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Language Brokering Contexts and Behavioral and Emotional Adjustment among Latino Parents and Adolescents

Charles R. Martinez Jr., **Heather H. McClure**, and **J. Mark Eddy**
Oregon Social Learning Center

Abstract

This study examined behavioral and emotional adjustment in family contexts in which there was high versus low demand for adolescents to serve as language brokers in a sample of 73 recently immigrated Latino families with middle-school-aged adolescents. Language brokering was conceptualized as a family process rather than merely an individual phenomenon. Multiple agents were used to assess language brokering and parent and youth adjustment. Results indicated that high language brokering contexts had negative associations with family stress, parenting effectiveness, and adolescent adjustment in terms of academic functioning, socioemotional health, and substance use. The findings are particularly important given the limited and mixed findings from formative research on language brokering, particularly in areas within the United States with emerging immigrant populations. Findings suggest the need for advancing practices that increase language and cultural supports for immigrant families and support parents' efforts to foster positive youth and family adjustment.

Keywords

language brokering; acculturation; Latino families; parenting; adolescent adjustment

Families who immigrate to the United States must navigate a host of complex challenges as they adapt to the demands of life in a new environment. Adaptation to the cultural norms of the U.S. involves a complex and potentially stressful process for families. The process of acculturation begins immediately upon arrival for immigrant families, but operates differently for children and for adults (Martinez, 2006). Children tend to acquire language proficiency in English and acculturate to cultural norms much more quickly than do their parents (Gonzales, Knight, Morgan-Lopez, Saenz, & Sirolli, 2002; Martinez, 2006; Szapocznik, Kurtines, & Fernandez, 1980). As families adapt, many immigrant parents rely on their children (as well as on other more acculturated members of their social networks) to help them function effectively in American society (Santisteban, Muir-Malcolm, Mitrani, & Szapocznik, 2002; Tse, 1995a). Children in these families often become the intermediaries between the cultural and linguistic divides that separate their families from the host culture. Such children, often referred to as "language brokers" in the literature, assist their parents by translating and interpreting, often in complex situations (Tse, 1995a). These situations may include health care visits (Cohen, Moran-Ellis, & Smaje, 1999), parent-teacher conferences (Orellana, Dorner, & Pulido, 2003), and bank transactions (McQuillan & Tse, 1995), among others, where child language brokers bear primary responsibility for facilitating their family's access to valuable services, information, or material resources.

Correspondence concerning this article should be addressed to Charles R. Martinez, Jr., Ph.D., Oregon Social Learning Center, 10 Shelton McMurphey Blvd., Eugene, OR, 97401; (541) 485-2711; (541) 485-7087 (fax); charlesm@oslc.org.

While there is evidence that language brokering is common among recent immigrant families, few studies have systematically examined the effects of language brokering on child and family outcomes (Santiago, 2003; Tse, 1995b; Valenzuela, 1999; Walinchowski, 2001). Most notably, there is little information on the impact of language brokering on the healthy functioning of children and families. Much of the research examines language brokering from the viewpoint of children only, without considering brokering as influencing the more complex family acculturation environment. The present study advances the literature on language brokering among Latin American immigrant families by examining the relationships between family environments that favor or disfavor language brokering and emotional and behavioral adjustment in children and parents.

Based on the literature, we view language brokering as a contextual influence that can impinge on parents' ability to effectively manage the family environment (Cohen et al., 1999; Tse, 1995b;1996b) and increase stress (Parke & Buriel, 1995; Shannon, 1990; Suárez-Orozco & Suárez-Orozco, 2001). Though some studies have documented positive effects of language brokering for children, including the development of strong metalinguistic and interpersonal skills (Malakoff & Hakuta, 1991; Valdés, 2003), increased confidence and maturity (McQuillan & Tse, 1995; Walinchowski, 2001), academic self-efficacy (Buriel, Perez, De Ment, Chavez, & Moran, 1998), and pride at being able to help out their families (DeMent & Buriel, 1999; Tse, 1995a; 1996a; Valdés, Chavez, & Angelelli, 2003), in some instances, parents can become less influential in their role with their children through the brokering process. When family relations become strained due to role reversals between adults and children who broker (Umaña-Taylor, 2003), the ability of parents to effectively do their job as a parent may diminish. Parental disempowerment, especially when combined with children's negative experiences of language brokering (DeMent & Buriel, 1999; Love, 2003; McQuillan & Tse, 1995; Ng, 1998; Valenzuela, 1999; Weisskirch & Alva, 2002) may in turn increase risk for poor outcomes among children.

Studies of language brokering in the U.S. typically define language brokers as children who translate the English language and interpret cultural practices for their parents (Morales & Hanson, 2005). This same practice has also been referred to as "natural translation" (Harris & Sherwood, 1978), "family interpreting" (Valdés, 2003), and "para-phrasing" (Orellana et al., 2003). Each of these terms reflects the abilities of children of immigrants to build their social and linguistic knowledge and to flexibly adapt their skills to the contingencies of different contexts; the term "para-phraser," for instance, reflects the ways children strategically use words for particular purposes (Dorner, Orellana, & Li-Grining, 2007).

The behaviors and consequences of language brokering are complex. Language brokering positions children in very influential roles in families, roles that may or may not be developmentally appropriate (Tse, 1995b). Children who serve as language brokers not only translate and interpret language for their parents, but also may be expected to interpret the often subtle cultural norms that are part of the interactions of families with various social systems. As these children become increasingly powerful cultural agents on behalf of their families, with license to communicate and to speak for their parents, parents may find themselves in more disempowered roles, often deferring to their children when faced with important family decisions (Martinez, 2006; Santisteban et al., 2002; Tse, 1995b). Though some studies indicate that language brokering allows children to establish more trusting relationships with parents (McQuillan & Tse, 1995), in instances of conflict between parents and "government" officials (e.g., an interaction with a police officer that becomes confrontational) children may be placed in the highly stressful position of placating authority figures, serving as their parents' advocates (Orellana et al., 2003), or protecting family members from humiliation by presenting them in a positive light (Valdés et al., 2003).

There is no question that, as Latino immigrant families adjust to the demands of life in the U.S., children from these families are at increased risk for negative behavioral health outcomes including substance use, school failure and dropout, incarceration, and poor physical and mental health (Kandel, 1995; Martinez, Eddy, & DeGarmo, 2003; Pentz, 1995; Wallace, Bachman, O'Malley, & Johnston, 1995). The extents to which language brokering either contributes to these risks or buffers families' abilities to cope with challenging life circumstances have been rarely examined. In this study, we investigated differences in behavioral health adjustment in families structured by different language brokering pressures. Families in which children were bilingual with only monolingual Spanish speaking parent(s) were conceptualized as facing a higher demand for language brokering in comparison with families in which bilingual children had at least one bilingual parent. Of these two groups, families in which at least one parent was bilingual were conceptualized as confronting a comparatively lower demand for language brokering.

Though the language brokering literature addresses children within immigrant families from various countries of origin, the present report focuses on Latino families that include both foreign-born and U.S. born youth. Latinos are the largest racial/ethnic minority group in the U.S. (14.5% of the U.S. population; U.S. Census, 2005). However, data remain limited both on the 40% of Latinos in the U.S. who are foreign born (Pew Hispanic Center, 2007), as well as on behavioral outcomes for children who are themselves immigrants or the children of immigrants. In Oregon, where the present study was conducted, Latinos also comprise the largest racial/ethnic minority group (10% of the population), though, like 21 other states that are currently sites of rapid immigrant population growth, Oregon has limited recent experience with large influxes of immigrant newcomers (Capps & Fortuny, 2006). While many of these 22 states have small foreign-born populations, new immigrant families may oblige existing educational, health and service delivery systems to confront new issues of linguistic access and cultural competency. Data are needed on behavioral outcomes for immigrants who live in places, like Oregon, where the burden of communication with monolingual English speakers is borne predominantly by immigrants and by their children.

Prevalence and Associations with Language Brokering

Language brokering is a common phenomenon among immigrant families. In one small study, Tse (1995a) studied the prevalence of language brokering among foreign-born Latino high school students and found that all participants reported regular brokering. In a review of the language brokering literature, Morales and Hanson (2005) concluded that a majority of immigrant children perform as language brokers, which many children begin brokering as early as one year after their arrival in the U.S., and that language brokering typically begins when children are in elementary school.

Despite the high rate of language brokering behavior in immigrant families, few studies have examined language brokering in relation to behavioral and emotional adjustment within families. In addition, findings from these studies have been inconsistent (Morales & Hanson, 2005). In their study of Mexican immigrants in Chicago, Dorner et al. (2007) found that higher levels of language brokering were significantly linked to better scores on fifth- and sixth-grade standardized reading tests. This study reinforced evidence presented in Orellana et al. (2003) demonstrating a positive relationship between language brokering and reading and math achievement test scores. In her study of Latino high school students, Tse (1995a) reported that a majority (54%) of students said that they liked brokering, nearly half (46%) indicated that they were proud to be brokers, and 31% indicated that brokering made them feel more independent and mature. Weisskirch (2005) showed that sixth-grade Latino students generally reported feeling positive about their brokering and language brokering was associated with more positive ethnic identity and pride. In another study, Buriel et al. (1998) examined the

relationship between language brokering and academic functioning, biculturalism, and self-efficacy among a sample of immigrant Latino adolescents. Findings from that study indicated that language brokering was positively associated with academic self-efficacy. In sum, many studies to date support the potential positive effects of language brokering on children's cognitive, socioemotional and behavioral development.

In contrast, other studies have shown that language brokering can have negative impacts. For example, counter to the findings of Orellana et al.(2003) and Dorner et al. (2007), Umaña-Taylor (2003) observed that children who broker may be at risk for lower academic outcomes. Further, Weisskirch and Alva (2002) showed that fifth-grade Latino children who frequently language brokered were more likely to report feeling more uncomfortable in brokering situations involving parents than infrequent brokers. In addition, frequent brokers reported feeling embarrassed and nervous that their parents were learning English more slowly because of brokering. Other researchers suggest that to the extent that language brokering requires children to take on powerful adult-like roles, it can negatively affect identity development for them and disrupt parenting practices (Martinez, 2006; Morales & Hanson, 2005; Padilla, 2006).

One problem that may, in part, explain incongruous findings related to language brokering effects is that much of the prior research considers language brokering as an individual psychological phenomenon, exerting effects on child adjustment independent of effects on parents and the family environment. In the present study, we regard language brokering and behavioral outcomes as multidimensional processes that occur within multiple social contexts. This approach is in keeping with ecodevelopmental theory adapted by Szapocznik and Coatsworth (1999) and Bronfenbrenner (1979), a theory that has been validated by extensive empirical research among immigrant and ethnic minority populations (e.g. Pantin, Coatsworth, Feaster, Newman, Briones, & Prado, 2003; Prado, et al., 2007; Tapia, Schwartz, Prado, Lopez, & Pantin, 2006). In the present study, we assessed a range of variables to reflect the following interacting spheres of influence on youth development: (a) exosystems, contexts in which the adolescent does not directly participate but that impact important members of the adolescent's life (e.g., immigration and occupation stress variables); (b) mesosystems, contexts involving important members of social worlds in which the youth directly engages (e.g. marital stress, parental depression variables); and (c) microsystems, contexts in which the adolescent directly participates (e.g., youth homework variables and likelihood of substance use).

In addition, this study relies upon social interaction learning theory, as formulated by Patterson and his colleagues (Patterson, 1997; Patterson, Reid, & Dishion, 1992; Reid & Eddy, 1997). This developmental model delineates which risk and protective factors are proximal and which are more distal or indirect influences on negative outcomes for youngsters. Within this theoretical framework, family members are presumed to influence each other's behavior in a bidirectional shaping process (e.g., parent to child and child to parent). These social interactions between parent and child can serve either to amplify and increase tendencies for displays of negative emotional behavior or to dampen them. Child and adolescent adjustment are predicted to be influenced most proximally by parenting practices and most distally by contextual factors. Contextual factors (e.g., SES, family stress, family structure transitions, parental adjustment, genetic factors, neighborhood, marital adjustment, and social support) are thought to exert their effects on youngster adjustment indirectly, through their effects on parenting practices. If one or more negative contexts impinge on a family, many aspects of parenting practices can suffer and the adjustment of children and adolescents can be negatively affected. Thus, the effects of contextual factors on youngsters' adjustment are hypothesized to be mediated by parenting practices. In keeping with this theoretical framework, our inquiry into language brokering and family adjustment also includes an examination of the relationships among brokering and parenting practices.

A regard for language brokering as a dynamic process allows us to better investigate the relationships between brokering on youth and their parents in relation to distinct and embedded social worlds, as well as consider the differences in outcomes for youth and parents within the same social contexts. In this way, brokering might be conceptually viewed as a marker of differential acculturation in families. Differential acculturation refers to differences between parents and children in their levels and rates of acculturation (Kurtines & Szapocznik, 1996; Martinez, 2006; Santisteban et al., 2002). As children acquire language and cultural information at a more rapid pace than their parents, a growing acculturation gap emerges. Families in which children are bilingual with monolingual parents are likely to reflect a more substantial acculturation gap than families in which one or both parents are also bilingual. Studies on differential acculturation have shown that it increases the risk for poor behavioral health outcomes for children and parents in Latino families (Martinez, 2006; Santisteban et al., 2002). A study by Martinez (2006), for example, showed that the larger the acculturation gap among Latino families (i.e., youths' greater U.S. "Americanization" compared to parents), the greater the risk for future substance use among a sample of immigrant Latino families with middle-school aged adolescents. Interestingly, the relationship between differential acculturation and substance use likelihood was mediated by family stress and parenting practices. More studies are clearly needed that describe the dynamic relationships between language brokering and behavioral and emotional adjustment within families.

The geographic areas in which previous studies on language brokering were conducted might also contribute to their mixed results. Immigrant families living in the six U.S. states (i.e., CA, IL, TX, NJ, NY and FL) in which two-thirds of all immigrants reside may benefit from well-established immigrant enclaves, and from the availability of more linguistically and culturally competent services at both the local and state levels (Capps & Fortuny, 2006). As noted above, the present study may have particular ramifications for the 22 states that have been sites of recent rapid immigrant population growth. In these contexts, demands for language brokering behavior may be high due to limited Spanish language support and increase the likelihood that these encounters will be stressful. This stress in turn increases risk for poor outcomes for immigrant parents and for their unique children who help their families interact in two or more different worlds (Morales & Hanson, 2005).

Finally, we conceptualize language brokering as an important component of the much more complex process of acculturation. We do not view brokering as a sole explanatory factor; it clearly cannot be disaggregated from other vital aspects of acculturation, including time in residency as well as the embrace of American activities, values and behaviors and changes in socioeconomic status across time. Instead, we perceive language brokering as one index of this more complex acculturative process and its influences—positive, negative and mixed—that are deeply shaped by social context and by the cultural, economic and political capital of new immigrants themselves.

We also recognize that certain acculturation processes can promote a family environment favoring stress. In this regard, language brokering contexts may serve to signal the potential presence of stressful proximal factors related to conditions of employment, perceived discrimination, persistent poverty, and other components that may contribute to poorer adjustment among youth, parents and families. Thus, we also regard language brokering as an indicator of these broader acculturative and psychosocial processes that may increase vulnerabilities for some families in emerging immigrant communities.

Utilizing data from a sample of recently immigrated Latino youth and their families, we examine three primary research questions:

1. Does the family environment differ in high versus low brokering demand families?

2. Do adolescents in high brokering demand families differ from adolescents in low brokering families in terms of substance use, academic functioning, and emotional and behavioral adjustment?

3. Do parents in high brokering demand families differ from parents in low brokering demand families in terms of parent adjustment and effective parenting behavior?

Method

Overview

The Latino Youth and Family Empowerment (LYFE) Project was designed as a random efficacy trial of a culturally specific parenting training preventive intervention called *Nuestras Familias: Andando Entre Culturas* (*Our Families: Moving Between Cultures*). *Nuestras Familias* was created through a partnership between researchers and lay and professional community members and staff from community-based non-profit organizations. The program was designed for recent immigrant Latino families with children in the sixth through eighth grades, and required the involvement of both parents from two-parent households. For participating stepfamilies, study inclusion criteria required that parents had been in a committed relationship and cohabiting for at least two years, and that each family member viewed the stepfather as having the sole fathering role in the family. Given the prevention focus of the study, families who participated in LYFE were not sampled for risk characteristics. The sample was stratified such that 50% of youth were U.S. born and 50% were foreign born. Results of the main intervention study can be found elsewhere (Martinez & Eddy, 2005). Findings presented here are from analyses conducted with baseline assessment data (i.e., prior to the intervention).

Recruitment

Project staff identified 314 potential participant families during the recruitment phase. Recruitment efforts focused on word-of-mouth and direct person-to-person contacts, each of which has been shown to be particularly effective recruitment strategies for Latino families in our geographic region (Harachi, Catalano, & Hawkins, 1997), as well as paper recruitment methods (e.g., flyers, letters home from school). Project staff also attended and presented at school and community events where families were likely to gather (e.g., school orientations, parent–teacher conferences, Spanish-language church services, social service program meetings, and Latino community social events). Of the potential participants, members of 159 families (51%) agreed to screening and were determined to be eligible for the study (i.e., parents were Spanish-speaking, had a youth in middle school, were in two-parent or established stepfamily households, and both parents agreed to intervention if so assigned). Of the eligible families, 73 families were successfully recruited and participated in baseline assessments, yielding an overall participation rate of 46%.

Participants

Seventy-three mothers, fathers, and focal youths residing in the Eugene-Springfield, Oregon metropolitan area participated in the study. Eighty-two percent of participating families were from two-biological parent families, and 18% were from families that included a biological mother and a stepfather. Of participating youth, 56% were boys and 44% were girls. Youth averaged 12.74 years old at baseline (SD = 1.05). The 50% of youth who were foreign born had lived in the U.S. an average of 6.56 years (SD = 4.56). Mothers averaged 36.38 years old (SD = 5.56) and fathers averaged 39.29 years old (SD = 7.47) at baseline. All participating mothers and all but one participating father were born outside of the U.S, with 90% tracing their origins to Mexico and the remainder tracing their origins to Peru and Central America. Not surprisingly, the two youth nativity groups differed significantly ($p < .01$) in terms of

average parent years in U.S. residency, with the U.S.-born youths having parents who had lived in the U.S. about 6.5 years longer than the parents of foreign-born youths. About 66% of mothers and 78% of fathers had an education level of ninth grade or less, and only about 20% of mothers and 13% of fathers had completed high school and/or received post-secondary education. Parents reported an average annual household income of $21,681 (*SD* = $9,535). Parents also reported an average of approximately 5 people in the household living on that income (*SD* = 1.17) leading to an estimated per capita yearly income of $4,178.

Assessment Procedures

Following recruitment, a bilingual and bicultural professional staff person visited families in their homes to discuss the project, answer questions, and obtain informed consent. All parents provided written consent and youth provided written assent for study participation prior to the assessment. There was a brief assessment training conducted during the home visit, in which families were exposed to a sample questionnaire. We found that such training prepared families for the assessments and minimized potential concerns arising from unfamiliarity with research procedures. Assessments occurred in families' homes or in project research offices. Childcare was provided as needed to assure privacy and freedom from distraction during the assessment. All home visits and assessments were conducted by a professional bilingual and bicultural staff member.

Assessment procedures included interviews with each family participant, self-report questionnaires, and family observations by staff. The LYFE study relied on a measurement strategy that has been extensively developed and refined for use with the Latino population. We incorporated culturally specific and psychometrically validated standardized instruments into the assessment battery (e.g., Hispanic Stress Inventory [Cervantes, Padilla, & Salgado de Snyder, 1991], Multigroup Ethnic Identity Measure [Phinney, 1992], Biculturalism Scale [Szapocznik et al., 1980]). In addition, we conducted minor revisions of some instruments which have been commonly used and validated in prior research, and developed new instruments to assess key aspects of Latino families' interactions with various social systems. For non-standardized instruments that were available only in English, we utilized a formal translation process to assure the functional equivalence and comprehensibility of the assessment measures (Brislin, 1986; Cauce, Coronado, & Watson, 1998; Foster & Martinez, 1995). The translation process involved having our translation team perform initial typographical and functional translations in Spanish, using outside experts to conduct back translations into English, and having the entire team compare the two documents and resolve disagreements. Finally, we piloted and refined the assessment procedures to make them culturally appropriate for participating families. All participants received compensation, and transportation and childcare were made available. Most assessment measures were orally administered to participants because of literacy issues. Participants were given the option of having the interview conducted in English or Spanish. All but one (99%) of the parent assessments were conducted in Spanish, while 33% of youth assessments were conducted in Spanish.

Measures

Language brokering context—While other studies on language brokering often directly assess brokering behavior by asking children about their translation and interpreting behavior, we employed a novel approach in this study. Since our conceptual model views language brokering as a family interactional process, we developed a marker of language brokering that captures language facility among parents and youth. As such, we examined two different family constellations; one that included bilingual children with monolingual Spanish speaking parents (i.e., an environment with potential high demand for language brokering) and one that included

bilingual children with at least one bilingual parent (i.e., an environment with relative low demand for language brokering).

Youth and parents indicated their expressive language facility in response to the question "I am capable of speaking …". Response choices included 1 ("English only"), 2 ("More English than Spanish"), 3 ("Both English & Spanish equally"), 4 ("More Spanish than English") and 5 ("Spanish only"). Youth responses were matched against their parents' responses to the question, "My child can speak …". Only two youth reported they spoke Spanish only, and they were excluded from further analysis due to discrepancies between their self-report and those of their parents. No youth reported speaking English only. Rather, all 71 remaining youth in the current study were classified as "bilingual" based on responses of "2" or "3" on the critical item and based on concordance of the parent report of their children's bilingual status. Parents were classified as either "bilingual" by responding "2" or "3" on the critical item, or were classified as "monolingual Spanish speaking" if they scored a "4" or "5." No parents reported being English speaking only. Families in which adolescents were bilingual and had two monolingual parents were then classified as "high language brokering" (HLB) and families in which bilingual children had at least one parent who was bilingual were classified as "low language brokering" (LLB).

Validity for our categorization of language brokering was examined in a number of ways. Most notably, we examined differences between these two groups in parent and youth response to the 5-point Likert-scale question, "I/my child helps our family by interpreting in various situations (school, post office, with landlord, with service providers, etc.)." As expected, mothers, fathers, and youth in high language brokering demand families all reported significantly more language brokering behavior than mothers, fathers, and youth in low language brokering demand families ($p < .05$ for all comparisons). Further, and as predicted in the introduction, the brokering variable is related to other aspects of acculturation beyond language facility. Mothers in HLB families have lived in the U.S. for significantly less time than mothers in LLB families ($p < .001$). The same pattern is true of fathers ($p < .01$). Fathers in HLB families also report significantly lower degrees of orientation to specific behaviors (e.g., comfort with and use of language, food, and traditions) that are typical of individuals living in the U.S. (i.e., Americanism) than fathers in LLB families ($p < .001$) when their scores are compared on the *Bicultural Involvement Scale* (Szapocznik et al., 1980) (for discussion of the use of this scale as a measure of differential acculturation among Latino families in Oregon, see Martinez, 2006). In contrast, the difference between the average Americanism scores of mothers in the two distinct language brokering contexts only approaches significance.

Family environment measures—Scales were constructed from standardized measures to reflect family stress, parent depression, and marital stress. These measures were developed from mother and father self-report on the immigrant version of the Hispanic Stress Inventory, which is a widely used and psychometrically supported measure of stress frequency and appraisal for Latinos (Cervantes et al., 1991). The measure includes five subscales that assess: (a) family cultural stress (e.g., "I have felt that being too close to my family interfered with my own goals"; "Because we have different customs, I have had arguments with other members of my family"); (b) marital stress (e.g., "It has been difficult for my spouse and me to combine Latino and American culture"; "My spouse has expected me to be more traditional in our relationship"); (c) occupational stress (e.g., "I have been criticized about my work"; "Because I am Latino, I have been expected to work harder"); (d) parenting stress (e.g., "I have thought my children want their independence before they are ready"; "Because of American ideas about children, it has been difficult for me to decide how strict to be with my children"), and (e) immigration stress (e.g., "I fear the consequences of deportation"; "Because of my poor English people have treated me badly"). Cronbach's alpha reliabilities ranged from .70 to .91 for mother and father scores across the five scales.

Parent depression was measured by parent report on the *Center for Epidemiological Studies Depression Scale* (Radloff, 1977). This 20-item self-report questionnaire focuses on parent's feelings and symptoms of depression. Items are scored on 4-point Likert scales ranging from "Rarely" to "Most or All of the Time." Alpha reliabilities were .84 for mothers and .86 for fathers.

Couple relationship quality was measured by the *Dyadic Adjustment Scale* (Spanier, 1976). This widely used measure of marital adjustment assesses four dimensions of the marital relationship: (a) consensus (e.g., "Handling family matters"; "Ways of dealing with parents or in-laws"; "Career decisions"); (b) cohesion (e.g., "Do you and your mate engage in outside interests together"; "Laugh together"; "Calmly discuss something"); (c) satisfaction (e.g., "Do you confide in your mate"; "How often do you and your partner quarrel"); and (d) affection (e.g., "Demonstrations of affection"; "Not showing love"). For the present study, a global score that combined the four subscales was utilized. The alpha reliability was .92 for mothers and fathers.

Effective parenting scales—Scales from Oregon Social Learning Center (OSLC) researcher developed instruments (i.e., *Parent Interview* and *Family Activities List*) were used to reflect different aspects of effective parenting (see Capaldi & Patterson, 1989). Scales analyzed in this investigation included: (a) *general parenting*, which averaged eight items reflecting general past month use of effective parenting strategies with the focal youth (e.g., "Communicating calmly and clearly with the youth when there was a disagreement", "Negotiating emotional conflicts and working toward solutions", "Being consistent with discipline, and following through with consequences"); (b) *positive involvement*, which summed 21 items reflecting whether parents had engaged in a variety of positive activities with the target youth during the past week (e.g., "Give him/her hug or kiss", "Play game with him/her"); (c) *appropriate discipline*, which averaged 12 items reflecting the effective use of specific limit-setting strategies in response to youth misbehavior (e.g., "Restricting privileges", "Giving a timeout", "Giving extra chores"); (d) *monitoring*, which averaged 12 items assessing parent supervision and tracking of the youth's activities (e.g., "Knowing what the youth is doing, who they are with"); (e) *skill encouragement*, which averaged eight items reflecting the frequency of specific positive responses when the youth engaged in prosocial behavior (e.g. "Giving extra privileges", "Praising youth", "Offering small rewards"); (f) *homework engagement*, which summed 16 items indicating whether parents engaged in specific activities to help the focus youth complete homework (e.g., "Establishing a specific time or place for homework completion", "Helping youth when he or she is stuck", "Verifying homework completion", "Providing sanctions for incompletion"); (g) *monitoring of school work*, which summed 10 items reflecting whether the parent knew about schoolwork activities such as youth performance in specific subjects, homework completion, homework quality, and homework interest; and (h) *school involvement*, which summed six items relating to parents' contact with school personnel and engagement in school-based activities. Scale alphas ranged from .67 to .87 for mothers and fathers across these eight scales.

Adolescent Outcomes—Scales were developed from child and averages of mother and father report data to assess youth academic functioning, socioemotional adjustment, and substance use. *Academic functioning* was assessed on individual items reflecting parents' average evaluations of their child's performance in language arts, history/social studies, math, and science, as well as two questions reflecting homework completion and homework quality. All item responses were on 5-point Likert scales with higher scores reflecting better academic performance.

Adolescent socioemotional adjustment was measured through mother and father reports on the broadly utilized *Child Behavior Checklist* (Achenbach, 1992). *Internalizing* and *externalizing* standardized t-scores were used for the present analysis.

Adolescent depression was measured by responses to the *Child Depression Inventory* (Kovacs, 1985), which is a well known standard measure of youth depression. The scale is a summative index of 27 items reflecting various dimensions of depression. The scale alphas were .87 for youth who chose to be assessed in English, and .80 for youth who chose Spanish.

Youth confidence—Youth rated their confidence level from 1 ("not at all confident") to 5 ("very confident") in response to six questions regarding their physical appearance, ability to do well in activities, make friends, do their schoolwork well, ability to cooperate with adult expectations, and expectation that they would become a successful adult. An average score was calculated from all six items. The scale alphas were .84 for youth who chose to be assessed in English, and .77 for youth who chose Spanish.

Youth ethnic identity—Youth responded to 21 items (scale range = 1 to 4) on the *Ethnic Identity Measure* (Phinney, 1992) regarding their feelings about their ethnicity and other members of their self-identified ethnic group. We created two factors (Roberts, Phinney, Masse, Chen, Roberts, & Romero, 1999) with the first composed of the average of five items relating to youth ethnic identity search, and the second comprised of the average of seven items relating to affirmation, belonging and commitment to their ethnic group. For youth who chose the English language assessment, scale alphas were .71 and .88 for factors one and two, respectively. For youth who chose the Spanish language assessment, scale alphas were .74 and .94 for factors one and two, respectively. Ethnic identity is considered an aspect of self-concept that has been shown to positively relate to psychological well-being and, further, to potentially protect individuals from risk (Umaña-Taylor & Updegraff, 2007).

Likelihood of substance use—This outcome measure was indicated by youth self-report on scales that assessed future likelihood of using tobacco, alcohol, and any substance. The three scales each averaged two Likert-scale items (scale range = 1 to 5) reflecting: (1) the likelihood of using that substance within the next 12 months, and (2) the likelihood of using that substance if offered by a best friend. For youth who chose the English language assessment, the individual items were correlated between .92 and .96 within the three scales. For youth who chose the Spanish language assessment, the individual items were correlated between .86 and .99 within the three scales. Items reflecting intention to use drugs have been shown to be highly correlated with and proximal to actual substance use among youth and have the added advantage of increased item variance (Petraitis, Flay, & Miller, 1995; Trudeau, Spoth, Lillehoj, & Redmond, 2003).

Results

Analytic Strategy

ANOVAs were conducted to examine the potential effects of conceptually relevant covariates including youth gender, nativity, socioeconomic status (a z-score created from household income and averages of parent education and occupation) and family structure (step-families versus two biological parent families). Neither gender, nativity status nor family structure were shown to interact significantly with language brokering demand, though the two language brokering groups were shown to differ by SES, $F(1, 71) = 6.14$, $p < .05$. In follow-up ANCOVAs involving key study dependent variables with SES entered as a covariate, however, SES did not account for a significant proportion of the variance in dependent variables.

While the use of MANCOVA to examine our main research questions would be desirable, we decided that this approach was problematic. Our modest sample size limited the types of analytic procedures we could use, and missing data and listwise deletion prior to analyses would substantially reduce our sample further. Because of the need for further information about the impact of language brokering on children and families, we elected to employ an exploratory strategy that maximized our sample size. Independent sample t-tests were conducted to examine differences in adjustment between families in high language brokering environments (i.e., bilingual adolescents with monolingual parents, n = 48) and those in low language brokering environments (i.e., bilingual adolescents with at least one bilingual parent; n = 23). In cases when the normal theory assumption of equal variances was violated, appropriate corrections were made to the t-values.

Family Environment Outcomes

A variety of differences were detected between high versus low language brokering family contexts in terms of family environment (see Table 1). Fathers in high language brokering environments reported higher levels of depression than fathers in low language brokering environments ($p < .001$). No such differences were detected for mothers. In terms of couple relationship quality, no differences were detected between mothers and fathers in high versus low language brokering environments. On the family stress measures, fathers in the high language brokering environments reported higher levels of immigration stress and occupational stress than fathers in low language brokering environments (both at $p < .05$).

Parenting Outcomes

Parents in low language brokering contexts consistently reported greater parenting effectiveness than those in high brokering contexts, with the exception of mother's school involvement, which was higher among mothers in high language brokering contexts ($p < .05$). Compared to mothers in high language brokering contexts, mothers in low language brokering contexts reported higher levels of general parenting ($p < .05$) and skill encouragement ($p < .05$). Fathers in low language brokering contexts reported higher levels of general parenting ($p < .05$) than fathers in high language brokering contexts. Interestingly, fathers (but not mothers) in low brokering environments reported more positive involvement with their adolescents ($p < .01$), as well as more monitoring ($p < .01$), homework engagement ($p < .05$), and monitoring of schoolwork ($p < .01$).

Adolescent Outcomes

In terms of outcomes for youth, adolescents in low language brokering environments evinced more positive adjustment than those in high brokering environments in a host of areas (see Table 3). For academic functioning, while language brokering demand did not lead to differences in terms of homework completion, parents of adolescents in low brokering environments were more likely to report higher levels of homework quality than those in low brokering environments ($p < .05$). Parents in low brokering environments also reported better academic performance in language arts for their adolescents ($p < .05$) compared to parents in high language brokering environments.

While no differences emerged in adolescents' own report of their depression in the two language brokering contexts, parents in low language brokering contexts did report that their adolescents exhibited less internalizing behavior than parents in high brokering contexts ($p < .05$). No differences in externalizing behavior were detected between the two groups.

Youth confidence did not differ between the two language brokering contexts. Differences between the groups were significant, however, for youth's feelings of ethnic belonging and affirmation ($p < .05$). For this factor, youth in high brokering demand families had lower

average scores suggesting less of a sense of ethnic belonging than among youth in low brokering demand families.

Similar patterns emerged for adolescent substance use. Adolescents in low language brokering environments reported less likelihood of using alcohol ($p < .001$), tobacco ($p < .001$), and all substances ($p < .001$) compared to adolescents in families with high brokering contexts. In a supplemental analysis, we examined whether language brokering contexts differentiated cases of actual substance use initiation in the sample. Of the 10 adolescents who had initiated alcohol or tobacco use in the sample, 80% were living in high language brokering environments.

Discussion

The literature on the effects of language brokering is sparse. The limited research that does exist presents a pattern of mixed results with some studies showing that brokering can enhance children's cognitive ability, school performance, and ethnic identity, while other studies suggest deleterious effects of brokering on children's anxiety, socioemotional adjustment, and parents' effectiveness (Morales & Hanson, 2005; Orellana et al., 2003; Tse, 1995a; Weisskirch, 2005; Weisskirch & Alva, 2002). This investigation furthers this discussion by moving from a consideration of language brokering as an individual psychological phenomenon among children to one that emphasizes the family constellation and regards brokering as a dialectical and dynamic interactional process. Through an emphasis on family process, this study viewed language brokering as a marker of differential acculturation within families. To begin to address the sparse and mixed nature of research on language brokering, this report describes exploratory findings designed to examine specific linkages between high and low language brokering contexts and distinct family contextual factors, academic achievement, socioemotional and behavioral adjustment, and parenting.

Importantly, as mentioned earlier, language brokering serves as a proxy for other complex phenomena, and it is possible that high language brokering families may demonstrate poorer adjustment due to variables not measured in this study. In addition to serving as a marker of acculturation, findings related to brokering may also reflect Latinos' differential experiences of and vulnerability to psychosocial stress (for instance, related to discrimination), which has been shown to influence emotional and behavioral outcomes (Araújo & Borrell, 2006; Landrine, Klonoff, Corral, Fernandez, & Roesch, 2006; Romero & Roberts, 2003; Umaña-Taylor & Updegraff, 2007). Though we relied upon composite variables that contain within them self-report measures of stress—for instance, family stress variables taken from the Hispanic Stress Index—we did not individually investigate relationships among brokering and stress related to variables such as discrimination, under- or unemployment, or poor working conditions, all factors that might contribute to differences between high and low language brokering contexts within Latino families. Rather than obscuring these important stressors, language brokering contexts, as defined in this study, instead may serve to signal the potential presence of stressful proximal factors of conditions of employment, perceived discrimination, persistent poverty, and other components that may relate to poorer adjustment among youth, parents and families.

Higher language brokering contexts—a marker of differential acculturation within and between families, and perhaps of greater vulnerability to psychosocial stressors—are associated in this study with poorer adjustment as perceived in family environments, parenting practices, and measures of adolescent well-being. Contrary to some prior published reports, there was almost no evidence of positive relationships between higher language brokering contexts and healthy adjustment among adolescents and parents, and within the family environment. Rather, families in which children were bilingual with two monolingual Spanish speaking parents reported more paternal depression and stress, and less paternal monitoring,

schoolwork monitoring, homework engagement, and positive involvement, as well as less maternal skill encouragement, than families in which children were bilingual but also had at least one bilingual parent. Similarly, adolescents in high brokering contexts evidenced more negative adjustment in terms of parent report of their homework quality, school performance in language arts, internalizing behavior, and adolescent report of future substance use likelihood than those in low brokering contexts. Adolescents in high brokering contexts accounted for the majority of the cases in which a middle-school adolescent in the sample ever used any substance.

Given the varied nature of language brokering effects from prior studies, how can such consistent evidence in the current study of negative associations between language brokering and behavioral adjustment be explained? Beyond the differences in methods, measures, and definitions of language brokering utilized in this study compared with previous research, another explanation may be found in the larger social context for this study. This study took place in Lane County, Oregon, an environment experiencing rapid sociodemographic growth among Latino immigrants (i.e., more than 200% growth of the Latino population in K-12 schools in the past 12 years; Oregon Department of Education, 2006). Social structure characteristics of the geographic areas in which Latino families reside impact the nature, complexity, and magnitude of potential cultural adaptation strains (Vega & Gil, 1999). Portes and Zhou (1993) refer to the process by which social contexts shape the acculturation experience as segmented assimilation. In geographic regions where significant Latino social, cultural, political, and business enclaves already exist (e.g., South Florida, California, Arizona), maintenance of one's language and culture of origin is possible and functional. In such contexts, the pressures on language brokers are likely to be mitigated in part by the availability of culturally and linguistically appropriate services. However, at present, the Latino community in a state like Oregon has little infrastructure to support a dual cultural society. Throughout Oregon, there are limited resources for non-English speaking individuals and few culturally competent services. The interaction between the sociodemographic picture described above and lack of linguistically and culturally relevant social services can contribute to increased adaptation strain for many Latino families and higher pressure on adolescent language brokers.

Findings from the present study provided some evidence that fathers may be particularly vulnerable to deleterious effects of stressors concomitant with high language brokering environments. Fathers in high language brokering contexts reported higher levels of depression and lower positive involvement, general monitoring, homework engagement, and monitoring of their adolescent's schoolwork than fathers in low language brokering contexts. Interestingly, language brokering context differentiated mothers on just two of the variables, with only one variable reflecting reduced engagement of mothers in high language brokering family contexts. One possibility worthy of further study is the potential that the complex changes in the parenting role that accompanies language brokering may interact with gender role expectations for fathers to protect and lead the family (Santisteban et al., 2002). As such, being forced to cede this role to their child out of necessity in language brokering situations may increase a father's risk for negative emotional and behavioral adjustment.

Intervention and Policy Implications

Findings from this study suggest the value of interventions that address the needs of families in high language brokering contexts. Parents who are less able to effectively navigate the social machinery in communities are likely to feel less influential in their role as parents (Martinez, 2006). As such, effective interventions that empower parents regarding their roles in the family within new cultural contexts may be quite beneficial. The *Nuestras Familias* intervention is a good example; this intervention showed promising effects in terms of improving parenting

practices and youth behavioral health outcomes in a variety of areas including substance use likelihood (Martinez & Eddy, 2005).

As a matter of public policy, these findings provide additional support to research indicating the need to develop and implement programs that are designed to support immigrant families in their adaptation to life in the U.S. (Castro et al., 2006; Maldonado-Molina, Reyes, & Espinosa-Hernández, 2006; Martinez & Eddy, 2005; Pantin et al., 2003; Tapia, Schwartz, Prado, Lopez, & Pantin, 2006). Though this article has focused on language brokering within the family, the process of acculturation is highly complex and involves much more than linguistic development. Interventions to support families encountering a complex array of stressors associated with high language brokering demands also should consider evidence that increasing acculturation can increase the risk for a host of negative outcomes (e.g., Vega, Gil, & Kolody, 2002; Vega, Kolody, Aguilar-Gaxiola, Alderete, Catalano, & Caraveo-Anduaga, 1998). It would be a mistake to conclude that the present findings simply imply that immigrant parents need to learn English more quickly. While parents' linguistic acculturation may help mitigate risks associated with high language brokering contexts, at least in contexts like that in Oregon, risk for other problems often accompany the acculturation process. For this reason, it is important that public policies in schools and other community institutions emphasize the provision of appropriate bilingual and bicultural professional supports to families whose children might otherwise be placed in complex language brokering situations.

Limitations and Future Directions

Findings from the present study have a number of important limitations. First, findings are constrained by low power, which limited our ability to conduct more focused analyses for subgroups based on gender, nativity status, or time in residency. Second, the language brokering variable that we relied upon for our analyses reflects the combined language abilities of family members rather than the amount of language brokering that actually occurs in each family; future studies should more directly measure the frequency and contexts within which children are translating and/or interpreting for their parents. Third, as mentioned earlier, a range of stressors experienced by parents and youth in high language brokering contexts may account in important ways for the strong and positive associations noted in this study between brokering and poorer emotional and behavioral adjustment. While the formative nature of these findings are significant given the gap in the literature on language brokering, a larger sample size would provide an opportunity to model the extent to which language brokering buffers the relationships between the constructs of family environment, parenting practices, and adolescent adjustment.

The generalizability of these findings to other parts of the country should also be carefully considered. As noted above, the social structure characteristics in Oregon differ greatly from those in states with established immigrant populations. To the extent that these findings help shed light on contexts in which language brokering may be particularly risky for families, they may be useful for understanding these issues in other states and communities experiencing rapid growth among emerging immigrant communities. Likewise, the generalizability of these findings to communities that have more widely available bilingual and bicultural support for recent immigrant Latino families may be limited.

As communities work to develop programs that help immigrant families adapt to life in the U.S., more information is needed about the situations that make families vulnerable to negative outcomes. In this paper, we employed a novel approach to examining the relationships among language brokering contexts and behavioral and emotional adjustment among adolescents and within families. We noted strong evidence that high language brokering contexts were negatively associated with family stress, adolescent academic, socioemotional, and substance variables, and parenting effectiveness. It is our hope that these findings can provide direction

for future research, particularly in states with emerging immigrant populations, and that these results can inform the development and testing of new prevention and intervention programs and service delivery systems intended to benefit entire communities in which immigrants are simply the newest members.

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Table 1

Impacts of Language Brokering Contexts on Family Environment

Variables	Range	HBC (*n* = 48)	LBC (*n* = 23)	Difference
		M (SD)	*M (SD)*	*t*
Parent Adjustment				
Mother Depression Score	0–38	12.21 (8.76)	10.43 (9.55)	−.78
Father Depression Score	0–46	10.48 (9.48)	4.70 (3.88)	−3.64***
Global Relationship Quality				
Mother Rating	83–187	160.29 (20.08)	164.74 (13.50)	.96
Father Rating	127–191	164.33 (18.76)	163.74 (18.19)	−.13
Family Stress				
Mother Family Cultural Stress	13–51	16.96 (6.75)	17.13 (9.57)	.09
Father Family Cultural Stress	13–41	14.94 (4.62)	14.23 (2.51)	−.68
Mother Parental Stress	13–40.08	17.38 (5.36)	15.49 (4.13)	−1.50
Father Parental Stress	13–29.25	15.51 (3.78)	14.77 (3.60)	−.78
Mother Marital Stress	16–34	20.25 (4.69)	18.48 (3.93)	−1.56
Father Marital Stress	16–46	19.15 (4.17)	19.50 (6.73)	.27
Mother Immigration Stress	18–59	28.63 (9.20)	26.17 (10.88)	−.99
Father Immigration Stress	18–56	27.27 (8.14)	22.95 (7.66)	−2.10*
Mother Occupational Stress	13–42	18.35 (5.57)	17.83 (6.84)	−.35
Father Occupational Stress	13–42	19.23 (5.95)	16.14 (5.34)	−2.08*

Note. HBC = high brokering context; LBC = low brokering context.

* $p<.05$.

** $p<.01$.

*** $p<.001$.

Table 2

Impacts of Language Brokering Contexts on Parenting

Variables	Range	HBC (*n* = 48)	LBC (*n* = 23)	Difference
		M (SD)	*M (SD)*	*t*
Mother General Parenting	1.4–5	3.44 (.88)	3.97 (.74)	2.51*
Father General Parenting	.6–5	3.21 (1.11)	3.85 (.83)	2.42*
Mother Positive Involvement	2–21	12.40 (4.15)	12.43 (4.13)	.04
Father Positive Involvement	2–21	11.40 (4.85)	14.17 (2.67)	3.11**
Mother Appropriate Discipline	1–4.1	2.79 (.57)	2.97 (.60)	1.24
Father Appropriate Discipline	1.3–4.6	2.42 (.65)	2.70 (.63)	1.66t
Mother Monitoring	2.2–5	4.04 (.58)	4.20 (.39)	1.14
Father Monitoring	2.8–5	4.06 (.57)	4.37 (.35)	2.83**
Mother Skill Encouragement	1–4.6	2.59 (.71)	2.96 (.78)	2.00*
Father Skill Encouragement	1.5–5	2.67 (.75)	2.89 (.54)	1.24
Mother School Involvement	0–6	2.43 (1.52)	1.86 (.64)	−2.14*
Father School Involvement	0–5	1.63 (1.42)	2.15 (1.27)	1.43
Mother Homework Engagement	.3–5.3	2.10 (1.14)	2.46 (1.25)	1.23
Father Homework Engagement	.3–5.3	1.85 (1.00)	2.72 (1.44)	2.63*
Mother Monitoring of Schoolwork	1–5	4.58 (.90)	4.74 (.75)	.72
Father Monitoring of Schoolwork	1–5	4.48 (.97)	4.96 (.21)	3.26**

Note. HBC = high brokering context; LBC = low brokering context.

t $p<.10$.

* $p<.05$.

** $p<.01$.

*** $p<.001$.

Table 3

Impacts of Language Brokering Contexts on Adolescent Outcomes

Variables	Range	HBC (*n* = 48)	LBC (*n* = 23)	Difference
		M (SD)	*M (SD)*	*t*
Academic Functioning				
Homework Completion	2.5–5	4.51 (.75)	4.59 (.72)	.41
Homework Quality	2.5–5	3.84 (.72)	4.26 (.65)	2.37*
Youth Performance in:				
Language Arts	2–5	3.51 (.67)	3.89 (.67)	2.23*
History or Social Studies	2–5	3.41 (.65)	3.63 (.71)	1.32
Math	1.5–5	3.48 (.83)	3.83 (.67)	1.75t
Science	2–5	3.38 (.65)	3.70 (.70)	1.90t
Socioemotional Adjustment				
Child Depression Score	0–31	9.34 (7.24)	7.37 (5.98)	−1.11
CBCL Internalizing	36–70.5	52.64 (8.50)	47.57 (7.03)	−2.48*
CBCL Externalizing	32–68	46.79 (8.21)	45.22 (7.21)	−.79
Youth Confidence	1.5–5	4.10 (.72)	4.11 (.76)	.07
Ethnic Identity Search	1–4	2.58 (.78)	2.87 (.57)	1.79t
Sense of Ethnic Belonging	1–4	3.00 (.90)	3.37 (.66)	1.97*
Likelihood of Substance Use				
Alcohol	1–4	1.41 (.76)	1.00 (.00)	−3.72***
Tobacco	1–4.5	1.45 (.75)	1.04 (.21)	−3.48***
Any Substance	1–3.88	1.37 (.60)	1.01 (.05)	−4.16***

Note. HBC = High Brokering Context; LBC = Low Brokering Context.

t $p<.10$.

* $p<.05$.

** $p<.01$.

*** $p<.001$.