

EFFECTS OF CULTURE BROKERING ON INDIVIDUAL WELL-BEING AND  
FAMILY DYNAMICS IN A SAMPLE OF IMMIGRANT YOUNG ADULTS FROM  
EASTERN EUROPE

BY

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DISSERTATION

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### **Abstract**

The current study explored the effects of culture brokering on the well-being and family dynamics of immigrant young adults from Eastern Europe. Data were collected from 197 first generation immigrant youth ( $M$  age = 22.93,  $SD$  = 2.89) from 12 different countries in Eastern Europe. The majority of the participants were female (63.5%) and had lived in the United States on average for 10 years. Participants completed a one-time online survey, answering questions about their brokering experiences, as well as about their well-being, family-dynamics, perception of their parents' acculturation, and demographic variables. With respect to culture brokering, participants completed a well-established measure of language brokering which assesses the frequency of brokering as well as individual's feelings toward brokering. A newly developed measure of procedural brokering, which also assessed frequency as well as feelings, was used to assess a new dimension of culture brokering. Data show that youth who are more educated and have lived in the United States for a longer period of time tend to broker less for their parents. Findings also indicate that negative feelings toward language brokering are related to depressive mood of young adults, but this relationship is mediated by family conflict. Similarly, family conflict mediated the relationship between frequency of procedural brokering and depressive mood. The results highlight the importance of understanding the complex family dynamics of immigrant families. Implications for further research and practice are discussed in detail.

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## **Chapter One: Introduction**

There are over 37 million foreign-born individuals currently living in the United States (U.S. Census Bureau, n.d.a). Some arrive to this country in search of better life, some bring their children to give them educational and other opportunities they may not have in their native countries, and others arrive as refugees, fleeing the conflict and persecution in their home land (Baptiste, 1993). Immigrants arriving from Eastern Europe fall into all of these categories (Robila, 2008). Immigration for them is a stressful life event that involves many changes in family relationships. While parents may be slower to adjust and assimilate to their new environment, young individuals are quickly immersed in the host culture which enables them to adapt and familiarize themselves with the new environment. The ability to assimilate faster allows young individuals to play an important role in their family's adjustment and functioning, and as a result assist their family members in navigating the new culture. Researchers have called this "culture brokering," and despite its commonality, research on brokering in immigrant families is still scarce. The primary purpose of this study is to fill the gap by examining the ways in which immigrant and refugee young adults broker for their parents, and the impact of brokering on individual and family life. Specifically, the study will examine the relationships between brokering and well-being of young individuals from Eastern Europe, as well as the impact of brokering on the relationships between young adults and their immigrant parents.

### **Overview of Main Concepts**

**Immigrants and refugees from Eastern Europe.** Even though immigrants from Eastern Europe have steadily been entering the United States since 1880s, the literature and research on this population is still lacking (Robila, 2008). The United States Migration Policy Institute considers Eastern Europe to be comprised of the following countries: Czechoslovakia, Hungary, Poland, Romania, Belarus, Russia, Ukraine, Bosnia and Herzegovina, Yugoslavia, Albania, Bulgaria, Croatia, Macedonia, Slovenia, Estonia, Latvia, Lithuania, Moldova, and the USSR (Dixon, 2005). These are mainly countries that have had strong relationships with the former Soviet Union and have experienced much of its influence economically, politically, and culturally. Following the disintegration of the Soviet Union in 1991 and the fall of communism in the Eastern Europe, the countries of that region became more open to the Western world, and the United States saw an influx of immigrants from this part of the world. For example, the

number of immigrants from Eastern Europe grew from 18,000 in 1986 to 76,000 in 2006 (Migration Policy Institute, n.d.).

Immigrants from Eastern Europe differ in some characteristics from immigrants from other parts of the world. On average they are more likely to have knowledge of the English language and are more educated (Robila, 2008), and encourage their children's education once they arrive to the United States (Nesteruk, Marks, & Garrison, 2009). This is not true, however for all groups from Eastern Europe, and there are many variations between people from different Eastern European countries. For example, Robila (2008) examined the characteristics of immigrants from this region and found that the immigrants with highest education (college degree or postgraduate degree) came from Latvia, while the immigrants with lowest education came from the region of the former Yugoslavia.

There are also differences in circumstances under which the families arrived. While many immigrants came in search of better financial and economic opportunities and better educational experiences, some immigrants came as refugees, especially those from the region of the former Yugoslavia (Robila, 2008). Refugees are a subgroup of immigrants who leave their native land because of the fear of persecution (Robila, 2008). Refugees are particularly unique groups because of their experiences of war and trauma, which can have profound impact on their mental health (Keyes & Kane, 2004). All of these factors can impact their view of the immigration process and their decision about how and to what extent they should assimilate into the new culture.

Sending countries also differ in their economic strengths, with Slovenia and Czech Republic having one of the highest GDP in the region and Serbia (part of former Yugoslavia) and Moldova having among the lowest (Robila, 2008). Furthermore, when they arrive to the United States, immigrants from different Eastern European countries differ in their financial resources in the host county. Data from the 2002-2004 Current Population Survey shows that the majority of immigrants from Eastern Europe had an annual income lower than \$50,000; median income for the overall US population during the same period was about \$44,500 (U.S. Census Bureau, n.d.b). Those from the former Yugoslavia had the lowest income level, with 70% of population having an annual income of less than \$25,000 (Robila, 2008) and those from Romania had the highest income, with 23.29% having an income of \$50,000 or higher (Robila, 2008).

Since very little research is available about immigrants and refugees from Eastern Europe, it is difficult to present a detailed picture about family dynamics and relationships of this population. The few studies that have been conducted reveal that many Eastern European families include extended family members, such as grandparents, in addition to the nuclear family, and it is not uncommon that several generations reside in the same household (Nesteruk & Marks, 2009). These families also have a traditional family pattern (i.e. gendered division of labor, placing high value on marriage, and valuing children) (Robila & Krishnakumar, 2004) and many report that family is central in their life (Robila, 2004a). Children report having close relationships with their parents, especially with their mothers (Robila, 2004b; Tóth, 2004). This seems to be mainly due to the patriarchal societies where mothers are expected to assume almost complete responsibility for child rearing. However, with the fall of communism and penetration of Western beliefs into the East European countries, child rearing practices have been changing over time. Children are becoming more independent and autonomous at an earlier age. Despite these gradual changes, Eastern European countries are still characterized by interdependence. Families assist one another, and there is a strong belief in intergenerational obligation to care for older family members (Robila & Krishnakumar, 2004). Research has not explored what happens to families from Eastern Europe once they immigrate; therefore it is unknown to what extent, if at all, family dynamics and relationships change during immigration process.

**Culture brokering.** Culture brokering is usually defined as “the degree to which child and adolescent immigrants serve as cultural translators or brokers for family members, other adults, and their peers” (Trickett & Jones, 2007, p. 143). Some studies indicate that 90% of immigrant children have brokered at least once in their life time, and immigrant children begin to broker for their parents at a very early age (Morales & Hanson, 2005; Tse, 1995). Brokering experiences are very diverse and include different types of activities and behaviors. Children in immigrant families are often asked to translate various documents, answer the phone for their parents, and speak on behalf of their parents in a store or doctor’s office (Orellana, Dorner, & Pulido, 2003; Trickett & Jones, 2007; Valenzuela, 1999). It is not surprising that this occurs since young individuals are often more experienced in the English language than their parents, and knowledge of the language and culture enables young individuals to assist their families in time of need.

In addition to translating, immigrant youth also interpret for their parents, which is a more complex activity that involves advanced knowledge of both native and English language. Interpreting involves transmitting information to parents and explaining certain concepts in more detail than just providing an exact translation of the same (Valenzuela, 1999). Valenzuela (1999) has called children who perform both translating and interpreting “tutors.” He distinguished this role from “advocates,” where young individuals “mediate, intervene, and advocate on behalf of their parents,” very often in complicated situations that involve legal or financial contexts (Valenzuela, 1999, p. 729). As can be seen, immigrant youth assist their parents in numerous ways, and while there have been quite a few studies that have focused on different aspects of language brokering, other forms of brokering have not been the focus of research.

**Relationships between immigrant young adults and their parents.** In general, young individuals in US families report positive relationships with their parents (Lye, 1996). The conflict that is sometimes present during adolescence usually decreases by the time individuals reach young adulthood (Laursen & Collins, 1994). It is not uncommon for young adults to view their parents as a source of emotional support and advice, even though they may not be relying on them as much as they previously did (Lye, 1996). During young adulthood, individuals also strive for increased independence and autonomy (Fuligni, 1998).

The research about immigrant families mainly focuses on the relationships between adolescents and their parents, and less is known about what happens in those families once adolescents transition to early adulthood. The few studies that have been conducted with young adults conclude that relationships in immigrant families are characterized by two, somewhat contradictory, characteristics. On the one hand, immigrant families can be described by strong relationships and high degree of closeness. At the same time, immigrant families are characterized by a higher degree of conflict than mainstream US families, mainly stemming from the intergenerational gap that is often present in families where children spend the majority of their life in a culture that is different from the one their parents have known (Ying & Han, 2007). Likewise, conflict may sometimes arise because of lack of clarification regarding the developmental tasks that need to be accomplished during this time period—immigrant young adults may be trying to establish their independence while at the same time they may be expected to contribute to their family.

The literature on immigrant families shows that immigrant young individuals place higher value on family than their Western counterparts. For example, a study with 998 first and second generation young adults, ranging in age from 18 to 25 years and representing Asian-Pacific, Latin-American, Afro Caribbean, and European ethnic groups, examined family behavior demands (Tseng, 2004). The results revealed that young adults from immigrant families placed a greater importance on their family obligation and spent more time fulfilling family demands than did the young adults from US-born families (Tseng, 2004). These young adults also had a different perception of their roles and felt an obligation to assist their families as opposed to the young adults from US-born families (Tseng, 2004). A longitudinal study with people from diverse backgrounds also found that during young adulthood, individuals from Filipino and Latin American immigrant families reported significantly stronger family commitment than non-immigrant young adults (Fulgini & Pedersen, 2002). Some researchers explain that strong ethnic identity is related to stronger family obligation (Rodriguez, Mira, Paez, & Myers, 2007).

Although they place a high value on family, immigrant youth often report an increased amount of conflict due to the stress related to immigration. For example, a study with first and second generation Chinese American college students found that students who report being more Americanized also reported lower quality of relationships with their parents (Ying, Lee, Tsai, Lee, & Tsang, 2001). Similar findings emerged in a different study with Asian American college students. The findings indicated that increased discrepancy in Asian values between parents and their children was positively related to increased conflict in those families (Ying et al., 2001). Even when young adults report no differences between their cultural values and that of their parents, they still report experiencing psychological distress because their cultural values are discrepant from the cultural values of the mainstream society (Kim, Sarason, & Sarason, 2006).

The dual nature of immigrant and refugee families can have profound effects on young people. They have to be able to negotiate strong family relationships while at the same time strive to attain socially desired autonomy. Culture brokering may contribute to those effects because of its ability to both contribute to the feelings of empowerment and importance of immigrant youth, while at the same time contributing to feelings of uncertainty about one's expectations and roles within a family.

## Chapter Two: Literature Review of Culture Brokering

Immigrant youth acculturate much faster than their parents due to their immersion into the host society through peers and social encounters with the host population (Birman, 2006b). As a result of this immersion, young individuals are able to familiarize themselves with the values, customs, and behaviors of the host society. The knowledge they acquire about the host society enables immigrant youth to assist their parents in numerous daily tasks, and help them navigate the new world. The assistance most often manifests itself in terms of translating and interpreting, therefore many researchers have looked at language brokering to examine different processes in immigrant families (Buriel, Perez, DeMent, Chavez, & Moran, 1998; Tse, 1995). Few researchers however have explored non-linguistic forms of culture brokering.

Brokering is very common in immigrant families. Several studies have found that more than 90% of children and adolescents in immigrant families performed brokering acts (Buriel et al., 1998; Jones & Trickett, 2005; Orellana, 2003; Trickett & Jones, 2007). Despite the commonality of this phenomenon, the literature that examines brokering is still very limited. The majority of studies have focused on either early (Weisskirch & Alatorre-Alva, 2002) or middle adolescents (Dorner, Orellana, & Jimenez, 2008; Trickett, & Jones, 2007), primarily of Latino and Mexican origin (Morales & Hanson, 2005). A few studies have also included Chinese (Wu & Kim, 2009) and Vietnamese immigrants (Trickett & Jones, 2007), and immigrants from the former Soviet Union (Jones & Trickett, 2005). These previous studies have found many variations regarding the gender of those who broker and the impact of acculturation on brokering.

Gender has been addressed in some studies that have explored culture and language brokering, but the findings from those studies are inconclusive. For example, in their study of first and second generation adolescent Latino students, Buriel and colleagues found that girls reported language brokering more frequently than boys (Buriel et al., 1998). Another study with mainly second generation Latino adolescents also found that oldest female tends to be the primary language broker for her family (Villanueva & Buriel, 2010). Valenzuela (1999) also found a similar trend, reporting that girls participated more than boys in activities that required detailed explanation or translation. On the other hand, a study with Mexican-American first and second generation adolescents ranging in age from 12 to 14 found that boys reported translating more often for their parents than girls (Weisskirch, 2007), while Love & Buriel (2007) found no

gender differences in culture brokering. The differences may be due to the gendered nature of certain activities in some cultures, where girls are viewed as being more fit than boys to explain in detail and translate documents.

Some studies have addressed relations between acculturation and culture brokering. A study of first and second generation Vietnamese adolescents (mean age 16) and their parents found that students whose parents had been in the US for longer period of time reported less culture brokering than those students whose parents have resided in the US for a short period of time (Trickett & Jones, 2007). The same was found in a study with first and second generation Chinese, Korean, and Mexican American adolescents (mean age of sample = 15.72) – those whose parents arrived to the United States at an earlier age brokered less than those adolescents whose parents have been residing in the States for a short period of time (Chao, 2006). Even though they don't assess it directly, perhaps researchers assume that acculturation is automatically embedded in culture brokering because parents who have been in the United States longer and have acculturated to some extent to the host society usually need their children to broker for them less than parents who are new to the US culture.

### **Impact of Culture Brokering on Adolescents'/ Young Adults' Well-being**

In general, brokering occurs very frequently in immigrant families, despite the fact that some parents may need their children to broker for them less than other parents. Parents often need their children to interpret and assist in other ways, and different brokering activities have been found to have both positive and negative effects on individual well-being. Some studies indicate that individuals who broker for their parents or other adults report positive experiences with brokering. For example, earlier studies on language brokering found that Latino adolescents who reported language brokering for their parents also reported that brokering contributed to their increased maturity and independence (Tse, 1995). In a different study of first and second generation Mexican American early adolescents who ranged in age from 12 to 14, data revealed that translating for others was associated with positive self-esteem (Weisskirch, 2007). Still other studies have found that children who perform language brokering for their parents feel a sense of efficacy (Wu & Kim, 2009), and report that brokering has helped their academic performance and aided them in their competency in English language (DeMent, Buriel, & Villanueva, 2005). Some young individuals even reported that brokering experiences have helped them learn about their native culture and language and contributed to increased self-

confidence in different social situations (Buriel et al., 1998; DeMent et al., 2005). Studies have also found that brokering can contribute to young individuals' ethnic identity development (Kim & Chao, 2009; Weisskirch et al., 2011). While few studies have identified the factors that are specifically related to language brokering, Buriel et al. (1998) found that one's feelings about language brokering were related to increased self-efficacy, while the diversity of places where young immigrants brokered were related to increased school success.

On the other hand, some studies have found negative effects of language brokering. Several studies with adolescents and young adults of Mexican and Latino origin, who ranged in age from 9 to 22, indicate that individuals who broker for their parents reported feeling uncomfortable (Weisskirch & Alatorre-Alva, 2002), frustrated (DeMent et al., 2005), embarrassed, and guilty (Weisskirch, 2007). Some boys even reported feeling depressed (Love & Buriel, 2007), and a study with college students found that language brokering was related to lower self-efficacy (Oznobishin & Kurman, 2009). A study with Mexican-heritage adolescents found that language brokering was associated with risky behaviors (Kam, 2011). Still others argue that young individuals prematurely assume adult roles while brokering and that these experiences can have detrimental effects on their identity development (Umaña-Taylor, 2003)

Therefore, in general, studies about relations of culture brokering to individual well-being yield mixed results. While some studies have found that brokering is just a normal activity that young immigrants do (Orellana et al., 2003), and that it has positive effects on well-being, other studies have found negative associations between brokering and adjustment. The majority of the studies explored the relationship between the amount of language brokering and well-being (Jones & Trickett, 2005; Martinez, McClure, & Eddy, 2009, Trickett & Jones, 2007; Weisskirch & Alatorre-Alva, 2002). Overall, however, there is not enough evidence to show that brokering can impact well-being one way or another, and more studies need to be conducted to further identify the factors that account for the association between the two concepts. Further, while studies have examined impact of culture brokering on family relations, they have not examined family system as a context for brokering activities. Therefore, it is important to explore the relationship between culture brokering and family relations because examining those can yield potential explanation for different effects of brokering on well-being.

### **Impact of Culture Brokering on Family Relations**

Similarly to findings related to individual well-being, findings regarding language brokering and relationship with parents are mixed (Morales & Hanson, 2005). Some studies found that language brokering is related to conflict in immigrant families. A study of first and second generation Vietnamese adolescents (mean age 15.9) and their parents found that adolescents reported that culture brokering contributed to family disagreements; however, the same was not reported by their parents (Trickett & Jones, 2007). A study with Cuban refugee parents and their adolescent children (mean age of children was 11.7 years) also found that culture brokering negatively affected family relations (Puig, 2002). The study reported that the majority of parents had to rely on their children to complete certain tasks for them. As a result, parents felt that their children were in control and that their brokering led to lack of trust and cooperation within the family. In turn, children reported often feeling embarrassed and frustrated with the work they had to do for their parents, and those who were younger in age reported feeling confused and unclear about the roles and responsibilities they had to assume (Puig, 2002). Similar findings emerged in a study of immigrant college students from the Former Soviet Union who immigrated with their families to Israel (Oznobishin & Kurman, 2009). The findings showed that immigrant youth frequently language brokered for their parents, and had a higher tendency of role reversal than their native-born counterparts.

A study with first and second generation Latino adolescents (mean age 12.74) and their parents examined amount of language brokering and family dynamics (Martinez et al., 2009). Researchers distinguished between “high language brokering” environments (HLB; those families in which adolescents were bilingual and had two monolingual parents) and “low language brokering” environments (LLB; families in which bilingual children had at least one parent who was bilingual). The findings revealed that parents in LLB contexts consistently reported greater parenting effectiveness than parents in HLB. At the same time, fathers (but not mothers) in LLB environments reported more positive involvement with their adolescents, as well as more monitoring, homework engagement, and monitoring of schoolwork (Martinez et al., 2009). Furthermore, whereas adolescents did not report any differences in their own depression scores, parents of children in LLB reported that their children exhibit less internalizing behaviors than parents in HLB (Martinez et al., 2009). Therefore, findings indicate that families in low

language brokering environments fared better than families in high language brokering environments.

In contrast, other studies indicate that brokering contributes to positive family dynamics. For example, a study with primarily second generation Chinese American 11<sup>th</sup> and 12<sup>th</sup> grade adolescents found that adolescents perceived that they mattered to their parents when they brokered for them (Wu & Kim, 2009). Some researchers propose that young individuals are an essential part of their families, assisting their parents in the unfamiliar environment, and helping their family advance in the new country (Orellana et al., 2003). Other studies have found no differences in power between parents and children. Even though children participated in family decisions they did not make any decisions on their own—that responsibility was still left for parents (Orellana et al., 2003).

Overall, findings between culture brokering and family relations are inconclusive. A few studies have found that ethnic identity plays an important role in positive relationship between brokering and family relations (Wu & Kim, 2009). Studies that find positive association between language brokering and family relations indicate that young individual in those families feel a strong sense of responsibility and obligation to help their families (Dorner et al., 2008; Orellana et al., 2003). Others have found negative association between the two constructs. More research is needed in this area to provide better understanding of factors that impact immigrant and refugee family dynamics.

### **Gaps and Overview of Current Study**

In summary, the literature on language and culture brokering contributes valuable information to our knowledge about processes in immigrant families. However, the results are mixed and the literature has some gaps that need additional exploration. For example, since this is a relatively new area of research, there is a lack of unified culture brokering theory that would help frame the research on this topic (Morales & Hanson, 2005). The research on culture brokering has seen the use of various theories such as grounded theory (Dorner et al., 2008), acculturation theory, and family systems theory, but there is not one overarching theory that would help frame the concept of brokering (Morales & Hanson, 2005). Additionally, there is a lack of studies on non-linguistic brokering with different age groups and from diverse populations. Namely, studies have included mainly adolescents (Acoach, & Webb, 2004; Buriel et al., 1998; Dorner et al., 2008), primarily of Latino origins (Morales & Hanson, 2005).

The current study will expand the previous literature and contribute to our knowledge of culture brokering (CB) in several ways. First, this study will contribute to the theoretical examination of CB by employing Vygotsky's sociocultural theory. Sociocultural theory in its essence attempts to explain human development in cultural and social context, and it has not been used to examine the ways in which culture brokering operates in immigrant families. The theory proposes that children are able to navigate the world around them by being guided, or scaffolded, by more experienced and usually older individuals (Daniels, 2007). However, immigrant families experience different kind of scaffolding. Since younger individuals acculturate much faster than older individuals, immigrant young individuals scaffold their parents. This framing will allow an in depth examination of different responsibilities immigrant youth assume, and will shed light on unique developmental tasks that often exist in immigrant families (the conceptual framework for the proposed study is explicated in the next section).

Second, the study will advance our understanding of brokering by utilizing a new measure, called procedural brokering, that will tap into non-linguistic aspects of CB. Pilot data collected previously show that young adults assist their parents in ways that go beyond language, such as explaining the school system, taking parents to different restaurants, and teaching parents requirements for US citizenship. Previous studies that have examined language brokering mainly focused on instances of translating that immigrant youth do for their parents. Procedural brokering, while distinct in nature from language brokering, does involve language as a means of accomplishing the procedural brokering tasks because of the nature of communication between individuals. However, the newly developed measure will allow for the assessment of brokering activities beyond translation. Tapping these additional brokering experiences will lead to a greater understanding of the complexities of brokering and its consequences for family dynamics.

Third, the study will contribute to the knowledge of CB by examining this phenomenon in a new population. The study will focus on young adults from Eastern Europe because they are an understudied population with unique immigrant experiences. Immigrant young adults from Eastern Europe tend to reside with their families until marriage, but the expectations of the majority US culture are that young people move out of their parents' home and live independently. These potential conflicting demands of the two cultures can have profound effects on young adults' well-being, as well as their relationships with their parents. Young

adults are a particularly interesting population because of their age at which they are preparing to pursue their own path in life while at the same time assisting their parents with daily tasks.

Studies that have explored culture brokering have been inconclusive about its effects on individual well-being and family relations, which may indicate lack of consistency across immigrant experiences. Since resettlement is a very stressful event that automatically disrupts family life (Puig, 2002) it is not surprising that immigrant families experience conflict and tension. At the same time, this challenging event may also be beneficial because it can bring families together in a way that allows them to work together to overcome hardships and succeed in the new environment. Since it occurs very often in immigrant families, it is important to examine culture brokering experiences to obtain some clarifications about its impact on those families. Further, exploration of culture brokering allows us to investigate the ways in which young adults assist their families and contribute to the adaptation of their parents into the host society. This will allow us to understand the ways in which young adults may help their families thrive in new environments. Further, the project will explore the ways culture brokering is linked to family dynamics. This will elucidate the relationships between young adults and their parents in the context of challenges that many immigrant and refugee families experience. Examining the above mentioned concepts can assist practitioners in their work with immigrants by contributing to the knowledge of dynamics and relationships in immigrant and refugee families.

In summary, this study will contribute to our understanding of culture brokering in several ways. First, the study will contribute to the theoretical examination of culture brokering by employing Vygotsky's sociocultural theory. The study will also contribute by utilizing the newly developed measure of non-linguistic brokering that also occurs in immigrant families. Lastly, the study will contribute to our understanding of culture brokering by exploring this phenomenon in a new population—immigrants and refugees from Eastern Europe.

### **Chapter Three: Theoretical Framework**

Sociocultural theory was developed by Lev Vygotsky in the late 1920s and early 1930s. The theory, in its essence, attempts to explain human development in cultural and social context. The sociocultural theory proposes that individuals are a product of their social and cultural worlds (Berk & Winsler, 1995), and they cannot be understood apart from their sociocultural context (Miller, 2002; Rogoff, 2003). In addition, culture serves as a determinant of the necessary skills for members of that specific culture, and it provides individuals with tools necessary for functioning within that society (Miller, 2002). Individuals, however, are not passive recipients of culture. They actively participate in the culture by making sense of it and by picking and choosing among different available tools within the culture (Blanck, 1990). In addition, individuals acquire knowledge and learn through the interactions with their social context. Sociocultural theory has not previously been used to examine brokering experiences of immigrants and refugees. Nonetheless, the theory presents itself as a potential framework for explaining these experiences in immigrant populations.

Culture is a central concept in sociocultural theory, and is held at a very high place by Vygotsky, so much that he proposed that culture helps children develop “higher forms of thinking” (Gredler & Claytor-Shields, 2008, p. 55). Culture is defined as a set of “shared beliefs, values, knowledge, skills, structured relationships, ways of doing things (customs), socialization practices, and symbol system (such as spoken and written language)” (Miller, 2002, p. 374). In addition, culture represents routines, images, stories and narratives, physical and social settings (such as schools, buildings and highways), tools, and much more (Miller, 2002). Vygotsky viewed the cultural context as the most important context for a child’s development.

The importance of cultural context becomes even more salient once we look at immigrant youth. On one hand, they have their native culture, which they bring with them and which is usually prevalent in their homes. On the other hand, they quickly experience the host culture through peers and the school system. Further, the immigrant youth have to be well-versed in both cultures in order to perform brokering activities which they are often expected to do. They have to be able to quickly switch from one cultural context to the other in order to be able to navigate and guide adults around them through the new environment.

Another very important concept in Vygotsky’s sociocultural theory is the idea of scaffolding. Scaffolding occurs when more knowledgeable individuals (such as parents, older

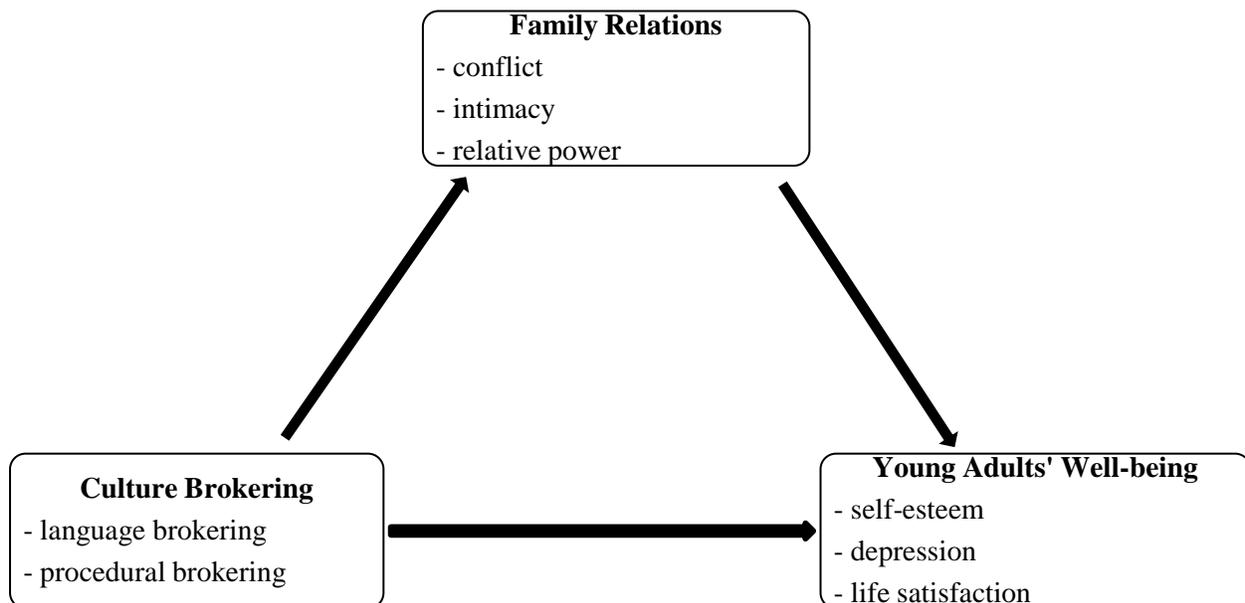
sibling, or teachers) assist a child or a novice to solve some type of problem or complete some task (Daniels, 2007). In this process the more knowledgeable individual takes the role of an expert and acts as a facilitator of a specific activity (Kermani & Brenner, 2000). The theory proposes that a child's future performance depends on the quality of the guidance received. In addition, scaffolding almost always includes an adult as instructor and a child as a learner (Clay & Cazden, 1990; Diaz, Neal, & Amaya-Williams, 1990).

Research on scaffolding almost always describes an adult-child dyad in such a way that adult is the more knowledgeable individual who instructs or teaches the less knowledgeable one – the child (Clay & Cazden, 1990; Kermani & Brenner, 2000; Tudge, 1990). However, this interaction may be reversed within immigrant families. Research has consistently shown that younger individuals acculturate faster than older individuals (Birman, 2006a; Birman & Taylor-Ritzler, 2007; Kuo & Roysircar, 2004; Orellana, 2009). Furthermore, young individuals interact more often with those from the host society, which gives them numerous opportunities to master the English language and familiarize themselves with American culture. As a result, many immigrant children are able to act as culture brokers for their families, often taking on adult roles within their families by helping their parents translate documents, make medical appointments, file tax forms, and help with general translation in conversations with non-immigrant individuals (Trickett & Jones, 2007). Thus, these young individuals bring the American culture to their parents and other older adults who may be less involved in the host culture (Monzo & Rueda, 2006). In contrast to previous theories on scaffolding, these young individuals become the more knowledgeable ones, acting as experts and guiding their parents through the learning process of familiarizing themselves with American culture.

Culture brokering can be seen as a specific type of scaffolding that occurs when immigrant youth provide guidance for their parents by translating, interpreting, and offering other forms of assistance that aid the parents in navigating the new environment (please see Figure 1 for the depiction of the theoretical framework for the study). Previous research has shown that brokering can have both positive and negative effects on individual well-being. Some studies have found that young individuals who broker for their parents feel increased sense of self-esteem and self-confidence, better knowledge of English and native language, and they feel competent in different social situations. On the contrary, some studies found negative impact of brokering on individual well-being, indicating that young individuals are forced to take on adult

responsibilities, making children mature much faster and impacting their responsibilities and work at school. In addition, literature has also shown mixed findings regarding the impact of brokering on family relations. For example, some researchers suggest that power dynamics change in families once children are given the task of brokering, while others indicate that children are viewed as important part of the family system. While there are mixed findings regarding the impact of brokering on well-being and family relations, studies have not been clear on the reasons of those effects. Particularly, studies have not examined what may be the circumstances under which culture brokering can have a positive or negative impact on well-being.

The current study will examine brokering experiences in the context of family relations. In other words, the study will examine the ways in which family relations can mediate the effects of brokering on individual well-being. The way in which family reacts to young individual's brokering can possibly affect his or her well-being. For example, if the family communicates to the young individual that their brokering is helping the family, that can have a positive effect on individual's well-being by contributing to higher self-esteem. Conversely, if the family system experiences conflict surrounding the brokering experiences, they may affect individual's well-being in a negative way.



*Figure 1.* Theoretical model of the impact of culture brokering on individual well-being through family relations.

Based on the theoretical framework and previous literature on culture brokering, four research questions have been developed:

- (1) *What is the quantity and type of culture brokering that immigrant and refugee young adults from Eastern Europe perform for their parents, and how do young adults feel about their brokering experiences?* Since little is known about brokering activities performed by young adults in immigrant families, the current study will examine levels, types of, and feelings about brokering reported by young adults whose families migrated from Eastern Europe.
- (2) *How is culture brokering related to young adults' and parents' demographic/background variables?* Previous literature has yielded contradictory results regarding the relationships between culture brokering and demographic variables. The current study will examine various demographic variables (i.e. age, gender, education, length of residence in the US) to assess its relation to culture brokering.
- (3) *How is culture brokering related to family relationships and individual well-being?* There have been contradictory findings regarding the ways in which culture brokering impacts family relationships and well-being. The current study will assess multiple domains of family relationship (e.g., power dynamics, conflict) and multiple indicators of well-being (e.g., depression, life satisfaction) that have been associated with culture brokering in prior research.
- (4) *Is the impact of culture brokering on individual well-being mediated through family dynamics?* The current study will assess the mediational model between culture brokering, family relations, and individual well-being to assess the pathways through which culture brokering may be operating.

## Chapter Four: Methods

### Participants

Participants ( $N = 197$ ) ranged in age from 18 to 29 years ( $M = 22.93$ ,  $SD = 2.89$ ). The majority of the sample was female (63.5%), and had lived in the United States for almost 11 years ( $M = 10.81$ ,  $SD = 4.23$ , range: 1 – 22 years) (see Table 1). Participants came from twelve different countries in Eastern Europe, with Poland (41.3%), Bosnia (15.3%), and Romania (12.8%) being the most represented.

Table 1

#### *Participants' Characteristics*

Variable	%	$M (SD)$
Age (in years)		22.92 (2.89)
Gender (% female)	63.5	
Time in U.S. (in years)		10.81 (4.23)
# of siblings		1.41 (1.15)
Education		
High school diploma or less	12.5	
Some college	31.0	
Associate degree	8.9	
Bachelor's degree	33.3	
Master's degree	8.3	
Doctorate degree	1.8	
Professional degree	4.2	
Immigration status		
Refugee	17.8	
Immigrant	76.6	
Don't know/Not sure	5.1	
Marital status		
Not married/Not engaged	79.2	
Engaged to be married	5.4	
Married	14.9	
Separated	0.6	

## Procedures

The study was approved by the University of Illinois Institutional Review Board (#10279) prior to data collection. In order to be eligible to participate in the study, participants had to be first generation immigrants from Eastern Europe, between 18 and 29 years of age, who immigrated with their parents and have resided in the United States no longer than 15 years. Participants were invited to take part in a one-time online survey that took about 25-30 minutes to complete. Research has shown that there are no differences between collecting data through web-based surveys and paper-and-pencil surveys (Ritter, Lorig, Laurent, & Matthews, 2004). In addition, online surveys have an advantage of costing less (Cooper, 2000; Kraut et al., 2004) and being able to reach geographically diverse groups (Rhodes, Bowie, & Hergenrather, 2003). Based on the author's previous experience with online surveys, the study was hosted by the Survey Monkey (<http://www.surveymonkey.com/>), and all responses were collected through the same web site. The participants' confidentiality was taken very seriously. The SurveyMonkey.com has a secure website and it guaranteed to protect participants' confidentiality. None of the participants' identifying information was recorded and there was no way of connecting individuals to the survey responses.

Participants were recruited using a variety of methods. Messages were sent to individuals using social networks (e.g., Facebook), and individuals in personal and professional networks (e.g., friends, family members, students and faculty members at different universities). In addition, study information was sent via listserves and newsletters of professional organizations (e.g., National Council on Family Relations, Eastern European Focus Group listserv) and to scholars studying Eastern European populations. Lastly, Eastern European student organizations at various colleges and universities were also contacted. An undergraduate research assistant did an internet search for Eastern European student organizations across the country, and sent e-mail messages to the organizations' contact individuals (either a student or a faculty member). Each message contained a short description of the study, the study requirements, and a request that the link to the study be forwarded to the organization's members.

Once participants accessed the study page on SurveyMonkey.com, they were presented with a consent form that described the study goals, detailed the procedures, and described measures to protect the confidentiality of their responses. They were prompted to read the consent form and had to click a box indicating their agreement before being able to access the

95-item questionnaire. Individuals who indicated that they did not agree with the consent form were not able to access the survey and were directed to the exit page.

After completing the survey, participants were taken to a different web page where they were able to leave their name and address so a gift card could be e-mailed to them. This web page was separate from the survey, and there was no way for the researchers to connect survey responses to individual participants. Participants who completed the survey were given a \$10.00 gift certificate to Amazon.com stores. In addition, to ensure the highest possible response rate, each time 50 participants completed the survey, and one random participant was awarded a \$100.00 gift certificate. Research shows that awarding incentives increases subjects' commitment to and completion of a study (Goritz, 2006; Goritz & Wolff, 2007).

### Measures

Table 2 shows the main concepts of the study and the scales used to measure them.

Table 2

*Main Study Variables and the Corresponding Measurement Scales*

<b>Concepts</b>	<b>Variables</b>	<b>Measures used</b>
Culture brokering	Language brokering	Language Brokering scale
	Procedural brokering	Developed for current study
Family relationships	Conflict	NRI – Conflict
	Communication	NRI – Intimacy
	Relative power	NRI – Relative power
Well-being	Self-esteem	Rosenberg Self-esteem scale
	Depression	CESD-10
	Life satisfaction	Quality of Life scale
Acculturation	Participants' language acculturation	Short Acculturation Scale for Hispanics
	Parents' acculturation (youth report)	Short Acculturation Scale for Hispanics (language) Young adults' perceived parental acculturation

**Language brokering.** A language brokering (LB) scale originally developed by Tse (1995) and revised by Buriel et al. (1998) was utilized. The scale has been widely used with adolescents from different Latino ethnic groups (Acoach & Webb, 2004; Love & Buriel, 2007; Weisskirch & Alatorre-Alva, 2002). The original measure consists of 38 items on four subscales, each measuring a different dimension of language brokering: “persons subscale” assesses persons for whom one has brokered; “places subscale” explores places where one has brokered; “things subscale” assess things (usually documents) that one has translated, and “feelings subscale” assesses one’s feelings about brokering (Buriel et al., 1998).

For the purposes of the current study, the measure was modified to make it applicable to the experiences of young adults brokering for their parents (the focus of the current study). First, only items assessing language brokering for parents were administered (e.g., “How often do you translate for your parents?”). In addition, since the age range of the participants in the current study was between 18 and 28, and some of the participants were not students, questions regarding brokering at school were omitted. The response categories were also revised to distinguish among young adults who had never brokered, those who brokered to some extent in the past year, and those who brokered frequently in the past year. Two items were omitted from this scale because they do not apply to this age-group and to limit the length of the survey. Lastly, the “feelings subscale” asked participants to indicate how they felt when they translated. Items related to one’s identity were omitted because they were not relevant for the current study.

The final revised scale consisted of 17 items (see Appendix A). One item asked participants in general how frequently they translate for their parents. Eight items (from the “places” subscale) assessed how frequently participants performed brokering in various locations. Possible responses ranged from 1 = *never did this* to 6 = *frequently/always in the past year*. Eight items assessed feelings about brokering (e.g., “I feel good about myself when I translate for my parents”; “I feel embarrassed when I translate for my parents”). The responses ranged from 1 = *never* to 4 = *always*. Factor analyses were conducted to create composite measures of language brokering (described in results section).

**Procedural brokering.** The study also assessed non-linguistic brokering using a scale specifically developed for the current study. The new scale assessed “procedural brokering”—brokering activities that go beyond linguistic brokering, including activities such as explaining the school system, taking parents to different restaurants to experience U.S. culture, or

illustrating cultural differences that may exist between native and host culture (customs, values, etc.). Multiple strategies were used to generate scale items. In addition to reviewing previous literature on culture brokering (e.g., Jones & Trickett, 2005; Valenzuela, 1999), scale items were identified through a multi-step pilot study. First, the investigator asked 11 individuals in her social network to describe the work they did for their immigrant parents that was not pure translation. Participants ranged in age between 19 and 27 years old, and included 6 females and 5 males all of whom were first-generation immigrants. Participants provided a list of tasks they performed for their parents in the past or currently. The list of tasks was analyzed for trends and grouped into categories, and a set of items drafted. Items were reviewed by several experts in immigrant and family studies, and a structured scale was constructed to mirror the Language Brokering scale in terms of format and response categories (Buriel et al., 1998). Lastly, six individuals tested the scale and provided feedback that was used to finalize the scale. Any items that were considered confusing or unclear were re-worded in order to ensure clarity of the scale.

The final measure consisted of 15 items assessing frequency of procedural brokering (PB) activities that immigrant and refugee youth performed for their parents, as well as the feelings young adults experienced when they assisted their families (Appendix B). The measure asked about two domains of brokering, frequency and feelings. First, participants indicated the extent to which their parents relied on them for assistance regarding explanations of concepts related to US culture (e.g., “How often do your parents rely on you to explain the American school system to them?”). Response categories mirrored those for the language brokering scale, ranging from 1 = *never did this* to 6 = *frequently/always in the past year*. Second, participants indicated how they felt about procedural brokering (e.g., “I feel embarrassed when I help out or assist my parents” and “helping or assisting my parents makes me feel grown-up”). Answer choices ranged from 1 = *never* to 4 = *always*. Factor analyses were conducted to create composite measures of procedural brokering (described in results section).

**Family dynamics.** Three subscales from the Network of Relationships Inventory (NRI) (Furman & Buhrmester, 1985, 1992) were used to assess family dynamics. The NRI assesses perceptions of characteristics of different personal relationships. The original measure contains 12 subscales, each comprising three items (Furman & Buhrmester, 1985). The three subscales of conflict, intimacy, and relative power (Appendix C) were used to tap the domains of interest in the current study. Respondents rated their relationship with both of their parents (“How much do

you and your parent(s) argue with each other?”, “Who tells the other person what to do more often, you or your parent(s)?”) using a scale from 1 (*little or none*) to 5 (*the most*) (Furman & Buhrmester, 1985).

Each subscale was calculated by averaging the three items that corresponded to that subscale. There were some participants who did not answer all items from a particular scale, therefore, scale items were averaged in order to avoid issues that would be caused by summing the items. In order to receive a score, each participant had to answer at least two of the three items. Means, standard deviations, and reliabilities for each scale are presented in Table 3. The scale has been used with Latino and immigrant young adults (Crockett et al., 2007; Moilanen & Raffaelli, 2010). Alphas for the current study were high (see Table 3).

**Acculturation.** Participants’ acculturation was assessed using items adapted from the Short Acculturation Scale for Hispanics (SASH; Marin, Sabogal, Vanoss-Marin, Otero-Sabogal, & Perez-Stable, 1987). The items were adapted by changing response categories from “Spanish” to “native language” so that the response categories apply to the current population. The SASH has been used to assess language acculturation in immigrants (Dela Cruz, Padilla, & Butts, 1998; Ellison, Jandorf, & Duhamel, 2011). The current study used three items from the original SASH scale: “what language do you read and speak?”, “what language do you speak at home?”, and “what language do you speak with your friends?” Participants responded on a 5-point scale that ranged from 1 = *only native language* to 5 = *English language only*. The scale was computed by averaging the three items. Participants received a score if they completed at least two of the three items. Cronbach’s alpha for the scale was 0.63.

Respondents reported on two aspects of their parents’ acculturation: parents’ language acculturation and young adults’ perceived parental acculturation. Parents’ language acculturation was assessed similarly to young adults’ language acculturation, with three items from the Short Acculturation Scale for Hispanics (Marin et al., 1987). Items were reworded so participants report on their parents’ language acculturation: “what language do your parents read and speak?”, “what language do your parents speak at home?”, and “what language do your parents speak with their friends?” The response categories ranged from 1 = *only native language* to 5 = *English language only*. The scale was computed by averaging the three items. Participants received a score if they completed at least two of the three items. Cronbach’s alpha for the scale was 0.67.

Table 3

*Descriptive Characteristics for Study Scales*

Variable	<i>N</i>	<i>M</i>	<i>SD</i>	$\alpha$	Range	Skewness	Kurtosis
Language Brokering							
LB frequency	185	2.59	1.20	0.93	1-5	0.44	-0.92
LB positive feelings	158	2.38	0.65	0.77	1-4	0.32	-0.03
LB negative feelings	163	1.59	0.56	0.56	1-3.33	0.99	0.73
Procedural Brokering							
PB frequency	175	2.80	0.94	0.80	1-5	0.29	-0.52
PB positive feelings	154	2.62	0.67	0.82	1-4	0.18	-0.23
PB negative feelings	162	1.56	0.58	0.68	1-4	1.45	2.41
Family dynamics							
NRI conflict	171	1.92	0.75	0.86	1-5	0.94	1.57
NRI intimacy	171	2.12	0.92	0.87	1-5	0.95	0.60
NRI power	170	2.44	0.78	0.86	1-4.67	-0.06	-0.35
Well-being							
Self-esteem	170	3.24	0.46	0.87	2-4	-0.17	-0.52
Depressive mood	168	0.82	0.50	0.81	0-2.60	0.93	0.96
Life satisfaction	174	5.04	1.24	0.87	1-7	-0.71	-0.06
Acculturation							
Ss language acc.	189	2.86	0.72	0.63	1.33-4.67	0.26	-0.23
Parents' lang. acc.	189	1.57	0.56	0.67	1-3.33	0.97	0.31
Perceived parental acc.	190	2.30	0.75	0.76	1-4.25	0.74	0.22

In addition, participants reported on their perception of their parents' acculturation. This measure, adapted from Kim and Ward (2007), asked participants whether they viewed their parents as "traditional" (i.e., adhering to the values of their native culture) or "mainstream American". Sample items include "How 'traditional' (i.e. Eastern-European) is your mother in her attitudes and behaviors?" and "How 'mainstream American' is your father in his attitudes and behaviors?" The scale contained 4 items (two asked about mother's acculturation and two about father's). The response choices ranged from 0 = *not at all* to 4 = *extremely*. Answers were coded so that higher scores corresponded to higher American acculturation. Responses for mothers and fathers were highly correlated (M and F traditional = 0.77,  $p < 0.01$ ; M and F American = 0.73,  $p < 0.01$ ) and therefore were combined in order to correspond to brokering variables (which also

assessed parents together rather than mother and father separately). Cronbach's alpha for the scale was 0.76.

**Young adults' well-being.** Three aspects of young adults' well-being were assessed: self-esteem, depression, and life satisfaction. *Self-esteem* was assessed using the Rosenberg Self-esteem Scale (Rosenberg, 1965), a widely-used measure that has been used with diverse ethnic groups within the United States (Berry, Phinney, Sam, & Vedder, 2006; Cislo, 2008) as well as internationally (Berry et al., 2006; Slonim-Nevo, Mirsky, Rubinstein, & Nauck, 2009). The scale has also been used with different age groups, including young adults (Cislo, 2008; Tsai, Ying, & Lee, 2001). It consists of ten items (e.g., "At times I think I am no good at all") measured on a 4-point Likert scale (0 = *strongly disagree* to 3 = *strongly agree*). Five items were reverse-scored as per author instructions (Rosenberg, 1965) and an overall score computed by averaging all ten items. Participants had to complete 8 of the 10 items in order to receive a score. Higher scores indicate higher self-esteem. The reliability of the scale for young adults in a study with Chinese American young adults was 0.86 (Tsai et al., 2001). The reliability in the current study was 0.87.

Participants' *depressive mood* was measured with the short form of the Center for Epidemiological Studies Depression (CES-D) scale developed by Radloff (1977), the CESD-10 (Kohout, Berkman, Evans, & Cornoni-Huntley, 1993). The measure assesses depressive symptoms during the past week on a scale from 0 = *rarely or none of the time (less than 1 day)* to 3 = *all of the time (5-7 days)*. Sample items include "I was bothered by things that usually don't bother me" and "I could not 'get going.'" An overall score was computed by averaging with a higher score indicating higher depressive symptoms. Participants had to complete 8 of the 10 items in order to receive a score. Cronbach's alpha in a previous study for the 10-item scale was 0.80 (Kohout et al., 1993), comparable to the reliability in the current study (0.81).

Participants' *life satisfaction* was measured with the 7-item Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). Sample items include "The conditions of my life are excellent" and "I am satisfied with my life". Answer choices ranged from 1 = *strongly disagree* to 7 = *strongly agree*. Overall scores were computed by averaging; participants must have answered at least four of the five items to receive a score. Higher scores indicated higher life satisfaction. In a study with Indian immigrants in Canada, the Cronbach's alpha equaled 0.77,

and scores ranged from 13 to 32 (Vohra & Adair, 2000). Scale reliability in the current study was 0.87.

**Demographics/background information.** Demographic data included participants' age, gender, age and gender of siblings, country of birth, ethnicity, immigration status (refugee or immigrant), number of years living in the United States, education, and a list of individuals living in the same residence. Based on the previous literature that relates sibling position to brokering (Valenzuela, 1999), a variable called *sibling constellation* was created (described in Results section). The coding scheme from Sletto (1934) was used to determine each participant's position within their family based on age and gender of their siblings.

In addition, participants were asked to report their parents' age, education, country of birth, number of years living in the United States, marital status, and income. In order to optimize the length of time it took to complete the survey, participants were asked to answer the brokering questions in relation to their parents, not mother and father separately. As a result, the mother's and father's demographic variables were averaged together to comprise "parents'" demographic variables.

### **Plan of Analysis**

**Creation of cultural brokering scales.** The items comprising the language and procedural brokering scales were examined using exploratory factor analysis. Language and procedural brokering items were analyzed separately. All items were inspected to ensure suitability for analysis, including the inspection of Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and the Bartlett's Test of Sphericity. Previous literature recommends that KMO value is 0.6 or higher, and the Bartlett's Test of Sphericity is significant in order for the data to be appropriate for factor analysis (Pallant, 2010). The analysis indicated that the data satisfied this condition. Principal Component Factor analysis with varimax rotation was used to extract factors. Scales were then computed and analyzed for normality and reliability prior to use in the main analyses.

**Research questions analyses.** The first research question, which examined quantity and type of culture brokering, involved psychometric and descriptive analyses. First, we examined the endorsement of individual items (e.g., percent endorsement of specific brokering activities). Second, psychometric analyses were performed to evaluate differences between language and

procedural brokering. Finally, mean levels of various types of brokering were examined using t-tests. Output information was used to calculate and evaluate the effect size (Pallant, 2010).

The second research question assessed associations between culture brokering and demographic variables. Correlations were used to assess bivariate associations between dependent variables and continuous variables (e.g., age, education). These analyses also helped identify control variables that were used in regression analysis (described below). Control variables were identified by examining demographic variables that were highly correlated with brokering variables. For the analysis, we chose variables that were correlated with brokering but not highly correlated (less than 0.35) with other demographic variables. The control variables were: participants' time in the United States, parents' language acculturation, and parents' age. Participants' gender was not correlated with brokering variables but it was still included in analysis based on the standard procedure of controlling for gender. For any categorical variables (e.g., immigration status) repeated measures ANOVA were used to explore mean differences in dependent variables (i.e., language and procedural brokering).

The third research question examined how culture brokering is related to family relationships and individual well-being. The analyses involved correlational and regression analysis. Correlations were used to explore relationships between the brokering variables and measures of family dynamics (i.e., conflict, intimacy, power dynamics) and individual well-being (i.e., self-esteem, depression, life satisfaction). The combined and unique associations of these variables were examined via stepwise linear regressions. For example, to test the effects of language brokering on individual well-being variables (self-esteem, life satisfaction, and depressive mood) were used as dependent variables in separate regression models. For each model, control variables were entered in Step 1, frequency of LB was entered in Step 2, and positive feelings toward LB and negative feelings toward LB were entered in Step 3. The same procedure was repeated for procedural brokering.

The mediation models in research question 4, which assessed whether associations between culture brokering and well-being operated through family dynamics, were tested using the regression approach laid out in Baron and Kenny (1986). A series of regression analyses were conducted to examine whether criteria for mediation are met. All regression models included appropriate control variables described above. The first regression analysis examined whether culture brokering is associated with the outcome (individual well-being). The second

regression analysis examined if culture brokering is significantly related to the proposed mediator (family dynamics). The third regression examined whether the proposed mediator (family dynamics) is significantly associated with the outcome (well-being). Once the significant associations were established, final regression models were computed with cultural brokering on the first step and the mediator (family relations) on the second step. A significant drop in the coefficient for cultural brokering on the second step indicated mediation. Researchers distinguish between full mediation and partial mediation. Full mediation occurs when the path between the IV and the DV is reduced to zero, whereas partial mediation occurs when the path between IV and DV is reduced but is different from zero when mediating variables is also in the model (Kenny, 2011). The Sobel test was then performed to examine the significance of the mediation. The test is designed to examine the significance of the indirect effect of independent variable on the dependent variable when the moderator variable is in the model (Baron & Kenny, 1986). An absolute value of 1.96 indicates a significant effect at the 0.05 level (Kenny, 2011).

## Chapter Five: Results

### Preliminary Analyses

The data were imported into an SPSS database, and analyzed using IBM SPSS Statistics 19 package. Respondents who were born prior to 1981 and were from a non-Eastern European country were removed from the data set ( $N = 10$ ). In addition, participants who did not provide their birth year and their gender were also removed from the data set. The analytic sample consisted of 197 participants.

All variables were inspected for outliers and none were detected. Reliabilities were computed for each measure (see Table 3 on page 23) and overall scores computed for existing measures. Factor analyses were conducted to create composite measures of cultural brokering (described below). Once the final list of variables was established, descriptive statistics were computed for the study variables. The data show that the mother's average age was 49.47 ( $SD = 5.29$ ) and the father's average age was 51.81 ( $SD = 5.48$ ) (see Table 4 for complete description of parents' characteristics). Almost 83% of parents were married and well-educated – 65.2% of mothers and 63.8% of fathers had more than a high school diploma.

Table 4

*Parents' Characteristics*

Variable	%	<i>M (SD)</i>
Parents' marital status ( <i>N</i> = 197)		
Not married/Not engaged	3.6	
Married	82.7	
Separated	1.0	
Divorced	6.6	
Widowed	6.1	
Parents' education		
	Mother (%) ( <i>N</i> = 187)	Father (%) ( <i>N</i> = 177)
Less than high school	3.7	5.6
High school diploma	31.0	30.5
Some college	13.9	11.9
Associate degree	12.8	4.0
Bachelor's degree	12.8	16.9
Master's degree	17.6	18.6
Doctorate degree	3.2	9.0
Professional degree	4.8	3.4
Mother's age ( <i>N</i> = 179)		49.49 (5.29)
Time in U.S. (in years) ( <i>N</i> = 167)		11.64 (5.26)
Father's age ( <i>N</i> = 157)		81.81 (5.47)
Time in U.S. (in years) ( <i>N</i> = 154)		12.94 (6.10)

Correlations were computed between all variables to determine bivariate associations between constructs. A paired sample t-test was conducted to assess the differences between youth and their parents' level of language acculturation. The data indicated a significant difference between young adults' ( $M = 2.86, SD = 0.72$ ) and their parents' ( $M = 1.57, SD = 0.56$ ) language acculturation ( $t(188) = 25.26, p < 0.0005$  [two-tailed]). The eta square statistic ( $\eta^2 = 0.77$ ) indicated a large effect size.

The *sibling constellation* variable was computed from participant reports of the number of older and younger sisters and brothers in their family. Sletto's (1934) coding system was used to place each participant within their sibling constellation. The index child (i.e., study participant) is assigned a position depending whether they are male or female, the gender of their siblings, and whether they are the oldest child, the youngest child, or somewhere in the middle.

In the current study, each respondent was classified into one of 12 mutually exclusive categories (see Appendix D for a complete coding scheme). For example, a participant would be classified as “oldest male child in a mixed family” if the participant indicated that he has younger brothers and sisters, whereas a participant would be classified as “oldest son” if he indicated that he has younger brothers, but no younger sisters. If a participant reported no brothers or sisters, they were classified as only child.

### **Factor Analysis: Brokering Scales Construction**

**Frequency of language brokering (LB) scale.** The 8 items assessing frequency of language brokering at different places were factor analyzed. Factor analysis revealed the presence of one component exceeding the eigenvalue of 1 and explaining 68.36% of the variance. Inspection of the component matrix also revealed the presence of a single factor, with all 8 items strongly loading onto the single factor (see Table 5). An overall score reflecting frequency of LB was constructed by averaging. Each participant had to complete at least 75% of the items (6 of the 8 items) in order to receive a score for language brokering. The internal consistency of the scale was very high ( $\alpha = 0.94$ ); previous studies that used the original version of the scale report a lower alpha ( $\alpha = 0.70$ , Love & Buriel, 2007) but because the original scale was modified for the present study it is not possible to compare directly.

Table 5

*Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Frequencies of Language Brokering*

Item	Factor loading	Communality
Have you ever translated in the bank?	<b>0.88</b>	0.77
Have you ever translated at the store?	<b>0.84</b>	0.62
Have you ever translated in the doctor's office?	<b>0.83</b>	0.69
Have you ever translated at a government office (e.g., social security office)?	<b>0.83</b>	0.69
Have you ever translated on the street?	<b>0.82</b>	0.68
Have you ever translated at a restaurant?	<b>0.82</b>	0.68
Have you ever translated where your parents work?	<b>0.80</b>	0.64
Have you ever translated at the hospital?	<b>0.79</b>	0.62

**Language brokering feelings scale.** The 8 items assessing participants' feelings toward language brokering were factor analyzed. The analysis revealed the presence of two components exceeding an eigenvalue of 1 and explaining 32.89% and 25.57% of the variance respectively. The two factors reflected the difference between positive feelings toward brokering and negative feelings toward brokering. Further, the component correlation matrix indicated only moderate correlation (-0.38) between the two factors. Previous studies did not factor-analyze the two scales, therefore comparison to previous research was not possible.

Accordingly, two subscales were computed: *LB positive feelings scale* and *LB negative feeling scale*. The LB positive feelings scale was computed by averaging 5 items that describe positive feelings toward language brokering (e.g., "Translating for my parents makes me feel mature"). Participants had to answer 4 of the 5 items to get a score. Cronbach's alpha for the scale was 0.77. The LB negative feelings scale was computed by averaging the three items that describe negative feelings toward language brokering (e.g., "I have to translate for my parents even when I don't want to"). Cronbach's alpha for the scale was 0.54. Deletion of specific items did not increase the reliability of the scale, therefore all three items were retained (see Table 6).

Table 6

*Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Language Brokering Feelings Subscales*

Item	Component coefficients		Rotated component coefficients		Communality
	1	2	1	2	
"I think translating has helped me to care more for my parents."	<b>0.82</b>	0.32	<b>0.87</b>	-0.03	0.76
"I feel good about myself when I translate for my parents."	<b>0.73</b>	-0.30	<b>0.55</b>	-0.56	0.62
"I think translating has helped me to understand my parents better."	<b>0.72</b>	0.38	<b>0.81</b>	0.07	0.66
"Translating for my parents makes me feel mature."	<b>0.65</b>	0.45	<b>0.77</b>	0.16	0.63
"I like to translate."	<b>0.65</b>	-0.46	0.42	-0.67	0.62
"I have to translate for my parents even when I don't want to."	-0.19	<b>0.74</b>	0.11	<b>0.76</b>	0.59
"I feel embarrassed when I translate for my parents."	-0.09	<b>0.66</b>	0.18	<b>0.64</b>	0.44
"I feel nervous when I translate for my parents."	-0.19	<b>0.57</b>	0.05	<b>0.62</b>	0.36

### Procedural Brokering Scales Construction

**Procedural brokering frequencies scale.** Similarly to language brokering, three subscales were computed for procedural brokering (PB). The PB frequencies scale contained 7 items; factor analysis revealed the presence of two components exceeding the eigenvalue of 1 and explaining 44.62% and 16.03% of the variance respectively. Despite this, an inspection of the scree plot revealed a clear break after the first component, and the two factors were highly correlated ( $r = 0.65$ ). Inspection of items indicated no clear conceptual distinction between the two items. Moreover Cronbach's alpha was 0.81, which further indicated that the 7 items grouped together. In light of this, a second factor analysis was conducted forcing a one-factor solution; all item loadings exceeded .60 (see Table 7). An overall score reflecting procedural brokering was constructed by averaging; participants must have completed at least 75% of the items (5 of the 7 items) in order to receive a score.

Table 7

*Factor Loadings for Exploratory Factor Analysis with Varimax Rotation for Procedural Brokering Frequencies Subscale*

Item	Factor loading		Communality
	1	2	
Help them communicate complicated information (e.g., medical information, insurance information) to someone on their behalf	<b>0.72</b>	-0.39	0.67
Pay bills	<b>0.71</b>	-0.44	0.70
Explain to them things/requirements related to U.S. citizenship	<b>0.71</b>	-0.05	0.51
Explain something on television	<b>0.66</b>	-0.34	0.55
Show them how to use electronics (i.e. camera, cell-phone, computer)	<b>0.63</b>	0.58	0.74
Show them how to do something online (i.e. pay bills, check bank account)	<b>0.62</b>	0.48	0.61
Explain the American school system	<b>0.61</b>	0.31	0.47

**Procedural brokering feelings subscales.** Similar to the language brokering feelings subscales, 8 items assessed participants' feelings toward procedural brokering. Factor analysis revealed the presence of two components exceeding the eigenvalue of 1 and explaining 35.83% and 28.04% of the variance respectively (see Table 8 for factor loadings). The two factors reflected positive vs. negative feelings toward brokering. The component correlation matrix indicated virtually no correlation (-0.06) between the two factors.

Two scales were computed: *PB positive feelings scale* and *PB negative feeling scale*. The PB positive feelings scale was computed by averaging 5 items that describe positive feelings toward procedural brokering (i.e., "Helping out or assisting my parents makes me feel mature"). Participants had to answer 4 of the 5 items to receive a score. Cronbach's alpha for the scale was 0.82. The PB negative feelings scale was computed by averaging three items that describe negative feelings toward procedural brokering (i.e., "I have to help out or assist my parents even when I don't want to"). Participants had to answer 2 of the 3 items to receive a score. Cronbach's alpha for the scale was 0.64.

All scales were relatively normally distributed, with skewness and kurtosis being within an acceptable range (Tabachnick & Fidell, 2007), with the exception of language brokering negative feelings scale and procedural brokering negative feelings scale. This is not unusual considering that participants were unlikely to report negative feelings. Table 3 (page 23) shows skewness and kurtosis for all scales. In order to keep them comparable to one another, the researcher decided not to transform the scales.

Table 8

*Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Procedural Brokering Feelings Subscales*

Item	Component coefficients		Rotated component coefficients		Communality
	1	2	1	2	
"I think helping or assisting has helped me to care more for my parents."	<b>0.86</b>	0.16	<b>0.87</b>	0.11	0.75
"I think helping or assisting has helped me to understand my parents better."	<b>0.81</b>	0.23	<b>0.83</b>	0.18	0.70
"Helping or assisting my parents makes me feel mature."	<b>0.77</b>	0.26	<b>0.79</b>	0.21	0.67
"I feel good about myself when I help out or assist my parents."	<b>0.72</b>	-0.44	<b>0.69</b>	-0.48	0.71
"I like to help out or assist."	<b>0.59</b>	-0.57	<b>0.55</b>	-0.60	0.67
"I feel nervous when I help out or assist my parents."	0.07	<b>0.75</b>	0.11	<b>0.74</b>	0.58
"I feel embarrassed when I help out or assist my parents."	0.03	<b>0.74</b>	0.08	<b>0.74</b>	0.56
"I have to help out or assist my parents even when I don't want to."	0.07	<b>0.69</b>	0.12	<b>0.68</b>	0.46

### **Quantity and Type of Brokering Immigrant Youth Perform for Parents (RQ 1)**

The first research question was descriptive, exploring the quantity and types of brokering that immigrant youth do for their parents, as well as how they feel about their brokering experiences.

The results from a general question asking immigrant youth how often they translate for their parents indicated that this occurs frequently—15.4% of participants said they translate *always* and 30% indicated they translate *a lot* for their parents. Twelve percent of participants said they never translate for their parents. Further analysis shows that between 50% and 85% of immigrant young adults report brokering for their parents at some point in their life. Within the last year, 44.15% have language brokered, and the three most common places where youth have language brokered for their parents at some point in their life were at a store (82.7%), on the street (73.4%), and at a restaurant (72.3%). These three places were reported as being most common within the last year, as well. Table 9 shows percent endorsement for individual items of the language brokering scale. Results indicate that the mean value for positive feelings toward language brokering was 2.38 and the mean value for negative feelings toward language brokering was 1.59. The answers on the scales ranged between 1 = *never* and 4 = *always* (see Table 3 for complete scale information).

Similarly to language brokering, 53% of immigrant young adults have done procedural brokering for their parents. Table 10 shows percent endorsement for individual items of procedural brokering scale. Reporting on procedural brokering, youth indicated that in the past year they most often showed their parents how to use electronics (66.1%), explained something to them on television (64.4%), and helped them communicate complicated information to someone (62.3%). The task that had the highest percentage of participants who indicated “*never did this*” was “paying bills” – about 43% of participants have never helped their parents pay bills. The results for feelings toward procedural brokering indicate that the mean value for positive feelings was 2.62, and the mean value for negative feelings was 1.56. The answers on both scales ranged between 1 = *never* and 4 = *always* (see Table 3).

Table 9

*Percent Endorsement of Individual Items in Language Brokering Frequency Subscale*

Item	Never did this	Used to do this, but not in the last year	Within the last year		
			Rarely	Occasionally	Frequently/always
Have you ever translated at the store?	17.3	25.9	11.9	26.5	18.4
Have you ever translated on the street?	26.6	26.1	15.8	17.4	14.1
Have you ever translated at a restaurant?	27.7	24.5	12.5	19.6	15.8
Have you ever translated at a government office?	32.1	25.5	9.2	15.2	17.9
Have you ever translated at the hospital?	34.1	23.8	10.3	13.0	18.9
Have you ever translated in the doctor's office?	34.2	20.7	14.1	12.0	19.0
Have you ever translated in the bank?	40.0	22.2	13.5	13.0	11.4
Have you ever translated where your parents work?	50.5	15.8	12.5	12.5	8.7

Table 10

*Percent Endorsement of Individual Items in Procedural Brokering Frequency Subscale*

Item	Never did this	Used to do this, but not in the last year	Within the past year		
			Rarely	Occasionally	Frequently/always
Explain something on television	16.1	19.5	26.4	20.7	17.2
Explain the American school system	16.7	23.6	16.7	21.8	21.3
Show them how to use electronics (i.e. camera, cell-phone, computer)	17.2	16.7	18.4	25.3	22.4
Help them communicate complicated information to someone on their behalf	21.7	16.0	16.0	24.0	22.3
Show them how to do something online (i.e. pay bills, shop, check bank account)	27.4	17.7	17.7	15.4	21.7
Explain to them things/requirements related to U.S. citizenship	41.7	28.6	12.0	10.3	7.4
Pay bills	48.3	18.4	10.3	10.9	12.1

Even though they were highly correlated ( $r = 0.66, p < 0.01$ ), a paired sample t-test revealed differences between frequency of language brokering and procedural brokering. The difference was statistically significant at the 0.01 level,  $t(174) = -2.64$ , with moderate effect size (0.04), indicating that participants reported doing more procedural than language brokering. In addition, there was a significant difference in feelings toward brokering. Immigrant young adults felt significantly more positive about procedural brokering ( $M = 2.63, SD = 0.68$ ) than language brokering ( $M = 2.40, SD = 0.65$ ),  $t(145) = -5.98, p < 0.001$  level. The eta squared statistic (0.20) indicated a large effect size.

Overall, findings indicate that immigrant young adults frequently broker for their parents, and there are differences in the amount and types of brokering they do.

## **Relations between Brokering and Demographic Characteristics (RQ 2)**

The second research question focused on the association between culture brokering and demographic variables. The results for this research question are presented separately for participants' characteristics and their parents' characteristics.

### **Association between participant demographic variables and culture brokering.**

Correlations were used to assess the relations between continuous demographic variables and the variables of language and procedural brokering (Table 11). Participants' age and gender are not significantly related to language or procedural brokering variables. Time in the United States is significantly negatively correlated with frequency of language and procedural brokering (see Table 11). Young adults' education is negatively correlated with frequency of language brokering but there is no correlation between education and procedural brokering. Participants' language acculturation is negatively correlated with frequency of language brokering and positive feelings toward language brokering as well as positive feelings toward procedural brokering.

Analysis of variance (ANOVA) was used to examine whether levels of brokering differed across the two categorical demographic variables (sibling constellation and immigration status). There were no significant differences between language brokering variables and sibling constellation ( $F(9,175) = 0.89, ns$ ), and language brokering and immigration status ( $F(1, 173) = 0.04, ns$ ). Non-significant results were also found between procedural brokering variables and sibling constellation ( $F(9, 165) = 1.02, ns$ ) and procedural brokering and immigration status ( $F(1,163) = 0.38, ns$ ).

Table 11

*Correlations Between Participants' Demographic Variables and Brokering (both Language and Procedural)*

Variable	1	2	3	4	5	6	7	8	9	10	11
1. LB frequency	-										
2. LB positive feelings	0.16*	-									
3. LB negative feelings	0.37**	-0.11	-								
4. PB frequency	0.66**	0.14	0.36**	-							
5. PB positive feelings	0.07	0.75**	-0.08	0.04	-						
6. PB negative feelings	0.32**	-0.06	0.74**	0.31**	-0.01	-					
7. Ss age	-0.08	-0.05	-0.15	-0.06	-0.02	-0.15	-				
8. Ss education	-0.18*	0.02	-0.07	-0.02	0.08	-0.06	0.55**	-			
9. Ss gender	0.02	0.12	-0.05	0.03	0.02	-0.10	0.05	0.15	-		
10. Time in U.S.	-0.25**	-0.03	-0.09	-0.29**	0.06	0.03	0.09	0.05	-0.16*	-	
11. Ss language acculturation <sup>a</sup>	-0.19**	-0.17*	0.12	-0.10	-0.18*	0.11	-0.21**	-0.04	-0.05	0.38**	-

\*  $p < 0.05$ . \*\*  $p < 0.01$ . <sup>a</sup> Higher number = more English language acculturation

**Association between parents' demographic variables and culture brokering.**

Relations between parents' demographic variables and brokering were assessed using correlations (Table 12). Parents' age is not correlated with brokering variables, whereas parents' years spent in the United States is negatively correlated only with frequency of language brokering. Parents' education is significantly negatively correlated with frequency of language brokering, negative feelings toward language brokering, and frequency of procedural brokering. Similar trends are found between parents' acculturation, perceived parental acculturation, and culture brokering variables. Parents' language acculturation is significantly positively correlated with number of years in the U.S. and parents' education, and perceived parental acculturation is negatively correlated with parents' age.

Analysis of participants' and parents' demographic characteristics indicate that the length of time spent in the US, proficiency in English language and level of acculturation are related to brokering variables, whereas age and participants' gender were not associated with brokering.

Table 12

*Correlations Between Parents' Demographic Variables and Brokering (both Language and Procedural)*

Variable	1	2	3	4	5	6	7	8	9	10	11
1. LB frequency	-										
2. LB positive feelings	0.16*	-									
3. LB negative feelings	0.37**	-0.11	-								
4. PB frequency	0.66**	0.14	0.36**	-							
5. PB positive feelings	0.07	0.75**	-0.08	0.04	-						
6. PB negative feelings	0.32**	-0.06	0.74**	0.31**	-0.01	-					
7. Parents' age	0.07	-0.03	0.01	0.12	-0.00	0.23	-				
8. Parents' years in the U.S.	-0.16*	-0.13	0.04	-0.12	-0.05	0.08	0.06	-			
9. Parents' education	-0.41**	-0.09	-0.22**	-0.36**	-0.03	-0.15	-0.05	-0.08	-		
10. Parents' lang. acculturation <sup>a</sup>	-0.44**	-0.20*	-0.16*	-0.34**	-0.21*	-0.08	-0.09	0.22**	0.44**	-	
11. Perceived parental acc. <sup>b</sup>	-0.39**	-0.03	-0.11	-0.32**	0.04	-0.04	-0.25**	0.04	0.16*	0.35**	-

\*  $p < 0.05$ . \*\*  $p < 0.01$ . <sup>a</sup> higher number = more English language acculturation; <sup>b</sup> higher number = more Americanized

### **Relations between Family Relations, Individual Well-being, and Brokering (RQ 3)**

Previous research has found mixed results between brokering and family relationships (Orellana et al., 2003; Puig, 2002; Trickett & Jones, 2007; Wu & Kim, 2009), and brokering and youth well-being (Buriel et al., 1998; DeMent et al., 2005; Umaña-Taylor, 2003; Wu & Kim, 2009). This research question examines the associations between brokering variables, family dynamics, and youth well-being in the current study.

**Family relations and brokering: Bivariate associations.** Correlational analyses indicate that family dynamics measures are significantly related to brokering variables (Table 13). For example, conflict was significantly correlated with five of the six measures of brokering. Specifically, conflict was associated positively with frequency of language and procedural brokering and with LB and PB negative feelings scales, and negatively with the PB positive feelings scale.

Intimacy is related to feeling positive about brokering. Namely, immigrant youth who report positive feelings toward both language and procedural brokering also report higher intimacy with their parents and less negative feelings toward language brokering. Frequency of brokering (both LB and PB) and negative feelings toward procedural brokering are not associated with intimacy.

Relative power, on the other hand, is not correlated with brokering variables. In fact, only one brokering variable, frequency of procedural brokering, is positively correlated with relative power. In other words, immigrant youth who report frequent procedural brokering also report that they have more power in their relationship with their parents.

Table 13

*Correlations Between Family Relations Variables and Brokering*

Variable	1	2	3	4	5	6	7	8	9
1. LB frequency	-								
2. LB positive feelings	0.16*	-							
3. LB negative feelings	0.37**	-0.11	-						
4. PB frequency	0.66**	0.14	0.36**	-					
5. PB positive feelings	0.07	0.75**	-0.08	0.04	-				
6. PB negative feelings	0.32**	-0.06	0.74**	0.31**	-0.01	-			
7. Conflict	0.29**	-0.14	0.39**	0.31**	-0.19*	0.36**	-		
8. Intimacy	-0.07	0.17*	-0.17*	0.01	0.21*	-0.07	-0.16*	-	
9. Relative power <sup>a</sup>	0.08	0.06	0.03	0.19*	0.04	0.06	-0.23**	0.08	-

<sup>a</sup>Higher number means the child has more power

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

**Family relations and brokering: Multivariate analysis.** The regression models were used to examine how specific aspects of brokering experiences affect family dynamics. A total of 6 regression analyses were conducted (see Plan of Analysis on page 26: 3 models explored the effects of LB frequency and feelings on family dynamics (conflict, intimacy, and power), and 3 models explored the effects of PB frequency and feelings on family dynamics. These models included control variables at Step 1, frequency of brokering at Step 2, and feelings toward brokering at Step 3. All models were inspected for violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity.

The results indicated one model was not significant, and the remaining five models were significant overall. The non-significant model examined the effects of language brokering on family intimacy,  $F(7,130) = 1.97, ns$ . Tables 14 and 15 show all six models. Frequency of language brokering was positively related to conflict ( $\beta = 0.44, p < 0.001$ ) and remained significant when both positive and negative feelings toward LB were entered into the equation ( $\beta = 0.33, p < 0.001$ ). Language brokering variables did not contribute to the significance of models related to intimacy and relative power (Table 14), however, time spent in the U.S. ( $\beta = -0.22, p < 0.05$ ) was negatively related to relative power, while parents' age ( $\beta = 0.20, p < 0.05$ ) was

positively related to relative power. Parents' age was also associated with intimacy ( $\beta = -0.18, p < 0.05$ ), while parents' language acculturation was associated with conflict ( $\beta = 0.24, p < 0.05$ ).

Similarly to language brokering, the findings for procedural brokering indicate that frequency of PB ( $\beta = 0.30, p < 0.001$ ) and negative feelings toward PB ( $\beta = 0.33, p < 0.001$ ) were significant predictors of family conflict. Positive feelings toward PB were positively associated with family intimacy (see Table 15). Parents' age was also positively associated with relative power, and negatively associated with family intimacy (Table 15).

Overall, the analyses indicate that both frequency of LB and PB and negative feelings toward both LB and PB are related to family dynamics. While brokering variables do not contribute strongly to family intimacy or relative power, parents' demographics seem to be associated with those family variables.

Table 14

*Multiple Linear Regression Predicting Family Dynamics from Language Brokering<sup>a</sup>*

Variable	Conflict $\beta$ (SE B)	Intimacy $\beta$ (SE B)	Relative Power $\beta$ (SE B)
Time in the U.S.	0.07 (0.01)	0.01 (0.02)	-0.22* (0.02)
Participant's gender	0.12 (0.12)	0.06 (0.16)	-0.13 (0.14)
Parents' language acculturation	0.24* (0.12)	0.04 (0.16)	-0.13 (0.14)
Parents' age	-0.05 (0.01)	-0.18* (0.01)	0.20* (0.01)
LB frequencies scale	0.33** (0.06)	-0.02 (0.08)	-0.01 (0.07)
LB positive feelings	-0.11 (0.09)	0.17 (0.12)	0.04 (0.11)
LB negative feelings	0.35** (0.11)	-0.14 (0.15)	0.02 (0.13)
<i>R</i> -squared	0.304	0.096	0.12
Adjusted <i>R</i> -squared	0.266	0.047	0.07
<i>F</i>	8.106**	1.968	2.481*

*Note.* The figures are standardized regression coefficients with standard error of beta;

<sup>a</sup>Results from the final model only

\* $p < 0.05$ . \*\* $p < 0.01$ .

Table 15

*Multiple Linear Regression Predicting Family Dynamics from Procedural Brokering<sup>a</sup>*

Variable	Conflict	Intimacy	Relative Power
Time in the U.S.	0.04 (0.01)	0.08 (0.02)	-0.17 (0.02)
Participant's gender	0.14 (0.12)	0.12 (0.16)	-0.11 (0.14)
Parents' language acculturation	0.18 (0.11)	0.11 (0.15)	-0.11 (0.13)
Parents' age	-0.09 (0.01)	-0.23** (0.01)	0.19* (0.01)
PB frequencies scale	0.30** (0.07)	0.14 (0.09)	0.02 (0.08)
PB positive feelings	-0.15 <sup>†</sup> (0.09)	0.19* (0.12)	-0.01 (0.10)
PB negative feelings	0.33** (0.10)	-0.09 (0.13)	0.08 (0.12)
<i>R</i> -square	0.29	0.12	0.10
Adjusted <i>R</i> -square	0.25	0.07	0.06
<i>F</i>	7.727**	2.535*	2.179*

*Note.* The figures are standardized regression coefficients with standard error of beta;

<sup>a</sup>Results from the final model only

<sup>†</sup> $p = 0.049$ . \* $p < 0.05$ . \*\* $p < 0.01$ .

**Individual well-being and brokering: Bivariate associations.** Correlations were computed to assess the relations between individual well-being and brokering variables (Table 16). Participants' self-esteem is significantly negatively correlated with frequency of procedural brokering. Participants' depressive mood is positively correlated with negative feelings for language brokering. Further, young adults' life satisfaction is positively correlated with positive feelings toward procedural brokering but not with any other variables.

Table 16

*Correlations Between Individual Well-being variables and Brokering*

Variable	1	2	3	4	5	6	7	8	9
1. LB frequency	-								
2. LB positive feelings	0.16*	-							
3. LB negative feelings	0.37**	-0.11	-						
4. PB frequency	0.66**	0.14	0.36**	-					
5. PB positive feelings	0.07	0.75**	-0.08	0.04	-				
6. PB negative feelings	0.32**	-0.06	0.74**	0.31**	-0.01	-			
7. Self-esteem	-0.07	0.00	-0.14	-0.17*	0.05	-0.14	-		
8. Depressive mood	-0.00	0.03	0.17*	0.10	-0.05	0.08	-0.54**	-	
9. Life satisfaction	-0.10	0.05	-0.12	-0.05	0.18*	-0.04	0.39**	-0.31**	-

\*  $p < 0.05$ . \*\*  $p < 0.01$ .

**Individual well-being and brokering: Multivariate analysis.** The regression models examined how specific aspects of brokering experiences affect individual well-being. A total of 6 regression analyses were conducted (see Plan of Analysis on page 25): 3 models explored the effects of LB frequency and feelings on individual well-being, and 3 models explored the effects of PB frequency and feelings on individual well-being (see Tables 17 and 18). These models included control variables at Step 1, frequency of brokering at Step 2, and feelings toward brokering at Step 3. All models were inspected for violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity.

None of the six regression models were significant at the final step. However, there were three specific associations that emerged in the six models. Frequency of PB was a significant predictor of depressive mood on initial entry into the model ( $\beta = 0.23, p < .05$ ) and remained significant in the final model (see Table 18). Frequency of PB was also a significant predictor of self-esteem on initial entry into the model ( $\beta = -0.22, p < .05$ ), but dropped to non-significance when the two feelings subscales were entered (see Table 18). In addition, negative feelings toward LB was a significant predictor of depressive mood on initial entry into model ( $\beta = 0.19, p < 0.05$ ) and remained significant at Step 3 (see Table 17).

The analyses for this question indicate that brokering does affect both family dynamics and youth well-being. Frequency of brokering, as well as negative feelings toward brokering, is related to family dynamics and individual well-being, albeit in different fashion. The following analyses examine the unique ways in which the associations between those constructs occur.

Table 17

*Multiple Linear Regression Predicting Participants' Well-being from Language Brokering<sup>a</sup>*

Variable	Self-esteem	Life Satisfaction	Depressive mood
Time in the U.S.	0.02 (0.01)	0.13 (0.03)	-0.01 (0.01)
Participant's gender	-0.11 (0.08)	0.12 (0.22)	0.00 (0.09)
Parents' language acculturation	-0.14 (0.08)	0.00 (0.22)	0.09 (0.09)
Parents' age	-0.03 (0.01)	-0.06 (0.02)	-0.03 (0.01)
LB frequency scale	-0.07 (0.04)	-0.12 (0.10)	0.05 (0.04)
LB positive feelings	0.01 (0.06)	0.06 (0.17)	0.08 (0.07)
LB negative feelings	-0.14 (0.07)	-0.01 (0.20)	0.22* (0.08)
<i>R</i> -squared	0.05	0.06	0.05
Adjusted <i>R</i> -squared	-0.01	0.01	-0.00
Model <i>F</i>	0.90	1.11	0.93
Number of observations	137	140	135

*Note.* The figures are standardized regression coefficients with standard error of beta;

<sup>a</sup>Results from the final model only

\* $p < 0.05$ .

Table 18

*Multiple Linear Regression Predicting Participants' Well-being from Procedural Brokering<sup>a</sup>*

Variable	Self-esteem	Life Satisfaction	Depressive mood
Time in the U.S.	0.01 (0.01)	0.10 (0.03)	0.03 (0.01)
Participant's gender	-0.09 (0.08)	0.12 (0.23)	-0.01 (0.09)
Parents' language acculturation	-0.22* (0.08)	0.02 (0.22)	0.15 (0.08)
Parents' age	-0.01 (0.01)	0.00 (0.02)	-0.09 (0.01)
PB frequency scale	-0.18 (0.05)	-0.04 (0.14)	0.23* (0.05)
PB positive feelings	0.02 (0.06)	0.16 <sup>†</sup> (0.17)	-0.02 (0.07)
PB negative feelings	-0.10 (0.07)	0.02 (0.20)	0.06 (0.08)
<i>R</i> -square	0.08	0.05	0.06
Adjusted <i>R</i> -square	0.03	0.00	0.01
Model <i>F</i>	1.61	1.06	1.25
Number of observations	139	142	137

*Note.* The figures are standardized regression coefficients with standard error of beta; <sup>a</sup>Results from the final model only

<sup>†</sup>  $p = 0.07$ . \* $p < 0.05$ .

### **Mediation between Brokering, Family Dynamics, and Individual Well-being (RQ 4)**

The results from the previous section show that language and procedural brokering are related to family dynamics and individual well-being. The fourth research question examines these associations further by exploring whether family dynamics mediate the relation between culture brokering and individual well-being. Following the procedures laid out in Baron and Kenney (1986), a series of regression analyses was performed to test for mediation (see Plan of Analysis on page 26). Given that no significant relations were found between 4 of the potential predictor variables (frequency of language brokering, positive feelings toward language brokering, and positive and negative feelings toward procedural brokering) and the indicators of individual well-being, the first condition for mediation was not met and no further analyses were conducted for those variables.

Mediation was therefore tested with the two brokering variables that emerged as significant predictors of individual well-being (frequency of PB and negative feelings toward LB). Even though the overall models were not significant (see description on p. 46) the significant individual predictors were used as part of the exploratory analysis (P. Jose, personal communication, April 9, 2012). Each mediation model is explained in detail below.

**Mediation model 1: Does family conflict mediate the relationship between PB frequency and self-esteem?** The first set of regression analyses (described in RQ3) indicated that frequency of procedural brokering was a significant predictor of self-esteem, meeting the first criterion for mediation. Therefore, a regression equation tested whether frequency of PB (the IV) was associated with any of the family dynamics variables (conflict, intimacy, and relative power). Results indicated that frequency of PB was significantly associated with conflict (Table 19), but not intimacy or relative power. Thus, further analyses were conducted to examine whether conflict mediated the association between frequency of PB and youth self-esteem. Following Baron and Kenney (1986), three regression models were computed (see Table 19). At the final step, both frequency of PB and conflict were entered as predictors of self-esteem. The analysis revealed a drop in the  $\beta$  value between frequency of PB and self-esteem from -0.217 to -0.132 (Figure 2). The Sobel test indicated that conflict was a marginally significant mediator (Sobel Test = -1.833,  $p = 0.07$ ) between frequency of PB and self-esteem.

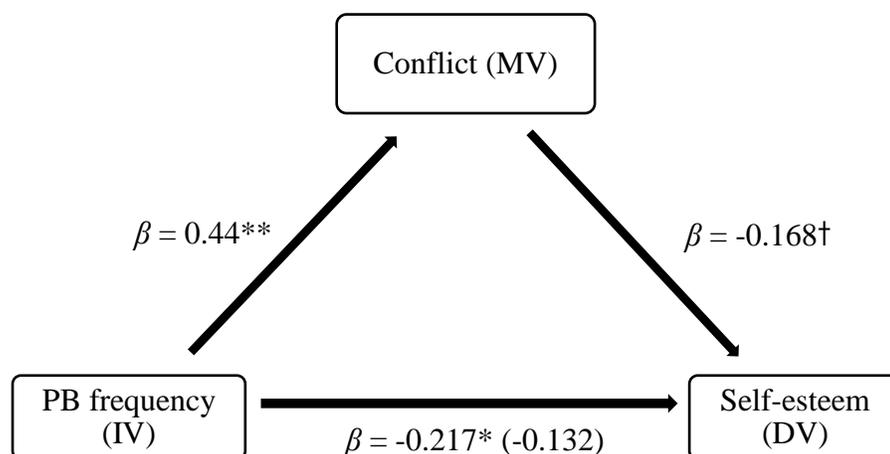
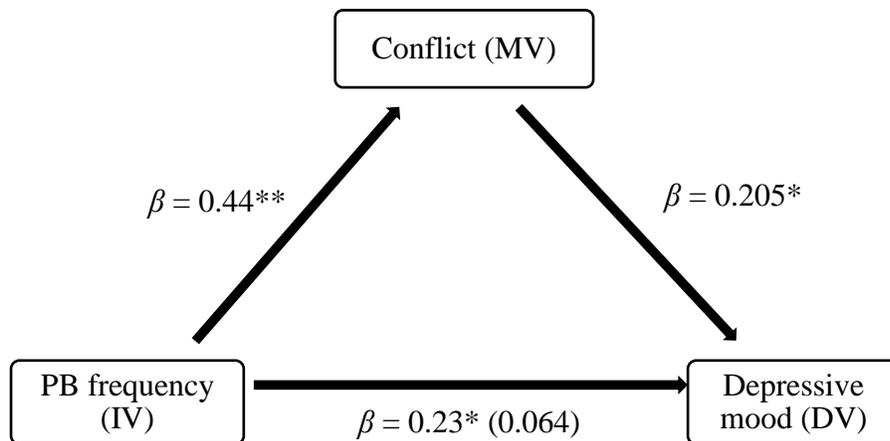


Figure 2. Test of mediation between frequency of procedural brokering and self-esteem, with family conflict as the mediating variable. Model is based on steps recommended by Baron and Kenny (1986). Beta values in the model are standardized regression coefficients. The model indicates a drop in the  $\beta$  value between frequency of PB and self-esteem, when conflict is included in the model.

$^{\dagger}p = 0.05$ .  $^*p < 0.05$ .  $^{**}p < 0.01$ .

**Mediation model 2: Does family conflict mediate the relationship between PB frequency and depressive mood?** The same procedure was repeated with depressive mood as the dependent variable. At Step 1, the significant relation between frequency of PB and depressive mood was established in previous analysis (see RQ3). In Model 2, the relation between frequency of PB and conflict was significant (Table 19). In Model 3, both frequency of PB and conflict were entered as predictors. As shown in Figure 3, when conflict was entered into the equation, the standardized regression coefficient between frequency of PB and depressive mood was reduced. Moreover, the paths from frequency of PB to conflict, and from conflict to depressive mood, were both significant (Table 19). The Sobel test confirmed that the reduction in the coefficient for frequency of PB was significant (Sobel test = 2.17,  $p = 0.03$ ). Therefore, we can conclude that family conflict partially mediated the association between frequency of PB and participants' depressive mood.



*Figure 3.* Test of mediation between frequency of procedural brokering and depressive mood, with family conflict as the mediating variable. Model is based on steps recommended by Baron and Kenny (1986). Beta values in the model are standardized regression coefficients. The model indicates a drop in the  $\beta$  value between frequency of PB and depressive mood, when conflict is included in the model.  
\* $p < 0.05$ . \*\* $p < 0.01$ .

Table 19

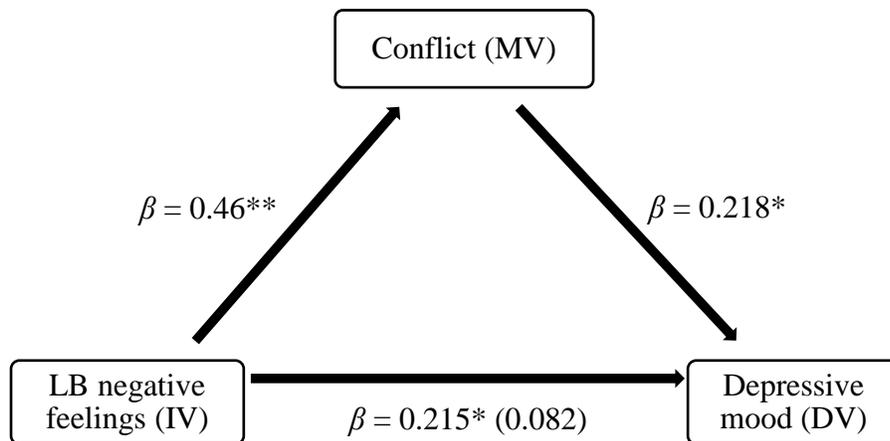
*Mediational Model Predicting the Influence of Procedural brokering on Immigrant Young Adults' Self-esteem and Depressive Mood*

Variable	Self-esteem			Depressive mood		
	<i>B</i>	SE <i>B</i>	$\beta$	<i>B</i>	SE <i>B</i>	$\beta$
Model 1 (IV → DV)						
PB frequency → Well-being	-0.11	0.04	-0.22*	0.12	0.05	0.23*
Model 2 (IV → MV)						
PB frequency → Conflict	0.35	0.06	0.44**	0.35	0.06	0.44**
Model 3 (IV + MV → DV)						
PB frequency → Well-being	-0.06	0.05	-0.13	0.03	0.05	0.06
Conflict → Well-being	-0.10	0.05	-0.17 <sup>†</sup>	0.14	0.06	0.21*
Model statistics						
Model 1	$R^2 = 0.05, F = 1.59$			$R^2 = 0.06, F = 1.69$		
Model 2	$R^2 = 0.18, F = 6.69^{**}$			$R^2 = 0.18, F = 6.69^{**}$		
Model 3	$R^2 = 0.07, F = 1.92$			$R^2 = 0.06, F = 1.71$		

*Note.* All models controlled for time in U.S., Ss gender, parents' language acculturation, and parents' age.

<sup>†</sup> $p = 0.05$ . \* $p < 0.05$ . \*\* $p < 0.01$ .

**Mediation model 3: Does family conflict mediate the relationship between negative feelings toward LB and depressive mood?** Regression analyses were also conducted to examine if any family dynamics variables mediate the association between LB negative feelings and depressive mood. In these analysis, only the relation between LB negative feelings and conflict was significant ( $\beta = 0.46, p < 0.001$ ); models for intimacy and relative power were not significant so these variables were not considered further. At the last step of the mediation analysis, both LB negative feelings and conflict were entered as predictors, and depressive mood as dependent variable. Figure 4 shows that the association between LB negative feelings and depressive mood was reduced from 0.215 to 0.033 when conflict was entered in the equation (Table 20). In fact, conflict was a significant mediator between LB negative feelings and depressive mood (Sobel Test = 2.121,  $p = 0.03$ ).



*Figure 4.* Test of mediation between negative feelings toward language brokering and depressive mood, with family conflict as the mediating variable. Model is based on steps recommended by Baron and Kenny (1986). Beta values in the model are standardized regression coefficients. The model indicates a drop in the  $\beta$  value between negative feelings toward language brokering and depressive mood, when conflict is included in the model.

\* $p < 0.05$ . \*\* $p < 0.01$ .

Table 20

*Mediational Model Predicting the Influence of Negative Feelings toward Language Brokering on Immigrant Young Adults' Depressive Mood*

Variable	<i>B</i>	SE <i>B</i>	$\beta$
Model 1 (IV → DV)			
LB negative feelings → Depressive mood	0.19	0.08	0.22*
Model 2 (IV → MV)			
LB negative feelings → Conflict	0.62	0.10	0.46**
Model 3 (IV + MV → DV)			
LB negative feelings → Depressive mood	0.07	0.08	0.08
Conflict → Depressive mood	0.14	0.06	0.22*
Model statistics			
Model 1	$R^2 = 0.05, F = 1.02$		
Model 2	$R^2 = 0.22, F = 7.73^{**}$		
Model 3	$R^2 = 0.08, F = 1.80$		

*Note.* All models controlled for time in U.S., Ss gender, parents' language acculturation, and parents' age.

\* $p < 0.05$ . \*\* $p < 0.01$ .

## **Chapter Six: Discussion**

Immigration has a profound effect on many different aspects of family life. Immigrant families often struggle with understanding the new environment and integrating into the new society. The youth from immigrant families are often the ones who help their families with this process by brokering for their parents and familiarizing them with the new culture. Previous literature has examined the relations between language brokering and family dynamics, as well as the effects of brokering on adolescent immigrants. However, the majority of the studies explored the effects of translating and language brokering on individual well-being and various family variables (cf. Trickett & Jones, 2007). The current study builds on this work in two key ways. First, it examines how both linguistic and non-linguistic brokering impact the relationships immigrant young adults have with their parents. Second, it explores associations between these two types of brokering and immigrant young adults' psychological well-being. The current study contributes to the existing literature by examining non-linguistic brokering in addition to language brokering, as well as by exploring these phenomena in immigrant young adults from Eastern Europe.

The discussion is organized in the following way. First, findings related to language brokering are discussed. Recent years have seen an increased number of studies on language brokering, so this will allow for the comparison between the previous research and the current study. Second, findings related to procedural brokering are discussed. Following this, limitations of the study are addressed and future directions suggested. The discussion ends with overall conclusions.

### **Language Brokering**

Findings from this study indicate that immigrant young adults often translate for their parents, which is consistent with previous studies on language brokering (Trickett & Jones, 2007; Tse, 1995; Weisskirch, 2007). Language brokering in this sample seems to occur most commonly in non-formal settings (e.g., street, restaurants), with the least common setting for language brokering being the parents' workplace. Previous studies, which mostly focus on immigrant adolescents, indicated that immigrant youth often translate for their parents in formal setting (e.g., school or medical settings) (Trickett & Jones, 2007; Weisskirch, 2007). Considering the average age of participants in this study, findings here suggest that immigrant youth serve as "socializing agents" (De Ment et al., 2005, p. 262) for their parents, introducing them to the new

culture in casual, everyday settings. Linking back to the sociocultural theory, these findings suggest that immigrant youth behave as scaffolds for their parents by providing guidance and familiarizing them with their new environment.

The frequency of language brokering is related to demographic and acculturation variables. Findings indicate that immigrant youth who have lived in the United States for a longer period of time, who have higher education, and who report being more acculturated all report a lower frequency of language brokering. The findings from current study extend the similar results found in previous studies with adolescents from Vietnam and the Soviet Union (Jones & Trickett, 2005; Trickett & Jones, 2007). Such findings suggest that the more time parents spend in the United States the more familiar they become with the culture, hence requiring less assistance from their children. The current study found no gender differences in language brokering, as well as no relations between sibling constellation and brokering. Some previous studies have examined gender and sibling order, but the findings with respect to language brokering have been mixed (Morales & Hanson, 2005).

Similar trends emerged when looking at parents' demographics – youth reported less language brokering if their parents had lived in the U.S. for longer period of time, if they were more educated, if they had higher knowledge of the English language, and if the youth perceived them to be more acculturated to U.S. culture. These findings are again similar to previous studies with Mexican, Chinese, Korean, and Russian adolescent immigrants (Chao, 2006; Jones & Trickett, 2005). Despite the relatively high educational level of parents in this sample, young adults still frequently participated in language brokering. This suggests that parents may not feel confident in their English language abilities, and may require their child's assistance even though they may not necessarily need it. This particular sample was composed of immigrant youth who were on average 23 years old and had resided in the U.S. at least 10 years. These findings extend the previous literature, which focused primarily on adolescents, and highlight the frequency of brokering work that immigrant youth do for their parents even when they have moved into early adulthood.

Language brokering is also related to family dynamics. More specifically, youth who frequently broker for their parents also report higher levels of conflict with their parents, which coincides with findings from a previous study (Trickett & Jones, 2007). In addition, youth who indicated feeling positive about language brokering also reported high intimacy with their

parents, and those who feel more negatively about language brokering also have less intimate relationship with their parents. In addition, youth who reported more negative feelings toward language brokering also reported more conflict with their parents. It is difficult to distinguish however, if one's feelings toward language brokering have a big impact on the overall family dynamics in immigrant families, or if poor family dynamics lead one to feel less positive about language brokering. The results of the current study show no differences in relative power between young adults and their parents with respect to language brokering. This is not completely unusual since the previous literature is inconsistent with respect to power differential and brokering in immigrant families. While some have found differences in power dynamics between parents and their children (Oznobishin & Kurman, 2009; Puig, 2002), others have indicated no power differential in immigrant families (Dorner et al., 2008; Orellana et al., 2003). More in depth research is needed to examine the power dynamics in immigrant families, and to explore the role that brokering plays in family power differentials.

How young immigrants feel about language brokering operates through family dynamics to impact youth well-being in a unique way. Findings suggest that negative feelings toward language brokering and depression are associated; however, this association is mediated by family conflict. Although the cross-sectional design does not allow causal pathways to be tested, the findings are similar to previous studies (Weisskirch, 2007), and the results support the notion that negative feelings toward language brokering lead to increased family conflict, which in turn contributes to depression among youth. This is true even when acculturation (time in the U.S. and language acculturation), youth gender, and parents' age are held constant. An explanation for this finding may be that negative feelings toward language brokering are a way for the youth to express frustration with their parents' low acculturation to US culture. As a result, youth may experience embarrassment and anger with their parents, which then would increase their depressive mood. This is similar to findings from a study with immigrant Latino adolescents (Weisskirch, 2007). The study posited that negative feelings toward brokering represent the overall negative feelings among family members. Further, youth may harbor negative feelings toward brokering because they still have to broker for their parents even though they are on average 23 years old and have lived in the U.S. for about 10 years. The fact that they are still called upon to broker, even in early adulthood, may shed some light on the overall family dynamics in immigrant families from Eastern Europe.

## **Procedural Brokering**

One innovative aspect of this study was the consideration of a distinct type of brokering. Procedural brokering involves immigrant young individuals introducing their parents to the new culture by showing them many different aspects of that culture that go beyond translating. Examples of procedural brokering include tasks such as explaining the school system and taking parents to different restaurants to experience US culture. Although findings related to procedural brokering show some similarities to those for language brokering they also point to some important differences between the two concepts. Youth reported participating more often in procedural brokering than in language brokering, which points to the possibility that these are two distinct concepts. In addition, youth reported feeling more positive about their procedural brokering than language brokering. Finally, although some of the associations between PB and the study variables were similar to those observed for LB, others were distinct. The findings for PB are described in this section, and the extent to which they are similar to those for LB discussed.

Similar to language brokering, longer residence in the United States is related to less procedural brokering, as is higher acculturation to American culture. Unlike language brokering, however, participants' education was not related to procedural brokering. A possible explanation is that the ability to perform procedural brokering for one's parents may not require education, but rather may be more related to everyday experiences with the new culture. In other words, procedural brokering may be more related to one's diversity of experiences in general, rather than the knowledge received through schooling. These findings do not in any way diminish the importance of education. On the contrary, they point to the importance of broader human experiences and suggest that non-classroom experiences are valuable to development for immigrant youth. In addition, these findings are in line with the proposed theoretical framework which speculates that immigrant young adults scaffold their parents by introducing them to new experiences and familiarizing them with the new culture.

Similarly to language brokering, higher levels of parental education, English language proficiency, and perceived acculturation to American culture are all related to less procedural brokering by young adults. However, parents' length of time in the United States (which was associated with less language brokering) was not related to the procedural brokering variables. An explanation for such finding could be related to the nature of procedural brokering.

Procedural brokering involves helping parents with things whose details can change over time (e.g., requirements for U.S. citizenship, paying bills on-line, and working with technological devices). Therefore, residing longer in the United States may not necessarily contribute to one's knowledge of the procedure brokering-related tasks because of the frequent changes in the specifics that accompany many of them. Language brokering involves assisting with language-related tasks, and language remains the same over time. Hence, residing longer in the U.S. does contribute to greater knowledge of English language. As a result, a parent reaches a point where they have acquired enough English language proficiency that they don't need assistance of their child any more. On the other hand, residing longer in the United States may not be related to less procedural brokering because of the changing nature of procedural brokering tasks.

In addition, the higher the parents' English language proficiency, the less positive youth feel about procedural brokering for them. There are a couple of explanations for this finding. First, youth may consider this type of brokering as an obligation they are not happy to do. Perhaps they feel that since their parents are proficient in English they should do the work themselves. Another explanation is that parents may not be as English-proficient as the youth perceive them to be, and therefore may not feel confident to partake in some of the procedural brokering tasks. The discrepancy between parents' language proficiency and the child's perception of the parents' proficiency may be what's causing the child's dissatisfaction with his/her brokering obligations. Because these are correlational findings, the direction of effect is unclear. Hence more research is needed to clearly understand the relation between immigrant young adults' feelings about brokering and its effects on family dynamics.

Procedural brokering was related to family dynamics as well. Participants who reported frequent procedural brokering and negative feelings toward the brokering also reported more conflict with their parents, findings similar to those with language brokering. Youth who reported feeling positive about procedural brokering reported more intimacy and less conflict with their parents. Similar findings emerged from different studies on language brokering with Latino immigrant adolescents – those who felt positive about brokering reported stronger family bonds (Buriel, Love, & DeMent, 2006; Love & Buriel, 2007). This again points to the idea that one's perception toward his/her role as a family broker may be an important factor in dynamics of immigrant families. However, youth who reported frequent procedural brokering also reported having more power in their relationship with their parents, a finding that was absent with

language brokering. This finding was present only in correlational analysis, and disappeared when other variables were entered into regression analysis.

The findings in this study indicate that the effects of frequency of procedural brokering on youth depressive mood may be mediated by family conflict. In other words, data show that frequent procedural brokering leads to increased conflict between youth and their parents, which in turn leads to increased depressive mood in immigrant young adults. This was true even when controlling for acculturation variables (time in the U.S. and language acculturation), parents' age and youth gender. One explanation for this finding may be related to issues of independence and autonomy. The youth in this sample are in their early to mid-twenties, and they may not feel they have much independence from their parents if they are frequently being called to broker for them. The repeated requests could lead to struggles or conflict within the family. Parents, on the other hand, may feel frustrated, embarrassed, or inadequate because they have to rely on their children for assistance. Like their children, they may also feel the loss of independence because they are giving up the control to their children. It is important to note that youth in this sample did not report issues of power with their parents. Thus, relative power as such may not be related to brokering, but possibly some other aspects of the relationship may be affected. Future research should explore in more depth the unique dynamics of parent-child relations in families where children broker for their parents.

### **Limitations**

The current study contributes to the literature on brokering by examining a new type of brokering, and shedding more light on the impact of brokering on immigrant youth well-being as well as their relationships with their parents. The study does have some limitations that future research can address. This is one of only a few studies to examine brokering among Eastern European immigrants, but the sample was restricted in terms of size and diversity. Certain populations from Eastern Europe were more represented than others, and only participants between the ages of 18 and 28, which had lived in the US no more than 15 years were able to participate in the survey. A larger and a more diverse sample would provide a wider distribution of experiences, and allow for more detailed examinations of brokering experiences. The sample also excluded young adults without access to a computer. Some studies indicate that immigrants are less likely to have access to a computer than their native-born counterparts (Fairlie, London,

Rosner, & Pastor, 2006). Therefore, this study may have omitted a potentially large population of immigrants with unique cultural experiences.

Another limitation is the retrospective design of the study. Participants reported primarily on their past experiences of brokering, rather than on their current brokering tasks. It would be ideal to examine brokering at the time it occurs, and see how the frequency and feeling toward it change over time. A longitudinal study that follows immigrant youth and their parents prospectively would be an ideal tool to examine how acculturation, time spent in the U.S., and education are all playing parts in brokering experiences and family dynamics.

A third major limitation is that parents' experiences were not assessed directly, but were examined by looking at young adults' perceptions of their parents' characteristics as well as the amount of brokering they do for their parents. It would be beneficial to examine parents' experiences of acculturation, brokering and relations with their children. Research however, has indicated that one's perceptions of his or her experiences may be more salient than the actual events (Boss, 2002; Park, Vo, & Tsong, 2009). In other words, individuals' perceptions of the amount of brokering they do may be stronger indicator of their well-being than the actual amount of brokering they do.

## **Conclusions**

The current study points to a gap in the research literature on brokering and concludes that two relatively distinct types of brokering may exist. The youth indicate differences in the amount of language and procedural brokering they do, as well as their feelings towards different types of brokering. In addition, the two types of brokering are associated with family dynamics and youth well-being in distinct ways. This interpretation should be taken with caution, though, considering that the two scales are also highly correlated ( $r = 0.66$ ,  $p < 0.01$ ). Thus, there is a need for additional studies that examine the differences between the two types of brokering. Further examination of this concept with different ethnic and racial groups, as well as with different age groups would provide a more complete picture about the two types of brokering. For example, a study that includes immigrants who speak English but are from very different cultures than the US would shed additional light on procedural brokering and how it is distinct from language brokering.

In addition, research should examine in more depth how youth feel about brokering for their parents. Feelings toward brokering, whether positive or negative, may be more important

than the amount of brokering youth do. Though some studies have looked at the effects of brokering feelings (Kam, 2011; Weisskirch, 2007; Wu & Kim, 2009), more research is needed to examine the ways feelings are related to brokering, and what aspects of brokering contribute to either positive or negative feelings toward it.

Lastly, there needs to be more research examining relations between brokering and family dynamics. Several studies (Trickett & Jones, 2007), including this one, point to the existence of conflict in families where youth frequently broker for their parents. However, it is still unclear exactly what aspects of brokering contribute to family conflict. Future research should examine specific circumstances under which brokering occurs, how those circumstances may impact one's frequency of brokering, and one's feelings toward the brokering tasks. Further while many studies focus on negative impact of brokering, some studies have found potentially beneficial effects of brokering on family dynamics. Previous studies (Buriel et al., 2006; Love & Buriel, 2007; Wu & Kim, 2009), as well as this one indicate that brokering may also be positively associated with family dynamics. Similarly, some studies suggest that parents broker for their children with the respect to the native culture (Weisskirch et al., 2011) contributing to the ethnic identity development of immigrant youth. Thus, future research should examine the ways brokering may contribute to positive family interactions, and how those positive contributions of brokering can be used to foster a healthy family atmosphere.

This study offers several ways to inform practitioners who work with immigrant youth and their families. Studies indicate that brokering impacts family dynamics in many different ways, sometimes causing family disruptions. Family disruptions related to brokering only contribute to the existing stressors that immigrant families experience. As a result, practitioners should be aware of the existence of this issue, and knowledgeable about the possible solutions to those problems and resources for the families (Baptiste, 1993; Hafford, 2010). For example, families should be encouraged to seek professional individuals who can broker for them rather than rely on their children for such help. Professionals, on the other hand, should strive to provide immigrant families with resources and support for both language and procedural brokering tasks (e.g., documents translated into their native language, contact information for other agencies, hands-on workshops). In addition, professionals who serve immigrant populations can partner with other agencies and educational institutions to provide community

wide services, and help immigrant families become fully-functioning members of the new society.

In summary, the current study documents the complexity of immigrant experiences and its profound effects on well-being and family relationships. Considering the frequency at which it occurs, culture brokering is certainly a part of the immigrant experience. This study has demonstrated that immigrant parents rely on their children's help well into the early stages of their child's adulthood. Since recent years have seen increasing numbers of youth growing up in immigrant families, the well-being of these young individuals should be the priority of scholars and practitioners. More research is needed to better understand the diverse experiences of immigrant young adults and their families, and to address the unique challenges these families face.

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## Appendix A

## Language Brokering Items

Please answer the following questions thinking specifically about the translating you have done for your **parents**.

1. How often do you translate for your parents?

1. Always
2. A lot
- 3 A little bit
4. Never

	Never did this	Used to do	Have done this within the past year		
		(but not in last year)	Rarely	Occasionally	Frequently/ Always
2. Have you ever translated for your parents at the store?	1	2	3	4	5
3. Have you ever translated for your parents at the hospital?	1	2	3	4	5
4. Have you ever translated for your parents in the doctor's office?	1	2	3	4	5
5. Have you ever translated for your parents in the bank?	1	2	3	4	5
6. Have you ever translated where your parents works?	1	2	3	4	5
7. Have you ever translated for your parents at a restaurant?	1	2	3	4	5
8. Have you ever translated for your parents on the street?	1	2	3	4	5
9. Have you ever translated for your parents at a government office (for example, social security office, welfare office)?	1	2	3	4	5

**How often would you say you feel this way when you translate?**

10. "I like to translate"  
always      a lot      a little bit      never
11. "I feel good about myself when I translate for my parents?"  
always      a lot      a little bit      never
12. "I feel embarrassed when I translate for my parents"  
always      a lot      a little bit      never
13. "I feel nervous when I translate for my parents"  
always      a lot      a little bit      never
14. "I have to translate for my parents even when I don't want to"  
always      a lot      a little bit      never
15. "Translating for my parents makes me feel mature"  
always      a lot      a little bit      never
16. "I think translating has helped me to care more for my parents"  
always      a lot      a little bit      never
17. "I think translating has helped me to understand my parents better"  
always      a lot      a little bit      never

## Appendix B

## Procedural Brokering Items

**How often do your parents rely on you to?**

	Used to do this		Have done this within the past year		
	Never did this	(but not in last year)	Rarely	Occasionally	Frequently/Always
1. Help them communicate complicated information to someone on their behalf	1	2	3	4	5
2. Pay bills	1	2	3	4	5
3. Explain something on television	1	2	3	4	5
4. Explain the American school system	1	2	3	4	5
5. Explain things/requirements related to citizenship	1	2	3	4	5
6. Show them how to use electronics (i.e. camera, cell- phone, computer)	1	2	3	4	5
7. Show them how to do something online (i.e. pay bills, shop, check bank account)	1	2	3	4	5

**How often would you say you feel this way when you help out or assist?**

8. "I like to help out or assist"

always	a lot	a little bit	never
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9. "I feel good about myself when I help out or assist my parents?"

always	a lot	a little bit	never
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10. "I feel embarrassed when I help out or assist my parents?"

always	a lot	a little bit	never
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11. "I feel nervous when I help out or assist my parents"  
always      a lot      a little bit      never
12. "I have to help out or assist my parents even when I don't want to"  
always      a lot      a little bit      never
13. "Helping or assisting my parents makes me feel mature"  
always      a lot      a little bit      never
14. "I think helping or assisting has helped me to care more for my parents"  
always      a lot      a little bit      never
15. "I think helping or assisting has helped me to understand my parents better"  
always      a lot      a little bit      never

## Appendix C

## Family Dynamics: The Network of Relationships Inventory (NRI) items

## Intimacy:

4. How much do you tell your mother everything?

1 = little or none      2 = somewhat      3 = very much      4 = extremely much      5 = the most

5. How much do you share your secrets and private feelings with your mother?

1 = little or none      2 = somewhat      3 = very much      4 = extremely much      5 = the most

6. How much do you talk to your mother about things that you don't want others to know?

1 = little or none      2 = somewhat      3 = very much      4 = extremely much      5 = the most

## Conflict:

7. How much do you and your mother get upset with or mad at each other?

1 = little or none      2 = somewhat      3 = very much      4 = extremely much      5 = the most

8. How much do you and your mother disagree and quarrel?

1 = little or none      2 = somewhat      3 = very much      4 = extremely much      5 = the most

9. How much do you and your mother argue with each other?

1 = little or none      2 = somewhat      3 = very much      4 = extremely much      5 = the most

## Relative power:

16. Who tells the other person what to do more often, you or your mother?

1 = little or none      2 = somewhat      3 = very much      4 = extremely much      5 = the most

17. Between you and your mother, who tends to be the boss?

1 = little or none      2 = somewhat      3 = very much      4 = extremely much      5 = the most

18. In your relationship, who tends to take charge and decides what should be done?

1 = little or none      2 = somewhat      3 = very much      4 = extremely much      5 = the most

## Appendix D

### Young Adults' Well-being Items

#### **Self Esteem**

1. On the whole, I am satisfied with myself.
2. At times I think I am no good at all
3. I feel that I have a number of good qualities
4. I am able to do things as well as most other people
5. I feel I do not have much to be proud of
6. I certainly feel useless at times
7. I feel that I am a person of worth, at least on an equal plane with others
8. I wish I could have more respect for myself
9. All in all, I am inclined to feel that I am a failure
10. I take a positive attitude toward myself

#### **Satisfaction with Life Scale**

1. In many ways my life is close to my ideal
2. The conditions of my life are excellent
3. I am satisfied with my life
4. So far I have gotten the important things I want in life
5. If I could live my life over, I would change almost nothing

#### **Depression**

1. I was bothered by things that usually don't bother me
2. I had trouble keeping my mind on what I was doing
3. I felt depressed
4. I felt that everything I did was an effort
5. I felt hopeful about the future
6. I felt fearful
7. My sleep was restless
8. I was happy
9. I felt lonely
10. I could not "get going"

## Appendix E

## Sibling Constellation Coding Scheme

- 1 = Oldest male child in all male siblings family
- 2 = Middle or youngest male child in all male siblings family
- 3 = Oldest male child in mixed siblings family
- 4 = Oldest brother in a mixed sibling family (may or may not have any older sisters)
- 5 = Middle male child in a mixed sibling family
  
- 6 = Oldest female child in all female siblings family
- 7 = Female child who has an older sister (in all-female-siblings family)
- 8 = Oldest daughter in a mixed siblings family
- 9 = Oldest sister in a mixed family (may or may not have any older brothers)
- 10 = Middle female child in a mixed sibling family
  
- 11 = single child – male
- 12 = single child – female