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Neighborhood Characteristics, Parenting Styles, and Children's Behavioral Problems in Chinese American Immigrant Families

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Using data from a socioeconomically diverse sample of Chinese American children ($n = 258$, aged 6–9 years) in immigrant families, we examined the concurrent relations among neighborhood economic disadvantage and concentration of Asian residents, parenting styles, and Chinese American children's externalizing and internalizing problems. Neighborhood characteristics were measured with 2000 U.S. Census tract-level data, parents (mostly mothers) rated their own parenting styles, and parents and teachers rated children's behavioral problems. Path analysis was conducted to test two hypotheses: (a) parenting styles mediate the relations between neighborhood characteristics and children's behavioral problems, and (b) children's behavioral problems mediate the relations between neighborhood and parenting styles. We found that neighborhood Asian concentration was positively associated with authoritarian parenting, which in turn was associated with Chinese American children's higher externalizing and internalizing problems (by parents' reports). In addition, neighborhood economic disadvantage was positively related to children's externalizing problems (by parents' reports), which in turn predicted lower authoritative parenting. The current results suggest the need to consider multiple pathways in the relations among neighborhood, family, and child adjustment, and they have implications for the prevention and intervention of behavioral problems in Chinese American children.

Keywords: neighborhood, parenting styles, behavioral problems, immigrants

Neighborhood and family are two of the most important developmental contexts affecting children's psychological adjustment. In existing research, neighborhood economic disadvantage has been consistently linked to children's higher behavioral problems. By contrast, the association between neighborhood ethnic density (a culturally salient factor for ethnic minority children) and children's adjustment has been less consistent. Researchers have highlighted family processes, such as parenting and the parent–child relationship, as potential mechanisms underlying the influence of neighborhood on children's adjustment. Although this line of research has sampled children from diverse cultural backgrounds,

including those from African American and Latino families (e.g., Gonzales et al., 2011; Roche, Ghazarian, Little, & Leventhal, 2011; Roche, Ensminger, & Cherlin, 2007; Roosa et al., 2005), it has largely ignored children from Asian American families (Zhou et al., 2012), the second largest foreign-born population in the United States (Hoeffel, Rastogi, Kim, & Shahid, 2012).

Using a socioeconomically diverse sample of 258 Chinese American school-age children in immigrant families, we examined the concurrent relations of neighborhood (economic disadvantage and concentration of Asian residents) and parenting styles (authoritative and authoritarian parenting) to children's externalizing and internalizing problems. On the basis of previous research on the family stress theory (Conger, Conger, & Martin, 2010), the transactional model of development (Sameroff, 2009), and cultural perspectives on parenting (Zhou et al., 2012), we tested two hypotheses: (a) neighborhood characteristics predict parenting styles, which in turn predict children's behavioral problems, and (b) neighborhood characteristics predict children's behavioral problems, which in turn predict parenting. By testing multiple pathways involved in neighborhood, parenting, and children's adjustment in Asian American immigrant families, this study can inform the development and dissemination of culturally competent mental health interventions serving this population.

Neighborhood Economic Disadvantage and Ethnic Density

Neighborhood Economic Disadvantage

Neighborhood economic disadvantage refers to hardship due to the simultaneous absence of economic, social, and family re-

sources in the residential neighborhood (Ross & Mirowsky, 2001). Neighborhood economic disadvantage is commonly assessed by objective indicators from census data such as the proportion of families living in poverty, the percentage of families receiving public assistance, and the unemployment rate (McBride Murry, Berkel, Gaylord-Harden, Copeland-Linder, & Nation, 2011; Xue, Leventhal, Brooks-Gunn, & Earls, 2005). The corrosive effects of neighborhood economic disadvantage on children's psychological adjustment have been well documented (see Leventhal & Brooks-Gunn, 2000 and McBride Murry et al., 2011, for reviews). Although earlier studies focused on late childhood and adolescence (Leventhal & Brooks-Gunn, 2000), recent studies have shown links between neighborhood economic disadvantage and children's behavioral problems in early and middle childhood (Edwards & Bromfield, 2009; Georgiades, Boyle, & Duku, 2007; Odgers et al., 2009; Xue et al., 2005).

Neighborhood Ethnic Density

Although economic disadvantage is a common risk factor affecting children regardless of ethnicity and culture, ethnic density (i.e., the number of same-ethnicity members in one's neighborhood; Juang & Alvarez, 2011) might be a culturally salient factor for ethnic minority children. With regard to the association between ethnic density and children's adjustment, various hypotheses have been proposed with different findings reported in the literature. One hypothesis is that a higher ethnic density is beneficial for residents' psychological adjustment because of greater social support and social cohesion as well as better access to cultural resources in ethnic communities (Halpern, 1993). Consistent with this perspective, ethnographic research conducted with Chinese and Korean American immigrants residing in ethnic enclaves (e.g., Chinatown) revealed that living in ethnic communities may nurture Asian American residents' ethnic identity and decrease their pressure to assimilate (Zhou & Kim, 2006). Moreover, the cultural resources (e.g., ethnic language schools and after-school programs, churches, and community centers) in ethnic communities provide valuable academic and social support for children of Asian American immigrants (Zhou & Kim, 2006). Consistent with the hypothesized beneficial or protective effect, Georgiades et al. (2007) found that higher neighborhood immigrant concentration was associated with fewer emotional-behavioral problems among Canadian children (aged 4–11 years) in immigrant families, whereas the reverse was true for children in nonimmigrant families. Moreover, neighborhood Hispanic composition attenuated the link between early pubertal timing and depressive symptoms in Mexican-origin adolescent girls (White, Deardorff, & Gonzales, 2012).

An alternative hypothesis is that greater ethnic density might have some adverse effects on residents' psychological adjustment. First, because neighborhood immigrant and ethnic concentration tend to be highly and positively correlated with neighborhood poverty (Leventhal & Brooks-Gunn, 2000), ethnic density may serve as a proxy for adverse economic, physical, and social conditions in neighborhoods and thus increase residents' exposure to stressors (Mair et al., 2010). Second, living in neighborhoods with a high concentration of coethnic members may heighten ethnic minority residents' awareness of racial/ethnic discrimination (Juang & Alvarez, 2011) and cultural alienation (Miller et al.,

2009), which may in turn put them at risk for mental health problems.

The empirical evidence regarding the adverse effect of ethnic density is mixed. For example, neighborhood ethnic density positively predicted Chinese American adolescents' perceived discrimination (Juang & Alvarez, 2011). Living in a neighborhood with a higher percentage of residents of the same race/ethnicity has been associated with more depressive symptoms in African American male adults, but fewer depressive symptoms in Hispanic males and Chinese females (Mair et al., 2010). The mixed findings suggest that the relation between ethnic density and individual adjustment is complex and likely varies by race or ethnicity, age (e.g., children or adolescents vs. adults), and type of adjustment outcome (e.g., academic attainment vs. mental health problems). Moreover, because of the frequent coexistence of immigrant and minority concentration and economic disadvantage, it is important to test their unique relations with children's adjustment.

The Role of Parenting in the Links Between Neighborhood and Children's Behavioral Problems: The Family Stress Model and the Transactional Model

To further understand how neighborhood affects child adjustment, it is important to study the mediating processes. The family stress model provides a heuristic framework for understanding how economic hardship influences family relationships, parenting, and children's adjustment (Conger et al., 2010). According to this theory, economic hardship indirectly escalates children's emotional and behavioral problems by increasing interparental conflicts and parents' own psychological distress, which are in turn associated with disruptions in parenting (e.g., harsh, inconsistent, or uninvolved parenting). Thus, parenting is considered a key process mediating the relation between economic hardship and children's behavioral problems (Conger et al., 2010). Because economic hardship and neighborhood disadvantage often co-occur (Leventhal & Brooks-Gunn, 2000), the family stress model has been extended to understand the role of neighborhood disadvantage in children's adjustment (e.g., Barnett, 2008; Leventhal & Brooks-Gunn, 2000; White, Roosa, & Zeiders, 2012). Specifically, the stressors associated with living in economically disadvantaged neighborhoods (e.g., exposure to crime and violence, lack of access to resources) are thought to undermine parental warmth and use of effective discipline with children, which in turn put children at risk for behavioral problems (Leventhal & Brooks-Gunn, 2000). Consistent with this theory, parent–child conflict mediated the relation between neighborhood disadvantage and school-age children's externalizing problems in Anglo and Mexican American families (Roosa et al., 2005). Likewise, negative parenting (inconsistent and harsh discipline and low nurturance) mediated the relation between neighborhood poverty and African American and Caucasian preadolescents' externalizing problems (Mrug & Windle, 2009). In addition, immigrant families residing in poor neighborhoods may be at heightened risk because of acculturative stress and pressure to adapt to local norms (Jung, Fuller, & Galindo, 2012; Weisner, 2002), which may undermine their ability to enact effective parenting practices.

Although empirical tests of the family stress model have primarily focused on the influence of parenting on children's adjustment, the transactional model of development (Sameroff, 2009)

highlights the role of children's behaviors in shaping parenting. In support of the child-driven effect on parenting, longitudinal studies have shown that children with higher externalizing problems or higher dispositional anger/frustration elicited parents' higher use of physical discipline or authoritarian parenting (e.g., Choe, Olson, & Sameroff, in press; Lee, Zhou, Eisenberg, & Wang, 2013). Thus, two simultaneous processes are likely involved in the relations among neighborhood, parenting, and children's behavioral problems: (a) the process in which neighborhood characteristics influence parenting, which in turn affects children's behavioral problems, and (b) the process in which neighborhood characteristics shape children's behavioral problems, which in turn affect parenting.

Cultural Perspectives on Parenting in Asian and Asian American Families

Authoritative parenting and authoritarian parenting are two broad dimensions of parenting styles widely studied among children from European American and East Asian backgrounds (see Steinberg, 2001, and Sorkhabi, 2005, for reviews). Authoritative parenting is characterized by warmth and acceptance, encouragement of children's autonomy, discipline through setting reasonable limits on children's behaviors, and the use of reasoning and induction. Authoritarian parenting is characterized by a lack of warmth, restricting children's autonomy, and frequent use of verbal hostility, physical coercion, and other punitive disciplinary strategies (Baumrind, 1996; Maccoby & Martin, 1983).

Because of the cultural emphasis on parents' firm control and filial piety in traditional East Asian societies (Wu et al., 2002), the cultural norms of and values toward parental authoritarian control are higher in East Asian than Western cultures (Lansford et al., 2005). Indeed, cross-national and cross-ethnic comparative studies reported that on average, parents of East Asian cultures scored higher on authoritarian parenting and lower on authoritative parenting than European American parents (e.g., Chao, 2001; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Supple & Small, 2006). However, despite the mean differences in parenting styles, the direction of the relations between authoritative and authoritarian parenting and child adjustment in East Asian families has been shown to be largely similar to those in European American families (see Sorkhabi, 2005, and Zhou et al., 2012, for reviews). Together, these findings suggest that cross-cultural commonalities and differences coexist in how authoritative and authoritarian parenting styles are linked with children's adjustment.

An important limitation of this line of research is that researchers have tended to focus on cross-nation or cross-ethnicity comparisons, and little attention has been paid to within-group differences among Asian American parents. For Asian American immigrant parents, the neighborhood concentration of Asian residents might be a proximal indicator of the cultural context of neighborhood; that is, ethnic cultural values and norms on parenting may be transmitted to immigrant parents through parents' interactions with their neighbors. Thus, by examining the associations between neighborhood Asian concentration and parenting styles among Asian American immigrant parents, we can gain a better understanding of the processes through which cultural factors shape parenting practices.

The Present Study

We aimed to integrate the family stress model, the transactional model, and cultural perspectives on parenting by examining the associations among two neighborhood features (economic disadvantage and Asian concentration), two parenting styles (authoritative and authoritarian parenting), and school-age children's behavioral problems in Chinese American immigrant families. Specifically, we tested two models: (a) the model in which parenting styles mediate the relations between neighborhood conditions and children's behavioral problems (see Figure 1), and (b) the model in which children's behavioral problems mediate the relations between neighborhood conditions and parenting styles (see Figure 2). On the basis of the family stress model, we hypothesized that neighborhood economic disadvantage would be associated with higher authoritarian parenting and lower authoritative parenting, which in turn would be associated with higher behavioral problems in Chinese American children. On the basis of cross-cultural perspectives on parenting, we hypothesized that neighborhood Asian concentration would be associated with higher authoritarian parenting and lower authoritative parenting, which in turn would be related to children's higher behavioral problems. According to the transactional model, we hypothesized that neighborhood economic disadvantage would be associated with higher externalizing problems in children, which in turn would be associated with higher authoritarian and lower authoritative parenting. Although longitudinal data would allow for more robust tests of mediated effects, the present cross-sectional study is an important first step to study these relations among Asian American children, an understudied population in neighborhood research.

Method

Participants

Data came from the Wave 1 assessment (conducted between November 2007 and May 2009) of an ongoing study of Chinese American children in immigrant families (Chen et al., 2013; Ly, Zhou, Chen, Chu, & Chen, 2012; Tao, Zhou, Lau, & Liu, 2013). A sample of 258 Chinese American children and their parents and teachers were recruited from schools and neighborhoods from four counties within the San Francisco Bay Area. These counties had between 16% and 36% of their population who identified as Asian alone or in combination with one or other races (U.S. Census Bureau, 2010). The children in this sample (51.9% boys) were in first and second grade and were between the ages of 5.81 and 9.14 years ($M = 7.38$ years, $SD = 0.71$). Twenty-four percent of children were first generation (i.e., born outside of the United States) and 76% were second generation (i.e., born in the United States to immigrant parents). Because mothers were asked to participate in the study if possible (if the mother was not available, then the father was asked to participate), most parents in this sample ($n = 211$, 81.8%) were mothers. The parents ranged from 27.92 to 54.75 years of age ($M = 39.53$ years, $SD = 5.19$). Most participating parents (97%) were born outside of the United States, and the mean time since their immigration was 11.82 years (range = 0–50 years). Detailed sample statistics on parent and family characteristics are presented in Table 1. The sample was diverse in parental education and family income. Fifty-seven percent of chil-
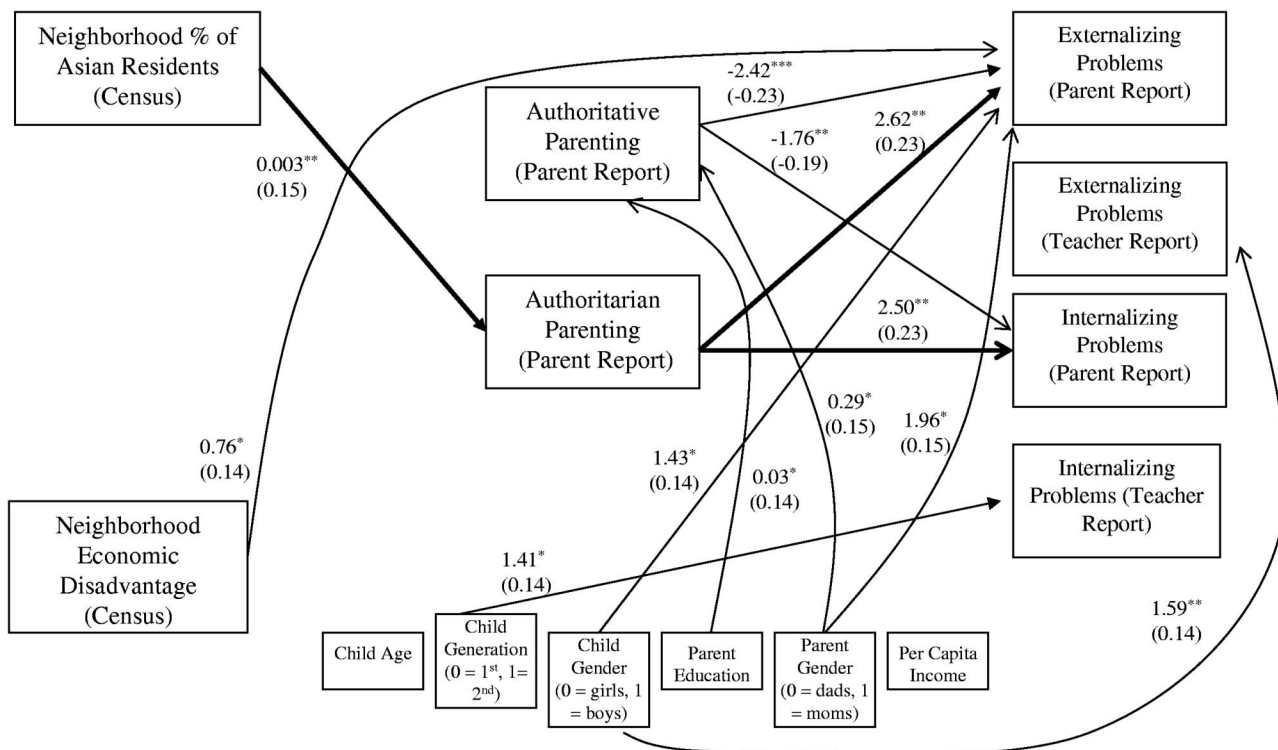
Figure 1. The path-analytic model testing parenting styles as mediators of the relations between neighborhood characteristics and children's behavioral problems. The model tested all of the paths from neighborhood variables to parenting styles, from parenting styles to behavioral problems, and from neighborhood variables to behavioral problems. However, only the statistically significant paths are shown. The bolded lines represent significant indirect paths. The numbers above the parentheses are unstandardized path coefficients, and the numbers in parentheses are standardized path coefficients. The effects of covariates (child age, gender, and generation status; parent education; and family income) on all parenting and behavioral problem variables are controlled, although only significant paths are shown. $^*p < .05$, $^{**}p < .01$, $^{***}p < .001$.

dren were eligible for free or reduced-price school lunch. On the basis of geographic coding of participants' home addresses, the families were distributed across 127 census tracts, with a range of 1–10 families per tract (the average number of families per tract was 2.0).

Using census data for the four counties from which the sample was recruited (U.S. Census Bureau, 2000), we compared the parent sample to the local Chinese American population in regard to language preference, education level, employment status, and family income. Our sample had a higher percentage of families with income less than $50,000, a lower percentage of parents with a bachelor's degree or higher, and a lower percentage of parents who are employed than the local Chinese American population.

Procedures

Families were recruited using multiple strategies, including (a) on-site recruitment fairs at shopping centers and grocery stores within Asian and Chinese American communities (63.6% of the sample), (b) distribution of flyers at public and private schools with a large proportion of Asian American students (17.4%), and (c) referrals from community organizations (e.g., afterschool programs, churches, nonprofit organizations) serv-

ing Chinese Americans (19.0%). Given our goal of studying underserved families, we intentionally oversampled low-income families by concentrating our recruitment efforts in Asian American communities with high economic disadvantage (e.g., Chinatowns). During recruitment, the project was described as a research study examining Chinese American children's psychological adjustment and achievement. Interested parents provided their phone number, and staff members conducted a follow-up prescreening phone interview to determine eligibility. The eligibility criteria were as follows: (a) the child was in first or second grade at the time of screening, (b) the child lived with at least one of his or her biological parents, (c) both biological parents were ethnic Chinese, (d) the child was either a first- or second-generation Chinese American, and (e) the parent and child were able to understand and speak English or Chinese (Mandarin or Cantonese). Of the 380 children whose parents expressed an interest (i.e., parents who filled out a contact form at recruitment events or contacted our office), 353 were screened; of those screened, 291 were eligible. Of those who met the eligibility criteria, 258 children were assessed. There were no significant associations between recruitment methods and participants' family demographic characteristics.
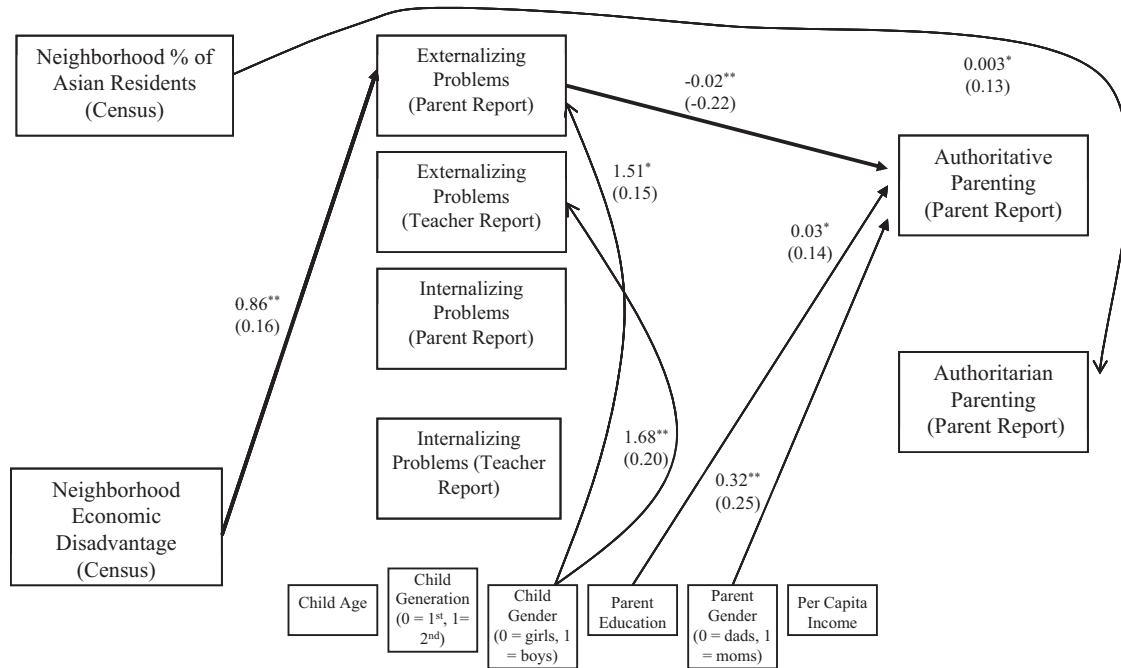
Figure 2. The path-analytic model testing child behavioral problems as mediators of the relations between neighborhood characteristics and parenting styles. The model tested all of the paths from neighborhood variables to behavioral problems, from behavioral problems to parenting styles, and from neighborhood variables to parenting styles. However, only the statistically significant paths are shown. The bolded lines represent significant indirect paths. The numbers above the parentheses are unstandardized path coefficients, and the numbers in parentheses are standardized path coefficients. The effects of covariates (child age, gender, and generation status; parent education; and family income) on all parenting and behavioral problem variables are controlled, although only significant paths are shown. $^* p < .05$, $^{**} p < .01$, $^{***} p < .001$.

The parent–child dyad completed a 2.5-hr laboratory assessment that consisted of one-on-one interviews, questionnaires, psychological testing, and behavioral tasks. A team of graduate students and undergraduate research assistants administered the assessments. Interviews were conducted in the participant's preferred language (i.e., English, Mandarin, or Cantonese), and all written materials were offered in English, simplified Chinese, or traditional Chinese characters. Most (83.3%) parents completed the questionnaires in Chinese. At the end of the laboratory visit, parents were paid $50 and children were given a small prize. In addition, the child's main classroom teacher was asked to complete a survey by mail. In the event that classroom teachers were not available, afterschool teachers/coaches (0.8%) or relatives/family friends (3.1%) completed the teacher report. Teacher data were collected for 85.3% of children. Teachers were paid $20 for each student. The average time lag between the laboratory visit and the return of the teacher survey was 3 months (range = 0–12 months for 94% of children with teacher data).

Measures

Neighborhood Economic Disadvantage (Census Data). We used tract-level data from the 2000 U.S. Census to assess neighborhood. Although this study was conducted in 2007–2009, at the time of our data analysis, tract-level data from the 2010 U.S. Census had not yet been made available to the public. Three

tract-level variables were used as indicators of neighborhood economic disadvantage: percentage of residents who receive public assistance, percentage unemployment, and percentage poverty. These indicators are commonly used in prior empirical work as measures of neighborhood disadvantage (e.g., Roosa et al., 2005; Xue et al., 2005). The three variables were highly correlated with each other in the present sample (rs > .70). After the procedure commonly used in neighborhood studies (e.g., Deng et al., 2006; Liu, Lau, Chen, Dinah, & Kim, 2009), we converted each indicator to a standardized value according to the current sample's scores and then averaged them to create a neighborhood disadvantage composite. Four percent of families in this sample lived in neighborhoods with poverty rates equal to or higher than 40%, 25% lived in neighborhoods with poverty rates between 20% and 40%, and 68% lived in neighborhoods with poverty rates lower than 20%.

Neighborhood Asian Concentration (Census Data). We used a single variable calculated from census data: percentage of residents who self-identified as being of Asian-only descent. Twenty-eight percent of families in the present sample lived in ethnic enclaves with Asian densities greater than 50%, and 22% lived in neighborhoods with Asian densities less than 20%.

Child Behavioral Problems (Parent and Teacher Report). Parents completed the Externalizing Problems and Internalizing Problems subscales of the Child Behavior Checklist (CBCL;

Table 1
Parent and Family Characteristics as Percentages of the Study Sample (Census Data in Parentheses)

Parent and Family Characteristics	Participating Mothers ($n = 211$)	Participating Fathers ($n = 47$)
Parent birthplace		
United States	1.4	6.4
Mainland China	75.8	68.1
Hong Kong	10.0	4.3
Taiwan	3.3	2.1
Other	9.5	19.1
Parent language preference[a]		
English	20.4 (17.7)	21.3 (17.7)
Chinese	79.6 (82.3)	78.7 (82.3)
Parent education level[b]		
Junior high and below	10.1 (21.4)	9.1 (15.5)
Some high school	5.7 (9.9)	4.5 (6.6)
High school or GED	38.7 (14.4)	31.8 (12.7)
Technical/associate's degree/some college	25.3 (19.2)	22.7 (19.6)
Bachelor's degree or higher	20.1 (35.0)	31.9 (49.1)
Parent employment status[c]		
Employed (full- or part-time)	78.3 (94.6)	88.1 (93.9)
Unemployed	10.6 (5.4)	11.9 (6.1)
Homemaker	11.1	0.0
	Sample ($n = 258$)	
Family income[d]		
≤$25,000	28.0 (9.8)	
$25,001–$50,000	37.4 (18.9)	
$50,000	34.6 (71.3)	

Note. All of the census data were calculated for the ethnic Chinese (alone) population across the four counties where the sample was recruited. [a] Census data for language preference were by household and refer to the language spoken in the home by all residents ages 5 and older. [b] Census data for education level were for females and males ages 25 and older. [c] Census data for employment status were for females and males ages 25 and older. [d] Census data for family income were for families with two parents and children younger than 18 years.

Achenbach, 2001a) in the laboratory. Teachers completed the corresponding subscales of the Teacher Report Form (TRF; Achenbach, 2001b) by mail. The Chinese versions of the CBCL externalizing and internalizing subscales have demonstrated good

internal consistency (αs > .80) and test–retest reliability (rs > .80) in previous studies of native Chinese children (Liu et al., 1999, 2000). In the present sample, the α values for externalizing problems were .87 (33 items) and .85 (27 items) for parents' and teachers' reports, respectively; the α values for internalizing problems were .80 (31 items) and .79 (32 items). Parents' and teachers' reports of externalizing problems were significantly and positively related ($r = .21$, $p = .003$), and so were their reports of children's internalizing problems ($r = .21$, $p = .002$).

Authoritative and Authoritarian Parenting (Parent Report). Parents rated their own authoritative and authoritarian parenting styles in the Parenting Styles and Dimensions Questionnaire (PSDQ; Robinson, Mandleco, Olsen, & Hart, 1995) using a 5-point scale (1 = *never* to 5 = *always*). 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: nonreasoning/punitive strategies, corporal punishment, verbal hostility, and directiveness. The PSDQ is available in English and Chinese languages, and it has shown an invariant two-factor structure in samples of native Chinese and U.S. parents (Wu et al., 2002). In this sample, the α values for authoritative parenting (26 items) and authoritarian parenting (17 items) were .83 and .84, respectively.

Results

Descriptive Statistics and Correlation Analyses

The descriptive statistics are presented in Table 2. Variables were first screened for normality. Using the cutoffs of two and seven for skewness and kurtosis, respectively (West, Finch, & Curran, 1995), with the exception of teachers' reports of children's externalizing problems, which was slightly positively skewed, all of the other neighborhood, parenting, and adjustment variables were normally distributed. Twelve children were missing neighborhood data because either information on their home addresses was not available or their home addresses could not be coded into census tracts. Forty-four children were missing teacher-reported data because their teachers did not return questionnaires. We

Table 2
Descriptive Statistics of Neighborhood, Parenting, and Child Behavioral Problems

Variable	Range	Mean (n)	SD	Skewness	Kurtosis
Neighborhood environment (census)					
Percentage Asian residents	1.21–93.54	38.42 (246)	21.70	.68	−.004
Percentage unemployment	0.00–15.31	3.89 (246)	2.50	1.88	5.13
Percentage of residents receiving public assistance	0.00–27.27	6.82 (246)	5.55	1.17	1.43
Percentage poverty	1.72–52.07	14.51 (246)	10.18	1.28	1.70
Child behavioral problems[a]					
Externalizing problems (parent report)	.00–21.00	4.82 (253)	5.09	1.20	.60
Externalizing problems (teacher report)	.00–23.00	2.54 (214)	4.29	2.48	6.34
Internalizing problems (parent report)	.00–26.00	3.97 (253)	4.61	1.84	4.00
Internalizing problems (teacher report)	.00–25.00	3.69 (214)	4.30	1.70	3.42
Parenting styles					
Authoritative parenting (parent report)	2.00–4.93	4.07 (254)	.48	−.60	1.37
Authoritarian parenting (parent report)	1.26–4.61	2.14 (252)	.43	1.40	4.55

[a] For parents' and teachers' reports of externalizing and internalizing problems, the total raw scores were reported.

compared the children who were missing neighborhood or teacher data ($n = 54$) with those who were not ($n = 204$) on demographic and parent-reported variables and found no differences.

The zero-order correlations among neighborhood, parenting, child behavioral problems, and child and family demographic characteristics are presented in Table 3. There are several significant correlations between participants' demographic characteristics and neighborhood, parenting, or child adjustment variables. Thus, child age, gender, and generation status and parent education, gender, and family income were included as covariates in subsequent analyses.

Path Analysis

To test the hypothesized relations among neighborhood variables, parenting styles and children's behavioral problems, we conducted path analysis in Mplus 5.2 (Muthén & Muthén, 1998–2008). Two models were tested: (a) the model in which parenting styles mediate the relations between neighborhood variables (economic disadvantage and Asian concentration) and children's behavioral problems (see Figure 1), and (b) the model in which children's behavioral problems mediate the relations between neighborhood variables and parenting styles (see Figure 2). In both models, the effects of covariates (child age, gender, and generation status; parent education, gender, and family income) on all parenting and child behavioral problem variables were controlled. Because parents' and teachers' reports of behavioral problems were weakly correlated, they were tested as separate dependent variables rather than indicators of latent factors. The models were estimated with Mplus 5.2 (Muthén & Muthén, 1998–2008) using full information maximum likelihood to handle missing data and the maximum likelihood robust (MLR) estimator for adjustment to correct standard errors for non-normality. Because participants were clustered in census tracts, the models were estimated using a special feature (i.e., TYPE = COMPLEX) in Mplus 5.2 (Muthén & Muthén, 1998–2008), which takes into account the nonindependence of observations: parameters are estimated by maximizing a weighted log-likelihood function and standard errors are computed using a sandwich estimator (Muthén & Muthén, 1998–2008). Given the study's modest sample size (at the individual and neighborhood level) and the large proportion of neighborhood clusters with a single individual (65%), this analytic approach is considered more appropriate than multilevel modeling (Bell-Ellison, Ferron, & Kromrey, 2008).

The model with parenting styles as mediators (see Figure 1) fit the data well, $\chi^2(df = 14, N = 246) = 7.34, p = .92$, Comparative Fit Index (CFI) = 1.00, Root Mean Square Error of Approximation (RMSEA) = 0.00, Standardized Root Mean Residual (SRMR) = .02, Akaike Information Criterion (AIC) = 10,915.32. Regarding the effects of covariates, more educated parents reported higher authoritative parenting than less educated parents, and mothers reported higher authoritative parenting and higher child externalizing problems than fathers. Parents and teachers rated boys higher on externalizing problems than girls. Teachers rated second-generation children higher on internalizing problems than first-generation children. Controlling for the covariates, neighborhood Asian concentration positively predicted authoritarian parenting, which in turn positively predicted parents' reports of externalizing and internalizing problems. Although neighborhood variables did not predict authoritative parenting, authoritative parenting negatively predicted parents' reports of externalizing and internalizing problems. In addition, neighborhood disadvantage had a positive and significant direct path to parents' reports of externalizing problems.

The model with children's behavioral problems as mediators (see Figure 2) also fit the data well, $\chi^2(df = 16, N = 246) = 23.88$, $p = .09$, CFI = .97, RMSEA = 0.045, SRMR = 0.044, AIC = 10,930.56. The effects of covariates were similar to the model in Figure 1. Controlling for covariates, neighborhood disadvantage was positively associated with parents' report of children's externalizing problems, which in turn was negatively associated with authoritative parenting. In addition, neighborhood Asian concentration had a positive and significant direct path to authoritarian parenting.

To test the significance of the mediated/indirect effects in Figure 1 (neighborhood → parenting styles → child behavioral problems)

Table 3
Zero-Order Correlations Among Neighborhood, Parenting, Child Adjustment, and Covariates

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Percentage of Asian residents in neighborhood (census)	—												
2. Neighborhood economic disadvantage composite (census)	−.004	—											
3. Internalizing problems (teacher report)	−.05	−.04	—										
4. Externalizing problems (teacher report)	−.004	−.05	.33***	—									
5. Internalizing problems (parent report)	.13*	.12+	.25***	.12+	—								
6. Externalizing problems (parent report)	.07	.17*	.21**	.24***	.68***	—							
7. Authoritative parenting (parent report)	−.09	−.10	−.10	−.02	−.22**	−.23***	—						
8. Authoritarian parenting (parent report)	.17**	.04	.08	.13+	.27***	.30***	−.08	—					
9. Child gender (0 = girls, 1 = boys)	−.03	.02	−.03	.18**	−.04	.14*	.05	.10	—				
10. Child generation (0 = first, 1 = second)	−.18**	−.003	.11	.01	−.01	−.08	.12+	−.10	−.06	—			
11. Child age	.01	−.05	−.07	.04	.04	−.04	−.12+	−.04	−.06	−.06	—		
12. Parent education	−.26***	−.28***	.003	−.03	−.11+	−.07	.17**	−.10	−.02	.13*	−.13*	—	
13. Parent gender (0 = dads, 1 = moms)	.02	−.002	−.11+	−.14*	−.001	.10+	.23***	.04	−.03	−.003	−.07	−.04	—
14. Family per capita income =[a]	−.26***	−.27***	.02	.03	−.07	−.08	.13*	−.08	−.02	.24***	−.16*	.63***	−.02

[a] Family per capita income was calculated by dividing the total family income for the past year by the number of individuals living in the household.
+ $p < .10$.   * $p < .05$.   ** $p < .01$.   *** $p < .001$.

and Figure 2 (neighborhood → child behavioral problems → parenting styles), we used the bias-corrected bootstrap confidence interval approach (Mackinnon, Lockwood, & Williams, 2004). Because the bootstrap confidence interval approach is not yet available for models estimated with the TYPE = COMPLEX option in Mplus 5.2 (for handling clustered data), we conducted the mediation analyses using the nonclustered option. For the model in Figure 1, there were two statistically significant indirect paths: (a) the indirect path from neighborhood Asian concentration to parents' reports of externalizing problems via authoritarian parenting (95% confidence interval [CI] = [0.001, 0.023]), and (b) the indirect path from neighborhood Asian concentration to parents' reports of internalizing problems via authoritarian parenting (95% CI = [0.001, 0.022]). For the model in Figure 2, the indirect path from neighborhood economic disadvantage to authoritative parenting via parents' reports of externalizing problems was significant (95% CI = [−0.049, −0.005]).

Discussion

To our knowledge, this is the first study to simultaneously test the relations among neighborhood characteristics, parenting styles, and Chinese American school-age children's behavioral problems. We found partial support for two hypotheses. First, consistent with the hypothesis that parenting styles mediate the relation between neighborhood and child adjustment, we found that neighborhood Asian concentration was positively associated with authoritarian parenting, which was in turn associated with Chinese American children's higher externalizing and internalizing problems. Second, consistent with the hypothesis that children's behavioral problems mediate the relations between neighborhood and parenting styles, we found that neighborhood economic disadvantage was associated with children's higher externalizing problems, which were in turn associated with lower authoritative parenting. Together, the findings point to the need to consider multiple contextual (e.g., socioeconomic and cultural) factors and multiple processes (e.g., family stress and transactional processes) in studying children's behavioral adjustment in ethnic minority and immigrant families.

Neighborhood Economic Disadvantage

Our finding on the positive association between neighborhood disadvantage and Chinese American children's externalizing problems (by parents' reports) is consistent with previous findings on neighborhood economic disadvantage or poverty conducted with child or adolescent samples from other ethnic groups (McBride Murry et al., 2001). However, parenting styles did not mediate the relation between neighborhood disadvantage and Chinese American children's behavioral problems. This result is in contrast to previous findings testing the family stress model, which showed that neighborhood poverty was indirectly associated with children's higher risk for behavioral problems partly by undermining effective parenting (e.g., Mrug & Windle, 2009; Roosa et al., 2005). There are two potential interpretations for the discrepancy. First, the discrepancy might be because we sampled families from low- to moderate- (but not high) poverty neighborhoods because few families in our sample lived in high-poverty neighborhoods (defined by ≥40%). Disruptions in parenting related to neighbor-

hood might emerge only in neighborhoods with high concentrated poverty, which are characterized by high crime and disorganization. Second, because previous studies were conducted with Latino (Roosa et al., 2005) and predominantly African American (Mrug & Windle, 2009) families, the discrepancy suggests that the processes underlying the adverse effect of neighborhood disadvantage on children's adjustment might differ by ethnicity. For example, extant research suggests that Chinese American immigrant parents living in disadvantaged neighborhoods may have other resources to support their child rearing (e.g., social support from extended families, friends, or community organizations). Indeed, Kamo and Zhou (1994) found that elderly Asian Americans are more likely than their European American counterparts to live in extended family households, particularly in their married children's homes, suggesting that grandparents might be an important source of social support for Asian American parents.

Although residing in an economically disadvantaged neighborhood did not have a direct association with parenting styles, we found support for a different pathway: neighborhood disadvantage increases parents' perceptions of their children's externalizing problems, which in turn decreases their authoritative parenting. Indeed, researchers previously showed that neighborhood disadvantage might escalate children's externalizing problems through promoting their association with deviant peers (Roosa et al., 2005). Although the significant path from children's externalizing problems to authoritative parenting is generally consistent with the developmental transactional theory (Sameroff, 2009), there are some differences between our findings and previous studies on bidirectional relations between parenting and child behaviors. Specifically, although researchers previously found that aggressive, explosive, and disruptive behavioral and temperament tendencies in children were associated with more coercive and punitive parenting behaviors (e.g., Choe et al., in press; Lee et al., 2013), we found that children's externalizing behaviors uniquely predicted lower authoritative parenting but not higher authoritarian parenting. It is important to note that the correlation between externalizing problems and authoritarian parenting (by parents' reports) was significant in the positive direction. Thus, the lack of a significant path in the model is likely due to overlap between child externalizing problems and other predictors (e.g., neighborhood Asian concentration). Moreover, Choe et al. (in press) and Lee et al. (2013) used longitudinal data and controlled for prior levels of parenting when testing the prediction by child behaviors, which is more advantageous for testing bidirectional relations than the present cross-sectional design.

Neighborhood Ethnic Density

An interesting result in our study is that neighborhood Asian concentration was unrelated to neighborhood disadvantage, which is in contrast to the findings from other ethnic groups (Leventhal & Brooks-Gunn, 2000). Our finding is consistent with a report from U.S. Census data showing that, compared with other ethnic minority groups in the United States, Asian Americans are less concentrated in areas of high poverty (Bishaw & U.S. Census Bureau, 2011). The relative independence of neighborhood disadvantage and coethnic concentration among Asian Americans provides a rare opportunity to isolate the effects of neighborhood cultural factors from socioeconomic factors.

Overall, there were no direct relations between neighborhood Asian concentration and children's behavioral problems. However, neighborhood Asian concentration had indirect positive associations with Chinese American children's externalizing and internalizing (by parents' reports) problems through authoritarian parenting style. Thus, one pathway through which living in neighborhoods with a higher concentration of Asian residents might be associated with Chinese American children's increased risk for behavioral problems is children's greater exposure to authoritarian parenting. This result mirrors the findings from cross-national and cross-ethnic group comparative studies, which showed that Chinese or Chinese American parents tend to endorse higher authoritarian parenting than European American parents (e.g., Chao, 2001; Dornbusch et al., 1987; Supple & Small, 2006). The cross-cultural differences in how frequently parents use certain parenting practices may be associated with cultural differences in perceived normativeness (Gershoff et al., 2010; Lansford et al., 2005). It is important to note that our results suggested that neighborhood might be a proximal context through which cultural influences on parenting are transmitted to families. It is possible that neighborhoods vary in the normativeness of authoritarian parenting, such that in neighborhoods with a high Asian concentration, the perceived normativeness of authoritarian parenting is higher than in neighborhoods with a low concentration of Asian residents. It is also possible that living around other Asian residents reinforces Chinese American parents' value of firm control, which in turn might promote their use of authoritarian parenting (Lau, 2010). However, because we did not assess neighborhood differences in perceived normativeness of authoritarian parenting or parents' cultural values of firm control, the above interpretations are speculative and cannot be tested in the study presented here.

Our finding that Chinese American children living in neighborhoods with higher Asian concentrations are at higher risk for behavioral problems due to greater exposure to authoritarian parenting seems inconsistent with the ethnographic research showing the benefits of ethnic communities for Asian American children's academic achievement (Zhou & Kim, 2006). In addition to the differences in research methodology (quantitative vs. qualitative), it is important to point out that our study and that of Zhou and Kim (2006) focused on different domains of child adjustment (mental health or behavioral problems vs. academic achievement). Qin, Rak, Rana, and Donnellan (2012) recently found that high-achieving Chinese American adolescents reported lower levels of psychological adjustment compared with their peers from other ethnic groups, showing a paradoxical pattern of development among Chinese American adolescents. Thus, the cultural and educational resources in ethnic communities that are conducive to Asian American children's academic achievement may not confer similar benefits for Asian American children's mental health adjustment. Moreover, because we only used a single indicator of the percentage of Asian residents in neighborhood, which does not accurately capture neighborhood variation in the availability of cultural resources, our study may have failed to detect the potential protective roles of ethnic communities in Chinese American children's psychological adjustment.

An integration of results from the two models (i.e., neighborhood → parenting → child behaviors and neighborhood → child behaviors → parenting) suggests that neighborhood economic disadvantage and Asian concentration might influence Asian American families through different pathways. Specifically, neighborhood economic disadvantage seemed to have a direct effect on children's externalizing problems, which in turn affected parents' use of authoritative parenting. By contrast, neighborhood Asian concentration seemed to have a direct effect on authoritarian parenting, which in turn affected children's behavioral problems.

Differential Predictions Between Parents' and Teachers' Reports of Behavioral Problems

The use of multiple informants (parents and teachers) to assess children's behavioral problems is one strength of this study. However, parents' and teachers' reports of externalizing and internalizing problems were weakly correlated with each other in the sample presented here. Informant discrepancies in ratings of child psychopathology are common in clinical child research and have been found in samples encompassing diverse ethnic and cultural backgrounds (see De Los Reyes & Kazdin, 2005, for a review). Informant discrepancies may be related to multiple factors, including differences in the contexts and perspectives of informants and differences in informants' attributions of child's behavioral problems (De Los Reyes & Kazdin, 2005). In our study, informant discrepancies were also shown in the relations between objective measures of neighborhood and ratings of children's behavioral problems: neighborhood disadvantage and Asian concentration were more strongly related to parents' ratings of child behavioral problems than teachers' ratings. Because parents have direct contact with their neighborhoods, their ratings of child psychopathology may be more sensitive to the variation in neighborhood than teachers' ratings. It is also possible that neighborhood disadvantage has a greater influence on parents' perceptions of children's behaviors than children's actual behaviors because of its effect on parental stress (Roosa et al., 2005).

Limitations and Conclusions

This study had several limitations. First, the cross-sectional design did not allow us to draw conclusions on the directionality of relations among neighborhood, parenting, and child adjustment. It is important to test the mediation pathways with longitudinal data. Second, our sample contained a small number of families in each census tract, which might lead to underestimated neighborhood effects (Duncan, Connell, & Klebanov, 1997). Third, because the study was based on a convenience sample recruited from an urban area with a high concentration of Asian American residents, the findings might not generalize to Chinese American families living in other geographical regions. Despite our efforts to oversample low-income families, our sample included a small percentage of families living in high-poverty neighborhoods. Thus, our findings are most applicable for families living in neighborhoods with low to moderate levels of poverty. Fourth, because the parenting style measure used was originally developed based on European American families, it does not fully capture indigenous aspects of parenting in Asian families (e.g., training; Chao, 1994). Future research should incorporate measures that assess culturally common and culturally unique dimensions of parenting. Fifth, the use of 2000 U.S. Census data did not allow us to assess current neighborhood conditions; however, the fact that neighborhood conditions assessed 7–8 years earlier had significant relations to

children's adjustment suggests that there is some stability in the neighborhood environment of our study participants. Finally, census measures of neighborhood quality might not capture more subjective and specific neighborhood ratings (e.g., culturally salient features of neighborhood for Chinese American immigrant families, the specific level of interactions between neighbors, the length of time each family resided in that census tract). Future research could incorporate qualitative methods to assess Chinese American residents' subjective perceptions and experiences of neighborhood, which may help identify culturally significant features of neighborhood for this population.

Despite these limitations, the study extends the applicability of the family stress model and transactional model of development to an Asian American immigrant population and contributes new knowledge on how culture shapes child development. Our findings suggest that effective interventions for reducing children's behavioral problems in Asian American families living in ethnic Asian communities can target authoritarian parenting as a putative mediator.

References

Achenbach, T. M. (2001a). *Child Behavior Checklist for ages 6–18*. Burlington, VT: University of Vermont, Research Center for Children, Youth, and Families.

Achenbach, T. M. (2001b). *Child Behavior Checklist Teacher's Report Form for ages 6–18*. Burlington, VT: University of Vermont, Department of Psychiatry.

Barnett, M. A. (2008). Economic disadvantage in complex family systems: Expansion of family stress models. *Clinical Child and Family Psychology Review, 11,* 145–161. doi:10.1007/s10567-008-0034-z

Baumrind, D. (1996). Parenting: The discipline controversy revisited. *Family Relations, 45,* 405–414. doi:10.2307/585170

Bell-Ellison, B. A., Ferron, J. M., & Kromrey, J. D. (2008). Cluster size in multilevel models: The impact of small level-1 units on point and interval estimates in two level models. *Proceedings of the American Statistical Association, Social Statistics Section*. Alexandria, VA: American Statistical Association.

Bishaw, A., & U.S. Census Bureau. (2011). *Areas with concentrated poverty: 2006–2010*. Washington, DC: U.S. Department of Commerce, Economics, and Statistics Administration, U.S. Census Bureau.

Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development, 65,* 1111–1119. doi:10.2307/1131308

Chao, R. K. (2001). Extending research on the consequences of parenting style for Chinese Americans and European Americans. *Child Development, 72,* 1832–1843. doi:10.1111/1467-8624.00381

Chen, S. H., Hua, M., Zhou, Q., Tao, A., Lee, E. H., Ly, J., & Main, A. (2013, April 8). Parent-child cultural orientations and child adjustment in Chinese American immigrant families. *Developmental Psychology*. Advance online publication. doi:10.1037/a0032473

Choe, D. E., Olson, S. L., & Sameroff, A. J.(in press). The interplay of externalizing problems and physical and inductive discipline during childhood. *Developmental Psychology*.

Conger, R. D., Conger, K. J., & Martin, M. (2010). Socioeconomic status, family processes, and individual development. *Journal of Marriage and Family, 72,* 685–704. doi:10.1111/j.1741-3737.2010.00725.x

De Los Reyes, A., & Kazdin, A. E. (2005). Informant discrepancies in the assessment of childhood psychopathology: A critical review, theoretical framework, and recommendations for further study. *Psychological Bulletin, 131,* 483–509. doi:10.1037/0033-2909.131.4.483

Deng, S., Lopez, V., Roosa, M. W., Ryu, E., Burrell, G. L., Tein, J.-Y., & Crowder, S. (2006). Family processes mediating the relationship of neighborhood disadvantage to early adolescent internalizing problems. *The Journal of Early Adolescence, 26,* 206–231. doi:10.1177/0272431605285720

Dornbusch, S. M., Ritter, P. L., Leiderman, P. H., Roberts, D. F., & Fraleigh, M. J. (1987). The relation of parenting style to adolescent school performance. *Child Development, 58,* 1244–1257. doi:10.2307/1130618

Duncan, G. J., Connell, J. P., & Klebanov, P. J. (1997). Conceptual and methodological issues in estimating causal effects of neighborhoods and family conditions on individual development. In J. Brooks-Gunn, G. J. Duncan, & J. L. Aber (Eds.), *Neighborhood poverty: Vol. 1. Context and consequences for children* (pp. 219–250). New York, NY: Russell Sage Foundation.

Edwards, B., & Bromfield, L. (2009). Neighborhood influences on young children's conduct problems and pro-social behavior: Evidence from an Australian national sample. *Children and Youth Services Review, 31,* 317–324. doi:10.1016/j.childyouth.2008.08.005

Georgiades, K., Boyle, M. H., & Duku, E. (2007). Contextual influences on children's mental health and school performance: The moderating effects of family immigrant status. *Child Development, 78,* 1572–1591. doi:10.1111/j.1467-8624.2007.01084.x

Gershoff, E. T., Grogan-Kaylor, A., Lansford, J. E., Chang, L., Zelli, A., Deater-Deckard, K., & Dodge, K. A. (2010). Parent discipline practices in an international sample: Associations with child behaviors and moderation by perceived normativeness. *Child Development, 81,* 487–502. doi:10.1111/j.1467-8624.2009.01409.x

Gonzales, N. A., Coxe, S., Roosa, M. W., White, R. M. B., Knight, G. P., Zeiders, K. H., & Saenz, D. (2011). Economic hardship, neighborhood context, and parenting: Protective effects on Mexican-American adolescent's mental health. *American Journal of Community Psychology, 47,* 98–113. doi:10.1007/s10464-010-9366-1

Halpern, D. (1993). Minorities and mental heath. *Social Science & Medicine, 36,* 597–607. doi:10.1016/0277-9536(93)90056-A

Hoeffel, E. M., Rastogi, S., Kim, M. O., & Shahid, H. (2012). *The Asian population: 2010*. Washington, DC: U.S. Census Bureau.

Juang, L. P., & Alvarez, A. N. (2011). Family, school, and neighborhood: Links to Chinese American adolescent perceptions of racial/ethnic discrimination. *Asian American Journal of Psychology, 2,* 1–12. doi:10.1037/a0023107

Jung, S., Fuller, B., & Galindo, C. (2012). Family functioning and early learning practices in immigrant homes. *Child Development, 83,* 1510–1526. doi:10.1111/j.1467-8624.2012.01788.x

Kamo, Y., & Zhou, M. (1994). Living arrangements of elderly Chinese and Japanese in the U.S. *Journal of Marriage and the Family, 56,* 544–558. doi:10.2307/352866

Lansford, J. E., Chang, L., Dodge, K. A., Malone, P. S., Oburu, P., Palmérus, K., . . . Quinn, N. (2005). Physical discipline and children's adjustment: Cultural normativeness as a moderator. *Child Development, 76,* 1234–1246. doi:10.1111/j.1467-8624.2005.00847.x

Lau, A. S. (2010). Physical discipline in Chinese American immigrant families: An adaptive culture perspective. *Cultural Diversity & Ethnic Minority Psychology, 16,* 313–322. doi:10.1037/a0018667

Lee, E. H., Zhou, Q., Eisenberg, N., & Wang, Y. (2013). Bidirectional relations between temperament and parenting styles in Chinese children. *International Journal of Behavioral Development, 37,* 57–67. doi:10.1177/0165025412460795

Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin, 126,* 309–337. doi:10.1037/0033-2909.126.2.309

Liu, L. L., Lau, A. S., Chen, A. C., Dinah, K. T., & Kim, S. Y. (2009). The influence of maternal acculturation, neighborhood disadvantage, and parenting on Chinese American adolescents' conduct problems: Testing the segmented assimilation hypothesis. *Journal of Youth and Adolescence, 38,* 691–702. doi:10.1007/s10964-008-9275-x

Liu, X., Kurita, H., Guo, C., Miyake, Y., Ze, J., & Cao, H. (1999). Risk factors of behavior and emotional problems among Chinese children aged 6 through 11 years. *Journal of the American Academy of Child & Adolescent Psychiatry, 38,* 708–715. doi:10.1097/00004583-199906000-00018

Liu, X., Kurita, H., Guo, C., Tachimori, H., Ze, J., & Okawa, M. (2000). Behavioral and emotional problems in Chinese children: Teacher reports for ages 6 to 11. *Journal of Child Psychology and Psychiatry, 41,* 253–260. doi:10.1017/S0021963099005119

Ly, J., Zhou, Q., Chu, K., & Chen, S. H. (2012). Teacher-child relationship quality and academic achievement of Chinese American children from immigrant families. *Journal of School Psychology, 50,* 535–553. doi:10.1016/j.jsp.2012.03.003

Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent–child interaction. In P. H. Mussen (Series Ed.) & E. M. Hetherington (Ed.), *Handbook of child psychology: Vol. 4, Socialization, personality, and social development* (pp. 1–101). New York, NY: Wiley.

Mackinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research, 39,* 99–128. doi:10.1207/s15327906mbr3901_4

Mair, C., Diez Roux, A. V., Osypuk, T. L., Rapp, S. R., Seeman, T., & Watson, K. E. (2010). Is neighborhood racial/ethnic composition associated with depressive symptoms? The multi-ethnic study of atherosclerosis. *Social Science & Medicine, 71,* 541–550. doi:10.1016/j.socscimed.2010.04.014

McBride Murry, V., Berkel, C., Gaylord-Harden, N. K., Copeland-Linder, N., & Nation, M. (2011). Neighborhood poverty and adolescent development. *Journal of Research on Adolescence, 21,* 114–128. doi:10.1111/j.1532-7795.2010.00718.x

Miller, A. M., Birman, D., Zenk, S., Wang, E., Sorokin, O., & Connor, J. (2009). Neighborhood immigrant concentration, acculturation, and cultural alienation in former soviet immigrant women. *Journal of Community Psychology, 37,* 88–105. doi:10.1002/jcop.20272

Mrug, S., & Windle, M. (2009). Mediators of neighborhood influences on externalizing behavior in preadolescent children. *Journal of Abnormal Child Psychology, 37,* 265–280. doi:10.1007/s10802-008-9274-0

Muthén, L. K., & Muthén, B. O. (1998–2008). *Mplus user's guide,* 5th ed. Los Angeles, CA: Muthén & Muthén.

Odgers, C. L., Moffitt, T. E., Tach, L. M., Sampson, R. J., Taylor, A., Matthews, C. L., & Caspi, A. (2009). The protective effects of neighborhood collective efficacy on British children growing up in deprivation: A developmental analysis. *Developmental Psychology, 45,* 942–957. doi:10.1037/a0016162

Qin, D. B., Rak, E., Rana, M., & Donnellan, M. B. (2012). Parent-child relations and psychological adjustment among high-achieving Chinese and European American adolescents. *Journal of Adolescence, 35,* 863–873. doi:10.1016/j.adolescence.2011.12.004

Robinson, C. C., Mandleco, B., Olsen, F. S., & Hart, H. C. (1995). Authoritative, authoritarian, and permissive parenting practices: Development of a new measure. *Psychological Reports, 77,* 819–830. doi:10.2466/pr0.1995.77.3.819

Roche, K. M., Ghazarian, S. R., Little, T. D., & Leventhal, T. (2011). Understanding links between punitive parenting and adolescent adjustment: The relevance of context and reciprocal associations. *Journal of Research on Adolescence, 21,* 448–460. doi:10.1111/j.1532-7795.2010.00681.x

Roche, M., Ensminger, M. E., & Cherlin, A. J. (2007). Variations in parenting and adolescent outcomes among African American and Latino families living in low-income, urban areas. *Journal of Family Issues, 28,* 882–909. doi:10.1177/0192513X07299617

Roosa, M. W., Deng, S., Ryu, E., Burrell, G. L., Tein, J.-Y., Jones, S., . . . Crowder, S. (2005). Family and child characteristics linking neighborhood context and child externalizing behavior. *Journal of Marriage and Family, 67,* 515–529. doi:10.1111/j.0022-2445.2005.00132.x

Ross, C. E., & Mirowsky, J. (2001). Neighborhood disadvantage, disorder, and health. *Journal of Health and Social Behavior, 42,* 258–276. doi:10.2307/3090214

Sameroff, A. J. (Ed.) (2009). *The transactional model of development: How children and contexts shape each other.* Washington, DC: American Psychological Association. doi:10.1037/11877-000

Sorkhabi, N. (2005). Applicability of Baumrind's parent typology to collective cultures: Analysis of cultural explanations of parent socialization effects. *International Journal of Behavioral Development, 29,* 552–563.

Steinberg, L. (2001). We know some things: Adolescent-parent relationships in retrospect and prospect. *Journal of Research on Adolescence, 11,* 1–19. doi:10.1111/1532-7795.00001

Supple, A. J., & Small, S. A. (2006). The influence of parental support, knowledge, and authoritative parenting on Hmong and European American adolescent development. *Journal of Family Issues, 27,* 1214–1232. doi:10.1177/0192513X06289063

Tao, A., Zhou, Q., Lau, N., & Liu, H. (2013). Chinese American immigrant mothers' discussion of emotions with children: Relations to cultural orientations. *Journal of Cross-Cultural Psychology, 44,* 478–501. doi:10.1177/0022022112453318

U.S. Census Bureau. (2000). *2000 Census summary file 3 census tract data.* Retrieved on September 18, 2012 from http://www.census.gov/census2000/sumfile3.html

U.S. Census Bureau. (2010). *2010 ACS 1-year estimates: Alameda, Contra Costa, San Francisco, and San Mateo Counties, CA.* Retrieved on September 18, 2012 from http://factfinder2.census.gov/faces/nav/jsf/pp./searchresults.xhtml?refresh=t

Weisner, T. (2002). Ecocultural understanding of children's developmental pathways. *Human Development, 45,* 275–281. doi:10.1159/000064989

West, S. G., Finch, J. F., & Curran, P. J. (1995). Structural equation models with non-normal variables. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 57–75). Thousand Oaks, CA: Sage.

White, R. M. B., Deardorff, J., & Gonzales, N. A. (2012). Contextual amplification or attenuation of pubertal timing effects on depressive symptoms among Mexican American girls. *Journal of Adolescent Health, 50,* 565–571. doi:10.1016/j.jadohealth.2011.10.006

White, R. M. B., Roosa, M. W., & Zeiders, K. H. (2012). Neighborhood and family intersections: Prospective implications for Mexican American adolescents' mental health. *Journal of Family Psychology, 26,* 793–804. doi:10.1037/a0029426

Wu, P., Robinson, C. C., Yang, C., Hart, C. H., Olsen, S. F., Porter, C. L., . . . Wu, X. (2002). Similarities and differences in mothers' parenting of preschoolers in China and the United States. *International Journal of Behavioral Development, 26,* 481–491. doi:10.1080/01650250143000436

Xue, Y., Leventhal, T., Brooks-Gunn, J., & Earls, F. J. (2005). Neighborhood residence and mental health problems of 5- to 11-year olds. *Archives of General Psychiatry, 62,* 554–563. doi:10.1001/archpsyc.62.5.554

Zhou, M., & Kim, S. S. (2006). Community forces, social capital, and educational achievement: The case of supplementary education in the Chinese and Korean immigrant communities. *Harvard Educational Review, 76,* 1–29.

Zhou, Q., Tao, A., Chen, S. H., Main, A., Lee, E., Ly, J., . . . Li, X. (2012). Asset and protective factors for Asian American children's mental health adjustment. *Child Development Perspectives, 6,* 312–319. doi:10.1111/j.1750-8606.2012.00251.x