate immigrants' experiences of adapting to a new culture and to show how this process is not universal (Bornstein, 2017). Acculturation is the process through which individuals influence, and are influenced by, a new culture, and the ways in which relocated individuals embrace or push away from both cultures (Berry, 2003). An individual's culture of origin, history of lived experiences, and culture of resettlement can all influence acculturation, meaning acculturation involves bidirectionally influential interactions between individuals and their contexts. The specificity principle thus fits well within the larger umbrella of relational developmental systems perspectives.

Acculturation for immigrants and refugees spans ethnic and cultural backgrounds, but associated outcomes vary depending on an individual's life history, culture of origin, culture of resettlement, and the process of acculturation itself (Bornstein, 2017). Following the specificity principle, then, people with overlap in some domains (e.g., similar histories and contexts) but who differ in other domains (e.g., biological dispositions) may have differing outcomes. Bornstein (2017) demonstrates the importance of considering the specificity principle with immigrant populations that may have additional domains to consider, such as whether they adhere to or relinquish their culture-of-origin values and identity and how well their cultures-of-origin mesh or clash with the dominant culture in their countries of relocation. The specificity principle means factors that influence thriving are therefore conditional on an individual and his or her culture, history, and current context. For example, a newly-immigrated Honduran adolescent who interprets for a parent in a U.S. city that is typically unwelcoming to Latinx

immigrants will have a specific experience with language brokering. A Vietnamese adolescent who has lived in the U.S. for the past five years in a diverse and culturally welcoming city will have a very different experience of interpreting for a family member than the Honduran. Given the reported prevalence of language brokering among youth, this means language brokering processes may be especially salient for promoting and/or inhibiting positive youth development.

**Positive Youth Development**

The Positive Youth Development (PYD) perspective is a theoretical framework that derives from the RDS metatheory and aligns well with the specificity principle (Lerner et al., 2005; Lerner et al., 2018). PYD marks a shift away from the historical way researchers conceptualized adolescence as a developmental phase of turmoil and stress in which successful development was defined by the absence of negative outcomes (Youniss, 2005). PYD approaches instead take a more strengths-based perspective. PYD emphasizes not only reducing problem behaviors, but also on fostering cognitive and social competencies, building strong relationships, encouraging and teaching skills and habits that lead to a successful transition to adulthood, and approaching all youth with a view that, given the right circumstances, they can thrive (Lerner et al., 2015). Approaching development from a strengths-based perspective, such as PYD, allows researchers to understand what individuals are doing well and to support youth before potential problems occur. PYD can be useful for examining populations such as immigrants and refugees who often face many barriers in their lives both before and after relocation. Understanding what may hinder immigrants' and refugees' positive development in specific situations can allow for the promotion of factors related to their resilience, such as achieving academic and social success despite navigating a new culture and language (Catalano et al., 2004; Lerner et al., 2015; Roth & Brooks-Gunn, 2003). Similarly, understanding the

unique strengths that immigrant and refugee youth bring to and derive from their contexts facilitates interventions designed to place their lives on more-positive trajectories.

Like RDS, PYD emphasizes the plasticity of adolescent development and the bidirectional, reciprocal interactions that adolescents engage in with their contexts as they develop (Lerner et al., 2015). Because immigrants and refugees experience their cultures of origin nested within the culture of their country of relocation, they are exposed to developmental contexts distinct from those of non-immigrants and non-refugees. Adolescents' cultures of origin and culture of resettlement both influence their development, and youth also influence both cultures while navigating new roles in each (e.g., adopting aspects of the dominant culture or serving as a translator for family members with limited proficiency in the dominant language). The contextualized nature of development under the PYD perspective makes it especially helpful for understanding the ways in which adolescents cultivate skills that help them positively engage with their communities and cultures.

**Applying a Relational Worldview to the Study of Language Brokering**

RDS, the specificity principle, and the PYD perspective can help frame a discussion on language brokering. Applying these collective theoretical perspectives suggests that serving as a language broker has the potential to help or hinder a youth's ability to thrive. Such outcomes depend on an adolescent's individual circumstances, history, and context, however (Bornstein, 2017; Lerner et al., 2005). Applying the specificity principle to the study of language brokering highlights how diverse experiences and backgrounds can lead different groups of immigrants and refugees to experience language brokering in different ways, even if these groups inhabit the same broader contexts (e.g., same school) at the same time. For example, language brokering might differentially impact youth from more collectivistic versus more individualistic cultures.

Children from more collectivistic cultures, such as China, India, and Pakistan, are often raised to see the importance of skills such as loyalty to family, fulfilling a sense of duty, and interdependence, and to place emphasis on group over individual decisions (Darwish & Huber, 2003). In contrast, children from more individualistic cultures, such as the U.S. and many European countries, are often raised to value independence, assertiveness, and personal achievement, and to hold autonomy in high regard (Darwish & Huber, 2003). A Chinese immigrant in the U.S. may therefore face challenges having skills and values from his or her collectivist upbringing (e.g., deferring to others) while living in a culture that values extroversion and self-assertion (Chen, 2000). In other scenarios, this upbringing and value system may work in this individual's favor, such as giving him or her a sense of pride for serving as a language broker for family members. In contrast, adolescents from individualistic cultures may feel less of a cultural clash in some scenarios but chafe at the perceived burden of being asked to translate for their family.

**Language Brokering and Youth Outcomes**

Research on youth who serve as language brokers has not led to a consensus on how language brokering may affect different groups of youth nor how such youth feel about language brokering (Morales & Hanson, 2005). Some research has shown that children in the U.S. feel uncomfortable acting as language brokers and that language brokering can negatively affect their lives (Weisskirch & Alva, 2002). A study by Morales, Yakushko, and Castro (2012) found that Latinx adolescents who served as language brokers for their families often had to miss school to perform translation duties for family members (e.g., attending a doctor's appointment with a parent). They also found that, even if not physically absent from school, children asked to serve as language brokers can spend so much time on language brokering that they miss out on other

important aspects of their lives (e.g., social interactions with peers; Morales, Yakushko, & Castro, 2012). Weisskirch and Alva (2002) and Niehaus and Kumpiene (2014) both found that Latinx children who served as language brokers experienced feelings of burden and stress. A study by Morales and Hanson (2005) reviewed current literature on language brokering and found that children who language broker not only serve as translators, but also as mediators in social situations and may be selective in the information they pass along (e.g., omitting information to protect their families from potential negative feelings such as shame). Such mediation can be a heavy and stressful task for young people.

Other studies have found positive outcomes associated with language brokering such as increased bilingualism and biculturalism, faster English language acquisition, and related gains in academic performance (Buriel et al., 1998; Corona, 2012). Some studies have found that greater frequency of language brokering predicts language brokering self-efficacy (i.e., feelings of competence in one's ability to accurately translate in a given situation), and positive feelings with performing that role (Weisskirch, 2013) and helping out one's family (Buriel et al., 1998; Corona et al., 2012).

The positive and negative outcomes associated with language brokering lead to the question of whether language brokering experiences may be positive for some individuals and cultural groups but negative for others. It also leaves open the question of what contexts may lead to positive, negative, or neutral sentiments associated with such translation, as well how language brokering may look different during different developmental periods and ages. Lewin-Bizan and colleagues (2010) conducted a study of positive youth development and concluded that, "…neither positive development nor problematic development is manifested in a single or simple way across at least the early to middle adolescent period" (Lewin-Bizan et al., 2010, p.

759). In a similar vein, the existing literature suggests that language brokering may be neither inherently positive nor inherently negative. Instead, both could be true for different groups living in different contexts or vary depending on one's background, context, or experiences. It is therefore important to learn if youth of diverse ethnic and cultural backgrounds are language brokering, and if so, how they feel about acting in this role.

In this manuscript, I examine the prevalence, frequency, and sentiments associated with language brokering through two studies. Including two studies allowed for the exploration of more information on language brokering from diverse adolescents, furthering our understanding of this phenomenon among differing individuals and contexts. Study One's sample consisted of culturally and ethnically diverse high school students in Portland, OR who were primarily immigrants and refugees. Study Two's sample consisted of racially diverse adolescents who were primarily second-generation immigrants in an afterschool program in six locations throughout the U.S. Both studies sought to understand if language brokering is happening in culturally and ethnically diverse populations of youth, and if so, how such youth feel about those experiences. Taken together, these studies aimed to set the groundwork for future research that will dive more deeply into nuances and potential group differences among language brokers.

**Study One**

This study explored the prevalence and frequency of language brokering and sentiments associated with such experiences among culturally and ethnically diverse immigrant and refugee high school students in Portland, OR. Previous studies in the U.S. have found that language brokering is occurring, and have separately found both negative and positive outcomes associated with it (Morales & Hanson, 2005). Previous studies have focused primarily on youth from Latinx and Chinese-American backgrounds however (e.g., Kim et al., 2014; Morales &

Hanson, 2005; Morales, Yakushko, & Castro, 2012), leaving language brokering among culturally and ethnically diverse populations and refugees understudied. Research on acculturation has shown that similar processes occur among immigrant populations spanning different cultural backgrounds (Berry, 1997), so it follows that language brokering may span different cultural backgrounds as well. Finally, research on PYD has shown that it is possible for an experience to result in ambivalent outcomes—some positive and some negative (Lewin-Bizan et al., 2010), which may help to explain the varying outcomes that language brokering has been associated with in the literature. This study builds on previous research in the fields of language brokering, acculturation, and PYD by focusing on a more culturally and ethnically diverse sample of immigrants and refugees. This study addressed the following research questions:

1. *Are the prevalence and frequency of language brokering different among adolescent immigrants and refugees in Portland, OR depending on their ethnic and cultural backgrounds?*
    - *Hypothesis 1: Language brokering prevalence and frequency would be similar in the current sample regardless of participant ethnic and cultural backgrounds.*
2. *To what extent do adolescent immigrants and refugees in Portland, OR from different ethnic and cultural backgrounds endorse positive and negative sentiments associated with language brokering?*
    - *Hypothesis 2: Adolescents would report both positive and negative sentiments associated with language brokering.*
3. *Do the of endorsements of positive and negative sentiments associated with language brokering differ by participants' ethnic and cultural backgrounds?*

- *Hypothesis 3: Sentiments would be different for participants of different ethnic and cultural backgrounds.*

## Study One Method

### Study design

Data came from a larger study that explored immigrant and refugee youth identity development. Language brokering questions were added to a quantitative survey to minimize participant burden when compared to more in-depth approaches (e.g., interviews). Portland, OR was chosen for this study because it is a refugee resettlement location (it is ranked 11th in U.S. cities resettling international refugees; City of Portland, n.d.) and has a sizable community of immigrants. Portland has a structure of resettlement in place made up of government and privately-funded organizations which provide relocation services to immigrants and refugees.

### Participants

**Schools.** Participants came from two public high schools in the Portland Public Schools district serving students in grades 9-12. Primary races represented at both schools were White, Latinx/Hispanic, Black, and Asian (percentages not included to preserve school anonymity). Both schools served immigrant and refugee students and were located in areas of the city where many immigrant and refugee families live. In addition, both schools had connections to local immigrant and refugee resettlement organizations.

**Students.** Participants were 32 adolescents between the ages of 15 and 20 years old ($M$=17, $SD$=1.41) who were enrolled in level 4-5 (advanced) English as a Second Language (ESL) high school classes. Participants were present on data-collection days and were identified by their teachers as having sufficiently proficient English language skills to be able to understand and respond to questionnaire items in English. Three participants were removed because they

either did not respond to any questions or responded only with “I don’t understand this question” or “not sure” (the original sample was 35). Participating students were primarily female (*n*=19, 59.38%) and represented diverse cultural and ethnic backgrounds (see Table 1). Just over one quarter (*n*=8, 28.57%) of participants were refugees, and just over half (*n*=15, 53.57%) were first-generation immigrants (defined as those born outside of the U.S.; Child Trends, 2018); Five participants (17.86%) reported they were neither immigrants nor refugees (i.e., “I am none of these,” or no response; none self-identified as asylum seekers). First-generation immigrants and refugees moved to the U.S. between the ages of two and 17 (*M* = 12.82 years, *SD* = 3.48) and came from African, Middle Eastern, Latin American, and East Asian countries (see Table 1 for a complete list of countries). The majority reported living in the U.S. for three or four years (3 years: *n*=7, 25.93%, 4 years: *n*=6, 22.22%). Of the participants who reported parent information, six (22.22%) had at least one parent who was a refugee, 13 (48.15%) had at least one parent who was an immigrant, and eight (29.63%) reported having one or both parents who had an immigrant status of ‘none of these’ (e.g., these students may not have had immigrant or refugee parents or may not have felt comfortable describing their parents’ immigration status).

## Recruitment and Procedures

Recruitment occurred at the district, school, principal, teacher, and student levels. Three schools in Portland, OR were identified for potential participation because one research assistant on the project knew ESL teachers working at those schools. When we reached out informally to the ESL teachers, two expressed interested and willingness to participate in our study. We then submitted a research proposal to the Portland Public Schools district outlining the scope and significance of the study, the research design, planned data collection procedures and logistics, and precautions in place to maintain student confidentiality. After approval by the school district,

the research team then obtained approval from Oregon State University's Institutional Review Board. After approval from the district and university review boards, we obtained permission from each school's principal and vice principal to conduct research within their school. We then directly contacted the two ESL teachers (at two different high schools) who had originally expressed interest in the study and asked if they would be willing to allow a research assistant from Oregon State University to conduct a study on positive youth development in their classrooms, specifically looking at identity development and translation work of immigrant and refugee youth. We provided teachers with a copy of the questionnaire to review. Both ESL teachers agreed to participate, and a research assistant worked with these teachers to schedule convenient times to come into their classrooms. The ESL teachers were told not to do anything out of the ordinary on the data collection day other than to set aside 5-10 minutes during one of their classes for the research assistant to speak with students. The research assistant then visited the ESL classrooms at times deemed appropriate by the teachers to recruit participants and distribute research packets.

Research packets contained a parental consent form, an assent form, the questionnaire, and a resource letter. Parent consent forms and participant assent forms were translated by a professional translation service (LanguageLine Solutions) into students' home languages as identified by the ESL teacher in each classroom (i.e., Arabic, Chinese, Karen, Kinyarwanda, Lao, Somali, Spanish, Swahili, and Vietnamese). Questionnaires were in English (see Appendices A and B for questionnaires). The resource letter was also in English and contained contact information for the Oregon State Institutional Review Board, the study principal investigator, the school counselor at each school, and a website containing additional resources for immigrant and refugee youth. This letter was intended to provide resources to all participants

if they had any questions about the study and in case any unpleasant memories or feelings arose while completing the questionnaire.

At School A, the teacher announced in class that there was a guest coming to speak to students before the research assistant entered the room. At School B, the teacher prepared a PowerPoint presentation which she reviewed with the research assistant beforehand. The presentation reviewed words and phrases the teacher thought her students might find useful to go over, such as, “research,” and “confidential.” In both classrooms, the research assistant then gave a brief (5-minute) overview of the study and described the content of each page of the consent (for participants under 18) and assent (for participants who were 18 and older) forms, questionnaire, and resource letter. The research assistant then showed students how to complete each form if they chose to do so, answered students’ questions, and handed out research packets for students to complete on their own time outside of class so as not to take away from instructional time. Explanations of the study took no more than 10 minutes of class time, and questionnaires were estimated to take approximately 20 minutes outside of class. 57 research packets were handed out to interested potential participants at School A and 22 at School B.

The research assistant returned to each classroom one week after handing out the packets at times deemed appropriate by the ESL teachers, answered questions the students had, and collected consent forms, assent forms, and completed questionnaires. Thirty completed questionnaires were returned at School A (53%) and five were returned at School B (23%), resulting in a 44% overall response rate. One reason for differences in response rates between schools could be the time of year: the research assistant visited School A first and School B second, meaning that recruitment at School B occurred closer to the end of the academic year. The ESL teacher in School B mentioned that attendance was lower at this time of year than

during other times and that students tended to be less focused on academic responsibilities. All students who participated at both schools, whether or not they finished the questionnaire, received a ten-dollar gift card to a local restaurant.

## Measures

RDS and the specificity principle point to the fact that language brokering may be different for individuals of different backgrounds. Therefore, demographic questions focused on individual's ethnic and cultural identities as well as background information such as the previous country a participant lived in. PYD points to the fact that individuals' positive and negative experiences can influence their development. Therefore, a language brokering scale was included to assess the degree to which adolescents agreed or disagreed with statements about sentiments associated with language brokering.

**Demographics.** The demographic section of the questionnaire included questions on age, gender, religion, ethnicity, immigrant status (i.e., immigrant, refugee, asylum seeker, none of these; documentation status was not asked nor reported), country of origin before the U.S. (if relevant), and country of origin of both parents, if relevant (see Appendix A).

**Language brokering scale.** The language brokering measure was made up of one question and five statements adapted from the Language Broker Scale for adolescents created by Kim and colleagues (2014), which had previously been used with Chinese-American populations. Statements were chosen for construct representativeness, readability, relevance to the population, and overall relevance to the larger study. The scale included a question about the prevalence and frequency of language brokering (i.e., "How often do you translate from your home language into English?"), using a response scale adapted for this study to be easily understood by ESL students of 1 (*Never*), 2 (*Rarely*), 3 (*At least once a week*), 4 (*Many times a*

*week*), 5 (*Every day*), and 6 (*I don't understand this*). The scale also included statements about sentiments associated with translating, including feeling stress, pressure, useful, bad, and embarrassed, using a 6-point response scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) with 3 indicating *not sure* and 6 indicating *I don't understand this* (see Appendix B).

**Analyses**

Data were analyzed using SAS (University Edition 1) and R (3.5.1 GUI 1.70). Analyses were primarily descriptive and exploratory due to the small sample size and nature of the study. In addition to exploring the prevalence, frequency, and sentiments associated with language brokering by demographic background in this study, I also probed some effects that have been previously explored in the literature, such as potential age and gender differences in language brokering. Although I did not anticipate these effects would be exactly the same in this study as in previous studies, I anticipated many similarities (for example, girls translating more often than boys, older youth translating more often than younger youth; Buriel et al., 1998; Shen et al., 2014).

Before analysis, I created two groups based on responses to the question, "How often do you translate from your home language into English?" The groups were those who reported never performing language brokering (referred to as the non-language brokering group), and those who reported performing language brokering (i.e., rarely, once a week, many times a week, or every day; referred to as the language brokering group)[1]. I also created demographic groups for ethnicity and country of origin (e.g., African ethnicities, African countries; see Table 1 for category breakdowns) for ease of analysis and to ensure that more than one participant fell into

[1] I re-ran all analyses with the 'rarely' response option included with the 'never' response option and the results generally replicated (i.e., significance did not change). Below I report results for the never versus all other language brokering options.

each category. In addition, to better understand the demographic backgrounds of the culturally and ethnically diverse sample, I created a generation status variable that indicated first-generation if participants had been born elsewhere and moved to the U.S. and second-generation if they had been born in the U.S. and indicated they had at least one parent who was an immigrant or refugee. For this variable, participants with missing responses or with responses of a generation status of 'other' were removed for analyses. Gender and age were included in analyses in line with previous research.

**Research question 1.** To test my hypothesis for research question one, that language brokering prevalence and frequency would be similar in the current sample regardless of participant ethnic and cultural background, I first determined the proportion of individuals within each demographic profile (gender, ethnicity, immigrant/refugee status, previous country, and first-generation status) who fell into the language brokering category versus the non-language brokering category. I then calculated 95% confidence intervals for each proportion to determine if language brokering occurred significantly more or less than five percent of the time in each demographic subgroup. I chose five percent because it represents a high enough value that, if the population percentage exceeded it, the phenomenon would be frequent enough to warrant further research. The confidence intervals could not include zero as long as at least one participant in the sample reported language brokering, making that an unrealistic value for the null hypothesis. To determine prevalence of language brokering across demographic groups, I computed a Wilcoxon Rank Sum test (a nonparametric alternative to the two-sample *t* test) to determine if there was a difference in age between the non-language brokering group and the language brokering group and computed chi-square tests of independence to examine the associations between language brokering prevalence and both gender and ethnic category. Next, to explore the frequency of

language brokering both within and between demographic groups, I returned to the responses in their raw metric (removing the language brokering and non-language brokering categories) and ran a regression for language brokering with frequency as the dependent variable and age as the independent variable, a Wilcoxon Rank Sum test for language brokering frequency and gender, and an ANOVA for language brokering frequency and ethnic category.

**Research question 2.** To test my hypothesis for research question two, that adolescents would report both positive and negative sentiments associated with language brokering, I ran single-sample *t*-tests to determine whether or not scores for all five statements about sentiments associated with language brokering were significantly different from a null hypothesized value that corresponded to the not sure response option (i.e., a value of three). I also explored correlations among the language brokering sentiment items to assess whether there were strong inverse correlations between positive and negative items or if the two types of items were relatively independent.

**Research question 3.** To test my hypothesis for research question three, that sentiments would be different for participants of different ethnic and cultural backgrounds, I ran regressions, Wilcoxon Rank Sum tests, and ANOVAs for each of the language brokering sentiment items (in their raw metric) to determine if there were demographic group differences (i.e., age, gender, country of origin, immigrant status, generation, and ethnic category) in the average response to each question[2].

## Study One Results

Overall, 86.67% of participants in the sample reported language brokering. A Wilcoxon Rank Sum test indicated there was no significant difference in age by language brokering status

[2] I examined Leverage, Cook's D, Rstudent, and DFFITs outlier diagnostics for all regression analyses using Proc Reg and examined Cook's D, Rstudent, and DFFITs for all ANOVA analyses using Proc GLM.

(i.e., between language brokering and non-language-brokering groups). Chi-square tests of independence found that the associations were not significant between language brokering status and both gender ($\chi^2(1) = 3.08$, $p = .13$) and ethnic categories ($\chi^2(4) = 8.77$, $p = .14$). There was also no significant difference in language brokering frequency by age (B(26) = .27, $p = .20$), gender ($S = 209$, $p = .31$), generation status (S = 73.00, $p = .54$), previous country ($F(3,20) = 1.51$, $p = .24$), immigrant status ($F(2,23) = 2.15$, $p = .14$), or ethnic category ($F(3,20) = 2.07$, $p = .14$).

Binomial tests indicated that 78% of female participants ($n$=14, $p < .0001$, 95% C.I. [0.52, 0.94]); 100% of male participants ($n$=12, $p < .0001$, 95% C.I. [0.74, 1]); 88% of first-generation participants ($n$=23, $p < .0001$, 95% C.I. [0.70, 0.98]); 86% of participants of African ethnicities ($n$=12, $p < .0001$, 95% C.I. [0.57, 0.98]), and 100% of participants of Asian ($n$=4, $p < .0001$, 95% C.I. [0.40, 1]), Arab ($n$= 2, $p < .01$, 95% C.I. [0.16, 1]), and Latinx ethnicities ($n$=4, $p < .0001$, 95% C.I. [0.40, 1]) reported language brokering. All observed percentages were significantly greater than the null hypothesized value of 5%.

Single-sample $t$-tests revealed that participant sentiments associated with language brokering were significantly different from the null hypothesized value that corresponded to the not sure response option for statements about feeling useful ($M = 4.11$, $SD = .85$, $t(26) = 6.81$, $p < .0001$), feeling bad ($M = 2.48$, $SD = 1.09$, $t(26) = -2.48$), $p = .02$), and feeling embarrassed ($M = 2.21$, $SD = 1.07$, $t(27) = -3.90$, $p < .001$) when language brokering. The means were not significantly different from not sure for feeling that translating was stressful ($M = 2.96$, $SD = 1.08$, $t(25) = -.18$, $p = .86$) and feeling pressure to translate ($M = 2.93$, $SD = 1.15$, $t(27) = -.33$, $p = .75$). Table 2 collapses the response patterns into a three-point scale (*Disagree/Strongly Disagree, Neutral, and Agree/Strongly Agree*) for ease of interpretation and to highlight the

diversity of experiences reported by participants (e.g., less than one quarter of participants reported neutral for most items).

Tables 3, 4, and 5 show results for each sentiment predicted (in single-predictor models) by age, gender, previous country lived before moving to the U.S. (called previous country from here on), immigrant status (i.e., immigrant, refugee, none of these), generation (i.e., first- or second-generation immigrant), and ethnic category. Results from regressions, Wilcoxon Rank Sum tests and one-way ANOVAs indicated no significant differences in feeling embarrassed when translating by any of the predictors.

After checking outlier diagnostics, two outliers were removed from analysis for feeling useful, one for feeling pressure, three for feeling bad, and two for feeling stressed. Four predictors significantly predicted language brokering sentiments. The first was age, which was associated with both pressure to translate ($B(25) = .38$, $p = .02$) and feeling useful when translating ($B(22) = .26$, $p = .03$), such that older participants reported feeling both more pressure to translate and more useful when doing so. The second significant predictor was immigrant status, which was significantly associated with feeling pressure to translate ($F(2,20) = 3.56$, $p = .047$). A post hoc comparison using a Tukey adjustment indicated that refugee participants reported feeling more pressure to translate than immigrant adolescents (mean difference = 1.25, 95% CI [0.02, 2.48]). The third significant predictor was the previous country category, which was significantly associated with feeling bad when translating ($B(3,15) = 9.06$, $p = .001$). A post hoc comparison using a Tukey adjustment indicated that participants from the Middle East reported higher levels of feeling bad when translating than adolescents from Africa (mean difference = 2.30, 95% CI [0.54, 4.05]), and Latin America (mean difference = 2.00, 95% CI [0.07, 3.93]). Previous country was also significantly associated with feeling stress when

translating ($B(4,20) = 2.90$, $p = .048$), although a post hoc comparison with a Tukey adjustment did not indicate any significant pairwise differences. The fourth and final finding was that ethnic category was significantly associated with feeling stress when translating ($F(3,16) = 4.48$, $p = .02$). Post hoc comparisons using a Tukey adjustment indicated that Asian participants reported higher levels of stress when translating than African participants (mean difference = 1.35, 95% CI [0.04, 2.66]) and Latinx participants (mean difference 1.80, 95% CI [0.03, 3.57]). No other demographic variables were significant predictors of feeling pressure, stress, useful, or bad when language brokering.

Last, I examined the correlations among positive and negative sentiment endorsement to determine if they represented a single continuum or if participants reported ambivalence about language brokering (i.e., if endorsement of positive and negative sentiments were relatively independent). Negative sentiments (stress, pressure, bad, and embarrassed) tended to be positively correlated with one another, albeit to a moderate degree. Negative sentiments tended to be uncorrelated with the positive sentiment (useful; see Table 6).

**Study One Discussion**

Results from this study suggest that language brokering occurs among ethnically diverse immigrant and refugee high school students in Portland, OR. This finding confirms the study hypothesis for research question one and fits with previous literature which has shown language brokering to be prevalent within the specific adolescent populations that have been studied (e.g., Buriel et al., 1998; Corona et al., 2012; Kim et al., 2014; Morales & Hanson, 2005). As a whole, the majority of participants agreed with the positive sentiment and disagreed with negative sentiments associated with translating. Consistent with the RDS perspective and the specificity principle, stating that individuals even in similar contexts who have different backgrounds will

experience things differently, there were demographic differences in endorsements of negative or positive feelings associated with language brokering.

Older participants reported feeling greater pressure to translate as well as feeling more useful translating. Older participants may feel more useful translating because they may view themselves as the most helpful person in their family to fill this role (more useful, for example, than younger siblings). It is also possible that, in this sample, older participants had spent more time in the U.S. and therefore had increased exposure to English and time spent language brokering. To test this hypothesis, I conducted a post hoc examination of the data, and it was partially substantiated - the majority of 17- and 18-year-olds reported moving to the U.S. more than four years ago, whereas younger participants (i.e., 15- and 16-year-olds) reported moving to the U.S. fewer than four years ago. Seventeen and 18-year-olds reported moving to the U.S. earlier than 19- and 20-year-olds, however, demonstrating that increased age does not directly correlate with increased time in the U.S. in this sample.

Refugees reported feeling greater pressure to translate than immigrants. Perhaps this is due to the differing circumstances surrounding reasons for and the process of relocation for immigrants and refugees. For many immigrants, relocation involves going through the legal protocol of requesting and obtaining residency before arrival and having time to plan for and learn about their new country, its culture, and its dominant language(s). In contrast, for refugees, relocation is often the only option for escaping violence or persecution. This means that some refugees arrive in the U.S. with little notice and potentially without previous knowledge about English or American culture. Perhaps refugee youth feel more pressure than their immigrant peers to translate for family members because they are the only means for their families to communicate with the English-speaking majority, whereas immigrant families may be slightly

more self-reliant (e.g., perhaps parents have already started learning English but are not yet as proficient as their children; Phillimore, 2011).

Participants from Middle Eastern countries reported greater levels of feeling bad associated with language brokering than did participants from African and Latin American countries. Middle Eastern countries represented in the sample were Afghanistan, Iraq, and Turkey, and a post hoc examination revealed that all individuals from Middle Eastern countries also self-identified as Muslim. Findings could be due in part to the increasingly negative socio-political climate in the U.S. towards individuals of Middle Eastern backgrounds, especially Muslims. Perhaps individuals from Middle Eastern countries feel uncomfortable or unsafe serving in the role of translator in dominant American culture. Perhaps they receive negative feedback speaking their native languages in front of English-speaking Americans. Future research should delve deeper into this finding to try to understand it's root causes.

Asian participants reported greater stress associated with language brokering than African and Latinx participants. This finding could be in part due to Asian participants' cultural orientation. In a study of Chinese-American language brokers, Wu and Kim (2009) found that adolescents' cultural orientation as "more Chinese" or "less Chinese" (p. 714) influenced their feelings of stress associated with language brokering. Specifically, adolescents who felt "more Chinese" reported feeling more efficacy as language brokers, and those who felt "less Chinese" felt greater burden and stress associated with language brokering. One key difference is that in the current study, the Asian ethnicity category was made up of participants who self-identified as Chinese, Vietnamese, and Asian more broadly, and therefore there is not enough information to determine if the results of this study follow the results that Wu and Kim found. It would be interesting to determine if stress associated with language brokering is a result of being more or

less oriented toward one's culture of origin for other individuals of other Asian backgrounds as well as across other cultural or ethnic groups. Future research is needed to better understand what outcomes and sentiments associated with language brokering are broadly applicable across ethnic groups and which are culturally-specific, especially when such sentiments are negative.

## Study Two

Study Two builds on Study One by complementing the majority immigrant and refugee sample in one city with a majority non-immigrant and non-refugee sample from multiple metropolitan areas in the U.S. As with Study One, Study Two explored the prevalence and frequency of, and sentiments associated with, language brokering. Previous studies on language brokering in the U.S. have focused primarily on youth in one geographic location at a time, and this study built on previous work by focusing on youth from multiple regions throughout the U.S. This study addressed the following research questions:

1. *Are the prevalence and frequency of language brokering different among adolescents from different demographic backgrounds depending on their ethnic and cultural backgrounds?*
    - *Hypothesis 1: Language brokering prevalence and frequency would be similar in the current sample regardless of participant ethnic and cultural backgrounds.*
2. *To what extent do adolescents from different demographic backgrounds endorse positive and negative sentiments associated with language brokering?*
    - *Hypothesis 2: Adolescents would report both positive and negative sentiments associated with language brokering.*
3. *Do the levels of endorsements of positive and negative sentiments associated with language brokering differ by participants' ethnic and cultural backgrounds?*

- *Hypothesis 3: Sentiments would be different for participants of different ethnic and cultural backgrounds.*

## Study Two Method

### Study Design

In the 2017-2018 school year, an empowerment evaluation of a multi-site afterschool program was conducted in six U.S. cities (Phoenix, AZ, Aurora, CO, Detroit, MI, Garfield Heights, OH, San Francisco, CA, and St. Louis, MO). The current study uses data specific to language brokering that was collected in Waves two and three of that three-wave evaluation. I added questions onto the evaluation study's online Qualtrics questionnaire to obtain information about demographics and language brokering from this sample.

### Program Context

The targeted afterschool program serves high-performing yet economically-disadvantaged youth with the goal of optimizing students' life chances. The program uses a PYD approach to prepare youth for success in middle and high school, college, and living on their own. The program primarily serves racial minorities, with Black and/or Latinx students making up the majority race/ethnicity at most program sites. The program emphasizes academics, service, faith, and life skills through direct instruction and consistent, supportive adult-youth relationships.

### Participants

Participants were students voluntarily participating in the afterschool program in Phoenix, AZ, Aurora, CO, Detroit, MI, Garfield Heights, OH, San Francisco, CA, or St. Louis, MO. Students who indicated that their families spoke a language other than English at home were given supplemental demographic and language brokering questionnaires and became part

of the current study's sample (*N*=77). Students in the sample were predominantly female (67.53%), racially diverse (54.55% Latinx, 28.57% Black, 11.69% Asian, 3.90% multiethnic, and 1.30% other), and 15 years old on average (*SD*=1.93, range 11-18). Students primarily identified as non-immigrants and non-refugees (93.28%), with just over five percent identifying as immigrants (5.41%) and just over one percent identifying as refugees (1.35%). Just over half of participants (51.35%) had at least one parent who was an immigrant, only 2.70% had at least one parent who was a refugee, and 45.95% had parents who were neither immigrants nor refugees. Students were not classified as English language learners (were not in ESL classes).

**Recruitment and Procedure**

The afterschool program reached out to our research team to conduct a program evaluation of their program, and therefore no recruitment at the program level was necessary, and all sites for the program throughout the U.S. were included. Youth recruitment occurred at the site level of each program, with all youth involved in the program invited to participate. Parent opt-out letters were sent to families in lieu of consent forms. To indicate assent, youth who chose to participate read an assent statement and typed their names to indicate they had read the information and wanted to take part in the study on the first page of an online survey. Demographic information specific to populations who may language broker (e.g., ethnic group, immigrant or refugee status) was collected through online Qualtrics questionnaires given at Wave two (February 2018). Information about language brokering prevalence, frequency, and sentiments was collected through online Qualtrics questionnaires at Wave three (May 2018). Participation in the study was voluntary for students in the participating programs, and all students who completed questionnaires received $10 gift cards at both data collection waves.

**Sites**

All program sites served economically-disadvantaged middle and high school-aged youth, yet the demographic makeup of each site was different. In all but one site (Michigan, which had no female participants who reported language brokering), all program sites were predominantly female (Arizona 72.22% female; Colorado 77.78% female; Ohio 100.00% female; California 57.14% female; Missouri 88.89% female). Participating adolescents were predominantly Latinx in Arizona (86.11%) and Colorado (55.56%), Black in Michigan, Ohio, and Missouri (100.00% at all three sites), and fairly evenly racially divided in California between Asian (50%) and Latinx (42.86%). Participant average ages were 14.06 in Arizona, 16.33 in Colorado, 17.33 in Michigan, 17 in Ohio, 14.64 in California, and 16.44 in Missouri.

**Measures**

RDS and the specificity principle point to the fact that language brokering may be different for individuals of different backgrounds. Therefore, demographic questions focused on individuals' ethnic and cultural identities as well as background information such as the previous country participants had lived in. PYD theories point to the fact that individuals' positive and negative experiences can influence their development. Therefore, a language brokering scale was included to assessing the degree to which adolescents agreed or disagreed with statements about sentiments associated with language brokering.

**Demographics.** The demographic section of the questionnaire was similar to the demographic questionnaire from Study One, including questions on ethnicity, immigrant/refugee status, previous country lived in before coming to the U.S., age moved to the U.S., and country

of origin of both parents (see Appendix C). Questions about age, gender, and race/ethnicity were collected from the larger study (see Appendix D).

**Language brokering scale.** Language brokering statements came from the Language Broker Scale for adolescents created by Kim et al. (2014), which previously had been used with Chinese-American populations. There were two questions and ten statements overall, six of which were the same as in Study One. Statements were chosen for construct representativeness. Study Two was less restricted than Study One in the number of items that could be included and therefore additional positive-valence items were added in order to achieve balance between potential positive and negative effects. The first two questions were designed to determine if participants would receive further questions about language brokering. The first was, "Does your family speak a language other than English at home?" If participants responded no, then no further language brokering questions were presented. If participants responded yes, then the next question about prevalence and frequency of language brokering would appear, "How often do you translate or interpret something for your family?" with the response options, 1 (*Never*), 2 (*Seldom*), 3 (*Sometimes*), 4 (*Often*), and 5 (*Very often*). If participants responded never, no further language brokering questions appeared. If participants responded with any response option other than never, the remaining language brokering questions were presented.

The questionnaire included the same statements as in Study One about times participants felt stress, pressure, useful, bad, and embarrassed translating (e.g., "I feel useful when I translate for my family"). The measure also included five additional statements about feeling good, important, and competent translating, if time was taken away from other activities to translate for family members, and if participants had ever disappointed a parent by translating poorly. Unlike Study One, response options were in their original metric. Response options were on a 5-point

response scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), with 3 indicating *somewhat agree and disagree* (see Appendix E).

**Analyses**

Data were analyzed using SAS (University Edition 1). Analyses were primarily descriptive and exploratory due to the small sample size and nature of the study. As in Study One, in addition to exploring the prevalence, frequency, and sentiments associated with language brokering by demographic background in this study, I also probed some effects that have been previously explored in the literature, such as potential age and gender differences. Although I did not anticipate that they would be exactly the same in this study as in previous studies, I thought there would be some similarities (for example, girls translating more often than boys, older youth translating more often than younger youth; Buriel et al., 1998; Shen et al., 2014).

Ethnicity and previous country did not appear to be relevant questions for this sample, with the majority of participants leaving the previous country question blank and responding to the ethnicity question (when at all) with either their race or religion. Therefore, I used the race variable from the demographic section of the larger study in analyses (see Appendix C). Race was collected as a categorical variable with ten possible response options (i.e., Asian, Asian Indian/Indian American, Black, Latino/a[3], Middle Eastern/North African American, Native-American/Alaska Native, Pacific Islander, White, multiethnic, and other). Racial and ethnic groups represented in this study sample were Asian, Black, Latinx, multiethnic, and other. Only one participant identified as other, so that category was combined with the multiethnic category.

Before analysis, I created two groups based on responses to the first question on the language brokering questionnaire, “How often do you translate or interpret something for your

[3] Although Latino/a is not a race, it was included as a race response category which participants could self-select on the demographic questionnaire for this study and, therefore, will be treated as a race in this study.

family?" The groups were those whose families spoke a language other than English at home but who reported never performing language brokering (referred to as the non-language brokering group) and those who reported performing language brokering (i.e., seldom, sometimes, often, or very often; referred to as the language brokering group)[4]. Gender and age were also included in analyses in line with previous research.

**Research question 1.** To test the hypothesis for research question one, that language brokering prevalence and frequency would be similar in the current sample regardless of participant demographic background, I computed a Wilcoxon Rank Sum test to determine if there was a difference in age between the non-language brokering and the language brokering groups. I computed chi-square tests of independence to examine the association between language brokering prevalence and gender and race. Next, to explore the frequency of language brokering both within and between demographic groups I returned to the responses in their raw metric (removing the language brokering and non-language brokering categories) and ran a regression with language brokering frequency as the dependent variable and age as the independent variable, a Wilcoxon Rank Sum test for language brokering frequency and gender, and an ANOVA for language brokering frequency and race.

**Research question 2.** To test my hypothesis for research question two, that adolescents would report both positive and negative sentiments associated with language brokering, I ran single-sample *t*-tests to determine whether or not scores for all 10 statements about sentiments associated with language brokering were significantly different from a null hypothesized value that corresponded to the somewhat agree and disagree response option (i.e., a value of three). I

[4] I re-ran all analyses with the 'rarely' response option included with the 'never' response option and the results generally replicated (i.e. significance did not change). Below I report results for the 'never' versus all other language brokering options.

also explored correlations among the language brokering sentiment items to assess whether there were strong inverse correlations between positive and negative items or if the two types of items were relatively independent.

**Research question 3.** To test my hypothesis for research question three, that sentiments would be different for participants of different demographic backgrounds, I ran regressions for age, Wilcoxon Rank Sum tests for gender, and ANOVAs for race predicting each of the 10 sentiments associated with language brokering (in their raw metric) one at a time to determine if there were demographic differences (i.e., age, gender, race) in the average response to each question[5].

## Study Two Results

Overall, 78.26% of participants in the sample reported language brokering. A Wilcoxon Rank Sum test indicated that there was no significant difference in age by language brokering status ($S = 645.50$, $p = .05$). A chi-square test of independence indicated a significant association between race and language brokering status ($\chi^2(3) = 11.44$, $p = .01$). In order to determine which specific race(s) were significant, I conducted post hoc pairwise comparisons, which revealed that Latinx participants reported a significantly greater prevalence of language brokering than Black participants ($\chi^2(1) = 3.65$, $p = .01$). Chi-square tests of independence indicated no significant difference in the prevalence of language brokering between male and female participants ($\chi^2(1) = 1.19$, $p = .36$). A one-way ANOVA indicated a significant difference between race and language brokering frequency ($F(3,65) = 4.27$, $p = .01$), and follow-up comparisons using a Tukey adjustment indicated that Latinx participants reported language brokering more frequently than

[5] I examined Leverage, Cook's D, Rstudent, and DFFITs outlier diagnostics for all regression analyses using Proc Reg. I ran Cook's D, Rstudent, and DFFITs for all ANOVA analyses using Proc GLM.

Black participants (mean difference = 1.14, Tukey adjusted 95% CI [0.07, 2.21]). Frequency of language brokering was not associated with age or gender.

Single-sample *t*-tests revealed that participants' sentiments associated with language brokering were significantly different from the null hypothesized value that corresponded to the somewhat agree and disagree response option for feeling that language brokering took time away from other things ($t(57) = -2.98$, $p<.01$), feeling pressure to translate ($t(56) = -4.68$, $p < .0001$), feeling bad when translating ($t(56) = -6.68$, $p < .0001$), feeling embarrassed to translate ($t(56) = -8.79$, $p < .0001$), having disappointed a parent translating ($t(56) = -6.32$, $p < .0001$), feeling good about translating ($t(55) = 4.24$), $p < .0001$), feeling important translating ($t(55) = 5.16$, $p < .0001$), feeling useful when translating ($t(68) = 6.00$, $p < .0001$), and feeling competent translating ($t(55) = 6.95$, $p < .0001$), but not significantly different for feeling that it was stressful to translate ($t(58) = -1.35$, $p = .18$). Overall, the majority of participants disagreed with negative statements and agreed with positive statements (see Table 7, which presents absolute frequencies aggregated into three bins: Disagree/Strongly Disagree, Neutral, and Agree/Strongly Agree).

Tables 8, 9, and 10 show regression, Wilcoxon Rank Sum test, and one-way ANOVA results for each sentiment predicted by age, gender, and race, respectively. Results indicated that feeling competent and useful when translating was significantly different depending on race ($F(3,52,) = 2.79$, $p = .049$). Post hoc comparisons using a Tukey adjustment indicated that Latinx participants reported feeling more competent when translating than Black participants (mean difference = 0.92, 95% CI [0.05, 1.79]) and more useful when translating than participants with ethnicities of multiethnic/other (mean difference = 1.38 95% CI [0.02, 2.74]). Age and gender did not significantly predict feeling competent when translating. Wilcoxon Rank Sum tests revealed significant gender differences for feeling bad and feeling embarrassed when translating

(bad: S = 604.00, $p = .04$; embarrassed: S = 600.50, $p = .048$); On average, male participants reported significantly higher scores for feeling bad and embarrassed when translating than did female students. There were no significant gender differences for feeling good, stress, pressure, important, or useful translating, in translating taking time away from other things, or having disappointed a parent when translating by age, gender, or race.

When examining inter-item correlations, negative sentiments (i.e., feeling stress, pressure, bad, embarrassed, having time taken away from other things, and having disappointed a parent) were moderately or strongly positively correlated with one another. Similarly, positive sentiments (i.e., feeling good, important, useful, and competent) were strongly positively correlated with one another. There were no significant correlations between positive and negative items, suggesting that the dimensions are mostly independent (see Table 11).

## Study Two Discussion

This study found that language brokering is happening among adolescents from a nation-wide afterschool program. Findings confirmed the hypothesis that language brokering prevalence and frequency would be similar in the current sample regardless of participant demographic backgrounds, which fits with previous literature that has shown language brokering to be prevalent within specific populations that have been studied (e.g., Buriel et al., 1998; Corona et al., 2012; Kim et al., 2014; Morales & Hanson, 2005).

As a whole, the majority of participants agreed with positive sentiments and disagreed with negative sentiments associated with language brokering. Consistent with the RDS perspective and the specificity principle, stating that individuals even in similar contexts who have different backgrounds will experience events differently, there were demographic differences in endorsements of negative or positive feelings associated with language brokering.

Race and gender were the only demographic factors that significantly predicted sentiments associated with language brokering. Specifically, Latinx participants reported greater prevalence of and more frequent language brokering and higher feelings of competence when translating than Black participants. Additionally, Latinx participants reported feeling more useful translating than participants with ethnicities of multiethnic/other. Male participants were more likely to report feeling bad and embarrassed than female participants.

It is possible that the race difference found in this study has to do with the languages that participants are translating from. Many Latinx adolescents may speak and translate from Spanish, which is a romance language with similar roots to English, whereas perhaps many Black participants translate from languages more dissimilar to English. This may lead Spanish-speakers to feel more competent translating and therefore more willing to do so often. Spanish is a more common language in the U.S. overall compared with any African languages, and therefore translating to and from Spanish may have be perceived as more socially accepted than doing so from an African language. Alternatively, language may not be the primary factor, but rather something else not measured or a combination of things that influence feelings of competence when language brokering. It is difficult to interpret the finding that Latinx participants feeling more useful than participants with ethnicities of multiethnic/other, because the multiethnic/other category is inherently vague. It could be that there are multiple cultures and languages represented in the home, and that multiethnic youth who language broker translate to and from multiple languages yet do not feel they have mastery in all. Multiethnic youth probably bring a different set of needs to the table. Future research should consider what these differences could be.

Buriel and colleagues (1998) found that language brokering was more common among female than male adolescents in a sample of Latinx youth. It is possible that the gender difference found in this study was due to the fact that boys were less familiar with performing language brokering and therefore experienced it more negatively than girls who were more accustomed to it. Race and gender differences being factors in youths' experiences of language brokering raises implications for youth PYD and warrants further research.

## Overall Discussion

Research on populations who translate or interpret is not new. In the public health literature, translation among those who do not speak English fluently has been studied in various settings, including a focus on the challenges of translation and interpretation in medical settings (Bischoff et al., 2003; Elderkin-Thompson, Silver, & Waitzkin, 2001; Kale & Syed, 2010; Timmins, 2002; Alexander et al., 2003). Research on dual language learners and the effects of growing up bilingually is also plentiful. Therefore, the concept behind language brokering is not new to the literature, nor is the act of language brokering among youth and their families who do not speak fluent English. Studies specifically focused on language brokering encompass the unique position of a young person still developing who takes on the role of not only switching between two languages, but also navigating multiple cultures and mediating adult conversations. What makes this field unique is the clear need of language brokers for such populations yet unclear impact on the youth who serve in these roles. With an increasingly global and multicultural population within the U.S., this research becomes increasingly important and relevant.

These studies demonstrated that language brokering is occurring among diverse groups of youth in the U.S. and that those youth associate various sentiments with language brokering.

Previous research has focused on exploring language brokering among specific populations of immigrants (e.g., Latinx), which allows for better understanding of the experiences of that one group and a deeper dive into aspects unique to individuals from that background and culture. This approach provides important depth to a study and understanding of a group but does not allow for knowledge of how findings might be similar or different across groups of various demographic and cultural backgrounds. The current two studies provide the opposite: a surface-level overview of adolescents from many different backgrounds, obtaining breadth that is lacking in other studies of language brokering but, in doing so, sacrificing depth. Future studies should strive for both breadth and depth by, for example, choosing a few groups of language brokers from different backgrounds and exploring in-depth their specific and unique experiences while also comparing across groups to get an understanding of the breadth of such experiences.

Previous research has tended to explain findings related to language brokering using a good/bad dichotomy. Language brokering does not appear to be a phenomenon that can be classified neatly as a positive or negative experience, however, or even as good for some but bad for others. It is important to reconsider this way of thinking and move toward understanding the nuances and multiple possible outcomes associated with language brokering, even among one individual. This study shows that most likely, language brokering outcomes can be both positive and negative, with nuances of person, context, and background all as contributing factors.

Current research on PYD has been primarily conducted in the U.S. among youth of the dominant culture. Language brokering and acculturation are therefore potential elements of PYD that are not acknowledged by major theories and existing literature. The studies presented here therefore set the stage for making that connection and point to the need for definitions of PYD that take into consideration youths' varied backgrounds and experiences. For example, the Five

Cs model of PYD is often used to measure youth thriving. This model measures youths' connection, confidence, character, competence, and caring, operationalized in a way that makes sense for mainstream American youth. The Five Cs model does not consider what PYD may look like for youth who are not of the dominant culture, whose families speak a language other than English, or who have additional duties such as serving as a language broker. For example, what does competence look like for a young person who is navigating two cultures and two languages in the U.S.? This study opens the door for research on how language brokering affects PYD.

Although it is not possible to generalize these studies' findings to other groups of language brokers, the present findings provide a glimpse into group differences that may exist and could impact PYD. Together, these studies found interesting differences in sentiments associated with language brokering by age, gender, previous country, immigrant status, and race/ethnicity. Findings from Study One suggest that more research should be conducted to explore causes for potential group differences in language brokering experiences. For example, do youth from Middle Eastern backgrounds consistently feel unpleasant sentiments associated with language brokering, and if so, are unpleasant sentiments due to such youths' country of origin, ethnicity, religion, or factors related to the translation process? Do Asian youth consistently feel more stress associated with language brokering than youth of other backgrounds, and if so, is that unique to one ethnicity or culture (e.g., Chinese-American youth) or more broadly applicable?

The fact that there were more significant findings for most sentiments and demographic factors in Study One than in Study Two suggests that there may be something about immigrants and refugees (such as those in Study One) performing language brokering that is different from

the experiences of non-immigrant/non-refugee youth (such as those in Study Two). In Study Two, 93.33% of participants were born in the U.S., with 38% reporting that at least one parent was an immigrant. This means many adolescents in the sample had parents who were born in the U.S. For those whose parents were born elsewhere, it is possible they relocated to the U.S. 15 or more years ago (the youngest participant in the sample was 15). Therefore, parents of youth in Study Two may have been in the U.S. longer and therefore had a less critical need for their children's translation assistance compared with immigrant and refugee parents in Study One who had arrived in the U.S. more recently. Differences in the translation needs of parents could lead to very different experiences of language brokering for youth. Adolescents' own translation needs could also impact their experiences. It is also possible that youth who do not need translation themselves (e.g., second-generation immigrants who grew up speaking both their home language and English) may minimize their parents' needs and therefore show less concern and connection to performing language brokering for their families.

From an RDS perspective, it is clear that an individual's ethnicity, culture of origin, culture of resettlement, and lived experiences before and after relocation all influence that person's experiences of language brokering. Refugees' often traumatic pasts influence their receptiveness to and interactions with their cultures of relocation and therefore their ability to adapt (Phillimore, 2011). This history, coupled with feelings of pressure to fill the role of translator in the family, and with potential discrimination faced when performing such a role, are all important to consider in understanding how such experiences may affect PYD.

The specificity principle highlights how different youth may take on similar language brokering tasks yet nevertheless interpret and conceptualize their experiences differently. For example, in Study One, 100% of Arab, Asian, and Latinx participants reported language

brokering, however, those three groups did not on average endorse language brokering sentiments in the same way. This points to cultural between-group differences in language brokering experiences. Further, experiences perceived to be positive may be more likely to help an individual succeed and foster important adult-child relationships with family members and other adults they may be translating for (e.g., teachers), which is an important element of PYD. The fact that some individuals feel pressure to language broker while others do not, and that some adolescents feel bad while others feel useful language brokering has the potential to impact positive development when viewed through a PYD perspective.

**Limitations and Future Directions**

These two studies of language brokering provide interesting pilot information and highlight potential directions for future research. Lack of comparability between the studies, however, is a limitation. Discrepancies in geographic location, recruitment and administration, differing response categories, and different demographics used in analyses mean we cannot directly compare findings and should instead consider each study independently.

Study One was conducted in a liberal city in a state that has been rated highly a scale of inclusivity toward immigrants and refugees (Hatzenbuehler et al. 2017). This means that participants in this study have a unique experience interacting with the dominant culture in society and findings from this study cannot therefore be generalized to youth who language broker in other geographic locations that are less accepting toward individuals of different backgrounds. Questions in this study were constrained by space limitations of the larger study's questionnaire and therefore only five sentiments were included, which focused more on negative than positive sentiments. This is a major limitation of this study as it does not allow for an understanding of the full range of sentiments that youth may associate with language brokering.

The very small sample size in this study meant there were very few people in each demographic category. For example, there were only three individuals from Middle Eastern countries. Although findings from this group lead to interesting considerations for causes of similar response patterns, it is impossible to generalize about the group's experiences. Most, if not all, of the participants in this study had never participated in research before and were perhaps unfamiliar in answering survey questions. This inexperience potentially led to different responses than might have been reported had participants been more familiar with the research process. Additionally, even though confidentiality was assured, it is possible that participants did not feel comfortable reporting their own or their parents' status as an immigrant or refugee. Participants may also not have wanted to honestly report negative sentiments regarding language brokering for fear of coming across as ungrateful for their experiences in the U.S. or because they thought their families might not approve of such a response. Such considerations are important because they would present considerable limitations to the interpretation of the data.

Study Two addressed some of the limitations of Study One with a larger sample size (although a different population), however, it had limitations of its own. Study Two was conducted in cities in six different states which vary in regard to political ideologies and attitudes. Information was lost by combining participants living in such different geographic and sociopolitical areas. Immigrant status, country of origin, and ethnicity were highly relevant for participants in Study One but less so for participants in Study Two (and were for the most part left unanswered). I therefore instead examined between-race differences in this study, which is a limitation because it does not allow for me to fully answer my research questions specifically asking about adolescents of different cultural and ethnic backgrounds. Finally, a major limitation of this study was that due to a glitch in the online questionnaire, demographic data were

collected at one time point in and language brokering prevalence, frequency, and sentiment questions were collected at a different time point. The sample size was therefore limited to only participants with data at both time points.

Together, the two studies had samples of youth with varied immigrant and refugee statuses. Although the samples were categorized as majority immigrant/refugee (Study One) and majority non-immigrant/non-refugee (Study Two), it is important to note that the samples were not perfectly divided, meaning that some of the individuals in Study One reported they were neither immigrants nor refugees and some of the participants in Study Two reported they were immigrants or refugees. Due to the already small sample sizes for both studies, I chose not to further limit subjects by removing individuals that either were or were not immigrants or refugees from either study.

Finally, both studies were exploratory, using a subsample of questions from an existing questionnaire which were close-ended and limited in number. The studies had strictly quantitative designs, with questions added onto existing questionnaires in studies of PYD. This study design limited my ability to learn about underlying reasons for participant responses regarding sentiments associated with language brokering.

Future research should consider taking a mixed-method approach, which would allow researchers to dig deeper into how individuals from different backgrounds feel about translating and how such experiences shape their lives and development. Such research would shine potentially important light on the experiences of participants who indicated feeling uncomfortable language brokering. One idea is to have questionnaires in combination with focus groups made up of individuals from similar backgrounds together to discuss shared and differing experiences with language brokering. For the quantitative component of such a study,

researchers should consider developing a measure of language brokering that captures more nuance of sentiments, including items that allow for a more ambivalent response (e.g., “sometimes I do not like translating for my family but other times I like it”). Researchers should also probe correlations between positive and negative sentiments to better understand the ambivalence that appeared in this study. Latent Class or Latent Profile Analyses in future studies could similarly allow for the discovery of empirically derived subgroupings that are not immediately visible given demographic variables. Running different analyses on a larger sample could also result in more nuanced and informative findings. Future studies could also consider if and how language brokering may predict indicators of PYD, for example, measuring language brokering experiences and their associations with the Five Cs of PYD (Lerner et al. 2005).

## Conclusion

More foreign-born children are relocating to the U.S. each year. When they arrive, they join the approximately 2.9 million first-generation and 16.7 million second-generation immigrant children already in the U.S. (Child Trends, 2018). There is therefore a need to understand the nuanced experiences and outcomes associated with growing up as a language broker. In studies that have explored translation among specific populations of immigrant families, language brokering in youth is reported as a commonly occurring phenomenon. Previous studies have focused on specific sub-populations of immigrants in the U.S. (e.g., Latinx or Chinese-American youth), and little to no language brokering research has focused on refugee populations. Previous research has also not compared non-immigrant and non-refugee populations to immigrant and refugee populations when studying language brokering, nor has it simultaneously focused on youth from multiple regions throughout the U.S. The current studies combine to build on previous research by demonstrating that language brokering occurs in ethnically, culturally, and

racially diverse populations throughout the U.S. Previous literature has reported both negative and positive outcomes associated with language brokering. In the current study, participants reported both negative and positive sentiments, showing a similar pattern. Therefore, it is important to further explore this phenomenon to understand what helps or hinders young language brokers' development and ability to thrive. Better understanding of the unique strengths and challenges of youth who language broker in the U.S. could inform research, practice, and policy regarding support for translation services, as well as discovery of areas for support beyond translation. These studies set the stage for future work that will delve more deeply into the nuances of youth experiences of language brokering and comparisons of individuals and groups of various cultural and ethnic backgrounds.

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Table 1

*Study One Demographics: Ethnicity and Previous Country*

| | Frequency | Percentage |
|---|---|---|
| Ethnicity | | |
| African | 14 | 53.85 |
| Black African | 1 | 3.85 |
| Congolese | 1 | 3.85 |
| Ghanaian | 1 | 3.85 |
| Rwandan | 2 | 7.69 |
| Somalian | 9 | 34.62 |
| Asian | 5 | 19.23 |
| Asian | 3 | 11.54 |
| Chinese | 1 | 3.85 |
| Vietnamese | 1 | 3.85 |
| Latinx | 4 | 15.38 |
| Latinx | 3 | 11.54 |
| Mexican | 1 | 3.85 |
| Arab | 2 | 7.69 |
| Previous Country | | |
| African countries | 15 | 55.56 |
| Egypt | 1 | 3.45 |
| Ethiopia | 3 | 10.34 |
| Ghana | 1 | 3.45 |
| Guinea | 1 | 3.45 |
| Kenya | 3 | 10.34 |
| Namibia | 1 | 3.45 |
| Rwanda | 2 | 6.90 |
| Somalia | 2 | 6.90 |
| Tanzania | 1 | 3.45 |
| Middle Eastern countries | 3 | 11.11 |
| Afghanistan | 1 | 3.45 |
| Iraq | 1 | 3.45 |
| Turkey | 1 | 3.45 |
| East Asian countries | 6 | 22.22 |
| China | 2 | 6.90 |
| Vietnam | 4 | 13.79 |
| Latin American countries | 3 | 11.11 |
| Guatemala | 1 | 3.45 |
| Mexico | 2 | 6.90 |

*Note.* Previous country is the country lived in before relocation, and is not necessarily the same as one’s country of origin.

Table 2

*Study One Percentage of Responses in Strongly Disagree/Disagree, Neutral, and Agree/Strongly Agree Categories*

| Sentiment | Percent disagree | Percent neutral | Percent agree |
|---|---|---|---|
| Stress | 38.46 | 23.08 | 38.46 |
| Pressure | 39.29 | 25.00 | 35.71 |
| Bad | 59.26 | 25.93 | 14.81 |
| Embarrassed | 67.86 | 14.29 | 17.86 |
| Useful | 3.70 | 18.52 | 77.78 |

Table 3
*Study One Differences in Frequency of and Sentiments Associated with Language Brokering Predicted by Age*

| | *B* | SE *b* | *t* | Error DF | *p* |
|---|---|---|---|---|---|
| Frequency | 0.27 | 0.20 | 1.32 | 26 | 0.20 |
| Stress | 0.05 | 0.29 | 0.29 | 22 | 0.78 |
| Pressure | 0.38 | 0.15 | 2.60 | 25 | 0.02* |
| Bad | 0.21 | 0.17 | 1.24 | 23 | 0.24 |
| Embarrassed | 0.05 | 0.15 | 0.31 | 25 | 0.76 |
| Useful | 0.26 | 0.11 | 2.35 | 22 | 0.03* |

*$p < .05$.

Table 4

*Study One Differences in Frequency and Sentiments Associated with Language Brokering by Gender and Generation Status*

| | *S* | *p* |
|---|---|---|
| Gender | | |
| Frequency | 209.00 | 0.31 |
| Stress | 152.00 | 0.61 |
| Pressure | 181.50 | 0.75 |
| Bad | 163.00 | 0.35 |
| Embarrassed | 189.50 | 0.99 |
| Useful | 188.00 | 0.31 |
| Generation Status | | |
| Frequency | 73.00 | 0.54 |
| Stress | 46.00 | 0.74 |
| Pressure | 52.50 | 0.56 |
| Bad | 57.00 | 0.27 |
| Embarrassed | 23.00 | 0.17 |
| Useful | 46.50 | 0.80 |

$^{*}p < .05$. *Note.* Response scale of 1 (*Never*), 2 (*Rarely*), 3 (*At least once a week*), 4 (*Many times a week*), and 5 (*Every day*), and 6 (*I don't understand this*) for language brokering sentiment statements. Gender coded as male/female, generation status coded as first or second generation.

Table 5

*Study One Differences in Frequency and Sentiments Associated with Language Brokering by Previous Country, Immigrant Status, and Ethnic Category*

| | DF within | DF between | F | *p* |
|---|---|---|---|---|
| Frequency | | | | |
| Previous country | 3 | 20 | 1.51 | 0.24 |
| Immigrant status | 2 | 23 | 2.15 | 0.14 |
| Ethnic category | 3 | 20 | 2.07 | 0.14 |
| Stress | | | | |
| Previous country | 3 | 19 | 3.39 | 0.04* |
| Immigrant status | 2 | 17 | 2.06 | 0.16 |
| Ethnic category | 3 | 16 | 4.48 | 0.02* |
| Pressure | | | | |
| Previous country | 3 | 17 | 1.66 | 0.21 |
| Immigrant status | 2 | 20 | 3.56 | 0.047* |
| Ethnic category | 3 | 18 | 0.30 | 0.83 |
| Bad | | | | |
| Previous country | 3 | 16 | 5.42 | 0.009** |
| Immigrant status | 2 | 19 | 1.23 | 0.32 |
| Ethnic category | 3 | 17 | 0.80 | 0.51 |
| Embarrassed | | | | |
| Previous country | 3 | 19 | 3.05 | 0.05 |
| Immigrant status | 2 | 21 | 1.04 | 0.37 |
| Ethnic category | 3 | 18 | 2.02 | 0.15 |
| Useful | | | | |
| Previous country | 3 | 20 | 2.08 | 0.14 |
| Immigrant status | 2 | 19 | 1.99 | 0.16 |
| Ethnic category | 3 | 16 | 2.20 | 0.13 |

$^*p < .05$, $^{**}p < .01$. *Note.* Response scale of 1 (*Never*), 2 (*Rarely*), 3 (*At least once a week*), 4 (*Many times a week*), and 5 (*Every day*), and 6 (*I don't understand this*) for language brokering sentiment statements. Previous country was coded as African countries, Middle Eastern countries, East Asian countries, and Latin American countries. Ethnic category was coded as Asian, Arab, African, and Latinx. Immigrant status was coded as immigrant, refugee, asylum-seeker, or none of these.

Table 6

*Study One Positive and Negative Sentiments Associated with Language Brokering*

| | *M* | *SD* | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|
| 1. Stress | 3.09 | 1.38 | | | | |
| 2. Pressure | 2.81 | 1.28 | .21 | | | |
| 3. Bad | 2.41 | 1.29 | .62* | .44* | | |
| 4. Embarrassed | 2.09 | 1.06 | .28 | .19 | .42* | |
| 5. Useful | 4.03 | 0.98 | -.13 | .02 | .06 | -0.20 |

*$p < .05$. *Note.* Response scale of 1 (*Never*), 2 (*Rarely*), 3 (*At least once a week*), 4 (*Many times a week*), and 5 (*Every day*), and 6 (*I don't understand this*) for language brokering sentiment statements.

Table 7
*Study Two Percentage of Responses in Strongly Disagree/Disagree, Neutral, and Agree/Strongly Agree Categories*

| Sentiment | Percent disagree | Percent neutral | Percent agree |
|---|---|---|---|
| Stress | 42.37 | 30.51 | 27.12 |
| Time | 53.45 | 22.41 | 24.14 |
| Pressure | 59.65 | 22.81 | 17.54 |
| Bad | 70.18 | 19.30 | 10.53 |
| Embarrassed | 78.95 | 14.04 | 7.02 |
| Disappointed | 68.42 | 21.05 | 10.53 |
| Good | 12.50 | 33.93 | 53.57 |
| Important | 8.93 | 35.71 | 55.36 |
| Useful | 8.70 | 28.99 | 62.32 |
| Competent | 8.93 | 17.86 | 73.21 |

Table 8
*Study Two Differences in Frequency of and Sentiments Associated with Language Brokering predicted by Age*

| | *B* | SE *b* | *t* | Error DF | *p* |
|---|---|---|---|---|---|
| Frequency | -0.13 | 0.09 | -1.52 | 66 | 0.13 |
| Stress | 0.15 | 0.08 | 1.85 | 56 | 0.07 |
| Time | 0.13 | 0.08 | 1.61 | 55 | 0.11 |
| Pressure | 0.15 | 0.08 | 1.77 | 54 | 0.08 |
| Bad | 0.07 | 0.08 | 0.83 | 54 | 0.41 |
| Embarrassed | 0.13 | 0.07 | 1.93 | 54 | 0.06 |
| Disappointed | 0.07 | 0.08 | 0.84 | 54 | 0.41 |
| Good | -0.02 | 0.07 | -0.24 | 53 | 0.81 |
| Important | -0.04 | 0.07 | -0.54 | 53 | 0.60 |
| Useful | -0.00 | 0.07 | -0.05 | 66 | 0.96 |
| Competent | -0.05 | 0.07 | -0.75 | 53 | 0.46 |

*$p < .05$.

Table 9
*Study Two Differences in Frequency and Sentiments Associated with Language Brokering by Gender*

| | *S* | *p* |
|---|---|---|
| Gender | | |
| Frequency | 747.50 | 0.22 |
| Stress | 536.00 | 0.66 |
| Time | 582.00 | 0.12 |
| Pressure | 578.50 | 0.06 |
| Bad | 604.00 | 0.04* |
| Embarrassed | 600.50 | 0.048* |
| Disappointed | 591.00 | 0.07 |
| Good | 473.00 | 0.83 |
| Important | 443.50 | 0.45 |
| Useful | 704.50 | 0.07 |
| Competent | 450.00 | 0.52 |

*$p < .05$.

Table 10

*Study Two Differences in Frequency and Sentiments Associated with Language Brokering by Race*

| | DF within | DF between | F | *p* |
|---|---|---|---|---|
| Frequency | 3 | 65 | 4.27 | 0.008** |
| Stress | 3 | 55 | 1.19 | 0.32 |
| Time | 3 | 54 | 0.36 | 0.79 |
| Pressure | 3 | 53 | 0.63 | 0.60 |
| Bad | 3 | 53 | 1.43 | 0.25 |
| Embarrassed | 3 | 53 | 0.87 | 0.46 |
| Disappointed | 3 | 53 | 1.21 | 0.31 |
| Good | 3 | 52 | 2.50 | 0.07 |
| Important | 3 | 52 | 1.27 | 0.29 |
| Useful | 3 | 65 | 2.80 | 0.046* |
| Competent | 3 | 52 | 2.79 | 0.049* |

*$p < .05$. **$p < .01$.

Table 11

*Study Two Positive and Negative Sentiments Associated with Language Brokering*

| | *M* | *SD* | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Stress | 2.80 | 1.16 | | | | | | | | | |
| 2. Time | 2.53 | 1.19 | .83*** | | | | | | | | |
| 3. Pressure | 2.26 | 1.19 | .61*** | .78*** | | | | | | | |
| 4. Bad | 2.02 | 1.11 | .45*** | .53*** | .74*** | | | | | | |
| 5. Embarrassed | 1.88 | .96 | .46*** | .61*** | .75*** | .87*** | | | | | |
| 6. Disappointed | 2.09 | 1.09 | .62*** | .72*** | .82*** | .78*** | .76*** | | | | |
| 7. Good | 3.52 | .91 | -.08 | .04 | -.07 | -.02 | .04 | -.09 | | | |
| 8. Important | 3.66 | .96 | .06 | .01 | -.09 | -.09 | -.08 | -.10 | .68*** | | |
| 9. Useful | 3.74 | 1.02 | .10 | .06 | -.06 | -.10 | .16 | .06 | .65*** | .87*** | |
| 10. Competent | 3.86 | .92 | .10 | .12 | -.01 | -.05 | -.08 | -.07 | .69*** | .87*** | .89*** |

***$p < .001$.

# Appendix A

## Study One Demographic Questions

1. How old are you? _______ years
2. Are you male or female?

☐ Male/boy ☐ Female/girl ☐ Other (please explain): ____________

3. What is your religion? (for example: Muslim, Christian, Buddhist, none) _____________
4. What is your ethnic group? (for example: Arab, Hmong, Somali) _________________
5. Are you any of these? (circle one)

Refugee Immigrant Asylum seeker I am none of these

6. What country were you born in? _____________________________

**If you were NOT born in the United States:**

7. Where did you live before moving to the United States? __________________________
8. How old were you when you moved to the United States? _______ years

**About your father:**

9. What country was your father born in? _______________________
10. Is your father any of these? (circle one)

Refugee Immigrant Asylum seeker He is none of these

**About your mother:**

11. What country was your mother born in? _______________________
12. Is your mother any of these? (circle one)

Refugee Immigrant Asylum Seeker She is none of these

## Appendix B

Study One Language Broker Scale (Adapted from subsection of Kim et al., 2014)

| 1. How often do you translate from your home language into English? | Never | Rarely | At least Once a Week | Many Times a Week | Every Day | I Don't Understand This |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| 2. It is stressful to me when I translate for my family | Strongly Disagree | Disagree | Not Sure | Agree | Strongly Agree | I Don't Understand This |
| 3. I feel pressure to translate for my family | Strongly Disagree | Disagree | Not Sure | Agree | Strongly Agree | I Don't Understand This |
| 4. I feel useful when I translate for my family | Strongly Disagree | Disagree | Not Sure | Agree | Strongly Agree | I Don't Understand This |
| 5. I feel bad when my family asks me to translate | Strongly Disagree | Disagree | Not Sure | Agree | Strongly Agree | I Don't Understand This |
| 6. I am embarrassed when my family asks me to translate | Strongly Disagree | Disagree | Not Sure | Agree | Strongly Agree | I Don't Understand This |

## Appendix C

### Study Two Demographic Questions

1. What is your ethnic group? (for example: Arab, Hmong, Somali) ________________

2. Are you any of these? (circle one)

   Refugee Immigrant Asylum Seeker I am none of these

3. Are either of your parents one of these (choose one)?

   Refugee Immigrant Asylum Seeker neither is one of these

4. What country were you born in? ______________________________

**If you were NOT born in the United States:**

5. Where did you live before moving to the United States? ___________________________

6. How old were you when you moved to the United States? _______ years

Appendix D

Study Two Demographic Questions from Larger Study

1. What is your gender (check one)?
   - ☐ Male
   - ☐ Female
   - ☐ Other (Please specify): ________________________________________

2. How would you identify your race/ethnicity (check on)?
   - ☐ Asian, or Asian American, including Chinese, Japanese, and others
   - ☐ Asian Indian, (Asian) Indian-American
   - ☐ Black or African American
   - ☐ Latino/a
   - ☐ Middle Eastern/North African American
   - ☐ Native-American/Alaska Native
   - ☐ Pacific Islander
   - ☐ White, Caucasian, Anglo, European American
   - ☐ Multiethnic: (Please specify): _____________________________________________
   - ☐ Other: (Please specify): _________________________________________________

3. How old are you (in years)? _______________

Appendix E

Study Two Language Broker Scale (subsection of Kim et al., 2014)

1. Does your family speak a language other than English at home?
   Yes ____ No_____

| 2. How often do you translate or interpret something for your family? | Never | Seldom | Sometimes | Often | Very Often |
|---|---|---|---|---|---|

How much do you agree with these statements (select one answer per statement)?

| | | | | | |
|---|---|---|---|---|---|
| 3. It is stressful for me to translate. | Strongly Disagree | Disagree | Somewhat Agree and Disagree | Agree | Strongly Agree |
| 4. Translating takes time away from other things I want to do. | Strongly Disagree | Disagree | Somewhat Agree and Disagree | Agree | Strongly Agree |
| 5. I feel pressure to translate for my parent. | Strongly Disagree | Disagree | Somewhat Agree and Disagree | Agree | Strongly Agree |
| 6. I feel bad when my parent asks me to translate. | Strongly Disagree | Disagree | Somewhat Agree and Disagree | Agree | Strongly Agree |
| 7. I am embarrassed to translate when my parent asks me to. | Strongly Disagree | Disagree | Somewhat Agree and Disagree | Agree | Strongly Agree |
| 8. I have disappointed my parent by translating poorly. | Strongly Disagree | Disagree | Somewhat Agree and Disagree | Agree | Strongly Agree |
| 9. I am good at translating. | Strongly Disagree | Disagree | Somewhat Agree and Disagree | Agree | Strongly Agree |
| 10. Translating makes me feel important and mature. | Strongly Disagree | Disagree | Somewhat Agree and Disagree | Agree | Strongly Agree |
| 11. I feel useful when I translate. | Strongly Disagree | Disagree | Somewhat Agree and Disagree | Agree | Strongly Agree |
| 12. I feel competent and capable when I translate for my parent. | Strongly Disagree | Disagree | Somewhat Agree and Disagree | Agree | Strongly Agree |