

## The relationship of language brokering to academic performance, biculturalism, and self-efficacy among Latino adolescents.

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**Children who interpret for their immigrant parents are referred to as language brokers. The present study examines the relationship of language brokering to academic performance, biculturalism, academic self-efficacy, and social self-efficacy. The many adultlike experiences of children who broker on a regular basis suggest that their cognitive and socioemotional development may be accelerated relative to children of immigrant families who broker infrequently or not at all. Latino adolescents (n = 122) from immigrant families were participants in the study. Results showed that, as expected, language brokering was positively related to biculturalism, and in turn, both of these variables were positively related to academic performance. In addition, the strongest predictor of academic performance was academic self-efficacy. Results also indicated that, to some degree, language brokering is a gendered activity, with females reporting more brokering than males.**

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The children of immigrant parents are usually the first members of their families to attend school in the United States and receive daily exposure to the English language. Because most Latino immigrant parents do not speak English and live in communities where little English is spoken, they often rely on their children to interpret for them. Tse (1995) refers to these children as language brokers and notes that, unlike formal translators, they sometimes influence the content and nature of the messages they convey between two culturally and linguistically distinct parties. Moreover, given their greater knowledge of U.S. culture relative to their parents, language brokers are often assigned responsibility for making decisions with English-speaking agents that affect their entire family (Buriel & De Ment, 1993; McQuillan & Tse, 1995; Shannon, 1990; Vasquez, Pease-Alvarez, & Shannon, 1994). Thus, as a result of the language-brokering role, traditional intergenerational authority relationships change, and these children become involved in the daily crosscultural transactions between their parents and U.S. society, such as arranging medical appointments, filling out job applications, disputing phone bills and credit card charges, and dealing with schools and the legal system (Olsen & Chen, 1988).

The many adultlike experiences of children who broker on a regular basis suggest that these children's cognitive and socioemotional development may be accelerated relative to children of immigrant families who broker infrequently or not at all. Language brokering often entails transactions that involve adults, which means that language brokers must be able to comprehend, interpret, and translate messages using vocabulary and concepts that are very sophisticated for children of their age (Buriel & De Ment, 1993). These cognitively demanding experiences may directly aid their academic performance as well as give rise to perceptions of academic self-efficacy. Moreover, due to their interactions with adults and professionals, language brokers may develop more mature interpersonal skills that also foster perceptions of social self-efficacy. Finally, to explain U.S. culture and society to their parents, language brokers must develop and maintain sociocultural competencies in both their native culture and Euro-American culture. As a result, their own acculturation style to U.S. society should be more reflective of a bicultural orientation. Because language brokers serve as acculturating agents for their parents, they may also be thought of as "children cultural brokers" (Buriel & De Ment, 1993, p. 1).

In her study of Latino adolescent language brokers, Tse (1995) reported that 50% had grade point averages (GPAs) below 2.5 and that foreign-born students had significantly higher GPAs than did their native-born peers. However, the relationship of language brokering was not directly tested in this study because the correlation of the amount of brokering to students' GPAs was not examined, and the GPAs of brokers were not compared to those of nonbrokers. At least three theoretical perspectives support the hypothesis that language brokers may develop cognitive skills that allow them to perform better in school than their nonbrokering peers. Malakoff and Hakuta (1991) argue that bilingual interpreters, including children, develop greater metalinguistic awareness and complex translation strategies than do monolingual speakers. Also, Krashen's (1985) comprehensible input hypothesis suggests that the school-related vocabulary of language brokers is enriched as a result of prolonged involvement in different brokering situations. Finally, Heath (1986) posits that prior experience in two types of language activities (label quests and meaning quests) and four types of genres (recounts, accounts, event casts, and stories) are required for students to demonstrate the academic, cognitive, and linguistic competencies expected in U.S. schools. Heath implies that the language used in brokering places such as

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banks, health clinics, post offices, and utilities offices differs in structure, vocabulary, and intent from that generally used in the home. Therefore, in the case of language brokers, children who acquire sufficient English competence to act as translators for their parents have opportunities to hear and to speak genres that may not be characteristic of their home language. As a result, language brokers are more likely to do well academically because they learn to master the genres and language skills that are expected for school success.

Bandura (1981, 1997) defines self-efficacy as the extent to which people believe they can perform a behavior to produce a particular desired outcome. Qualitative research with college-age language brokers (Buriel & De Ment, 1993; McQuillan & Tse, 1995) suggests that these students developed a sense of personal empowerment or self-efficacy as a result of their diverse brokering experiences and academic success. These college-age brokers recalled how as children they were motivated to learn English and master academic concepts to help their parents adapt to life in the United States. They also felt that having to negotiate between two adult parties in sensitive conditions, such as disputing phone bills or conveying medical diagnoses, forced them to develop greater competence in interpersonal situations that involve adults. It seems likely, therefore, that children with more extensive brokering experience also develop a greater sense of both academic and social self-efficacy. This is supported by Shannon's (1990) case study of two preadolescent Latino siblings, Adan and Left, who translated for their parents. Shannon reports that during their brokering experiences, they learned how to address professionals, how to behave during professional interactions, and how to competently advocate for their parents and other family members.

Ramirez (1983) defines biculturalism as an integration of the competencies and sensitivities associated with two cultures within a person. Biculturalism represents an optimum cultural adaptation strategy for Latinos and other non-Western immigrant groups who must respond to the often competing demands of two cultural worlds on a daily basis (Harrison, Wilson, Pine, Chan, & Buriel, 1990; LaFromboise, Coleman, & Gerton, 1993; Ramirez, 1983). Buriel (1993a) has shown that among Mexican American children, biculturalism is highest among those from immigrant families. By virtue of translating for their parents, children with more language-brokering experience are likely to exhibit higher levels of biculturalism. These children are also likely to express higher levels of social self-efficacy due to their greater exposure to cross-cultural social interactions. Ramirez and Castaneda (1974) have also theorized that the cognitive integration and synthesis required for biculturalism may also aid students' academic performance. At least two studies with Asian and Latino adolescents have shown a positive relationship between biculturalism and academic performance (Buriel & Luu, 1993; Landsman et al., 1992). Biculturalism is therefore hypothesized to be positively related to academic performance in this study.

This study builds on the earlier work of Tse (1995), who described the nature and extent of language brokering among a sample of Latino adolescents. The present study seeks to extend this work by examining the theoretically derived relationship of language brokering to biculturalism, self-efficacy, and academic performance. Furthermore, gender comparisons were conducted on all variables because previous work on language brokering has not considered the possibility of gender differences in language brokering. Parents' education was also included as a measure of family socioeconomic status.

### Method

#### Participants

The participants were 122 9th- and 10th-grade Latino students (63 females, 59 males) attending a predominantly Latino (80%) high school in eastern Los Angeles County. The average age of the participants was 14.8 years ( $SD = .7$  years). The community served by the high school is predominantly Latino and includes a large immigrant population. As a condition for inclusion in the study, all participants were from immigrant households with foreign-born parents. The nativity of the participants was 15.6% foreign born and 84.4% native born. Among foreign-born participants, the age of arrival in the United States varied from 1 year to 10 years of age, with an average of 4.1 years ( $SD = 2.7$  years). The average length of U.S. residence for foreign born students was 10.5 years ( $SD = 2.6$  years). Students of Mexican descent made up approximately 90% of the sample ( $n = 109$ ). The remaining students had family origins representing Central America (Nicaragua,  $n = 4$ ; El Salvador,  $n = 3$ ; Guatemala,  $n = 1$ ; Panama,  $n = 1$ ), South America (Ecuador,  $n = 2$ ; Chile,  $n = 1$ ), and the Caribbean (Puerto Rico,  $n = 1$ ). All students reported having some brokering experience. The average age when students began brokering was 10.4 years ( $SD = 2.0$  years). It is worth noting that Tse (1995) reported an almost identical

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average age when students began brokering for her sample of high school students ( $M = 10.9$ ;  $SD = 2.96$ ).

### Measures

**Language brokering.** Participants completed a revised version of the language broker scale developed by Tse (1995, in press). The revised scale measures four language brokering dimensions, including (a) persons for whom one has brokered (persons), (b) places where one has brokered (places), (c) things (usually documents) translated (things), and (d) one's feelings about brokering (feelings). The revised scale used in this study included additional questions in all four brokering dimensions that were derived from focus groups with children and adolescents (Buriel & De Ment, 1993). The 10 items in the persons dimension ask participants to indicate on a 4-point scale how often they translate for family members, friends, neighbors, teachers, and strangers. Responses included 1 (never), 2 (a little bit), 3 (a lot), or 4 (always). The places dimension asks respondents to check either yes or no to 12 places where they may have brokered. Because translating in some places is considered to be more difficult than in other places (Buriel & De Ment, 1993), a yes response was weighted on a scale of 1 to 3 by the level of difficulty involved. Thus, for example, a yes response for translating at home was given a score of 1; translating at school was given a score of 2; and translating at the hospital or the doctor's office was given a score of 3. The things dimension asks participants to check either yes or no to 12 things that they may have translated during brokering sessions. Because things translated also vary by level of difficulty, a yes response was weighted on a scale of 1 to 3. Thus, for example, translating flyers left by door-to-door salespeople was given a score of 1; translating phone bills and credit card bills was given a score of 2; and translating insurance forms or rental contracts was given a score of 3. The feelings dimension asks participants to evaluate their feelings about their brokering experiences. The feelings dimension includes 12 items that are scored on a 4-point scale ranging from always to never. A total brokering score was computed by summing participants' scores across the persons, places, and things items because these three dimensions all represent behaviors involved in brokering. The feelings dimension was examined separately because it represents an attitudinal aspect of brokering rather than

**Social self-efficacy.** Focus groups (Buriel & De Ment, 1993) were used to generate items for the social self-efficacy scale. From an initial pool of items, 12 were selected by two judges based on their relevance to social self-efficacy for high school students with language-brokering experience. The role of language broker requires children to act as intermediaries between adults of two different cultural and linguistic backgrounds. In this role, children are likely to develop social interaction skills that impart feelings of self-confidence in managing social interactions. The social self-efficacy items used in this study sought to capture this sense of self-confidence in social interactions with adults and others. The final scale included items such as, "I can usually get people to do what I want," "I can usually get my parents to go along with my point of view, .... I am pretty good at getting people to solve their problems," and "My brothers and/or sisters often come to me for advice." Respondents answered all 12 items on a 4-point scale ranging from 1 (strongly agree) to 4 (strongly disagree). The interitem alpha was .61 for the social self-efficacy scale.

**Academic performance.** Self-reported grades were used to measure students' academic performance rather than actual grades due to school district policies that prohibit the reporting of grades. Self-reported grades were obtained from students' responses to the following question: "What kind of grades do you usually get?" The response categories and the attendant numerical values were: mostly As (9), mostly As and Bs (8), mostly Bs (7), mostly Bs and Cs (6), mostly Cs (5), mostly Cs and Ds (4), mostly Ds (3), mostly Ds and Fs (2), and mostly Fs (1). Previous research that included Latino high school students (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987) has found a strong correlation, .76, between self-reported grades and recorded grades.

**Parental education.** Students reported the highest grade in school completed by their mother and father. A scale with years of schooling ranging from 1 year to more than 17 years was used for students to report their parents' level of education. This grade-by-grade method of measuring parents' education is advantageous because it can detect small differences in years of schooling even within a population having, on average, very limited education. This method of reporting parents' education has been used successfully in previous research with Mexican American parents (Buriel, 1993b). For each student, mothers' and fathers' years of schooling were added and then divided by 2 to derive an average parents' years of schooling score. In cases in which only one parent was present at home, only that parent's years of schooling was used as the schooling score.

**Demographic information.** Students answered a series of questions to collect demographic information about themselves

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and their parents. Student data included gender, age, ethnicity, generation, years living in the U.S., and the age when they began brokering. Parental information included country of origin and years of schooling.

## Procedure

Students were surveyed during science and English classes by a bilingual research assistant. All questionnaires were administered in English. Each student in the class received a questionnaire and responded individually as the research assistant read each question out loud. The majority of students in the classes were Latino but also included a few Asian American students. Only the data for Latino students from immigrant families were analyzed in this study because these students are more likely to be involved in language brokering than later-generation students.

Data were analyzed in three steps. First, t tests were used to compare the brokering scores of males and females to determine if brokering is associated more with one gender. Males and females were also compared on the other variables examined in this study. Second, correlations were computed between all variables in the study to determine if the hypothesized relationships existed. Finally, multiple regression analyses were run to examine the relative contribution of language brokering and the other variables to students' academic performance.

Table 1 presents the means, standard deviations, and correlations for the variables. Gender analyses showed two significant differences. Females had higher total brokering scores (M= 38.9, SD = 14.8) than did males (M= 32.9, SD = 13.9),  $t(120) = 2.27, p [is less than] .05$ . Females also had higher social self-efficacy scores (M = 35.0, SD = 4.2) than did males (M = 32.9, SD = 4.1),  $t(120) = 3.25, p [is less than] .01$ . In addition, there was a trend for females to report higher grades (M = 6.1, SD = 1.5) than did males (M = 5.5, SD = 1.9),  $t(120) = 1.90, p [is less than] .10$ .

Table 1. Correlations Between All Variables

Variable	Mean	Feeling (about brokering)
Total brokering	35.9 (14.3)	.32(****)
Feeling (about brokering)	36.3 (6.0)	
Biculturalism	143.5 (12.3)	
Academic self-efficacy	37.6 (6.2)	
Social self-efficacy	33.9 (4.1)	
Academic performance	5.8 (1.7)	
Parents' education	8.3 (3.6)	

Variable	Biculturalism	Academic Self-Efficacy
Total brokering	.20(**)	.03
Feeling (about brokering)	.24***	.29(****)
Biculturalism		.14(*)
Academic self-efficacy		
Social self-efficacy		
Academic performance		
Parents' education		

Variable	Social Self-Efficacy	Academic Performance
Total brokering	.28(***)	.20(**)
Feeling (about brokering)	.45(****)	.24(***)
Biculturalism	.31(****)	.26(****)
Academic self-efficacy	.40(****)	.48(****)

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Social self-efficacy .33(\*\*\*\*)  
 Academic performance  
 Parents' education

Variable	Parents' Education
Total brokering	-.23(***)
Feeling (about brokering)	-.05
Biculturalism	-.10
Academic self-efficacy	.04
Social self-efficacy	.05
Academic performance	.01
Parents' education	

NOTE: Numbers in parentheses are standard deviations. Significance levels are for one-tailed tests.

(\*) p < .10.

(\*\*) p < .05.

(\*\*\*) p < .01.

(\*\*\*\*) p < .001.

Inspection of Table 1 shows that all the variables were significantly correlated in the hypothesized direction. The only exception was the absence of a significant correlation between total brokering and academic self-efficacy. Parents' education, which was included as a control variable, was not related to any of the variables except total brokering, with which it was negatively correlated.

A stepwise multiple regression analysis was used to examine the relationship of total brokering to academic performance relative to the other variables in the study, including parents' education. Results of this analysis are presented in Table 2 and show that three variables entered the equation. Academic self-efficacy entered in Step 1, followed by biculturalism in Step 2, and total brokering in Step 3. Together, these three variables accounted for 30% of the variance in academic performance. Table 2 also indicates that academic self-efficacy accounted for the majority of the explained variance (23%).

Table 2. Stepwise Multiple Regression Analyses Predicting Students' Academic Performance

Predictor Variable	Step	[Beta]	R Square Change	p
<b>First equation</b>				
Academic self-efficacy	1	.45	.23	.001
Biculturalism	2	.16	.27	.036
Total brokering	3	.15	.30	.049
F(3, 118) = 16.64, p < .001				
<b>Second equation</b>				
Academic self-efficacy	1	.44	.23	.001
Places brokered	2	.20	.29	.015
Biculturalism	3	.14	.31	.089
F(3,118) = 17.64, p < .001				

Although total brokering entered the equation, feelings (about brokering) did not, which suggests that all aspects of the

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brokering experience are not comparably related to academic performance. To explore further the potential differential relationship of the four dimensions of language brokering to academic performance, a second multiple regression analysis was performed in which total brokering was disaggregated into its three behavioral dimensions. In this second analysis, the three behavioral dimensions of total brokering--persons, places, and things--were entered separately in place of total brokering, along with feelings (about brokering) and the other variables included in the first regression analysis. Results of this second analysis are presented in Table 2 and showed three variables in the equation accounting for 31% of the explained variance. Academic self-efficacy entered in Step 1 and accounted for the same amount of explained variance as in the first regression analysis (23%). The language brokering dimension, places, entered the equation in Step 2 and accounted for approximately 6% of the explained variance. Biculturalism entered in Step 3 and accounted for 2% of the explained variance.

### Discussion

This study examined the relationship of language brokering to academic performance as well as to other theoretically related variables among Latino adolescents. Results showed that academic self-efficacy, language brokering, and biculturalism all contributed to the explained variance in academic performance. In addition, female students scored higher in total brokering than did male students.

The findings for the correlational analyses showed that total brokering was related to academic performance, biculturalism, and social self-efficacy. In addition, the affective dimension of the brokering construct, feelings (about brokering), was related to academic self-efficacy as well as to all the other variables in the study. In general, these findings lend support to the validity of the language-brokering construct. The correlation between language brokering and biculturalism and their mutual relationship to social self-efficacy suggest that interpersonal experiences with two languages and two cultures may impart enhanced feelings of self-confidence in social interactions.

In their qualitative study of adults who served as language brokers when they were children, McQuillan and Tse (1995) reported that their respondents did not believe that their brokering experiences had any effect on their academic performance, except to assist them in acquiring better language skills. This may explain why in the present study, total brokering was not correlated with academic self-efficacy. Perhaps the cognitive demands inherent in language brokering initially contribute to academic performance in elementary school, which is the developmental period when most children begin to broker. However, by the time language brokers reach high school (Tse, 1995) and college (Buriel & De Ment, 1993; McQuillan & Tse, 1995), their brokering responsibilities may have become so routine that they attribute their academic performance to other factors, such as personal abilities and motivation. In addition, students who have been overburdened by their brokering responsibilities (Baptiste, 1993) during childhood may have dropped out of school before reaching high school, thus precluding an examination of how their negative brokering experiences may have adversely affected their academic performance and feelings of academic self-efficacy. Although no hypothesis was put forth regarding parents' education, it is worth noting that it was negatively related to total brokering. Immigrant parents with fewer years of schooling may have greater difficulties in cross-cultural interactions and therefore depend more on their children to broker for them. Overdependency on their children to help cope with the acculturation process has been reported as a major source of stress among some adult Latino immigrants (Padilla, Cervantes, Maldonado, & Garcia, 1988).

Results of the first multiple regression analysis showed that academic self-efficacy was the strongest predictor of academic performance, followed by biculturalism and total brokering. These results support the hypothesized direct relationship of these three predictor variables to academic performance. In the second multiple regression analysis, total brokering was disaggregated into its three behavioral dimensions of persons, places, and things. In this second analysis, places entered the equation after academic self-efficacy and was followed by biculturalism. In this second analysis, places explained approximately 3% more variance in academic performance than did total brokering in the first analysis.

Of the three behavioral dimensions of total brokering, places best captures the cognitive demands inherent in language brokering that have implications for school success. This finding is consistent with Heath's (1986) argument that the more opportunities language minority children have to use language in diverse community settings, the greater the likelihood they will develop the linguistic competencies (activities and genres) necessary for school success. Language brokers must not only label and describe things, they must also explain them, ask for clarification, and recognize that what they

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say is not always understood as they intended (Heath, 1986). Therefore, children who broker in diverse settings such as banks, hospitals, stores, churches, and government offices have opportunities to develop more sophisticated language competencies than children who broker only in one setting.

The results of this study also offer further support for the positive role of biculturalism in students' academic performance. Even after accounting for the effects of motivational (academic self-efficacy) and linguistic (total brokering) variables, biculturalism made a unique positive contribution to academic performance. Greater experience, competence, and comfort in two cultures may provide bicultural students with more problem-solving strategies, interpersonal skills, and self-confidence for accessing academic resources at school and in their communities. Bicultural students may feel more at ease interacting with teachers and non-Latino students at school while also being amenable to tutoring Spanish-speaking adults in their community who were educated in Latin America (Tse, 1997). Moreover, bicultural adolescents are better adapted to their dual cultural environment, which minimizes the detrimental effects of acculturation, such as psychosocial and behavioral disorders (Rogler, Cortes, & Malgady, 1991; Szapocznik et al., 1980), that can detract from academic performance.

Females scored higher than males on total brokering, which suggests that language brokering is, to some degree, a gendered activity. Kibria (1993) found that women in Vietnamese immigrant households were often assigned responsibility for interacting with English-speaking institutions to protect males from public embarrassment and feelings of powerlessness. Threats to male pride may discourage some male adolescents from assuming as many brokering responsibilities as their female peers. The more numerous brokering activities of females may contribute to their higher levels of social self-efficacy. Yet, despite differences between females and males in the amount of total brokering, both groups express equal satisfaction with their brokering roles as indicated by the nonsignificant gender difference for feelings (about brokering).

The present study provides support for the construct validity of language brokering by demonstrating its association to other theoretically related variables. Similar to the construct of biculturalism, language brokering implies competencies in two cultural settings, which provide adolescents with greater social and cognitive resources. Language brokering, however, carries with it the added responsibility of serving as a linguistic intermediary between adults from different cultural backgrounds. The stresses attendant with language brokering are therefore likely to be greater than any other stresses that are associated with being bicultural.

### References

- Bandura, A. (1981). Regulation of cognitive processes through perceived self-efficacy. *Developmental Psychology*, 25, 729-735.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Baptiste, D. A. (1993). Immigrant families, adolescents and acculturation: Insights for therapists. *Marriage & Family Review*, 19, 341-363.
- Buriel, R. (1993a). Acculturation, respect for cultural differences and biculturalism among three generations of Mexican American and Euro American school children. *Journal of Genetic Psychology*, 4, 531-543.
- Buriel, R. (1993b). Childrearing orientations in Mexican American families: The influence of generation and sociocultural factors. *Journal of Marriage and the Family*, 55, 987-1000.
- Buriel, R., & De Ment T (1993). Children as cultural brokers: Recollections of college students. Unpublished manuscript, Pomona College, Psychology Department, Claremont, CA.
- Buriel, R., & Luu, N. T. (1993). The relationship of biculturalism and parents' aspirations to Vietnamese- and Mexican American high school students' academic achievement and aspirations. Unpublished manuscript, Pomona College, Psychology Department, Claremont, CA.

## The relationship of language brokering to academic performance, biculturalism, and self-efficacy among Latino adolescents.

Dornbusch, S. M., Ritter, P. L., Leiderman, P. H., Roberts, D. F., & Fraleigh, M. J. (1987). The relation of parenting style to adolescent school performance. *Child Development*, 58, 1244-1257.

Harrison, A. O., Wilson, M., Pine, C. J., Chan, S., & Buriel, R. (1990). Family ecologies of ethnic minority children. *Child development*, 61, 347-367.

Heath, S. B. (1986). Sociocultural contexts of language development. In *Beyond language: Social and cultural factors in schooling language minority students* (pp. 143-186). Los Angeles: California State University, Los Angeles, Evaluation, Dissemination and Assessment Center.

Kibria, N. (1993). *Family tightrope: The changing lives of Vietnamese Americans*. Princeton, NJ: Princeton University Press.

Krashen, S. (1985). *The input hypothesis: Issues and implications*. Torrance, CA: Laredo.

LaFromboise, T., Coleman, H.L.K., & Gorton, J. (1993). Psychological impact of acculturation: Evidence and theory. *Psychological Bulletin*, 114, 395-412.

Landsman, M. A., Padilla, A. M., Leiderman, P. H., Clark, C., Ritter, P., & Dornbusch, S. (1992). Biculturalism and academic achievement among Asian and Hispanic adolescents. Unpublished manuscript, Stanford University, School of Education, Palo Alto, CA.

Malakoff, M., & Hakuta, K. (1991). Translation skill and metalinguistic awareness in bilinguals. In E. Bialystok (Ed.), *Language processing in bilingual children* (pp. 141-166). Cambridge, UK: Cambridge University Press.

McQuillan, J., & Tse, L. (1995). Child language brokering in linguistic minority communities: Effects of cultural interaction, cognition and literacy. *Language and Education*, 9, 195-215.

Olsen, L., & Chen, M. T. (1988). *Crossing the schoolhouse border: Immigrant students and the California public schools*. San Francisco: California Tomorrow Policy Research Report.

Padilla, A. M., Cervantes, R. C., Maldonado, M., & Garcia, R. E. (1988). Coping responses to psychological stressors among Mexican and Central American immigrants. *Journal of Community Psychology*, 16, 418-427.

Ramirez, M. (1983). *Psychology of the Americas*. New York: Pergamon.

Ramirez, M., & Castaneda, A. (1974). *Cultural democracy, bicognitive development and education*. New York: Academic Press.

Rogler, L. H., Cortes, D. E., & Malgady, R. G. (1991). Acculturation and mental health status among Hispanics. *American Psychologist*, 46, 585-597.

Shannon, S. M. (1990). English in the barrio: The quality of contact among immigrant children. *Hispanic Journal of Behavioral Sciences*, 12, 256-276.

Solberg, V. S., O'Brien, K., Villareal, P., Kennel, R., & Davis, B. (1993). Self-efficacy and Hispanic college students: Validation of the College Self-Efficacy Instrument. *Hispanic Journal of Behavioral Sciences*, 15, 80-95.

Szapocznik, J., Kurtines, W. M., & Fernandez, T. (1980). Bicultural involvement and adjustment in Hispanic-American youths. *International Journal of Intercultural Relations*, 4, 353-365.

Tse, L. (1995). Language brokering among Latino adolescents: Prevalence, attitudes, and school performance. *Hispanic Journal of Behavioral Sciences*, 17, 180-193.

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Tse, L. (1997, December 17). A bilingual helping hand. Los Angeles times, p. B7.

Tse, L. (in press). Prevalence of language brokering among linguistic minority students: The case of Chinese and Vietnamese students. Bilingual Research Journal.

Vasquez, O. A., Pease-Alvarez, L., & Shannon, S. M. (1994). Pushing boundaries: Language and culture in the Mexicano community. Cambridge, UK: Cambridge University Press.

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