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Cultural Orientation as a Moderator of the Relationship Between Chinese American Adolescents' Discrimination Experiences and Delinquent Behaviors

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Abstract

The purpose of this study was to examine the relationships among Chinese American adolescents' discrimination experiences, cultural orientations, and delinquent behaviors. Data were collected from three hundred and eleven Chinese American adolescents (58% girls) and their parents when the adolescents were 7th or 8th graders and again 4 years later. The data analyses demonstrated that adolescents' perceptions of discrimination and victimization experiences were significantly related to their delinquent behaviors conditionally based upon their cultural orientation. Specifically, adolescents' high Chinese cultural orientation amplified the negative impact of discriminatory experiences on delinquent behaviors whereas high Western cultural orientation protected them against that impact. The significance of both ethnic and mainstream cultural orientations for understanding ethnic minority adolescents' adjustment and improving their adjustment outcomes is discussed.

Keywords

Discrimination; Chinese American adolescents; Chinese cultural orientation; Western cultural orientation; Delinquent behaviors; Moderation effects

Introduction

Historical and contemporary evidence demonstrates that Chinese Americans in the United States have experienced discriminatory attitudes and acts in their daily lives (Ancheta 1998; Goto et al. 2002; Hall and Hwang 2001; Liang et al. 2007). Without exception, Chinese American children reported being victims of harassment and assaults such as theft, vandalism, or physical attack (Chan 1991; Matsouka and Ryujin 1991; Saito 2001). Such experiences, as Garcia Coll et al. (1996) proposed in their developmental competence model, play a significant role in ethnic minority children's developmental outcomes including behavioral problems. Specifically, it has been suggested that discriminatory experiences are related to segregated

environments in the residential, economic, and social lives of ethnic minority children, which often directly contribute to their maladjustment outcomes. Discriminatory experiences are also conceptualized within the life stress framework in psychological research (e.g., Alvarez et al. 2006; Clark et al. 1999; Chakraborty and McKenzie 2002; Harrell 2000). This framework posits that being a target of discriminatory attitudes or behaviors is a significant source of life stress. Understanding the potential conditions that amplify or diminish the negative impact of discrimination can provide important information for the design of prevention and intervention programs to reduce behavioral problems.

While numerous studies with African American youths confirmed the relationship between high levels of discriminatory experiences and increasing behavioral problems (e.g., violent behaviors in Caldwell et al. 2004; drug use behaviors in Gibbons et al. 2007), empirical evidence on the risk of discrimination for Chinese American children's adjustment outcomes and possible protective factors that may buffer such risk is quite limited (Alvarez and Kimura 2001; Young and Takeuchi 1998). This might be due to their small population size in the United States and the longstanding model minority myth of Asian Americans including Chinese American adolescents (Lai 2005; Young and Takeuchi 1998). Although data have suggested that the rate of delinquent offenders in custody was lowest for Asian Americans (113 per 100,000) compared to other ethnicities (754 for Blacks, 496 for American Indians, 348 for Hispanics, 190 for Whites; Snyder and Sickmund 2006), Asian American adolescents' problem behaviors have been reported to be increasing and are recognized as one of the most significant maladjustment outcomes among these adolescents (Lai 2005; Le and Stockdale 2005). Moreover, researchers found that Asian American youths in fact reported slightly more aggressive offenses than white youths, and more nonaggressive offenses and substance use than black youth (Choi and Lahey 2006). Therefore, Asian American adolescents' delinquent behaviors should not be neglected, and scientific research on potential risk and protective factors are needed.

Some studies on Asian American youths reported that discrimination experiences were related to maladjustment outcomes including low self esteem, low life satisfaction, high level of depression, and more psychological distress (Fisher et al. 2000; Greene et al. 2006; Lee 2003; Yoo and Lee 2005). Two studies specifically examined Chinese American adults (Ying et al. 2000) and Chinese immigrants living in Australia (Mak and Nesdale 2001) and found that discrimination experience was related to low self coherence and high psychological distress. However, the association between discrimination and Chinese American adolescents' delinquent behaviors has yet to be explored, and little has been done to understand possible moderators of any stress-maladjustment link. To fill this void in the literature, the present study examined the negative influence of discrimination on Chinese American adolescents' delinquent behaviors, and explored the moderating effects of adolescents' cultural orientation within Garcia Coll et al.'s (1996) developmental model and the life stress framework.

Chronic Daily Discrimination and Discriminatory Victimization as Risk Factors

Chinese American adolescents, like other adolescents, are at a stressful stage characterized by rapid physical and social development (Jose and Huntsinger 2005). Discrimination constitutes an additional source of stress (Garcia Coll et al. 1996; Greene et al. 2006; Krieger 1990; Liang et al. 2007). According to the life stress framework, individual's perceptions and experiences of discriminatory attitudes and behaviors in their everyday lives constitute a chronic stressor, while insults or attacks are considered to be a more acute form of life stressor. These life stressors have been consistently viewed as negatively affecting minority individuals' psychological adjustment, including adolescents' problem behaviors (e.g., Broman et al. 2000; Cassidy et al. 2004). Therefore, in this study we hypothesized that Chinese American adolescents' discriminatory experiences would predict their delinquent behaviors. To fully

capture the variety of stressors related to discrimination, the current study measured both chronic daily discrimination and more acute discriminatory victimization experiences. Because individuals may use different coping strategies and resources when confronting daily discrimination versus the more acute victimization experiences, we examined these two types of discriminatory experiences as separate risk factors.

Cultural Orientation as a Moderator of the Link Between Discrimination and Delinquent Behaviors

Despite a growing literature linking discriminatory experiences with deleterious mental and physical health outcomes for ethnic minority youths, experiences with discrimination increase the likelihood for, but do not necessarily determine, negative outcomes (Coie et al. 1993; Rutter 1990). Some moderators may mitigate the impact of discriminatory experiences (Clark et al. 1999; Brody et al. 2006). For example, ethnic minority adolescents may depend on coping resources such as identification with their ethnic culture and beliefs about this culture in order to effectively interpret and negotiate experiences of discrimination (Chang and Ng 2002; Helms and Cook 1999; Phinney 1990, 2003). Thus, discovering potential moderators that may protect adolescents from the negative influences of discrimination is critical for theory development regarding ethnic minority adolescents' adjustment (Brody et al. 2006). In addition, unlike discrimination and adjustment outcomes, protective factors are often controllable and thus may be manipulated via various interventions. Research on moderators therefore has significant clinical implications as well (Aponte and Johnson 2000; Barnes and Lightsey 2005; Clark et al. 1999; Fischer and Shaw 1999; Klonoff et al. 1999). In fact, research examining moderators of the negative consequences of discrimination has started to accumulate in the literature (e.g., Caldwell et al. 2004; Fischer and Shaw 1999; Lee 2003; Noh et al. 1999; Yoo and Lee 2005).

Ethnic Orientation as a Moderator—Among the current published research on moderators, an individual's acquisition and retention of his/her ethnic culture has attracted considerable theoretical and empirical attention (e.g., Fischer and Shaw 1999; Yoo and Lee 2005; Phinney 1990, 2003; Smith 1991). It has been believed that an individual's retention of his/her ethnic culture provides a sense of belonging to one's ethnic group, and functions as a psychological resource against the consequences of discrimination (Chang and Ng 2002; Helms and Cook 1999; Phinney 1990, 2003). Empirical evidence for such buffering effects of one's ethnic culture has been reported in studies with African Americans (e.g., Caldwell et al. 2004; Sellers et al. 2003; Wong et al. 2003), Filipino Americans (Mossakowski 2003), Mexican Americans (Umana-Taylor and Updegraff 2007), and Iranians living in the Netherlands (Werkuyten and Nekuee 1998). Thus, one area of research generally supports the idea that one's identification with the ethnic culture buffers the negative influences of discrimination.

In contrast with these findings, some researchers have examined various aspects of one's retention of the ethnic culture and generally reported a lack of support for this hypothesis among Asian Americans or Asians living in other host countries (Cassidy et al. 2004; Lee 2003; Mak and Nesdale 2001; Noh et al. 1999; Yoo and Lee 2005, 2008). For example, Mak and Nesdale (2001) found that ethnic self-esteem (defined and assessed as the "individual's personal evaluation of the worth of the Chinese ethnic group", p. 2637) did not moderate the discrimination-distress relationship among Asian Americans. Noh et al. (1999) studied Southeast Asian refugees in Canada and found that ethnic identity (defined and assessed as "self-appraised ethnic salience, attitude toward intermarriage, language retention, and ethnic identification", p. 198) did not moderate the effects of discrimination on individuals' psychological well-being. Lee (2003) also found that ethnic identity (defined and assessed as an "individual's acquisition and retention of cultural characteristics that are incorporated into one's self-concept", p. 133) did not moderate the effects of discrimination on Asian American college students' psychological well-being. In a quasi-experimental vignette study conducted

by the same group of researchers, Yoo and Lee (2008) reported evidence that ethnic identity exacerbated rather than ameliorated the negative relationship between discrimination and Asian American college students' well-being. Complicating the matter even further is a study by Yip et al. (2008) on Chinese American adults. A sense of ethnic identity buffered the deleterious link between discrimination and mental health among 41- to 50-year-old US-born Chinese individuals, whereas a sense of ethnic identity exacerbated the negative impact of discrimination among 31- to 40-year-old US-born Chinese individuals (Yip et al. 2008). Thus, it appears that retaining one's ethnic culture may have either a positive or negative influence depending on one's life stage. The focus of the current investigation is on adolescence as a life stage among Asian Americans.

Although few in number, the aforementioned studies using samples of Asian Americans or immigrant Asian populations living in other countries have reported some findings contrary to the prevailing theoretical and empirical literature. This suggests that Asian Americans' identification with their ethnic culture may not necessarily protect them against the deleterious effects of discrimination. Due to the limited number of studies and their varying ways of conceptualizing and measuring individuals' identification with the ethnic culture, such findings need to be taken cautiously and further research efforts are warranted. In the current study we go beyond the previous literature, which mostly focuses on one's commitment to ethnic identity, by examining how individuals' general Chinese cultural orientation may moderate the negative impact of discrimination in their behavioral development.

Western (Host Culture) Orientation as a Moderator—In studies involving ethnic minorities, scholars have consistently suggested that conceptualization of change along two dimensions (i.e., one's identification with the ethnic culture and the host culture) is important (e.g., Berry 2003; Phinney 2003). This is especially true for minority adolescents, because they simultaneously grow up in contrasting natal and host cultures in the process of solidifying their identity and self-concept. Unfortunately, most of the previous studies on cultural resources have focused on the role of identification with the ethnic culture and ignored the possible role that orientation to the host culture might play.

Umana-Taylor and Updegraff (2007) offered an important exception to this trend. These authors reported that Mexican American boys' high orientation to the mainstream culture magnified the negative impact of perceived discrimination on their adjustment outcomes. These researchers suggested that individuals' familiarity with the host culture increased their sensitivity to discrimination, thus exacerbating the linkage between discrimination and adjustment. However, other researchers believe that engagement with the host culture may enable individuals to have better access to and benefit from the host society's mental or social services, and also to have more friends and contacts for resources to cope with the negative consequences of discrimination (Aponte and Johnson 2000). Moreover, as adolescents negotiate a place within the society, familiarity and engagement with the host culture could provide guidance in the process of realistically appraising and responding to discrimination (Caldwell et al. 2004; Festinger and Carlsmith 1959), possibly mitigating the negative influence of discriminatory experiences on one's adjustment. Considering the differing theoretical views, the moderating effect of individuals' engagement to the host culture (in this case Western orientation) was also examined in this study.

Present Study

The link between discrimination and Chinese American adolescents' delinquent behaviors has not been explicitly examined despite a growing literature for other groups, especially African Americans (e.g., Caldwell et al. 2004; Gibbons et al. 2007; Sellers et al. 2003; Wong et al. 2003). This study examined these issues in an effort to extend the current literature relating

discrimination to minority adolescents' adjustment. Two major research questions were examined in this study. First, we examined the relation of discrimination experiences to adolescent delinquent behaviors. Drawing upon Garcia Coll et al.'s (1996) developmental model and also the life stress framework, it was anticipated that both chronic daily discrimination and the more acute discriminatory victimization experiences would be significantly related to adolescents' delinquent behaviors. Second, we explored the potential moderating roles of youths' Chinese orientation and their Western orientation on the stress-delinquency link. Given the mixed evidence on the moderating effects of one's ethnic orientation and the lack of research on the moderating effect of orientation to the mainstream culture, the specific direction of each of these two possible moderation effects were not proposed.

Methods

Participants

Data for this study came from a longitudinal study of Chinese American families living in major metropolitan areas of Northern California. Data were collected in two separate waves. The first wave of data was collected when adolescents were 7th or 8th graders. The second wave came 4 years after the first. Both adolescents and their parents participated in the study. Because some of the variables of interest were not collected at Wave 1, the current study primarily used Wave 2 data for the analyses, while controlling for adolescent delinquent behaviors at Wave 1. The final sample with complete data on the study variables for the present investigation included a total of 311 adolescents (180 girls and 131 boys) and their parents. These adolescents were attending middle school at Wave 1 and high school at Wave 2. The participating adolescents ranged in age from 12 to 15 years ($M = 13.0$ years, $SD = 0.73$) at Wave 1 and 16 to 19 years ($M = 17.05$ years, $SD = 0.80$) at Wave 2. Two hundred and thirty-five were born in the United States and 76 were foreign-born. Eighty-five percent of the fathers and 88% of the mothers were immigrants. A majority (85.2%) of the adolescents lived in intact families with two parents, 10.3% of them lived with their mothers, 0.6% with their fathers, and the remaining adolescents lived in other arrangements.

Procedures

With the aid of school administrators, Chinese American students were identified from all of the 7th and 8th graders attending seven middle schools located in major metropolitan areas of Northern California. We sent all eligible families a letter that explained the research project, and only those families who consented to participation received a packet of questionnaires. These were collected about 2–3 weeks after their distribution by research staff. The questionnaires required about 1–1.5 h to finish for both Wave 1 and 2. Questionnaires were available in both English and Chinese. For both Wave 1 and Wave 2 data collection, the target adolescent received a nominal amount of money as compensation for their completed and returned questionnaires.

Of all eligible families we contacted, 47% agreed to participate. Of these families, 76% completed surveys. Four years later, participants were re-contacted for the follow-up study. Seventy-nine percent of the Wave 1 sample returned complete surveys at Wave 2. Attrition analyses found that attriters were similar to completers on family income and other demographic factors with one exception. Specifically, boys were more likely to have attrited than girls ($\chi^2(1) = 16.1, p < .001$). For Wave 1 data collection, 86.5% of the adolescents, 31.5% of the mothers, and 38.9% of the fathers took English surveys. For Wave 2 data collection, 94.9% of the adolescents, 27.7% of the mothers, and 35.4% of the fathers took English surveys.

Measures

All measures were forward- and back-translated in Chinese. Any inconsistencies with the original English version were then resolved by two bilingual/bicultural research assistants with careful consideration of the culturally appropriate meanings of items. The descriptive statistics of the measures are presented in Table 1.

Demographic Variables—The first demographic question asked whether the adolescent was born in the United States in order to determine his/her generational status. Family socioeconomic status was assessed in \$15,000 increments, using a scale ranging from (1) “\$15,000 or under” to (12) “\$165,001 or more. Mothers and fathers each reported their gross family income. The mean of the father and mother report was calculated to represent family income.

Chronic Daily Discrimination—Through ten questions, adolescents reported their experiences with chronic daily discrimination. Nine of these items were originally developed and used by Williams et al. (1997) and Kessler et al. (1999) and one item (“People assume my English is poor”) was created by the current research team. Adolescents were asked to indicate the frequency of daily exposure to discriminatory experiences by endorsing statements such as “I am treated with less courtesy than other people” and “people act as if they are better than I am.” The response options included “1 = never”, “2 = rarely”, “3 = sometimes”, and “4 = often.” A higher score reflected more chronic daily discrimination. For the current sample, Cronbach’s alpha of this scale was .86.

Discriminatory Victimization—Five items were used to ask adolescents about their victimization experience due to discrimination. Three of the items (“People hit, kick or push me,” “People say mean or bad things about me to other people,” and “People leave me out of an activity or event I want to be part of”) were originally developed by Rigby (2000) in a physical victimization scale. Two items (“People break or destroy my things” and “People steal things from me”) were adapted from the Multicultural Events Scale for Adolescents (MESA) developed by Gonzales et al. (2001) to measure life events of ethnic minority adolescents. Adolescents were asked to indicate how often each of the discriminatory victimization experiences occurred on a daily basis (ranging from “1 = never” to “4 = often”). A higher score reflected more victimization experience. For the current sample, Cronbach’s alpha of this measure was .76.

Chinese Cultural Orientation and Western Cultural Orientation—The Vancouver Index of Acculturation (Ryder et al. 2000) was used to capture participants’ level of traditional Chinese cultural orientation and their orientation toward mainstream Western culture. Using a scale ranging from “1 = strongly disagree” to “5 = strongly agree”, adolescents responded to ten questions on their Western cultural orientation and ten questions on their Chinese cultural orientations. The two subscales each covered ten identical domains, such as tradition (e.g., “I often follow Chinese cultural traditions” vs. “I often follow mainstream American cultural traditions”) and values (e.g., “I believe in Chinese cultural values” vs. “I believe in mainstream American values”). A higher score reflected a high level of identification with each specific culture. For the current sample, Cronbach’s alpha was .84 for the subscale of Chinese cultural orientation and .78 for the subscale of Western cultural orientation.

Delinquent Behaviors—A 9-item measure adapted from the Child Behavior Checklist (Achenbach 2001) was used to assess delinquent problems (e.g., stealing, running away, lying). This measure excluded the items “thinks about sex” and “vandalism” in the CBCL Delinquency Scale and included an additional item “is part of a gang.” Both of the parents and adolescents were asked how true each item was for the target adolescent during the past 6 months and

responded on a scale ranging from “0 = not true” to “2 = often true or very true.” The inter-rater correlations among father, mother and adolescent reports for the items ranged from $r = .17$ to $.40$, $p < .01$. Due to the low endorsement of these items by any single informant, we created a composite score for each item by taking its maximum score across informants within the same family. For example, if any of the informants (the mother, father, or adolescent) reported that a delinquent behavior was “2 = often true or very true” for the target child, then the symptom was coded a ‘2’. Then a mean across all the items was calculated to represent the target child’s delinquent behavior score across informants. A high score reflected more delinquent behaviors. This approach of combining parent and adolescent symptom reports has been adopted to maximize reliability of diagnostic classifications when underreporting of problems might be anticipated by any single informant (Jensen et al. 1995; Liu et al. 2009).

Results

Preliminary Analyses

According to Garcia Coll et al. (1996), gender is an important determinant of ethnic minority children’s development. Boys and girls may cope with the stress of discrimination differently, and thus their susceptibility to associated negative outcomes may be different. In addition, previous research has suggested that males report more discriminatory experiences than females (Alvarez et al. 2006; Forman et al. 1997; Jackson et al. 1996; Kessler et al. 1999), and our attrition analyses of the current sample showed potential gender bias. Therefore, we conducted descriptive analyses of all of the study variables for the overall sample and performed t -tests to examine mean differences between boys and girls. No significant differences were detected. Bivariate correlation analyses were then conducted with the study variables and the demographic variables (see Table 1).

Testing the Hypothesized Deleterious Impact of Chronic Daily Discrimination and Discriminatory Victimization

Two sets of hierarchical regression models were tested, separately testing the role of (1) chronic daily discrimination and (2) discriminatory victimization as potential risk factors for delinquent behaviors at Wave 2. In all of the regression models, demographic background variables such as family income, gender, and adolescent’s immigrant status were included as predictors in order to control for the effects of these variables. We also included delinquent behavior at Wave 1 as a predictor to fully recognize the contribution of pre-existing behaviors to the same outcome at Wave 2 (Duncan et al. 2004). With the exception of the dichotomous variables, all of the predictor variables were centered and the interaction terms of chronic daily discrimination and discriminatory victimization variables with the moderators (i.e., Chinese cultural orientation and Western cultural orientation) were then created. Variables were entered in two steps. The first step simultaneously entered the demographic variables mentioned above, delinquent behavior at Wave 1, the risk factor (i.e., chronic daily discrimination or discriminatory victimization), Chinese cultural orientation, and Western cultural orientation. The second step entered the hypothesized two-way interaction terms of the risk factor and the moderators (i.e., chronic daily discrimination $\times$ Chinese cultural orientation and chronic daily discrimination $\times$ Western cultural orientation). A significant coefficient for the interaction term provided evidence for moderation effects and was further probed with simple slope analyses (Aiken and West 1991).

The results of regressing adolescent delinquent behaviors on chronic daily discrimination are presented in Table 2. The results of regressing delinquent behaviors on discriminatory victimization are presented in Table 3. All of the reported regression coefficients are unstandardized. Because some of the independent variables within a single regression model were significantly correlated (coefficients ranging from $.13$ to $.40$), collinearity diagnostic

indicators were examined for potential multicollinearity problems in all of the regression analyses. The results showed that the highest collinearity condition index was 2.64. Statisticians have suggested that collinearity condition index above 15 should be a concern for researchers (Belsley et al. 1980). This suggested that multicollinearity was not a serious problem in these regression models and that the coefficient estimates were likely to be reliable.

Consistent with the hypothesis, Table 2 shows that adolescents who reported high levels of chronic daily discrimination were at increased risk for delinquent behaviors. Neither Chinese cultural orientation nor Western cultural orientation independently predicted delinquent behaviors in Step 1, but the relationship between Western cultural orientation and delinquent behaviors became significant when interaction terms were entered in Step 2. The two-way interactions between each of the risk factors and each of the two hypothesized moderators were significant ($b = .17$, $SE = .06$, $p < .01$ for chronic daily discrimination $\times$ Chinese cultural orientation; $b = -.25$, $SE = .06$, $p < .001$ for chronic daily discrimination $\times$ Western cultural orientation), which indicated the existence of moderation effects. The complete model explained 20% of the variance in delinquent behaviors at Wave 2.

Although the discriminatory victimization variable was significantly related to delinquent behaviors in the bivariate analysis, Table 3 shows that it did not predict adolescent delinquent behaviors when controlling for prior delinquent behaviors, cultural orientation, and demographic background. Moreover, neither Chinese nor Western cultural orientations were significantly related to the outcome. The two-way interactions, however, were significant ($b = .13$, $SE = .06$, $p < .05$ for victimization $\times$ Chinese cultural orientation; $b = -.23$, $SE = .06$, $p < .001$ for victimization $\times$ Western cultural orientation). This final model explained 17% of the variance in the outcome. The significant interactions suggested moderation effects and the potential significant relationship between the independent variable and the outcome variable at certain levels of the moderators.

Simple Slope Analyses of Moderation Effects

Simple regression slopes of adolescent delinquent behaviors on chronic daily discrimination at high (one standard deviation above the mean) and low (one standard deviation below the mean) levels of Chinese cultural orientation (Fig. 1) and Western cultural orientation (Fig. 2) were plotted to further examine the moderation effects. According to the simple slope analyses (Aiken and West 1991), the relationship between chronic daily discrimination and adolescent delinquent behaviors was significant when adolescents reported high levels of Chinese cultural orientation ($b = .15$, $SE = .04$, $p < .001$) whereas this relationship was not significant when adolescents reported low levels of Chinese cultural orientation ($b = -.04$, $SE = .05$, ns). These results suggested that adolescents' perceptions of being discriminated against could increase the risk for delinquent behaviors, but only when they showed a high level of Chinese cultural orientation. The simple slope analyses with Western cultural orientation as the moderator demonstrated the opposite effect. When Chinese American adolescents reported low levels of Western cultural orientation, higher chronic daily discrimination was associated with more delinquent behavior ($b = .17$, $SE = .04$, $p < .001$). When they reported high levels of Western cultural orientation, chronic daily discrimination was not related to adolescent delinquent behaviors ($b = -.05$, $SE = .04$, ns).

Similar analyses were performed on the risk variable of discriminatory victimization. Results were consistent with the findings reported above. When adolescents reported high levels of Chinese cultural orientation, their experience with victimization significantly predicted delinquent behaviors ($b = .11$, $SE = .04$, $p < .05$) whereas this relationship became nonsignificant when they had low levels of Chinese cultural orientation ($b = -.04$, $SE = .05$, ns). Victimization was related to increasing delinquent behaviors when adolescents reported low levels of Western cultural orientation ($b = .13$, $SE = .04$, $p < .01$). When they reported high

levels of Western cultural orientation, discriminatory victimization was not related to adolescent delinquent behaviors ($b = -.07$, $SE = .04$, ns).

Discussion

This study examined the relationships among Chinese American adolescents' discriminatory experiences, their cultural orientations, and the development of delinquent behaviors within the frameworks of Garcia Coll et al.'s (1996) developmental model and the life stress model. Our hypotheses were partially supported by the data in that adolescents' perceptions of discrimination and their victimization experiences predicted delinquent behaviors conditionally based upon their cultural orientations. Specifically, the negative impacts were significant only when adolescents reported high levels of Chinese cultural orientation or low levels of Western cultural orientation. When they reported high levels of Western cultural orientation or low levels of Chinese cultural orientation, the risk-maladjustment outcome link disappeared. These findings highlight the significance of individual's Chinese cultural orientation and Western cultural orientation as moderators in the relationship between Chinese American youths' discriminatory experiences and their behavioral problems. These results and several other findings are discussed in this section.

Gender Differences

Our preliminary analyses indicated no gender differences in any of the study variables, including adolescents' chronic daily discrimination and victimization experiences. This finding was contrary not only to Garcia Coll et al.'s (1996) proposal that demographic factors including gender often determine ethnic minority children's life experiences, but also to several previous studies which found that males encountered more discrimination than females (e.g., Alvarez et al. 2006; Forman et al. 1997). It is interesting to note, however, that similar to our finding, several studies in fact reported that gender was not significantly related to the amount or frequency of individuals' discriminatory experiences (e.g., Goto et al. 2002; Fisher et al. 2000). Given the mixed evidence, further research may be needed to clarify the role of gender in predicting individuals' discriminatory experiences.

Cultural Orientation as a Moderator

According to our data, the correlations between Chinese cultural orientation and both types of discriminatory experiences (i.e., chronic daily discrimination and discriminatory victimization) were not significant. That is, the level of Chinese American adolescents' Chinese cultural orientation was not related to the amount of discriminatory experiences. This finding did not support several previous studies reporting that individuals who highly identified with their ethnic group often incorporate ethnic pride into their self-concept and thus tend to be more sensitive to discrimination (Operario and Fiske 2001; Shelton and Sellers 2000). Our analyses also found that a high level of Western cultural orientation was associated with fewer discriminatory experiences. We suspect that this might be due to the fact that highly Western oriented Asian Americans are more likely to be perceived as Americanized and thus are less likely to receive discrimination. However, Goto et al. (2002) reported contradictory findings; they reported that highly acculturated (i.e., highly identified with Western culture) Chinese Americans were more likely to report unfair treatment from other people. Due to a very limited number of studies and mixed findings, the relationship between cultural orientation and perceived discrimination may require further research efforts.

Consistent with Garcia Coll et al.'s (1996) model, the stress-maladjustment hypothesis, and the prevailing literature (e.g., Brody et al. 2006; Caldwell et al. 2004; Gibbons et al. 2007), our study on Chinese American adolescents provided supportive evidence that negative adjustment outcomes including delinquent behaviors often accompany discrimination. Furthermore, as the

life stress model emphasizes, individuals are not passive victims of life stressors. Rather, they interact with the stressors and the deleterious effects can be moderated by some factors. In this study, the analyses demonstrated that individuals' cultural orientations moderated the harmful effects of discrimination on adolescents' adjustment.

Ethnic Orientation—Our data demonstrated that for Chinese American adolescents who reported low levels of Chinese cultural orientation, there was no link between their experiences with discrimination and delinquent behaviors. However, for those who reported high levels of Chinese cultural orientation, experiences with discrimination significantly predicted their maladjustment. This finding implies that high levels of ethnic cultural orientation allow a harmful link between discriminatory experiences and behavioral problems. This finding seems to contradict the prevailing theoretical literature and some empirical literature about the role of ethnic resources; identification with one's ethnic culture should provide extra coping resources and thus mitigate the stress of discrimination and accompanying adjustment problems (e.g., Greene et al. 2006; Sellers and Shelton 2003; Mossakowski 2003). Interestingly, several studies (Cassidy et al. 2004; Lee 2003; Mak and Nesdale 2001; Noh et al. 1999; Yoo and Lee 2005) have also reported the lack of protective effects of identification with ethnic culture. Moreover, similar to our study, Beiser and Hou (2006) found that ethnic identity in fact amplified the risk of discrimination among Asian refugees in Canada. Lee (2005) also reported that ethnic pride exacerbated Korean Americans' levels of depression associated with discrimination, and Yoo and Lee (2008) found that ethnic identity amplified the negative influence of discrimination on Asian American college students' well being.

Our finding of the moderating effects of Chinese cultural orientation might be explained by ethnic individuals' cognitive dissonance. Researchers proposed that when individuals are highly internalized in their ethnic culture and exhibit a strong sense of ethnic identity, they tend to believe that others view their ethnic group favorably (e.g., Beiser and Hou 2006; Caldwell et al. 2004; Lee 2005). When discrimination occurs for such an individual, a strong cognitive dissonance arises due to the large discrepancy between the individual's beliefs and reality, which in turn places the individual at increasing risk for adjustment problems (Caldwell et al. 2004; Festinger and Carlsmith 1959). As a result, this study's Chinese American adolescents with high levels of Chinese cultural orientation may have found discrimination to be especially unexpected and insulting and thus became vulnerable to its negative influence. Their counterparts with low levels of Chinese cultural orientation might have been better prepared to dismiss it when it occurred, because being Chinese was less likely to be a central part of their identity.

The accumulating yet mixed research findings on the moderating effects of one's identification with ethnic culture calls for scholars' attention. Although the reasons for the inconsistencies in the literature are unclear, we suspected several things might account for them. First, individuals' identification with their ethnic culture has been believed to be a very complex phenomenon that includes multiple theoretical and empirical implications (Berry 2003). Although ethnic identity and cultural orientation are two concepts which share some similarities in their measurement and theoretical meaning, ethnic identity emphasizes a commitment to an identity, whereas cultural orientation as defined in the acculturation framework involves engagement in the behaviors of a particular culture (Tsai et al. 2002). Also, while cultural orientation is believed to capture the process of ethnic individuals integrating their ethnic culture, ethnic identity is often considered to be the end result of a developmental process (Berry 2003; Phinney 1990, 2003).

Second, we studied Chinese cultural orientation broadly in the present study, yet most of the previous studies focused specifically on ethnic identity. The concept of ethnic identity is in itself a complex concept that has multiple dimensions. Even when previous research reported

results on ethnic identity, different dimensions were measured and studied (e.g., race centrality and public regard in Caldwell et al. 2004; ethnic identity attachment in Beiser and Hou 2006; ethnic self-esteem in Cassidy et al. 2004). The conceptual differences among the study variables perhaps account for some of the inconsistencies among the studies.

Third, most studies reporting the protective effects of ethnic identity were conducted with ethnic groups other than Asian Americans (e.g., African Americans in Caldwell et al. 2004, Sellers et al. 2003 and Wong et al. 2003; Iranian immigrants in Netherlands in Werkuyten and Nekuee 1998). Only one study with Asian Americans reported a protective effect similar to these studies (Mossakowski 2003). Most studies with Asian Americans (e.g., Lee 2003; Yoo and Lee 2005, 2008) or Asian immigrants living in other countries (e.g., Beiser and Hou 2006; Cassidy et al. 2004) reported no moderating effects. This may imply that the lack of protective effects could be unique to Asian immigrants. Considering the scarcity of empirical research and theoretical discussion in the current literature, these hypotheses warrant further examination.

Western Cultural Orientation—Another important finding of our study is that Chinese American adolescents' Western cultural orientation buffered the deleterious discrimination-maladjustment link. Specifically, for Chinese American adolescents who reported low Western cultural orientation, discrimination was related to engaging in more delinquent behaviors. Yet this link became nonsignificant for youths with high Western cultural orientation. This finding is inconsistent with Umana-Taylor and Updegraff's (2007) study with Mexican American boys. However, it does support the cognitive dissonance hypothesis (Caldwell et al. 2004; Festinger and Carlsmith 1959), in that one's high level of familiarity and identification with the mainstream culture may help individuals to be prepared to appropriately appraise and respond to discriminatory experiences. This in turn may then reduce the likelihood of negative emotional appraisal and accompanying deleterious effects of discrimination. Additionally, the perpetual foreigner stereotype often encountered by Asian Americans, including Chinese Americans, (Alvarez et al. 2006; Chan 1991; Goto et al. 2002; Kao 2000; Tuan 1998) may help to explain this finding. Theorists and researchers believed that discrimination and stereotyping take complex and unique forms. Because of Asian Americans' unique culture, history, and physical features, they are often perceived as unassimilable strangers in this country regardless of their actual birthplace or generational status (e.g., Chan 1991; Goto et al. 2002; Tuan 1998). If so, becoming acculturated and affiliated with the mainstream culture may offset the stereotype of being perceived as "strangers." By mitigating the negative emotional appraisal to discrimination, individuals may then be protected from its negative impact. Another plausible explanation of Western cultural orientation's protective effects may be that highly Western oriented individuals often have great involvement in activities with the mainstream society and people of other ethnicities, which allows them to have better knowledge and access to the resources available to help them cope with discrimination. Lee's study (2003) also reported similar findings, that Asian American college students' interaction with the White majority group and other ethnic people buffered the adverse influence of discrimination on their life satisfaction. With the exception of Lee (2003) and Umana-Taylor and Updegraff (2007), and our study, the paucity of research on the moderating effects of mainstream cultural orientation suggests the need for future research.

Limitations

Some caution must be exercised when interpreting the findings of the current study. Although our purpose was to understand Chinese American adolescents' discrimination and accompanying adjustment problems, the study was conducted exclusively with a Chinese American sample from Northern California, where Asian American students constituted a large proportion of the student population (at least 19% of the student body was Asian American in

each of the seven schools in our sample). The density of Chinese in this area is high, and the cultural environment is greatly supportive of the Chinese community compared to most other regions of the US. In other words, youths' experiences with their ethnic culture, mainstream western culture, and experiences of discrimination may be different from those living in other parts of the country. Thus, interpretations and generalizations of the current findings need to be mindful of context. Studies using a more diverse sample of Chinese American are warranted. In addition, because Asian Americans are very diverse in their heritages, languages, cultures of origin, religions, immigration backgrounds and experiences, and socio-economic statuses (Chan 1991; Root 1998), psychological studies that sample one distinct Asian ethnic group may not be generalizable to other Asian American ethnic groups. Thus, findings from this study need to be applied to other Asian American ethnic groups with caution. Lastly, the present study assessed chronic daily discrimination in a general form, rather than specific to race. Future studies could incorporate both race-specific discrimination and the present study's approach to assessing discrimination in a general form to better elucidate the moderating role of cultural orientation in the discrimination-maladjustment link.

Conclusion

Despite the limitations, the current study represents one of the first research efforts towards understanding the relationship between Chinese American adolescents' experiences with discrimination and behavioral outcomes. Historically, the limited research on the psychology of racism has been conducted primarily with African Americans (e.g., Broman et al. 2000; Gibbons et al. 2007; Prelow et al. 2006; Wong et al. 2003). Only relatively recently has empirical work been done to investigate the mental health implications of discrimination in the Asian American community (Fisher et al. 2000; Kessler et al. 1999; Lee 2003; Yoo and Lee 2005). The present study is unique for its focus on Asian American adolescents in high school, as most of the prior research has been conducted with Asian American adults or college students.

Findings from this study significantly contribute to the literature and hold important implications for both research and practice. First, Chinese Americans have been perceived as "model minorities" in the United States, and their vulnerability to discrimination and accompanying maladjustment outcomes are often ignored. Our study confirmed that Chinese American youths share similar risks of behavioral problems associated with discrimination with other ethnic groups, although some uniqueness in the potential mechanisms involved were found. Thus, future theoretical and empirical work should pursue these compelling issues. Second, in terms of practical implications, failing to recognize the impact of discrimination through potential moderators may jeopardize any prevention or intervention efforts. In particular, our study suggested that identifying with the ethnic culture may make adolescents more vulnerable to the negative influences of discriminatory experiences due to their strong involvement in ethnic practices or behaviors. If so, prevention or intervention efforts may need to pay special attention to those exhibiting high levels of ethnic cultural identification. Prevention strategies to help them realistically acknowledge the existence of discrimination and prepare them to efficiently cope with it could be included.

In summary, this study suggests that the negative effects of discrimination on Asian American adolescents' delinquent behaviors are moderated by their cultural orientations. We found that adolescents' high levels of Chinese cultural orientation amplified the negative impact of discriminatory experiences on delinquent behaviors whereas high levels of Western cultural orientation protected them against that impact. These findings underscore the importance of cultural orientation in Asian American adolescents' coping with discrimination experiences.

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References

- Achenbach, TM. Manual for the youth self-report and 2001 profile. Burlington, VT: University of Vermont, Department of Psychology; 2001.
- Aiken, LS.; West, SG. Multiple regression: Testing and interpreting interactions. Thousand Oaks, CA: Sage; 1991.
- Alvarez AN, Juang LA, Liang CT. Asian Americans and racism: When bad things happen to “model minorities”. *Cultural Diversity and Ethnic Minority Psychology* 2006;12:477–492. [PubMed: 16881751]
- Alvarez A, Kimura E. Asian Americans and racial identity: Dealing with racism and snowballs. *Journal of Mental Health Counseling* 2001;23:192–206.
- Ancheta, AN. Race rights and the Asian American experience. New Brunswick, NJ: Rutgers University Press; 1998.
- Aponte, JF.; Johnson, LR. The impact of culture on the intervention and treatment of ethnic populations. In: Aponte, JF.; Wohl, J., editors. *Psychological intervention and cultural diversity*. Needham Heights: Allyn and Bacon; 2000. p. 18-39.
- Barnes PW, Lightsey OR Jr. Perceived racist discrimination, coping, stress, and life satisfaction. *Journal of Multicultural Counseling and Development* 2005;33:48–61.
- Beiser M, Hou F. Ethnic identity, resettlement stress and depressive affect among Southeast Asian refugees in Canada. *Social Science and Medicine* 2006;63:137–150. [PubMed: 16436309]
- Belsley, DA.; Kuh, E.; Welsch, RE. Regression diagnostics: Identifying influential data and sources of collinearity. New York: Wiley; 1980.
- Berry, JW. Conceptual approaches to acculturation. In: Chun, KM.; Organista, PB.; Marín, G., editors. *Acculturation: Advances in theory, measurement and applied research*. Washington, DC: American Psychological Association; 2003. p. 17-37.
- Brody GH, Chen Y, Murry VM, Ge X, Simons RL, Gibbons FX, et al. Perceived discrimination and the adjustment of African American youths: A five-year longitudinal analysis with contextual moderation effects. *Child Development* 2006;77:1170–1189. [PubMed: 16999791]
- Broman CL, Mavaddat R, Hsu S. The experience and consequences of perceived racial discrimination: A study of African Americans. *Journal of Black Psychology* 2000;26:165–180.
- Caldwell CH, Kohn-Wood LP, Schmeelk-Cone KH, Chavous TM, Zimmerman MA. Racial discrimination and racial identity as risk or protective factors for violent behaviors in African American young adults. *American Journal of Community Psychology* 2004;33:91–105. [PubMed: 15055757]
- Cassidy C, O'Connor R, Howe C, Warden D. Perceived discrimination and psychological distress: The role of personal and ethnic self-esteem. *Journal of Counseling Psychology* 2004;51:329–339.
- Chakraborty A, McKenzie K. Does racial discrimination cause mental illness? *The British Journal of Psychiatry* 2002;180:475–477. [PubMed: 12042221]
- Chan, S. Asian Americans: An interpretive history. Boston: Twayne Publishers; 1991.
- Chang HH, Ng KS. The perception of resiliency mechanisms in Chinese American families: Implications for family therapy. *Family Therapy* 2002;29:89–100.
- Choi Y, Lahey BB. Testing the model minority stereotype: Youth behaviors across racial and ethnic groups. *Social Service Review* 2006;80:419–452.

- Clark R, Anderson NB, Clark VR, Williams DR. Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist* 1999;54:805–816. [PubMed: 10540593]
- Coie JD, Watt NFW, West SG, Hawkins JD, Asarnow JR, Markman HJ, et al. The science of prevention: A conceptual framework and some directions for a national research program. *American Psychologist* 1993;48:1013–1022. [PubMed: 8256874]
- Duncan GJ, Magnuson KA, Ludwig J. The endogeneity problem in developmental studies. *Research in Human Development* 2004;1:59–80.
- Festinger L, Carlsmith JM. Cognitive consequences of forced compliance. *Journal of Abnormal and Social Psychology* 1959;58:203–210.
- Fischer AR, Shaw CM. African Americans' mental health and perceptions of racist discrimination: The moderating effects of racial socialization experiences and self-esteem. *Journal of Counseling Psychology* 1999;46:395–407.
- Fisher CB, Wallace SA, Fenton RE. Discrimination distress during adolescence. *Journal of Youth and Adolescence* 2000;29:679–695.
- Forman TA, Williams DR, Jackson JS. Race, place, and discrimination. *Perspectives on Social Problems* 1997;9:231–261.
- Garcia Coll C, Lamberty G, Jenkins R, McAdoo HP, Crnic K, Wasik BH, et al. An integrative model for the study of developmental competence in minority children. *Child Development* 1996;67:1891–1914. [PubMed: 9022222]
- Gibbons FX, Yeh H, Gerrard M. Early experience with racial discrimination and conduct disorder as predictors of subsequent drug use: A critical period hypothesis. *Drug and Alcohol Dependence* 2007;88:S27–S37. [PubMed: 17275213]
- Gonzales NA, Tein JY, Sandler IN, Friedman RJ. On the limits of coping: Interaction between stress and coping for inner-city adolescents. *Journal of Adolescent Research* 2001;16:372–395.
- Goto SG, Gee GC, Takeuchi DT. Strangers still? The experience of discrimination among Chinese Americans. *Journal of Community Psychology* 2002;20:211–224.
- Greene ML, Way N, Pahl K. Trajectories of perceived adult and peer discrimination among Black, Latino, and Asian American adolescents: Patterns and psychological correlates. *Developmental Psychology* 2006;42:218–238. [PubMed: 16569162]
- Hall, PW.; Hwang, VM. *Anti-Asian violence in North America*. Walnut Creek, CA: Altamira Press; 2001.
- Harrell SP. A multidimensional conceptualization of racism-related stress: Implications for the well-being of people of color. *American Journal of Orthopsychiatry* 2000;70:42–57. [PubMed: 10702849]
- Helms, JE.; Cook, DA. *Using race and culture in counseling and psychotherapy: Theory and process*. Needham heights, MA: Allyn and Bacon; 1999.
- Jackson JS, Brown TN, Williams DR, Torres M, Sellers SL, Brown K. Racism and the physical and mental health status of African Americans: A thirteen year national panel study. *Ethnicity and Disease* 1996;6:132–147. [PubMed: 8882842]
- Jensen P, Roper M, Fisher P, Piacentini J. Test-retest reliability of the diagnostic interview schedule for children (DISC 2.1): Parent, child, and combined algorithms. *Archives of General Psychiatry* 1995;52:61–71. [PubMed: 7811163]
- Jose PE, Huntsinger CS. Moderation and mediation effects of coping by Chinese American and European American adolescents. *The Journal of Genetic Psychology* 2005;166:16–43. [PubMed: 15782676]
- Kao G. Group images and possible selves among adolescents: Linking stereotypes to expectations by race and ethnicity. *Sociological Forum* 2000;15:407–430.
- Kessler RC, Mickelson KD, Williams DR. The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior* 1999;40:208–230. [PubMed: 10513145]
- Klonoff EA, Landrine H, Ullman JB. Racial discrimination and psychiatric symptoms among Blacks. *Cultural Diversity and Ethnic Minority Psychology* 1999;5:329–339.
- Krieger N. Racial and gender discrimination: Risk factors for high blood pressure? *Social Science and Medicine* 1990;30:1273–1281. [PubMed: 2367873]
- Lai MH. Responding to Asian Pacific Islander youth violence: Lessons learned from a community mobilization strategy. *Crime and Delinquency* 2005;51:158–179.

- 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]
- Lee RM. Do ethnic identity and other-group orientation protect against discrimination for Asian Americans? *Journal of Counseling Psychology* 2003;50:133–141.
- Lee RM. Resilience against discrimination: Ethnic identity and other-group orientation as protective factors for Korean Americans. *Journal of Counseling Psychology* 2005;52:36–44.
- Liang B, Grossman JM, Deguchi M. Chinese American middle school youths' experiences of discrimination and stereotyping. *Qualitative Research in Psychology* 2007;4:187–205.
- Liu LL, Lau AS, Chen ACC, Dinh KT, Kim SY. 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* 2009;38:691–702. [PubMed: 19636764]
- Mak AS, Nesdale D. Migrant distress: The role of perceived racial discrimination and coping resources. *Journal of Applied Social Psychology* 2001;31:2632–2647.
- Matsouka JK, Ryuji DH. Asian American immigrants: A comparison of the Chinese, Japanese, and Filipinos. *Journal of Sociology and Social Welfare* 1991;18(3):123–133.
- Mossakowski KN. Coping with perceived discrimination: Does ethnic identity protect mental health? *Journal of Health and Social Behavior* 2003;44:318–331. [PubMed: 14582311]
- Noh S, Beiser M, Kaspar V, Hou F, Rummens J. Perceived racial discrimination, depression, and coping: A study of Southeast Asian refugees in Canada. *Journal of Health and Social Behavior* 1999;40:193–207. [PubMed: 10513144]
- Operario D, Fiske S. Ethnic identity moderates perceptions of prejudice: Judgments of personal versus group discrimination and subtle versus blatant bias. *Personality and Social Psychology Bulletin* 2001;27:550–561.
- Phinney JS. Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin* 1990;108:499–514. [PubMed: 2270238]
- Phinney, JS. Ethnic identity and acculturation. In: Chun, KM.; Organista, PB.; Marin, G., editors. *Acculturation: Advances in theory, measurement and applied research*. Washington, DC: American Psychological Association; 2003. p. 63-82.
- Prelow HM, Mosher CE, Bowman MA. Perceived racial discrimination, social support, and psychological adjustment among African American college students. *Journal of Black Psychology* 2006;32:442–454.
- Rigby K. Effects of peer victimization in schools and perceived social support on adolescent well-being. *Journal of Adolescence* 2000;23:57–68. [PubMed: 10700372]
- Root, MPP. Multiracial Americans. In: Lee, LC.; Zane, NWS., editors. *Hand book of Asian American psychology*. Thousand Oaks: Sage; 1998. p. 261-287.
- Rutter, M. Psychosocial resilience and protective mechanisms. In: Rolf, J.; Masten, AS.; Cicchetti, D.; Nuechterlein, KH.; Weintraube, S., editors. *Risk and protective factors in the development of psychopathology*. New York: Cambridge University Press; 1990. p. 181-214.
- 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]
- Saito, LT. The politics of adaptation and the 'good immigrant': Japanese Americans and the new Chinese immigrants. In: Lopez-Garza, M.; Diaz, DR., editors. *Asian and Latino immigrants in a restructuring economy: The metamorphosis of Southern California*. Stanford, CA: Stanford University Press; 2001. p. 332-349.
- Sellers RM, Caldwell CH, Schmeelk-Cone KH, Zimmerman MA. Racial Identity, racial discrimination, perceived stress, and psychological distress among African American young adults. *Journal of Health and Social Behavior* 2003;44:302–317. [PubMed: 14582310]
- Sellers RM, Shelton JN. Racial identity, discrimination, and mental health among African Americans. *Journal of Personality and Social Psychology* 2003;84:1079–1092. [PubMed: 12757150]
- Shelton JN, Sellers RM. Situational stability and variability in African American racial identity. *Journal of Black Psychology* 2000;26:27–50.

- Smith EJ. Ethnic identity development: Toward the development of a theory within the context of majority/minority status. *Journal of Counseling and Development* 1991;70:181–188.
- Snyder, HN.; Sickmund, M. Juvenile offenders, victims: 2006 National report. Washington, DC: US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention; 2006.
- Tsai, JL.; Chentsova-Dutton, Y.; Wong, Y. Why and how we should study ethnic identity, acculturation, and cultural orientation. In: Hall, G.; Okazaki, S., editors. *Asian American psychology: The science of lives in context*. Washington, DC: American Psychological Association; 2002. p. 41–65.
- Tuan, M. *Forever foreigners or honorary Whites?*. New Brunswick: Rutgers University Press; 1998.
- Umana-Taylor AJ, Updegraff KA. Latino adolescents' mental health: Exploring the interrelations among discrimination, ethnic identity, cultural orientation, self-esteem, and depressive symptoms. *Journal of Adolescence* 2007;30:549–567. [PubMed: 17056105]
- Werkuyten M, Nekuee S. Subjective well-being, discrimination, and cultural conflict: Iranians living in the Netherlands. *Social Indicators Research* 1998;47:281–306.
- Williams DR, Yu Y, Jackson JS, Anderson NB. Racial differences in physical and mental health: Socioeconomic status, stress and discrimination. *Journal of Health Psychology* 1997;2:335–351.
- Wong CA, Eccles JS, Sameroff A. The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality* 2003;71:1197–1232. [PubMed: 14633063]
- Ying Y, Lee PA, Tsai JL. Cultural orientation and racial discrimination: Predictors of coherence in Chinese American young adults. *Journal of Community Psychology* 2000;28:427–442.
- Yip T, Gee GC, Takeuchi DT. Racial discrimination and psychological distress: The impact of ethnic identity and age among immigrant and United States-born Asian adults. *Developmental Psychology* 2008;44:787–800. [PubMed: 18473644]
- Yoo HC, Lee RM. Ethnic identity and approach-type coping as moderators of the racial discrimination/well-being relation in Asian Americans. *Journal of Counseling Psychology* 2005;52:497–506.
- Yoo HC, Lee RM. Does ethnic identity buffer or exacerbate the effects of frequent racial discrimination on situational well-being of Asian Americans? *Journal of Counseling Psychology* 2008;55:63–74.
- Young, K.; Takeuchi, DT. Racism. In: Lee, LC.; Zane, NWS., editors. *Handbook of Asian American psychology*. Thousand Oaks, CA: Sage; 1998. p. 401–432.

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Fig. 1.

Relationship between chronic daily discrimination and adolescent delinquent behaviors at high and low levels of Chinese cultural orientation

Fig. 2.
Relationship between chronic daily discrimination and adolescent delinquent behaviors at high and low levels of Western cultural orientation

Table 1
Bivariate correlations of study variables including demographic background variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1 Family income (Wave 2)	—	—	—	.09	-.24***	-.11	.00	-.15**	.05	.14*	.09
2 Child gender (Wave 2)	—	—	—	—	-.05	.02	.02	-.03	-.02	.05	.03
3 Child immigrant status (0 = born in the US, 1 = born in other countries; Wave 2)	—	—	—	—	—	.03	.08	.10	-.12*	-.09	-.08
4 Chronic daily discrimination (Wave 2)	1.78	.50				—	.63***	.02	-.20***	.20***	.20***
5 Discriminatory victimization (Wave 2)	1.44	.44					—	.00	-.12*	.15**	.13*
6 Chinese cultural orientation (Wave 2)	3.80	.55						—	.40***	-.02	-.06
7 Western cultural orientation (Wave 2)	3.81	.43							—	-.05	-.03
8 Delinquent behaviors (Wave 1)	.18	.16								—	.33***
9 Delinquent behaviors (Wave 2)	.27	.26									—

N = 311,

* $p < .05$,

** $p < .01$,

*** $p < .001$

Table 2

Unstandardized and standardized hierarchical regression coefficients (chronic daily discrimination as the risk factor and adolescent delinquent behaviors at Wave 2 as the outcome)

Variable	Step 1			Step 2		
	<i>b</i>	SE	Beta	<i>b</i>	SE	Beta
Main effects						
Family income (Wave 2)	.00	.01	.04	.00	.01	-.01
Child gender (Wave 2)	.00	.03	.00	.00	.03	.00
Child immigrant status (0 = born in the US, 1 = born in other countries; Wave 2)	-.02	.03	-.04	-.02	.03	-.03
Adolescent delinquent behavior (Wave 1)	.46***	.09	.29	.45***	.08	.29
Chronic daily discrimination (Wave 2)	.09**	.03	.17	.06*	.03	.11
Chinese cultural orientation (Wave 2)	-.03	.03	-.07	-.05	.03	-.10
Western cultural orientation (Wave 2)	.04	.04	.07	.08*	.04	.13
Two way interactions						
Chronic daily discrimination (Wave 2) × Chinese cultural orientation (Wave 2)				.17**	.06	.18
Chronic daily discrimination (Wave 2) × Western cultural orientation (Wave 2)				-.25***	.06	-.25
<i>R</i> ²	.14			.20		
Δ <i>R</i> ²				.055***		
Model significance			<i>F</i> = 7.06 (7,303)***			<i>F</i> = 8.11 (9,301)***

N = 311,
* *p* < .05,
** *p* < .01,
*** *p* < .001

Unstandardized and standardized hierarchical regression coefficients (discriminatory victimization as the risk factor and adolescent delinquent behaviors at Wave 2 as the outcome)

Table 3

Variable	Step 1			Step 2		
	<i>b</i>	SE	Beta	<i>b</i>	SE	Beta
Main effects						
Family income (Wave 2)	.00	.01	.02	.00	.01	-.01
Child gender (Wave 2)	.00	.03	.00	.00	.03	.01
Child immigrant status (0 = born in the US, 1 = born in other countries; Wave 2)	-.03	.03	-.05	-.03	.03	-.04
Adolescent delinquent behaviors (Wave 1)	.49***	.09	.31	.48***	.09	.31
Discriminatory victimization (Wave 2)	.06	.03	.09	.03	.03	.06
Chinese cultural orientation (Wave 2)	-.03	.03	-.06	-.05	.03	-.11
Western cultural orientation (Wave 2)	.02	.04	.04	.06	.04	.11
Two way interactions						
Discriminatory victimization (Wave 2) × Chinese cultural orientation (Wave 2)				.13*	.06	.12
Discriminatory victimization (Wave 2) × Western cultural orientation (Wave 2)				-.23***	.06	-.20
<i>R</i> ²	.12			.17		
Δ <i>R</i> ²				.05***		
Model significance	<i>F</i> = 6.12 (7,303)***			<i>F</i> = 6.94 (9,301)***		

N = 311,
* *p* < .05,
** *p* < .01,
*** *p* < .001