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Psychological Acculturation and Parenting Behaviors in Mexican Immigrant Families

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Abstract

This study examined the relation between mothers' and fathers' psychological acculturation and parenting behaviors in two samples of Mexican immigrant families. The middle childhood sample included 47 mothers, 38 fathers and 46 children in families with children age 9 – 12, and the early childhood sample included 185 mothers and 155 fathers in families with children age 2 – 6. In both samples, compared to families in which fathers reported feeling connected only to Latino culture, fathers who reported feeling connected to both Latinos and Americans engaged in fewer aversive and withdrawn interactions and more warm interactions with children. In families where fathers reported feeling connected to both Latinos and Americans, mothers also engaged in fewer aversive and withdrawn interactions and more warm interactions with children. Results were consistent across the two samples and across different family member reports of parent-child interactions.

Keywords

Acculturation; Mexican immigrant families; mother-child interactions; father-child interactions

In 2012, nearly 25 percent of U.S. children lived in an immigrant family; that proportion has been increasing over time (Migration Policy Institute, 2014b). Although immigrants traditionally moved to a small set of states, immigrants are increasingly moving to new destinations, such as North Carolina (NC). Immigrants made up 7.7% of the population of NC as of 2012, compared to 1.7% in 1990, and Mexicans are the fastest growing immigrant group (Migration Policy Institute, 2014a). Understanding influences on the development of immigrant children, especially in new immigrant destinations such as NC, is crucial to promoting the positive development of children from diverse backgrounds (Crosnoe & Fuligni, 2012).

Immigration leads to acculturation, a process of cultural, behavioral, and psychological change that occurs when individuals from different cultures come into contact. Measures of *psychological* acculturation, in particular, as compared to typically used proxies for acculturation, such as length of time in U.S. or language use, are stronger predictors of respondents' cultural behaviors (Tropp, Erkut, García Coll, Alarcón, & García, 1999). Because parenting behaviors are, in part, culturally determined (Putnick et al., 2012), psychological acculturation may lead to changes in these parenting behaviors, such as warmth, aversiveness, and withdrawal, as immigrant parents interact with others in the new cultural context. Consequences of these changes may or may not lead to positive outcomes

for children, depending on a number of factors such as extent of acculturative stress, the psychological stress of adapting to a new culture, and economic resources (Lara, Gamboa, Kahramanian, Morales, & Hayes Bautista, 2005; Smart & Smart, 1995). Additionally, as family members are interconnected within the family system, acculturation by some family members could alter a family system's dynamics and lead to altered behaviors by other family members. Bidirectional influences within families and the links between family subsystems (e.g., father-child; father-mother) could lead to altered behavior among different family members when one member of the system experiences acculturation.

Little extant research focused on young children has specifically investigated the relations between parents' psychological acculturation and either their own or the other parents' warm, aversive, or withdrawn parenting behaviors. Each of these broad types of parenting behaviors are commonly examined by researchers, because of their strong links with children's adjustment across cultures (Dodge, Pettit, & Bates, 1994; Jones Harden, Denmark, Holmes, & Duchene, 2014; Knox, Burkhart, & Khuder, 2011; Putnick et al., 2015). Further, very few studies have focused specifically on fathers or on mothers and fathers in the same family. This paper begins to fill those gaps in the literature by focusing on the relations of both mothers' and fathers' psychological acculturation to their own warm, aversive, and withdrawn parenting behaviors and the parenting behaviors of the other parent in the family, using two samples of Mexican immigrant families living in a new immigrant destination. The focus of this paper is on families with children in early and middle childhood, two developmental periods that have been understudied in the literature on immigrant families (Chase-Lansdale, D'Angelo, & Palacios, 2007). In both samples, both mothers and fathers provided information about their psychological acculturation, and other family members provided reports about parent-child interactions.

Acculturation and parenting behaviors

Although many researchers have studied many different types of parenting behaviors, warm, aversive, and withdrawn behaviors are commonly examined. Warm behaviors refer to behaviors that are characterized by high levels of affection and positive affect, including hugging, praising, verbally or physically demonstrating love, or engaging in other behaviors that make children feel accepted. Aversive behaviors are sometimes referred to as harsh behaviors and are characterized by hostility and negative affect. They include behaviors such as physical punishment and coerciveness. Withdrawn behaviors refer to behaviors that are characterized by lack of engagement and neglectfulness, including rejection, indifference, and avoidance of interaction. Each of these types of parenting behaviors are commonly studied because they strongly predict child adjustment, across many cultures (Dodge et al., 1994; Jones Harden et al., 2014; Knox et al., 2011; Putnick et al., 2015).

Although the links between warm, aversive and withdrawn parenting behaviors and child adjustment are well established, what is less well understood is the role that parental acculturation may play. Ways of behaving within the family setting and different ways of interacting with children vary by culture (Bornstein & Cote, 2006a; Putnick et al., 2012). When moving to a new country, immigrant parents also undergo a process of acculturation: Contact between two or more distinct cultural groups may lead to a process of change and

adaptation among individuals and groups. As immigrants come into contact with people and institutions in a new cultural context, their sense of belonging, understanding, and comfort may shift from their culture of origin to include more comfort in the new context. These changes can occur across domains, including communication, cultural practices, beliefs, values, and cultural self-identity (Zane & Mak, 2003). Although acculturation was originally conceptualized as a unidimensional process, moving from maintenance of identity in the culture of origin to adaptation to the new culture, it is now commonly understood to be multifaceted, bidirectional, and not necessarily ending with assimilation (Trimble, 2002). Indeed, accumulating evidence suggests that becoming bicultural (or multicultural if more than two groups are involved) is related to better adjustment than identifying either primarily with the culture of origin or the culture of destination (Ferguson, Bornstein, & Pottinger, 2012).

Psychological acculturation might be particularly likely to lead to changes in parenting behaviors such as warmth, aversiveness and withdrawal. Psychological acculturation is defined as “changes in individuals’ psychocultural orientations that develop through involvement and interaction within new cultural systems” (Tropp et al., 1999, pp. 351–352). Acculturation is a key way in which the broader societal context is transferred into the family setting (Gonzales, Knight, Morgan-Lopez, Saenz, & Sirolli, 2002; Liebkind, 2008). As acculturation changes the ways in which parents make sense of information in the new cultural context (Marin & Gamba, 2003), it may alter parents’ interpretations and reactions to extra-familial stressors. For example, Latino immigrants who have spent more time in the U.S. endorsed the use of different problem solving strategies in response to stressors than those who arrived more recently (Marin & Gamba, 2003). Given that high levels of stress are related to lower levels of warm and higher levels of aversive parenting behaviors (Kotchick & Forehand, 2002; Martorell & Bugental, 2006), if psychological acculturation facilitates addressing stressors differently, it may also be related to the same parenting behaviors. Similarly, parents experiencing high levels of psychological distress also display higher levels of withdrawn behaviors (Lovejoy, Graczyk, O’Hare, & Neuman, 2000). As parents become comfortable with the U.S. cultural context, they experience reductions in stress from immigration, which may lead to higher levels of warmth and lower levels of aversiveness and withdrawal. Consistent with this perspective is prior research that has shown that relations between Mexican-immigrant parents’ perceived workplace discrimination, a substantial stressor, and their warm, aversive, and withdrawn parenting behaviors were moderated by psychological acculturation (Gassman-Pines, 2015). Discrimination was not related to parenting behaviors among those with bicultural orientations, but was related to less warmth, more aversiveness, and more withdrawal among those who felt connected to Latino culture only.

Research has also suggested that acculturation and greater social competence with respect to the ability to achieve personal goals in social interaction while maintaining positive relationships with others over time and across situations (Rubin & Rose-Krasnor, 1992) may facilitate immigrants’ parenting if parents are then better understand and negotiate the complex influences on their children in the U.S. context (García Coll et al., 1996; Santisteban & Mitrani, 2003). If parents feel psychologically connected to Latinos but not Anglos/Americans, then this may lead to social isolation from many groups of people and

mainstream institutions. This social isolation may be an additional source of stress that exacerbates how families address other stressors and leads to lower levels of warmth and higher levels of aversiveness and withdrawal.

In each of these cases, parenting behavior could change as parents become more bicultural, maintaining identity with their culture of origin but also adapting to the new cultural context. It is also the case that even if parents endorse different parenting behaviors as they become more biculturally oriented, that does not mean that they have given up their Latino cultural values.

There is substantial variety and disagreement in the extant literature about how best to measure acculturation (Basilio et al., 2014; Bornstein & Cote, 2006a). Biculturalism, in particular, is one of the most challenging constructs to measure. Measurement strategies have included measuring connection to the culture of origin and the receiving culture separately, measuring biculturalism as a unique construct, and using the midpoint of a unidimensional scale (Basilio et al., 2014). Each approach has strengths and weaknesses, with little consensus about the single best approach (Arends-Toth & van de Vijver, 2006). For example, unidirectional and bidirectional measures are highly related (Cuellar, Arnold, & Moldonado, 1995), and both types of measures have good psychometric properties (Arends-Toth & van de Vijver, 2006). In the present study we utilized a multi-item scale measuring psychological acculturation (Tropp et al., 1999), as that construct is most closely linked to parenting behaviors. The scale measures biculturalism as the midpoint of a unidimensional scale.

Although the importance of the parent-child relationship and parenting for successful child development is well established (Collins, Madsen, & Susman-Stillman, 2002; Shonkoff & Phillips, 2000), the majority of research on parenting behaviors has focused only on mothers. However, fathers' availability, engagement, and responsibility for children were also related to successful child development across domains (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000; Tamis-LeMonda, Yoshikawa, Kahana-Kalman, Niwa, & Castellano, 2009). In regards to Latino fathers in particular, a recent conceptual paper by Cabrera and Bradley (2012) highlighted the great variation in fathers' parenting among Latinos. Although it has often been assumed that Latino fathers, in particular, may not engage in these positive parenting practices because they are more likely to hold traditional views on family roles that emphasize machismo and the centrality of mothers in childrearing (Campos, 2008), Latino fathers engage in a wide variety of behaviors. Indeed, the concept of machismo itself also has positive attributes, such as fathers being caring, serving as protectors of the family, and being responsible for family well-being (Mayo, 1997; Torres, Solberg, & Carlstrom, 2002). Consistent with the positive aspects of machismo, many Latino fathers both strongly endorse machismo and are also highly engaged and responsive in interactions with their children (Cabrera & Bradley, 2012).

Family systems theory and associations across parents

Familismo, which is defined as a strong orientation towards family, is an important cultural value among Latinos (Harwood, Leyendecker, Carlson, Asencio, & Miller, 2002). Given familismo and the central importance of family and family dynamics in Latino culture,

family systems theory - a useful framework for understanding the complex relationships among family members (Chun, 2006) - provides a framework that allows for the study of acculturation and parent-child interactions within the cultural perspective of Mexican immigrant families. Family systems theory proposes that families are systems that function as a whole (Bowen, 1978; Cox & Paley, 1997, 2003; Kerr & Bowen, 1988). All members of the family are interconnected; interactions between members are influenced by other members, including other members' characteristics, attitudes and behaviors (Hoffman, 1981). The family system also contains important subsystems, such as the couple and parent-child relationships, which are influenced by individuals and other subsystems (Cox & Paley, 1997).

A theoretical perspective grounded in family systems theory suggests that the influence of one parent's acculturation extends beyond that parent, to the other parent's interactions with the child. First, family systems reorganize and adapt over time in response to transitions. As these processes occur, the individuals and subsystems embedded within the family system are influenced (Cox & Paley, 1997). The experience of immigration is a major transition for families, likely leading to a reorganization of the functioning of the entire family system and individuals within that system. As one parent experiences acculturation, this process could be linked to the functioning of other individuals and subsystems in the family. Second, the couple subsystem can influence other subsystems, such as the mother-child subsystem. If couples' relationship quality and functioning are influenced by one partner's acculturation (Chun & Akutsu, 2003), the within-couple change could lead to changes in the relationships between the partners and their children. Finally, parents who work outside the home will be exposed to different social networks than parents who do not. These networks outside the home could lead to acculturation and changes in parenting that are transferred to the non-working parent either directly or indirectly in the family setting. For example, a parent with more connections in the workplace could directly share information about parenting in the U.S. context with the parent who is less connected to networks in the host culture.

Empirical studies of acculturation and parenting behaviors

Parental acculturation and parents' own behaviors

When prior researchers used language and generational status as proxies for acculturation, their results showed that Mexican-immigrant mothers with better English skills and higher generational status displayed more sensitive and responsive interactions with their infants (Cabrera, Shannon, West, & Brooks-Gunn, 2006) and higher levels of dyadic mutuality and warmth with their 15-month-olds (Ispa et al., 2004), compared to mothers with fewer English skills and more recent generation of immigration. Similarly, fathers with more English skills were engaged in more infant caregiving and play activities than fathers with fewer English skills (Cabrera et al., 2006; Capps, Bronte-Tinkew, & Horowitz, 2010). Other researchers focused on families with children in middle childhood and found that mostly Mexican-immigrant mothers with better English skills and higher generational status used fewer psychological control strategies with their children and were less likely to spank their children (Buriel, Mercado, Rodriguez, & Chavez, 1991; Ceballo & Hurd, 2008), compared to mothers with fewer English skills and more recent generation of immigration.

It is important to note, however, that language use and generational status have significant drawbacks as proxies for acculturation (Chun, 2006). Additionally, results were not consistent across parenting behavior measures (Buriel et al., 1991; Ispa et al., 2004) or model specification (Ceballo & Hurd, 2008).

Others utilized multi-item scales to capture Mexican-immigrant mothers' self-reported acculturation, showing that biculturalism was related to less inconsistent discipline with 4th-grade children (Dumka, Roosa, & Jackson, 1997) and less hostile parenting of 5th-grade children (Parke et al., 2004). Dumka et al., however, found no relation between mothers' biculturalism and supportive parenting.

Not all studies examining parental acculturation and parenting behaviors found significant associations with any parenting behaviors (Bornstein & Cote, 2006b; Parke et al., 2004) and some found relations in the opposite direction of the other studies described above.

Researchers using generational status and language as proxies for acculturation have found that Mexican mothers with better English skills and higher generational status provided less cognitive stimulation as children aged from early to middle childhood (Schmitz, 2005) and reported less parental efficacy (Ceballo & Hurd, 2008), compared to mothers with fewer English skills and more recent generation of immigration.

In sum, the results of prior studies have been highly inconsistent, and very little of the research focused exclusively on Mexican-immigrant fathers. Some of the inconsistencies found in studies of both mothers and fathers are likely due to the various measures of both acculturation and parenting used across studies. Given that both acculturation and parenting are multifaceted, uncovering the complex relations among them requires additional research, especially research that incorporates fathers' parenting behaviors.

Parental acculturation and the other parents' behaviors

A very small set of studies has investigated the types of cross-parent relationships suggested by a family systems perspective, where one parent's acculturation is examined as a predictor of the other parent's interactions with the child. In Mexican-immigrant families, researchers who used English proficiency as a proxy for acculturation showed that in families in which mothers had more English skills, fathers engaged in more literacy activities with young children (Cabrera et al., 2006) than in families in which mothers had fewer English skills. Maternal self-reported biculturalism was related to less hostile parenting among fathers of 5th-grade children (Parke et al., 2004). Thus, the limited evidence is suggestive that cross-parent influences may be present and are an important avenue for further study.

Gaps in the literature and current study

In sum, there are a number of gaps in the extant literature. First, studies of acculturation and parenting have focused primarily on mothers, but less so on fathers. Second, very few studies have examined cross-parent relations, despite the fact that a family systems perspective would suggest that such relations are likely. Finally, early and middle childhood continue to be understudied developmental periods in research on immigrant families.

The current study will begin to address each of these gaps. First, this study focuses on the acculturation and parenting behaviors of both mothers and fathers. Second, this study further examines the relations between parents' self-reported psychological acculturation and the other parent's parenting behaviors. Finally, this study uses two different samples of Mexican immigrant families with children in two developmental periods that have been understudied by researchers focused on parental acculturation and parenting behaviors: early and middle childhood. These developmental periods represent times of rapid growth and consolidation in both social and cognitive skills; these also are the periods during which the family is the most central context for development. In addition to addressing these key gaps in the literature, the current study includes additional methodological strengths. In both samples, data were gathered from multiple family members about both parents' behaviors, in order to avoid mono-method bias and to provide a more complete picture of parenting and family context. Additionally, both samples were recruited in the same new immigrant destination, adding to knowledge about Mexican immigrants and acculturation in a context that has not had high levels of immigration historically.

The study investigates two research questions:

1. What is the relation between Mexican immigrant mothers' and fathers' psychological acculturation to their own warm, aversive, and withdrawn parenting behaviors?
2. What is the relation between Mexican immigrant mothers' and fathers' psychological acculturation and the other parent's warm, aversive, and withdrawn parenting behaviors?

Method

Participants

Participants in the present study were originally recruited for two different larger studies taking place in and around Durham, NC. Data in both studies were collected between June 2010 and August 2011. In both larger studies, the focal children were born in the United States but the parents were born in Mexico.

Middle childhood sample—Families in the middle childhood sample were part of an on-going longitudinal study of parenting and child development in diverse families. Detailed information about participant recruitment is available elsewhere (reference removed for blind review). Briefly, initial recruitment letters, in English and Spanish, describing the study and asking parents to return a completed form with their contact information were sent home with students at 15 public and 2 private elementary schools, when children were targeted to be 8 – 9 years old. There was additional outreach to Spanish-speaking families. Because the sample was drawn from a larger study, the recruitment of participants was not designed to generate variability in acculturation. Nevertheless, as described below, the recruitment generated a sample with variability in both mothers' and fathers' self-reported psychological acculturation. In the first year of the study, 53 families of Mexican origin were recruited.

In the third year of the study, 47 mothers, 38 fathers, and 46 youth of Mexican origin were still participating and were included in these analyses (sample sizes reflect participants from 47 families, 89% of the families recruited in year 1).

Early childhood sample—Participants were recruited as part of a larger study of work-family balance in Mexican immigrant families; detailed information about the larger study is available elsewhere (reference removed for blind review). Briefly, recruitment utilized formal institutions (e.g., churches), Latino-serving businesses (e.g., bodegas), and public spaces (e.g., parks). Families had to meet the following eligibility criteria: (a) at least one parent working for pay outside the home; (b) at least one parent born in Mexico; and (c) at least one child between the ages of 3 and 5. If the family had more than one child in the age range, one child was randomly selected to be the focal child about whom detailed information was collected.

186 mothers and 156 fathers initially agreed to participate; 185 mothers and 155 fathers completed at least one of the daily surveys and were included in the present analyses (sample sizes reflect participants from 186 families).

Sample characteristics—The characteristics of the families in the two samples appear in Table 1. Although the two samples were recruited for different larger studies, the two samples are quite similar in terms of demographic characteristics. Across the two samples, parents had similar levels of education, households were of similar size, family structure was similar, and nearly all families were low income, with annual incomes below \$30,000 per year.

Procedures

Middle childhood sample—Interviews were conducted in participants' homes or at another location chosen by the participants. Each family member was interviewed by a different interviewer out of hearing of the other family members. Mothers and fathers chose written or oral questionnaires. All children had questionnaires administered orally. All family members chose whether to complete study materials in English or Spanish (over 90% of mothers and fathers selected Spanish; over 90% of children selected English).

Early childhood sample—At study enrollment, participants completed an in-person background survey. Each parent was asked to complete a short survey at the end of each day for 14 days. Parents chose to complete paper surveys themselves or to answer the survey questions via telephone. All study materials and communication with participants were in Spanish.

Measures

In both studies, we used two teams of bilingual research assistants of varying backgrounds and Spanish-speaking countries of origin. A member or members of the first team translated the English version of the measure into Spanish, and a member or members of the second team translated the measure from Spanish back into English. Discrepancies from the original English translation were discussed and resolved. When available, already translated versions

of the instruments were utilized. All scales were coded so that higher scores indicated a greater amount of that construct. All alphas reported refer to the translated measures.

Parents' psychological acculturation—In both studies, mothers and fathers completed the Psychological Acculturation Scale (Tropp et al., 1999), a 9-item scale that focuses explicitly on psychological aspects of acculturation, including English and Spanish versions provided by the scale's creators. Answers were on a 9-point scale from *only Hispanics/Latinos* to *only Anglos/Americans*; the midpoint of the scale indicated *equally with Hispanics/Latinos and Anglos/Americans*. Regarding the midpoint, the scale's authors state that the likert scale has “a bicultural orientation defining its midpoint” (Tropp et al., 1999, p. 356). Items included, “With which group(s) of people do you feel you share most of your beliefs and values?” and “With which group(s) of people do you feel you have the most in common?” Internal consistency reliability (Cronbach's α) was .88 for mothers and .84 for fathers in the middle childhood sample and .84 for both mothers and fathers in the early childhood sample. Mothers' and fathers' psychological acculturation scores were moderately correlated ($r = .24$ in the middle childhood sample; $r = .12$ in the early childhood sample).

Parenting measures—Although the procedures for measuring parenting behaviors varied across the two studies both studies measured the same three constructs. In the middle childhood study, the Parental Acceptance-Rejection/Control Questionnaire-Short Form (PARQ; Rohner, 2005) measured children's reports about each parent's behavior. Children rated 29 items as 1 = *never or almost never*, 2 = *once a month*, 3 = *once a week*, or 4 = *every day*. Warm parent-child interactions were measured by with the PARQ warmth-affection subscale (8 items, e.g. “My dad makes me feel wanted and needed”). Aversive interactions were measured using the PARQ hostility-aggression subscale (6 items; e.g., “My dad punishes me severely when he is angry”). Withdrawn interactions were measured using the PARQ neglect-indifference subscale. (7 items; e.g., “My mom pays no attention to me when I ask for help”). Internal consistency reliabilities varied but were generally acceptable, especially given the small sample size (Table 2). We retain the one subscale with low reliability (mother's hostility-aggression) for comparison only.

In the early childhood study, mothers and fathers were asked about their own and the other parent's interactions with the focal child each day during the daily data collection period. Parents indicated to whom each item applied: *mother only*; *father only*; *both mother and father*; *neither mother nor father*. Three subscales were created for each parent, using the average of all available daily scores to measure typical parent-child interactions. Warm and aversive interactions were measured with six items each (e.g., “Took his/her frustration out on your child;” “Child and parent laughed often”). Withdrawn interaction was measured with four items (e.g. “Were together but not really interacting”). Scores on each measure range from 0 to 1, with the scores indicating the share of items to which the respondents said “yes,” on average. Thus, higher scores indicate greater typical engagement in those behaviors. All reliabilities were at least .80 (Table 2).

Covariates—Both utilized the same set of covariates for both samples: mothers' and fathers' ages; child gender; and, educational status, measured as the number of years of education completed by the parent with the highest level of education.

Data Analytic Plan

The same models were run separately for the two samples, using all available data. None of the parents were missing data on psychological acculturation, and rates of missing data on the outcome variables were very low. We utilized OLS regression, with the following model:

$$PARENTING = \beta_0 + \beta_1 PSYCHACC + \beta_i COVAR_i + \varepsilon$$

Where *PARENTING* is any given parenting subscale, as reported by a mother, father, or child; *PSYCHACC* is a measure of either mothers' or fathers' psychological acculturation; and *COVAR* is a set of covariates, as described above. To retain as many sample members as possible, separate models were run with mothers' and fathers' psychological acculturation as the main predictor. We report results with *p* values less than .05 as statistically significant. Given that effect sizes may be small and to guard against potential Type II errors, we also report results with *p* less than .10, designated as marginally significant.

Results

Descriptive Results

In both samples, average psychological acculturation scores were relatively low (Middle childhood sample: father *mean(sd)* = 3.30(1.28); mother *mean(sd)* = 3.37(1.50). Early childhood sample: father *mean(sd)* = 2.76(1.24); mother *mean(sd)* = 2.22(1.10)). Because low scores on the measure indicate orientation toward Latino culture and high scores on the measure indicate orientation toward Anglo/American culture, the midpoint indicates equal orientation toward Latino and Anglo cultures. Those scoring at the midpoint of the scale likely have a bicultural orientation, as evidence suggests that the share of individuals who are not connected to either their culture of origin or the receiving culture is very low (Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Indeed, as mentioned above, the authors of the scale indicated that scoring at the midpoint of the scale reflected a bicultural orientation (Tropp et al., 1999). In both samples, observed ranges covered only a portion of the full scale (1–9). In the middle childhood sample, the observed range was 1.0 – 6.3 for fathers and 1.0 – 8.1 for mothers. Only two mothers, however, scored above 5.6. In the early childhood sample, the observed range was 1.0 – 6.1 for fathers and 1.0 – 6.0 for mothers. The distributions were positively skewed for mothers and fathers in both samples. Thus, in the results that follow, the comparisons across different levels of psychological acculturation reflect differences between those who felt most connected to Latinos, and those with a bicultural orientation.

Mothers' and fathers' psychological acculturation and their own parenting

Middle childhood sample—Mothers' psychological acculturation was related to one of the three of the child-reported maternal parenting outcomes, at the marginal level of statistical significance (Table 3). All outcomes were standardized so regression coefficients

can be interpreted as the predicted change in parenting score in standard deviation units for each additional point on the psychological acculturation scale. Higher levels of psychological acculturation reflecting a more bicultural orientation were related to lower levels of neglect-indifference, as reported by children. For each additional point on the psychological acculturation scale, children reported .13 *SD* fewer neglect-indifference behaviors.

Fathers' psychological acculturation was significantly related to child-reported paternal neglect-indifference and warmth-affection. For each additional point on fathers' psychological acculturation scores, child-reported neglect-indifference scores were predicted to decrease by .27 *SD* and warmth-affection scores were predicted to increase by .25 *SD*. Fathers' psychological acculturation was also marginally significantly related to lower levels of child-reported hostility-aggression. The effect size for that association was .26 *SD*.

Early childhood sample—Mothers' psychological acculturation was not significantly related to any of the mother-child interaction subscales, as reported by either mothers or fathers (Table 3). However, fathers' psychological acculturation was related to all three of the father-child interaction subscales. In particular, higher levels of psychological acculturation indicating a more bicultural orientation were significantly related to lower levels of aversive father-child interactions, as reported by fathers, and marginally significantly related to lower levels of withdrawn father-child interactions and higher levels of warm father-child interactions, as reported by mothers. Effect sizes were very similar across outcomes, ranging from .12 to .13 *SD*.

Mothers' and fathers' psychological acculturation and the other parents' parenting behaviors

Middle childhood sample—Mothers' psychological acculturation was significantly related to only one child-reported father parenting behavior, fathers' neglect-indifference, with an effect size of .18 *SD*. In contrast, however, fathers' psychological acculturation was significantly related to child-reported maternal aggression-hostility and neglect indifference, and marginally significantly related to child-reported maternal warmth-affection. Higher levels of father psychological acculturation indicating a bicultural orientation were related to higher levels of maternal warmth, and lower levels of maternal neglect-indifference and aggression-hostility, as reported by children. Effect sizes ranged from .21 to .31 *SD*.

Early childhood sample—Results were highly consistent with those found in the middle childhood sample. In the early childhood sample, mothers' psychological acculturation was not significantly related to any of the father-child interaction subscales, as reported by either mothers or fathers. Fathers' psychological acculturation, however, was related to all three of the mother-child interaction subscales. Higher levels of paternal psychological acculturation indicating a bicultural orientation were significantly related to lower levels of withdrawn mother-child interactions, as reported by mothers, and lower levels of aversive mother-child interactions, as reported by fathers. Higher levels of paternal psychological acculturation indicating a bicultural orientation were also marginally significantly related to lower levels of withdrawn interactions and higher levels of warm mother-child interaction, as reported by

fathers. Effect sizes ranged from .09 to .18 *SD*. Relations with mother-reported aversive and warm mother-child interactions were in the same directions but outside statistical significance.

Robustness checks

We examined four sets of models to test the robustness of our findings (results available from authors). First, any relations between parents' psychological acculturation and their parenting behaviors may be due to omitted variables, rather than to parents' psychological acculturation itself. To address this concern, we included the following additional covariates in our models: family income; number of children in the household; and whether both parents were employed. The results including these additional covariates were substantially similar to those reported above. Second, because the sample size of the subset of families in the middle childhood sample that were from Mexico was small, we ran all of the models for the larger subset of families from Mexico as well as other Central and South American countries. Results were substantially similar to those reported for the Mexican sample. Third, for the subset of families in which both mothers and fathers participated, we ran each regression model including both parents' psychological acculturation as predictors. Results were substantially similar to those reported above. Importantly, differences between fathers and mothers in the relations between psychological acculturation and the parenting behavior outcomes were statistically significant. This increases our confidence that our findings for fathers are distinct. Fourth, because young children's participation in out-of-home child care could be related both to parents' acculturation and parenting behaviors, we included an indicator for the child participating in any type of out-of-home child care in our models for the early childhood sample. Including child care status as a covariate did not alter the results.

Discussion

The current study adds to the literature on parent acculturation in Mexican-immigrant families and its relation to parenting behavior, by focusing on families with children in early and middle childhood and using data from mothers and fathers, and, when possible, children. Results show relations between fathers' psychological acculturation and both their own and the mothers' parenting behaviors. These results align with a family system perspective, which suggests that family members are influenced by other family members, including other members' characteristics, attitudes and behaviors. If fathers with a bicultural orientation experience less stress in navigating the U.S. cultural context, for example, than fathers who are only connected to Latino culture, that reduction in stress may be related to their own parenting, but may also be related to the mothers' parenting, because of the interconnectedness of families. Our results also suggest that the complex interplay of parents' psychological acculturation and their parenting behaviors begins when children are young, during developmental periods when family is the central context for children's development (Bronfenbrenner & Evans, 2000).

The current study finds differences in warm, aversive, and withdrawn parenting behaviors of fathers with bicultural orientations, compared to those with low scores on the psychological acculturation measure, which indicate feeling more connected to, comfortable with, and

understood by Latino culture only. Those with bicultural orientations have more warm and affectionate behaviors, and fewer hostile, and neglectful and indifferent behaviors. These results are consistent with studies that have found relations between Latino fathers' acculturation and their positive engagement with young children (Cabrera et al., 2006; Capps et al., 2010) and with studies showing the beneficial effects of biculturalism (Ferguson et al., 2012). Many Latino fathers typically display warmth and engagement with their children (Cabrera & Bradley, 2012) and becoming more comfortable with the U.S. cultural context may promote even more warmth and engagement, as they experience reductions in stress from immigration. It is also possible that as fathers become more biculturally oriented, the positive aspects of machismo may become more salient, leading to different parenting behaviors. Fathers who have a bicultural orientation may be more aware of the complex influences on their children in the unique U.S. context and may alter their behavior to facilitate child development in the U.S. This may be particularly true in a new immigrant area, because immigrants to such an area may be less likely to live in well-established immigrant enclaves and may need to interact with those of different ethnicities more routinely. Importantly, we note that our results should not be interpreted to indicate that Mexican-immigrant fathers need to become "Americanized" or assimilated in order to display positive parenting behaviors. Rather, we believe that our results are related to the stresses that immigrant parents may face in their new destination. In addition to all of their other family responsibilities, Mexican-immigrant parents have acculturation as an additional change process to contend with, which is not true of non-immigrant parents. Trying to navigate a new culture can create stress and when fathers approach biculturalism, they may experience less stress as their level of comfort and understanding of the new cultural context increases. The resulting reduction in stress may allow parents to focus more on their roles as parents. Maintaining connection to culture of origin is also likely an important factor in facilitating the navigation of these roles in the U.S. cultural context. Since we lack measures of parenting attitudes, beliefs, or behaviors prior to emigration, we do not know if this increase in positive parenting represents a return to previous (pre-emigration) levels, or new developments in parenting behavior. We also note that our findings do not reflect value judgements about parenting among different groups, but are simply descriptive. Descriptive information, however, can help researchers and practitioners better understand and support immigrant families, and design immigration services.

A similar pattern is found between fathers' acculturation and mothers' parenting behavior. Although very little of the extant research has examined cross-parent associations, those studies that have focused on them find links between mothers' acculturation and fathers' parenting behaviors (Cabrera et al., 2006; Parke et al., 2004). In contrast, the present study finds limited evidence that mothers' acculturation is related to fathers' parenting but strong evidence that fathers' acculturation is related to mothers' parenting. When fathers report a bicultural orientation, mothers' parenting behaviors are different, compared to when fathers report a connection only to Latino culture. This is notable because a family systems perspective would suggest that the complex links between family members and subsystems would operate across parents.

In a new immigrant destination, the families' abilities to adapt in response to family members' acculturation experiences is a critical component in their functioning. As fathers

become more comfortable in the U.S. cultural context, they may share information with mothers regarding parenting expectations in the U.S. Mothers may also alter their own behaviors in response to fathers' changing behaviors. Although links may be direct or indirect, these results suggest that acculturation may be best considered holistically in the family context (Chun, 2006).

Uncovering the reasons that fathers' psychological acculturation is related to mothers' parenting behaviors but that mothers' acculturation was not related to fathers' parenting behaviors was beyond the scope of this study. However, there are a number of potential mediating mechanisms that could be considered in future research. First, bicultural fathers may work in more diverse workplaces that lead to different types of cultural contact and acculturation (Helms, Supple, & Proulx, 2011). If fathers learn new information about the U.S. cultural context in those settings, for example, they could share that information with mothers. Second, fathers who are more biculturally oriented may lead them to take on different roles within the family, such as helping mothers within the home. If becoming biculturally oriented led fathers to alter the traditional gender roles, that could lead to improved marital relationship quality and decreased distress among mothers (Helms et al., 2014; Umaña-Taylor & Updegraff, 2013). Mothers who are less distressed are likely to exhibit more positive parenting behaviors than mothers who are more distressed. It will also be important to consider how changes in family subsystems might link fathers' biculturalism with mothers' parenting behaviors (Helms et al., 2011). Such relations could be due to changes in the relationship between father and child, father and mother, mother and child, or some combination of those.

Important to note is the strikingly similar pattern across both samples studied and reports from fathers, mothers, and children. Data from the two samples were collected in the same new immigrant destination during the same time periods, indicating that the broader social context was likely similar for the two samples. The samples also had similar family structures, household compositions, and incomes. As others have noted (Athey & Imbens, 2016; Duncan, Engel, Claessens, & Dowsett, 2014), this type of replication across samples is crucial for advancing scientific inquiry on families.

This study's findings raise important issues relevant to both practice and policy. The inclusion of fathers in research is often undervalued, and in practice, interventions to address child adjustment difficulties in school and in therapeutic interventions often include only the parent most available, often the mother. Our findings show that fathers play an important role in families and greater efforts should be made to include them in such interventions, especially those targeting Mexican-immigrant children. Additionally, with recent focus on federal and state immigration policy in the U.S., there is often strong public opinion in favor of pressuring immigrants to develop a cultural identity most closely resembling assimilation. Our research adds to the growing body of knowledge that, contrary to public opinion, a bicultural orientation might lead to the most positive outcomes for families and children.

Limitations should be noted. First, our acculturation measure is unidirectional, preventing separate queries about connection to each culture. We argue, however, that the largest problem with unidirectional measures is that they imply that assimilation is the most optimal

acculturative state, when evidence suggests that assimilation may confer risks (Greenman & Xie, 2008). In both current samples, however, none of the fathers had acculturation scores that would be suggestive of assimilation. Nevertheless, future research should examine different measures of acculturation. Second, these data are correlational and should not be interpreted as causal. It is possible, for example, that fathers' personality characteristics such as outgoingness or willingness to interact socially, actually lead both to acculturation and warmer parenting. Third, although some research on Latino families suggests that fathers may interact differently with daughters compared to sons (Raffaelli & Ontai, 2004), the small sample sizes utilized in this study prevented us from examining father-daughter and father-son interactions separately.

Despite these limitations, this study provides important information about Mexican immigrant parents' acculturation and parent-child interactions in a new immigrant destination. The findings are consistent across two samples with children in early and middle childhood, broadening the literature on the relation between parents' acculturation and parenting during developmental stages that have been under-represented in the extant literature. Results highlight the complex influences of acculturation on individuals and their family members.

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Table 1

Sample characteristics

	Middle childhood sample	Early childhood sample
Age		
Mother	34.3 (5.1)	31.4 (6.1)
Father	36.3 (5.4)	33.0 (5.7)
Child	10.5 (0.7)	3.9 (0.9)
Child is a girl (%)	52.4	43.0
Years of education		
Mother	9.5 (3.6)	9.0 (3.2)
Father	8.8 (2.8)	8.4 (3.0)
Adults in the household	2.3 (1.0)	2.5 (0.9)
Children in the household	2.8 (1.4)	2.7 (1.1)
Family structure (%)		
Two-parent married	55.3	57.5
Two-parent cohabiting, nonmarried	27.7	37.1
Mother only	14.9	5.4
Father only	2.1	0.0
Family income below \$30,000 per year (%)	80.0	81.6
<i>N (families)</i>	47	186

Note. Mean (*SD*) reported unless otherwise noted.

Table 2

Descriptive statistics: parent-child interaction outcomes

	Middle childhood sample			Early childhood sample		
	Child report			Maternal report		
	Mean	SD	Reliability	Mean	SD	Reliability
Mother-child interactions						
Aversive ^a	1.16	.26	.45	.28	.17	.86
Withdrawn ^b	1.43	.59	.76	.24	.22	.81
Warm ^c	3.70	.43	.78	.90	.11	.84
Father-child interactions						
Aversive ^a	1.12	.26	.70	.10	.11	.84
Withdrawn ^b	1.38	.51	.74	.22	.22	.80
Warm ^c	3.73	.35	.67	.74	.25	.90
<i>N (families)</i>	47			186		

Note. For the mother-child and father-child interaction subscales, all middle childhood sample subscales range from 1 to 4; all early childhood sample subscales range from 0 to 1.

^aRohner Hostility-Aggression subscale in middle childhood sample; aversive daily interactions scale in early childhood sample.

^bRohner Neglect-Indifference subscale in middle childhood sample; withdrawn daily interactions scale in early childhood sample.

^cRohner Warmth-Affection subscale in middle childhood sample; warm daily interactions scale in early childhood sample.

Table 3

Regression results predicting parenting behaviors from parents' psychological acculturation

Outcomes	Predictor: Mothers' psychological acculturation		Predictor: Fathers' psychological acculturation	
	Middle childhood sample	Early childhood sample	Middle childhood sample	Early childhood sample
	<i>b</i> (<i>SE</i>)	<i>b</i> (<i>SE</i>)	<i>b</i> (<i>SE</i>)	<i>b</i> (<i>SE</i>)
Mother-child interactions				
<u>Aversive^a</u>				
Maternal report	--	-.06 (.06)	--	-.08 (.06)
Paternal report	--	.04 (.06)	--	-.13[*] (.06)
Child report	-.09 (.07)	--	-.31[*] (.14)	--
<u>Withdrawn^b</u>				
Maternal report	--	.04 (.07)	--	-.18^{**} (.07)
Paternal report	--	.06 (.08)	--	-.10[†] (.06)
Child report	-.13[†] (.09)	--	-.24[*] (.10)	--
<u>Warm^c</u>				
Maternal report	--	-.02 (.06)	--	.08 (.05)
Paternal report	--	.04 (.07)	--	.09[†] (.05)
Child report	0.04 (.07)	--	.21[†] (.12)	--
Father-child interactions				
<u>Aversive^a</u>				
Maternal report	--	.05 (.07)	--	-.05 (.06)
Paternal report	--	-.02 (.07)	--	-.13[*] (.05)
Child report	-.16 (.12)	--	-.26[†] (.13)	--
<u>Withdrawn^b</u>				
Maternal report	--	.10 (.08)	--	-.12[†] (.07)
Paternal report	--	.07 (.07)	--	-.03 (.06)
Child report	-.18[*] (.08)	--	-.27[*] (.12)	--
<u>Warm^c</u>				
Maternal report	--	-.01 (.06)	--	.06 (.05)
Paternal report	--	-.08 (.07)	--	.13[†] (.07)
Child report	.13 (.11)	--	.25[*] (.12)	--

[†] $p < .10$.^{*} $p < .05$.

^{**}
 $p < .01$.

^a Rohner Hostility-Aggression subscale in middle childhood sample; aversive daily interactions scale in early childhood sample.

^b Rohner Neglect-Indifference subscale in middle childhood sample; withdrawn daily interactions scale in early childhood sample.

^c Rohner Warmth-Affection subscale in middle childhood sample; warm daily interactions scale in early childhood sample.

Note. All outcomes were standardized. Models adjust for child gender, parental age, and parental education.

-- indicates: that outcome not provided by that reporter.