Parent–Child Cultural Orientations and Child Adjustment in Chinese American Immigrant Families

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Direct and indirect/mediated relations of (a) children's and parents' cultural orientations and (b) parent–child gaps in cultural orientations to children's psychological adjustment were examined in a socioeconomically diverse sample of 258 Chinese American children (age = 6–9 years) from immigrant families. Parents reported on children's and their own Chinese and American orientations in language proficiency, media use, and social relationships. Parents and teachers rated children's externalizing and internalizing problems and social competence. Using structural equation modeling, we found evidence for both the effects of children's and parents' cultural orientations and the effects of parent–child gaps. Specifically, children's American orientations across domains were associated with their better adjustment (especially social competence). These associations were partly mediated by authoritative parenting. Parents' English and Chinese media use were both associated with higher authoritative parenting, which in turn was associated with children's better adjustment. Furthermore, greater gaps in parent–child Chinese proficiency were associated with children's poorer adjustment, and these relations were partly mediated by authoritative parenting. Together, the findings underscore the complex relations between immigrant families' dual orientations to the host and heritage cultures and children's psychological adjustment.

Keywords: cultural orientation, child adjustment, immigrant families

Nearly one in four children in the United States under 8 years of age has at least one immigrant parent (Fortuny, Hernandez, & Chaudry, 2010). For children growing up in immigrant families, the process of adaptation to a new culture is accompanied by a host of changes across multiple life domains, which can create both challenges and opportunities for children's psychosocial adjustment (Gonzales, Fabrett, & Knight, 2009). The processes of cultural adaptation often vary among immigrant families and may even vary among members of the same family. Foreign-born immigrant parents and children may *acculturate* by adapting elements of the mainstream, or host, culture. Meanwhile, they may maintain or lose certain elements and practices of their heritage culture. By contrast, for second-generation immigrant children

(i.e., those born in the host country), adapting the family's heritage culture may be a process of *enculturation* rather than maintenance, in which they acquire and adapt elements of their heritage culture (Gonzales, Knight, Morgan-Lopez, Saenz, & Sirolli, 2002; Knight et al., 2009). The variety of processes experienced by immigrant families (e.g., acculturation, enculturation, and cultural maintenance) can be characterized by *cultural orientation*, "the degree to which individuals are influenced by and actively engage in the traditions, norms, and practices of a specific culture" (Tsai & Chentsova-Dutton, 2002, p. 95; Ying, Lee, & Tsai, 2000).

Using a socioeconomically diverse sample of first- and second-generation Chinese American children in early elementary school, the present study examined how children's and parents' orientations to host and heritage cultures in multiple domains relate to children's psychosocial adjustment. We simultaneously tested the relations of children's and parents' own cultural orientations and parent–child gaps in cultural orientations to children's adjustment. In addition to testing the direct relations between cultural orientations and children's adjustment, we tested parenting styles as mediators of these relations.

Cultural Orientations and Child Adjustment in Immigrant Families

Individual Cultural Orientations

Research examining the relations of an individual's cultural orientation and adjustment has yielded two groups of contrasting findings (Takeuchi, Hong, Gile, & Alegría, 2007). First, some findings from primarily adult Asian American immigrant populations suggest that lower acculturation is associated with poorer

psychological adjustment (Suinn, 2010; Wang & Mallinckrodt, 2006; Yeh, 2003). By contrast, the findings from Takeuchi et al. (2007) and others support a *cumulative disadvantage hypothesis*, which proposes that immigrants' adjustment worsens over time as they become more acculturated to the host culture. For example, research comparing immigrant and non-immigrant children has suggested an "immigrant paradox" (Alegría et al., 2008), in which immigrants are often shown to have better outcomes compared to their native-born peers (Fuligni, 1997). Moreover, research focusing on within-group differences among immigrants has shown that immigrants' higher acculturation to the host culture was associated with poorer outcomes, including increased drug and alcohol use (Allen et al., 2008; Hahm, Lahiff, & Guterman, 2004) and higher prevalence of psychiatric disorders (Alegría et al., 2008).

Discrepancies in Cultural Orientations

A second line of investigation has focused on whether poorer child outcomes may be attributed to discrepancies or gaps between parents' and children's cultural orientations (Kwak, 2003; Merali, 2002; Okagaki & Bojczyk, 2002). Some researchers found relations between intergenerational gaps in cultural orientations and various negative child outcomes, including conduct and emotional problems (Costigan & Dokis, 2006; Farver, Narang, & Bhadha, 2002; Ying & Han, 2007). However, other researchers failed to find such associations (Lau et al., 2005; Vega, Khuory, Zimmerman, Gil, & Warheit, 1995).

Limitations of Existing Research

Little research has simultaneously examined cultural orientations at the child/individual level (i.e., a child's cultural orientations) and at the family/dyad level (i.e., parent–child gaps in cultural orientations). One exception is Birman (2006a), in which researchers found both a main effect of adolescent acculturation and Parent × Adolescent Acculturation interactions (representing parent–adolescent acculturation gap) on family conflict among Soviet Jewish refugees in the United States. Similarly, L. L. Liu, Benner, Lau, and Kim (2009) examined both main and interactive effects of parent and adolescent heritage language proficiencies on adolescents' depressive symptoms and academic achievement.

Moreover, with the exception of Costigan and Dokis (2006) and Birman (2006a), few researchers have examined how cultural orientations across multiple domains relate to children's adjustment. Recent research and theory indicate that an individual's cultural orientations may vary across different life domains (Berry, 2003; Phinney, Horenczyk, Liebkind, & Vedder, 2001; Tsai, Chentsova-Dutton, & Wong, 2002). For example, an immigrant may maintain close friendships with other immigrants from the same cultural group but engage in mainstream media and become proficient in the language of the host country. Importantly, studies showed that the links between parent–adolescent acculturation gaps and adolescent adjustment differed by domains of acculturation (e.g., Birman, 2006a; Costigan & Dokis, 2006). Thus, assessing intergenerational gaps in multiple domains can highlight specific aspects of acculturative or enculturative processes that have implications for children's adjustment (Birman, 2006a).

Finally, research on cultural orientation has given little attention to the psychological adjustment of young children of immigrants.

From a developmental perspective, the roles of acculturation and enculturation in individuals' psychological adjustment likely vary across different developmental periods. Because early acquisition of English proficiency (a key aspect of acculturation) is critical for behavioral and academic adjustment (Halle, Hair, Wandner, Mc-Namara, & Chien, 2012; Hoff, 2013), acculturation in language proficiency during early elementary school may be particularly critical for children from language minority homes. By contrast, the benefit of acculturation might decrease or even reverse in adolescence due to a host of risk processes associated with immigrant youths' higher acculturation to the host culture, such as association with deviant peers and substance use (Gonzales et al., 2009). Thus, the existing findings from adolescent or adult samples may not generalize to young children of immigrants. Early elementary school is also a critical, yet neglected, period for studying intergenerational gaps in cultural orientations. Because children from immigrant families (especially those from low-income families) are less likely to participate in center-based early care (e.g., preschool) than children of U.S.-born citizens (Matthews & Ewen, 2006), the entry to elementary school may be their first experience with formal schooling in the host culture. Thus, early elementary school may be one of the earliest developmental periods in which parent–child gaps in cultural orientations may begin to manifest.

In response to these limitations, the first goal of the present study was to examine the unique relations of children's and parents' dual cultural orientations (i.e., Chinese and American orientations) and gaps in parent–child cultural orientations to Chinese American children's psychosocial adjustment in first and second grades. Given the critical role of English proficiency in early school adjustment among children of language minority immigrant families (Halle et al., 2012; Hoff, 2013), we hypothesized that Chinese American children's orientation to American culture would be associated with better adjustment. Based on prior research on parent–youth acculturation gaps on youth adjustment in immigrant families (e.g., Birman, 2006a; Costigan & Dokis, 2006), we hypothesized that greater gaps in parent–child cultural orientations would generally be associated with poorer child adjustment. We expected that at least some associations would differ by domains of cultural orientation and/or by type of child adjustment (externalizing and internalizing problems, and social competence).

Parenting as a Mediator in the Relations Between Cultural Orientations and Child Adjustment

To further understand the mechanisms involved in the link between cultural orientations and child adjustment, it is important to investigate potential mediators. A growing body of research suggests that parenting or parent–child relationships may mediate these associations. For example, Dumka, Roosa, and Jackson (1997) found that Spanish-speaking and low-income Mexican American mothers' higher acculturation was associated with their lower use of inconsistent discipline, which in turn mediated the relations between higher parental acculturation and lower conduct problems and depression in early adolescence. Similarly, Kim, Chen, Li, Huang, and Moon (2009) tested parenting as a mediator in the relations between parent–child acculturation gaps and Chinese American adolescents' adjustment and found that a higher

father–adolescent discrepancy in American orientation was associated with unsupportive parenting, which in turn was related to adolescents' higher depressive symptoms. However, parenting style has not been tested as a mediator in models that simultaneously considered parent's cultural orientations, children's cultural orientations, and parent–child gaps in cultural orientation, and the mediation hypothesis has not been tested with samples of young children in immigrant families.

Authoritative parenting (characterized by high warmth and high control/demandingness) and authoritarian parenting (characterized by low warmth and high demandingness/control) are two global dimensions of parenting styles that have been widely studied in children and adolescents of both Western and Eastern cultures (Baumrind, 1971; Maccoby & Martin, 1983). Although some researchers have argued that authoritative and authoritarian parenting styles do not fully capture indigenous aspects of Chinese parenting (e.g., training/*chiao shun*; Chao, 1994, 2000), research with native Chinese families has shown that authoritarian parenting predicted various negative outcomes in children including higher externalizing and internalizing problems and lower social competence, whereas the opposite relations were found for authoritative parenting (e.g., X. Chen, Dong, & Zhou, 1997; Xu et al., 2005; Zhou et al., 2008). In a sample of Chinese American immigrant families, Cheah, Leung, Tahseen, and Schultz (2009) found that authoritative parenting was positively associated with preschoolers' regulatory abilities. Together, these studies suggest that the socialization functions of authoritative and authoritarian parenting may be generalized in part to families of Chinese origins.

Consistent with the cultural emphasis on parents' firm control and filial piety in traditional East Asian societies (Wu et al., 2002), researchers found that the cultural norms of parental authoritarian control are higher in East Asian than in Western cultures (Lansford et al., 2005). Indeed, comparative studies showed that native or immigrant Chinese parents endorsed higher authoritarian parenting and lower authoritative parenting than European American parents (e.g., Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Wu et al., 2002).

However, little is known about how parenting styles change as Asian immigrant families adapt to the Western or mainstream American culture. There are only a few studies examining the relations between acculturation-related factors and parenting among Asian immigrants (Farver, Xu, Bhadha, & Narang, & Lieber, 2007; Lau, 2010; Su & Hynie, 2011). Farver et al. (2007) found that more acculturated Asian Indian parents endorsed higher authoritative parenting than less acculturated Asian Indian parents. Similarly, Su and Hynie (2011) found that Canadian Chinese mothers' endorsement of traditional Chinese childrearing beliefs was positively associated with their authoritarian parenting, although mothers' individualism and collective values were both positively associated with authoritative parenting. Finally, Lau (2010) found that different heritage cultural values showed different relations to Chinese American parents' use of physical discipline, with the value of emotional restraint being associated with lower use of physical discipline, and the value of firm control being associated with higher use of physical discipline (especially in families with high acculturation conflict). Together, these findings suggest that cross-ethnic or cross-national differences in parenting may not translate directly into simple relations between cultural orientations and parenting among immigrant parents. Instead, the experience of immigrant parents may be more accurately described from an "adaptive culture" perspective, which suggests that immigrant families use elements of their heritage culture to navigate demands of the host culture and, in doing so, "dynamically construct a new cultural environment" (Lau, 2010, p. 319).

Given these theorized associations between parent–child gaps in cultural orientations, parents' own cultural orientations, and parenting practices in immigrant families, it is logical to test parenting styles as mediators in the relations between parent–child cultural orientations and children's adjustment in Chinese American immigrant families. Based on the research on parent–child gaps in adolescents and young adults, we hypothesized that greater parent–child gaps in cultural orientation would be associated with higher authoritarian parenting and lower authoritative parenting, which in turn would mediate the relations between gaps and children's adjustment. Based on the cross-cultural research on parenting styles and research on the links between immigrant parents' own cultural orientations and parenting practices, we generally expected that Chinese American parents' Chinese orientation would be positively associated with authoritarian parenting and negatively associated with authoritative parenting, whereas the opposite relations would be found with parents' American orientation. However, based on the adaptive culture perspective (Lau, 2010), the relations between parents' own cultural orientations and parenting might be less consistent than the relations between parent–child gaps and parenting.

Method

Participants

The sample consisted of 258 first generation (born outside of the United States; 23.6% of the sample) and second generation (born within the United States; 76.4%) Chinese American children (48.1% girls) and their parents and teachers in the San Francisco Bay Area. The majority of children were in first (48.8%) or second (50.0%) grade at the time of assessment (age range = 5.8–9.1 years, mean age = 7.4, SD = 0.71). The majority of participating parents (81.8% mothers) were foreign-born, including those born in mainland China (74.4%), Hong Kong (8.9%), Taiwan (3.1%), or other parts of the world (11.2%). On average, parents had lived in the United States for more than 1 decade (range = <1 year to 38 years, M = 11.8 years). Parents' years of school education ranged from 5 years (elementary school education) to 20 years (doctorate or other advanced degree), and mean years of education was 13.3 years (some education beyond high school; SD = 2.5 years). In this sample, 54.3% of participating parents were employed full-time, 12.0% were employed part-time, and 7.8% were unemployed or homemakers. Families' per capita income was calculated by dividing the total family income for the past year by the number of individuals living in the household (Datta & Meerman, 1980). Families' per capita income ranged from $625 to $50,000 (M = $11,607, SD = $8,309). More than half of the children in the sample (57.3%) were eligible for free or reduced school lunch based on parent report.

The Chinese American population in the San Francisco metropolitan area is among the largest in the United States, and an estimated 61.1% of this population is foreign-born (U.S. Census Bureau, 2011). Based on geographic coding of the participating

families' home addresses, families in this sample were distributed across four counties and 129 census tracts, with a range of 1–10 families per tract. Based on 2000 Census tract-level data, these families lived in neighborhoods where approximately a third of the population were Asian (range = 1.21%–93.53%, M = 38.75%) or foreign-born (range = 9.21%–83.85%, M = 42.06%) residents.

Procedures

Recruitment. To recruit a socioeconomically diverse sample of Chinese American immigrant families, a variety of recruitment strategies were employed, including conducting recruitment fairs in Asian or Chinese American communities (e.g., Chinatown shopping centers, Asian grocery stores, and Chinese American neighborhood events), establishing partnerships with public and private schools with large Asian student populations and distributing fliers to parents through school staff or at the schools' open house events, as well as seeking referrals from community organizations serving the Chinese American population (e.g., after-school programs, churches, nonprofit organizations). At the recruitment fairs, research assistants distributed project fliers to parents. The project was described as a research study on Chinese American children's psychological adjustment. Parents who expressed an interest in the study were asked to fill out a contact sheet with their phone numbers.

Screening. Trained bilingual Chinese–American research assistants conducted phone screening interviews with interested parents. The following conditions were set as eligibility criteria for the study: (a) the child was in first or second grade at the time of screening, (b) the child lived with at least one of her/his biological parents, (c) both biological parents identified as ethnic Chinese, (d) the child was either first generation (born outside the U.S.) or second generation (born in the U.S. with at least one foreign-born parent), and (e) both the parent and child were able to understand and speak English or Chinese (Mandarin or Cantonese). Of the 287 children who were screened and met the eligibility criteria, 258 children completed the 2.5-hr laboratory assessment with one parent. Of this number, 63.6% were recruited through community recruitment fairs, 17.4% through school events, and 19% through agency/organization referrals. We compared the children who participated in our study (n = 258) with those who were screened and met the eligibility criteria but whose parents refused to participate (n = 29) on basic demographic characteristics collected at screening, including child's gender, generation status, and parents' and child's preferred languages. The families who refused to participate were more likely to have parents and children who preferred to speak Chinese, suggesting that the families who refused might be less acculturated than those who participated.

Assessment. The present study used data collected from parent and teacher questionnaires. In this sample, 81.8% of children had mothers as the participating parent, and 18.2% of children had fathers as the participating parent. The majority of parents (79.5%) chose to complete the questionnaires in Chinese (simplified or traditional Chinese), whereas 20.5% of parents chose to complete the questionnaires in English. The child's main classroom teacher completed the teacher questionnaires by mail. In the event that classroom teachers were not available, after-school teachers/coaches (0.8%) or relatives/family friends (3.1%) completed the

teacher questionnaires. Teacher data were collected for 85.3% of children.

Measures

Family demographics and migration history (parent report). The Family Demographics and Migration History Questionnaire was adapted from a similar measure used in a study of Mexican American immigrant families (Roosa et al., 2008). This questionnaire included questions on maternal and paternal education, family annual income, whether the child receives free or reduced lunch at school, and mother's and father's country of birth and length of stay in the United States. We modified the questions related to ethnicity and countries of origin to make them appropriate for Chinese American families. In translating the questions into Chinese, we followed the strategies recommended by Kim, Nair, Knight, Roosa, and Updegraff (2009).

Parent and child cultural orientations (parent report). Parents reported their own and their child's orientations toward American and Chinese cultures using the Cultural and Social Acculturation Scale (CSAS; X. Chen & Lee, 1996; see also X. Chen & Tse, 2010). The CSAS is a bi-dimensional scale that permits the assessment of individuals' contact with and engagement in both heritage and host cultures. The CSAS has two versions: one for parents' ratings of their own cultural orientations (32 items), and one for parents' ratings of children's cultural orientations (31 items). The parent and child versions have matched items, with only a few items differing between them. The CSAS is available in Chinese and English and has shown satisfactory internal reliabilities in a previous study of Chinese American mothers with preschoolers (Garrett-Peters & Fox, 2007).

The CSAS assesses parents' and children's bi-dimensional cultural orientations primarily in three domains: (1) language proficiency (four items for Chinese proficiency and four items for English proficiency; e.g., "How well do you/does your child speak Cantonese or Mandarin/English?"), (2) media use (five items on Chinese media use and five items on English media use; e.g., "How often do you/does your child watch Chinese/English movies?"), and (3) social relationships or friends (three items on Chinese friends and three items on Caucasian-American friends; e.g., "How often do you/does your child invite Chinese/Caucasian-American friends to your house?"). Items were rated on Likert scales ranging from 1 to 6 points. Because factor analysis of the multi-domain and bi-dimensional structure of the CSAS has not been reported previously, we performed two confirmatory factor analyses (CFAs) to test a six-factor model of cultural orientations (Chinese proficiency, Chinese media use, Chinese friends, English proficiency, English media use, and Caucasian-American friends) for parents and children, respectively. Results suggested that the six-factor model fit well with both parents' and children's data. The loading for one item in the child's English Media factor ("How often does your child watch English movies?") was not significant. Thus, this item was dropped from the scale. Based on these results, we computed the composite scores of parents' and children's Chinese and American orientations in three domains (language proficiency, media use, and social relationships) by averaging the corresponding item scores. The alpha reliabilities in this sample are .95, .79, and .68 for parent's English proficiency, English media use, and Caucasian-American friends; .92, .67, and

.68 for parent's Chinese proficiency, Chinese media use, and Chinese friends; .91, .51, and .73 for child's English proficiency, English media use, and Caucasian-American friends; and .87, .68, and .68 for child's Chinese proficiency, Chinese media use, and Chinese friends.

Child behavioral problems (parent and teacher report). Parents completed the externalizing problem and internalizing problem subscales of the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001), and teachers completed the Teacher Report Form (TRF; Achenbach & Rescorla, 2001). The Chinese language version of the CBCL subscales have demonstrated good internal consistency and test–retest reliability in previous studies of native Chinese children (X. Liu et al., 1999; X. Liu, Sun, Uchiyama, Li, & Okawa, 2000; Tao, Zhou, & Wang, 2010; Zhou et al., 2008). An earlier version of the CBCL has also been used with Chinese American parents (Huntsinger, Jose, & Larson, 1998). In the present sample, alphas for externalizing problems were .87 (33 items) and .85 (27 items) for parents' and teachers' reports, and alphas for internalizing problems were .80 (31 items) and .79 (32 items) for parents' and teachers' reports. Parents' and teachers' reports were positively correlated with each other (rs = .24 and .25 for externalizing and internalizing problems, respectively, ps < .001).

Child social competence (parent and teacher report). Parents and teachers rated children's social competence using a four-item subscale from an adapted version of Harter's Perceived Competence Scale for Children (HPCSC; Eisenberg et al., 1995; Harter, 1979). This scale assesses children's socially appropriate behaviors (e.g., "My/This child is usually well behaved"). The items are rated on a 4-point scale (1 = *really false* to 4 = *really true*). In a study of native Chinese children (Tao et al., 2010), the Chinese language version of this measure has demonstrated satisfactory internal reliabilities (αs ≥ .63), and parents' and teachers' ratings on this measure were correlated with measures of parenting practices and children's temperament. In this present sample, par-

ents' and teachers' reports showed satisfactory alpha reliabilities (.69 and .86) and were positively correlated with each other (r = .19, p = .007).

Authoritative and authoritarian parenting (parent report). Parents rated their own parenting styles using the authoritative and authoritarian scales of the Parenting Styles and Dimensions Questionnaire (PSDQ; Robinson, Mandleco, Olsen, & Hart, 1995). The Chinese version of the PSDQ has been previously used with Chinese populations and had satisfactory internal reliabilities (Wu et al., 2002; Zhou et al., 2008). The factor structures of the two scales were shown to be invariant between Chinese and American samples (Wu et al., 2002). The authoritative scale includes four subscales: warmth/acceptance, reasoning/induction, easygoing/responsiveness, and encouragement of child's democratic participation. The authoritarian scale includes four subscales: non-reasoning/punitive strategies, corporal punishment, verbal hostility, and directiveness. For each item, parents used a 5-point scale to rate how often they exhibit this behavior with the child (from 1 = *Never* to 5 = *Always*). Composite scores of authoritative and authoritarian parenting styles were formed by averaging the corresponding item scores. The alpha reliabilities in this sample were .83 and .84 for authoritative parenting (17 items) and authoritarian parenting (13 items), respectively.

Results

The descriptive statistics of study variables are presented in Table 1. Variables were first screened for normality. Using the cutoffs of two and seven for skewness and kurtosis, respectively (West, Finch, & Curran, 1995), all the cultural orientation and adjustment variables were normally distributed, with the exception of teachers' reports of children's externalizing problems, which was slightly positively skewed. Because the severity of clinically significant behavioral problems is typically low in community- or school-based samples (Garralda & Bailey, 1988), it is not surprising that some measures of behavioral problems are positively

Table 1
Descriptive Statistics of Study Variables

Variable	Minimum	Maximum	M (N)	SD	Skew	Kurtosis
Parent English proficiency	1.00	5.00	2.67 (255)	0.95	0.36	0.18
Child English proficiency	1.00	5.00	3.53 (256)	0.74	0.18	−0.04
Parent English media use	1.00	6.00	3.00 (253)	1.29	0.21	−0.94
Child English media use	1.00	6.00	3.40 (254)	1.17	0.35	−0.52
Parent American friends	1.00	4.67	1.84 (233)	0.72	0.99	1.24
Child American friends	1.00	4.00	1.87 (250)	0.75	0.95	0.36
Parent Chinese proficiency	1.50	5.00	4.15 (256)	0.78	−0.89	0.59
Child Chinese proficiency	1.00	5.00	2.77 (256)	0.85	0.18	0.02
Parent Chinese media use	1.00	6.00	4.23 (255)	1.14	−0.58	−0.03
Child Chinese media use	1.00	5.20	2.58 (251)	1.05	0.38	−0.63
Parent Chinese friends	1.00	4.67	2.92 (253)	0.68	0.23	0.33
Child Chinese friends	1.00	4.67	2.71 (254)	0.75	0.31	0.02
Externalizing problems (P)	0.00	21.00	4.82 (253)	5.09	1.20	0.60
Externalizing problems (T)	0.00	23.00	2.54 (214)	4.29	2.48	6.34
Internalizing problems (P)	0.00	26.00	3.97 (253)	4.61	1.84	3.99
Internalizing problems (T)	0.00	25.00	3.69 (214)	4.30	1.70	3.42
Social competence (P)	2.00	4.00	3.19 (250)	0.51	−0.15	−0.65
Social competence (T)	1.00	4.00	3.37 (208)	0.68	−1.26	1.29
Authoritative parenting (P)	2.00	4.93	4.07 (254)	0.48	−0.60	1.37
Authoritarian parenting (P)	1.26	4.61	2.15 (252)	0.43	1.40	4.55

Note. (P) = Parent report; (T) = Teacher report.

skewed (i.e., a high concentration of cases with low scores on the continuum).

Correlations With Demographic Characteristics

Zero-order correlations among cultural orientation, child adjustment, and parenting variables are reported in Table 2. We also examined correlations between cultural orientations and demographic characteristics (child age, gender, and generation status, family socioeconomic status [SES], and parent age). A composite index of family SES was computed by first averaging maternal and paternal education levels and then averaging the standardized scores of parental education and per capita income. Family SES was positively related to all domains of American orientations for both parents and children ($rs = .28–.61$, $ps < .001$). SES was positively correlated with parents' Chinese language proficiency ($r = .14$, $p = .03$) and was negatively correlated with parents' and children's Chinese media use ($rs = -.41$ and $-.23$, $ps < .001$). Parent age was unrelated to most cultural orientation variables, although it was positively correlated with parents' Chinese media use ($r = .13$, $p = .046$). Child gender was uncorrelated with cultural orientations. Child age was negatively correlated with parents' English proficiency ($r = -.16$, $p = .01$) and was positively correlated with children's English proficiency ($r = .13$, $p = .046$). Compared to first-generation children, second-generation children scored higher on domains of American orientation ($rs = .16$ to .27, $ps = .01$ to $<.001$). Second-generation children also scored higher than first-generation children on parents' English media use ($r = .19$, $p = .003$) and parents' Chinese friends ($r = .12$, $p = .049$). Given these associations, family SES, parent age, child age, gender, and generation status were included as covariates in subsequent analyses.

Structural Equation Modeling

To test the direct and mediated relations between parent–child cultural orientations, parenting styles, and children's adjustment, three structural equation models (SEMs) were tested, one for each domain of cultural orientation (see Figures 1 and 2 for examples). In these models, the four main effect predictors (child Chinese orientation, child American orientation, parent Chinese orientation, and parent American orientation) and two interaction predictors (Child Chinese Orientation × Parent Chinese Orientation, and Child American Orientation × Parent American Orientation) were hypothesized to simultaneously predict authoritative and authoritarian parenting styles, which in turn predict the latent factors of child externalizing problems, internalizing problems, and social competence (measured by parents' and teachers' reports). The direct paths from cultural orientations to child adjustment were also tested. Moreover, the effects of covariates (family SES, child age, gender, generation status, and parent age) on parenting and child adjustment factors were controlled in the models.

Parent–child gaps in cultural orientation were tested using interaction terms of Parent Cultural Orientation × Child Cultural Orientation. Although different methods have been used to assess parent–child gaps in cultural orientations (see Birman, 2006b, for a review), the interaction approach is considered more advantageous than the other approaches because (a) it provides more information about the types of match/mismatch in cultural orien-

tations in the parent–child dyads, and (b) it allows researchers to simultaneously examine the "main effects" of parents' and children's cultural orientations and parent–child gaps in cultural orientations. To reduce multicollinearity and aid interpretation, the main effect predictors were mean centered before computing the interaction terms (Aiken & West, 1991). The models were estimated with Mplus 5.2 (Muthén & Muthén, 1998–2007) using full information maximum likelihood to handle missing data and the Maximum Likelihood Robust (MLR) estimator for adjustment to correct standard errors for nonnormality. The raw data were analyzed. Hu and Bentler (1999) recommended the cutoffs of comparative fit index (CFI) $\geq .95$, root-mean-square error of approximation ($RMSEA$) $\leq .06$, and standardized root-mean-square residual ($SRMR$) $\leq .08$ as the criteria for a relatively good overall model fit.

Language proficiency. The model for language proficiency (see Figure 1) fit the data well, $\chi^2(38, N = 258) = 63.5$, $p = .006$, $CFI = .96$, $RMSEA = .05$, $SRMR = .03$. In predicting authoritative parenting, there was a significant positive main effect of child English proficiency, and a significant positive main effect of parent Chinese proficiency qualified by a significant interaction of Parent Chinese Proficiency × Child Chinese Proficiency. Authoritative parenting, in turn, negatively predicted children's externalizing problems and internalizing problems and positively predicted social competence. By contrast, none of the language proficiency variables were uniquely related to authoritarian parenting, although authoritarian parenting positively predicted externalizing and internalizing problems and negatively predicted social competence. In addition, there was a significant direct path from Parent × Child Chinese Proficiency to externalizing problems, and significant direct paths from child's Chinese proficiency and child's English proficiency to social competence.

To probe the two significant interaction effects (i.e., Parent × Child Chinese Proficiency predicting authoritative parenting and externalizing problems), we performed simple slopes analyses following the procedures outlined by Aiken and West (1991). In the simple slope analysis, the relations between parents' Chinese proficiency and authoritative parenting or the latent factor of child externalizing problems were probed at three levels of child's Chinese proficiency: mean level, one standard deviation above the mean ("high"), and one standard deviation below the mean ("low"), controlling for other predictors in the model. As shown in Figure 3A, although parents' Chinese proficiency was positively associated with authoritative parenting across all levels of children's Chinese proficiency, the associations were stronger among children with higher Chinese proficiency than those with lower Chinese proficiency. For the interaction predicting children's externalizing problems (see Figure 3B), at low levels of children's Chinese proficiency, parents' Chinese proficiency was positively associated with children's externalizing problems; at mean or high levels of children's Chinese proficiency, parents' Chinese proficiency was unrelated to children's externalizing problems.

To test the significance of the mediated relations between cultural orientations and child adjustment via parenting, we used the bias-corrected bootstrap confidence interval approach for testing mediation (MacKinnon, Lockwood, & Williams, 2004). There were six significant mediated/indirect effects in the model (see Figure 1). Authoritative parenting significantly mediated the paths from child English proficiency to externalizing problems (95% CI

Table 2
Zero-Order Correlations of All Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Parent English proficiency	—	.41***	.52***	.33***	.28***	.21**	.12*	-.08	-.39***	-.18**	.07	-.09	.15*	-.16*	-.14*	-.02	-.12	.09	.26***	-.07
2. Child English proficiency		—	.26**	.37***	.32***	.39***	.08	-.02	-.18**	-.11	.16**	.08	.19**	-.16*	-.15*	-.14*	-.10	-.13	.37***	.17*
3. Parent English media use			—	.51***	.38***	.26***	.01	-.09	-.12	-.04	.24***	.07	.25***	.03	-.09	.02	-.09	.04	.19***	.07
4. Child English media use				—	.33***	.37***	-.13*	-.08	-.05	.15*	.28***	.15*	.14*	.05	-.09	-.04	.02	-.03	.24***	.12
5. Parent American friends					—	.55***	-.11	-.07	-.03	.07	.27***	.22**	.16*	.07	-.06	-.06	-.01	-.05	.18**	.06
6. Child American friends						—	-.11	-.19**	-.12	-.09	.23***	.19**	.04	.02	-.03	.01	-.04	-.10	.16*	.03
7. Parent Chinese proficiency							—	.31***	.20**	.11	-.03	-.04	.28***	-.14*	-.05	.01	-.14*	.07	.11	-.01
8. Child Chinese proficiency								—	.17**	.49***	.003	-.01	.04	-.06	-.09	.01	-.04	.05	.09	.09
9. Parent Chinese media use									—	.45***	.16*	.21**	.11	.04	-.08	.003	-.02	.10	-.002	.10
10. Child Chinese media use										—	.12	.15*	.04	-.05	-.02	-.01	.03	.01	.03	.10
11. Parent Chinese friends											—	.56***	.12*	.08	-.03	.02	-.05	.05	.08	.10
12. Child Chinese friends												—	.004	.12	.02	-.05	-.01	-.06	.003	.07
13. Authoritative parenting													—	-.08	-.23***	-.02	-.22**	-.11	.43***	.01
14. Authoritarian parenting														—	.30***	.13	.27***	.08	-.21**	-.13
15. Externalizing problems (P)															—	.24***	.68***	.21**	-.46***	-.23**
16. Externalizing problems (T)																—	.12	.33***	-.24***	-.71***
17. Internalizing problems (P)																	—	.25***	-.30***	-.04
18. Internalizing problems (T)																		—	-.13	-.16*
19. Social competence (P)																			—	.19**
20. Social competence (T)																				—

Note. (P) = Parent report; (T) = Teacher report.
* $p < .05$. ** $p < .01$. *** $p < .001$.
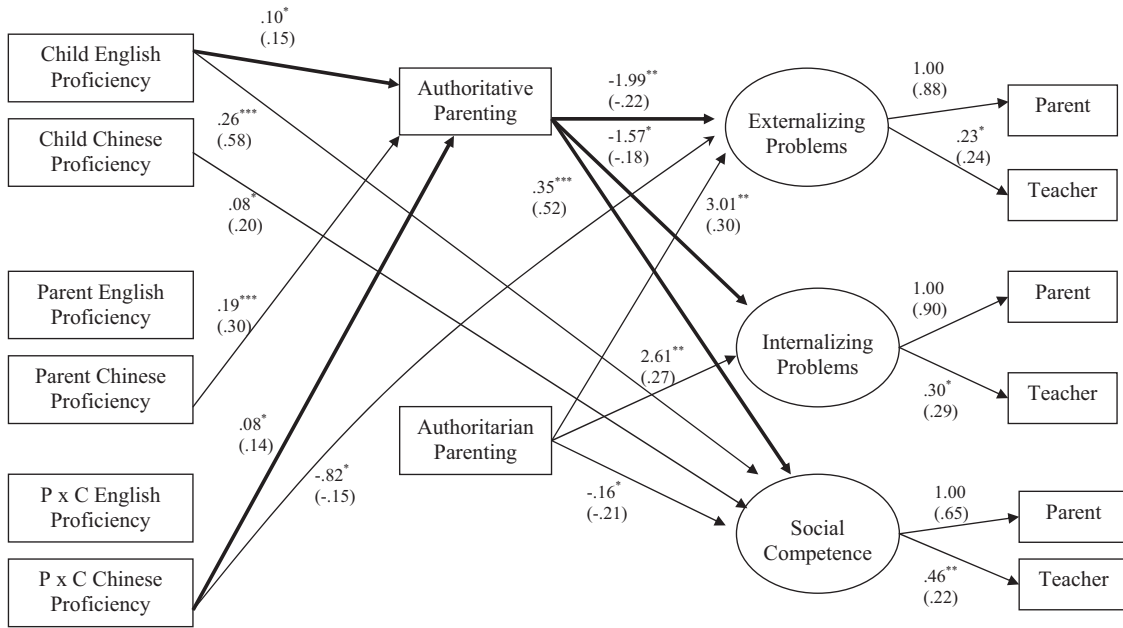
Figure 1. The mediation model testing parenting as mediators in the relations between language proficiency and child adjustment. In the hypothesized model, the six cultural orientation predictors are specified to simultaneously predict authoritative and authoritarian parenting, which in turn predict the latent factors of child adjustment. Although not shown in the graph, the effects of covariates (family socioeconomic status, child age, parent age, child generational status, and child gender) on parenting and child adjustment are controlled. The direct effects of cultural orientations and adjustment are also controlled. For ease of presentation, only significant paths are shown in the graph, and non-significant paths are omitted in the graph (but included in model estimation). Correlations among factors are not reported in the figure. The numbers above parentheses are unstandardized loadings or path coefficients, and the numbers inside parentheses are standardized loadings or path coefficients. Bolded paths indicate significant mediations. P × C = Parent × Child. * $p < .05$. ** $p < .01$. *** $p < .001$.

[−.502, −.048]), internalizing problems (95% CI [−.453, −.028]), and social competence (95% CI [.007, .075]). Authoritative parenting also significantly mediated the paths from Parent × Child Chinese Proficiency to externalizing problems (95% CI [−.419, −.027]), internalizing problems (95% CI [−.335, −.019]), and social competence (95% CI [.004, .061]). Although the main effect of parent's Chinese proficiency on authoritative parenting was significant in the model, we did not test the mediation effects of parent's Chinese proficiency on child adjustment via authoritative parenting because the main effect is qualified by a significant interaction of Parent × Child Chinese Proficiency.

Media use. The model for media use fit the data well (see Figure 2), $\chi^2(44, N = 258) = 61.9, p = .03, CFI = .97, RMSEA = .04, SRMR = .04$. For predicting authoritative parenting, there were significant positive main effects of parent English media use and parent Chinese media use. By contrast, none of the media use variables were uniquely related to authoritarian parenting. Similar to the model in Figure 1, significant associations were found between authoritative and authoritarian parenting and children's adjustment. In addition, there was a significant direct path from child English media use to social competence.

Mediation analyses indicated six statistically significant mediation effects. Authoritative parenting significantly mediated the relations between parent English media use and child externalizing problems (95% CI [−.395, −.014]), internalizing problems (95% CI [−.334, −.009]), and social competence (95% CI [.003, .053]). Authoritative parenting also significantly mediated the relations between parent Chinese media use and child externalizing problems (95% CI [−.377, −.020]), internalizing problems (95% CI [−.336, −.017]), and social competence (95% CI [.002, .061]).

Social relationships. The model for social relationships also fit the data well, $\chi^2(44, N = 258) = 68.7, p = .01, CFI = .95, RMSEA = .05, SRMR = .04$. None of the social relationship variables uniquely predicted parenting styles. However, there was a significant direct path from children's Caucasian-American friends to social competence ($\beta = .29, p = .01$). Mediation analyses indicated that none of the mediated effects via parenting was significant at $p < .05$. Thus, parenting styles did not mediate the links of social relationships to child adjustment.

Discussion

The present study simultaneously tested three types of relations between parent–child cultural orientations and children's psychological adjustment in Chinese American immigrant families: (a) the role of children's cultural orientations, (b) the role of parents' cultural orientations, and (c) the role of parent–child gaps in cultural orientations. We found that children's American orienta-
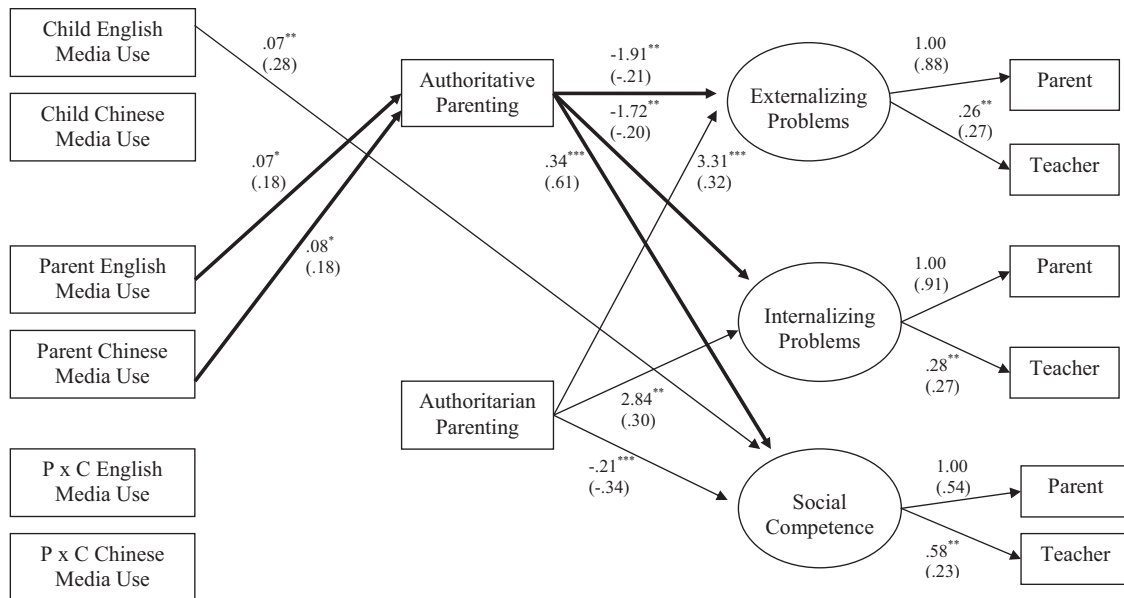
Figure 2. The mediation model testing parenting as mediators in the relations between media use and child adjustment. In the hypothesized model, the six cultural orientation predictors are specified to simultaneously predict authoritative and authoritarian parenting, which in turn predict the three latent factors of child adjustment. Although not shown in the graph, the effects of covariates (family socioeconomic status, child age, parent age, child generational status, and child gender) on parenting and child adjustment are controlled. The direct effects of cultural orientations and child adjustment are also controlled. For ease of presentation, only significant paths are shown in the graph, and non-significant paths are omitted in the graph (but included in model estimation). Correlations among factors are not reported in the figure. The numbers above parentheses are unstandardized loadings or path coefficients, and the numbers inside parentheses are standardized loadings or path coefficients. Bolded paths indicate significant mediations. P × C = Parent × Child. * $p < .05$. ** $p < .01$. *** $p < .001$.

tion across domains was generally associated with their better psychological adjustment, and that these associations were partly mediated by higher authoritative parenting. We also found that greater parent–child gaps in Chinese proficiency were associated with poorer child adjustment, and that this relation was partly mediated by lower authoritative parenting.

The Role of Children's Cultural Orientations in Child Adjustment

Across the models for language use, media use, and social relationships, we found several main effects of children's American orientations on their psychological adjustment. Specifically, children's higher English proficiency, greater English media use, and greater association with Caucasian American friends were directly related to their higher social competence. Children's higher English proficiency was also indirectly related to lower behavioral problems and higher social competence via higher authoritative parenting.

These findings are generally consistent with those from a previous study of Canadian Chinese children from immigrant families in 4th–8th grades (X. Chen & Tse, 2010). Together, these findings support the benefits of acculturation for school-age children in immigrant families. During the early elementary school period, an important developmental task for children from immigrant families is to become adjusted to and integrated with the mainstream

education system, and to develop meaningful social relationships with people outside the family (e.g., teachers and peers; James, 1997). Thus, children from immigrant families who are more engaged in and familiar with American culture may display fewer behavioral problems and be more competent in social interactions. This may be particularly evident for children with higher English proficiency, which would enable them to use English media and make English-speaking friends.

The findings on the indirect relations between children's English proficiency and adjustment via authoritative parenting suggest that children's cultural orientations might influence how they are socialized by parents. Although the directionality of these relations cannot be tested with cross-sectional data, the findings are consistent with models emphasizing cultural transmission in the family as a bidirectional pathway—"a transactional process in which the parent impacts the child and the child influences the parent in return" (Schönpflug, 2009, p. 22). In specific regards to English proficiency, we have recently argued that speaking a particular language involves adapting the cultural expectations associated with that language (S. H. Chen, Kennedy, & Zhou, 2012). Thus, children who are proficient in English may endorse values or ideals more common to the American culture—for example, greater parental warmth, more democratic participation by the child, and less directiveness between parents and children (Huntsinger et al., 1998; Huntsinger, Jose, Larson, Kreig, & Shaligram,

A

B
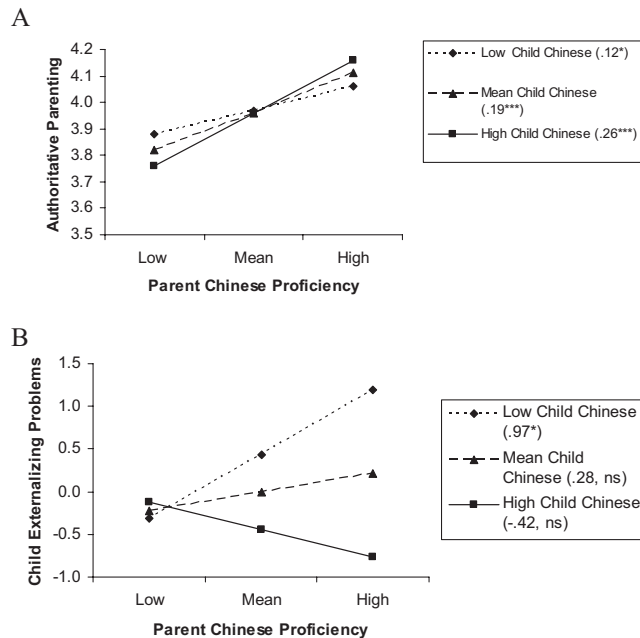
Figure 3. The interaction of Parent × Child Chinese proficiency predicting authoritative parenting and child externalizing problems. The numbers in parentheses are unstandardized simple slopes. ns = not significant. * p < .05. *** p < .001.

2000), which may in turn elicit parents' authoritative parenting practices.

It is important to note that the direct relations between children's American orientations (especially in English media use and association with Caucasian-American friends) and children's social competence were significant after controlling for the mediating effects of parenting. This suggests that extra-familial processes such as peer interactions and children's interactions with neighborhood, community, and schools might also mediate the relations of children's cultural orientations and adjustment, which is an important direct for future research.

The Role of Parents' Cultural Orientations in Child Adjustment

Although parents' cultural orientations had no direct relations to children's adjustment, they showed indirect relations to child adjustment via parenting. Specifically, parents' English and Chinese media use were both positively associated with their use of authoritative parenting, which in turn was associated with children's better adjustment. This result is generally consistent with findings by Farver et al. (2007), Lau (2010), and Su and Hynie (2011), in which acculturation of Asian immigrant parents were associated with more authoritative or less authoritarian parenting. Also similar to the present study, Lau (2010) found that certain aspects of parents' Chinese orientation (e.g., endorsement of heritage cultural values such as emotional restraint) were associated with their lower use of physical discipline. Thus, both acculturation and heritage culture maintenance might promote immigrant parents' use of authoritative/supportive parenting, which further confers benefits for children's adjustment.

Although we had hypothesized that parents' Chinese orientation would be associated with their higher use of authoritarian parenting, we found no unique relations between parents' cultural orientations and authoritarian parenting. Because our multivariate models controlled for children's cultural orientations, parent–child gaps in cultural orientations, as well as demographic characteristics (e.g., family SES), our study may have tested the "purer" relations between parents' cultural orientations and parenting. The lack of unique relations between cultural orientations and authoritarian parenting echoes the perspective by other researchers (e.g., Lau, 2010; Su & Hynie, 2011) that coercive or authoritarian parenting is jointly influenced by multiple contextual factors (e.g., cultural values and norms, family relationships, and neighborhood environment) as well as individual factors (e.g., parental stress, child temperament and behavioral problems). Thus, cultural influences on parenting cannot be studied in isolation.

The Role of Parent–Child Gaps in Cultural Orientations in Child Adjustment

We found both direct and indirect relations between greater parent–child gaps in cultural orientations (represented by the interactions of Parent × Child Cultural Orientations) and children's poorer adjustment. As shown in Figure 3B, higher child Chinese proficiency was associated with lower externalizing problems only when parents also had high levels of Chinese proficiency. The families in which both children and parents had high Chinese proficiency (i.e., low intergenerational gap) showed better child adjustment. In contrast, poorer child adjustment was observed among families in which children were low in Chinese proficiency while their parents were high in Chinese proficiency (i.e., high intergenerational gap). This pattern was consistent with previous research on parent–child acculturation gaps and the adjustment of adolescents or young adults from immigrant families (e.g., Birman, 2006a; Costigan & Dokis, 2006; Farver et al., 2002).

In addition to these direct relations, we found evidence for the indirect relation between parent–child gaps in Chinese proficiency and poorer child adjustment via authoritative parenting. Specifically, as shown in Figure 3A, although parents' higher Chinese proficiency was associated with their higher use of authoritative parenting regardless of children's Chinese proficiency (as evidenced by the presence of a main effect), this association was attenuated among children with low Chinese proficiency. In both types of interaction effects (see Figures 3A and 3B), the families in which both parents and children were high on Chinese proficiency showed the most adaptive outcome (i.e., highest level of authoritative parenting and lowest level of child externalizing problems). Thus, greater parent–child gaps in Chinese proficiency are associated with poorer child adjustment partly because parents are less likely to use authoritative parenting. These indirect relations are consistent with the results from a prior Chinese American adolescent sample (Kim, Chen, et al., 2009).

Taken together, the above findings support the hypothesis that intergenerational gaps in cultural orientations impose risk for offspring's maladjustment in immigrant families, partly because they make it more challenging for parents to exercise supportive or authoritative parenting, thus creating tension or conflict in the parent–child relationship (e.g., Birman, 2006a; Ying & Han, 2007). To our knowledge, the present study provided the youngest

sample in which the negative effects of parent–child cultural orientation gaps were reported. Because we used latent factors to capture children's adjustment from both parents' and teachers' perspectives, our findings suggest that the negative effect of intergenerational cultural orientation gaps on children's adjustment can be observed in both family and school contexts.

Study Limitations and Future Research Directions

The study has a few limitations. First, the cross-sectional design does not allow us to test hypotheses on the direction of relations between cultural orientations, parenting styles, and child adjustment. Longitudinal investigations are critical for examining how changes in children's and parents' cultural orientations are associated with changes in children's adjustment, and how the relations between cultural orientations and child adjustment might shift across different developmental periods. Second, because the sample was recruited from an urban area with a high concentration of Asian American residents, the findings might not generalize to Asian immigrant families living in other regions of the world. Third, children's cultural orientations were measured only through parents' reports, which may not fully capture children's cultural contacts and engagements in domains such as media use and social relationships. Future studies should incorporate multiple informants and multiple methods to assess children's cultural orientations. Fourth, our measure of American orientation in social relationships only assesses individuals' associations with Caucasian-American friends, and not with friends from other ethnic or cultural backgrounds. Given the ethnic diversity of the U.S. demography, association with Caucasian-American friends does not accurately capture parents' and children's orientation to American culture in the social domain. Future research should explore other approaches for assessing social relationships in a multicultural environment and study children's peer networks as potential pathways through which cultural orientations shape children's psychological adjustment.

Implications for Intervention Serving Young Children in Immigrant Families

Our findings suggest that interventions aimed at reducing maladjustment and promoting competence among children of immigrants should target both children's acculturative and enculturative processes, as well as intergenerational gaps in cultural orientations. Likewise, interventions aimed at facilitating children's acculturation should not interfere with their socialization in, or maintenance of, the heritage culture (e.g., heritage language use and heritage cultural practices). Finally, our study showed that parent–child gaps in cultural orientations and their adverse effects on children's adjustment can be observed even in early elementary school years, highlighting the need for early intervention targeting young children of immigrant families.

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