Parent–Child Acculturation Discrepancy, Perceived Parental Knowledge, Peer Deviance, and Adolescent Delinquency in Chinese Immigrant Families

Yijie Wang,
Department of Human Development and Family Science, University of Texas at Austin, 1 University Station, A2700, Austin, TX 78712, USA

Su Yeong Kim,
Department of Human Development and Family Science, University of Texas at Austin, 1 University Station, A2700, Austin, TX 78712, USA

Edward R. Anderson,
Department of Human Development and Family Science, University of Texas at Austin, 1 University Station, A2700, Austin, TX 78712, USA

Angela Chia-Chen Chen, and
College of Nursing, Arizona State University, Tempe, AZ, USA

Ni Yan
Department of Human Development and Family Science, University of Texas at Austin, 1 University Station, A2700, Austin, TX 78712, USA

Su Yeong Kim: sykim@prc.utexas.edu

Abstract

Parent–child acculturation discrepancy has been considered a risk factor for child maladjustment. The current study examined parent–child acculturation discrepancy as an ongoing risk factor for delinquency, through the mediating pathway of parental knowledge of the child's daily experiences relating to contact with deviant peers. Participants were drawn from a longitudinal project with 4 years between data collection waves: 201 Chinese immigrant families participated at Wave 1 (123 girls and 78 boys) and 183 families (110 girls and 73 boys) participated at Wave 2. Based on the absolute difference in acculturation levels (tested separately for Chinese and American orientations) between adolescents and parents, one parent in each family was assigned to the "more discrepant" group of parent–child dyads, and the other parent was assigned to the "less discrepant" group of parent–child dyads. To explore possible within-family variations, the mediating pathways were tested separately among the more and less discrepant groups. Structural equation modeling showed that the proposed mediating pathways were significant only among the more discrepant parent–adolescent dyads in American orientation. Among these dyads, a high level of parent–child acculturation discrepancy is related to adolescent perceptions of less parental knowledge, which is related to adolescents having more contact with deviant peers, which in turn leads to more adolescent delinquency. This mediating pathway is significant concurrently, within early and middle adolescence, and longitudinally, from early to middle adolescence. These findings illuminate some of the dynamics in the more culturally discrepant parent–child dyad in a family and highlight the importance of examining parent–child acculturation discrepancy within family systems.

Correspondence to: Su Yeong Kim, sykim@prc.utexas.edu.

Introduction

Although Asian American adolescents are commonly perceived to be model minorities, there has been a growing concern about delinquent behaviors in this group. Indeed, studies have found that Asian American adolescents are at least as likely to engage in delinquency (e.g., graffiti painting, shoplifting or stealing a car) as their European American counterparts (Choi and Lahey 2006; Willgerodt and Thompson 2006). The literature on this topic suggests that Asian American adolescents' delinquent behaviors are tied to the challenges of adapting to life in the US, such as dealing with family and peer relationships in potentially conflicting mainstream and heritage cultures (Le 2002). Thus, it is important to consider the psychosocial predictors of delinquency, such as acculturation, in order to inform future intervention efforts.

Acculturation refers to a process through which immigrants gradually adapt their language, behaviors, beliefs, and/ or values as a result of contact with the mainstream culture (Yoon et al. 2011). A significant body of work has shown that discrepancy in acculturation levels between parents and children is a significant risk factor for child maladjustment, as indicated by decreased academic performance, depression, and delinquency (Costigan and Dokis 2006a; Kim et al. 2009; Unger et al. 2009). Longitudinal research on this link's underlying mechanism, however, is limited. Also limited are studies examining within-family variations in the effects of parent–child acculturation discrepancy on child maladjustment. The present study explores how parents' knowledge of children's daily experiences (as perceived by the adolescents) and adolescents' association with deviant peers, two important constructs related to delinquency, operate sequentially to mediate the relationship between parent–child acculturation discrepancy and adolescent delinquency in an understudied population of adolescents in Chinese immigrant families. Within each family, the mediating pathway is tested separately for two groups of parent–adolescent dyads: those that are more discrepant in their acculturation levels, and those that are less discrepant.

Parent–Child Acculturation Discrepancy as a Risk Factor for Adolescent Delinquency

Acculturation is a bi-dimensional construct, consisting of orientations toward two cultures, heritage and mainstream, which are independent from each other (Ryder et al. 2000). Children of immigrants tend to be more acculturated to the mainstream culture, while immigrant parents tend to be more oriented toward their heritage culture (Portes and Rumbaut 1996). Although the alternate scenario occurs with less frequency, some immigrant parents are more acculturated to the mainstream culture, while their children are more oriented toward the parents' heritage culture (e.g., Lau et al. 2005). Regardless of direction, however, discrepancies in family members' acculturation levels have been linked to externalizing behaviors in children, such as substance use in Latino youth (Unger et al. 2009), conduct problems in Mexican youth (Lau et al. 2005), and violence in Asian American youth (Le and Stockdale 2008). This might be due to the fact that as long as parents and children have discrepant beliefs, values and behaviors, family functions are likely to be disrupted. Birman (2006) found that parent–child acculturation discrepancy leads to family disagreement regardless of the direction of discrepancy. Therefore, although the current study controls for the direction of discrepancy, any form of acculturation discrepancy is considered to have a similar effect on adolescent adjustment.

One limitation of previous studies on this topic is their tendency to rely on concurrent data and to examine only direct correlational relationships between acculturation discrepancy and adolescent delinquency. By using longitudinal data, the current study takes into account the temporal ordering of variables to test the long-term effect of parent–child acculturation discrepancy on youth delinquency and to explore in greater depth the underlying mechanisms of this relationship.

Parental Knowledge and Deviant Peers as Potential Mediators

Parent–child acculturation discrepancy in immigrant families disrupts family functioning by increasing the incidence of miscommunication and misunderstanding (Hwang 2006). Theories on communication have highlighted the disruptive effect of not sharing beliefs, values and behaviors; people with divergent points of view can experience difficulty gaining information from each other (Berger and Calabrese 1975). Similarly, parents and children who hold culturally discrepant beliefs, values and behaviors may be discouraged from communicating and interacting effectively. Therefore, adolescents may come to feel that their parents do not know or understand their daily activities, whereabouts and companions.

The extant literature does not directly examine the link between parent–child acculturation discrepancy and perceived parental knowledge. However, previous research does provide some support for such a link. For example, using generational status as a proximal measure of acculturation, Tasopoulos-Chan et al. (2009) found that second generation Chinese American youth more frequently avoided discussing their activities with their parents than did first generation Chinese American youth. In a case study of Chinese immigrant families, Qin (2006) found that both parents and children report that parents do not know about their children's friends and school activities and children do not tell their parents about their experiences due to the fact that parents and children adhere to the heritage and mainstream cultures to different degrees. Weaver and Kim's study (2008) on Chinese American families, which used parent and adolescent reports of parental knowledge as one of several indicators of supportive parenting, suggested that a high level of parent–child acculturation discrepancy may be related to less parental knowledge about children's whereabouts, companions, and bedtime. Therefore, it is possible that in families with a high level of acculturation discrepancy between parents and children, adolescents perceive a lack of parental knowledge. In addition, within a two-parent immigrant family, the child may perceive that the parent who is more culturally discrepant knows less about the child's activities, whereas the other parent, whose acculturation level more closely matches that of the child, knows more.

Parental knowledge has been consistently connected to fewer adolescent problem behaviors because such knowledge reduces the likelihood that the child will affiliate with deviant peers (for a review, see Crouter and Head 2002). Although this link between parental knowledge and adolescent delinquency has been demonstrated in the literature, few studies on immigrant families have examined the factors that set this process in motion. Parent–child acculturation discrepancy may be an ongoing obstacle for immigrant parents when it comes to obtaining knowledge about their children, which in turn places adolescents at risk for affiliating with deviant peers and engaging in delinquent behaviors.

Within-Family Variations on the Hypothesized Model

Studies on parent–child acculturation discrepancy usually sample only one parent within a family, even though two-parent families are the most common family form in the immigrant population (Hernandez 2004). Examining the effect of parent–child acculturation discrepancy without considering the family context may yield inconclusive results, as the dynamics in each of the parent–child dyads within a family are interdependent (Costigan

2010; Minuchin 1985). For example, an acculturation discrepancy with one parent may not influence family functioning if there is a great deal of tension between the child and the other parent.

Within a family, there are likely to be differences between parents in terms of how similar their acculturation level is to that of their child. In fact, Costigan and Dokis (2006b) found that father– and mother–child acculturation discrepancy differed significantly from each other in both Chinese and American orientations. Thus, the two parent–child dyads within a family can be categorized as the dyad with a greater acculturation discrepancy versus the dyad with a smaller acculturation discrepancy. A contrast effect is likely to take place: acculturation discrepancy in the less discrepant parent–child dyad becomes less important, whereas acculturation discrepancy in the more discrepant dyad becomes more problematic. Indeed, literature on social judgment suggests that one's evaluation of a target is based on its *relative* characteristics—that is, in comparison to the reference, whatever the reference might be (Mussweiler 2003). Therefore, the link between parent–child acculturation discrepancy and adolescents' perceptions of lack of parental knowledge may be stronger among more discrepant parent–child dyads than it is among less discrepant dyads.

Control Variables

Several control variables are theoretically related to the main study variables of parent–child acculturation discrepancy, perceived parental knowledge, adolescents' contact with deviant peers and delinquency. First, the current study controls for family income and parental education level, as the risks posed by parent–child acculturation discrepancy may be especially strong in families in which parents have fewer resources (Portes and Rumbaut 1996). Second, parent gender is controlled, as some parent and child characteristics (e.g., maternal working hours and children's temperament) are more consistently related to paternal knowledge than they are to maternal knowledge (Crouter et al. 1999). Third, empirical studies have found that second- or later-generation adolescents engage in more delinquent behaviors than their first-generation counterparts (Choi and Lahey 2006), and that boys engage in more delinquent behaviors than do girls (Moffitt et al. 2001). In addition, delinquent behaviors tend to increase from early to middle adolescence (Moffitt 1993). Therefore, the present study also includes adolescents' generational status, sex and age as control variables. We also control for the direction of parent–child acculturation discrepancy and whether the more/less discrepant designation remains the same across waves.

Present Study

The present study is part of a longitudinal project on Chinese immigrant families. Data were collected first when children in these families were in their early adolescent years (middle school), and again when they were in their middle adolescent years (high school). The current study has two aims. First, we examine the proposed mediating pathways separately among the more and less discrepant parent–adolescent dyads. We hypothesize that parent–child acculturation discrepancy will be related to adolescents perceiving that their parents know less about their daily experiences. The perception of less parental knowledge will be associated with adolescents affiliating with more deviant peers, which in turn will be related to adolescents engaging in more delinquent behaviors. Second, we compare model paths between more and less discrepant dyads. We hypothesize that model paths may be stronger for more discrepant dyads than they are for less discrepant dyads.

The conceptual model to be tested is shown in Fig. 1, which depicts both concurrent and longitudinal paths between model constructs. Concurrent relationships from parent–child acculturation discrepancies to parental knowledge to adolescent delinquency are tested

among all Wave 1 variables as well as among all Wave 2 variables (a paths). Data on deviant peers were collected only at Wave 2, and thus are tested as a Wave 2 construct only. Auto-regressive influences are controlled through paths of the same constructs across waves (b paths). In addition, cross-lagged paths are specified for distinct constructs from Wave 1 to Wave 2 (c paths). Alternative cross-lagged paths (d paths) are also specified to test for a potential alternative causal direction of the proposed relationships in the model.

Method

Participants

Participants were drawn from a two-wave longitudinal study conducted in Northern California. Immigrant parents in the current study hail from mainland China, Hong Kong and Taiwan. As the study targets both parents in a family, all families have two foreign-born parents who are married to one another, both of whom participated in the study. The current sample consists of 201 families in the first wave and 183 in the second wave. Adolescents were between 12 and 15 years of age ($M = 13.0$, $SD = 0.71$) at Wave 1, and 16–19 years of age ($M = 17.0$, $SD = 0.72$) at Wave 2. Females accounted for 61.2% of the adolescent sample at Wave 1 and 60.1% at Wave 2. Median family income was in the range of $30,001–$45,000 at Wave 1 and $45,001–$60,000 at Wave 2. Median education level was high school graduate for both fathers and mothers across waves.

Procedure

At Wave 1, participants were recruited from seven middle schools in major metropolitan areas of Northern California. With the aid of school administrators, Chinese American students were identified, and all eligible families were sent a letter describing the research project. Participants received a packet of questionnaires for the mother, father, and target child in the household. Participants were instructed to complete the questionnaires alone and not to discuss answers with friends and/or family members. They were also instructed to seal their questionnaires in the provided envelopes immediately following completion of their responses. Within approximately 2–3 weeks after sending the questionnaire packet, research assistants visited each school to collect the completed questionnaires during the students' lunch periods. Of the 47% of families who agreed to participate, 76% returned surveys. Approximately 79% of families participating at Wave 1 completed questionnaires at Wave 2. At each wave, the entire family received nominal compensation ($30 at Wave 1 and $50 at Wave 2) for their participation. Questionnaires were prepared in English and Chinese. The questionnaires were first translated to Chinese and then back-translated to English. Any inconsistencies with the original English version of the scale were resolved by bilingual/bicultural research assistants with careful consideration of culturally appropriate meaning of items.

Attrition analyses were conducted to compare whether demographic variables differed between families that participated at only one wave and those that participated at both waves. Only adolescent sex was marginally significantly related to attrition: boys were more likely to have dropped out than girls (χ^2 (1) = 3.86, p = .051).

Measures

Acculturation—The Vancouver Index of Acculturation follows the bi-dimensional model of acculturation and was developed for use with Chinese Americans (Ryder et al. 2000). Using a scale ranging from (1) "strongly disagree" to (5) "strongly agree," mothers, fathers, and adolescents responded to 10 questions about their American orientation and 10 questions about their Chinese orientation. Questions asked about a range of generic behaviors without listing specific traditions or attitudes (e.g., "I often follow Chinese

cultural traditions"). The American orientation items were the same as the Chinese orientation items, except that the word "Chinese" was changed to "American." Only those items that conformed to the common factor structure across informants and waves were used (Kim et al. 2009). Across informants and waves, the internal consistency was high for both orientations (α = .76–.82).

Parental Knowledge—Parental knowledge was assessed through a measure adapted from the Iowa Youth and Families Project (Ge et al. 1996). Using a scale ranging from (1) "never" to (5) "always," adolescents rated three items on parents' knowledge of adolescents' daily activities (e.g., "During the day, does your parent know where you are and what you are doing?"). Across waves, the internal consistency was acceptable (α = .62–.74).

Deviant Peers—Adolescents reported on their association with deviant peers at Wave 2 only, using an abridged 7-item version of a peer deviance measure previously used with Asian American adolescents (Le and Stockdale 2005). Adolescents rated the proportion of their close friends who had exhibited problem behaviors (e.g., gone joyriding) during the past 6 months using a scale ranging from (1) "almost none" to (5) "almost all." The internal consistency was high (α = .83).

Delinquent Behaviors—Delinquent behaviors were assessed through measures adapted from the "rule-breaking behaviors" subscale of the Child Behavior Checklist (Achenbach 2001). One additional item, "is part of a gang," was added. Using a scale ranging from (0) "not true" to (2) "often true or very true," adolescents rated their own problem behaviors during the past 6 months. Two items ("feel guilty after doing something I shouldn't do" and "would rather be with older kids than kids my own age") were dropped from factor analysis due to low factor loading. The internal consistency was between .57 to .60 across waves. Given the low levels of delinquent behaviors reported, each delinquent behavior was dichotomized, such that a score of 0 reflected no delinquent behavior and a score of 1 indicated delinquent behavior, whether occasional or frequent.

Control Variables—Fathers and mothers reported on their family income before taxes and highest level of education attained. Family income was assessed using a scale ranging from (1) "below $15,000" to (12) "$165,001 or more." The highest level of education attained by parents was assessed using a scale ranging from (1) "no formal schooling" to (9) "finished graduate degree (e.g., Master's degree)." Adolescents also reported their age, sex, whether they were foreign- or US-born and whether their parents were married to one another.

Conceptualizing More/Less Discrepant Parent–Child Dyads

Acculturation scores of adolescents and parents were first standardized. The parent–child discrepancy score was the absolute value reached by subtracting the standardized parent score from the standardized adolescent score. The discrepancy scores of the two parent–adolescent dyads in the same family were then compared with each other. The dyad with a higher discrepancy score was assigned to the more discrepant group, whereas the dyad with a lower discrepancy score was assigned to the less discrepant group. These designations were done separately for each wave and separately for Chinese and American orientations. For the entire sample, there were slightly more father-adolescent dyads (50.8–54.2%) than mother–adolescent dyads (49.2–45.8%) placed in the more discrepant group for all the designations. This issue was addressed by controlling for parent gender as a covariate in the following analyses.

Results

Analyses Plan

Data analyses proceeded in three steps. First, we conducted descriptive and correlational analyses for model constructs and control variables. Second, we tested our first hypothesis on the mediating pathway separately among more and less discrepant groups using structural equation modeling. We examined the hypothesized paths depicted in Fig. 1 and the indirect effects from parent–child acculturation discrepancy to adolescent delinquency. Third, we tested our second hypothesis on the difference between more and less discrepant groups. We conducted invariance tests to compare the strength of the model parameters for more and less discrepant dyads. All the steps were conducted separately for Chinese and American orientations.

Descriptive Statistics and Correlational Analyses Among Model Constructs

Table 1 displays the descriptive statistics for the raw scores from participants' original reports. Tables 2 and 3 display the descriptive statistics and correlations among the study variables for models involving Chinese and American orientations, respectively. Consistent with the hypotheses, concurrent relationships and auto-regressive relationships between model constructs are generally significant. One notable exception is that parent–child acculturation discrepancy is significantly correlated with parental knowledge only among the more discrepant parent–adolescent dyads in American orientation. In addition, only two cross-lagged relationships are significant among the more discrepant parent–adolescent dyads in American orientation: a high level of parent–child acculturation discrepancy at Wave 1 is related to compromised parental knowledge at Wave 2, and a high level of parental knowledge at Wave 1 is significantly related to less contact with deviant peers at Wave 2. A potential alternative cross-lagged relationship emerged (Path d3 in Fig. 1), as adolescent delinquency at Wave 1 is significantly related to deviant peers at Wave 2 for both Chinese and American orientations. This is the only alternative path included in the analyses of the hypothesized models described below.

Analyses of Hypothesized Models

Structural Equation Modeling (SEM) was used to examine the hypothesized model using Mplus 6.11 (Muthen and Muthen 2011). Both concurrent and longitudinal links, as well as direct and indirect effects among the model constructs, were tested simultaneously. Mplus uses the full information maximum likelihood (FIML) estimation method to handle missing data, so that all the available data can be used to estimate model parameters (Muthen and Muthen 2011).

Four separate models were tested, separately for more and less discrepant parent–adolescent dyads, for both Chinese and American orientations. For all models, the endogenous variable was adolescent delinquent behaviors, and the mediating variables were parental knowledge and deviant peers. Adolescents' age, sex, and place of birth, as well as family income, parental educational level, the direction of the parent–child acculturation discrepancy, and whether the assignment to the more or less discrepant group switched from Waves 1 to 2, were included in all models as covariates.

The model fits are displayed in the last set of rows in Table 4. The four models showed a fair to good fit to the data. Each model explained 9.2–15.9% of the variance in Wave 1 adolescent delinquency, and 43.5–47.7% of the variance in Wave 2 adolescent delinquency.

The coefficients and confidence intervals for our hypothesized paths are also shown in the first set of rows in Table 4. All the hypothesized concurrent relationships among parent–

child acculturation discrepancies, perceived parental knowledge, adolescents' contact with deviant peers and adolescent delinquency (a paths) are significant in the models for more discrepant dyads in American orientation. In contrast, parent–child acculturation discrepancy is not significantly related to less parental knowledge (Paths a1 and a3) in the models for less discrepant dyads in Chinese or American orientation, nor for more discrepant dyads in Chinese orientation. Auto-regressive influences are generally significant for parent–child acculturation discrepancy and parental knowledge (Paths b1 and b2). However, with the exception of Model 4, the auto-regressive influence of adolescent delinquency (Path b3) is not significant. In addition, with the exception of the significant relationship between W1 delinquency and W2 deviant peer association (Path d3 in all four models), none of the other cross-lagged paths is significant.

Indirect effects are shown in the second set of rows in Table 4. Concerning our first hypothesis, on mediating effects, only the models for more discrepant parent–adolescent dyads in American orientation yielded significant indirect effects from parent–child acculturation discrepancy to adolescent delinquency. Concurrently, the effect of parent–adolescent acculturation discrepancy on adolescent delinquency was mediated by parental knowledge at Wave 1 (Pathway 1), and by both parental knowledge and contact with deviant peers at Wave 2 (Pathway 2). Longitudinally, the indirect effect of parent–adolescent acculturation discrepancy at Wave 1 on adolescent delinquency at Wave 2 was significant via two pathways. The first pathway was via parental knowledge at both waves and contact with deviant peers at Wave 2 (Pathway 3). The second was via parental knowledge at Wave 1, adolescent delinquency at Wave 1, and contact with deviant peers at Wave 2 (Pathway 4).

Comparing Models for More and Less Discrepant Parent–Adolescent Dyads

Concerning our second hypothesis, on the difference between more and less discrepant parent–child dyads, invariance tests were used to determine whether the model paths (Paths a, b, c and d3) were significantly different between the two groups; these were conducted separately for American and Chinese orientations. For each orientation, data for more and less discrepant dyads were modeled within the same covariance matrix to account for within-family dependence (Benner and Kim 2009). A model was first fitted allowing all structural paths to be freely estimated between more and less discrepant dyads. Individual paths of the structural model were then constrained, one at a time, to determine if they were significantly different across groups. The Chi-square test was used to determine whether a more constrained model fitted the data significantly worse than a less constrained one.

For American orientation only, invariance tests showed that three paths are stronger in the model for more discrepant parent–adolescent dyads than in the model for less discrepant dyads: the path from parent–child acculturation discrepancy to parental knowledge at Wave 1 (Path a1, $\chi^2(1) = 4.47$, $p < .05$), the path from parental knowledge to adolescent delinquency at Wave 1 (Path a2, $\chi^2(1) = 5.68$, $p < .05$), and the path from parental knowledge to contact with deviant peers at Wave 2 (Path a4, $\chi^2(1) = 7.25$, $p < .01$).

Discussion

Parent–child acculturation discrepancy has mostly been studied using cross-sectional data from the adolescent and just one parent in the family, usually the mother (Costigan 2010). The current study used longitudinal data to examine parent–child acculturation discrepancy as an ongoing risk factor for adolescent delinquency, and explored possible variations of this effect between more and less discrepant parent–adolescent dyads in terms of how their different acculturation levels might affect the functions within each family group. The mediating mechanism of this relationship was examined both concurrently and longitudinally. For more discrepant parent–adolescent dyads in American orientation, the

relationship between parent–child acculturation discrepancy and adolescent delinquency is mediated by adolescents' perception of parental knowledge and contact with deviant peers, both concurrently and longitudinally.

In the current study, parent–child discrepancies in American orientation, but not Chinese orientation, are indirectly related to adolescent delinquency. The extant literature has been inconsistent on the question of whether orientations towards the mainstream and heritage cultures influence delinquent behaviors in adolescents from immigrant families. For example, Le and Stockdale (2005) found that Asian American adolescents' endorsement of both orientations was related to their delinquent behaviors. In comparison, Juang and Nguyen (2009) found that adolescents' misconduct (i.e., damaging school property, threatening a teacher or hurting a classmate) was not significantly related to orientations towards either American or Chinese culture, but instead to specific cultural values (i.e., autonomy expectations). This finding suggests that the effects of acculturation-related factors on adolescent adjustment may vary according to the specific area being examined. It is possible that only a parent–child discrepancy in American orientation affects adolescent delinquency through the mediating pathway of parental knowledge and contact with deviant peers, whereas a discrepancy in Chinese orientation affects adolescent adjustment through other mediating mechanisms. This possibility seems especially likely considering that the construct measured in the current study—namely, parental knowledge about children's daily experiences—is more likely to be associated with the mainstream culture than with the heritage culture. Future studies are needed to explore whether and how parent–child discrepancy in Chinese orientation may be related to adolescent delinquency in Chinese immigrant families.

The existing literature considers lack of parental knowledge, especially adolescents' perceptions that their parents lack knowledge, to be a risk factor for adolescent delinquency (Crouter and Head 2002). The current study adds to this literature by identifying parent–child acculturation discrepancy as one possible origin of this particular risk factor in immigrant families. Further, this link between parent–child acculturation discrepancy and parental knowledge may take different forms, depending on the various dynamics operating within a given family. In our study, we compared the more and less discrepant parent–adolescent dyads within each family. Generally, the parent who is more discrepant from the child in orientation towards the mainstream culture presents more of a risk factor than does the less discrepant parent. Only among dyads in the more discrepant group is parent–child acculturation discrepancy related to deterioration in adolescents' perceptions of parental knowledge, which in turn is linked to more adolescent delinquency. Studies have found that parental knowledge comes from different sources, such as parents' active surveillance and adolescents' voluntary disclosures (Stattin and Kerr 2000). Studies measuring perceived parental knowledge (Soenens et al. 2006) also support this notion. It is possible that both processes, surveillance and disclosure, are compromised for the more discrepant parent–child dyad. In comparison, the less discrepant parent may assume more responsibility for actively tracking the child's activities, because he or she relates to the child better. For their part, adolescents may be more willing to share their daily experiences with their less discrepant parent, as they may feel that this parent understands them.

An interesting finding in the current study is that adolescent delinquency in early adolescence is consistently related to contact with deviant peers in middle adolescence, but not as consistently to delinquency in middle adolescence. In fact, contact with deviant peers during middle adolescence seems to bridge delinquency in early and middle adolescence. This result suggests that it may be ideal to time an intervention for reducing delinquency before early adolescence, when it may be most effective at reducing the long-term consequences of problem behaviors. Early onset of delinquent behaviors is a sign of a life-

course-persistent pattern, whereas adolescence-limited delinquent behaviors are more likely to exist only in middle adolescence (Moffitt 1993). As the life-course-persistent pattern of delinquency clearly poses more of a developmental risk, it is important to develop early intervention programs aimed at preventing this persistent pattern from developing.

Implications

The current study demonstrates that acculturation discrepancy in parent–child dyads is implicated in child maladjustment. Moreover, it suggests that the parent who is more discrepant poses the greater risk to child outcomes. Intervention programs usually target mothers, or whichever parent in a family signs up for the program (Ying 1999). However, this may not be a good strategy if the participating parent happens to be the less discrepant parent in the family. Rather, it may be more fruitful for future interventions to use a baseline measure to identify and target the parent whose acculturation level is more discrepant from that of the child.

The current study also identifies parental knowledge as a proximal mediator of the relationship between parent–child discrepancy in American orientation and adolescent delinquency. A lack of shared values, beliefs and activities may create misunderstanding and precipitate disagreements among family members. Intervention programs need to facilitate effective communication by providing approaches such as active monitoring and encouraging adolescents' disclosure.

Limitations

There are some limitations of the current study. First, families in which only one parent participated, including all single-parent families in the project, were not included in the sample. Thus, our findings may not be applicable to those families. In a similar vein, given the low participation rate, future studies with different samples are needed to examine whether the current findings can be replicated. Second, there are few significant cross-lagged relationships between study variables. This lack of significance may be attributed to the gap of 4 years that occurred between data collection waves. Third, although the direction of parent–child acculturation discrepancy was included as a covariate, the current study could not compare model parameters between families with different discrepancy directions. Future studies with larger sample sizes are needed to examine whether the direction of the parent–child acculturation discrepancy has an effect on how it impacts child adjustment. Finally, the current study assumes that a high level of parental knowledge and a low level of adolescent delinquency are adaptive. It is possible, however, that an extremely high level of parental knowledge indicates an overly controlling parenting style, and an extremely low level of adolescent delinquency indicates poor peer relationships, both of which are indicators of adolescent maladjustment. Future studies are needed to examine how various levels of parental knowledge and adolescent delinquency are related to adolescents' long-term developmental outcomes.

Conclusion

The current study explored the possible mediating mechanism of the relationship between parent–child acculturation discrepancy and adolescent delinquency, and compared the mediating pathways between more and less discrepant parent–adolescent dyads in Chinese immigrant families. For parent–adolescent dyads more discrepant in American orientation, acculturation discrepancy in early adolescence is an ongoing risk factor for adolescents' engagement in delinquent behaviors, in both early and middle adolescence. These results suggest that future intervention programs need to include the parent whose acculturation level is more discrepant from that of the child. Facilitating better communication between

parents and children, thereby increasing parental knowledge during early adolescence, may be the most promising strategy for interventions aiming to reduce adolescents' affiliation with deviant peers and subsequent engagement in delinquent behaviors.

Acknowledgments

References

Achenbach, T. Manual for the youth self-report and 2001 profile. Burlington, VT: University of Vermont; 2001.

Benner AD, Kim SY. Intergenerational experiences of discrimination in Chinese American families: Influences of socialization and stress. Journal of Marriage and Family. 2009; 71:862–877. [PubMed: 20161516]

Berger C, Calabrese R. Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. Human Communication Research. 1975; 1:99–112.

Birman D. Acculturation gap and family adjustment: Findings with Soviet Jewish refugees in the United States and implications for measurement. Journal of Cross-Cultural Psychology. 2006; 37:568–589.

Choi Y, Lahey BB. Testing the model minority stereotype: Youth behaviors across racial and ethnic groups. Social Service Review. 2006; 80:419–452. [PubMed: 21572913]

Costigan CL. Embracing complexity in the study of acculturation gaps: Directions for future research. Human Development. 2010; 53:341–349.

Costigan CL, Dokis DP. Relations between parent–child acculturation differences and adjustment within immigrant Chinese families. Child Development. 2006a; 77:1252–1267. [PubMed: 16999796]

Costigan CL, Dokis DP. Similarities and differences in acculturation among mothers, fathers, and children in immigrant Chinese families. Journal of Cross-Cultural Psychology. 2006b; 37:723–741.

Crouter, AC.; Head, MR. Parental monitoring and knowledge of children. In: Bornstein, M., editor. Handbook on parenting. 2. Mahwah, NJ: Lawrence Erlbaum; 2002.

Crouter AC, Helms-Erikson H, Updegraff K, McHale SM. Conditions underlying parents' knowledge about children's daily lives in middle childhood: Between- and within-family comparisons. Child Development. 1999; 70:246–259. [PubMed: 10191526]

Ge X, Best KM, Conger RD, Simons RL. Parenting behaviors and the occurrence and co-occurrence of adolescent depressive symptoms and conduct problems. Developmental Psychology. 1996; 32:717–731.

Hernandez DJ. Demographic change and the life circumstances of immigrant families. Future of Children. 2004; 14:17–47.

Hwang WC. Acculturative family distancing: Theory, research, and clinical practice. Psychotherapy: Theory, research, practice, training. 2006; 43:397–409.

Juang LP, Nguyen HH. Misconduct among Chinese American adolescents: The role of acculturation, family obligation, and autonomy expectations. Journal of Cross-Cultural Psychology. 2009; 40:649–666.

Kim SY, Chen Q, Li J, Huang X, Moon UJ. Parent–child acculturation, parenting, and adolescent depressive symptoms in Chinese immigrant families. Journal of Family Psychology. 2009; 23:426–437. [PubMed: 19586205]

Lau AS, McCabe KM, Yeh M, Garland AF, Wood PA, Hough RL. The acculturation gap-distress hypothesis among high-risk Mexican American families. Journal of Family Psychology. 2005; 19:367–375. [PubMed: 16221017]

Le TN. Delinquency among Asian/Pacific Islanders: Review of literature and research. Justice Professional. 2002; 15:57–70.

Le TN, Stockdale GD. Individualism, collectivism, and delinquency in Asian American adolescents. Journal of Clinical Child and Adolescent Psychology. 2005; 34:681–691. [PubMed: 16232065]

Le TN, Stockdale GD. Acculturative dissonance, ethnic identity, and youth violence. Cultural Diversity and Ethnic Minority Psychology. 2008; 14:1–9. [PubMed: 18229995]

Minuchin P. Families and individual development: Provocations from the field of family therapy. Child Development. 1985; 56:289–302. [PubMed: 3886321]

Moffitt T. Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. Psychological Review. 1993; 100:674–701. [PubMed: 8255953]

Moffitt, T.; Caspi, A.; Rutter, M.; Silva, P. Sex differences in antisocial behavior: Conduct disorder, delinquency and violence in the Dunedin longitudinal study. New York: Cambridge University Press; 2001.

Mussweiler T. Comparison processes in social judgment: Mechanisms and consequences. Psychological Review. 2003; 110:472–489. [PubMed: 12885111]

Muthen, BO.; Muthen, L. Mplus computer software. Los Angeles: Authors; 2011.

Portes, A.; Rumbaut, RG. Immigrant America: A portrait. 2. Berkeley, CA: University of California Press; 1996.

Qin DB. "Our child doesn't talk to us anymore": Alienation in immigrant Chinese families. Anthropology & Education Quarterly. 2006; 37:162–179.

Ryder AG, Alden LE, Paulhus DL. Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. Journal of Personality and Social Psychology. 2000; 79:49–65. [PubMed: 10909877]

Soenens B, Vansteenkiste M, Luyckx K, Goossens L. Parenting and adolescent problem behavior: An integrated model with adolescent self-disclosure and perceived parental knowledge as intervening variables. Developmental Psychology. 2006; 42:305–318. [PubMed: 16569169]

Stattin H, Kerr M. Parental monitoring: A reinterpretation. Child Development. 2000; 71:1072–1085. [PubMed: 11016567]

Tasopoulos-Chan M, Smetana JG, Yau JP. How much do I tell thee? Strategies for managing information to parents among American adolescents from Chinese, Mexican, and European backgrounds. Journal of Family Psychology. 2009; 23:364–374. [PubMed: 19586199]

Unger JB, Ritt-Olson A, Wagner KD, Soto DW, Baezconde-Garbanati L. Parent–child acculturation patterns and substance use among Hispanic adolescents: A longitudinal analysis. The Journal of Primary Prevention. 2009; 30:293–313. [PubMed: 19384604]

Weaver SW, Kim SY. A person-centered approach on the linkages among parent–child differences in cultural orientation, supportive parenting, and adolescent depressive symptoms in Chinese American families. Journal of Youth and Adolescence. 2008; 37:36–49. [PubMed: 20725611]

Willgerodt MA, Thompson EA. Ethnic and generational influences on emotional distress and risk behaviors among Chinese and Filipino American adolescents. Research in Nursing and Health. 2006; 29:311–324. [PubMed: 16847910]

Ying YW. Strengthening intergenerational/intercultural ties in migrant families: A new intervention for parents. Journal of Community Psychology. 1999; 27:89–96.

Yoon E, Langrehr K, Ong LZ. Content analysis of acculturation research in counseling and counseling psychology: A 22-year review. Journal of Counseling Psychology. 2011; 58:83–96. [PubMed: 21142352]

Biographies

Yijie Wang is a doctoral student in the Department of Human Development and Family Sciences at the University of Texas at Austin. She is interested in the family dynamics that

influence adolescent development within a cross-cultural context. Her current research is on parenting practices and adolescent adjustment in Chinese immigrant families in the US.

Su Yeong Kim is an Assistant Professor in the Department of Human. Development and Family Sciences at the University of Texas at Austin. She received her Ph.D. in Human Development from the University of California, Davis. Her research interests include the role of cultural and family contexts that shape the development of adolescents in immigrant and minority families in the US.

Edward R. Anderson is an Associate Professor in the Department of Human Development and Family Sciences at the University of Texas at Austin, and an Affiliated Scientist of the Oregon Social Learning Center. He received his Ph.D. in Psychology from the University of Virginia. His research interests concern family process and child development in divorced, repartnered, and remarried families.

Angela Chia-Chen Chen is an Associate Professor in the College of Nursing and Healthcare Innovation at Arizona State University. She received her Ph.D. in Nursing at the University of Washington. As a trilingual nursing scholar and psychiatric/mental health nurse practitioner who works primarily with racial/ethnic minority populations, her program of research centers on mental health and behavioral issues of vulnerable populations, particularly immigrant families and ethnic minority youth.

Ni Yan is a doctoral student in the Department of Human Development and Family Sciences at the University of Texas at Austin. Her research interests focus on parenting in children's socio-emotional development. Her current research seeks to understand the mechanisms through which maternal depression impacts on child inhibition.
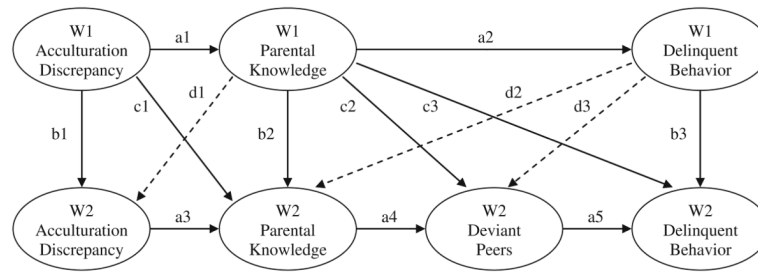
Fig. 1.
Conceptual longitudinal model linking parent–child acculturation discrepancy, parental knowledge, deviant peers, and adolescent delinquency in Chinese immigrant families. *a paths*: concurrent relationships between model constructs within Wave 1 or Wave 2; *b paths*: auto-regressive relationships between the same constructs across Wave 1 and Wave 2; *c paths*: cross-lagged relationships between distinct constructs from Wave 1 to Wave 2; *d paths*: alternative cross-lagged relationships between distinct constructs from Wave 1 to Wave 2

Table 1

Descriptive statistics for raw scores of study variables

	N	Minimum	Maximum	Mean	SD
W1 teen Chinese orientation	201	1.33	5.00	3.66	0.63
W1 teen American orientation	201	1.83	5.00	3.76	0.52
W1 father Chinese orientation	201	2.50	5.00	3.89	0.51
W1 father American orientation	201	2.14	4.57	3.33	0.45
W1 mother Chinese orientation	201	2.17	5.00	3.92	0.49
W1 mother American orientation	201	1.57	4.86	3.30	0.49
W2 teen Chinese orientation	183	2.17	5.00	3.67	0.62
W2 teen American orientation	183	2.00	5.00	3.91	0.50
W2 father Chinese orientation	183	2.67	5.00	3.91	0.50
W2 father American orientation	183	1.14	4.57	3.25	0.53
W2 mother Chinese orientation	183	2.83	5.00	3.91	0.49
W2 mother American orientation	183	1.00	4.71	3.18	0.47
W1 paternal knowledge	201	1.00	5.00	3.77	1.00
W1 maternal knowledge	201	1.33	5.00	4.11	0.79
W2 paternal knowledge	182	1.00	5.00	3.42	1.01
W2 maternal knowledge	183	1.33	5.00	3.85	0.81
W2 deviant peers	180	1.00	3.00	1.42	0.43
W1 delinquency	201	0.00	0.60	0.14	0.12
W2 delinquency	181	0.00	0.50	0.18	0.13

Table 2

Descriptive statistics and correlations among study variables in Chinese orientation models

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Mean	SD
1 W1 Disc	—	-.01	.03	.12	-.01	-.06	.02	-.04	.10	-.03	-.15*	-.02	-.07	.03	.15*	.01	.08	-.03	-.02	-.04	.65	.63
2 W1 Know	-.04	—	-.32***	-.11	.25**	-.11	-.05	.04	-.05	.06	-.06	-.14	.07	.04	-.12	.08	-.04	.03	.07	.08	3.94	.93
3 W1 Delq	.05	-.26***	—	.04	-.16*	.32***	.27***	.01	-.05	.03	.04	-.04	.12	.02	.13	.06	.14	.12	.02	-.12	.14	.12
4 W2 Disc	.21**	-.06	.00	—	-.09	-.02	-.04	-.03	.01	-.06	-.09	-.04	.03	-.12	-.09	-.20*	-.16*	-.06	-.10	.01	.60	.54
5 W2 Know	-.01	.38***	-.09	-.07	—	-.21**	-.28***	.08	.08	-.03	-.07	.11	-.20**	.19*	.14	.29**	.21**	.02	.11	.06	3.66	.93
6 W2 Peer	-.08	-.07	.32***	.05	-.29***	—	.64***	-.03	-.06	-.06	-.01	-.08	-.02	-.03	-.03	-.08	.00	.14	-.04	-.11	1.42	.43
7 W2 Delq	-.01	-.04	.27***	.03	-.15*	.64**	—	-.03	-.02	-.09	.02	-.01	.10	.00	-.01	-.01	-.01	.02	.07	-.05	.18	.13
8 T Sex	-.02	-.06	.01	-.05	.00	-.03	-.03	—	.04	-.04	-.01	-.05	-.12	-.05	-.17*	-.03	-.12	.04	-.01	-.03	.62	.49
9 T Born	.17*	-.03	-.05	.03	.00	-.06	-.02	.04	—	-.04	.18**	.11	-.06	-.14*	-.19*	.03	.01	.10	.01	.04	1.28	.45
10 W1 TAge	-.06	.06	.03	-.10	-.02	-.06	-.09	.05	-.04	—	1.00***	.08	-.07	-.02	-.04	-.07	.02	.08	-.08	-.09	13.02	.71
11 W2 TAge	-.17*	-.08	.04	-.04	-.07	-.01	.02	-.01	.18**	1.00***	—	.00	.07	.00	.03	-.01	.01	.01	-.01	.03	17.00	.72
12 W1 PGend	.00	-.24***	.04	.03	-.13	.08	.01	.05	-.11	-.08	.00	—	.09	-.04	-.05	-.02	-.11	.18*	.04	-.01	.47	.50
13 W2 PGend	.07	-.09	-.12	.00	-.26***	.02	-.10	.12	.06	.07	-.07	.09	—	-.01	.05	-.04	.02	-.03	.24**	-.07	.49	.50
14 W1 Income	.03	.21**	.02	-.05	.05	-.03	.00	-.05	-.14*	-.02	.00	.04	.01	—	.82***	.48***	.39***	-.02	-.03	-.08	3.79	2.35
15 W2 Income	.10	.10	.13	.02	.00	-.03	-.01	-.17*	-.19**	-.04	.03	.05	-.05	.82***	—	.49***	.44***	-.04	-.08	-.08	4.33	2.42
16 W1 PEdu	.08	.12	.03	.07	.12	-.10	-.05	-.07	.01	.01	.02	.07	-.02	.47***	.47***	—	.61***	-.12	-.01	-.03	5.51	1.67
17 W2 PEdu	.14	.11	.04	.02	.11	-.04	-.02	-.04	.06	-.07	.09	-.02	.05	.46***	.52***	.72***	—	-.17*	-.07	-.08	5.56	1.69
18 W1 Direct	-.06	.17*	-.04	-.10	-.06	.01	-.02	.06	.07	.08	.11	-.19**	.04	.01	-.02	.01	-.09	—	.08	-.19*	.92	1.00
19 W2 Direct	-.04	.14	.12	.03	.24**	-.06	.06	-.04	.08	-.08	.02	-.01	-.21**	.00	-.04	.04	.03	.11	—	-.13	1.06	1.00
20 Switch	.07	-.09	-.12	.03	.03	-.11	-.05	-.03	.04	-.09	.03	.01	.07	-.08	-.08	.03	.08	-.10	-.17*	—	.54	.50
Mean	1.22	3.94	.14	1.09	3.61	1.42	.18	.62	1.28	13.02	17.00	.53	.51	3.79	4.33	5.67	5.68	.93	1.07	.54		
SD	.77	.91	.12	.67	.96	.43	.13	.49	.45	.71	.72	.50	.50	2.35	2.42	1.77	1.71	1.00	1.07	.50	—	

The coefficients above the diagonal are for less discrepant parent–child dyads (N = 201 at Wave 1 and N = 183 at Wave 2) and the coefficients below the diagonal are for more discrepant parent–child dyads (N = 201 at Wave 1 and N = 183 at Wave 2). W1 Wave 1, W2 Wave 2, Disc parent–child acculturation discrepancy, Direct direction of discrepancy, Switch designation of more/less discrepant parent switched at Wave 2, TAge adolescent age, PGend parent gender, PEdu parent education, Delq delinquency, Peer deviant peers, Know adolescents' perception of parental knowledge

*
$p < .05;$

**
$p < .01;$

***
$p < .001$

Table 3

Descriptive statistics and correlations among study variables in American orientation models

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Mean	SD
1	W1 Disc	–	-.04	.07	.21**	-.11	.11	.09	-.12	.07	.02	.02	.02	-.03	-.05	.01	-.08	-.02	-.10	-.03	-.07	.72	.67
2	W1 Know	-.20**	–	-.22**	.12	.35***	-.04	.01	.03	-.04	-.03	-.03	-.20**	-.17*	.07	-.11	.12	-.08	.12	.11	-.06	3.94	.92
3	W1 Delq	.10	-.36***	–	.13	-.13	.32***	.27***	.01	-.05	.04	.04	-.07	.10	.02	.13	.04	.15*	.03	-.10	-.09	.14	.12
4	W2 Disc	.17*	-.06	.15*	–	-.05	.18*	.18*	.05	-.06	-.06	-.06	-.15	-.01	.07	.00	-.10	-.02	.11	.20**	.02	.66	.73
5	W2 Know	-.16*	.32***	-.11	-.20**	–	-.16*	-.24***	.08	-.02	-.12	-.12	.05	-.33***	.15*	.09	.24**	.20**	.03	.12	.00	3.65	.96
6	W2 Peer	.04	-.14*	.32***	.19**	-.35***	–	.64***	-.03	-.06	-.01	-.01	-.06	-.06	-.03	-.03	-.10	-.02	.00	-.11	.05	1.42	.43
7	W2 Delq	.03	-.10	.27***	.23**	-.19*	.64***	–	-.03	-.02	.02	.02	-.08	.01	.00	-.01	-.10	-.01	.00	.03	.15	.18	.13
8	T Sex	-.07	-.05	.01	.01	.00	-.03	-.03	–	.04	-.01	-.01	-.05	-.07	-.05	-.17*	-.01	-.05	.07	.03	.12	.62	.49
9	T Born	.13	-.04	-.05	-.07	.10	-.06	-.02	.04	–	.18**	.18**	-.01	.01	-.14*	-.19**	-.02	.02	-.03	.00	-.04	1.28	.45
10	W1 TAge	.03	-.12	.04	-.03	-.01	-.01	.02	-.01	.18**	–	1.00***	-.04	.00	.00	.03	-.03	.05	.05	-.09	-.10	13.02	.71
11	W2 TAge	.03	-.12	.04	-.03	-.01	-.01	.02	-.01	.18**	1.00***	–	-.04	.00	.00	.03	-.03	.05	.05	-.09	-.10	17.00	.72
12	W1 PGend	.04	-.18*	.07	.08	-.05	.06	.08	.05	-.01	.04	.04	–	-.12	-.02	.01	.06	-.06	-.18*	-.09	.00	.46	.50
13	W2 PGend	.11	.14	-.10	-.03	-.13	.06	-.01	.07	.01	.00	.00	-.12	–	.06	.01	-.04	-.01	-.03	-.04	-.09	.49	.50
14	W1 Income	-.10	.18*	.02	.08	.08	-.03	.00	-.05	-.14*	.00	.00	.02	-.06	–	.82***	.48***	.40***	.09	-.08	-.05	3.79	2.35
15	W2 Income	-.04	.08	.13	.03	.05	-.03	-.01	-.17*	-.19**	.03	.03	-.01	-.01	.82***	–	.49***	.44***	-.04	-.09	-.16	4.33	2.42
16	W1 PEdu	-.10	.08	.04	-.03	.19*	-.07	-.06	-.09	.05	.04	.04	.00	-.06	.47***	.47***	–	.59***	.02	-.04	-.16*	5.50	1.72
17	W2 PEdu	-.06	.08	.04	.03	.12	-.02	-.02	-.10	.06	.05	.05	-.07	.08	.45***	.51***	.65***	–	-.06	.07	-.17*	5.68	1.6
18	W1 Direct	.08	.06	-.07	.14	.06	.04	.10	.02	.07	.05	.05	.14*	-.06	-.05	-.15	-.12	-.14	–	.24**	.01	1.21	.98
19	W2 Direct	-.01	.11	-.05	.02	.14	.05	.09	.00	.07	-.12	-.10	.06	.00	-.02	-.08	-.11	-.12	.27***	–	.05	.99	1
20	Switch	-.09	-.02	-.09	.02	-.08	.05	.15	.12	-.04	-.10	-.10	.00	.09	-.05	-.16	-.08	-.05	-.05	-.09	–	.44	.50
	Mean	1.31	3.94	.14	1.26	3.62	1.42	.18	.62	1.28	13.02	17.00	.54	.51	3.79	4.33	5.69	5.57	1.02	1.09	.44		
	SD	.75	.92	.12	.87	.92	.43	.13	.49	.45	.71	.72	.50	.50	2.35	2.42	1.73	1.79	1.00	1.00	.50	–	

The coefficients above the diagonal are for less discrepant parent–child dyads ($N = 201$ at Wave 1 and $N = 183$ at Wave 2) and the coefficients below the diagonal are for more discrepant parent–child dyads ($N = 201$ at Wave 1 and $N = 183$ at Wave 2). *W1* Wave 1, *W2* Wave 2, *Disc* parent–child acculturation discrepancy, *Know* adolescents' perception of parental knowledge, *Peer* deviant peers, *Delq* delinquency, *T* adolescent, *TAge* adolescent age, *PGend* parent gender, *PEdu* parent education, *Direc* direction of discrepancy, *switch* designation of more/less discrepant parent switched at Wave 2

* *p* < .05;

**
$p < .01$;

***
$p < .001$

Table 4

Structural equation modeling linking parent–child acculturation discrepancy, perceived parental knowledge, peer deviance, and adolescent delinquency

Model	Chinese orientation				American orientation			
	1		2		3		4	
	More discrepant		Less discrepant		More discrepant		Less discrepant	
	β	CI	β	CI	β	CI	β	CI
Parameter estimates								
a1 Disc W1 → PKnow W1	−.05	[−.18, .09]	−.01	[−.15, .13]	−.19**	[−.32, −.06]	−.01	[−.15, .12]
a2 PKnow W1 → Delq W1	−.29***	[−.43, −.16]	−.34***	[−.47, −.22]	−.36***	[−.49, −.24]	−.27***	[−.40, −.14]
a3 Disc W2 → PKnow W2	−.04	[−.17, .10]	.02	[−.11, .16]	−.21**	[−.35, −.07]	−.12	[−.25, .01]
a4 PKnow W2 → Peer W2	−.34***	[−.50, −.18]	−.25**	[−.42, −.07]	−.35***	[−.51, −.20]	−.22*	[−.40, −.04]
a5 Peer W2 → Delq W2	.64***	[.54, .74]	.60***	[.51, .70]	.59***	[.49, .70]	.57***	[.47, .67]
b1 Disc W1 → Disc W2	.22**	[.07, .38]	.15	[−.01, .31]	.20**	[.05, .34]	.22**	[.08, .36]
b2 PKnow W1 → PKnow W2	.36***	[.23, .49]	.27***	[.14, .41]	.32***	[.17, .46]	.32***	[.20, .45]
b3 Delq W1 → Delq W2	.07	[−.05, .18]	.08	[−.03, .19]	.10	[−.01, .22]	.11*	[.00, .22]
c1 Disc W1 → PKnow W2	−.00	[−.15, .15]	−.07	[−.22, .08]	−.04	[−.19, .11]	−.05	[−.19, .08]
c2 PKnow W1 → Peer W2	.14	[−.01, .29]	.06	[−.09, .20]	.06	[−.09, .20]	.09	[−.06, .23]
c3 PKnow W1 → Delq W2	.04	[−.10, .17]	.09	[−.04, .20]	.03	[−.10, .16]	.12	[.00, .24]
d3 Delq W1 → Peer W2	.32***	[.20, .44]	.30***	[.17, .43]	.30***	[.18, .43]	.31***	[.18, .43]
Mediating pathways	Indirect effects		Indirect effects		Indirect effects		Indirect effects	
1 Disc W1 → PKnow W1 → DelqW1	$\beta = .014, p = .507$		$\beta = .003, p = .914$		$\beta = .068, p = .013$		$\beta = .003, p = .855$	
2 Disc W2 → PKnow W2 → Peer W2 → Delq W2	$\beta = .008, p = .580$		$\beta = -.003, p = .736$		$\beta = .044, p = .016$		$\beta = .015, p = .162$	
3 Disc W1 → PKnow W1 → PKnow W2 → Peer W2 → DelqW2	$\beta = .004, p = .513$		$\beta = .000, p = .914$		$\beta = .012, p = .045$		$\beta = .001, p = .852$	
4 Disc W1 → PKnow W1 → Delq W1 → Peer W2 → Delq W2	$\beta = .003, p = .512$		$\beta = .000, p = .914$		$\beta = .012, p = .033$		$\beta = .001, p = .852$	
Model fit	$\chi^2(42, N = 220) = 46.919$		$\chi^2(42, N = 220) = 62.697$		$\chi^2(42, N = 220) = 47.053$		$\chi^2(42, N = 220) = 51.705$	
	$p = .278$		$p = .021$		$p = .273$		$p = .145$	
	CFI = .978		CFI = .906		CFI = .978		CFI = .958	
	RMSEA = .023		RMSEA = .047		RMSEA = .023		RMSEA = .032	

Model	Chinese orientation				American orientation			
	1		2		3		4	
	More discrepant		Less discrepant		More discrepant		Less discrepant	
	β	CI	β	CI	β	CI	β	CI
		[.000, .053]		[.019, .071]		[.000, .053]		[.000, .059]
	SRMR = .034		SRMR = .039		SRMR = .036		SRMR = .039	

CI 95% confidence interval, *CFI* comparative fit index, *RMSEA* root mean square error of approximation, *SRMR* standardized root mean square residual, *Disc* parent–child acculturation discrepancy, *PKnow* adolescents' perception of parental knowledge, *Peer* deviant peers, *Delq* delinquency

†
p <.10;

*
p <.05;

**
p <.01;

***
p <.001