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## Accent, Perpetual Foreigner Stereotype, and Perceived Discrimination as Indirect Links between English Proficiency and Depressive Symptoms in Chinese American Adolescents

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### Abstract

The current study uses Garcia Coll et al.'s (1996) developmental competence model of ethnic minority children and Kim's (1999) Racial Triangulation Theory as frameworks for investigating the mechanisms whereby early adolescent English proficiency relates to perceived discriminatory experiences and adolescent depressive symptoms. Data from 444 adolescents (239 girls and 205 boys, with a mean age of 13.0 for Wave 1 and 17.0 for Wave 2) and their parents living in major metropolitan areas of Northern California were collected. The structural equation modeling analyses indicate that self-reported low levels of English proficiency among Chinese American adolescents in middle school are related to these same students later reporting that they speak English with an accent in high school, which in turn relates significantly to their perceiving that they have been stereotyped as perpetual foreigners. For girls, a perpetual foreigner stereotype relates to perceptions of chronic daily discrimination, increasing the risk of depressive symptoms. For boys, the path is different: a perpetual foreigner stereotype is apparently related to discriminatory victimization experiences, which increase the risk of depressive symptoms.

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Discrimination occurs not only when ethnic minority individuals are denied civil and political rights but also when they become targets of discriminatory attitudes and acts in their daily lives (Hune, 2000). Ethnic minority adults report having experienced discrimination as children and adolescents (Simmons et al., 2002; Fisher et al., 2000; Wong et al., 2003). The perception of being discriminated against has been suggested to influence adolescents' adjustment in areas including, but not limited to, self identity, peer relationships, academic performance and mental health (Brown & Bigler, 2005; Caldwell et al. 2004; Gibbons et al. 2007; Noh et al., 1999; Taylor & Turner, 2002). Researchers also report that knowledge about discrimination increases over time with children's age, and so do instances of perceived discrimination (Brown & Bigler, 2005; McKown & Weinstein, 2003; Wong et al., 2003). It is essential for researchers who study adolescent adjustment to understand the experiences of discrimination that may be reported by their study subjects (Brown & Bigler, 2005; Garcia Coll et al., 1996). In response to this need, García Coll and colleagues (1996) have proposed a developmental competence model for ethnic minority children, stressing that discrimination is a significant component of their experience. According to this model, developmental pathways of ethnic minority children are influenced

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by social position factors such as race, social class, ethnicity, and gender. It is proposed that these factors often become fertile ground for perceptions of discrimination, and that they implicate residential, economic, social and psychological environments that hinder ethnic minority children's adjustment.

Although Asian American children have been touted as “model minorities” for their outstanding educational achievements, they are also victims of discrimination, manifested in behaviors such as name-calling, vandalism, or physical attack (Boulton, 1995; Fisher et al., 2000; Harrell, 2000; Liang et al., 2007; Rosenbloom & Way, 2004; Young & Takeuchi, 1998). The contradiction between the model minority stereotype and Asian American adolescents' perceived discriminatory experiences is attracting increasing attention among researchers (Lin et al., 2005; Kim, 1999). Scholars propose that one common stereotype of Asian Americans – the perpetual foreigner stereotype – may significantly contribute to discriminatory treatment of Asian Americans from the mainstream society (Kim, 1999; Uba, 2002). Asian Americans are often perceived as strangers in this country no matter where they were born or how long their families have resided in the U.S. Those who do not speak English well are especially likely to be stereotyped in this way. In fact, lack of English proficiency is believed to be an important marker of “foreigner” status, particularly when English is spoken with a non-standard American accent (Rodriguez, Myers, Mira, Flores, & Garcia-Hernandez, 2002).

In some theoretical discussions and qualitative observations, scholars propose that Asian Americans go to great lengths to deflect the foreigner stereotype in their attempts to avert associated discriminatory treatment (Tuan, 1998; Uba, 2002). Unfortunately, little empirical evidence exists to show how Asian Americans' perceptions of being stereotyped might influence their perceptions of being discriminated against, and, by extension, the effect of these perceptions on mental health. In response to the research gap, the current longitudinal study tests a hypothesized model (Figure 1) to investigate the links among language use (i.e., English proficiency level), speaking English with an accent, experiences of the perpetual foreigner stereotype, perceived discriminatory experiences, and depressive symptoms in a sample of Chinese American adolescents.

The present study's focus on the adolescent years in the life course is deliberate. Relative to middle childhood, there is a shift in cognitive and social development during adolescence that allows for a richer understanding of the proposed processes, particularly as these relate to perceptions of discrimination (Brown & Bigler, 2005). Studies demonstrate that perceptions of discrimination increase over time from middle childhood to adolescence (Brody, Chen, Murry, Ge, Simons, et al., 2006) and even during high school (Greene, Niobe, & Pahl, 2006). The development of a wider array of social relationships during adolescence provides more instances in which an adolescent may perceive discrimination. These social opportunities are accompanied by concomitant gains in reasoning ability, which allow adolescents to be better aware of and attuned to instances of possible discrimination. Moreover, ethnic minority parents are more likely to employ ethnic-racial socialization practices that emphasize preparation for bias, or potential discrimination experiences and ways of coping with such experiences, during their children's adolescence than when their children were younger (Hughes, Rodriguez, Smith, Johnson, Stevenson, & Spicer, 2006). This is due to parents' attempts at aligning their socialization practices with children's increasing competencies in terms of awareness of, and experiences with, discrimination. As developmental processes observed in adolescence have been shown to persist well into adulthood (Block & Robins, 1993), it is important to uncover antecedents and precursors of discrimination during adolescence. The following sections highlight the factors associated with perceiving discrimination and the ways in which this relates to adjustment difficulties such as depressive symptoms among Chinese American adolescents.

## English Proficiency and Accent in Asian Americans

Acquiring fluency in the dominant language (i.e., English) is one of the first steps towards acculturation to the United States (Gordon, 1964). That is, in the process of acculturation, mastering the English language is considered to be foundational (Finch, 2000; Gordon, 1964; Uba, 2002; Vega et al., 1993). Indeed, English proficiency is one of the most widely used indicators of acculturation level, and it has been consistently reported to predict ethnic minority individuals' adjustment (e.g., Finch, 2000; Vega et al., 1993). Thus, for minority groups with a large number of recent immigrants, such as Asian Americans (Uba, 2002; Goto et al., 2002), adaptation and adjustment to the mainstream society is largely dependent on their ability to speak and understand English well. Lack of proficiency can be seen as a sign of failure or unwillingness to acculturate (Rodriguez et al., 2002).

In the school context, strong English language skills are particularly important, as these skills provide a foundation necessary for adolescents to master the school curriculum and move toward a successful future in college or the work force. For students who speak a different language at home, mastering the English language can represent a challenge. Even when students acquire a high level of fluency, it may be difficult to speak English like a native speaker. Instead, their accent often signals foreignness or an immigrant status. As García Coll et al. (1996) emphasize, giving cues of foreignness/immigrant status may mean that adolescents are more likely to experience discrimination. There is some empirical support for this conjecture. For example, a qualitative study of Asian American adolescents reveals that minority adolescents are harassed by peers at school due to their poor English skills and for speaking English with a non-standard American accent (Qin et al., 2008). Similarly, Cargile (1997) finds that people giving a speech with a Chinese accent are rated as less attractive than those with an American accent.

In the current study, adolescents' English fluency level is measured via self-report at Wave 1 (during middle school) and is hypothesized to be significantly related to the degree to which they report speaking English with an accent four years later (during high school) at Wave 2. Those adolescents reporting stronger accents are more likely to feel that they are stereotyped as a perpetual foreigner. In other words, lower English language fluency in middle school may predict accented English and a perpetual foreigner stereotype in high school, which in turn may relate to a minority adolescent perceiving discrimination and experiencing adjustment problems such as depressive symptoms.

## The Perpetual Foreigner Stereotype of Asian Americans

While discrimination is commonly discussed in the literature, the primary research focus has, for decades, been on Black/White relations. For this reason, the Black/White framework is often adopted to understand the discriminatory experiences of Asian Americans, Latinos, and Native Americans (Hune, 2000; Lin, Kwan, Cheung, & Fiske, 2005; Kim, 1999). Within this framework, Whites are considered to be “superior” as the dominant group, and ethnic minorities are considered “inferior” as dominated groups (Kim, 1999). Recent discussions on this topic are beginning to highlight the shortcomings of relying on such superior/inferior models of discrimination, focusing instead on the uniqueness of Asian Americans' experiences with discrimination (e.g. Goto et al., 2007; Kim, 1999; Shah, 1994).

In the limited yet growing literature, the stereotype of “perpetual foreigner” is attracting great attention (e.g. Chan, 1991; Goto et al., 2007; Kim, 1999; Shah, 1994; Tuan, 1998; Wong, 1993). The formation of the foreigner image may be due to the fact that Asian Americans usually have a strong preference for retaining their ethnic and cultural practices while simultaneously struggling for full acceptance in the mainstream U.S. society (Goto et al., 2002; Kitano & Daniels, 2001). They often live according to Asian customs, and their

unique accents, foods, religions, beliefs, and values are considered to be markedly different from mainstream or White ways (Espiritu, 1997). Maintaining a highly ethnic lifestyle is often misinterpreted as distance from, and resistance to, the mainstream culture. In consequence, Asian Americans are often believed to be unassimilable (Espiritu, 1997; Shah, 1994; Yang, 2006).

In support of the above observations, Kim's (1999) Racial Triangulation Theory provides a systematic analysis of contemporary Asian American experiences, with a particular focus on stereotypes. This theory suggests that for the purpose of controlling the distribution of power and privilege, those from the dominant (White) group categorize Asian Americans via two processes or dimensions: 1) inferior/superior, and 2) foreigner/insider. According to Kim, Asian Americans are racially triangulated in relation to Whites and Blacks through a categorization process represented by the graph in Figure 2. On one axis, Asian Americans are labeled as being superior to Blacks (i.e., the model minority stereotype) yet still inferior to Whites; and on the other dimension, they are labeled as inherently unassimilable foreigners (i.e., the perpetual foreigner stereotype), whereas Whites and Blacks are both considered to be insiders.

The “perpetual foreigner” stereotype may seem innocuous, but in reality, it constitutes a form of discrimination and therefore can be detrimental (Chan, 1991; Shah, 1994). The present paper focuses on the “perpetual foreigner” stereotype because it is more clearly a negative form of discrimination than the model minority stereotype, which has some positive aspects to it. Because people tend to view strangers with some degree of suspicion, those who are branded as strangers may be treated differently. Even within the Asian American community, there is widespread use of the term “FOB,” or “Fresh off the Boat,” to denigrate one's coethnics as “too ethnic.” Pyke and Dang (2003) observed that more acculturated Asian Americans are thus able to signal their own “insider” status and divert the stigma of being perceived as a foreigner onto their less acculturated coethnics (Pyke & Dang, 2003). Among those who are victimized/discriminated against, perpetual foreigner status is often accompanied by feeling distant, helpless, and frustrated (Chan, 1991; Tuan, 1998).

To our knowledge, no empirical study tests the impact of the perpetual foreigner stereotype on Asian Americans' perceptions of discrimination and also on their psychosocial adjustment. The current study tests these relationships by drawing upon racial triangulation theory and previous qualitative research.

### **Perceived Discrimination and Depressive Symptoms in Asian Americans**

García Coll et al. present a model (2006) stressing that discrimination experiences undermine the resources and opportunities available to ethnic minority children in their social interactions, and thus increase the likelihood that they will develop problems in competence. Empirical research also consistently demonstrates that discriminatory experiences are stressful for minorities; they are also associated with maladjustment, including mental health problems (e.g., Alvarez, Juang, & Liang, 2006; Clark et al., 1999; Chakraborty & McKenzie, 2002; Harrell, 2000). Those studies that focus specifically on depressive symptoms in ethnic minority adolescents have examined whether perceived discrimination remains significant in predicting depressive symptoms even after accounting for other related constructs, such as stressful life events (e.g., Taylor & Turner, 2002). Other studies focus on uncovering potential moderators, such as sense of ethnic identity and coping processes, on the relationship between perceived discrimination and ethnic minority adolescents' depressive symptoms (e.g., Noh et al., 1999). Although these studies help to better elucidate the relationship between perceived discrimination and depressive symptoms, we know little about potential precursors or factors that may heighten ethnic minority

adolescents' sense that they are experiencing discrimination. The current study proposes to fill this void by testing whether Asian American adolescents who believe that they fit the perpetual foreigner stereotype have an increased likelihood of perceiving discriminatory treatment from others, consequently increasing the chances that they exhibit more depressive symptoms.

Scholars recognize that discrimination can be “expressed either in direct or blatant forms [or in] subtle and elusive” forms of behavior (Noh et al., 1999, p. 194). Similarly, Brown and Bigler (2004) note that discriminatory actions can range from mild (e.g., ignoring someone) to virulent (e.g., inflicting physical harm) (Brown & Bigler, 2004, p. 714). To better understand the complexity of discrimination experiences, the present study examines two forms of perceived discrimination. Specifically, chronic daily discrimination is the measure for the milder form, and discriminatory victimization is the measure for the more virulent form of discrimination.

### **Developmental Model of Children's Perceptions of Discrimination**

According to Brown and Bigler's (2005) model of children's perceptions of discrimination, several developmental factors provide the foundation for children to be aware of possible discrimination. First, children should be able to label and categorize themselves into a social group to which they belong. Knowing the social group to which one belongs is an important precursor to recognizing that one's treatment by others is tied to one's social group. Second, children should be able to recognize the stereotypes and biases held by members of the larger society about their particular social group. In other words, knowing about which stereotypes are associated with a given social group is important for perceiving that those stereotypes are being applied. Third, children should be able to recognize that the stereotypes assigned to a social group have important consequences for members of that social group. Fourth, children are more likely to detect discrimination directed toward a social group if they have a strong sense of identity as being part of that social group. Collectively, older children have better facility with these factors than do younger children. That is, adolescents' increased cognitive capacity allows them to form a more sophisticated understanding of social groups, social status, and stereotypes. Due to these factors, adolescence is an opportune developmental period for testing the hypothesis that perceiving that one has been branded as a perpetual foreigner is related to perceiving that one is being discriminated against.

Based on Brown and Bigler's (2005) developmental model of perceiving discrimination, it is possible to contend that being stereotyped as a perpetual foreigner would activate adolescents' sense of the salience of their group identity. Since salience of group identity makes children more susceptible to perceiving discrimination, the present study tests for a significant link between perpetual foreigner stereotype and perceptions of discrimination in a sample of Asian American adolescents.

Perceiving that one is affected by the perpetual foreigner stereotype should also be linked to a heightened sense of stigmatization (Brown & Bigler, 2005). According to Pinel (1999), individuals with a heightened sense of stigmatization are more likely to perceive discrimination directed toward them. That is, Asian American adolescents who perceive that they are affected by the perpetual foreigner stereotype are likely to perceive more discrimination, which would in turn make them more likely to report depressive symptoms.

### **Control Variables**

Considering the significance of the family's social class in determining ethnic minority children's development (García Coll et al., 1996) and the widely demonstrated strong

association between family socioeconomic status and children's mental health problems (see Brooks-Gunn & Duncan, 1997), the potential role of family income on adolescent depressive symptoms is controlled for in the current model. In addition, an individual's place of birth (U.S.-born vs. foreign-born) often has a significant impact on his or her English proficiency, accent, and likelihood of feeling stereotyped as a foreigner; thus, these relationships are included and controlled for in the analyses. Lastly, adolescents' depressive symptoms at Wave 1 are controlled for, in order to fully recognize the contribution of pre-existing conditions to the same outcomes at Wave 2.

Empirical research has yielded inconsistent findings in answer to the question of whether there is a gender difference in adolescents' perceptions of discrimination. Some studies find that ethnic minority boys report more discrimination than girls (e.g., Alvarez et al., 2006; Forman et al., 1997; Waters, 1996) and others find no gender differences (e.g., Goto et al., 2002; Greene et al., 2006; Fisher et al., 2000). Research on Black and Latino adolescents suggests that boys are more likely than girls to encounter discrimination due to the stereotype that ethnic minority boys are violent and delinquent (Gibbs, 1998; Tatum, 1997). Qualitative research on Asian American boys similarly suggests that they are more likely to encounter discrimination experiences compared to girls, especially through physical harassment (Qin, Way, & Mukherjee, 2008). Qin and colleagues suggest that because of their smaller physical size, perceived physical weakness, and being perceived as “nerds”, Asian Americans boys become easy targets of discrimination.

According to García Coll et al.'s (1996) theoretical framework, gender is an important determinant in ethnic minority children's development. Boys and girls may cope differently with the stress of perceiving discrimination, and thus their susceptibility to associated negative outcomes may be different. Therefore, the present study tests the hypothesized model separately for boys and girls and compares the results by gender. To our knowledge, the present study will be one of the first to examine differential associations by gender for relationships among perpetual foreigner stereotype, discrimination, and developmental outcomes for Asian American adolescents.

In summary, based upon García Coll et al.'s (1996) developmental competence model and Kim's (1999) Racial Triangulation Theory, the current study tests a hypothesized model to understand how Chinese American adolescents' self-reported poor English skills in middle school might relate to their depressive symptoms in high school via a specific pathway. This pathway is speaking English with an accent, which is hypothesized to relate to adolescents perceiving that they fit the perpetual foreigner stereotype, which is expected to relate, in turn, to adolescents reporting that they are experiencing discrimination.

## Methods

### Participants

Data for this study come from a longitudinal study of Chinese American families living in major metropolitan areas of Northern California. Two waves of data were collected at a 4-year interval. The final sample included 444 adolescents (239 girls and 205 boys) and their parents. The target adolescent was attending middle school at Wave 1 and attending high school at Wave 2. Specifically, the participating adolescents ranged in age from 12 to 15 years (mean = 13.0 years,  $SD = 0.73$ ) at the first wave and ranged from 16 to 19 (mean = 17.05 years,  $SD = 0.80$ ) at the second wave. Three hundred and thirty-three of them were born in the United States and the others were foreign-born. Most of the parents were immigrants (87% of fathers and 90% of mothers). Most of the families spoke Chinese in their households (91.2%). The family income ranged from “\$15,000 or under” to “\$165,001 or more,” with a median in the range of “\$30,000-\$45,000.”

## Procedures

With the aid of school administrators, Chinese American students were identified from all of the 7<sup>th</sup> and 8<sup>th</sup> graders attending any one of seven middle schools. These schools were all located in major metropolitan areas of Northern California. All eligible families were sent a letter explaining the research project, and only those families who consented to participate received a packet of questionnaires, which were collected by research staff about two to three weeks after distribution. Questionnaires were available in both English and Chinese. For each family's returned questionnaires, the target adolescent received a nominal amount of monetary compensation.

Of all eligible families, 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 ( $\chi^2(1) = 16.1, p < .001$ ).

## Measures

All measures were forward- and back-translated in Chinese. Any inconsistencies with the original English version scale were then resolved by two bilingual/bicultural research assistants with careful consideration given to culturally appropriate meaning of items.

**Demographic variables**—Family socioeconomic status was assessed via fathers' and mothers' reports on their annual gross family income using a scale ranging from (1) “\$15,000 or under” to (12) “\$165,001 or more.” In the current analysis, a mean of the father and mother report at Wave 1 is calculated to represent family income. Adolescents were also required to report whether they were born in the U.S. or foreign-born.

**English proficiency**—It has been suggested that generally people perceive their language proficiency accurately, and self-report measures have been recommended as a way to achieve a valid assessment of language proficiency without the time and expense associated with formal testing (Macintyre, 1997). Therefore, the current study asked adolescents to answer two questions: 1) how well do you speak and understand English?, and 2) how well do you read and write English? The response options included “1 = not well at all,” “2 = slightly well,” “3 = moderately well,” “4 = very well,” and “5 = extremely well.” A mean of the responses on these two questions represents adolescents' general English proficiency. A higher score reflects better English skills.

**Accent**—Adolescents also self-reported how often people noticed they spoke English with an accent on a four-point scale with the following descriptors: “1 = never,” “2 = rarely,” “3 = sometimes,” and “4 = often.” A higher score indicates a stronger and more noticeable accent.

**Perpetual foreigner stereotype**—Five items were used to measure adolescents' experience of being stereotyped as foreigners (Benner & Kim, 2009). Sample items include “People assume I am a FOB (fresh-off-the-boat)” and “People assume I am from another country.” Adolescents were asked to indicate how often each of the above experiences happened in their life on a day-to-day basis with responses ranging from “1 = never” to “4 = often.” A higher score reflects a perception of being stereotyped as a foreigner more frequently. Cronbach's alpha of this measure is .79.

**Chronic daily discrimination**—By answering ten questions, adolescents reported their perceptions of discrimination in daily life. Items were originally developed and used by Williams and colleagues (Williams, Yu, Jackson, & Anderson, 1997; Kessler, Mickelson, & Williams, 1999). The present study uses a modified version of the scale, specifically developed for use with Asian Americans (Benner & Kim, 2009). Adolescents were asked to indicate the frequency of daily exposure to general 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 reflects the perception of more chronic daily discrimination. For the current sample, Cronbach's alpha of this scale is .86.

**Discriminatory victimization**—Five items were used to measure adolescents' victimization experiences associated with general discrimination for use with Asian American adolescents (Deng, Kim, Vaughan, & Li, in press). Three of the items (i.e., “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) as part of a physical victimization scale. Two items (i.e., “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, Tein, Sandler, & Friedman (2001) to measure the 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 high score reflects more perceived experiences of victimization. For the current sample, Cronbach's alpha of this five-item measure is .77.

**Depressive symptoms**—Adolescents' self-reports of depressive symptoms were collected using the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). Participants responded to statements such as “I felt people disliked me” using a scale ranging from 0 (rarely or none of the time) to 3 (most of the time). A high score indicates more depressive symptoms. In the present study, Cronbach's alpha of this 20-item measure is .87.

## Results

### Factor Analyses

We first conducted exploratory factor analyses to test whether the two measures of discrimination (i.e., perceptions of chronic daily discrimination and perceptions of discriminatory victimization) represented two distinct constructs, given the high correlation between them (see Table 2). Results of exploratory factor analyses indeed demonstrated the existence of two separate factors. However, two items in the chronic daily discrimination scale (“I am called names or insulted,” and “I am threatened or harassed”) and one item in the discriminatory victimization scale (“People leave me out of an activity or event I want to be a part of”) showed either low factor loadings (below .30) or double loadings in both constructs, and were subsequently removed from their respective scales. The reliabilities of the resulting eight-item chronic daily discrimination scale and the four-item discriminatory victimization scales were .83 and .75, respectively.

We next proceeded to conduct confirmatory factor analyses, to test how well a two-factor discrimination measure (represented by perceptions of chronic daily discrimination and perceptions of discriminatory victimization) would be confirmed by the data. We followed the recommendation of Little, Cunningham, Shara, and Widaman (2002) in conducting confirmatory factor analyses with parceling of items. Parceling involves aggregating item



levels by creating sums or averages of two or more items. Parceling of items is recommended because it reduces the psychometric problems associated with item-level data, such as lower reliability and communality. Parceling is also more parsimonious, allows for fewer chances for residual correlation, and reduces sampling error. We followed the item-to-construct balance approach in creating the parcels. The results of the parceled items demonstrated an excellent fit to the data for a two factor model,  $\chi^2(8) = 2.64$ ,  $p = .95$ , CFI=1.00, SRMR=0.01, RMSEA=.00 with 90% confidence interval [.00, .00]. This suggested that perceived discrimination was best represented using two distinct constructs.

### Preliminary Analyses

As one of the important purposes of the current study is to explore the effects of adolescent gender on the research question of interest, and as the attrition analyses indicate a potential gender bias, all of the analyses were conducted separately for boys and girls. Descriptive analyses on the study variables for boys and girls are presented in Table 1. T-tests were performed to examine mean-level differences between boys and girls (Table 1). The analyses demonstrate that girls reported significantly more depressive symptoms than boys did ( $p < .05$ ). No other gender difference was observed in any of the remaining study variables. We also examined the mean-level difference on the study variables between U.S.-born and foreign-born adolescents in Table 1. The results indicated that U.S.-born adolescents reported significantly higher family income, better English proficiency, weaker accent, and fewer experiences of being perceived as a perpetual foreigner. These findings suggest that there are potential confounding effects of birthplace on the study variables, and indicates the need to control for birthplace in testing the model.

Correlational analyses are presented in Table 2. For girls, low family income is significantly related to being foreign-born and also to self-reports of lower English proficiency, stronger accent when speaking English, more experiences of being stereotyped as a foreigner, and more depressive symptoms in high school. Also for girls, being born in a foreign country is significantly related to lower English proficiency, stronger accent, and perceiving more experiences of being stereotyped as a foreigner. As hypothesized, girls' poor English proficiency in middle school is related to stronger accent and being stereotyped as foreigners in high school. Girls' accent when speaking English is related to more perceived experiences of being stereotyped as a foreigner, increased perceptions of chronic daily discrimination and more depressive symptoms in high school. Believing that they are stereotyped as foreigners is significantly associated with girls' increased perceptions of discrimination (both chronic daily discrimination and discriminatory victimization) and depressive symptoms in high school. As expected, these perceptions of discrimination are also positively related to depressive symptoms in high school.

For boys, low family income is significantly associated with being foreign-born and with self-reports of poor English proficiency, stronger accent when speaking English, and reporting more experiences of being stereotyped as a foreigner. Also for boys, being born in a foreign country is significantly related to lower English proficiency, stronger accent, and perceiving more experiences of being stereotyped as a foreigner. Boys with lower English proficiency at Wave 1 were more likely to report speaking English with an accent and being perceived as foreigners at Wave 2. In addition, for boys, speaking English with an accent, being stereotyped as foreigners, discriminatory experiences, and adjustment outcome – namely, depressive symptoms at Wave 2 – are all correlated with each other as hypothesized.

## Test of the Hypothesized Model

Structural equation modeling (SEM) was used to test the hypothesized model using the Mplus software package (v. 5; Muthén, B. O., & Muthén, 2006). Mplus uses the full information maximum likelihood (FIML) estimator to account for missing data by including all available data in its parameter estimation. To judge the fit of hypothesized models using SEM, multiple fit indices are used because no single fit index provides unbiased estimates of fit under a range of sample size and data distribution conditions. In the current study, the criteria for judging good model fit include the  $\chi^2$  test ( $\chi^2$  should not be significant for a good fit), the root mean square error of approximation (RMSEA  $\leq$  .08 for acceptable fit, Kline, 2005), and the comparative fit index (CFI  $>$  .95) and SRMR  $<$  .08 for a good fit (Hu & Bentler, 1999). Both direct and indirect effects were tested simultaneously in Mplus. Inferences for the indirect effects were estimated using the delta method (Muthen & Muthen, 2003).

**Girls' model**—The girls' model showed a fair to good fit to the data:  $\chi^2$  ( $df = 12, n = 239$ ) = 22.202,  $p = .035$ , CFI = .970, SRMR = .054, RMSEA = .060 with 90% confidence interval [.015; .098]. The model explained 28.3% of the variance in girls' depressive symptoms. The amount of variability explained without the control variables (namely adolescent birthplace, level of adolescent depressive symptoms at Wave 1, and family income) in the model was 24.5%, suggesting that the substantive variables in the model explain a considerable amount of variance in the endogenous variable.

Significant hypothesized paths and their standardized coefficients are shown in Figure 3. The paths between English proficiency and accent, between accent and foreigner stereotype experience, between foreigner stereotype experience and perceptions of chronic daily discrimination/discriminatory victimization, and between perceptions of chronic daily discrimination and girls' depressive symptoms are significant as hypothesized. The hypothesis that perceptions of discriminatory victimization would relate to depressive symptoms, however, was not confirmed by the data.

Three potential confounding variables, i.e., adolescent birthplace, level of adolescent depressive symptoms at Wave 1, and family income, were controlled for in model testing. The significant control paths are shown as dotted lines in Figure 3. As expected, adolescent birthplace (U.S.-born vs. foreign-born) was significantly related to perceived English proficiency level, with U.S.-born adolescents reporting significantly better English proficiency ( $p < .001$ ) and weaker accent ( $p < .01$ ). However, birthplace was not related to foreigner stereotype experiences. Wave 1 depressive symptoms were significantly related to Wave 2 depressive symptoms. Family income was not significantly related to adolescent depressive symptoms. We suspect that family income may be a distal risk factor for adolescent depressive symptoms, likely to relate to parental depressive symptoms (which were not assessed in the current study) rather than producing direct effects on adolescent depressive symptoms. When testing indirect effects, the direct effects from the exogenous variables to all of the endogenous variables are also included in the model as controls, and the results demonstrated one significant relationship (i.e., a path from English proficiency at Wave 1 to foreigner stereotype experience at Wave 2,  $p < .01$ ).

Table 3 reports the total effects, as well as the direct and indirect effects, of the hypothesized pathways separately for girls and boys. For the girls' model, the indirect effect of hypothesized pathway A (involving chronic daily discrimination as the measure of perceived discrimination) was supported, while pathway B (involving discriminatory victimization as the measure of perceived discrimination) was not supported. However, the indirect effect involving perceived discriminatory victimization as the final endogenous variable in the pathway (English Proficiency  $\rightarrow$  Accent  $\rightarrow$  Perpetual Foreigner Stereotype  $\rightarrow$  Perceived

Discriminatory Victimization), was significant ( $\beta = -.036, p = .026$ ). This suggests that the indirect effect of pathway B was not supported because of the insignificant path ( $\beta = .094, p = .162$ ) from perceived discriminatory victimization to depressive symptoms, as shown in Figure 3.

**Boys' Model**—The boys' model showed an acceptable fit to the data:  $\chi^2 (df = 12, n = 205) = 27.153, p = .007, CFI = .958, SRMR = .076, RMSEA = .078$  with 90% confidence interval [.039; .118]. The model explained 25.8% of the variance in boys' depressive symptoms. The amount of variability explained by the model was reduced slightly, to 22.4%, when the control variables (namely adolescent birthplace, level of adolescent depressive symptoms at Wave 1, and family income) were not included in the model. Significant paths and their standardized coefficients are shown in Figure 4. As with the girls' model, adolescent birthplace was found to be significantly related to self-reported English proficiency and accent, but not to perceived perpetual foreigner stereotype. For the theoretically hypothesized paths – the paths between English proficiency and accent, between accent and foreigner stereotype experience, between foreigner stereotype experience and perceptions of chronic daily discrimination/discriminatory victimization, and between perceived discriminatory victimization and boys' depressive symptoms – were significant, as expected. The relationship between perceptions of chronic daily discrimination and boys' depressive symptoms, however, was not significant.

For the boys' model, according to Table 3, the indirect effect of hypothesized pathway E (involving discriminatory victimization as the measure of perceived discrimination) was supported, while pathway D (involving chronic daily discrimination as the measure of perceived discrimination) was not supported. However, the indirect effect involving chronic daily discrimination as the final endogenous variable in the pathway (English Proficiency → Accent → Perpetual Foreigner Stereotype → Perceived Daily Discrimination), was significant ( $\beta = -.095, p = .009$ ). This suggests that the indirect effect of pathway D was not supported because of the insignificant path ( $\beta = .084, p = .355$ ) from chronic daily discrimination to depressive symptoms, as shown in Figure 4.

**Test of model invariance by gender**—Model invariance by gender was tested using multigroup analysis in Structural Equation Modeling (MGSEM; Kline 1998). First, all the paths in the hypothesized models were constrained to be equal for boys and girls. Then, one path at a time was freed to identify specific paths that might be significantly different between genders. If the  $\chi^2$  difference test is significant for the specific path being compared across groups, it can be concluded that the hypothesized path varies according to gender. In contrast, a nonsignificant  $\chi^2$  difference test would suggest invariance of the path regardless of gender.

Analyses demonstrate three significantly different paths for boys in comparison to girls. Specifically, the path from accent to perpetual foreigner stereotype experience ( $\chi^2 (1) = 4.916, p < .05$ ) and the path from foreigner stereotype experience to perceived discriminatory victimization ( $\chi^2 (1) = 4.865, p < .05$ ) are significantly different: the relationships are stronger for boys than for girls. The path from perceived chronic daily discrimination to depressive symptoms ( $\chi^2 (1) = 4.824, p < .05$ ) also varies according to gender; this relationship is significant for girls but not for boys.

## Discussion

The purpose of this study was to use García Coll et al.'s (1996) developmental model for ethnic minority children and Racial Triangulation Theory (Kim, 1999) as frameworks to understand mechanisms whereby self-report of early adolescent English proficiency relates

to experiences of discrimination and adolescent depressive symptoms over time. The analyses confirm that the hypothesized paths operate differentially by gender. According to self-reports from both boys and girls, Chinese American early adolescents' lack of English proficiency in middle school significantly relates to their reporting speaking English with an accent four years later, which increases the likelihood that they will be perceived as foreigners in this country and that they will perceive more discrimination. In turn, these negative experiences (perceptions of chronic daily discriminatory experiences for girls, and perceptions of discriminatory victimization for boys) relate to adolescents reporting significantly more depressive symptoms when they reach high school.

Acculturation researchers have suggested that, for immigrants, mastering the language of the host country is important for their smooth adjustment to mainstream society, and that it is one of the most salient indicators of acculturation level (e.g., Gordon, 1964; Uba, 2002; Vega et al., 1993). For ethnic minority adolescents, strong English skills provide a critical foundation for their academic success and their social interactions with others (Finch, 2000; Gordon, 1964; Uba, 2002). The present analyses confirm the importance of English language proficiency in Chinese American adolescents' adjustment by demonstrating that English proficiency is related, albeit indirectly, to adolescents' depressive symptoms through the indirect effects of speaking English with an accent, being stereotyped as a foreigner, and perceiving discriminatory experiences. In other words, believing that they have a low level of English proficiency in early adolescence places these Chinese American adolescents on a path toward experiencing adjustment problems such as depressive symptoms in high school.

The present study corroborates previous research (Qin, Way, & Mukherjee, 2008) in demonstrating that Chinese American adolescents who report that they speak English with a non-standard accent are more likely to report being stereotyped as foreigners. There is a dominant standard in the U.S. for the correct use of language, a standard that is tied to a person's accent. Many immigrants are aware that people judge one another based on accent. Adolescents speaking English with an accent seem to signal their immigrant or outsider status relative to peers at their schools, and are thus more likely to be perceived as foreigners. The current results also show a stronger path from accent to being stereotyped as a foreigner for boys than for girls, which suggests that Chinese American boys are more susceptible than girls to report being stereotyped as foreigners due to their accent. The results of the analyses also indicate that for both girls and boys, English language proficiency in early adolescence is directly related to reporting experiences of being stereotyped as a foreigner as middle adolescents in high school. This implies that the effect of accent on the relationship between English proficiency and foreigner stereotype is only partial, suggesting that the relationship can be explained by other factors in addition to speaking English with an accent.

According to the present study's findings, boys and girls who report being stereotyped as foreigners are more likely to report discriminatory experiences, including perceptions of both chronic daily discrimination and discriminatory victimization. This supports the Racial Triangulation Theory (Kim, 1999), in positing that the perpetual foreigner stereotype, which is applied specifically to Asian Americans, is not innocuous. Treating Asian Americans as foreigners is often accompanied by more explicitly discriminatory acts, which can lead to adjustment problems for adolescents.

As hypothesized, reports of being stereotyped as foreigners relate indirectly to adolescents' depressive symptoms via perceived discriminatory experiences. This finding suggests that when Chinese American adolescents are stereotyped as foreigners and then encounter discrimination, they may be placed into what García Coll et al. (1999) refer to as a "prohibiting environment." In such an environment, Chinese American adolescents with an

accent may have difficulty engaging with their more Americanized peers, who may not understand their enunciation and may even ridicule rather than assist them in their efforts to communicate. Students with an accent are thus likely to feel self-conscious about speaking English and to experience more discrimination, and they may experience more mental health problems such as depressive symptoms as a result.

It is interesting to note that the specific type of discriminatory experience through which foreigner stereotype influences depressive symptoms is different for girls than for boys. For girls, perceptions of chronic daily discrimination are related to depressive symptoms; for boys, perceptions of discriminatory victimization are related to depressive symptoms. Although mean level differences on these two types of discrimination are not evident between Chinese American girls and boys, multigroup analyses confirmed that the path from foreigner stereotype experience to perceived discriminatory victimization is in fact more well-defined for boys than for girls, suggesting that boys may be more susceptible to explicit forms of discrimination (e.g., being attacked) than are girls. Chinese American girls, on the other hand, may be more sensitive and susceptible to less overt forms of discrimination in their day-to-day social interactions (e.g., being unfairly treated in a restaurant).

The gender-specific patterns of the present study provide support for García Coll et al.'s (1999) proposal that developmental processes should be examined according to gender. Other researchers have also suggested that stereotypes may influence boys' and girls' discriminatory experiences and psychosocial adjustment differently (e.g., Greene et al., 2006; Gibbs, 1998; Noguera, 2003). This finding is consistent with previous research on Black boys in that, compared to girls, boys experience discrimination that involves more explicitly victimizing actions, such as physical attack (Tatum, 1997). Researchers believed that this was due to the fact that racial stereotypes assume that violent or delinquent behaviors are more prevalent for Black boys than for girls (Gibbs, 1998; Noguera, 2003). However, unlike their Black counterparts, Asian American boys are often stereotyped as being non-aggressive and less masculine (Iwamoto & Liu, 2008). Our findings seem to suggest that such stereotypes do not protect Asian American boys; instead, being thought of as passive or weak makes them more likely to report that they are victims of relatively explicit and severe discrimination. According to Qin, Way, and Mukherjee (2008), education and gentleness in men are valued qualities in Chinese culture, and the Chinese idiom “strong limbs, simple mind” (p. 500) demonstrates the cultural emphasis on education and intellect over physical size and strength in Chinese American parental socialization practices. As the boys in our study were more likely to experience depressive symptoms when they perceived discriminatory victimization, it may be helpful for Chinese American parents to support the development of boys in a broader context, helping them cultivate skills that go beyond academic achievement.

Some limitations of the current study should be acknowledged. First, it is important to assess one's feelings about English language proficiency in a variety of contexts (e.g., reports of English skills in academic domains may be different from reports of English language skills in a social context with peers). Also, self-reported language fluency and accent were assessed with two items for language fluency and one item for accent. It would be ideal to have more items to more reliably assess language fluency and accent, and to have standardized assessments of both rather than relying on self-reports. In fact, all constructs were assessed with self reports. The shared method variance may therefore account for some of the significant relationships found in this study. That is, individuals with mental health problems, or those with elevated levels of depressive symptoms, may be more likely to report and explain their life experiences more negatively than may actually be warranted.

Second, it would be ideal to test a longitudinal model where fewer constructs are assessed simultaneously. With the exception of the English language fluency variable, the remaining constructs in the hypothesized model are measured at the same assessment point. With additional assessment points, it becomes possible to test with more confidence whether the direction of the significant relationship found in this study may in fact be the other way around. In other words, alternative relational pathways should be explored in future studies, in which the temporal ordering of the variables can be tested with more confidence than is the case with just the two assessment points used in the present study. Also related to the longitudinal study design, only four years elapsed between Wave 1 and Wave 2 of data collection. Considering that language acculturation is an ongoing process, and that adolescents' English proficiency often improves significantly over time, a longer time-frame between waves is needed to assess the impact of initial language proficiency on Chinese American adolescents' depressive symptoms.

Third, the measure of discriminatory victimization used in the current study could also be described as a measure of general victimization rather than a measure of discriminatory victimization per se. That is, although the present study elected to use Deng et al.'s definition of discriminatory victimization as an acute or virulent form of perceived discrimination, the lack of reference in the self-reports to experiences specifically related to race/ethnicity suggest that labeling the measure "general victimization" may be more accurate.

Fourth, given the extant literature's emphasis on the immigrant paradox, in which better mental health might be explained by lower levels of perceived discrimination for the foreign-born compared to the U.S.-born (Gee, Ryan, Laflamme, & Holt, 2006; Viruell-Fuentes, 2007), it was surprising that no generational differences on depressive symptoms and reports of perceived discrimination were found in the current sample of adolescents. However, a closer examination of the extant literature seems to suggest that the protective effect of foreign-born status on positive mental health and lower levels of perceived discrimination may be stronger for Mexico-origin individuals than those of Asian descent (Alegria et al., 2008; Gee, Ryan, Laflamme, & Holt, 2006; Sue & Chu, 2003). Studies focusing specifically on Asian Americans also demonstrate that the immigrant paradox phenomenon is quite complex, because the salutary effect of being foreign-born depends on the age of arrival to the U.S.. That is, those foreign-born who immigrate to the U.S. as adults do indeed show positive mental health outcomes compared to the U.S.-born, whereas those foreign-born who immigrate to the U.S. as children show worse mental health outcomes when compared to the U.S.-born (Takeuchi, Hong, Gile, & Alegria, 2007). Given the sample limitations of the present study, it was not possible to consider the age of arrival among the foreign-born as a separate variable.

Lastly, the study participants are all from Northern California, where Asian American students constitute a significant proportion of the student population (at least 19% of the student body was Asian American in each of the schools in our sample). Because of the density of Chinese in this area, the cultural environment is greatly supportive of the Chinese community compared to most other regions of the U.S. In other words, study findings may not be generalizable to Chinese American adolescents living in other parts of the country, whose perceptions of discrimination may be different because of the lower density of fellow Chinese in their environment. The current study findings may only be generalizable in locations where Chinese Americans are significant in number.

Findings from this study have important practical applications for parents, educators, and prevention and intervention professionals working with the group of children in question. First of all, mastering English is demonstrably important in the adjustment of ethnic minority adolescents living in the U.S., not only for their day-to-day social interactions, but

also for their mental health. For this reason, parents, educators and professionals would do well to facilitate Chinese American children's acquisition of English language skills. Secondly, being identified as foreigners is shown to pose a potential risk to Chinese American adolescents' psychological adjustment. Educators and prevention professionals should be conscious of such stereotypes in schools and other settings in adolescents' lives, and lend their expertise in helping to eliminate or at least lessen tensions between students who speak with a non-standard American accent and those who speak with a standard American accent. Lastly, different discriminatory experiences are found to relate to depressive symptoms in Chinese American boys as compared to girls. Prevention efforts to help adolescents cope with discriminatory experiences may need to focus on developing gender-specific strategies.

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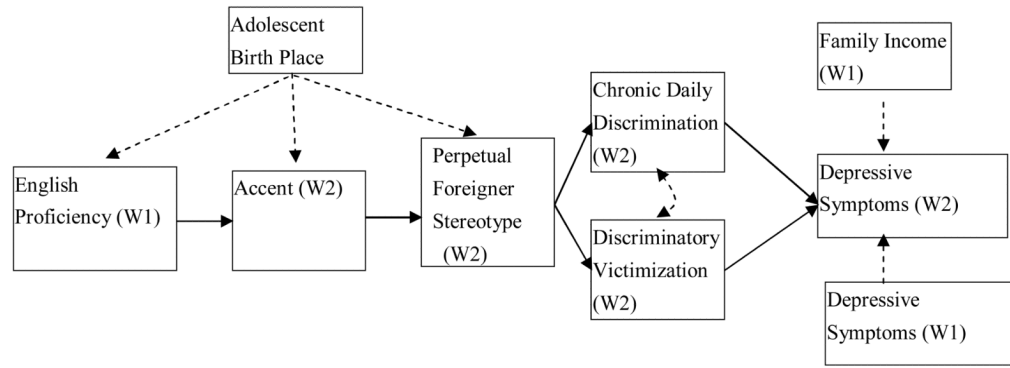
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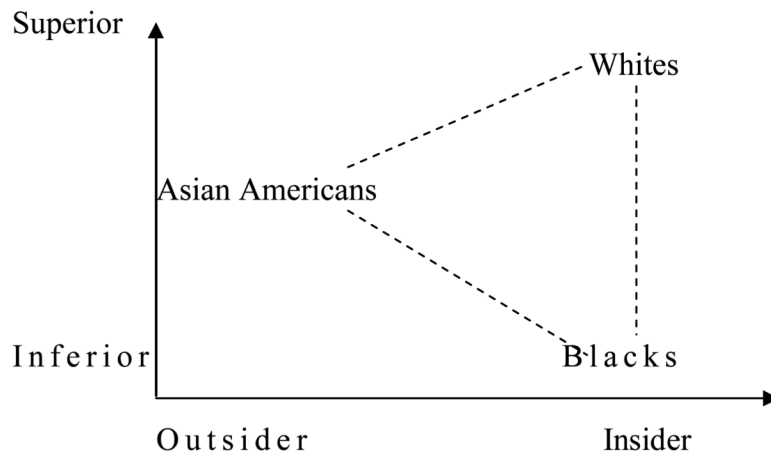
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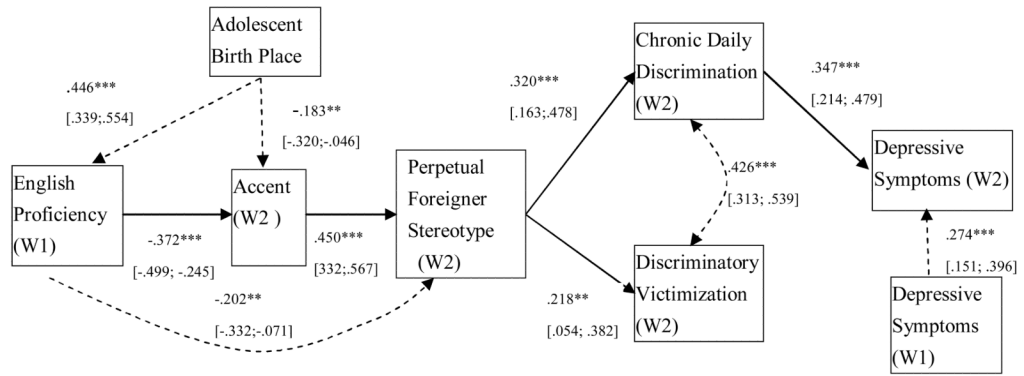
**Figure 1.** The Hypothesized Model of Accent, Foreigner Stereotype, and Perceived Discrimination Experiences as Indirect Links between English Proficiency and Depressive Symptoms in Chinese American Adolescents.

W1=wave1, W2=wave2.

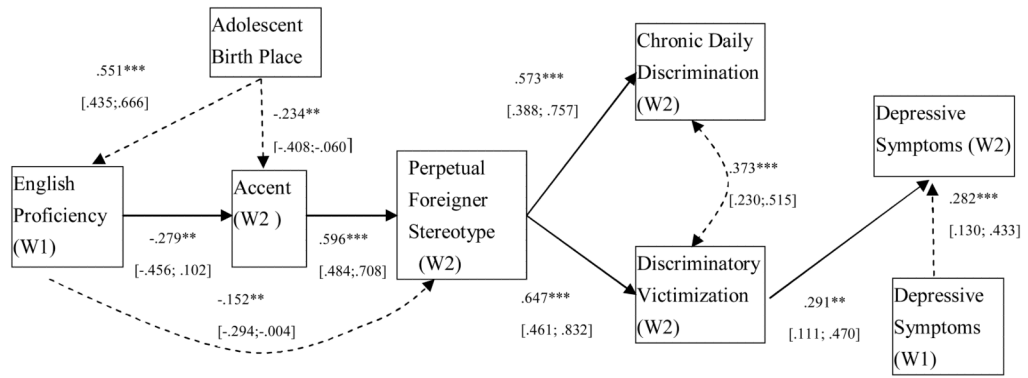
—————▶ Theoretically Hypothesized Paths.  
 - - - - -▶ Control Paths.



**Figure 2.**  
Racial Triangulation of Asian Americans (Kim, 1999).



**Figure 3.** The Results of Hypothesized Model for Girls. Only the significant paths are shown and the standard coefficients are presented. 95% Confidence Intervals are reported in brackets.  
 —————> Significant Hypothesized Paths.  
 - - - - -> Significant Control Paths.  
 \*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$



**Figure 4.** The Results of Hypothesized Model for Boys. Only the significant paths are shown and the standard coefficients are presented. 95% Confidence Intervals are reported in brackets.  
 —————> Significant Hypothesized Paths.  
 - - - - -> Significant Control Paths.  
 \*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Table 1  
Descriptive Statistics and T-test Results of Study Variables for Girls and Boys and U.S.-Born and Foreign-Born Adolescents

	Girls (n = 239)		Boys (n = 205)		U.S.-Born (n = 334)		Foreign-Born (n = 109)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Family Income (W1)	4.11	2.29	4.60	2.92	4.14 <sup>b</sup>	2.58	2.80	1.76
English Proficiency (W1)	4.27	0.82	4.14	0.81	4.44 <sup>b</sup>	0.59	3.55	0.98
Accent (W2)	1.52	0.84	1.60	0.87	1.39 <sup>b</sup>	0.72	2.09	1.03
Perpetual Foreigner Stereotype (W2)	1.50	0.58	1.60	0.63	1.43 <sup>b</sup>	0.54	1.89	0.63
Perceived Chronic Daily Discrimination (W2)	1.71	0.47	1.75	0.52	1.76	0.48	1.80	0.53
Perceived Discriminatory Victimization (W2)	1.37	0.42	1.40	0.47	1.41	0.43	1.51	0.49
Adolescent Depressive Symptoms (W1)	1.67	0.43	1.61	0.41	1.63	0.40	1.67	0.47
Adolescent Depressive Symptoms (W2)	1.76 <sup>a</sup>	0.47	1.64	0.45	1.71	0.46	1.70	0.49

Notes

<sup>a</sup>The difference between boys and girls is significant (p < .05).

<sup>b</sup>The differences between U.S.- and foreign-born adolescents are significant (p < .001).  
One student did not report his/her U.S./foreign-born status.

**Table 2**

**Bivariate Correlations Among Study Variables**

	1	2	3	4	5	6	7	8	9
1 Family Income (W1)	1.00	0.21**	0.29***	-0.17**	-0.29***	-0.13	-0.08	0.06	-0.15*
2 Birth Place (W1)	0.19*	1.00	0.45***	-0.37***	-0.29***	-0.01	-0.09	-0.03	0.02
3 English Proficiency (W1)	0.40***	0.53***	1.00	-0.47***	-0.44***	-0.06	-0.13	-0.11	-0.08
4 Accent (W2)	-0.27**	-0.36***	-0.38***	1.00	0.56***	0.15*	0.11	0.09	0.18*
5 Perpetual Foreigner Stereotype (W2)	-0.28**	-0.40***	-0.43***	0.69***	1.00	0.30***	0.22**	0.13	0.26***
6 Perceived Chronic Daily Discrimination (W2)	-0.16	-0.07	-0.16	0.38***	0.55***	1.00	0.51***	0.20**	0.46***
7 Perceived Discriminatory Victimization (W2)	-0.04	-0.13	-0.16	0.26**	0.50***	0.59***	1.00	0.07	0.29***
8 Adolescent Depressive Symptoms(W1)	-0.06	0.07	-0.12	0.16	0.27**	0.25**	0.20**	1.00	0.34***
9 Adolescent Depressive Symptoms (W2)	-0.09	0.01	-0.04	0.29**	0.36***	0.38***	0.41***	0.35***	1.00

Notes. W=Wave; Birth place is coded where U.S.-born adolescents are coded as 1 and foreign-born adolescents are coded as 0. The coefficients above the diagonal are for girls and the coefficients below the diagonal are for boys.

- \* p < .05;
- \*\* p < .01;
- \*\*\* p < .001.



**Table 3**

## Tests of Mediational Pathways from English Fluency to Depressive Symptoms for Girls and Boys

Mediational Pathway	Total	Direct	Indirect
<i>Girls' Model</i>			
<u>English Proficiency</u> → Depressive Symptoms	-0.020	0.058	-0.078 <sup>+</sup>
A. English Proficiency→Accent→ Perpetual Foreigner Stereotype→Chronic Daily Discrimination →Depressive Symptoms			-0.019 <sup>*</sup>
B. English Proficiency→Accent→Perpetual Foreigner Stereotype→Discriminatory Victimization →Depressive Symptoms			-0.003
C. Other Pathways			-0.056
<i>Boys' Model</i>			
<u>English Proficiency</u> → Depressive Symptoms	0.065	0.149	-0.084 <sup>+</sup>
D. English Proficiency → Accent → Perpetual Foreigner Stereotype → Chronic Daily Discrimination →Depressive Symptoms			-0.010
E. English Proficiency → Accent → Perpetual Foreigner Stereotype → Discriminatory Victimization →Depressive Symptoms			-0.031 <sup>*</sup>
F. Other Pathways			-0.043

\* p &lt; .05

+ p &lt; .10