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Testing the Model Minority Stereotype: Youth Behaviors across Racial and Ethnic Groups

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Abstract

Using data from a large nationally representative sample of adolescents attending school, this study tests the stereotype that youth of Asian Pacific Islander ethnicity (API) are the model minority. The results suggest that, except for substance use, API American youth do not report fewer delinquent behaviors than white youth; in fact, API American youth report slightly higher numbers of aggressive offenses than white youth, and female API American youth report greater numbers of nonaggressive offenses than white female youth. Also, API American youth report higher rates of nonaggressive offenses and substance use than do black youth. The mental health and social service needs of API American youth are thus at least as great as those of white youth. The need for such services increases with the length of residency in the United States.

According to the stereotype, Asian Pacific Islander (API) Americans are the “model minority” (Kitano 1969, 257): they work hard, they behave well, and they succeed.¹ In fact, API Americans are often regarded as “whiter than white” (Sue and Kitano 1973, 87). The stereotype also generally presents API Americans as being self-sufficient, in that they take care of their own problems within the family or the community. However, it is questionable whether the model minority stereotype is accurate. There are few empirical studies comparing API Americans’ behaviors with those of other racial and ethnic groups. In those studies that do exist, there is conflicting evidence as to whether API Americans behave better than other racial and ethnic groups.

Some studies confirm positive and healthy outcomes among API American youth. A large proportion of these studies focus on academic performance (e.g., Schneider et al. 1994; Rumbaut 1997a). A study conducted in southern California indicates that API American children, most of whom are immigrants, outperform the district norm at every grade level and that schools classify a disproportionate number of API American children as gifted (Rumbaut 1997a). The mass media, too, often portray API American children as academic whizzes. Furthermore, some studies find that API American youth are less likely than their counterparts in other racial and ethnic groups to use substances (Bachman et al. 1991; Price et al. 2002), commit violent juvenile offenses (McNulty and Bellair 2003), or be arrested (Le 2002).

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¹There is no clear consensus in the use of racial and ethnic terms. Studies and researchers often use terms interchangeably. For example, European Americans are often described as white and African Americans as black. In this study, white, black, API American, and Hispanic classifications are derived from survey questionnaire responses; respondents used these terms to identify their racial and ethnic group memberships. Thus, e.g., the term “black” identifies individuals who identify themselves as black or African Americans in the survey. Respondents in this group include nonimmigrants as well as immigrants from Africa, the West Indies, or any other part of the world.

Other studies, however, report various problems among API American youth, including an upsurge in gang activity (Song, Dombrink, and Geis 1992; Toy 1992; Zhang 2002), a rapid increase in involvement with the legal system (Le 2002), and a drastic increase in violent crime; none of these problems can be explained by the increases in the API American population (Ima 1995; Baba 2001). Indeed, Southeast Asian youth have the highest rate of gang-related homicides among distinguished racial and ethnic groups in California (Ima 1995). There also are studies that report increases in substance use among API American youth; in one study, API American youth have the highest level of heavy alcohol drinking among examined racial and ethnic groups (Kim et al. 1995). Another study finds that Vietnamese American boys living in Massachusetts are more likely to smoke (27.9 percent) than Hispanic (19.7 percent) and black (18.9 percent) boys in the same area (Wiecha 1996). The same study finds that the rate of smoking among older (age 15 plus) Vietnamese American boys, 37.7 percent, approaches the rate among Vietnamese American adult males, 43.2 percent (Wiecha 1996).

It may be most accurate to say that API American youth have mixed developmental outcomes, with both notable successes and failures (Bankston and Zhou 1997). It is possible that API American youth do better than other racial and ethnic groups in some areas, such as school performance and sexual behaviors (including later initiation of sexual intercourse and lower rates of teen pregnancy), but that they do less well in other areas, such as violence and gang involvement. It is also possible that there are two distinct groups within API American youth: one group that does well and another that struggles. In other words, there may be bimodal patterns on many behaviors.

It is also possible that mixed findings and/or suggestions of a bimodal pattern reflect methodological differences that result, for example, from the fact that research examines different subpopulations. Many extensive national surveys of adolescent health and behavior do not include API American as an ethnic group category. The majority of studies on API American youth include only regional samples (e.g., Chang, Morrissey, and Koplewicz 1995; Hsia and Spruijt-Metz 2003) or use clinical samples (Sue et al. 1995). Many existing studies use convenience samples. Few studies of API American youth use nationally representative samples (Harachi et al. 2001). Moreover, API Americans are heterogeneous with respect to demographics, culture, and many other factors. However, the size of the population is relatively small, and thus it is difficult to sample. In addition, the arrival of new immigrants continues to change the characteristics of the population. All of these factors increase the variability of research findings (Sue et al. 1995).

The common perception that API Americans compose a model minority is not surprising; stereotypes, whether negative or positive, tend to reflect perceptions held in society rather than real characteristics of groups (Sue and Kitano 1973). The model minority stereotype has several major purposes in the dominant society. For example, it may buttress the myth that U.S. society is devoid of racism. It may serve to blame those who lag behind for their individual failure to work hard, to portray racial and ethnic minority culture as inferior, to thwart other minority groups' demands for social justice, and to pit minority groups against each other (Zhou and Lee 2004).

Stereotypes can have serious consequences (Hirschman and Wong 1986). They are used to discriminate against those perceived negatively and even to suppress those viewed positively (Hurh and Kim 1989). For example, stereotypes can be internalized (Wong et al. 1998; Danico 2002). Such internalization, in turn, reaffirms and legitimizes the stereotypes. A false self-image, even if positive, can be psychologically damaging for children who cannot live up to their own and to society's expectations (Lee 1994). In the United States, the model minority stereotype also has been used by the dominant society to justify glossing over the

structural barriers and adversities that API Americans struggle to overcome (Zhang 2002), as well as to ignore various problems encountered by API American youth and their families. This stereotype has also falsely led API Americans to believe that they have reached socioeconomic parity in society (when in fact they have not), and other groups have reacted to the stereotype with hostility (Hurh and Kim 1989). In addition, because API Americans are stereotyped as successful and self-reliant, programs and services are lacking for this group. For example, because teachers and school administrators perceive API American students as problem free, they are likely to overlook the difficulties encountered by these students. There is also a general perception that community organizations and social service programs are not needed in API American communities (Sue et al. 1995). Further, research efforts may also be misdirected if research presumes that API American youth are excelling. For example, before testing theories of why API American youth fare well (e.g., Hirschman and Wong 1986; Sue and Okazaki 1990), research should establish a sound epidemiological foundation to see whether the youth indeed behave better than other racial and ethnic groups. It is imperative, therefore, that research challenge the stereotype by empirically documenting outcomes on a variety of criteria for this group of Americans.

Using data from the large and nationally representative National Longitudinal Study of Adolescent Health (Add Health), the current study assesses the validity of the model minority stereotype for API American youth in grades 7–12 in 1995. The Add Health study investigates the prevalence, patterns, and distribution of various problem behaviors among youth. The number of API American youth ($n = 1,248$) in Add Health is large enough to allow comparisons with adolescents who are white ($n = 9,644$), black ($n = 3,794$), and Hispanic ($n = 3,230$). Although the numbers of youth representing some subgroups of API American adolescents are relatively limited, the Add Health data can help overcome some of the methodological problems of existing studies by providing a national sample of API American adolescents who are attending secondary schools.

Youth behaviors examined in the current study include school behavior, aggressive and nonaggressive delinquent offenses, substance use, and sexual behavior. A wide range of behaviors is investigated for two purposes: (1) to examine whether the model minority stereotype is confirmed broadly across various youth behaviors and indices of achievement and (2) to determine whether or not API American youth behave better than other racial and ethnic groups with respect to specific problems or areas of achievement.

This study examines immigrant generation status as well as racial and ethnic group differences. Recent studies show that immigrant children and second-generation immigrants (those with at least one immigrant parent) perform better in school and are less likely to engage in problem behaviors than their nonimmigrant counterparts (Rumbaut 1997b; Harker 2001). Some researchers propose that this better performance may be due to an immigrant ethos (Waters 1997; Portes and Rumbaut 2001). Immigrants allegedly are extremely motivated to succeed in their new home. They may also have close ties to one another. Parental pressure may be intense for children to excel at school and to achieve positions of prestige and respectability (Bankston and Zhou 2002). Given that a large proportion of API American youth are immigrants or children of immigrants, any possible favorable outcomes with respect to problems and levels of achievement could be explained by issues in social organization that reflect immigrant status.

Methods

Sample

The Add Health study is a longitudinal, school-based, nationally representative study of adolescents who were in grades 7–12 in 1995. The purpose of the study is to investigate

causes of health-related behaviors, particularly causes linked with such social contexts as family, friends, school, and community. The primary sampling unit is the school. The sample includes 132 schools, stratified by region of the country, and is representative of U.S. schools. In-school data are from all students who were in attendance on the interview day. In-home samples were developed from the in-school samples. Multiple methods, such as sample stratified random selection, purposeful selection, and systematic selection, oversample certain groups of students (e.g., API American youth [$n = 1,585$; wave 1]). The in-home samples are nationally representative if estimated with proper sampling weights. In-home samples also include nonrepresentative samples that were collected for studies on genetics and do not have sampling weights ($n = 1,821$). The in-home sample adolescents were interviewed for a second time 1 year later (wave 2) and for a third time 6 years after the initial interview (wave 3). Data were gathered from the adolescents themselves and from their parents (mostly mothers), as well as from siblings, friends, romantic partners, fellow students, and school administrators. Wave 1 data are derived from 90,118 in-school interviews, 20,745 in-home interviews with adolescents, 17,916 parent interviews, and 125 school administrator interviews.

This study uses data from adolescent respondents to the wave 1 in-home survey. Due to a relatively low sample size, the analyses omit Native Americans ($n = 740$) and those who self-identify with a racial or ethnic group other than those specifically mentioned in the survey ($n = 1,958$). Students who indicated that they belong in more than one racial or ethnic category also are excluded ($n = 717$). Only the weighted samples are included to ensure that the findings can be generalized to the larger population of U.S. adolescents. In this study, the total sample includes 17,886 respondents. The average age of students in the sample is 15.68 years ($SD = 1.74$). Slightly more than half are girls. Seven percent of the group is API American ($n = 1,248$), 21.2 percent is black ($n = 3,794$), 18 percent is Hispanic ($n = 3,230$), and 53.8 percent is white ($n = 9,644$). Slightly more than 10 percent of sample members report that their mother receives some form of public assistance, such as welfare; 9.4 percent report being born outside of the United States, and 14.5 percent report having at least one immigrant parent.

Measures

Self-identification of race and ethnicity—A series of questions in Add Health help establish the respondent's race and ethnicity. All respondents were asked whether they were of Hispanic or Latin origin. Respondents were also asked whether they considered themselves white, black or African American, American Indian or Native American, Asian or Pacific Islander, and other. In each instance, the respondent answered “yes” or “no,” and respondents were allowed to identify with more than one group. A race variable thus is computed to categorize students who self-identify as Hispanic, white, black, and API American. Anyone who answers “yes” to Hispanic or Latino origin is classified as Hispanic. Thus, the Hispanic category may include various racial and ethnic groups with Latino origin. The rest of the categories are created among non-Hispanic youth.

Youth behaviors—Five areas of youth behaviors were examined: school behavior, aggressive delinquent offenses, nonaggressive delinquent offenses, underage substance use, and sexual behavior. Multiple indicators measure each area of behavior. Data from some indicators are recoded into a binary response (0 for having never committed the act and 1 for having done it once or more) and summed to create indices. A parallel approach is used in similar studies (McNulty and Bellair 2003).

School behaviors—Seven indicators are used to assess youths' school behaviors. The first three include whether the respondent repeated a grade, received out-of-school

suspension, or was expelled from school. Response options are “yes” (coded as 1) and “no” (coded as 0). Grade point average (GPA) is calculated by averaging the grades that respondents reported receiving during the previous year in English or language arts, math, history or social studies, and science (the value assigned to grades ranges from 1 for D to 4 for A).

Aggressive delinquent offenses—A total of six indicators are summed to assess aggressive delinquent offenses, that is, confrontational offenses against a person. Indicators inquired about the frequency of serious physical fighting, seriously injuring someone, threatening someone with a weapon, taking part in a group fight, pulling a knife or gun on someone, and shooting or stabbing someone. Response options for the first four indicators are “never” (coded as 0), “1–2 times” (coded as 1), “3–4 times” (coded as 2), and “5 or more times” (coded as 3). Possible responses for pulling a weapon and shooting or stabbing someone are “never” (coded as 0), “once” (coded as 1), and “more than once” (coded as 2). These options are recoded as “never” (coded as 0) and “one or more times” (coded as 1). They are then summed to create the scale. The scores range from 0 to 6, with a mean of 0.80 (SD = 1.20) for the full sample.

Nonaggressive delinquent offenses—Eight indicators are summed to measure nonaggressive offenses. These offenses mainly include property offenses, such as vandalism and theft. Items cover the frequency of painting graffiti, damaging property, stealing something worth less than \$50 in the 12 months prior to the interview, shoplifting, stealing a car, stealing something worth more than \$50, burglarizing a building, and running away from home. Response options include “never” (coded as 0), “1–2 times” (coded as 1), and “5 or more times” (coded as 3). To avoid giving unbalanced weight to theft, three indicators are combined: shoplifting, stealing something worth less than \$50, and stealing something worth more than \$50. If respondents reported positively on any of the three indicators, theft is coded as 1. All items are recoded into binary responses (“never” [coded as 0] and “one or more times” [coded as 1]) and summed. The scores for nonaggressive delinquent offenses range from 0 to 6, with a mean of 0.78 (SD = 1.18) for the full sample.

Underage substance use—Nine indicators examine underage substance use. The first asks whether a respondent ever smoked. The response options are “yes” (1) and “no” (0). Three indicators assess alcohol drinking behaviors: the frequency (in the 12 months prior to the interview) of drinking alcohol, of having five or more drinks, and of having gotten drunk. Because previous studies show a relatively high rate of heavy and binge drinking among API American youth, these items are examined individually (Kim et al. 1995; Harachi et al. 2001). Response options for the three drinking indicators are “never” (0), “once or twice” (1), “once a month or less” (2), “2–3 days a month” (3), “once or twice a week” (4), “3–5 days a week” (5), and “nearly every day” (6). Five indicators assess multiple substance use. These indicators ask the frequency of using marijuana, cocaine, inhalants, and other illegal drugs, as well as the frequency of smoking, in the 30 days prior to the interview. The indicators are recoded to binary options in the same fashion described earlier (0 for never using the substance or smoking and 1 for using the substance or smoking once or more) and summed to create a multiple drug use scale. Thus, the score for multiple substance use indicates the number of substances, including cigarettes, that respondents used in the 30 days prior to the interview, not the frequency of use. The total score ranges from 0 to 5 with a mean of 0.49 (SD = 0.86) for the full sample.

Sexual behavior—Nine indicators for boys and 12 for girls are used to examine sexual behaviors. All respondents are asked whether they ever had sex, and the girls are asked whether they have ever been pregnant. Response options for these two indicators are “yes”

(1) and “no” (0). Respondents are also asked whether they ever contracted various sexually transmitted diseases (STD; eight indicators for boys and 10 for girls). These indicators are used to create a binary STD variable, coded as 0 if the respondent never had any kind of STD or as 1 if the respondent had at least one STD.

Immigration status—Immigration status is computed from two indicators: the reported immigrant status of the parents and that of the adolescent respondents. If an adolescent reports being foreign born, immigrant status is coded as 0. If the adolescent was born in the United States but has at least one parent who was born outside the United States, the status is coded as 1, indicating that the respondent is a child of an immigrant (here described as second generation). If the adolescent and both parents are U.S. born, the respondent's status is coded as 2, indicating that the youth is a nonimmigrant. This measure is consistent with those used in other studies (e.g., Bankston and Zhou 2002).

Control variables—Respondents' reported age at the time of interview is used as a control variable for differences in youth outcomes associated with age (Hsia and Spruijt-Metz 2003). Gender is also used to control for gender differences in youth outcomes (Moffitt et al. 2001).

Analytic Strategy

Comparisons of the prevalence and patterns of youth behaviors—Regression models determine if the racial and ethnic groups differ by adolescent outcomes. The racial and ethnic group variable is dummy coded, with API American youth serving as the reference group. Because the main focus is to examine similarities and differences between API American youth and those in other groups, the study only compares API American youth with their counterparts in three non-API American groups. In other words, this study does not compare non-API American youth across groups (e.g., white youth with Hispanics).

Stepwise regressions are conducted to compare behaviors across groups. First, the prevalence of behaviors by racial and ethnic groups is examined without other adjustments (model 1). Then, two control variables, age and gender, are entered in the regression models (model 2). Because different racial and ethnic groups may socialize boys and girls differently, interaction terms (gender by racial and ethnic group) are next added (model 3). Immigrant status is dummy coded (with immigrant youth as reference) and next added to the models (model 4). Finally, interaction terms (immigrant status by racial and ethnic group) are added to determine if the estimated effects of immigrant status differ by racial and ethnic group (model 5).

Depending on the distributional characteristics of outcomes, four types of regression analyses are used to determine racial and ethnic group differences: ordinary least squares, logistic, ordered logistic, and Poisson. Ordinary least squares regression models are used for continuous variables (e.g., GPA). Logistic regression models are used for binary outcomes (e.g., whether a respondent repeated a grade). Ordered logistic (proportional odds) regressions are employed for the three drinking behavior outcomes, which are ordinal. Poisson regression models are used for analyses of the summary scales created for this study (e.g., aggressive delinquent offenses). These scales involve count data. Odd ratios (OR) and incident rate ratios (IRR) are estimated for the logistic, ordered logistic, and Poisson regression models.

Comparisons of distributions of youth behaviors—A further analysis investigates whether there is a bimodal distribution for continuous response variables. This analysis

examines the magnitudes of variances and the bimodality of distributions. The continuous outcomes are GPA, aggressive and nonaggressive delinquent offenses, as well as the indicators measuring frequency (in the 12 months prior to the interview) of alcohol consumption, of having five or more drinks at a time, of having been drunk, and (in the 30 days prior to the interview) of using multiple drugs and other substances.

The equality of variances is tested to examine differences in distributions between API American youth and those in other racial and ethnic groups (Van Belle et al. 2004). If reports of GPA and problem behaviors are distributed in a more bimodal way among API American youth than for their counterparts in other racial and ethnic groups, the size of variances among API American youth would be significantly greater than that for other groups.

In addition, analyses use the cluster procedure (PROC CLUSTER function) in the program SAS to calculate bimodality coefficients (SAS Institute 1999). Bimodality is estimated based on skewness and kurtosis of each variable. Values of the bimodality coefficient greater than 0.555 indicate that there may be bimodal or multimodal marginal distributions (SAS Institute 1999).

Sampling designs—The clustered sampling design of the Add Health study needs to be taken into account in estimations. The Add Health data are clustered at the school level. Failure to account for clustering biases estimation of parameters, especially standard errors. This is because respondents from the same school are likely to have shared characteristics; this violates the assumption of independence among respondents. The software program Stata (version 8.0) is used to perform the statistical analyses. The effect of clustering is adjusted by specifying the primary sampling unit, in this case, as school. The Add Health data are selected with unequal probabilities of selection. Stata handles complex survey data and probability sampling weights, as well as stratification for binary, ordinal, count, and continuous variables. The SAS program is used to test the bimodality of continuous distributions. The distributions of these continuous outcomes among samples are examined without considering weights and clustering because the current SAS version cannot adjust weights and clustering of sampling in estimating bimodality coefficients.

Results

Comparisons of Prevalence and Patterns of Youth Behaviors by Race and Ethnicity

Tables 1 and 2 present descriptive results arrayed by race and ethnic group, gender, and immigration status (immigrant, second generation, or nonimmigrant). The sample sizes provided in the second columns of tables 1 and 2 describe the study's sample. Due to item-specific patterns of missing data, the exact sample sizes used for analyses differ slightly across behaviors and are provided for each behavior in the bottom rows of the tables.

School behavior—As shown in model 2 of table 3, the analyses uncover several statistically significant differences in school behaviors across racial and ethnic groups.² In all school behaviors, API American youth are found to show statistically significantly better adjustment than black and Hispanic youth. They are less likely than black and Hispanic youth to repeat a grade, to receive a suspension, or to get expelled. They also earn higher grades. Specifically, the odds of repeating a grade are higher among black (2.1 times) and Hispanic (1.7 times) youth, respectively, than among their API American counterparts. So,

²The results from unadjusted rates (model 1) were almost identical to those in models adjusted for gender and age (model 2). Thus, unadjusted rates are not presented in the tables. In addition, gender-by-race interactions generally are not statistically significant (model 3) and therefore are not presented in the tables either. Statistically significant interactions of gender are described in the text.

too, the odds of school suspensions are higher among black (2.7 times) and Hispanic (1.4 times) youth than among API American youth. The same is true of expulsions; blacks in the sample are 2.7 times more likely to be expelled than the sampled API Americans, and Hispanic youth are 1.8 times more likely to be expelled. The GPAs reported by API American youth are statistically significantly higher than those reported by black and Hispanic youth. Intelligence is one of the significant predictors of academic achievement, and research finds racial and ethnic group differences in the average intelligence score (Rushton and Jensen 2005). Thus, the intelligence score is added in this model. Further adjusting the intelligence score (measured by the Peabody Picture Vocabulary Test; Dunn and Dunn 1981) does not change the results of GPA or the group differences (not shown in table 3). No statistically significant difference is observed between API American and white youth in school behaviors. In addition, no statistically significant interaction of gender by race group is found.

As shown in model 4 of table 3, immigrant status is found to be related to a statistically significant degree to all but one school behavior: immigrant adolescents have better outcomes than second-generation immigrant or nonimmigrant adolescents in all variables but the measure of repeating a grade. The statistically significant group differences in school behaviors are largely unchanged when adding immigrant status to the models, except that the difference in school suspensions between white and API American youth becomes statistically significant. White youth report lower odds of suspension (29 percent less).

Several statistically significant interaction terms (racial and ethnic group by immigrant status) are identified (see table 4). For example, the predicted odds of repeating a grade are statistically significantly greater among second-generation black immigrants as compared to second-generation API American immigrants ($b = 2.01, p < .001$). In addition, while black first-generation immigrant youth are less likely to be expelled from school than API American first-generation immigrant youth, the odds of expulsion for blacks are statistically significantly greater among second-generation immigrants ($b = 3.71, p < .001$) and nonimmigrant youth ($b = 3.47, p < .001$). In other words, the odds of repeating a grade and of being expelled are both higher for black youth than for API American youth. But, in each case (repeating a grade, expulsion), much of the difference between the two groups is found in the second-generation immigrants and nonimmigrant groups. However, when white youth are compared with their API American counterparts, among nonimmigrant youth, the odds of repeating a grade and those of school suspension differ to statistically significant degrees. White youth report significantly lower rates of repeated grades and suspension than API American youth. For Hispanic youth as compared to API American youth, the ratio of the odds of repeating a grade and being suspended are statistically significantly smaller among nonimmigrant youth ($b = -1.55, p < .001$ and $b = -1.25, p < .001$) than among first-generation immigrant youth ($b = 1.26, p < .001$ and $b = 1.14, p < .001$). These results mean that API American youth have lower rates of repeating a grade and school suspension than Hispanic youth, but the group differences are narrower among nonimmigrant youth than among first-generation immigrant youth. Similarly, for Hispanic and API American youth, the differences in GPA are found largely among first-generation immigrant youth. When compared to API American youth who are nonimmigrants, white youth are found to have statistically significantly higher GPAs.

Aggressive and nonaggressive delinquent offenses—Results suggest that rates of aggressive delinquent offenses differ by group to a statistically significant degree. White youth report committing fewer aggressive offenses than do API American youth. Black and Hispanic youth both report more numerous aggressive offenses than API American youth do (see table 3, model 2). Regardless of race and ethnicity, second-generation immigrant and nonimmigrant youth report committing statistically significantly more aggressive offenses

than immigrant youth (see table 3, model 4). When immigrant status is added to the model, the magnitude of the difference between white and API American youth becomes larger. If immigrant status is not included, white youth are 17 percent less likely to commit an aggressive offense than are their API American counterparts. When immigrant status is included in analyses (table 3, model 4), white youth are 27 percent less likely than API American youth to commit such offenses. When immigrant status is included, the difference between black and API American youth becomes statistically insignificant, and the difference between Hispanic and API American youth is roughly unchanged, whether or not immigrant status is included or not. There is a statistically significant interaction (table 4); the difference in the number of aggressive offenses between API American and white youth may be largely due to offenses reported among nonimmigrant youth.

Results suggest that the number of nonaggressive offenses is statistically significantly higher among API American youth than among white and black youth (table 3, model 2). However, there is a statistically significant interaction between gender and being white ($b = -0.22$, $p < .05$). Gender-by-race interactions generally are not statistically significant (model 3) and are not presented in the tables, but the interaction in nonaggressive offenses is one of the few exceptions. Post hoc comparisons further show that, while sampled API American females report more nonaggressive offenses than their white female counterparts, there is little or no difference among males in the sample. Hispanic and API American youth do not differ to a statistically significant degree with respect to the number of nonaggressive offenses. Results also suggest that immigrant youth report fewer nonaggressive offenses than youth who are second-generation immigrants or nonimmigrants (table 3). The pattern of racial and ethnic group differences remains when adding immigrant status to the model. The one exception, presented in table 4, suggests that the difference between black and API American youth may be narrower among second-generation immigrant youth.

Underage substance use—The general pattern of racial and ethnic group differences in underage substance use indicates that API American youth report lower rates than white youth but higher rates than black youth (see table 5, model 2). This pattern holds for the variables involving smoking (ever), alcohol (frequency of drinking, of consuming five or more drinks, and of getting drunk in the 12 months prior to the interview), and multiple substance use (the number of different substances used in the 30 days prior to the interview). No statistically significant differences between Hispanic and API American youth are found for underage substance use. Immigrant status is associated with all substance use behaviors to a statistically significant degree; second-generation immigrant and nonimmigrant youth report higher rates of these behaviors than immigrant youth (table 5, model 4). Adjusting for the immigrant status changes some results. For example, the statistically significant differences between white and API American youth largely disappear once immigrant status is added to the models. The exception is the difference involving having been drunk. However, the results suggest that differences between black and API American youth increase in strength. In other words, when immigrant status is held constant, the substance use patterns of API American youth are found to become similar to those of white youth (who have the highest use rate among all racial and ethnic groups). The differences between API American and black youth become larger when immigrant status is added to the models.

Several statistically significant interactions (table 6) reveal that the differences between white and API American youth on selected measures of substance use behaviors (frequency of drinking alcohol, having five or more drinks, having been drunk, and using multiple substances) are narrower among nonimmigrant youth than among immigrant youth. In addition, a statistically significant interaction suggests that the difference between white and API American youth on having ever smoked is narrower among second-generation immigrant youth than first-generation immigrant youth. Finally, there is a statistically

significant difference that suggests that the group difference between Hispanic and API American youth on the frequency of drinking alcohol is larger among second-generation immigrant youth than among immigrant youth.

Sexual behavior—Results presented in table 5 suggest that black youth report significantly higher rates of ever having had sex than API American youth. Also, API American girls report lower rates of pregnancy than their black or Hispanic counterparts (table 5). White and API American youth do not report differences in these two behaviors. However, there is a statistically significant interaction by gender between API American and white youth. This relation indicates that sampled white females report higher rates of ever having had sex than their API American female counterparts ($b = 0.35$ [OR = 1.42], $p < .05$). Another statistically significant interaction by gender shows that the gender difference in ever having had sex is smaller among black than API American youth ($b = -0.41$ [OR = 0.66], $p < .05$). Adding the immigrant status variable does not affect the reported racial and ethnic group differences in ever having had sex and ever having been pregnant. The findings for reports of sexual behaviors are similar to the pattern found in other behaviors. Results here suggest that ever having had sex is reported by higher proportions of second-generation immigrant and nonimmigrant youth than by immigrant youth. The proportion of nonimmigrant youth that reports ever having been pregnant is higher than that of immigrant youth (table 5). Table 6 presents several statistically significant interactions by immigrant status. These suggest that, with respect to experience of sex and pregnancy, the differences among racial and ethnic groups occur largely among immigrant children, while white, black, and Hispanic youth report these behaviors in higher proportions than API American youth. Results also suggest that differences are narrower among youth who are second-generation immigrant or nonimmigrant youth.

Table 5 also reports rates of exposure to STD. Although the proportion of the sample that reports ever having had a STD is lower among API American youth than among those in other groups, when sampling weights are taken into account, API American youth report a statistically significantly higher rate of STD exposure than sampled whites. Conversely, API American youth report a significantly lower rate than black youth. Exposure to STDs is reported at the same rate by API American and Hispanic youth (see table 5). These group differences remain largely unchanged after adjusting for age, gender, and immigrant status. Results do suggest that STD exposure is reported by a higher proportion of nonimmigrant youth than by immigrant youth. One statistically significant interaction also shows that, with respect to rates of STD exposure, the difference between immigrant and nonimmigrant youth is narrower among whites than API American youth.

Comparisons of Distributions of Youth Behaviors by Race and Ethnicity

Table 7 presents tests of the equality of variances. Results show some statistically significant differences in tested dependent variables. However, the patterns generally do not suggest that API American youth have greater variances in adolescent outcomes than members of other groups. For example, white youth show statistically significantly larger variances than API American youth on all substance use items. The comparisons of variances between API American and Hispanic youth are statistically significant on all variables except GPA. Variances are greater among Hispanic youth than among API American youth. However, the patterns of differences in variance between API American and black youth are a bit complex. The differences in variance are statistically significant with respect to the numbers of aggressive offenses, the frequency of drinking alcohol, and the frequency of getting drunk. The size of variance among black youth is greater than that among API American youth. However, while differences in the variances of GPA, nonaggressive offenses, and

multiple substance use are statistically significant, variances are larger among API American youth than among black youth.

Finally, table 7 also presents estimates of the bimodality coefficients. The results show statistically significant bimodality (greater than 0.555) across groups in all outcomes except GPA. Because this index of bimodality is a function of skewness and kurtosis, this result simply means that most youth problems are not normally distributed, but skewed, and that the pattern is common across racial and ethnic groups.

Discussion

The number of API American families has grown rapidly in recent years, but relatively little is known about how API American youth are faring. Many studies of youth behaviors focus on white youth. Studies that include ethnic minority youth frequently focus only on blacks and Hispanics (Kandel 1995; Newcomb 1995; Wallace et al. 1995). The few studies that have been done on API American youth are inconclusive. The aim of this study is to test the stereotypical assumption that API American youth are problem-free high achievers, living in families that are self-sufficient.

To a large extent, the results do not support the model minority stereotype. In several (but not all) measures, API American youth are found to report fewer problem behaviors. Results suggest that API American youth are doing better in school and are less likely to commit aggressive offenses than black and Hispanic youth. Compared to white youth, API American youth are less likely to ever smoke. API American youth also report drinking alcohol, consuming five or more drinks, and getting drunk less frequently than white youth. They report using fewer numbers of substances. Compared to black youth, API American youth are less likely to report having had sex. These results may at first seem to confirm existing perceptions about API American youth.

However, results from most of the measures of behaviors indicate that API American youth are not behaving better than white youth. The exception to this is the finding on behaviors related to substance use. Higher numbers of aggressive delinquent offenses are reported by API American youth than by white youth; the differences occur mainly among nonimmigrants. Similarly, sampled API American females report more nonaggressive delinquent offenses than their white female counterparts. Compared to black youth, API American youth also report more nonaggressive delinquent offenses and higher proportions or rates in substance use indicators. No differences are found between Hispanic and API American youth in nonaggressive delinquent offenses, substance-use-related behaviors, experience of sex, and exposure to STD.

Although the model minority stereotype casts API American youth as more successful, higher achieving, and better behaved than youth in other racial and ethnic groups, the current findings suggest that API youth do not act uniformly. Instead, on certain behaviors, API American youth seem to behave similarly to some groups (especially white youth) or to report poorer behaviors than other groups. In addition, analyses fail to show any noteworthy differences in the distributions across groups. Compared to other racial and ethnic groups, API American youth certainly show no distinctive bimodal distributions.

It should also be noted that some behavior indicators in the current study may capture school personnel's bias toward certain racial and ethnic groups. For example, results suggest that black and Hispanic youth report higher rates of school expulsions and suspensions than API American youth, but when the rates of problem behaviors reported by black and Hispanic youth are compared to those reported by API American youth, the results do not seem to justify the disproportionate rates of school expulsions and suspensions among black and

Hispanic youth. Thus, school expulsions and suspensions may not directly measure youth behavior but may instead reflect school personnel's response to youth behaviors.

This study also underscores the importance of including immigrant status when measuring and comparing behaviors. Immigration status is statistically significantly related to youth behaviors. Immigrant children report better behaviors than second-generation immigrants or nonimmigrants. This finding is consistent with existing research (e.g., Rumbaut 1997b; Harris 1999). It is most evident when comparing black and API American youth in this sample. For example, the findings indicate that black and API American youth report differences in their school behaviors, but those differences may be due to the fact that black youth are largely nonimmigrants. Adjusting for immigrant status does not completely explain the racial and ethnic group differences found for most of the behaviors, but several notable changes are observed in the pattern of the differences. For instance, when examining aggressive delinquent offenses, accounting for immigrant status increases the difference between API American and white youth. Moreover, the adjustment eliminates the difference between API American and black youth. Second-generation immigrant or nonimmigrant API American youth are also statistically significantly more likely than white youth to be suspended from school. Between white and API American youth, the difference in nonaggressive delinquent offenses increases when immigrant status is considered. In addition, controlling for immigration status eliminates a majority of the differences in substance use indicators between API American and white youth, and accounting for immigration status increases the magnitude of the differences between API American and black youth.

Several significant interactions further support the accuracy of these patterns. For example, the differences between white and API American youth on substance use behaviors (smoking, drinking, and using multiple substances) are found to be greater among immigrant youth than among nonimmigrant youth. Similarly, several of the differences between Hispanic and API American youth are narrower among second-generation immigrant or nonimmigrant youth than among immigrant youth. These findings suggest that the better behaviors among API American youth may, in part, occur because a larger proportion of these youth are immigrants or in the second-generation after immigration. The findings also suggest that those better behaviors among API American youth may deteriorate at a faster rate across generations than among other groups, including Hispanic youth. Thus, we can speculate that the behaviors of API American youth in the third or later generations after immigration may decline, and their already poor outcomes may become worse. However, it is also possible that these patterns are only true for the present cohorts of youth. The Add Health data used in the current study are cross-sectional. Thus, longitudinal data following API American youth across generations can reveal the most accurate patterns of behaviors.

Immigrant status is often used as a proxy for acculturation. It is assumed that as immigrants stay longer in this country, they begin to behave more like the native population (Rumbaut 1997b). Thus, the positive effect of being an immigrant may imply a protective effect that stems from certain elements in ethnic group culture. In fact, culture has often been used to explain racial and ethnic group differences (Sue and Okazaki 1990). For example, cultural values that emphasize education and promote social mobility are often cited as reasons for the higher educational achievements among API Americans. Again, however, assertions about Asian culture often are not based on empirical findings (Sue and Okazaki 1990). The results of the current study suggest that first-generation immigrant status is a protective factor for other racial and ethnic groups as well. This is particularly true for black youth. Thus, it is unclear whether the loss of certain protective cultural elements through acculturation causes deterioration of behaviors or whether the deterioration results from diminishing immigrant ethos over generations. It also is worth exploring why these

protective cultural elements, if they exist, fail to protect API Americans from all measured risky behaviors, including aggressive and nonaggressive delinquent offenses. An enhanced understanding of the effect of being an immigrant, whether such an effect is related to certain cultural elements or to immigrant ethos, can provide a guide in helping API American youth maintain better behaviors.

Another notable finding is that the rate of nonaggressive offenses is higher among API American girls than among white girls. Some past research finds that being a female is a strong protective factor against some behaviors, and this is especially true among API American youth. For example, John Wiecha (1996) finds that the rate of tobacco smoking differs drastically by gender among Vietnamese American youth (27.9 percent of the boys smoke; only 3.7 percent of the girls do). Although females tend to report better behaviors than males across a range of behaviors in this study, no such drastic gender interaction is identified. Instead, results suggest that API American girls may be at higher risk than white girls for nonaggressive delinquent offenses.

Studies suggest that API American youth are at greater risk for emotional and social difficulties than youth of other racial and ethnic groups (Yee 1992; Wong et al. 1998). These difficulties include low self-esteem, high angst, and social isolation. A study also finds that, among those who are sexually active, API American youth are no different in their rates of substance use and risky sexual behaviors than youth of other racial and ethnic groups (Grunbaum et al. 2000). Also, API American youth are less likely than white youth to drink, but those who do drink are more likely to binge drink (Hahm, Lahiff, and Guterman 2004). Thus, the better outcomes in a few areas should not justify brushing aside other problems that these youth face (Shih 1989).

The current study has its limitations. The Add Health data stem from a national student population that necessarily excludes dropouts, youth in institutions, and youth who do not attend school. Dropouts are more likely to engage in multiple risk behaviors than students (Crum et al. 1998). Some may argue that the pattern of racial and ethnic differences found in this study may be a function of the fact that dropout rates are higher among youth in other groups than among API American youth. Minority youth, particularly those who are black and Hispanic, are more likely to drop out of school (Kaufman, Alt, and Chapman 2004). However, the statistical significance of the differences in dropout rates by race and ethnicity fluctuates from year to year. Methods for estimating dropout rates have also been a source of debate (Kaufman et al. 2004). Dropout rates can vary greatly depending on the definition of dropout and on data collection methods. Opinions also vary on the degree to which these variant dropout rates influence the prevalence of multiple risk behaviors across racial and ethnic groups (Bachman et al. 1991; Wallace et al. 1995). Regardless of whether dropout rates alter the prevalence and the patterns of behaviors by racial and ethnic group, a possibility remains that the differences identified in this study are likely to be found among youth who are in school.

This study treats API American youth as an aggregated group, combining different subgroups. Despite the diversity of API subpopulations, it is nonetheless useful to document differences by racial and ethnic group at aggregated levels, because these findings can be used for resource allocation, broad group comparisons, and establishment of baseline information (Sue et al. 1995; Grunbaum et al. 2000). The next step of research, however, should be to focus on specific subgroups (Sue et al. 1995). Researchers argue that only a few subgroups of API Americans exhibit problems (Kuo 1984; Kim and Chun 1993; Le 2002). For example, arrest rates are high only among the Southeast Asian populations (Le 2002). Thus, the results from aggregated data may be misleading. It is possible that distinct outcomes may be found among API subgroups, that is, certain ethnic groups are doing well

while others are engaging in serious problem behaviors. The possibility of problem behavior differences among API American subgroups warrants further study.

The Add Health data are based on youth self-reports. However, such reports are generally found to be reliable for many variables (Johnston, O'Malley, and Bachman 2001). To obtain reliable responses from participants, the Add Health study used the computer-assisted personal interviewing method for most survey items, relying on the computer-assisted self-interviewing method for sensitive questions.

It is imperative for research and for society in general to put to rest this notion of a model minority. The stereotype appears to be untrue on many levels. Research should also continue to examine this stereotype, because belief in the stereotype may impede needed interventions and policy attention. The stereotype may also stymie efforts to identify and address the needs of this growing group of Americans. The mental health and social service needs of API American youth are at least as great as those of their white counterparts, and the needs of API American youth increase with the length of their family's residence in the United States. It is also critical that researchers look beyond the stereotype so as not to run the risk of perpetuating false perceptions in research and theory.

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Table 1
Proportions and Means of School Behavior and Aggressive and Nonaggressive Delinquent Behaviors

Subgroup	N	School Behavior			Delinquent Behavior	
		Repeated Grade (% Yes)	Suspension (% Yes)	Expulsion (% Yes)	GPA *	Aggressive * Nonaggressive *
API American:						
Boys:						
Immigrant	307	14.05	19.34	1.97	2.94 (.71)	.82 (1.17) .86 (1.21)
Second generation	279	10.39	25.45	2.15	2.94 (.80)	.93 (1.33) 1.05 (1.37)
Nonimmigrant	75	17.33	22.67	5.33	2.76 (.77)	.95 (1.31) .92 (1.20)
Girls:						
Immigrant	304	9.21	3.95	.00	3.21 (.69)	.35 (.82) .58 (.91)
Second generation	222	5.86	11.71	2.70	3.07 (.76)	.41 (.84) .77 (1.03)
Nonimmigrant	61	6.56	11.48	.00	2.85 (.91)	.38 (.80) .93 (1.35)
White:						
Boys:						
Immigrant	67	22.39	22.39	1.49	2.92 (.77)	.79 (1.31) .84 (1.18)
Second generation	232	18.53	29.74	4.33	2.75 (.78)	.91 (1.16) 1.05 (1.41)
Nonimmigrant	4,436	23.25	31.75	4.24	2.73 (.79)	.95 (1.26) .93 (1.26)
Girls:						
Immigrant	68	13.24	11.76	2.94	3.13 (.76)	.39 (.74) .43 (.68)
Second generation	239	12.70	14.64	1.26	3.01 (.70)	.47 (.94) .63 (1.12)
Nonimmigrant	4,602	13.88	14.02	1.20	2.97 (.76)	.43 (.87) .61 (1.04)
Black:						
Boys:						
Immigrant	46	19.57	21.74	2.17	2.90 (.72)	.63 (1.18) .52 (1.05)
Second generation	84	30.95	41.67	7.14	2.59 (.75)	1.07 (1.21) .77 (1.07)
Nonimmigrant	1,668	34.70	53.49	12.02	2.45 (.69)	1.27 (1.43) .80 (1.19)
Girls:						
Immigrant	46	15.22	23.91	.00	2.86 (.73)	.58 (.97) .44 (.76)
Second generation	93	15.05	20.43	3.23	2.81 (.69)	.72 (1.13) .80 (1.08)
Nonimmigrant	1,857	24.04	36.33	6.10	2.72 (.68)	.78 (1.12) .56 (.93)

Subgroup	N	School Behavior			Delinquent Behavior			
		Repeated Grade (% Yes)	Suspension (% Yes)	Expulsion (% Yes)	GPA *	Aggressive *	Nonaggressive *	
Hispanic:								
Boys:								
Immigrant	411	33.67		31.78	5.88	2.44 (.70)	.94 (1.25)	.81 (1.25)
Second generation	698	32.71		35.29	8.32	2.46 (.74)	1.26 (1.43)	1.16 (1.47)
Nonimmigrant	503	29.34		44.11	9.64	2.48 (.78)	1.47 (1.63)	1.23 (1.43)
Girls:								
Immigrant	416	26.57		15.94	2.66	2.70 (.71)	.41 (.83)	.51 (.91)
Second generation	720	22.50		22.08	3.48	2.58 (.75)	.71 (1.11)	.88 (1.15)
Nonimmigrant	482	19.58		25.89	3.55	2.64 (.76)	.80 (1.24)	.88 (1.27)
N		17,890		17,887	17,867	17,338	17,702	17,707

Note.—GPA = grade point average; API = Asian and Pacific Islander.

* Results include means, and standard deviations are shown in parentheses.

Table 2

Proportions and Means of Substance Use and Sexual Behavior

Subgroup	N	Substance Use				Sexual Behavior			
		Ever Smoked (% Yes)	Drinking Alcohol ^{*, ‡}	Five or More Drinks ^{*, ‡}	Drunk [*]	Multiple Substance Use ^{†, ‡}	Ever Had Sex (% Yes)	Ever Pregnant (% Yes)	STD (% Yes)
API American:									
Boys:									
Immigrant	307	50.17	.84 (1.37)	.51 (1.18)	.44 (1.08)	.30 (.71)	26.25	NA	.98
Second generation	279	47.84	.77 (1.30)	.44 (1.17)	.39 (1.06)	.37 (.76)	23.38	NA	.72
Nonimmigrant	75	43.24	.83 (1.33)	.42 (1.11)	.32 (1.00)	.47 (.84)	29.73	NA	.00
Girls:									
Immigrant	304	41.33	.55 (1.02)	.25 (.80)	.18 (.58)	.17 (.50)	18.27	2.31	1.32
Second generation	222	52.97	.71 (1.16)	.36 (1.00)	.38 (1.03)	.35 (.74)	34.40	6.79	.45
Nonimmigrant	61	50.82	.98 (1.49)	.51 (1.13)	.61 (1.26)	.38 (.78)	29.51	6.56	.00
White:									
Boys:									
Immigrant	67	62.69	1.43 (1.58)	.79 (1.35)	.70 (1.17)	.54 (.82)	32.84	NA	.00
Second generation	232	59.39	1.32 (1.56)	.86 (1.46)	.83 (1.40)	.59 (.94)	31.00	NA	.43
Nonimmigrant	4,436	62.13	1.31 (1.59)	.93 (1.52)	.85 (1.40)	.61 (.95)	35.58	NA	.81
Girls:									
Immigrant	68	63.24	1.22 (1.44)	.71 (1.25)	.69 (1.18)	.36 (.67)	37.31	8.82	4.41
Second generation	239	60.34	1.35 (1.52)	.73 (1.34)	.80 (1.32)	.57 (.90)	34.18	4.62	2.93
Nonimmigrant	4,602	63.13	1.14 (1.40)	.63 (1.20)	.66 (1.15)	.61 (.92)	36.59	5.33	2.78
Black:									
Boys:									
Immigrant	46	36.96	.69 (1.02)	.18 (.61)	.40 (1.14)	.20 (.55)	50.00	NA	.00
Second generation	84	33.33	.75 (1.30)	.25 (.97)	.26 (.95)	.20 (.48)	54.22	NA	2.38
Nonimmigrant Girls:	1,668	45.92	.84 (1.47)	.44 (1.23)	.46 (1.20)	.33 (.72)	61.51	NA	3.72
Girls:									
Immigrant	46	44.44	.58 (1.29)	.15 (.67)	.24 (.87)	.09 (.36)	40.00	4.35	4.35
Second generation	93	43.48	.60 (1.15)	.23 (.92)	.23 (.77)	.22 (.71)	36.56	8.60	5.38
Nonimmigrant	1,857	43.97	.75 (1.30)	.27 (.93)	.30 (.90)	.22 (.54)	49.02	13.14	9.05

Subgroup	N	Substance Use				Sexual Behavior			
		Ever Smoked (% Yes)	Drinking Alcohol ^{*,‡}	Five or More Drinks ^{*,‡}	Drunk [*]	Multiple Substance Use ^{†,‡}	Ever Had Sex (% Yes)	Ever Pregnant (% Yes)	STD (% Yes)
Hispanic:									
Boys:									
Immigrant	411	44.83	.94 (1.39)	.61 (1.24)	.49 (1.12)	.27 (.64)	46.17	NA	1.70
Second generation	698	57.18	1.34 (1.65)	.88 (1.53)	.78 (1.40)	.50 (.85)	45.23	NA	1.29
Nonimmigrant	503	66.73	1.47 (1.77)	1.05 (1.62)	.98 (1.56)	.77 (1.06)	50.51	NA	1.79
Girls:									
Immigrant	416	36.63	.58 (1.13)	.29 (.91)	.24 (.78)	.16 (.57)	29.43	5.33	4.33
Second generation	720	60.64	1.16 (1.33)	.60 (1.17)	.52 (1.04)	.44 (.82)	35.15	7.50	2.08
Nonimmigrant	482	61.84	1.16 (1.43)	.68 (1.24)	.64 (1.17)	.59 (.94)	41.65	10.81	4.15
N		17,758	17,879	17,869	17,885	17,300	17,8791	9,089	17,916

Note.—STD = sexually transmitted disease; API = Asian and Pacific Islander.

* Frequency in the 12 months prior to the interview.

† Multiple substance use is the number of substances that respondents used in the 30 days prior to the interview.

‡ Results include means, and standard deviations are shown in parentheses.

Table 3
Models 2 and 4 for School Behavior and Aggressive and Nonaggressive Delinquent Behaviors

	School Behavior			Delinquent Behavior	
	Repeated Grade ^a	Suspension ^a	Expulsion ^a	GPA ^b	Aggressive Offenses ^c Nonaggressive Offenses ^c
Model 2:					
Controls:					
Age	.24 (1.27) ***	.10 (1.10) ***	.11 (1.12) ***	-.02 (.01) **	-.03 (.97) *** -.01 (.99)
Gender	-.53 (.59) ***	-.88 (.42) ***	-1.00 (.37) ***	.21 (.02) ***	-.65 (.52) *** -.37 (.69) ***
Group differences:					
White vs. API American	-.04 (.96)	-.13 (.88)	-.27 (.76)	-.04 (.04)	-.18 (.83) ** -.20 (.82) ***
Black vs. API American	.74 (2.11) ***	1.00 (2.72) ***	.99 (2.68) ***	-.33 (.04) ***	.26 (1.30) *** -.33 (.72) ***
Hispanic vs. API American	.52 (1.68) **	.34 (1.40) **	.59 (1.80) *	-.28 (.05) ***	.19 (1.20) ** .03 (1.03)
Model 4:					
Controls:					
Age	.24 (1.27) ***	.10 (1.11) ***	.12 (1.13) ***	-.02 (.01) **	-.03 (.97) ** -.00 (1.00)
Gender	-.53 (.59) ***	-.88 (.42) ***	-.99 (.37) ***	.21 (.02) ***	-.65 (.52) *** -.36 (.70) ***
Second generation vs. immigrant	-.01 (.99)	.37 (1.45) **	.54 (1.72) *	-.10 (.04) **	.33 (1.40) *** .48 (1.62) ***
Nonimmigrant vs. immigrant	.16 (1.17)	.64 (1.89) ***	.82 (2.27) ***	-.18 (.04) ***	.47 (1.61) *** .44 (1.55) ***
Group differences:					
White vs. API American	-.12 (.89)	-.35 (.71) **	-.52 (.60)	.03 (.04)	-.32 (.73) *** -.29 (.74) ***
Black vs. API American	.66 (1.94) ***	.78 (2.19) ***	.75 (2.11) **	-.26 (.04) ***	.12 {1.13} -.42 (.66) ***
Hispanic vs. API American	.54 (1.71) **	.35 (1.43) **	.61 (1.84) *	-.28 (.05) ***	.19 (1.21) ** .02 (1.02)
N	17,886	17,883	17,883	17,334	17,699 17,703

Note.—GPA = grade point average; API = Asian Pacific Islander.

^aLogistic regression. Figures in parentheses are odds ratios.

^bOrdinary least squares regression. Figures in parentheses are standard errors.

^cPoisson regression. Figures in parentheses are incident rate ratios.

* $p < .05$.

.100 > d

.10 > d
**

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Table 4
Model 5 for School Behavior and Aggressive and Nonaggressive Delinquent Behaviors

	School Behavior			Delinquent Behavior	
	Repeated Grade ^a	Suspension ^a	Expulsion ^a	GPA ^b	Aggressive Offenses ^c Nonaggressive Offenses ^c
Controls:					
Age	.24 (1.27) ***	.10 (1.11) ***	.12 (1.13) ***	-.02 (.01) **	-.03 (.97) **
Gender	-.53 (.59) ***	-.88 (.41) ***	-.99 (.37) ***	.21 (.02) ***	-.65 (.52) ***
Second generation vs. immigrant	-.20 (.82)	.59 (1.81) **	.20 (1.21)	-.20 (.07) **	.28 (.32)
Nonimmigrant vs. immigrant	1.07 (2.91) ***	1.52 (4.60) ***	1.42 (4.12) **	-.49 (.07) ***	.68 (.98) ***
Group differences:					
White vs. API American	.50 (1.65)	.63 (1.88)	-.17 (.84)	-.22 (.09) *	-.08 (.08)
Black vs. API American	-.90 (.41)	-.12 (.88)	-2.97 (.05) **	-.27 (.11) *	-.45 (.64)
Hispanic vs. API American	1.26 (3.52) ***	1.14 (3.14) ***	1.14 (3.13) *	-.54 (.06) ***	.33 (.39) ***
Interactions:					
White × second generation	NS	NS	NS	NS	NS
Black × second generation	2.01 (8.05) ***	NS	3.71 (40.87) ***	NS	.79 (2.19) *
Hispanic × second generation	NS	NS	NS	.17 (.08) *	NS
White × nonimmigrant	-1.09 (.34) **	-1.36 (.26) ***	NS	.41 (.11) ***	NS
Black × nonimmigrant	NS	NS	3.47 (32.31) ***	NS	NS
Hispanic × nonimmigrant	-1.55 (.21) ***	-1.25 (.29) ***	NS	.50 (.09) ***	NS
N	17,886	17,883	17,883	17,334	17,699
					17,703

Note.—NS = not statistically significant; GPA = grade point average; API = Asian Pacific Islander.

^a Logistic regression. Figures in parentheses are odds ratios.

^b Ordinary least squares regression. Figures in parentheses are standard errors.

^c Poisson regression. Figures in parentheses are incident rate ratios.

* $p < .05$.

** $p < .01$.

 $p < .001$

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Table 5

Models 2 and 4 for Substance Use and Sexual Behavior

	Substance Use				Sexual Behavior			
	Ever Smoked ^c	Drinking Alcohol ^{a,d}	Five or More Drinks ^{a,d}	Drunk ^{a,d}	Multiple Substance Use ^{b,e}	Ever Had Sex ^c	Ever Pregnant ^c	STD ^c
Model 2:								
Controls:								
Age	.17 (1.18)***	.29 (1.33)***	.32 (1.38)***	.33 (1.39)***	.15 (1.16)***	.47 (1.60)***	.44 (1.55)***	.44 (1.55)***
Gender	.03 (1.03)	-.05 (.95)	-.29 (.75)***	-.13 (.88)*	-.02 (.98)	-.08 (.92)	...	1.22 (3.40)***
Group differences:								
White vs. API American	.40 (1.49)***	.40 (1.50)***	.40 (1.50)***	.52 (1.68)***	.26 (1.30)**	.16 (1.18)	.34 (1.41)	-.55 (.58)**
Black vs. API American	-.24 (.79)*	-.32 (.73)*	-.66 (.52)***	-.47 (.63)***	-.40 (.67)***	1.14 (3.12)***	1.39 (4.00)***	.93 (2.54)***
Hispanic vs. API American	-.00 (1.00)	.12 (1.13)	.18 (1.19)	.14 (1.16)	-.04 (.97)	.19 (1.21)	.66 (1.93)*	-.38 (.68)
Model 4:								
Controls:								
Age	.17 (1.19)***	.30 (1.34)***	.33 (1.39)***	.34 (1.40)***	.15 (1.17)***	.48 (1.61)***	.45 (1.57)***	.45 (1.56)***
Gender	.03 (1.03)	-.05 (.95)	-.28 (.75)***	-.13 (.88)*	-.02 (.98)	-.08 (.92)	...	1.23 (3.41)***
Second generation vs. immigrant	.64 (1.90)***	.89 (2.44)***	.81 (2.25)***	.98 (2.65)***	.77 (2.16)***	.57 (1.76)***	.05 (1.05)	.15 (1.16)
Nonimmigrant vs. immigrant	.76 (2.14)***	.90 (2.47)***	.99 (2.69)***	1.11 (3.04)***	.97 (2.63)***	.85 (2.34)***	.81 (2.24)**	.62 (1.87)*
Group differences:								
White vs. API American	.17 (1.18)	.17 (1.18)	.12 (1.13)	.22 (1.25)*	.02 (1.02)	-.12 (.88)	-.05 (.95)	-.82 (.44)***
Black vs. API American	-.47 (.63)***	-.55 (.57)***	-.94 (.39)***	-.77 (.46)***	-.64 (.52)***	.86 (2.36)***	1.00 (2.71)**	.66 (1.94)**
Hispanic vs. API American	-.01 (.99)	.10 (1.10)	.17 (1.19)	.13 (1.14)	-.03 (.98)	.21 (1.23)	.71 (2.04)*	-.34 (.71)
N	17,754	17,874	17,864	079.0	17,296	17,707	9,088	17,911

Note.—STD = sexually transmitted disease; API = Asian Pacific Islander.

^aFrequency in the 12 months prior to the interview.^bMultiple substance use is the number of substances that respondents used in the 30 days prior to the interview.^cLogistic regression. Figures in parentheses are odds ratios.

^d Ordered logistic regression. Figures in parentheses are odds ratios.

^e Poisson regression. Figures in parentheses are incident rate ratios.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 6

Model 5 for Substance Use and Sexual Behavior

	Substance Use				Sexual Behavior			
	Ever Smoked ^c	Drinking Alcohol ^{a,d}	Five or More Drinks ^{a,d}	Drunk ^{a,d}	Multiple Substance Use ^{b,e}	Ever Had Sex ^c	Ever Pregnant ^c	STD ^c
Controls:								
Age	.17 (1.19) ***	.29 (1.34) ***	.33 (1.39) ***	.34 (1.40) ***	.15 (1.17) ***	.48 (1.61) ***	.45 (1.57) ***	.44 (1.57) ***
Gender	.03 (1.03)	-.04 (.96)	-.28 (.75) ***	-.13 (.88) *	-.02 (.98)	-.08 (.92)	...	1.22 (3.39) ***
Second generation vs. immigrant	.68 (1.96) ***	.62 (1.85) **	.68 (1.97) ***	1.08 (2.94) ***	.82 (2.29) ***	1.27 (3.55) ***	1.14 (3.14)	1.25 (3.14)
Nonimmigrant vs. immigrant	1.00 (2.73) ***	1.22 (3.38) ***	1.43 (4.20) ***	1.54 (4.68) ***	1.18 (3.27) ***	1.95 (7.07) ***	1.72 (5.62) *	1.30 (3.70) *
Group differences:								
White vs. API American	1.09 (2.98) ***	.98 (2.27) ***	.99 (2.69) ***	1.26 (3.52) ***	.76 (2.14) **	1.43 (4.19) ***	1.88 (6.57) *	.71 (2.03)
Black vs. API American	-.16 (.85)	-.33 (.72)	-1.00 (.37)	-.21 (.81)	-.39 (.67)	1.97 (7.23) ***	1.46 (4.33)	.29 (1.34)
Hispanic vs. API American	-.07 (.93)	-.03 (.97)	.29 (1.34)	.21 (1.23)	-.05 (.95)	1.05 (2.85) ***	1.47 (4.37) *	.62 (1.86)
Interactions:								
White × second generation	-.79 (.45) *	NS	NS	NS	NS	-1.26 (.28) **	NS	NS
Black × second generation	NS	NS	NS	NS	NS	-1.33 (.26) **	NS	NS
Hispanic × second generation	NS	.48 (1.62) *	NS	NS	NS	-.92 (.39) **	NS	NS
White × nonimmigrant	NS	-1.07 (.34) ***	-1.13 (.32) ***	-1.23 (.29) ***	-.83 (.43) **	-1.94 (.14) ***	-2.09 (.12) **	-1.58 (.21) ***
Black × nonimmigrant	NS	NS	NS	NS	NS	-1.47 (.23) ***	NS	NS
Hispanic × nonimmigrant	NS	NS	NS	NS	NS	-1.13 (.31) ***	NS	NS
N	17,754	17,874	17,864	17,880	17,296	17,707	9,088	17,911

Note.—NS = not statistically significant; STD = sexually transmitted disease; API = Asian Pacific Islander.

^aFrequency in the 12 months prior to the interview.^bMultiple substance use is the number of substances that respondents used in the 30 days prior to the interview.^cLogistic regression. Figures in parentheses are odds ratios.^dOrdered logistic regression. Figures in parentheses are odds ratios.

^e Poisson regression. Figures in parentheses are incident rate ratios.

* $p < .05$.
 ** $p < .01$.
 *** $p < .001$.

Table 7

Tests of Variances and Bimodality

Youth Behavior	N	API American		White		Black		Hispanic	
		Mean	Bimodality	Mean	Bimodality	Mean	Bimodality	Mean	Bimodality
GPA	17,338	3.01 (.76)	.52	2.85 (.78)	.49	2.60 (.70) ***	.41	2.54 (.74)	.42
Aggressive offenses	17,702	.64 (1.10)	.72	.68 (1.10)	.68	1.00 (1.29) ***	.63	.95 (1.32) ***	.67
Nonaggressive offenses	17,707	.83 (1.17)	.66	.77 (1.16)	.69	.67 (1.06) ***	.67	.94 (1.29) ***	.68
Drinking alcohol ^a	17,879	.74 (1.25)	.76	1.23 (1.50) ***	.67	.78 (1.37) ***	.78	.78 (1.37) ***	.69
Five or more drinks ^a	17,869	.39 (1.06)	.87	.78 (1.38) ***	.79	.34 (1.07)	.89	.70 (1.33) ***	.82
Drunk ^a	17,885	.36 (.98)	.83	.76 (1.28) ***	.76	.37 (1.04) ***	.86	.63 (1.24) ***	.80
Multiple substance use ^b	17,300	.31 (.70)	.77	.61 (.93) ***	.69	.27 (.63) ***	.67	.47 (.86) ***	.74

Note.—GPA = grade point average; API = Asian and Pacific Islander. Figures in parentheses are standard deviations.

^aFrequency in the 12 months prior to the interview.

^bMultiple substance use is the number of substances that respondents used in the 30 days prior to the interview.

p < .001.