

Acculturation and Mental Health of Immigrant Youth

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Abstract

The present study aimed to contribute to the understanding of the effects of acculturation on immigrant youth mental health and positive social behaviors. Acculturation levels, along with family environment, amount of and feelings towards language brokering tasks, and parents' level of English proficiency, were investigated in order to describe the relationship between the individual and collective impact of each on mental health. Surveys were administered to 14 students of Mexican descent between the ages of 9-14. The majority of the participants were born in the United States (71%), while 21% were born in Mexico. Results from correlation analyses showed that fewer mental health problems for immigrant youth were associated with higher integration levels of acculturation while fewer prosocial behaviors endorsed by the youth were associated with a higher assimilation level of acculturation. The family environment was found to have both a positive and negative impact on youth mental health and prosocial behavior. More mental health difficulties for the youth were found to be associated with family cohesion and out of control anger, while youth prosocial behavior was found to be associated with more family harmony. Less family harmony and support along with more fighting in the family seemed to shape the child's feelings of language brokering negatively. A simple regression suggested that both mother's and father's English ability were good predictors of youth mental health and prosocial behavior respectively. Family harmony and fighting were also suggested as good predictors for youth prosocial behavior.

Acculturation and Mental Health of Immigrant Youth

The school bell rings and the lockers are lined with an array of hair and skin colors while the hallway is buzzing with different dialects. This is a common scene for schools in California where immigrant children represent a large portion of the school-aged population (Kim, Chen, Li, Huang, & Moon, 2009). This phenomenon is not solely present on the West Coast, however, but also in the Midwest. One such school district in New Carlisle, Ohio that can attest to the diversity of their student population is Tecumseh Local Schools, in which 7.5% of the students are of Mexican descent (Tecumseh Local School District, 2011). The presence of this biculturalism in much of the country supports the notion that this is a national phenomenon for the United States. No longer are big cities the only centers of cultural diversity, but smaller towns and neighborhoods also can be home to immigrants.

Although many immigrants come to America to receive better opportunities than what their original country offered, the experience that many immigrants have is far from a dream. Relocating to a new place brings many new trials and worries since immigrants leave the familiar behind. Countless questions arise as soon as immigrants arrive and begin the process of making a new land their home. For immigrant youth, they are immediately thrown into a prominent part of the American culture by attending elementary and middle school. While juggling all the responsibilities that come with being a student, immigrant youth must also gain confidence in using a second language and learn how to adjust to the new culture.

Acculturation

Adjusting to another culture can be referred to as acculturation. Acculturation is defined as “the process of adopting the language, attitudes, culture, and behaviors of a new host country” (Kim et al., 2009, p. 426). Furthermore, the process of acculturation occurs anytime that an

individual experiences changes from encountering another culture different from their own (Mio, Barker-Hackett, & Tumaming, 2009). Therefore, first-generation immigrants as well as second-generation immigrants can go through this process. Berry (2005) highlights four strategies that anyone living in two cultures can use while acculturating: integration, assimilation, separation, and marginalization. Integration describes individuals who remain a part of their native culture, but are still able to adjust to the new culture. Assimilation refers to individuals who neglect their native culture and completely adjust to the new culture. Separation explains those who completely hold onto their native culture and literally separate themselves from the new culture. Finally, marginalization describes individuals who do not adjust to the new culture, and do not retain their native culture (Lee & Green, 2010). There is not a set model or specific rules that one can follow in order to acculturate into a new culture. The “melting pot” of the United States is just that because of the diverse individuals who make up this country.

The process of acculturating is not only a cultural change, but also a psychological change (Berry, 2005). Acculturative stress culminates from anxiety related to the difficult time that individuals have in living in the new culture (Mio et al., 2009). How well an immigrant adapts to the host culture can alleviate or increase the amount of stress that is felt (Fosados et al., 2007). Of the four acculturation strategies, research has supported that integration results in the least stress for the individual, while marginalization creates the most stress (Berry, 2005). The integration strategy seems ideal; not only does it result in the least amount of stress, but also allows the individual to hold onto the principles of their native culture while learning to incorporate the second culture (Mio et al., 2009). The marginalization strategy, on the other hand, turns the individual away from everyone. Almost in an act of rebellion, the individual with

a marginalized level of acculturation rejects the virtues of both the new and old culture (Mio et al., 2009).

Mental Health

Stress, which can be felt from going through the acculturation process, can be a predictor for poor mental health (Unger et al., 2002). While stress is a potential risk factor of most mental illnesses, due to the stress associated with migration, immigrants are especially at risk for poor mental health. A number of studies have found a link between acculturation stress and psychological distress such as depression, anxiety, and substance use (Roebbers & Schneider, 1999; Torres, 2010; Unger et al., 2004). For example, a study in Norway conducted with 10th grade students found that first-generation females and second-generation males were at risk for poor mental health (Oppedal, Røysamb, & Heyerdahl, 2004). Specifically, male participants with parents who had immigrated before, thus making them second-generation immigrants, were at risk for both internalizing and externalizing problems. Female participants who immigrated were at risk for hyperactivity as well as emotional and peer problems.

Overall, immigrant adolescents in Norway were found to have more symptoms of depression compared to non-immigrant adolescents in one study (Fandrem, Sam, & Roland, 2009). Like previous findings, female immigrants were found to have more depressive symptoms than male immigrants (Fandrem et al., 2009; Hovey & King, 1996). Although females may have more of the depressive symptoms, a lack of support from peers has been shown to result in these symptoms in both males and females (Turjeman, Mesch, & Fishman, 2008). Specifically, males may feel alienated from others, while females feel that they do not have adequate peer support (Turjeman et al., 2008). Also, feelings of discrimination for both males and females were found to result in depressive symptoms (Turjeman et al., 2008).

Previous literature has found that among children and adolescents, anxiety disorders are the most prevalent type of mental illness (Varela & Hensley-Maloney, 2009). In a study measuring feelings of anxiety, immigrants in Germany who did not speak the host language well reported having more feelings of anxiety than immigrants who knew the second language (Roebbers & Schneider, 1999). Since more anxiety is felt as a result of not knowing the new language, for school aged children, learning in a second language can cause feelings of anxiety to heighten (Roebbers & Schneider, 1999). Feelings of anxiety can also result from family roles and values changing as a result of migration in Latino children (Varela & Hensley-Maloney, 2009). For example, parenting roles can be altered due to the host culture's expectations. Furthermore, moving from a collectivistic society to a more individualistic society may change what was once valued in the family (Varela & Hensley-Maloney, 2009). Imagine, the one place that immigrants were likely to feel comfortable and at home, which is amongst their families, now results in feelings of anxiety. A child with an anxiety disorder can deal with these feelings for the rest of his life and can impact his level of functioning (Varela & Hensley-Maloney, 2009).

In the hopes to fit in, immigrant youth may find themselves adopting the practices of their American peers. To an extent that the more assimilated an individual is, the more they take on the customs of the new culture, the immigrant youth may find himself partaking in behaviors different from those of his own native culture (Lee & Green, 2010). During the process of acculturation, youth are particularly at risk to participate in deviant behaviors (Vega, Gil, Warheit, Zimmerman, & Apospori, 1993). In one study that looked at delinquent behavior in relation to immigrant generation status, third-generation Mexican immigrants were found to participate in more delinquent behaviors than second or first-generation Mexican immigrants

(Buriel, Calzada, & Vasquez, 1982). Examples of the delinquent behaviors included: stealing, drinking, fighting, defacing property, and drug use (Buriel et al., 1982). Another study found that higher levels of acculturation for Mexican-American adolescents was a predictor for antisocial peer pressure (Wall, Power, & Arbona, 1993). The acculturating adolescent may feel pressure from his peer group; this pressure can influence his decisions to engage in behaviors such as aggression, and rule breaking (Wall, Power, & Arbona, 1993).

Substance use is one behavior that immigrant adolescents can take part in to feel more assimilated. For Asian American adolescents in one study, higher levels of acculturation resulted in increased substance use (Thai, Connell, & Tebes, 2010). The authors suggested that Asian American youth whose parents were immigrants might have participated in substance use because it was a way for them to fit in with their peers. The more time immigrants spend with American-born peers the more they will experience influence from the American peers to use substances (Unger et al., 2000). This can result in the immigrant having positive feelings towards substance use because the immigrant may think that the use is customary among his peers (Fosados et al., 2007).

Another view is that immigrants use substances such as drugs in order to cope with the tremendous amount of stress that they are under (Unger et al., 2004). One study looked at levels of acculturation along with drug and alcohol use among Latino high school students in California (Fosados et al., 2007). The results supported previous findings in that a low level of acculturation such as marginalization (those who did not adjust to the new culture, nor held onto their native culture) resulted in stress and increased substance use. Marginalized males in particular had the greatest likelihood to use alcohol and drugs throughout their lives but not marginalized females. The separation acculturation level (those who hold onto the native

culture, but do not hold relationships with those from the host culture) was a predictor for current alcohol use in females (Fosados et al., 2007). The previous studies highlight a meta-analysis of results found from many immigrant populations. Overall, however, cultural differences exist, and regardless of cultural background, the acculturation process is stressful for immigrants.

Family Environment

Immigrant youth's increased risk for psychological problems can be impacted either positively or negatively by family factors. The family unit can play an important role in combating acculturative stress and increase the level of functioning for the child (Walsh, Shulman, Bar-On, & Tsur, 2006). Specifically, the parent-child bond was found to play more of a role in the functioning of immigrant youth than non-immigrant youth (Walsh et al., 2006). In fact, immigrants with a strong, positive relationship with their parents tended to handle stressful events better than those with a weak parental relationship, and thus had high levels of functioning (Walsh et al., 2006).

It is easy to see why it is vital for immigrants to have healthy relationships with their parents; however, during adolescence, the child and the parent may grow apart (Kim et al., 2009). This is especially true for youth acculturating because the strength of the family unit can change during the acculturation process (Hovey & King, 1996). There may be a greater need for peer support since the family bond tends to be weaker in adolescent years (Turjeman et al., 2008). Also, since immigrant youth want to be accepted among their new peer group, they often become accustomed to the new culture much faster than their parents (Baptiste, 2005). Although this can result in strengthening the child's relationship with his new peers, it can also hurt the relationship that he has with his parents (Baptiste, 2005).

Dissonance in the family can pose a lot of problems for the youth trying to figure out how to live with two cultures. The family unit can harm the youth's level of functioning if the family is not supportive (Céspedes & Huey, 2008). A study with high school students who were second-generation Latino immigrants found that family disharmony correlated with acculturative stress (Hovey & King, 1996). Depression in Latino youth was also found in the presence of conflict between family members and a lack of togetherness among the family unit (Céspedes & Huey, 2008). Some parents even guilt their children into holding onto the importance of family and their native culture, such as those from East India (Baptiste, 2005). As previous research has suggested, this does not bode well for the immigrant's level of functioning (Céspedes & Huey, 2008).

Language Brokering

One factor affecting both the family relationship and youth's mental health in immigrant families may be language brokering. Language brokers are defined as "children from immigrant families who translate, interpret, and mediate information for their parents or other adults" (Love & Buriel, 2007, p. 473). These individuals are involved in important decisions such as paying bills and private decisions such as interpreting at doctor appointments (Love & Buriel, 2007). There are positive as well as negative outcomes that are associated with language brokering.

Added stress from language brokering is not always good for the adolescent; however, because of the autonomous role that the adolescent is placed in, brokering can create many positive outcomes for the adolescent such as a sense of worth and independence (Love & Buriel, 2007). Older individuals who language broker such as junior high students, are more likely to have positive outcomes than children who language broker from ages 9-11 years (Love & Buriel, 2007). Females are also more likely to be language brokers because it is often in accordance

with their gender role of spending time with the family (Love & Buriel, 2007). Girls who language broker get the chance to feel independent and may see language brokering as an additional responsibility to help out the family (Love & Buriel, 2007).

Most of the negative outcomes of language brokering come from the discrepancy between normal familial roles and the new autonomous roles that the language brokers are placed into. While parents may try to maintain authoritarian roles at home, their children actually have more authority outside of the home because parents have to turn to their children for help with interpreting. The child who interprets for his parents has a lot more authority than other peers his age. As a result, the child is granted certain responsibilities and duties similar to an adult outside the home, yet inside the home, his level of autonomy is much lower. Children who language broker may undercut their parents' authority, and expect more independence than what their parents are actually willing to give (Love & Buriel, 2007; Unger et al., 2002). For the adolescent, the parent not meeting these expectations can result in negative outcomes (Love & Buriel, 2007).

A study conducted by Love and Buriel (2007) found that Mexican American middle school students reported having higher levels of depression on the Children's Depression Inventory (CDI) if they interpreted for more people, such as those not in their immediate family. However, this relation for girls, but not boys, was affected by the level of responsibility they had within the household. Females that had more responsibilities and language brokered in more places actually had lower levels of depression. The authors suggested that interpreting for females may result in positive outcomes such as gaining a sense of autonomy and feeling a sense of worth if the child receives more responsibility due to language brokering. On the other hand, since this study was correlational, it is possible that highly competent females who are less

depressed are asked to take on more responsibilities, including language brokering, both at home and other places.

Present Study

The previous research focused on the different levels of acculturation in children and adolescent immigrants. Research showed that stress from the acculturation process could lead to mental health problems in adolescents. Specifically, depression in second-generation Latino youth (Hovey & King, 1996), anxiety in overall immigrant youth (Mio et al., 2009), and substance use in Asian Americans adolescents (Thai et al., 2010). Yet, in at least one study, higher levels of acculturation were associated with poorer outcomes, specifically greater alcohol use in Latino youth (Fosados et al., 2007). Previous studies have also shown the role that family relationships play in helping immigrant children deal with stress; that is, stronger parent-child bonds and lower levels of conflict aided adjustment in immigrant youth (Céspedes & Huey, 2008; Walsh et al., 2006). Sometimes however, children are needed by their parents to interpret and are placed in the role of a language broker. Such immigrant-specific tasks, as well as their effects on family relationships and children's mental health, are little researched. Similarly, most previous studies on immigration examined relatively few variables.

The current study assessed levels of acculturation, family environment, amount of and feelings towards language brokering tasks, and parents' level of English proficiency for immigrant youth in order to examine the individual and collective impact of each on mental health. Moreover, little previous research has examined participants' level of mental health across a variety of symptoms. Thus, the present study utilized a measure of mental health that incorporated both internalizing (e.g., sadness, anxiety) and externalizing (e.g., lying, fighting) symptoms. Also, previous research has focused on the relationship between negative social

behaviors and acculturation. The current study explores the relationship between positive social behavior and acculturation, along with family environment and English as a second language issues in the home.

In accordance with Berry (2005), it was hypothesized that low levels of acculturation such as separation would be associated with worse overall adjustment, specifically more mental health problems and fewer prosocial behaviors. Similarly, high levels of acculturation such as integration and assimilation were predicted to correlate with fewer mental health problems and more prosocial behaviors. Since previous research has found stronger and more positive family relationships to be associated with fewer problems adjusting to a new culture (e.g., Walsh et al., 2006), it was hypothesized that a healthier, more positive family environment would be associated with better mental health and more prosocial behavior. For attitudes on language brokering, it was hypothesized that a more positive family environment would correlate with more positive feelings towards language brokering. Also, it was expected that more positive feelings towards language brokering would correlate with less mental health problems and more prosocial behaviors.

Previous research has found sex differences in mental health and risk factors. While second-generation males were found to be at risk for internalizing and externalizing their feelings, first-generation females were found to be at risk for peer problems (Oppedal et al., 2004). The present study will explore for sex differences in psychological difficulties and prosocial behavior.

Method

Participants

Students who attended the Adelante program were recruited to participate in the study. Permission from the Superintendent of the school district was given in order to recruit participants for the study from the Adelante program. Parental consent forms were sent home with all students who attended the program. Adelante is an after-school program through Tecumseh Local Schools that is designed to help students with backgrounds different from the American culture both academically and socially. The program is open to every student that meets this criterion; however, not all students actually attend the program. No incentives were given for participation. It was estimated that 40 students were recruited to participate, however, parental and youth consent was given for only 14 students. Of the participants who completed the study, 43% were male and 57% were female. The majority of the participants were elementary school students (64%) while the rest were middle school students (36%). The age range of the participants was 9-14 ($M = 10.86$, $SD = 1.35$).

All of the participants were of Mexican descent; 71% of the participants were born in the United States and 21% were born in Mexico. The participants born in Mexico had been living in the United States for at least four years. One student could not recall if she was born in Mexico or the United States. The immigrant generation status of participants was not known since it was not assessed. All of the participants were deemed proficient in the English language by the Adelante program coordinators. Spanish was the first language for 71% of the participants while English was the first language for 21%. One participant learned both Spanish and English at the same time. All of the participants language brokered and were still continuing to do so at the time of the study. The youngest age participants first started to language broker was seven, and the oldest age participants first started to broker was ten ($M = 7.93$, $SD = 2.53$).

Few participants lived in nuclear households containing a father, mother, and siblings (21%). The majority of the participants (79%) lived in households with extended family members such as grandfathers, grandmothers, aunts, uncles, and cousins. The number of family members participants lived with ranged from 4-11 ($M = 6.93$, $SD = 2.43$). The number of brothers participants lived with ranged from 0-4 ($M = 1.64$, $SD = 1.15$) while the number of sisters participants lived with ranged from 0-3 ($M = .86$, $SD = .86$).

Materials

All of the materials consisted of paper forms (See Appendix A for a copy of all the materials). Consent forms were used to obtain permission from both the parent and the child. The parental consent form was available in both English and Spanish so that parents could read the purpose of the study in their language of preference. Typical demographic questions such as gender, age, and grade in school were asked. In addition to those questions, the participants were asked their place of birth, age of arrival to the United States, the country their family was from, the first language they learned, and the second language they learned. Questions were also included about their family; participants were given a list of family members and told to denote whom they lived with as well as how many siblings they had and their ages. Four surveys, each assessing different constructs, were used. All of the surveys were administered in English because the students were proficient in the English language.

Acculturation. The Habits and Interests Multicultural Scale for Adolescents (AHIMSA; Unger et al., 2002) was used in order to evaluate the different levels of acculturation: integration, assimilation, separation, and marginalization as defined by Berry (2005). The eight item scale was adapted for use with adolescents from acculturation scales designed for adults (Unger et al., 2002). A group of psychologists, sociologists, anthropologists, and researchers of cultural

studies extensively reviewed acculturation literature as well as adult acculturation scales in order to generate items that were age-appropriate for adolescents (Unger et al., 2002). The items selected for the scale were chosen with the help of both adolescents and researchers.

Adolescents answered the items and provided feedback in order to make sure that the questions did not result in confusion while researchers made sure that the questions were good measurements of acculturation (Unger et al., 2002). The scale was found to have good construct validity in comparing results of the AHIMSA to other scales of acculturation (Unger et al., 2002).

The items asked participants to think about different aspects of their lives and from which country those aspects are most associated with. Participants could answer the items by selecting from four options: a = "The United States", b = "The country my family is from", c = "Both the United States and the country my family is from", or d = "Neither the United States nor the country my family is from." Participants answered the items such as: "I am most comfortable being with people from," and "My best friends are from" Four scores based on the four levels of acculturation are generated from the answer options; the number of "a" responses is the assimilation score, the number of "b" responses is the separation score, the number of "c" responses is the integration score, and the number of "d" responses is the marginalization score. None of the participants selected the "d" response, and therefore, only the acculturation levels of assimilation, separation, and integration were included in the analyses.

Language Brokering. The second survey was a Language Broker Scale and was adapted from Tse (1995). The survey asked participants to assess the ability of their mother and father to speak, listen, read, and write in the English and Spanish languages. The participants were also asked to answer those same questions regarding their own personal ability.

An image-based Likert scale of circles was used to provide participants with a visual representation of the scale options. Previous literature has suggested that using images to depict the answer choices is helpful when obtaining data from children (Mantzicopoulos, French, & Maller, 2004 as cited in Reynolds-Keefer & Johnson, 2011). Therefore, the circle images were adapted from a survey used by a youth service agency that assessed how children felt about one of their programs. The answer choice for the items on the language broker scale were: A white circle = "Not at all," a circle with one fourth of its area shaded black = "A little," a circle with the bottom half shaded black = "Somewhat," A circle with three fourths of its area shaded black = "Well," and a circle completely shaded black = "Very well. "

After the participant had completed assessing the abilities of their mother, an open ended item asked, "Are there any other languages your mother knows? If yes, what other language?" Likewise, this question was asked at the conclusion of the father and individual language assessment sections. Neither the parents nor the participants had knowledge of a third language. An overall mean of mother's English abilities as well as an overall mean of father's abilities was computed for each participant. The averaged responses from the four items assessing how well the mother and father could speak, listen, read, and write in English on a 1-5 Likert scale were used to compute the overall mean of mother and father's English abilities score. Both the mother and father English abilities scales had adequate levels of internal consistency-reliability (Cronbach's alpha = .86 and Cronbach's alpha= .90, respectively). There was no variability in the responses for mother and father Spanish speaking and listening abilities; all of the children rated both their mother's and father's Spanish speaking and listening abilities at the highest levels. Also, participants noted hesitancy in their ability to assess their parents' reading and

writing abilities in Spanish. Therefore, an overall mother and father Spanish abilities scale was not included in the analysis.

After defining language brokering, the next items on the scale asked participants about their personal language brokering experiences: “Have you ever brokered?”, “At what age did you begin brokering?”, “Are you still brokering?”, “At what age did you stop?”, and “Why did you stop?” While some of these items were open-ended, fixed-choice responses of “Yes,” “No,” and “Not sure” were used for both the “Have you ever brokered?” and “Are you still brokering?” items.

Items pertaining to family life were also used and participants marked how many brothers and sisters they had, the ages of those siblings, and if they had ever language brokered. In order to understand whom the participants broker for and where they broker, participants could circle all of the people whom they have had to broker for as well as the places they have brokered. The choices for whom they have brokered for were: parents, brothers/sisters, friends, other relatives, neighbors, teachers, doctor, and other. The choices for where they have brokered were: home, school, bank, grocery store, mall, post office, doctor’s office, and other. A total number of people brokered for item as well as a total number of places brokered for item were created for analysis.

Finally, feelings and attitudes about language brokering were assessed. Participants could place a check mark next to the statements that they agreed with. Some of the statements were: “I am proud to be a broker,” “Brokering helped me learn English,” “Brokering did not help me learn Spanish,” “I like to broker,” and “I know my first culture better because I brokered.” An item of the total number of positive feelings towards language brokering was created for

analysis. Similarly, an item of any negative feelings of language brokering was created for analysis.

Family Conflict and Support. Items from the Family Environment Scale (FES) Moos (1974) were selected in order to evaluate family conflict and support. Of the original 90 items, 18 items were selected to compromise the Family Environment Survey used for the present study based on their assessment of positive and negative family environments. The same image-based Likert scale used in the language broker survey was also used in the Family Environment Scale. Participants were asked to think about if the items were true and therefore the written responses that went along with the circles were changed. The responses that corresponded to the Likert circle images were: “Not true,” “A tiny bit true,” “Sometimes true,” “Mostly true,” and “True all the time.” Three responses were used to make a family cohesion scale and three responses were used to make a family conflict scale. These scales did not generate adequate internal consistency, however (Cronbach’s $\alpha < .40$), and therefore were not used in the analysis. Similarly, some items were dropped and not used because they were either irrelevant to the main interests of the study (e.g., “There is little privacy in our family”), the children had a hard time understanding the question and asked to clarify what the question meant (e.g., “Each person’s duties are clearly defined in our family”) or the question contained a double negative (e.g., “Family members hardly ever lose their tempers”) that proved confusing for the children to comprehend. Thus, responses from six items were assessed individually in the analysis : “Family members really help and support one another,” “We fight a lot in our family”, “Family members sometimes get so angry they throw things”, “There is a feelings of togetherness in our family”, “If there is a disagreement in our family, we try to smooth things over and make peace”, and “We really get along well with each other”.

Youth Mental Health. Items from the Strengths and Difficulties Scale (Goodman, 1997) were utilized to assess the students' mental health. The survey for the present study consisted of 16 items that were selected as the most relevant for assessing psychological difficulties as well as positive social behavior. In order to assess psychological troubles, an overall mean of psychological difficulties was computed for each participant. The responses from six items assessing internalizing (e.g., "I get a lot of headaches, stomachaches, or sickness"), externalizing (e.g., "I get very angry and often lose my temper") and peer difficulties (e.g., "I generally play alone or keep to myself") were used for the mean psychological difficulties score. Of note, the scale had an adequate level of internal consistency reliability (Cronbach's alpha = .76). Similarly, to assess positive behavior towards others, an overall mean of prosocial behavior was computed for each participant. The responses from four items: "I try to be nice to other people. I care about their feelings," "I usually share with others," "I am helpful if someone is hurt, or feeling ill," and "I have good friends" were used for the mean prosocial behavior score. Of note, the scale had a high level of internal consistency reliability (Cronbach's alpha = .80). The same circle representations that were used in the language broker survey and the Family Environment Survey were also used in the Strengths and Difficulties survey. The response options for the survey were also the same as the response options for the Family Environment Survey because participants were asked to assess how true statements were.

Procedure

The surveys were administered when the students had free time at Adelante. After giving assent to participate, a researcher sat with the student in order to make any clarifications or answer any questions the student had about the items. Items from the scales were read to the younger students (4th and 5th grade), and the verbal responses of these participants were marked

by the researcher. The younger participants completed the surveys in the Adelante room at a table with the researcher away from their peers. Older participants (6th, 7th, and 8th grade) had the choice to either have the questions read by the researcher or read the questions themselves. The older participants also had the option to take the surveys under the supervision of the researcher either at a desk in the room that Adelante was being held, or in a separate room. The order of the surveys was as follows: Acculturation, Language Brokering, Family Environment, and lastly, Strengths and Difficulties. Completion of the surveys took 30 minutes.

Results

Descriptive Statistics and Overview of Data Analyses

The means and standard deviations of all the variables are presented in Table 1. Most of the variables were fairly normally distributed with the exception of some of the Family Environment Scale items. Two FES items had a high level of kurtosis (> 3.0) due to either most participants scoring very high on the item (“We really get along well with each other”) or very low (“Family members sometimes get so angry they throw things”). Analyses with these two variables should be interpreted with caution. Next, *t*-tests were run to examine if there were any significant sex differences for any of the variables; none existed. Then, correlations (Pearson *r* statistics) were run within the measures in order to examine the hypothesized relations among the variables (see Tables 4,5,6,7). Due to the small sample size limiting the likelihood of finding statistically significant results, all correlations greater than $|\ .30 |$ were interpreted tentative since these are considered moderate effect sizes (Cohen, 1988). Last, linear regressions were run to examine the combined effects of any variables that had significant correlations with psychological difficulties or prosocial behavior.

Acculturation and Youth Adjustment

The correlations between the three types of acculturation (assimilation, separation and integration) and the index of psychological difficulties were examined in order to test if there was a relationship between acculturation and mental health. There appeared to be a negative correlation between the child's level of integration and mental health problems, $r(12) = -.30, p = .31$. Fewer mental health problems were associated with higher integration levels of acculturation. There did not seem to be a trend between mental health and the other measures of acculturation: assimilation and separation.

The correlations between the three types of acculturation and the level of prosocial behavior were examined next. There seemed to be a negative correlation between assimilation level and prosocial behavior, $r(12) = -.42, p = .14$, indicating that higher levels of assimilation were associated with fewer prosocial behaviors. Neither integration nor separation was correlated with prosocial behaviors.

Family Environment and Youth Adjustment

To explore the relationship between a positive and healthy family environment and mental health difficulties, the correlations between each of the six retained Family Environment Scale items and the participants' scores on the psychological difficulties scale were examined. There seemed to be a positive correlation between the FES item "There is a feeling of togetherness in our family" and psychological difficulties, $r(12) = .30, p = .30$. More mental health problems were associated with feelings of family cohesion. There also seemed to be a positive correlation between "If there is a disagreement in our family, we try to smooth things over and make peace" and psychological difficulties, $r(12) = .39, p = .16$. More mental health difficulties were associated with trying to ease troubles and create harmony within the family. There also seemed to be a positive correlation between "Family members sometimes get so

angry they throw things” and mean psychological difficulties, $r(12) = .35, p = .22$. More mental health problems seem to be associated with out of control anger in the family. No other trends were found between the FES items and psychological difficulties.

To investigate the relationship between a positive and healthy family environment and prosocial behavior, the correlations between each of the six retained Family Environment Scale items and the participants’ scores on the prosocial behavior scale were examined. There was a significant negative correlation between prosocial behavior and “We fight a lot in our family,” $r(12) = -.56, p < .05$. This correlation indicated that more fighting in the home was associated with fewer prosocial behaviors endorsed by the youth. Also, there seemed to be a negative correlation between prosocial behavior and “Family members sometimes get so angry they throw things,” $r(12) = -.36, p = .21$. This trend seemed to indicate that more out of control anger was associated with fewer prosocial behaviors. Of note, the correlation with the item about fighting had a large (vs. moderate) effect size. There were also two large effect size, marginally significant positive correlations between prosocial behavior and “There is a feeling of togetherness in our family,” $r(12) = .50, p = .07$, and “If there is a disagreement in our family, we try to smooth things over and make peace,” $r(12) = .50, p = .07$, which indicated that cohesion and harmony within the home was associated with participants exhibiting more prosocial behaviors. No other trends were found between between prosocial behaviors and the FES items.

Youth Language Brokering and Family Environment

To explore the relationship between attitudes towards language brokering and the family environment, correlations between the positive and negative feelings towards language brokering variables and each of the six retained (FES) items were tested. There was a marginally

significant negative correlation between the negative response towards language brokering and “Family members really get along well,” $r(12) = -.47, p = .09$, “There is a feeling of togetherness in our family,” $r(12) = -.33, p = .25$, and “Family members help and support one another,” $r(12) = -.75, p < .01$. These correlations indicate that the negative feelings toward language brokering were associated with less family cohesion and support in the home. There were also positive correlations between negative feelings toward language brokering and the following FES items: “We fight a lot in our family,” $r(12) = .53, p = .05$ and “Family members sometimes get so angry they throw things,” $r(12) = .54, p = .05$. These correlations indicate that the negative feelings toward language brokering were associated with more anger and fighting in the family. There was a positive correlation between the positive feelings of language brokering and “We really get along well with each other,” $r(12) = .46, p = .10$. This correlation indicates that positive feelings towards language brokering were associated with more family harmony.

Parents’ English Proficiency, Youth Language Brokering, and Youth Adjustment

In order to examine the relationship between youth mental health and their parents’ level of English proficiency, the number of places and people brokered for, and feelings towards language brokering, correlations among these eight items were run. There was a negative correlation between psychological difficulties and the total number of people brokered for, $r(12) = -.45, p = .11$, indicating that the more psychological difficulties the child reported, the fewer people for whom they language brokered. Also, there was a positive correlation with a large effect size found between mom’s level of English proficiency and psychological difficulties, $r(12) = .51, p = .06$. The better the mother was at the English language the more mental health problems reported by the youth. No trend was found between having positive feelings towards language brokering and mental health difficulties.

In regards to the correlations between prosocial behavior and items concerning language issues (e.g., English language proficiency and language brokering), there were two large effect size, marginally significant positive correlations: one with both dad's level of English proficiency, $r(12) = .51, p = .06$, and the other with the total number of people brokered for, $r(12) = .50, p = .07$. Children reported more prosocial behavior when their dad had greater English proficiency and when they brokered for more people. No significant correlation was found between having positive feelings towards language brokering and prosocial behavior.

Regression Analyses

Exploratory linear regressions were run in order to examine if any of the variables seemed to be correlated with mental health also had independent effects when all of the variables were included in the same model (integration, smooth things over and make peace, get so angry they throw, total number of people brokered for, and mom's level of English proficiency). Of note, the FES item "There is a feeling of togetherness in our family" was not included in the regression due to it having a large, significant correlation with "If there is a disagreement in our family, we try to smooth things over and make peace;" such a large correlation could produce problems associated with multicollinearity when running the regression. In the initial regression, the total number of people brokered for had essentially no predictive value ($p = .95$); therefore, the regression was re-run without this variable. This second regression was significant, $F(4, 9) = 4.53, p < .05$, indicating that the four remaining items were able to significantly predict children's psychological difficulties. Moreover, mom's English proficiency was significant, $p < .05$, suggesting that the item alone could also significantly predict children's psychological difficulties.

Exploratory linear regressions were run in order to examine if any of the variables significantly correlated with prosocial behaviors also had independent effects when all the variables were included in the same model (assimilation, smooth things over and make peace, fight a lot, total number of people brokered for, and dad's level of English Proficiency). In this regression, the FES items "There is a feeling of togetherness in our family" and "Family members sometimes get so angry they throw things" were excluded due to their large, significant correlations with "If there is a disagreement in our family, we try to smooth things over and make peace" and "We fight a lot in our family," respectively. In the initial regression, the total number of people brokered for as well as assimilation had limited predictive value, $p = .65$, and $p = .63$, respectively. Therefore, the regression was re-run without these two variables. The second regression was significant, $F(3, 10) = 11.19$, $p < .05$, indicating that the three remaining items were able to significantly predict children's prosocial behaviors. Furthermore, all three remaining variables (smooth things over and make peace, fight a lot, and dad's level of English proficiency) were significant, $p < .05$ for all three items. This significance suggests that these items independently can predict children's prosocial behavior.

Discussion

The results of the study did not fully support the hypotheses. The hypothesis that a low level of acculturation would be correlated with more mental health problems and fewer prosocial behaviors was not supported. Likewise, the hypothesis that positive feelings towards language brokering would be correlated with fewer psychological difficulties and more prosocial behaviors was not supported. The hypothesis that a positive family environment would be correlated with better mental health was tentatively and partly supported only because other trends such as an association between more psychological difficulties and feelings of familial

cohesion and trying to keep harmony in the family were found to suggest otherwise. The second part of this hypothesis, however, that a positive family environment would be correlated with more prosocial behaviors, was not supported. Similarly, the hypothesis that a higher level of acculturation would be correlated with fewer psychological difficulties was tentatively supported but was not found to be associated with more prosocial behaviors. One hypothesis was fully supported: a positive family environment was found to correlate with positive feelings towards language brokering.

Acculturation and Youth Adjustment

The tentative negative correlation between integration and psychological difficulties in this study seemed to support the hypothesis that high levels of acculturation would correlate with fewer psychological difficulties. The integration level refers to how much the immigrant holds onto her native culture while also adopting the new culture (Mio et al., 2009). Previous research has shown that integration results in the least amount of acculturation stress (Berry, 2005). Since stress is a risk factor for many mental illnesses, a low level of acculturation stress would support the notion that the child is not at an increased risk for developing a mental illness. However, there did not seem to be a trend between assimilation, another indicator of acculturation and mental health in this sample.

It is possible that assimilation was not correlated with mental health due to it having variable effects on mental health. Higher levels of assimilation indicate more involvement with the new culture and less connection with the child's culture of origin. When the child feels pressured to abandon her old culture and adopt the new one, it is possible that assimilation would lead to greater psychological difficulties. When the child freely chooses the new culture over the old, however, assimilation could be associated with fewer psychological problems.

The hypothesis stating that low levels of acculturation (separation) would be associated with more mental health difficulties and fewer prosocial behaviors was not supported. This was not consistent with previous studies finding that low levels of acculturation were associated with worse overall adjustment (Berry, 2005). Due to the majority of the participants being in elementary school (64%), the family unit is likely to still play a positive and prominent role in the child's life. Since previous literature has suggested that children start to lose touch with family members and gravitate more towards peer relationships during adolescence, the elementary-aged participants may still have a close connection with their family (Baptiste, 2005). The child may not have the opportunity to receive exposure to the new culture because of his bond with his parents or to endorse prosocial behavior. Therefore, the child may not even have interest in adopting the new culture. The limited knowledge of and interest in the new culture, along with the family support system in this scenario, would suggest that among elementary-aged students separation would be less associated with negative outcomes such as mental health difficulties.

The hypothesis that higher levels of acculturation would correlate with more prosocial behaviors was not supported. In contrast, higher levels of acculturation (assimilation) were correlated with fewer prosocial behaviors. To the extent that an immigrant child is well adjusted into the host culture, the more he takes on the customs of the new culture. This may cause him to participate in behaviors that are not normal of his native culture (Lee & Green, 2010). Higher levels of acculturation for Mexican-American adolescents were a predictor for antisocial peer pressure (Wall et al., 1993). The adolescent may give into this peer pressure and engage in negative social behaviors such as rule breaking and showing aggression towards others (Wall et al., 1993). Higher levels of acculturation were also found to be associated with increased

substance use (Thai et al., 2010). Perhaps the more time immigrant youth spend with American-born peers, the more they think that substance use is customary in the new culture (Fosados et al., 2007).

Family Environment and Youth Adjustment

The hypothesis that a healthier, more positive family environment would be associated with better mental health was partly supported by the tentative association between out of control anger of family members and more mental health problems. This is consistent with previous results in which lower levels of conflict in the home helped the youth adjust in a positive manner (Céspedes & Huey, 2008; Walsh et al., 2006). The hypothesis was not supported, however, by the tentative associations between more mental health problems and both feelings of cohesion and trying to keep harmony in the family. Cohesion and the feelings of togetherness for some families may actually create more mental health problems. Of note, 79% of the participants in the present study did not live in nuclear homes and the average amount of people that they lived with at home was seven. It likely takes a lot of effort and time to even achieve a feeling of togetherness in such families. The energy it can take for large families that include more than just the immediate family to engage in activities together can be demanding. The results of this study would suggest that these efforts may do more harm than good. Similarly, the effort it can take to smooth things over and make peace in the family can generate more problems in the future.

More interpretations of this correlation can be made as well. Since the Mexican culture is more collectivistic while the American culture is more individualistic, gathering everyone in the family is against the individualistic values that are stressed in the United States. The contrast between what the host culture regards as important and what the family holds as important can

be hard for the child to understand and thus create more psychological difficulties. Also, regardless of cultural background, if issues are not addressed at hand and are merely overlooked, as suggested by smoothing things over, the underlying issue is not taken care of. The problems that have been quickly overlooked in order to create feelings of peace in the family can create more problems in the future. The results of this study would suggest that these problems can be seen in psychological difficulties.

The hypothesis that a more positive family environment would be associated with more prosocial behavior of immigrant youth was marginally supported by an association between feelings of family cohesion and harmony and more prosocial behaviors endorsed by the youth. Furthermore, the association between more fighting in the home and fewer prosocial behaviors endorsed by the youth also shows support for the hypothesis. This is consistent with previous findings that a stronger more positive family atmosphere was associated with fewer problems for the youth in adjusting to a new culture (Walsh et al., 2006). Children can learn behaviors through modeling. Perhaps because family members are exhibiting a type of prosocial behavior at home, the child too exhibits this behavior. Similarly, the child can also learn negative behaviors such as throwing things when angry and fighting. The child may think that because her family members partake in these activities, she can as well.

Family Environment, Youth Language Brokering, and Youth Adjustment

The hypothesis that positive feelings towards language brokering would be associated with a positive family environment was tentatively supported by the association between positive feelings towards language brokering and families getting along. This hypothesis was further supported by the marginal associations between negative feelings towards language brokering and less familial cohesion and support. Additionally, the tentative association between negative

feelings towards language brokering and out of hand anger and fighting also supported this hypothesis. These results suggest that how youth view language brokering is reflective of their family environment at home. If family members get along with each other, the child may not have problems with language brokering because he knows that he is helping the family out. It has been suggested that the child feels a sense of worth because he language brokers (Love & Buriel, 2007). Perhaps the child views language brokering in a positive manner because he feels that he is contributing to the family cohesion by brokering. Children who language broker are involved in family decisions at places such as the bank and doctor's office (Love & Buriel, 2007). This kind of authority outside the home may create more problems in the home; the child may undermine their parent's authority and expect more independence at home (Love & Buriel; Unger et al., 2002). This kind of dissonance between independence given outside the home but not inside the home can contribute to more fighting in the family and the lack of cohesion and support.

The hypothesis that having positive feelings towards language brokering would be associated with less mental health difficulties and more prosocial behaviors was not supported. There are other tentative findings of interest, however, mainly that the more psychological difficulties reported by the youth, the less people they language broker for. It is important to consider that because the child has psychological difficulties, she may only broker in situations that she absolutely has to. For example, she may be the only one in the home who knows both English and Spanish and therefore must language broker in the home. The responsibility of language brokering outside the home, however, may not be given because she has psychological difficulties which may impair her ability to language broker for others.

Also of interest are associations found between both mother and father's English language abilities and factors that impact the child's mental health and prosocial behavior. An association with a large effect size between mom's English and more mental health problems was found. Since Mexico is a patriarchal society, the father is the head of the household. If the mother is more proficient in English than the father, this may not fit the expectations of the traditional Mexican family values. This can consequently create a problem between the father and the mother which can in turn create more problems for the child.

Also, to the extent that knowing the language of the host culture can help the individual better assimilate, the mother may have a higher level of acculturation due to her English proficiency, however, still stress the importance of the native culture at home. This dissonance between assimilating to the host culture outside the home, yet separating from the host culture inside the home may create problems for the child. The mother may support the use of English outside the home, but inside the home insist on using the Spanish language. This can confuse the child and make it difficult to find a balance between the native and host cultures. This in turn may result in more psychological difficulties for the child.

The father's ability in English was also marginally associated between both prosocial behaviors and the number of people brokered for. Results of this study suggested that immigrant children may learn to be more social from their fathers. Perhaps because the father may work outside of the home and thus socialize with more people, the child in turn learns from this and exhibits similar behavior. Similarly, this prosocial behavior may help suggest the association between father's English and the number of people brokered for. While the child may not need to broker for his father, the child's inclination to endorse prosocial behavior results in him language brokering for more people.

Regressions

While many factors were found to be significantly correlated with mental health, of particular note is mom's English proficiency. This variable in particular was found to be a very good predictor for youth mental health difficulties. A higher level of English proficiency for the mother may result in more mental health difficulties experienced by the child. This may be due to the value placed on the patriarchal society in Mexican families. The mother knowing more English than the father goes against the normal expectations of the patriarchal society which can result in problems at home and more psychological difficulties for the child.

Likewise, many factors were found to be significantly correlated with prosocial behavior. Three variables in particular were found to be good predictors for youth exhibiting prosocial behaviors: "If there is a disagreement in our family, we try to smooth things over and make peace", "We fight a lot in our family", and dad's level of English. Children can learn from and model after their parents. The child may learn to be more prosocial from his father considering that fathers may work outside of the home more so than mothers. Therefore, the father may have developed more relationships and therefore endorses more prosocial behavior. This kind of behavior can look favorable to the child in which the child endorses these similar behaviors. In a way, brokering for more people is a prosocial behavior. The child may find helping others understand another language to be a rewarding experience. This in turn can lead to the child seeking out more situations that would result in a similar feeling of satisfaction. The child may find that he also finds reward in being more positively social and therefore exhibits these behaviors.

Limitations & Further Research

Since the current study was correlational, it is important to note that results can be interpreted in two ways. The present study was concerned with mental health and prosocial behaviors and so results are interpreted in this manner. Many of the correlations were stated as an association between a variable and mental health and similarly, an association between a variable and prosocial behaviors. This suggests that the variable had an impact on the child's mental health and prosocial abilities. However, because it was a correlational study, both mental health and prosocial behavior can have an impact on the variable. It may be that there is an association of prosocial behavior and the variable as well as an association of psychological difficulties and the variable.

Two important issues to consider are experimenter bias and demand characteristics that may have arisen during data collection. In regards to experimenter bias, the experimenter gave alternate definitions for words that participants did not know. This may have skewed participants understanding of questions in a manner that resulted in less consistent responses over the course of data collection. Also, the experimenter would use intonation to help the participants understand the Likert scale answer selections. The experimenter was also trying to develop a rapport with the students in the Adelante program to encourage participation in the study. Consequently, the experimenter tried to make small talk with the children while they filled out the surveys. For example, if the participant answered that they were good at school, the experimenter would often stress to the child that they should continue to keep up their good work. This small talk may have skewed the participants to choose answers that made them seem more favorable in the eyes of the experimenter. Also, considering the experimenter was Caucasian and spoke only English to the participants, demand characteristics may have resulted which would also result in less accurate and reliable data. The setting in which participants took

the surveys, and the level of privacy in which they were administered also poses a problem. No control setting was used and the level of privacy varied with each participant. Some of the participants filled out the surveys with their friends sitting beside them and sometimes it was only the experimenter and the participant. Demand characteristics may have also occurred for the participants who took the surveys with their friends.

It is also important to note that there may have been a sampling bias. While the Adelante program is offered to everyone with a background different from the American culture, not everyone who meets this criterion takes advantage of the program. It is uncertain how many students who do meet this criterion do not attend. The overall sample available at Adelante of youth with Mexican descent was biased as well as those who chose to participate in the current study. Similar to the demand characteristics as a result of the experimenter, there may have been demand characteristics to appease the Adelante program coordinators. This may have occurred because the coordinators made house visits and phone calls to recruit parents to participate in the study.

The major limitation of this study was the small sample size. Perhaps with a larger sample size, variability of responses would have improved. Increasing the sample size may have improved the likelihood of finding significance as well. Due to these limitations the findings of the present study can only describe the population at hand. A larger sample size would allow the findings of the study to be further generalized.

For further research, the sample should include the parents or primary caregiver of the immigrant youth. Including the parents would allow for their acculturation levels to be assessed as well as the responses on the family environment scale. Correlations could then be run to see if there is an association between the acculturation levels of the parent and the child. Also,

including the responses of the primary caregiver along with the child's responses would give a better representation of the family environment. Including a control sample, in which the demographic characteristics of the immigrant child would be matched to a nonimmigrant child, could help the validity of the results. Using a control group would allow the study to investigate if some of these problems (mainly mental health and prosocial behaviors in relation to the family environment) are faced in nonimmigrant populations as well.

Although the present study focused on language brokering, an aspect of being bilingual, it would be beneficial for further research to explore the bilingualism and the role it plays in the child's acculturative process. For instance, it would be helpful to assess which language is often spoken in the home as well as attitudes that both the parent and the child have in regards to being bilingual. These attitudes could be assessed to determine if positive or negative attitudes serve as variables for predicting prosocial behavior or psychological difficulties.

References

- Baptiste, D. A. (2005). Family therapy with East Indian immigrant parents rearing children in the United States: Parental concerns, therapeutic issues, and recommendations. *Contemporary Family Therapy, 27*, 345-365. doi: 10.1007/s10591-005-6214-9
- Berry J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations, 29*, 697-712. doi: 10.1016/j.ijintrel.2005.07.013
- Buriel, R., Calzada, S., & Vasquez, R. (1982). The relationship of traditional Mexican American culture to adjustment and delinquency among three generations of Mexican American male adolescents. *Hispanic Journal of Behavioral Sciences, 4*, 41-55.
- Céspedes, Y. M., & Huey S. J. Jr. (2008). Depression in Latino adolescents: A cultural discrepancy perspective. *Cultural Diversity and Ethnic Minority Psychology, 14*, 168-172. doi: 10.1037/1099-9809.14.2.168
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd edition). Hillsdale, NJ: Erlbaum.
- Fandrem, H., Sam, D. L., & Roland, E. (2009). Depressive symptoms among native and immigrant adolescents in Norway: The role of gender and urbanization. *Social Indicators Research, 92*, 91-109. doi: 10.1007/s11205-008-9291-y
- Fosados, R., McClain, A., Ritt-Olson, A., Sussman, S., Soto, D., Baezconde-Garbanati, L., & Unger, J. B. (2007). The influence of acculturation on drug and alcohol use in a sample of adolescents. *Addictive Behaviors, 32*, 2990-3004.
- Goodman, R. (1997) The strengths and difficulties questionnaire: A research note. *Journal of Child Psychology & Psychiatry, 38*, 581-586.

- Hovey, J. D., & King, C. A., (1996). Acculturative stress, depression, and suicidal ideation among immigrant and second-generation Latino adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 35*, 1183-1192.
- Kim, S., Chen, Q., Li J., Huang, X., & Moon, U. (2009). Parent-child acculturation, parenting, and adolescent depressive symptoms in Chinese immigrant families. *Journal of Family Psychology, 23*, 426-437. doi: 10.1037/a0016019
- Lee, J. K., & Green, K. (2010). Acculturation processes of Hmong in Eastern Wisconsin. *Hmong Studies Journal, 11*, 1-21.
- Love, J. A., & Buriel, R. (2007). Language brokering, autonomy, parent-child bonding, biculturalism, and depression. *Hispanic Journal of Behavioral Sciences, 29*, 472-491. doi: 10.1177/0739986307307229
- Mio, J. S., Barker-Hackett, L., & Tumambing, J. (2009). *Multicultural psychology: Understanding our diverse communities*. New York: McGraw-Hill Higher Education
- Moos, R. H. (1990). Conceptual and empirical approaches to developing family-based assessment procedures: Resolving the case of the family environment scale. *Family Process, 29*, 199-208.
- Oppedal, B., Røysamb, E., & Heyerdahl, S. (2004). Ethnic group, acculturation, and psychiatric problems in young immigrants. *Journal of Child Psychology and Psychiatry, 46*, 646-660. doi: 10.1111/j.1469-7610.2004.00381x
- Tecumseh Local School District 2010-2011 School Year Report Card [PDF document]. Retrieved from Ohio Department of Education Interactive Local Report Card Online Website: [http://ilrc.ode.state.oh.us/districts/District_Questions.asp?sel=046243, Tecumseh%20Local,Clark%20County](http://ilrc.ode.state.oh.us/districts/District_Questions.asp?sel=046243,Tecumseh%20Local,Clark%20County)

- Reynolds-Keefer, L., & Johnson, R. (2011). Is a picture worth a thousand words? Creating effective questionnaires with pictures. *Practical Assessment, Research & Evaluation*, 16. Available online: <http://pareonline.net/getvn.asp?v=16&n=8>.
- Roebbers, C. M., & Schneider, W. (1999). Self-concept and anxiety in immigrant children. *International Journal of Behavioral Development*, 23, 125-147.
- Thai, N. D., Connell, C. M., & Tebes, J. K. (2010). Substance use among Asian American adolescents: Influence of race, ethnicity, and acculturation in the context of key risk and protective factors. *Asian American Journal of Psychology*, 1, 261-274. doi: 10.1037/a0021703
- Torres, L. (2010). Predicting levels of Latino depression: Acculturation, acculturative stress, and coping. *Journal of Cultural Diversity and Ethnic Minority Psychology*, 16, 256-263. doi: 10.1037/a0017357
- Tse, L. (1995). Language brokering among Latino adolescents: Prevalence, attitudes, and school performance. *Hispanic Journal of Behavioral Sciences*, 17, 180-193.
- Turjeman, H., Mesch, G., & Fishman, G. (2008). The effect of acculturation on depressive moods: Immigrant boys and girls during their transition from late adolescence to early adulthood. *International Journal of Psychology*, 43, 32-44. doi: 10.1080/00207590701804362
- Unger, J. B., Baezconde-Garbanati, L., Shakib, S., Palmer, P., Nezami, E., & Mora, J. (2004). A cultural psychology approach to “drug abuse” prevention. *Substance Use & Misuse*, 39, 1779-1820.
- Unger, J. B., Cruz, T. B., Rohrbach, L. A., Ribisil, K. M., Baezconde-Garbanati, L., Chen, X., Trinidad, D. R., & Johnson, A. (2000). English language use as a risk factor for smoking

- initiation among Hispanic and Asian American adolescents: Evidence for mediation by tobacco-related beliefs and social norms. *Health Psychology, 19*, 403-410.
- Unger, J. B., Gallaher, P., Shakib, S., Ritt-Olson, A., Palmer, P. H., & Anderson Johnson, C. (2002). The AHIMSA acculturation scale: A new measure of acculturation for adolescents in a multicultural society. *Journal of Early Adolescence, 22*, 225-251.
- Varela, E. R., & Hensley-Maloney, L. (2009). The influence of culture on anxiety in Latino youth: A review. *Clinical Child & Family Psychology Review, 12*, 217-233.
- Vega, W. A., Gil, A. G., Warheit, G. J., Zimmerman, R. S., & Apospori, E. (1993). Acculturation and delinquent behavior among Cuban American adolescents: Toward an empirical model. *American Journal of Community Psychology, 21*, 113-125.
- Wall, J. A., Power, T. G., & Arbona, C. (1993). Susceptibility to antisocial peer pressure and its relation to acculturation in Mexican-American adolescents. *Journal of Adolescent Research, 8*, 403-418.
- Walsh, S., Shulman, S., Bar-On, Z., & Tsur, A. (2006). The role of parentification and family climate in adaptation among immigrant adolescents in Israel. *Journal of Research on Adolescence, 16*, 321-350.

Table 1. *Means, and Standard Deviations of Youth Adjustment Variables*

Youth Adjustment	<i>M</i>	<i>SD</i>
Psychological Difficulties	2.40	.82
Prosocial Behavior	4.50	.64
Assimilation	2.36	1.45
Separation	1.86	1.61
Integartion	3.79	1.58

Note. Items from the Strength & Difficulties Scale were used to compute the Psychological Difficulties and Prosocial Behavior variables.

Table 2. Means, and Standard Deviations of Language Brokering Scale

Language Brokering Scale	<i>M</i>	<i>SD</i>
Dad English Proficiency	3.14	1.10
Mom English Proficiency	2.41	1.02
Total Places Brokered For	3.50	1.51
Total People Brokered For	3.50	1.74
Positive Responses towards Language Brokering	4.36	1.98
Any Negative Responses towards Language Brokering	.36	.50

Note. Items from the Language Brokering Scale were used to compute Dad and Mom English Proficiency variables.

Table 3. *Means, and Standard Deviations of Family Environment Scale*

Family Environment Scale	<i>M</i>	<i>SD</i>
“Family members help and support one another”	4.21	1.05
“We fight a lot in our family”	1.79	1.19
“Family members sometimes get so angry they throw things”	1.36	.93
“There is a feeling of togetherness in our family”	4.21	.97
“If there is a disagreement in our family, we try to smooth things over and make peace”	3.86	1.03
“We really get along well with each other”	4.29	1.14

Table 4. *Correlations between Youth Adjustment & Parents' Level of English Proficiency*

Scale	1.	2.	3.	4.	5.	6.	7.
1. Psychological Difficulties	—				-.30	.51	
2. Prosocial Behavior		—	-.42				.51
3. Assimilation		-.42	—	-.47	-.44		
4. Separation			-.47	—	-.59		
5. Integration	-.30		-.44	-.59	—		
6. Moms' English Proficiency	.51	—				—	
7. Dads' English Proficiency		.51					—

Table 5. *Correlations between Youth Adjustment & Language Brokering*

Scale	1.	2.	3.	4.	5.	6.	7.	8.
1. Psychological Difficulties	_____		.51			-.45		
2. Prosocial Behavior		_____		.51		.50		
3. Moms' English Proficiency	.51		_____			-.36		-.39
4. Dads' English Proficiency		.51		_____		.46	-.36	
5. Total Places Brokered For					_____	.51		
6. Total People Brokered For	-.45	.50	-.36	.46	.51	_____		
7. Positive Responses towards Language Brokering				-.36			_____	
8. Negative Response towards Language Brokering			-.39					_____

Table 6. *Correlations between Youth Adjustment & Family Environment*

Scale	1.	2.
1. Psychological Difficulties	—	
2. Prosocial Behavior		—
3. “Family members really help and support one another”	.83	.85
4. “We fight a lot in our family”		-.56
5. “Family member sometimes get so angry they throw things”	.35	-.36
6. There is a feeling of togetherness in our family”	.30	.50
7. “If there is a disagreement in our family, we try to smooth things over and make peace”	.39	.50
8. “We really get along well with each other”		

Table 7. *Correlations between Family Environment & Feelings towards Language Brokering*

Scale	1.	2.
1. Positive Responses towards Language Brokering	—	
2. Negative Response towards Language Brokering		—
3. “Family members really help and support one another”	.37	
4. “We fight a lot in our family”		.53
5. “Family members sometimes get so angry they throw things”		.54
6. “There is a feeling of togetherness in our family”		-.33
7. “If there is a disagreement in our family, we try to smooth things over and make peace”		
8. “We really get along well with each other”	.46	-.47

APPENDIX A

Please write the answers in the spaces below.

1) Gender: _____

2) Age: _____

3) Grade in school: _____

4) Place of Birth: _____

5) If born outside of this country, age of arrival to the U.S.: _____

6) The country my family is from is: _____

7) How many people live you with at home:

8) Check whom you live with:

a) _____ Biological Mother

h) _____ Brothers(s)

b) _____ Biological Father

i) _____ Grandmother

c) _____ Stepmother

j) _____ Grandfather

d) _____ Stepfather

k) _____ Aunt

e) _____ Mom's Boyfriend/Fiancé

l) _____ Uncle

f) _____ Father's Girlfriend/Fiancée

m) _____ Cousin

g) _____ Sister(s)

n) _____ Other

9) Number of brothers and their ages:

10) Number of sisters and their ages:

11) The language I learned first is: _____

12) The language I learned second is: _____

Acculturation

These questions will ask you to think about your likes and preferences for certain things. I will ask you a question and then you must choose one answer. You have four options to choose from:

- a) The United States*
 - b) The country my family is from*
 - c) Both the United States and the country my family is from*
 - d) Neither the United States nor the country my family is from*
-

Please circle the letter that matches your answer

1) I am most comfortable being with people from:

- a) The United States
- b) The country my family is from
- c) Both the United States and the country my family is from
- d) Neither the United States nor the country my family is from

2) My best friends are from:

- a) The United States
- b) The country my family is from
- c) Both the United States and the country my family is from
- d) Neither the United States nor the country my family is from

3) The people I fit in with best are from:

- a) The United States
- b) The country my family is from
- c) Both the United States and the country my family is from
- d) Neither the United States nor the country my family is from

4) My favorite music is from:

- a) The United States
- b) The country my family is from
- c) Both the United States and the country my family is from
- d) Neither the United States nor the country my family is from

5) My favorite TV shows are from:

- a) The United States
- b) The country my family is from
- c) Both the United States and the country my family is from
- d) Neither the United States nor the country my family is from

6) The holidays I celebrate are from:

- a) The United States
- b) The country my family is from
- c) Both the United States and the country my family is from
- d) Neither the United States nor the country my family is from

7) The food I eat at home is from:

- a) The United States
- b) The country my family is from
- c) Both the United States and the country my family is from
- d) Neither the United States nor the country my family is from

8) The way I do things and the way I think about things are from:

- a) The United States
- b) The country my family is from
- c) Both the United States and the country my family is from
- d) Neither the United States nor the country my family is from

Language Broker Survey

Have you ever had to help someone who could not speak English very well? To help that person, did you have to use your Spanish to tell the person what was said in English? Has there ever been a time where someone could not say something in English so you had to for them? Have you ever had someone tell you something in Spanish that you then had to say in English to someone else? These are examples of interpreting and translating and you may have found yourself in some of these situations. Another name for this is called language brokering.

Here are some more examples of brokering: 1) translating a form brought home from school for your parents who do not know English very well, 2) interpreting what your friends or parents say to a worker at the grocery store, bank, post office, or doctor's office, or 3) writing letters or notes for someone who is unable to or uncomfortable with using English.

I want to find out if you have ever been a language broker, and if so, when and where you had to do this. Please answer the questions below honestly and give as much detail in your answer as you can.

1) Circle how well your **mother** can **speak** in **English**:



Not at all



A little



Somewhat



Well



Very Well

2) Circle how well your **mother** can **listen** in **English**:



Not at all



A little



Somewhat



Well



Very Well

3) Circle how well your **mother** can **read** in **English**:



Not at all



A little



Somewhat



Well



Very Well

4) Circle how well your **mother** can **write** in **English**:



Not at all



A little



Somewhat



Well



Very Well

5) Circle how well your **mother** can **speak** in **Spanish**:



Not at all



A little



Somewhat



Well



Very Well

6) Circle how well your **mother** can **listen** in **Spanish**:



Not at all



A little



Somewhat



Well



Very Well

7) Circle how well your **mother** can **read** in **Spanish**:



Not at all



A little



Somewhat



Well



Very Well

8) Circle how well your **mother** can **write** in **Spanish**:



Not at all



A little



Somewhat



Well



Very Well

Are there any other languages your **mother** knows? If yes, what other language?

9) Circle how well your **father** can **speak** in **English**:



Not at all



A little



Somewhat



Well



Very Well

10) Circle how well your **father** can **listen** in **English**:



Not at all



A little



Somewhat



Well



Very Well

11) Circle how well your **father** can **read** in **English**:



Not at all



A little



Somewhat



Well



Very Well

12) Circle how well your **father** can **write** in **English**:



Not at all



A little



Somewhat



Well



Very Well

13) Circle how well your **father** can **speak** in **Spanish**:



Not at all



A little



Somewhat



Well



Very Well

14) Circle how well your **father** can **listen** in **Spanish**:



Not at all



A little



Somewhat



Well



Very Well

15) Circle how well your **father** can **read** in **Spanish**:



Not at all



A little



Somewhat



Well



Very Well

16) Circle how well your **father** can **write** in **Spanish**:



Not at all



A little



Somewhat



Well



Very Well

Are there any other languages your **father** knows? If yes, what other language?

17) Circle how well **you** can **speak** in **English**:



Not at all



A little



Somewhat



Well



Very Well

18) Circle how well **you** can **listen** in **English**:



Not at all



A little



Somewhat



Well



Very Well

19) Circle how well **you** can **read** in **English**:



Not at all



A little



Somewhat



Well



Very Well

20) Circle how well **you** can **write** in **English**:



Not at all



A little



Somewhat



Well



Very Well

21) Circle how well **you** can **speak** in **Spanish**:



Not at all



A little



Somewhat



Well



Very Well

22) Circle how well **you** can **listen** in **Spanish**:



Not at all



A little



Somewhat



Well



Very Well

23) Circle how well **you** can **read** in **Spanish**:



Not at all



A little



Somewhat



Well



Very Well

24) Circle how well **you** can **write** in **Spanish**:



Not at all



A little



Somewhat



Well



Very Well

Are there any other languages **you** know? If yes, what other language?

25) Have you ever brokered? **Please circle your answer:**

Yes

No

Not sure

26) At what age did you begin brokering?

27) Are you still brokering? **Please circle your answer:**

Yes

No

Not sure

28) If no, at what age did you stop?

29) Why did you stop?

Please circle your answer for questions 30-32.

30) I have 1 brother.

Yes No

31) I have more than 1 brother.

Yes No

32) My brother or brothers language broker.

Yes No Not sure

33) What is the age of your brother(s) who language broker(s)?

Family Environment

These questions will ask you to think about your family. I will read a sentence and your job is to think about how true the sentence is for you. You will be able to choose from 5 answers: Not true, A tiny bit true, Sometimes true, mostly true, or true all the time. Remember that if you do not wish to answer a question you may say, "skip".

Please circle your answer to the questions.

1) Family members really help and support one another.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

2) Family members often keep their feelings to themselves.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

3) We fight a lot in our family.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

4) We don't do things on our own very often in our family.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

5) Family members rarely become angry.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

6) In our family, we are strongly encouraged to be independent.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

7) There are very few rules to follow in our family.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

8) Family members sometimes get so angry they throw things.



Not true



A tiny bit true



Sometimes true



Mostly true



True all the time

9) There is one family member who makes most of the decisions.



Not true



A tiny bit true



Sometimes true



Mostly true



True all the time

10) There is a feeling of togetherness in our family.



Not true



A tiny bit true



Sometimes true



Mostly true



True all the time

11) We tell each other about our personal problems.



Not true



A tiny bit true



Sometimes true



Mostly true



True all the time

12) Family members hardly ever lose their tempers.



Not true



A tiny bit true



Sometimes true



Mostly true



True all the time

13) We are not that interested in cultural activities.



Not true



A tiny bit true



Sometimes true



Mostly true



True all the time

14) There is very little privacy in our family.



Not true



A tiny bit true



Sometimes true



Mostly true



True all the time

15) Everyone has an equal say in family decisions.



Not true



A tiny bit true



Sometimes true



Mostly true



True all the time

16) If there is a disagreement in our family, we try to smooth things over and make peace.



Not true



A tiny bit true



Sometimes true



Mostly true



True all the time

17) Each person's duties are clearly defined in our family.



Not true



A tiny bit true



Sometimes true



Mostly true



True all the time

18) We really get along well with each other.



Not true



A tiny bit true



Sometimes true



Mostly true



True all the time

Strengths & Difficulties

I will read statements and your job is to think about how true the statement is for you. You will be able to choose from 5 answers: Not true, A tiny bit true, Sometimes true, mostly true, or true all the time. Remember that if you do not wish to answer a question you may say, "skip".

Please circle your answer to the questions.

1) I try to be nice to other people. I care about their feelings.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

2) I get along well with my family.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

3) I get a lot of headaches, stomachaches or sickness.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

4) I usually share with others (food, games, pens).

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

5) I get very angry and often lose my temper.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

6) I generally play alone or keep to myself.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

7) I am helpful if someone is hurt, or feeling ill.

- Not true
 A tiny bit true
 Sometimes true
 Mostly true
 True all the time

8) I have hobbies and activities that I enjoy.

<input type="radio"/>				
Not true	A tiny bit true	Sometimes true	Mostly true	True all the time

9) I have good friends.

<input type="radio"/>				
Not true	A tiny bit true	Sometimes true	Mostly true	True all the time

10) I fight a lot.

<input type="radio"/>				
Not true	A tiny bit true	Sometimes true	Mostly true	True all the time

11) I am nervous in new situations.

<input type="radio"/>				
Not true	A tiny bit true	Sometimes true	Mostly true	True all the time

12) I get good grades at school.

<input type="radio"/>				
Not true	A tiny bit true	Sometimes true	Mostly true	True all the time

13) I lie or cheat.

<input type="radio"/>				
Not true	A tiny bit true	Sometimes true	Mostly true	True all the time

14) I have many fears, I am easily scared.

<input type="radio"/>				
Not true	A tiny bit true	Sometimes true	Mostly true	True all the time

15) I like myself.

<input type="radio"/>				
Not true	A tiny bit true	Sometimes true	Mostly true	True all the time

16) I like school.

<input type="radio"/>				
Not true	A tiny bit true	Sometimes true	Mostly true	True all the time