

Academic Achievement and Problem Behaviors among Asian Pacific Islander American Adolescents

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Abstract Using data from the National Longitudinal Study of Adolescent Health, this study tests whether the relationship between academic achievement and problem behaviors is the same across racial and ethnic groups. Some have suggested that academic achievement may be a weaker predictor of problem behaviors among Asian Pacific Islander American (API) youth; that they can have high grades but still exhibit problem behaviors. This study finds that academic performance is a significant predictor of aggressive and nonaggressive delinquent offenses, gang initiation, sexual behaviors, and substance use, and that the relationship generally does not vary by race and ethnicity. Thus, there is little evidence that API youth are high achievers who are also engaging significantly in problem behaviors. The existing perceptions of API youth may be largely based on stereotype and ambivalence.

Keywords API youth · Academic achievement · Problem behaviors · Interrelations of youth behaviors · Etiology

Identifying risk factors of problems is critical to designing effective interventions (Mrazek and Haggerty, 1994). Problem behaviors among youth are highly correlated with one another and often share etiology (Howell *et al.*, 1995). For example, academic underachievement and school problems

are significantly associated with violence, delinquency, and substance use (Huzinga and Jakob-Chien, 1998). Similarly, higher academic performance and better school behaviors predict lower rates of risk behaviors (Maguin and Loeber, 1996). Early problem behaviors among youth are also one of the strongest predictors of later problem behaviors (Moffitt, 1993). Many youth who are incarcerated report previous school problems and drug use (Dryfoos, 1998). These findings are consistent across both gender and age (Thornberry *et al.*, 1995).

However, it is less clear whether the associations between youth behaviors are also consistent across racial and ethnic groups. Although Asian Pacific Islander American (API) youth academically perform better than other racial and ethnic groups (Choi and Lahey, 2006), some suggest, but do not empirically show, that academic achievement may be a weaker predictor of problem behaviors among API youth compared with other racial and ethnic groups of youth (Kang and Saar, 1996; Seo, 1995). For example, Vietnamese youth earned the highest grades among student samples in a San Diego study (Rumbaut, 1997). At the same time, they were the fourth-largest group on probation, following Hispanic, white, and black youth in California, and their probation rates increased 67% between 1990 and 1995 (Baba, 2001). Others argue that API youth may do well in school as they simultaneously engage in serious problems, and that this possibly weak association between academic performance and other problem behaviors is “uniquely Asian” (Kang and Saar, 1996; Seo, 1995). Although infrequent, it is possible that youth who do very well in school also are involved in risk behaviors. However, is this pattern uniquely Asian? This study examines whether academic achievement measured by grade point average (GPA) predicts youth problem behaviors and whether these associations vary by race and ethnicity. The problem behaviors include delinquent

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behaviors (aggressive offenses, nonaggressive offenses, and gang initiation), sexual behaviors, and substance use. The study uses a nationally representative sample of secondary school students from the National Longitudinal Study of Adolescent Health (Add Health).

For prevention and intervention efforts to be effective, it is imperative to discern similarities and differences in behaviors and predictors of behaviors across racial and ethnic groups. For example, prevention programs targeting diverse groups can focus on common predictors. If there were significant variations in certain predictors of problems across different racial and ethnic groups, we would need distinct models to understand each group and to appropriately integrate those differences in programs targeting a specific group. Failure to attend to these similarities or differences is likely to result in targeting wrong groups of youth or wrong risks.

Two sides of the “model minority”

API Americans are stereotypically regarded as a “model minority” (Kitano, 1969): they work hard, behave well, and succeed. High academic achievement among API youth, especially, has received much attention, which has led several researchers to attempt to explain such high achievement (e.g., Hirschman and Wong, 1986). The model minority stereotype is sometimes applied to other areas of youth behaviors as well. However, research on API youth and their behaviors is fragmented (Choi and Lahey, 2006). Some studies support the model minority stereotype (Bachman *et al.*, 1991; McNulty and Bellair, 2003; Price *et al.*, 2002), while others report high rates of problems, such as street gang involvement and violence (Baba, 2001; Ima, 1995). Yet others argue that both positive and negative youth behaviors coexist among API youth (Zhou, 1997) and suggest that there is a bifurcation of behaviors with both notable success and failure (Bankston and Zhou, 1997). A recent study using the Add Health data found that, compared with other racial and ethnic groups, API youth reported more positive school behaviors, fewer aggressive offenses, and fewer sexual risk behaviors, but they did not report better outcomes in other areas, such as nonaggressive offenses (Choi and Lahey, 2006). Also, API youth did not differ significantly from white youth on most behavior indicators. The same study found no coexistence of prominently positive and highly negative behaviors among API youth (Choi and Lahey, 2006).

Despite efforts to more carefully explore the validity of this “model minority” label, the stereotype persists (Yee, 1992). Stereotypes tend to reflect perceptions held in society rather than real characteristics of groups (Sue and Kitano, 1973), and there have been limited studies on API youth and their families to counteract existing stereotypes. The false

image can instigate negativity toward API, including resentment over their perceived success, and may contribute to an increase in hate crimes directed at API individuals (Ho and Jackson, 2001). In addition, even seemingly positive stereotypes can be mixed with underlying negative feelings toward the target group (Fiske *et al.*, 2002). For example, the positive aspects of the model minority stereotype are often mixed with negative images of overachievement, excessive competition, and social awkwardness and isolation (Lin *et al.*, 2005).

Mass media reflects these ambivalent feelings about API youth (Lee, 1999). For example, in 1993, five API youth were convicted of beating their friend to death. This event received extensive media coverage. The incident was especially shocking because the boys were doing quite well in school. Some were honors students admitted to top universities (Gebe Martinez, 1993; Saavedra, 1993). The killing, which was gruesome and unusually violent, inspired the movie, “Better Luck Tomorrow,” which portrays the boys as high achievers, from affluent middle-class families, but cheating on exams, using and selling hard drugs, engaging in several serious thefts, and finally committing a brutal murder. Several reports following the incident also portrayed API youth leading “dual lives,” in which they have top grades but also maintain gang ties and engage in crimes (Kang and Saar, 1996; Seo, 1995). In these reports, police, school officials, and gang experts describe API gang members as simultaneously “exceptionally good students” and “exceptionally violent.” They further argue that this phenomenon is uniquely Asian (Kang and Saar, 1996; Seo, 1995).

Although not widespread (Taylor and Stern, 1997), these extreme or exceptional cases can nevertheless be used to generalize about all API youth. Some community leaders worry that API youth will be mistakenly labeled as gang members because these highly publicized yet unusual incidents can exacerbate the ambivalence and misperception toward the group (Seo, 1995). Stereotypes can have serious consequences (Hirschman and Wong, 1986). For example, Dan Trung Hoang, a biology student at University of California, Irvine, was sentenced to 15 years in prison after he was convicted of attempted murder in 1995, largely on the basis of an alleged affiliation with a gang. His affiliation with the gang was never substantiated (Tsang, 1995). The youth’s advocates argued that the jury’s false image of API youth as leading dual lives may have unjustly influenced the sentence (Seo, 1995; Tsang, 1995).

Present study

This study attempts to provide empirical evidence of whether academic performance is indeed a weaker predictor of delinquent behaviors, substance use, and sexual behaviors among API youth than among other racial and ethnic groups of

youth. To examine the relationship, several statistical models are tested regarding the relationship between GPA and a range of problem behaviors, across several racial and ethnic groups. The “dual lives” hypothesis suggests that the relation will be weaker among API youth than other groups. GPA is examined both as a correlate and predictor. As a possible correlate to problem behaviors, GPA is analyzed in cross-sectional data (i.e., at the same time point) (wave 1). The models are also tested with GPA as a predictor, using the GPA score measured at wave 1 and problem behavior measures as reported at wave 2 (a year later), to establish temporal precedence in the relationship.¹ The dual-lives hypothesis is first tested only with GPA and race variables in the model to examine whether the existing perceptions of API youth are valid, excluding other related factors (Model 1). Because socio-demographic variables have shown to be related to racial and ethnic group differences, such as gender and parental socioeconomic status (SES) (Choi and Lahey, 2006), these variables are added to subsequent models to determine whether they explain any racial and ethnic differences in the rates of problem behaviors observed in Model 1. However, because the socio-demographic variables are not the main interest in this paper, the analysis does not explicitly test for their connection to any differences in problem behaviors by racial and ethnic group. Early problem behaviors strongly predict later problem behaviors (Moffitt, 1993). Thus, Model 3 adds early problem behaviors, as measured at wave 1, to examine whether GPA predicts later problem behaviors above and beyond the effect of any early problem behaviors and whether the predicting relationships vary across racial and ethnic groups after accounting for socio-demographic variables and earlier problem behaviors.

Only recently have researchers begun to investigate racial and ethnic group variations in patterns of behaviors and etiology of problems (Choi *et al.*, 2005). Some studies have found significant evidence of racial and ethnic group differences in predictors of problem behaviors (e.g., Deater-Deckard *et al.*, 1996; Gutman and Eccles, 1999). By contrast, others have found no empirical support for such variations in patterns, associations, and etiology of behaviors (e.g., Hill and Herman-Stahl, 2002; Mistry *et al.*, 2002). It is likely that both similarities and differences exist across different groups (Choi *et al.*, 2005). Studies that have identified significant differences in problem behaviors (e.g., Newcomb, 1995) suggest that the differences stem mainly from differing family and social contexts (Choi *et al.*, 2005; McLoyd *et al.*, 2000). No study, however, has shown racial and ethnic differences in the interrelations of youth behaviors. The pos-

¹ The temporal order in the models is not intended to test causality. To examine whether GPA is a causal risk factor, it requires much more rigorous conditions than the current data allow, like randomized clinical trials (Kraemer, 2003).

sible coexistence of notable successes and problems within a group, even if valid, also does not necessarily mean that it is the same group of individuals who have both high GPA and high rates of violence, indicating a weaker association between GPA and violence. Thus, the competing hypothesis to the dual-lives hypothesis is compelling, that there may be no significant difference in the relationships between GPA and problem behaviors across different racial and ethnic groups. This study is one of the first to test this relationship and to examine whether the existing perceptions of API youth are accurate.

Methods

Samples

The Add Health study is a longitudinal, school-based, and nationally representative study of adolescents who were in grades 7 through 12 in 1994–1995. The primary sampling unit was the school. In-school samples were selected from all students who were in attendance on the interview day. From the in-school samples, the researchers selected in-home samples using multiple methods, such as sample stratified random selection, purposeful selection, and systematic selection, to oversample certain groups of students (e.g., API American youth [$n = 1,585$; wave 1]). The in-home samples were interviewed for a second time one year later (wave 2) and a third time 6 years after the initial interview (wave 3).

This study used data from the in-home samples who participated both at wave 1 and wave 2.² The analysis omitted Native Americans ($n = 115$) and those in the “other” racial group ($n = 192$) owing to a relatively low sample size. Only the weighted samples were included to ensure the generalizability of findings to the larger population of U.S. adolescents. Total sample size used for this study is 13,377. The average age of students in the sample is 16.09 years ($SD = 1.76$) at wave 1. Slightly more than one-half are girls. About 6% of the group is API (6.3%, $n = 843$), 19.9% is black ($n = 2,663$), 17.2% Hispanic ($n = 2,298$),

² There are some statistically significant differences between those who only participated in wave 1 and those who participated in both waves 1 and 2. These include the percentage of immigrants ($\chi^2 = 32.64, p \leq .000$), whether mothers have received public assistance ($\chi^2 = 3.92, p \leq .05$), and parental education ($\chi^2 = -2.20, p \leq .05$). The samples that participated in both waves had a lower proportion of immigrants (8.49% vs. 11.11%), a higher proportion of maternal public assistance (10.64% vs. 9.64%), and a slightly higher parental education level (2.76 vs. 2.72). However, the results of the following analyses did not differ across these two groups. Wave 3 data are not used in this study because they were collected six years after the first interview, when respondents were no longer adolescents.

52.7% white ($n = 7,051$), and 3.9% multiracial ($n = 522$).³ Slightly more than 10% of the sample members report that their mother receives public assistance; 8.5% report being foreign-born, and 10.64% report having at least one immigrant parent.

Measures

Independent variable: GPA

Student reported their grades in four subjects: English or language arts, math, history or social sciences, and science. Grades were from the year prior to the interview (ranging from 1 for D to 4 for A). Grade point average was calculated by averaging four items of the grades. The mean of GPA was 2.77 ($SD = 0.77$).

Dependent variables: Youth behaviors

Five areas of youth behaviors measured were included as dependent variables: aggressive and nonaggressive delinquent offenses, gang initiation, sexual behaviors, and substance use. Multiple items were used to measure each area of behavior. Responses from some items in this study were 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 (details discussed below). These items measured behaviors that are not common among youth and recoding into binary options seemed appropriate. A parallel approach is used in similar studies (Choi and Lahey, 2006; McNulty and Bellair, 2003).

Aggressive offenses. Four items were used to assess aggressive delinquent offenses, defined as confrontational offenses against a person in the 12 months prior to the interview: frequency of threatening someone with weapon, taking part in a group fight, pulling a knife or gun on someone, and shooting or stabbing someone. Response options for the first two items were “never” (0), “1–2 times” (1), “3–4 times” (2), and “5 or more times” (3). Possible responses for pulling a weapon and shooting or stabbing someone were “never” (0), “once” (1), and “more than once” (2). These options were recoded as “never” (0) and “one or more times” (1). They were then summed to create the scale. The scores ranged from 0

to 4, with a mean of 0.28 ($SD = 0.64$) for the full sample. The alpha reliability coefficient is 0.55 for the scale.⁴

Nonaggressive offenses. Eight items measured nonaggressive offenses in the 12 months prior to the interview. These offenses included mainly property offenses, such as vandalism and theft. Items covered the frequency of painting graffiti, damaging property, stealing something worth less than \$50, shoplifting, stealing a car, stealing something worth more than \$50, burglarizing a building, and running away from home. Response options ranged from “never” (0), “1–2 times” (1), to “5 and more times” (3). To avoid giving unbalanced weight to theft, three items were combined: shoplifting, stealing something worth less than \$50, and stealing something worth more than \$50. If respondents reported positively on any of the three items, theft was coded as 1. All items were recoded into binary responses (“never” [0], and “one or more times” [1]) and summed. The scores for nonaggressive delinquent offenses range from 0 to 6, with a mean of 0.61 ($SD = 1.06$) for the full sample. The alpha reliability coefficient is 0.64 for the scale.

Gang Initiation. One item asked whether respondents have been initiated into a named gang. Response options were “yes” (1) and “no” (0). This item is examined separately because gang activity is often associated with the “dual lives” stereotype of API youth.

Sexual behaviors. Nine items for boys and 12 for girls were used to examine sexual behaviors. All respondents were asked whether they ever had sex, and the girls were asked whether they had ever been pregnant. Response options for these two indicators were “yes” (1) and “no” (0). Respondents were also asked whether they had ever contracted various sexually transmitted diseases (STD) (8 items for boys and 10 for girls). These items were 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.

Substance use. Nine items were used to examine underage substance use. The first question asked whether a respondent ever smoked. The response options were “yes” (1) and “no” (0). Three items assessed 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

³ Multiracial youth are those who marked more than one race and ethnicity category on the survey. Recent studies show that multiracial youth as a group report significantly higher rates of problems (Choi *et al.*, 2006; Udry *et al.*, 2003). However, despite their rapidly growing population and potentially unique needs and heightened risk, multiracial adolescents are often not regarded as a distinct group in studies of adolescent problem behaviors and we know little about this group. Multiracial youth are, thus, included in this study as a separate group to provide baseline empirical findings, even if exploratory.

⁴ In wave 1, two additional items are available for aggressive delinquent offenses: frequency of serious physical fights and seriously injuring someone. When these two items are added to the scale, the alpha coefficient is 0.69 and the mean of the scale is 0.80 ($SD = 1.21$). The difference in internal consistency and the mean of the scale may be because the two items not assessed in wave 2 are more common among youth than the four items that were measured in both waves of interview. Analyses were conducted with the 6-item scale and the 4-item scale, respectively, in the models with cross-sectional data (i.e., using only wave 1 data). Despite the difference in alpha coefficients, the results were largely the same.

drunk. Because previous studies showed a relatively high rate of heavy and binge drinking among API youth (Harachi *et al.*, 2001; Kim *et al.*, 1995), these items were examined individually to investigate whether GPA predicts them differently. Response options for the three drinking items were “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 items were used to measure multiple substance use. These items asked 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 items were 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 cigarette 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 1.49 (SD = 0.74) for the full sample.

Control variables: Age, gender, and parental education

Respondents’ reported age at the time of interview was used as a control variable for differences in youth outcomes by age (Hsia and Spruijt-Metz, 2003). Gender was also used to control for gender differences in youth outcomes (Moffitt *et al.*, 2001). In addition, differences across ethnic groups may be reflections of parental SES; therefore, it is important to adjust for it. This study used parental education as a proxy of parental SES. These variables were derived from adolescent reports. Responses of parental education were recoded as no school (0); less than high school (1); high school or equivalent degree (2); more than high school, less than college (3); college graduate (4); and more than college (5). The average education of both parents was used for two-parent families, and the education of the parent who was present in the home was used for single-parent families.⁵

Self-identification of race and ethnicity

A series of questions were used to establish the respondent’s race and ethnicity. All respondents were first asked whether they were of Hispanic or Latino origin. Respondents were

then asked whether they considered themselves white, black or African American, American Indian or Native Americans, 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 was computed to categorize students who self-reported as Hispanic, white, black, and API. Students who indicated that they belonged in more than one racial and ethnic category were categorized as multiracial. Anyone who answered “yes” to Hispanic or Latino origin was first classified as Hispanic. Thus, the Hispanic category included various racial and ethnic groups with Latino origin. The rest of the categories were created among non-Hispanic youth. Tables 1 and 2 provide descriptive statistics of the independent and dependent variables by racial and ethnic group memberships.

Analytic strategy

Regression analyses were conducted to examine and compare the association between GPA and problem behaviors (delinquent offenses, substance use, and sexual behaviors). Depending on the distributional characteristics of dependent variables, three types of regression analyses were used: logistic, ordered logistic, and Poisson. Logistic regression models were used for binary outcomes (e.g., whether a respondent ever smoked). Ordered logistic (proportional odds) regressions were employed for the three drinking behavior outcomes whose response options were ordinal. Poisson regression models were used for analyses of the summary scales created for this study (e.g., aggressive delinquent offenses) because these scales involved count data. Odd ratios (OR) and incident rate ratios (IRR) were estimated for the logistic, ordered logistic, and Poisson regression models.

To determine the associations between GPA and problem behaviors, Model 1 included GPA as an independent variable and the dummy variables for racial and ethnic groups, with API as a reference. To adjust for socio-demographic variables in the associations, Model 2 included GPA, the race dummy variables, and control variables (age, gender, and parental education). Models 1 and 2 were examined using both cross-sectional and longitudinal data. Model 3 included GPA, the race dummy variables, control variables, and the earlier problem behaviors. Model 3 was examined with longitudinal data only. For example, in the model for aggressive delinquent offenses, the predictor variables were GPA, the race dummy variables, controls, and aggressive delinquent offenses measured at wave 1, and the dependent variable was aggressive delinquent offenses measured at wave 2.

In each model, interaction terms (products of GPA and racial and ethnic group dummy variables) were created and added to examine whether the relationships between GPA and problem behaviors were significantly different across

⁵ Although adolescents were also asked whether their parents have received any public assistance, the public assistance item was not used as a proxy for SES, because the reliability of adolescent responses on this item was not clear. For instance, the responses regarding father’s receiving assistance were largely missing. In addition, there was little difference in results when maternal public assistance was accounted for in the subsequent model testing.

Table 1 Means and proportions of delinquent and sexual behaviors

Groups	Delinquent behavior			Sexual behavior		
	Aggressive offenses	Nonaggressive offenses	Gang initiation	Ever had sex	Ever pregnant	STD
	Mean (SD)	Mean (SD)	Yes (%)	Yes (%)	Yes (%)	Yes (%)
API	<i>n</i> = 835 0.23 (0.59)	<i>n</i> = 836 0.58 (1.03)	<i>n</i> = 837 4.79	<i>n</i> = 841 28.30	<i>n</i> = 399 6.27	<i>n</i> = 843 1.19
White	<i>n</i> = 7,027 0.22 (0.54)	<i>n</i> = 7,015 0.60 (1.05)	<i>n</i> = 7,032 2.90	<i>n</i> = 7,012 40.57	<i>n</i> = 3,603 7.02	<i>n</i> = 7,051 1.93
Black	<i>n</i> = 2,644 0.35 (0.73)	<i>n</i> = 2,638 0.50 (0.92)	<i>n</i> = 2,645 5.48	<i>n</i> = 2,640 56.44	<i>n</i> = 1,420 14.65	<i>n</i> = 2,663 4.99
Hispanic	<i>n</i> = 2,273 0.37 (0.76)	<i>n</i> = 2,269 0.73 (1.17)	<i>n</i> = 2,275 8.79	<i>n</i> = 2,277 47.30	<i>n</i> = 1,143 10.32	<i>n</i> = 2,298 3.05
Multiracial	<i>n</i> = 521 0.33 (0.67)	<i>n</i> = 518 0.68 (1.06)	<i>n</i> = 521 5.18	<i>n</i> = 519 48.36	<i>n</i> = 279 12.54	<i>n</i> = 522 4.60

groups (Model 1-1, Model 2-1, and Model 3-1). The two nested models (one with main effects only (e.g. Model 1) and the other with main effects plus product terms (e.g. Model 1-1)) were examined by using an adjusted Wald test to determine whether the overall interaction effects were significant. If these tests, as measured by *F* statistics, are significant, they indicate that there are significant differences in the magnitudes of the relationships between predictor variables and dependent variables across racial and ethnic groups. An adjusted Wald test, rather than likelihood ratio tests, was used because it is a more appropriate estimate of changes in model fits in complex survey data (StataCorp, 2003). In addition, statistically significant interaction coefficients were calculated using the *lincom* function in Stata for each racial and ethnic group of interest. Comparisons were made only between API and non-API youth (but not among non-API groups) because the main interest of the study is to examine similarities and differences between API youth and other youth.

All standard errors were estimated while accounting for the fact that Add Health data were clustered within the school level. Responses from the same cluster are likely to correlate, violating the assumption of independence among re-

spondents. The Add Health data were also selected with unequal probabilities of selection. The statistical software program used for all analysis, *Stata* (version 8.0), handles clustered complex survey data, probability sampling weights, and stratification for binary, ordinal, count, and continuous variables. *Svy* commands in *Stata* were used to perform the statistical analyses, accounting for school clustering. Sampling weights for each respondent were included in the analyses to account for unequal sampling selection.

Results

Results varied little in the analyses using cross-sectional and longitudinal data. Thus, the results using longitudinal data are presented to avoid redundancy. Results from Model 1, presented in the upper sections of Tables 3 and 4, show that GPA was a significant predictor of problem behaviors among youth. Specifically, higher GPA predicted fewer aggressive and nonaggressive delinquent offenses, and lower likelihood of gang initiation, having had sex, having been pregnant, and having contracted an STD. Also, higher GPA predicted lower likelihood of ever smoking and lower frequency of drinking,

Table 2 Means and proportions of substance use behaviors and GPA

Groups	Ever smoked	Drinking alcohol	Five or more drinks	Drunk	Multiple sub. use	GPA
	Yes (%)	Mean (SD)				
API	<i>n</i> = 837 34.29	<i>n</i> = 843 0.72 (1.28)	<i>n</i> = 840 0.45 (1.16)	<i>n</i> = 840 0.42 (1.11)	<i>n</i> = 827 1.33 (0.60)	<i>n</i> = 825 3.05 (0.76)
White	<i>n</i> = 7,024 52.06	<i>n</i> = 7,035 1.27 (1.57)	<i>n</i> = 7,028 0.87 (1.47)	<i>n</i> = 7,038 0.84 (1.39)	<i>n</i> = 6,893 1.59 (0.77)	<i>n</i> = 6,890 2.87 (0.78)
Black	<i>n</i> = 2,634 27.87	<i>n</i> = 2,653 0.70 (1.32)	<i>n</i> = 2,654 0.33 (1.05)	<i>n</i> = 2,657 0.35 (1.04)	<i>n</i> = 2,609 1.29 (0.59)	<i>n</i> = 2,592 2.61 (0.70)
Hispanic	<i>n</i> = 2,273 40.97	<i>n</i> = 2,292 1.11 (1.53)	<i>n</i> = 2,291 0.76 (1.42)	<i>n</i> = 2,295 0.69 (1.35)	<i>n</i> = 2,245 1.47 (0.75)	<i>n</i> = 2,189 2.54 (0.76)
Multiracial	<i>n</i> = 520 44.81	<i>n</i> = 521 1.11 (1.54)	<i>n</i> = 520 0.71 (1.38)	<i>n</i> = 521 0.69 (1.35)	<i>n</i> = 505 1.55 (0.78)	<i>n</i> = 501 2.72 (0.75)

Table 3 Models 1 and 1-1 for delinquent and sexual behaviors

	Delinquent behavior		Sexual behavior	
	Aggressive offenses Poisson b (IRR)	Nonaggressive offenses	Gang initiation Logistic b (OR)	Ever had sex Logistic b (OR)
Model 1	<i>N</i> = 12,929	<i>N</i> = 12,907	<i>N</i> = 12,942	<i>N</i> = 12,922
Group difference				<i>N</i> = 6,649
White vs. API	-0.03 (0.98)	0.02 (1.02)	-0.67 (0.51)*	0.52 (1.67)***
Black vs. API	0.34 (1.40)	-0.28 (0.76)*	-0.05 (0.96)	1.20 (3.31)***
Hispanic vs. API	0.43 (1.53)*	0.23 (1.26)	0.44 (1.56)	0.54 (1.71)**
Multiracial vs. API	0.47 (1.59)*	0.18 (1.20)	0.03 (1.03)	0.77 (2.17)***
GPA	-0.50 (0.61)***	-0.26 (0.77)***	-0.71 (0.49)***	-0.62 (0.54)***
Model 1-1	<i>N</i> = 12,929	<i>N</i> = 12,907	<i>N</i> = 12,942	<i>N</i> = 6,649
Group differences:				
White vs. API	0.14 (1.15)	0.24 (1.26)	-0.82 (0.44)	-0.07 (0.93)
Black vs. API	0.04 (1.04)	0.03 (1.03)	-0.20 (0.82)	0.11 (1.11)
Hispanic vs. API	0.42 (1.53)	0.52 (1.68)	0.29 (1.34)	-0.32 (0.73)
Multiracial vs. API	0.28 (1.32)	0.04 (1.04)	-0.71 (0.49)	-0.06 (0.94)
GPA	-0.48 (0.62)	-0.19 (0.83)	-0.77 (0.46)*	-0.85 (0.43)***
Interactions				
White × GPA	n.s.	n.s.	n.s.	n.s.
Black × GPA	n.s.	n.s.	n.s.	n.s.
Hispanic × GPA	n.s.	n.s.	n.s.	n.s.
Multiracial vs. GPA	n.s.	n.s.	n.s.	n.s.

* $p < .05$, ** $p < .01$, *** $p < .001$; n.s.: not statistically significant.

Table 4 Models 1 and 1-1 for substance use

	Ever smoked Logistic b (OR)	Drinking alcohol Ordered Logistic b (OR)	Five or more drinks	Drunk	Multiple sub. use Poisson b (IRR)
Model 1	<i>N</i> = 12,921	<i>N</i> = 12,964	<i>N</i> = 12,956	<i>N</i> = 12,972	<i>N</i> = 12,716
Group differences					
White vs. API	0.77 (2.15)***	0.83 (2.30)***	0.96 (2.61)***	1.13 (3.09)***	0.20 (1.22)***
Black vs. API	-0.32 (0.72)*	-0.03 (0.97)	-0.42 (0.66)*	-0.04 (0.96)	-0.02 (0.98)
Hispanic vs. API	0.24 (1.27)	0.58 (1.79)***	0.75 (2.12)***	0.83 (2.29)***	0.10 (1.11)***
Multiracial vs. API	0.60 (1.83)**	0.61 (1.84)***	0.65 (1.91)**	0.86 (2.37)***	0.20 (1.22)***
GPA	-0.53 (0.59)***	-0.28 (0.76)***	-0.41 (0.66)***	-0.34 (0.72)***	-0.13 (0.87)***
Model 1-1	<i>N</i> = 12,921	<i>N</i> = 12,964	<i>N</i> = 12,956	<i>N</i> = 12,972	<i>N</i> = 12,716
Group differences					
White vs. API	0.04 (1.04)	0.47 (1.61)	0.17 (1.18)	-0.02 (0.98)	0.19 (1.21)
Black vs. API	-1.33 (0.26)*	-0.61 (0.54)	-1.30 (0.27)*	-1.48 (0.23)*	-0.08 (0.93)
Hispanic vs. API	-0.46 (0.63)	0.42 (1.53)	0.00 (1.00)	-0.12 (0.89)	0.12 (1.12)
Multiracial vs. API	0.25 (1.29)	0.16 (1.17)	-0.57 (0.57)	-0.34 (0.71)	0.33 (1.38)*
GPA	-0.77 (0.46)***	-0.39 (0.67)*	-0.68 (0.51)***	-0.71 (0.49)***	-0.13 (0.87)***
Interactions					
White × GPA	n.s.	n.s.	n.s.	n.s.	n.s.
Black × GPA	n.s.	n.s.	n.s.	0.50 (1.65)*	n.s.
Hispanic × GPA	n.s.	n.s.	n.s.	n.s.	n.s.
Multiracial vs. GPA	n.s.	n.s.	0.43 (1.53)*	n.s.	n.s.

p* < .05, *p* < .01, ****p* < .001; n.s.: not statistically significant.

drinking five or more drinks, having been drunk, and fewer substances used. All these predictions were statistically significant. These findings support the contention that higher academic achievement predicts lower rates of various youth problem behaviors.

To investigate whether the relationship between GPA and youth problem behaviors is moderated by racial and ethnic groups, the interaction terms of GPA by race and ethnicity dummy variables were tested (Model 1-1, shown in the lower section of Tables 3 and 4). The hierarchical tests of the overall interaction effects estimated by adjusted Wald tests showed that the interactions were not significant for most of the behaviors, except having five or more drinks and having been drunk. GPA was a stronger predictor of having five or more drinks among API youth than multiracial youth (Fig. 1), and GPA was a stronger predictor for API youth of having been drunk than for black youth (Fig. 2). In other words, there were few distinctions by race or ethnicity in the association between GPA and youth problem behaviors.

Results from Model 2 (with GPA, race dummies, and controls) and Model 3 (with GPA, race dummies, controls, and earlier problem behaviors) were largely the same. When socio-demographic variables were added in Model 2, GPA predicted problem behaviors in the same direction and in the similar magnitudes as in unadjusted models. GPA continually predicted problem behaviors when the earlier problem behaviors were added (Model 3). Thus, GPA was significantly predictive of delinquent offenses, sexual behaviors, and substance use one year later, even after controlling

for socio-demographic variables and the earlier problem behaviors. Results from Model 3 are presented in the upper sections of Tables 5 and 6.

The analysis uncovered several significant differences across racial and ethnic groups. For example, when control variables and earlier problem behaviors were adjusted in the models, GPA was a stronger predictor of having ever been pregnant for API youth than for white, black, Hispanic, or multiracial youth (Fig. 3). Other significant interactions also showed similar patterns. In Models 2-1 and 3-1, GPA was a stronger predictor for API than black youth

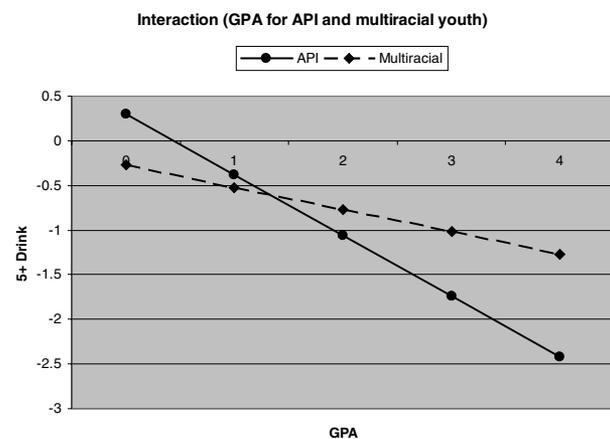


Fig. 1 Interaction of GPA by API and multiracial in having five or more drinks

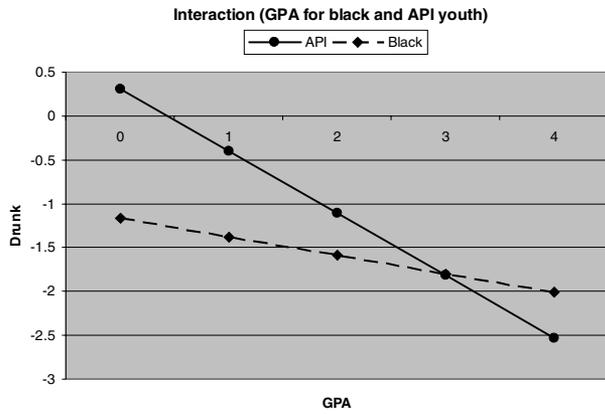


Fig. 2 Interaction of GPA by API and black in having been drunk

of having been drunk. After accounting for prior reported drunkenness, GPA remained a stronger predictor for API youth than white youth. The significant interaction between multiracial and API on having had five or more drinks in

Model 2-1 ($\beta = 0.57, p < 0.05$) was no longer significant in Model 3-1, which accounted for earlier behavior.

Discussion

Findings from this study show that, controlling for age, gender, parental education, and earlier problem behaviors, academic performance measured by GPA is a significant predictor of all of the problem behaviors examined in this study—generally regardless of one’s race or ethnicity. Specifically, high academic performance equally predicts across youth of all race and ethnicities fewer aggressive and nonaggressive offenses, a lower likelihood of gang initiations, contracting an STD, smoking, and alcohol and substance use. GPA is also equally predictive of binge drinking between API youth and white, black, and Hispanic youth. Finally, GPA is equally predictive of the frequency of having been drunk between Hispanic and API youth and multiracial and API youth. Thus, in general, it can be said that these findings

Table 5 Models 3 and 3-1 for delinquent behaviors and sexual behaviors

	Delinquent behavior		Sexual Behavior		
	Aggressive offenses Poisson b (IRR)	Nonaggressive offenses	Ever had sex Logistic b (OR)	Ever pregnant	STD
Model 3	<i>N</i> = 12,537	<i>N</i> = 12,525	<i>N</i> = 12,534	<i>N</i> = 6,503	<i>N</i> = 12,701
Controls					
Age	-0.06 (0.94)***	-0.09 (0.92)***	0.25 (1.29)***	0.30 (1.35)***	0.24 (1.27)***
Gender	-0.28 (0.76)***	-0.12 (0.88)***	0.24 (1.27)***	—	0.62 (0.87)***
Parental education	-0.04 (0.96)	-0.00 (1.00)	-0.10 (0.90)**	-0.23 (0.79)***	-0.23 (0.79)**
Group differences					
White vs. API	-0.05 (0.95)	0.02 (1.02)	0.52 (1.69)**	0.34 (1.41)	0.07 (1.07)
Black vs. API	0.18 (1.20)	-0.15 (0.86)	0.65 (1.91)**	0.99 (2.70)*	1.01 (2.74)
Hispanic vs. API	0.23 (1.26)	0.16 (1.17)	0.42 (1.52)	0.39 (1.48)	0.49 (1.64)
Multiracial vs. API	0.25 (1.29)	0.08 (1.08)	0.71 (2.04)**	0.55 (1.74)	0.85 (2.34)
GPA	-0.25 (0.76)***	-0.10 (0.90)***	-0.40 (0.67)***	-0.45 (0.64)***	-0.39 (0.68)**
Behavior variables at Wave 1	0.47 (1.60)***	0.43 (1.54)***	3.28 (26.57)***	4.20 (66.56)***	0.97 (2.63)***
Model 3-1	<i>N</i> = 12,537	<i>N</i> = 12,525	<i>N</i> = 12,534	<i>N</i> = 6,503	<i>N</i> = 12,701
Controls					
Age	-0.06 (0.94)***	-0.09 (0.92)***	0.25 (1.29)***	0.30 (1.35)***	0.24 (1.27)***
Gender	-0.28 (0.76)***	-0.12 (0.89)***	0.24 (1.27)***	—	0.63 (1.87)***
Parental education	-0.04 (0.96)	-0.10 (1.00)	-0.10 (0.90)**	-0.23 (0.79)***	-0.23 (0.79)**
Group differences					
White vs. API	0.33 (1.40)	0.35 (1.42)	-0.11 (0.90)	-3.51 (0.03)*	-0.14 (0.87)
Black vs. API	0.15 (1.16)	0.32 (1.38)	-0.70 (0.50)	-3.21 (0.04)*	0.60 (1.82)
Hispanic vs. API	0.47 (1.60)	0.51 (1.67)	-0.46 (0.63)	-3.98 (0.02)**	-0.04 (0.96)
Multiracial vs. API	0.47 (1.61)	0.13 (1.14)	-0.21 (0.81)	-4.02 (0.02)*	-0.44 (0.64)
GPA	-0.16 (0.85)	0.01 (1.01)	-0.64 (0.53)*	-1.92 (0.15)***	-0.51 (0.60)
Behavior variables at Wave 1	0.47 (1.60)***	0.43 (1.54)***	3.28 (26.65)***	4.20 (66.83)***	0.96 (2.61)***
Interactions					
White × GPA	n.s.	n.s.	n.s.	1.43 (4.19)*	n.s.
Black × GPA	n.s.	n.s.	n.s.	1.57 (4.81)**	n.s.
Hispanic × GPA	n.s.	n.s.	n.s.	1.64 (5.15)*	n.s.
Multiracial vs. GPA	n.s.	n.s.	n.s.	1.71 (5.54)*	n.s.

* $p < .05$, ** $p < .01$, *** $p < .001$; n.s.: not statistically significant.

Table 6 Models 3 and 3-1 for substance use

	Ever smoked Logistic b (OR)	Drinking alcohol	Five or more drinks Ordered Logistic b (OR)	Drunk	Multiple sub. use Poisson b (IRR)
Model 3	<i>N</i> = 12,569	<i>N</i> = 12,646	<i>N</i> = 12,636	<i>N</i> = 12,657	<i>N</i> = 12,122
Controls					
Age	−0.03 (0.97)	0.10 (1.10)***	0.16 (1.18)***	0.14 (1.15)***	0.01 (1.01)*
Gender	0.11 (1.12)	0.01 (1.01)	−0.15 (0.86)*	−0.02 (0.98)	0.02 (1.02)
Parental education	0.02 (1.02)	0.10 (1.11)***	0.09 (1.09)**	0.10 (1.11)***	0.01 (1.01)
Group differences					
White vs. API	0.56 (1.74)***	0.63 (1.87)***	0.96 (2.61)***	1.00 (2.72)***	0.13 (1.13)***
Black vs. API	−0.41 (0.66)*	−0.10 (0.90)	−0.32 (0.72)	−0.09 (0.92)	−0.01 (0.99)
Hispanic vs. API	0.19 (1.21)	0.58 (1.79)***	0.92 (2.52)***	0.88 (2.40)***	0.09 (1.09)***
Multiracial vs. API	0.40 (1.49)	0.43 (1.53)*	0.68 (1.98)***	0.77 (2.16)***	0.12 (1.13)***
GPA	−0.32 (0.73)***	−0.11 (0.90)**	−0.20 (0.82)***	−0.17 (0.85)***	−0.07 (0.94)***
Behavior variables at Wave 1	2.19 (8.96)***	0.78 (2.18)***	0.71 (2.03)***	0.81 (2.24)***	0.23 (1.26)***
Model 3-1	<i>N</i> = 12,569	<i>N</i> = 12,646	<i>N</i> = 12,636	<i>N</i> = 12,657	<i>N</i> = 12,122
Controls					
Age	−0.03 (0.97)	0.10 (1.10)***	0.16 (1.18)***	0.14 (1.15)***	0.01 (1.01)*
Gender	0.11 (1.12)	0.01 (1.01)	−0.15 (0.86)*	−0.03 (0.97)	0.01 (1.01)
Parental education	0.02 (1.02)	0.10 (1.10)***	0.09 (1.09)**	0.10 (1.11)***	0.00 (1.00)
Group differences					
White vs. API	−0.49 (0.61)	0.04 (1.04)	0.32 (1.38)	−0.19 (0.83)	0.06 (1.06)
Black vs. API	−1.64 (0.19)*	−0.58 (0.56)	−0.77 (0.46)	−1.41 (0.24)*	−0.08 (0.92)
Hispanic vs. API	−0.94 (0.39)	0.14 (1.15)	0.40 (1.50)	−0.05 (0.95)	0.04 (1.04)
Multiracial vs. API	−0.53 (0.59)	−0.41 (0.67)	−0.39 (0.68)	−0.37 (0.69)	0.13 (1.14)
GPA	−0.66 (0.52)**	−0.29 (0.75)	−0.40 (0.67)*	−0.54 (0.58)**	−0.09 (0.92)***
Behavior variables at Wave 1	2.19 (8.95)***	0.78 (2.18)***	0.71 (2.03)***	0.81 (2.24)***	0.23 (1.26)***
Interactions					
White × GPA	n.s.	n.s.	n.s.	0.39 (1.48)*	n.s.
Black × GPA	n.s.	n.s.	n.s.	0.45 (1.57)*	n.s.
Hispanic × GPA	n.s.	n.s.	n.s.	n.s.	n.s.
Multiracial vs. GPA	n.s.	n.s.	n.s.	n.s.	n.s.

* $p < .05$, ** $p < .01$, *** $p < .001$; n.s.: not statistically significant.

reject the notion of significant co-occurrence of both positive and negative behaviors in API youth—the dual-lives stereotype. There is little evidence from this study that API youth are high achievers who are also highly engaged in behavior problems.

Contrary to the stereotype, several significant interactions indicate that GPA may be a stronger predictor of certain behaviors among API than other racial and ethnic groups of youth. For instance, GPA is a significantly stronger predictor of having ever been pregnant among API youth than all four groups. GPA is also a stronger predictor of getting drunk among API than white and black youth after adjusting for socio-demographic variables and previous behaviors. Thus, the findings from this study show not only that there is little difference in the relationships between GPA and problem behaviors across racial and ethnic groups, but also that GPA may be a stronger predictor, not a weaker predictor, among API youth as some suggested.

However, it is important to keep in mind the low prevalence of some of these behaviors. For example, the num-

bers of girls who report having been pregnant is very small. Specifically, 25 API, 252 white, 209 black, 118 Hispanic, and 35 multiracial girls (640 girls of all groups combined) had been pregnant, from a total sample of 13,356. Even though the data are nationally representative of secondary school students, any generalizations from these quite low incident rates should be made with caution. Power analyses were conducted to determine whether these statistically nonsignificant and significant interactions are meaningful. Effect sizes were determined on the basis of racial and ethnic group differences in the rates of problem behaviors in the Add Health data. The current sample largely met the required sample sizes to attain 80% power, with a few exceptions. For example, to detect statistically significant difference in the association between GPA and aggressive offenses, a sample of 1,100 is required for both white and API youth. Although the sample of white youth was large enough, the sample for API youth was too small. The same applied for comparisons of binge drinking between black and API (required sample size is 1,272). Other exceptions include nonaggressive

offenses between white and API youth, and gang initiation between multiracial and API youth. In these behaviors, there is little difference between the groups compared and they require much larger sample sizes to detect significance. For these behaviors, caution is advised in generalizing the findings. However, it is also important to note that the Add Health is one of the very few nationally representative data sets with substantial numbers of ethnic minority youth. Thus, although it would be ideal to have larger sample sizes for each group in some behaviors, the present findings are still informative.

Further studies are needed to systematically explain why GPA may be a stronger predictor of past drinking and having been pregnant among API youth. Differential cultural norms and practices are one of the most frequently suggested reason to explain racial and ethnic group differences. If the reasons for the differences found in this study are related to different cultural norms about sex and drinking, it will be important to understand why the stronger relationship is not found in other drinking (drinking initiation and the frequency of drinking and binge drinking) and other sex related behaviors

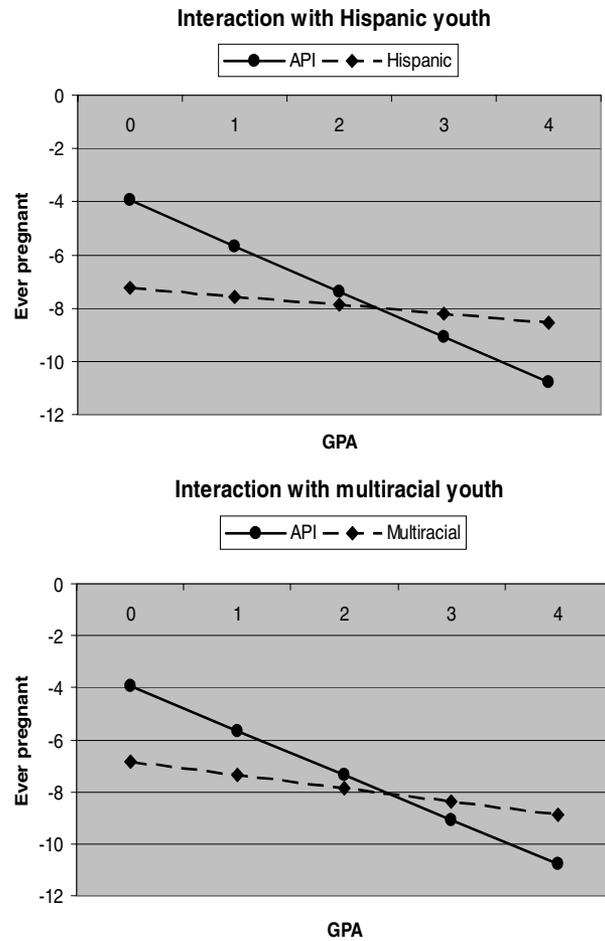
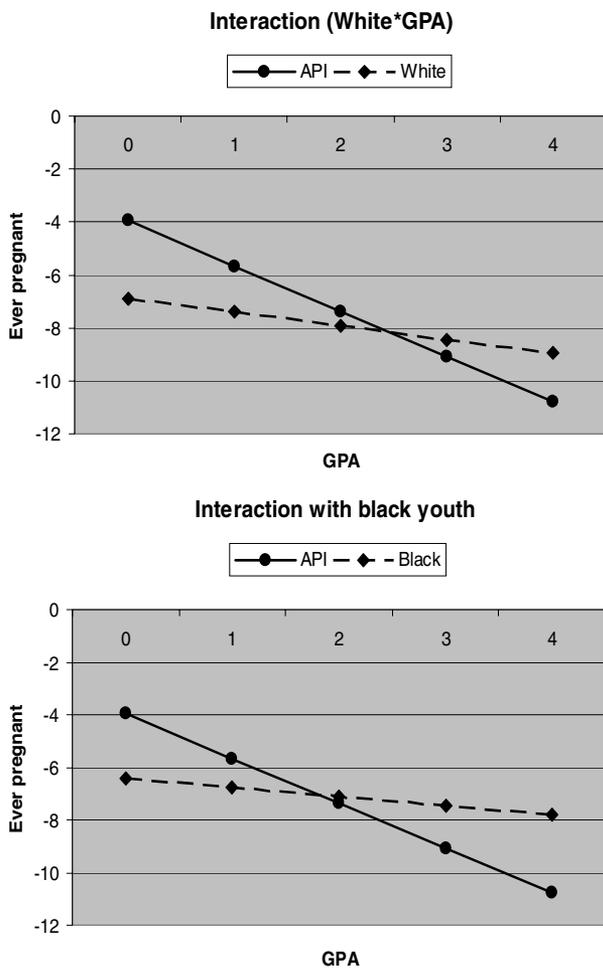


Fig. 3 Continued

(e.g., STDs). A better and more in-depth understanding of these differences can advance our understanding of youth behaviors and their associations.

A few limitations bear mentioning. The Add Health data stem from a national student population that necessarily excludes dropouts, youth in institutions, and youth who do not attend school. Thus, the findings are not generalizable to the entire group of youth. This study treats API youth as an aggregated group, combining different subgroups. The aggregated API group includes youth of Filipino (44.6%), Chinese (22.2%), Korean (7.2%), and Vietnamese (5.5%) origin. These groups differ in the level of parental education and immigrant generational status. Significant subgroup differences within API youth are also found in the rates of youth problems. It is possible that there are significant subgroup-specific associations of behaviors, especially in relation to how GPA predicts problem behaviors. However, subgroup differences were not examined in this paper primarily owing to small subgroup sample sizes. Although the next step in future research should be subgroup specific, the current study can provide baseline findings as an aggregated

Fig. 3 Interaction of GPA and having been ever pregnant

group as a baseline for future studies. Finally, the Add Health data are based on youth self-reports. Although self-report data can be less reliable, they are generally considered reliable when reporting youth's own behaviors (Johnston *et al.*, 2001).

Conclusion

To be effective, prevention efforts and interventions should be informed by a systematic understanding of rates and patterns of problem behaviors, etiology, and etiological mechanisms. It is equally critical that interventions be designed to appropriately respond to the needs of diverse racial and ethnic groups, and to not be driven by stereotypes or assumed needs. One of the first steps to establish culturally appropriate, and thus more effective, interventions is to empirically validate commonalities and differences across groups (Choi *et al.*, 2005). Shared characteristics can be targeted in broader interventions while other interventions can be tailored to the group's unique needs. Unfortunately, ethnic minority children and their behaviors are often understood on the basis of existing stereotypes or prejudices rather than empirically driven data (Lee and Zhou, 2004). A more enhanced understanding of youth behaviors and associated factors can help to reduce some of the misperceptions about minority youth.

This study is a first step in debunking the stereotypes of API youth, especially that which depict them as having polarized behaviors. It is too common that stereotypes and prejudices are held against ethnic minority youth in school, social service agencies, and other institutions that serve them. Even with evidence to the contrary, stereotypes and prejudices persist. Some suggest that any media coverage of API youth that exposes the model minority as a myth, even extreme incidents such as a gruesome murder, may help the public to see the complexity of the lives of individual API youth rather than a monolithic model minority (GoldSea, 2006; Seo, 1995). However, those extreme cases and generalizations may not eliminate stereotypes, but rather elaborate existing ones. In the murder case that was described earlier, the boy who led the killing was later found to have severe mental health problems, possibly paranoid schizophrenia (GoldSea, 2006). This fact, however, received little media attention, and the sensationalizing of the story fueled the notion of the dual-lives hypothesis. Instead, the information regarding the boy's mental health might have been used to underscore the lack of proper treatment for the problem, rather than an excuse to label the case uniquely Asian. Persistent efforts to provide more accurate information on the complex needs and dynamics of API youth and their families are warranted. Research should also continue to examine stereotypes and their consequences because the persistence of stereotypes would impede needed interventions and policy attention.

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References

- Baba Y (2001) Vietnamese gangs, cliques and delinquents. *J Gang Res* 8:1–20
- Bachman JG, Wallace JM Jr, O'Malley PM, Johnston LD, Kurth CL, Neighbors HW (1991) Racial/ethnic differences in smoking, drinking, and illicit drug use among American high school seniors, 1976–89. *Am J Public Health* 81:372–377
- Bankston CL III, Zhou M (1997) Valedictorians and delinquents: the bifurcation of Vietnamese American youth. *Deviant Behav* 18:343–364
- Choi Y, Harachi TW, Gillmore MR, Catalano RF (2005) Applicability of the Social Development Model to urban ethnic minority youth: Examining the relationship between external constraints, family socialization and problem behaviors. *J Res Adolesc* 15:505–534
- Choi Y, Harachi TW, Gillmore MR, Catalano RF (2006) Are multiracial adolescents at greater risk? Comparisons of rates, patterns, and correlates of substance use and violence between monoracial and multiracial adolescents. *Am J Orthopsychiatry* 76:86–97
- Choi Y, Lahey BB (2006) Testing model minority stereotype: Youth behaviors across racial and ethnic groups. *Soc Serv Rev* 80:419–452
- Deater-Deckard K, Dodge KA, Bates JE, Pettit GS (1996) Physical discipline among African American and European American mothers: Links to children's externalizing behaviors. *Dev Psychol* 32:1065–1072
- Dryfoos JG (1998) *Safe passage: Making it through adolescence in a risky society: What parents, schools, and communities can do.* Oxford University Press, New York
- Fiske ST, Cuddy AC, Glick P, Xu J (2002) A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *J Pers Soc Psychol* 82:878–902
- Gebe Martinez DT (1993, Issue Date) Murder suspect appeared to be on fast track to success crime: The alleged mastermind of the slaying of honors student. *Los Angeles Times*, pp 3
- GoldSea (2006) Murder, they wrought. Retrieved May 1, from the World Wide Web: <http://goldsea.com/Features2/Murders/murders4.html>
- Gutman LM, Eccles JS (1999) Financial strain, parenting behaviors, and adolescents' achievement: Testing model equivalence between African American and European American single- and two-parent families. *Child Dev* 70:1464–1476
- Harachi TW, Catalano RF, Kim S, Choi Y (2001) Etiology and prevention of substance use among Asian American youth. *Prev Sci* 2:57–65
- Hill NE, Herman-Stahl MA (2002) Neighborhood safety and social involvement: Associations with parenting behaviors and depressive symptoms among African American and Euro-American mothers. *J Fam Psychol* 16:209–219
- Hirschman C, Wong MG (1986) The extraordinary educational attainment of Asian-Americans: A search for historical evidence and explanations. *Soc Forces* 65:1–27
- Ho C, Jackson JW (2001) Attitudes toward Asian Americans: Theory and measurement. *J Appl Soc Psychol* 31:1553–1581
- Howell JC, Krisberg B, Hawkins JD, Wilson JJ (eds) (1995) *A sourcebook: Serious, violent, and chronic juvenile offenders.* Sage, Thousand Oaks, CA

- Hsia F-N, Spruijt-Metz D (2003) The meanings of smoking among Chinese American and Taiwanese American college students. *Nicotine Tob Res* 5:837–849
- Huizinga D, Jakob-Chien C (1998) The contemporaneous co-occurrence of serious and violent juvenile offending and other problem behaviors. In: Loeber R, Farrington D (eds) *Serious and violent juvenile offenders*. Sage, Thousand Oaks, CA, pp 47–67
- Ima K (1995) Testing the American dream: case studies of at-risk Southeast Asian refugee students in secondary schools. In: Rumbaut RG, Cornelius WA (eds) *California's immigrant children: Theory, research and implications for educational policy*. Center for U.S.-Mexican Studies, University of California San Diego, San Diego, pp 191–208
- Johnston LD, O'Malley PM, Bachman JG (2001) *Monitoring the Future: national results on adolescent drug use; Overview of key findings, 2000* (National Institute of Health Publication 01-4923). National Institute on Drug Abuse, Bethesda, MD
- Kang KC, Saar M (1996, Issue Date) Asian gangs rise strikes a paradox; Violence: Members often come from well-to-do homes and do well in school. *Los Angeles Times*, pp 3
- Kim S, Coletti SD, Williams C, Hepler NA (1995) Substance abuse prevention involving Asian/Pacific Islander American Communities. In: Botvin GJ, Schinke SP, Orlandi MA (eds) *Drug abuse prevention with multiethnic youth*. Sage, Thousand Oaks, CA, pp 295–326
- Kitano HHL (1969) Japanese-American mental illness. In Plog SC, Edgerton RB (eds) *Changing perspectives in mental illness*. Holt, Rinehart & Winston, New York
- Kraemer HC (2003) Current concepts of risk in psychiatric disorders. *Curr Opin Psychiatry* 16:421–430
- Lee J, Zhou M (eds) (2004) *Asian American youth: Culture, identity and ethnicity*. Routledge, New York
- Lee RG (1999) *Orientalism: Asian Americans in popular culture*. Temple University Press, Philadelphia
- Lin MH, Kwan VSY, Cheung A, Fiske ST (2005) Stereotype content model explains prejudice for an envied outgroup: Scale of anti-Asian American stereotypes. *Pers Soc Psychol Bull* 31: 34–47
- Maguin E, Loeber R (1996) Academic performance and delinquency. In: Ronry M (ed) *Crime and justice: a review of research*, vol 29. University of Chicago Press, Chicago, pp 145–264
- McLoyd VC, Cauce AM, Takeuchi DT, Wilson L (2000) Marital processes and parental socialization in families of color: A decade review of research. *J Marriage Fam* 62:1070–1093
- McNulty TL, Bellair PE (2003) Explaining racial and ethnic differences in serious adolescent violent behavior. *Criminology* 41:709–746
- Mistry RS, Vandewater EA, Huston AC, McLoyd VC (2002) Economic well-being and children's social adjustment: The role of family process in an ethnically diverse low-income sample. *Child Dev* 73:935–951
- Moffitt TE (1993) Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychol Rev* 100:674–701
- Moffitt TE, Caspi A, Rutter M, Silva PA (2001) Sex differences in antisocial behavior: Conduct disorders, delinquency and violence in the Dunedin longitudinal study. Cambridge University Press, New York
- Mrazek PJ, Haggerty RJ (eds) *Committee on Prevention of Mental Disorders, Institute of Medicine (1994) Reducing risks for mental disorders: Frontiers for prevention intervention research*. National Academy Press, Washington, DC
- Newcomb MD (1995) Drug use etiology among ethnic minority adolescents: Risk and protective factors. In: Botvin GJ, Schinke SP, Orlandi MA (eds) *Drug abuse prevention with multiethnic youth*. Sage, Thousand Oaks, CA, pp 105–129
- Price RK, Risk NK, Wong MM, Klingle RS (2002) Substance use and abuse by Asian Americans and Pacific Islanders: Preliminary results from four national epidemiologic studies. *Public Health Rep* 117:39–50
- Rumbaut RG (1997) Assimilation and its discontents: rhetoric and reality. *Int Migration Rev* 31:923–960
- Saavedra T (1993, Issue Date) Teen was savagely beaten, then buried – perhaps alive. *Orange County Register*, pp A.01
- Seo D (1995, Issue Date) Some 'A' students lead dual lives as gang-bangers: The Asian American says they are torn between values of parents, friends. Some Engage in serious crime. *Los Angeles Times*, pp 1
- StataCorp (2003) *Stata Survey Data: Reference manual*, 8th edn. Stata Press Corporation, College Station, TX
- Sue S, Kitano HHL (1973) Stereotypes as a measure of success. *J Soc Issues* 29:83–98
- Taylor CR, Stern BB (1997) Asian-Americans: Television advertising and the "model minority" stereotype. *J Advert* 26:47–61
- Thornberry TP, Huizinga D, Loeber R (1995) The prevention of serious delinquency and violence: Implications from the program of research on causes and correlates of delinquency. In: Howell JC, Krisberg B, Hawkins JD, Wilson JJ (eds) *Sourcebook on serious, violent, and chronic juvenile offenders*. Sage, Thousand Oaks, CA, pp 213–237
- Tsang DC (1995) Asian American gangbanger stereotype sentences UCI student to 15 years in prison. Retrieved April 12, from the World Wide Web: <http://sun3.lib.uci.edu/~dtsang/stereot.htm>
- Udry JR, Li RM, Hendrickson-Smith J (2003) Health and behavior risks of adolescents with mixed-race identity. *Am J Public Health* 93:1865–1870
- Yee AH (1992) Asians as stereotypes and students: Misperceptions that persist. *Educ Psychol Rev* 4:95–132
- Zhou M (1997) Segmented assimilation: issues, controversies, and recent research on the new second generation. *Int Migration Rev* 31:975–1008