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DIVERSITY WITHIN: SUBGROUP DIFFERENCES OF YOUTH PROBLEM BEHAVIORS AMONG ASIAN PACIFIC ISLANDER AMERICAN ADOLESCENTS

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Abstract

This study compares problem behaviors across a range of adolescent Asian Pacific Islander (API) subgroups using the Add Health data, and controlling for parental education or immigrant status. The study finds that Filipino, “other” API, and multiethnic API American youth are at higher risk for poorer outcomes than Chinese, Korean, and Vietnamese American counterparts. Many of these differences remained after adjusting for parental education. Controlling for immigrant status explained only some of the subgroup differences. The results suggest several shortcomings to the “model minority” stereotype that is often applied to API American youth. Research and practice should not overlook the higher risk for problem behaviors among certain API American subgroups. The findings highlight the need for more resources for API Americans, especially for the API subgroups facing higher risks.

Asian and Pacific Islander (API) Americans and their children are the fastest growing racial-ethnic group in the U.S., and as a group, they are increasingly diverse (Zhou & Gatewood, 2000). Yet we know little about subgroup differences, especially patterns of problem behaviors among API American adolescents (Harachi, Catalano, Kim, & Choi, 2001). Existing studies on youth risk behaviors typically include aggregate profiles (e.g., Bachman et al., 1991), which is problematic because there are at least 17 nationality groups and eight Pacific Islander groups within the API American population who differ in their language, cultural heritage, and religion. They also differ on history, including average length of time in the U.S., reasons for immigration, and the level of industrialization in their country of origin. Since 1980, no single subgroup has accounted for more than one-third of API Americans (Zhou & Gatewood). Although group comparisons from aggregate profiles can establish baseline information and inform policymaking (Sue, Sue, Sue, & Takeuchi, 1995), research should now begin to examine group-specific differences and similarities to advance our understanding.

UNDER THE SHADOW OF THE MODEL MINORITY STEREOTYPE

Empirical data and research findings on API Americans and their youth, even as an aggregated group, are seriously limited (Choi & Lahey, 2006). Filling this vacuum are stereotypes and prejudices used to characterize API Americans, the most popular of which is the model minority, which portrays these youth as “minorities who made it in this land of

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opportunities” (Cheng & Yang, 2000). This stereotype has persisted since the 1960 s, despite repeated efforts to refute it in early (e.g., Sue & Kitano, 1973) and more recent research (e.g., Bonacich, Ong, & Cheng, 1994; Uba, 1994; Zhou & Gatewood, 2000; Zhou & Lee, 2004). The stereotype is also tenacious amid the general public. For example, newspaper articles in recent years have regularly portrayed API American youth as “model students” and “painfully perfect” (Kristof, 2006) and as attending at top universities in “overwhelming” numbers (Egan, 2007). Many of these articles highlight the academic success of Asian youth (Rado, 2005).

One of the most serious problems that these stereotypes and prejudices create is the prospect of overlooking certain subgroups that are not faring well. In addition, the stereotypes focus primarily on school-related behaviors, neglecting other areas of youth behaviors. Even if API Americans (or some subgroups) do well in school, they may have problems and needs in other areas. To further muddy the waters, the findings of the few existing studies on the behavioral characteristics of API American are inconsistent. Several studies report better academic performance and lower rates of negative behaviors among API Americans than any other race or ethnic group (e.g., Bachman et al., 1991; Grunbaum et al., 2000; Rumbaut, 1997), while others (e.g., Baba, 2001; Cowart & Cowart, 1993) suggest disproportionate street gang memberships and violence among API American youth. Despite the heterogeneity of API Americans, the size of the population is relatively small and thus it is difficult to obtain representative samples and subsamples (Choi & Lahey, 2006). The arrival of new immigrants continues to change the characteristics of the population as well. These factors together increase the variability of research findings (Sue et al., 1995).

Using a nationally representative student sample from the National Longitudinal Study of Adolescent Health (Add Health), this study examines school-related behaviors (grades, expulsion, suspension, and retention) and the rates of youth problem behaviors among API American youth subgroups, including aggressive and nonaggressive delinquent offenses, sexual behaviors, and substance use. Nationally representative and disaggregated data such as that from Add Health can address several methodological limitations of existing studies. Sampling in past studies has either been regional in nature or has relied on clinic-based or convenience samples (Sue et al., 1995). Add Health used school-based random sampling to obtain nationally representative school samples, and the survey also provides sufficient numbers of API American subgroups to allow for several meaningful comparisons.

API AMERICAN SUBGROUP DIFFERENCES

It is beyond the scope of this article to describe the differences across API subgroups in depth (for details, see Cheng & Yang, 2000; Takaki, 1998; Zhou & Gatewood, 2000). Instead, this article focuses on those factors correlated with youth problem behaviors, such as SES, immigrant generation status, refugee status, and culture (summarized in Table 1).

Family Socioeconomic Status (SES)

The distribution of SES across API American subgroups is almost bimodal (Zhou & Gatewood, 2000). For example, 2000 census data show that more than 60% of immigrant adults from India and Taiwan, but fewer than 5% of those from Cambodia and Laos reported having college degrees. Occupation and income levels also show similar patterns, with Chinese, Asian Indian, Korean, Japanese, and Filipino Americans at the upper level, with other groups at the lower level (Zhou & Gatewood).¹ Family SES, as measured by parental education, occupation, and family income, is one of the strongest predictors of youth behaviors. Jang (2002) showed that the patterns of general deviance among API subgroups follows the means of the composite

¹A within-group difference exists among Vietnamese immigrants, with earlier immigrants more likely to have higher SES while later immigrants, who came as refugees, have lower SES (Kim, 2002).

measure of family SES, i.e., the group with the highest mean of SES reporting the lowest level of deviance while the group with the lowest mean of SES reporting the highest deviance, with the exception of Filipino Americans. Specifically, Asian Indians reported the least deviant behaviors followed by Far East Asians (Chinese, Japanese, and Korean), Southeast Asians (Vietnamese, Laotian, Cambodian, and Thai), and East Asians (Filipino). In the current study, it is expected that API youth of subgroups with high parental education mean will report better behaviors than youth of subgroups with low mean. It is further expected that after accounting for parental education, some subgroup differences will become nonsignificant.

Immigrant Generation Status

Several studies have shown that first-generation immigrant (foreign-born) children and second-generation youth who have at least one immigrant parent report better behaviors than their nonimmigrant counterparts (e.g., Choi & Lahey, 2006; Portes & Rumbaut, 2001). The assumption is that as immigrants stay longer in this country, they become more acculturated and begin to adopt the poorer behaviors of the native population. Chinese, Japanese, Asian Indian, and Filipino Americans have relatively longer immigration histories than do other API American subgroups. Japanese Americans in particular are primarily third or later generations. Filipino Americans have higher rates of mental health problems and possibly other behavioral problems than other API American groups and non-API groups (Kuo, 1984), despite the advantages that Filipino parents tend to have relative to other API American parents, including higher average education level and better English proficiency. It is argued that the higher rates of mental health problems among Filipinos may be due to the long history of colonization by Western countries and subsequent westernization (Rimonte, 1997). Despite the long history of immigration, Chinese Americans comprise more first- and second-generation immigrants than third or later generations. It is expected, in this study, that API youth of subgroups who have experienced western colonization or are comprised of later generation of immigrants will report worse behaviors than youth of subgroups who are largely recent immigrants. It is further expected that after controlling for immigrant status, some subgroup differences will disappear.

Refugee Status

Whether one arrived in the U.S. as a refugee can have a significant effect on youth behaviors. Refugees are more likely than other immigrants to have had traumatic experiences and subsequent mental health problems (Kroll et al., 1989). Parents with such difficulties are likely to struggle with their own adjustment, may be unable to provide guidance and adequate parenting to their children, and hence may put their children at risk (Tran & Ferullo, 1997). Unemployment rates among refugees are very high, which is directly related to low family SES (Cheng & Yang, 2000). Thus, refugee status predicts more problems among youth. It is expected that API subgroups that came as refugees, Vietnamese, Cambodian, and other Southeast Asians will be more likely to have problems than other groups.

Culture

One of the reasons frequently used to explain race-ethnic group differences is culture (Sue & Okazaki, 1990). Especially, the Far East Asian culture that emphasizes education and promotes social mobility through education are often cited as reasons for the high educational achievements among Chinese, Japanese, Korean, and Vietnamese Americans (Kim, 2002; Kristof, 2006).² Although many came as refugees, Vietnamese Americans report better behavioral indicators than other Southeast Asian youth, which may stem from their closer cultural ties to the Far East Asian groups (Kim, 2006). Thus, API subgroups with the Far East Asian culture are expected to report better behaviors than other API subgroups.

²Although geographically southeastern, Vietnamese culture belongs to this cultural group as well (Kim, 2002).

A primary objective of this study is to contribute to the establishment of a sound and strong epidemiological foundation on how certain groups of API youth are faring behaviorally and to initiate further exploration of why differences are emerging. This study first investigates subgroup differences on a range of youth behaviors. Parental education and immigrant status are also examined to determine whether they can explain any group differences. The findings from the population-based, national data can shed a light on disparity in youth behaviors among API American youth; inform policy, including resource allocation; and encourage future studies to investigate various individual, familial, cultural, and social factors that yield group differences. These additional studies can help develop culturally relevant and more effective interventions to prevent problem behaviors among this growing group of Americans.

METHODS

Sample

The Add Health study is a longitudinal, school-based, and nationally representative study of adolescents in grades 7–12 in 1994–1995. The primary sampling unit is the school. In-school data include information on all students who were in attendance on the interview day. From those in-school samples, the study selected a sample of youth to interview in their homes. The selection process used multiple methods to oversample certain groups, such as Chinese Americans. Wave I data include 90,118 in-school and 20,745 in-home youth interviews.

The study reported here used data from the API adolescent respondents at Wave 1 from both the in-school and in-home samples.³ The samples are composed of respondents who identified their race as “Asian or Pacific Islanders” among the categories offered. Students who checked both API and other race categories were excluded. Thus, the respondents identify as non-Hispanic, monoracial API Americans. In addition, only the respondents with sampling weights were included to ensure the generalizability of findings. The total sample size was 5,711 in-school and 1,183 in-home respondents. The average age of students was 15.0 ($SD = 1.84$) for the in-school sample and 16.2 ($SD = 1.63$) for the in-home sample. In both the school and home samples, slightly more than one-half were girls and about one-half reported being foreign-born. Forty percent reported having at least one immigrant parent. Slightly more than 6% of the in-home sample reported that their mother had received public assistance. The API subgroup composition is presented in Table 1. Sample sizes of Japanese American ($n = 36$) and Asian Indian American ($n = 29$) of in-home data were too small to include in the analyses. Although respondents did not specify, the “other API” category is likely to include Cambodian, Laotian, Malaysian, Burma, Hmong, Thai, and Pacific Islanders. Multiethnic API includes respondents who checked more than one API subcategory. These subgroups were significantly different from one another in terms of parental education and immigrant generation (Table 2).

Measures

Youth behaviors—The study focuses on externalizing behaviors, including (a) academic achievement (grades) and other school-related behaviors (retention, suspension, and expulsion); (b) aggressive delinquent offenses; (c) nonaggressive delinquent offenses; (d) substance use behaviors; and (e) sexual behavior. The study selected various youth behaviors from the survey to provide information about subgroup differences on a wide range of problems and to identify whether a certain subgroup is more vulnerable to a specific risk than others

³In-home data included a wider range of behaviors than in-school data. For example, in-school data contain items about grades and four substance use behaviors, and in-home data include all five areas of youth behaviors of this study. However, in-school data provided larger API subgroups for comparisons. There are some indicators that were contained in both in-school and in-home data (e.g., GPA, the frequency of drinking alcohol, and having been drunk). Results from both data sets on these common items are reported separately in this article.

[e.g., previous studies suggest that Japanese American fare well on academic performance, but report high rates of substance use (Price, Risk, Wong, & Klinge, 2002)].

Academic achievement and school behaviors—GPA was calculated by averaging four items of the grades respondents reported receiving the previous year in English or language arts, math, history or social studies, and science (range from 1 for *D* to 4 for *A*). In-home data contain three additional school-related items: whether respondents had repeated a grade, had been suspended, or had been expelled from school. The study examined these three school-related items individually.

Aggressive delinquent offenses—Six items in in-home data were summed to assess confrontational behaviors. Original items asked the frequency of serious physical fights, seriously injuring someone, threatening someone with weapon, taking part in a group fight, pulling a knife or a gun on someone, and shooting or stabbing someone. The study recoded responses into binary responses as (1) for having done so once or more than once, or (0) for having never committed the act. Recoding into binary responses seemed reasonable because these behaviors were not prevalent or rare among youth and showed mostly binary distribution (McNulty & Bellair, 2003). Recoded items were summed to create an index (ranging 0 to 6).

Nonaggressive delinquent offenses—The study used eight items in in-home data to measure nonaggressive delinquent offenses. Items included the frequency of painting graffiti, damaging property, stealing something worth less than \$50 in the past 12 months, and shoplifting, stealing a car, stealing something worth more than \$50, burglarizing a building, and running away from home. Because three items assessed theft—shoplifting or stealing something worth more or less than \$50—they were combined in a single item to avoid giving unbalanced weight to theft in this index. A theft variable was created in such a way that if respondents reported positively on any of the three items, theft was coded as 1. As done with the aggressive offenses index, other items were recoded into binary responses and summed (ranging 0 to 6).

Substance use—The analysis used four items from in-school data and nine items from in-home data to examine substance use. First, the in-school survey asked students whether they had drunk alcohol and the frequency of smoking, drinking alcohol and having been drunk for the past 12 months. The in-home survey asked students whether they had ever smoked cigarettes and the frequency of alcohol use, having had five or more drinks in a row, and having been drunk in the past 12 months. Because some previous studies find a relatively high rate of heavy and binge drinking among API American youth (Harachi et al., 2001), this analysis examined alcohol frequency items separately. The study also assessed multiple drug use from in-home data. Five items assessed the frequency of smoking, using marijuana, cocaine, inhalants, and other illegal drugs during the past 30 days. Responses were recoded as binary options in the same fashion as above and summed to create a multiple drug use index (ranging 0 to 5).

Sexual behavior—One item in in-home survey asked whether students ever had sex.

Covariates

The analysis adjusted two covariates when comparing subgroup differences. The first covariate, parental education, was derived from youth reports. 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. The second covariate, immigrant generation, was computed from the immigrant status of the parents and that of adolescents. It was coded as 0 if the youth was foreign-born (immigrant), coded as 1 if the youth was U.S. born, but at

least one parent was foreign-born (second generation) and coded as 2 if both the youth and parents were U.S. born (third or later generation). This measure is consistent with other studies.

Analytic Strategy

The current analysis adjusts for sampling design in the Add Health survey. Add Health data were stratified and cluster-correlated at the school level and samples were selected with unequal probabilities of inclusion. This study used *Stata* (version 9.0), which handles clustered complex survey data, probability sampling weights, and stratification.

First, the means and proportions of each variable were generated for each subgroup. To test for any statistically significant subgroup differences, the means and proportions of each variable were then compared across groups using survey regression command. In this initial step, covariates were not included. The *F*-statistics from the survey commands are interpreted similarly to those from ANOVA or from regular regressions.⁴

Because survey regression is a regression model, one of the groups has to be dropped from the analyses as a reference group to make comparisons. The group with the largest sample size (Filipino Americans) is the reference group in the survey regression analysis. The overall subgroup differences indicated by *F*-statistics are almost identical regardless of which group is used as a reference. The analysis then immediately compared other subgroups by adding a series of *lincom* commands following the survey regression model for each youth behavior. Results from survey regression and *lincom* comparisons together provided 15 comparisons in the in-home data (for six subgroups) and 28 comparisons in the in-school data (for eight subgroups) for each behavior. These comparisons are equivalent to Bonferroni tests in ANOVA.

The analysis added each covariate to the survey regression models one at a time. The analysis used the *F*-statistics to evaluate significant statistical subgroup differences after adjusting covariates. As with the unadjusted models, the survey regression models (with Filipino Americans as a reference group) were followed by a series of *lincom* commands to make comparisons among subgroups, accounting for covariates.

RESULTS

Tables 3-1 and 3-2 show proportions and means of each behavior by API subgroup.⁵ Results from in-school data show that all of the behaviors examined—GPA, ever drinking, frequency of smoking, drinking alcohol, and whether the youth had ever been drunk—were statistically different across API subgroups (*F* statistics ranged from 1.66 to 6.08; Table 3-1). In-home results were similar (Table 3-2). The exceptions (no differences) were found in school suspension, expulsion, and nonaggressive offenses.

Table 4 shows specific subgroup differences from in-school data. The first column shows unadjusted comparisons, the second column is adjusted for parental education, and the third is adjusted for immigrant status. Because there are numerous behaviors and many possible combinations of comparisons, the general pattern of results are described, rather than providing a description of every specific individual subgroup difference.

⁴The numerator degrees of freedom of *F*-statistics are the same from ANOVA and survey regression. However, the denominator degrees of freedom are generally different; those from survey regression reflect the sample size as the number of clusters (e.g., the number of primary sampling unit) rather than the number of individual observations.

⁵The tables report statistics from survey data analyses accounting for sampling designs and from ANOVA or cross-tabs (unweighted) for reference. However, the following discussion focuses on the results that take into account sampling design.

With a few exceptions, Filipino, other API, and multiethnic API American youth reported more problem behaviors than Chinese, Korean, and Vietnamese American youth. For instance, GPA was significantly lower for Filipino, other API, and multiethnic API Americans than Chinese Americans. Multiethnic API Americans also reported lower GPA than Korean Americans. The proportion of youth who had ever had a drink was higher among Filipino than Chinese, Asian Indian, and Vietnamese Americans. It was higher among other API than Vietnamese Americans, and higher among multiethnic API than Chinese, Korean, and Vietnamese Americans. Similar patterns were found in the frequency of smoking and drinking and having been drunk.

Although less frequent, Japanese and Asian Indian American youth reported more problem behaviors than Chinese, Korean, and Vietnamese Americans. For example, Japanese Americans reported lower GPA than Chinese Americans, and Asian Indian Americans reported lower GPA than Chinese, Korean, and Vietnamese Americans. In addition, Japanese Americans reported significantly higher rates of having drunk alcohol and higher frequencies of smoking than Chinese and Vietnamese American youth.

Adjusting for parental education had little effect, with one exception: the differences between multiethnic API and Korean Americans on the proportion who had ever drunk alcohol were no longer significant. Accounting for parental education introduced numerous new subgroup differences. For instance, the differences on GPA between Filipino and Korean Americans and between Filipino and Vietnamese Americans became statistically significant when parental education was adjusted.

When immigrant status was accounted for, the differences between Japanese and Chinese Americans on GPA, drinking, and smoking frequency disappeared. In addition, the difference between Japanese and Vietnamese Americans on the frequency of smoking disappeared. The differences between multiethnic API and Korean Americans on GPA and ever drinking also became nonsignificant. Few additional subgroup differences emerged after adjusting for immigrant status. The exceptions were that Korean and Vietnamese Americans reported lower GPA than Chinese Americans and more Korean Americans reported ever having drunk alcohol than Vietnamese Americans, when immigrant status was adjusted.

The results from in-home data are similar to those from in-school.⁶ Among school-related behaviors, a higher proportion of other API Americans reported repeating a grade than Korean, Filipino and multiethnic API Americans. A higher proportion of multiethnic API Americans had been suspended than Filipino Americans. Higher proportions of Filipino Americans had been expelled than Vietnamese and multiethnic API Americans. The results on GPA from in-home data were largely similar to those from in-school data, except that Korean Americans reported lower GPA than Chinese Americans, and Filipino Americans reported lower grades than Korean Americans.

Aggressive delinquent offenses were higher among Korean, Filipino, other API, and multiethnic API than Chinese Americans, and nonaggressive delinquent offenses were higher among Filipino Americans than Chinese Americans.

Having ever smoked followed the general pattern, with one exception: Korean Americans reported a higher rate than Vietnamese Americans. Filipino Americans were more likely than Vietnamese Americans to report frequent drinking, as were multiethnic API Americans compared with all other groups in the in-home survey. The differences between Filipino

⁶Due to space limitations, the specific subgroup differences from in-home samples are not shown in tables. The general patterns are described in the text. The detailed information is available from the author.

Americans and other groups in the in-home data set were less extensive than in the in-school data set. Another notable finding in in-home data was that multiethnic API Americans reported significantly higher rates of the frequency of drinking, having five or more drinks, having been drunk, and multiple substance use than Filipino American youth. Except for this difference between multiethnic API Americans and Filipino Americans, other subgroup differences in the frequency of having five or more drinks, having been drunk, number of multiple substances used, and the rates of having sex fit the general pattern: Filipino, other API, and multiethnic API Americans reported higher rates of these behaviors than Chinese, Korean, and Vietnamese American youth.

As it was the case in the in-school data, controlling for parental education did not change the general pattern of the subgroup differences. Exceptions include differences in smoking between multiethnic API and Korean Americans and differences in multiple substance use between multiethnic API and Korean Americans and between multiethnic API and Filipino Americans (significant differences disappeared). Multiethnic API youth reported lower average parental education than Korean and Filipino Americans. The difference between Filipino and Vietnamese Americans became significant, which was also true of the in-school data.

When immigrant status was adjusted, again, the majority of significant subgroup differences remained with a few exceptions. For example, the significant differences in having had sex between other API and Vietnamese Americans, between multiethnic API and Korean Americans, and between multiethnic API and Vietnamese Americans disappeared.

DISCUSSION

Using the nationally representative samples of students, this study identified several significant API American subgroup differences in rates of problem behaviors. Specifically, Chinese, Korean, and, contrary to the expectation, Vietnamese American youth reported largely similar outcomes. However, relative to these three groups, Filipino, other API, and multiethnic API American groups reported poorer outcomes. These differences were quite extensive and consistent, ranging from lower GPA, more aggressive and nonaggressive delinquent offenses, more sexual experiences, and greater substance use. Although, the patterns of behaviors among Japanese and Asian-Indian Americans were not as distinct as the others, the general pattern of subgroup differences in youth problem behaviors supports the preliminary indication in the literature of important differences between API American subgroups.

With only a few exceptions, the subgroup differences found in unadjusted comparisons remained significant after accounting for parental education or immigrant status. That is, despite the significant differences in parental education levels across API American subgroups, parental education did not often explain subgroup differences in youth problem behaviors. However, several new significant differences emerged when parental education was adjusted. This suggests that had there been no parental education difference across API subgroups, the differences in youth behavior could have been even more significant. However, the findings may also be related to measurement issues. Ideally, SES should be measured with multiple indicators, including household income, occupation, and assets. However, parents' education was the only variable available in the in-school data. Among immigrant families, an education obtained in a foreign country may not translate into corresponding jobs and income in the U.S. Thus, if more SES variables were available, they might better explain some of the subgroup differences.

Some of the differences were explained by immigrant generation status. but again many of the significant subgroup differences remained and some new differences surfaced. One of the

notable findings is that the differences between Chinese and Japanese Americans largely disappeared when accounting for immigrant status. This finding suggests that the poorer outcomes among Japanese American youth in unadjusted comparisons stem from the larger proportion of third-generation or later Japanese Americans than Chinese Americans (67.4% versus 16.7% within the in-school data). Multiethnic API Americans have a high proportion of third-generation or later immigrants as well. However, controlling for immigrant status did not eliminate the subgroup differences between multiethnic API and other API subgroups. Therefore, some other factor may explain their poor outcomes.

These findings about immigrant status lead to the question of what immigrant status means. First, immigrants, both adults and children, report better behaviors and health and mental health outcomes than their nonimmigrant counterparts (Portes & Rumbaut, 2001). Thus, being an immigrant itself can be a protective factor. Second, scholars suggest that the better outcomes among immigrants can be explained by an “immigrant ethos”; a strong motivation to succeed coupled with close family ties leads immigrant parents to prod their children to excel at school and behave well (Bankston & Zhou, 2002). This suggestion is, in part, supported by the less problem behaviors reported by API American youth, especially for substance use, than their peers in their country of origins (Grunbaum et al., 2000). Immigrant status is also often used as a proxy for the degree of acculturation; a longer residence in U.S. tends to be correlated with a higher level of acculturation, which is, in turn, linked to the deterioration of positive behaviors among immigrants (Portes & Rumbaut, 2001). However, it may not be the years of residence per se but the degree to which one adopts the culture of mainstream society that influences behaviors (Portes & Rumbaut, 2001). For example, despite the long history of immigration among Filipino Americans, the majority of the group was either first or second generation. However, this high proportion of recent immigrants did not result in better behaviors among Filipino Americans. It has been suggested that immigrants from the Philippines begin the acculturation process before they emigrate (Agbayani-Siewert, 2004). It would have been possible to gain more insights in this matter if the dataset provided a scale specifically developed to measure the degree of acculturation. This should be the next step in research.

Without additional studies, we can only speculate on the unexpected outcome for Vietnamese American youth. The findings are intriguing, especially because parental education was lowest among all groups studied and many Vietnamese families came as refugees. One could argue that Vietnamese culture buffers risks of negative behaviors. If so, identifying cultural elements that are specifically related to improved youth behaviors should be the next step in future research. Culture is a complex construct, and isolating its effect is challenging. However, a more systematic understanding of culture and acculturation could greatly advance our understanding, and as such calls for more attention and effort.

Although the differences among Chinese, Korean and Vietnamese Americans were relatively small, Korean Americans performed worse than Chinese and Vietnamese counterparts in some areas. Korean Americans are identified as a culturally marginalized and separated group, and they also report higher levels of stress associated with cultural adaptation than other immigrant groups (Berry, Kim, Minde, & Mok, 1987). Future research should investigate whether these findings are reflections of these unique experiences of social integration.

The differences between multiethnic API and other subgroups, especially in the in-home data, were large and extensive. Little is known about multiracial and multiethnic youth and their behaviors because often they are not regarded as a distinct group. However, when examined as a distinct group, multiracial youth have higher rates of multiple risk behaviors than monoracial youth (Choi, Harachi, Gillmore, & Catalano, 2006). Although multiethnic API Americans are technically monoracial, it is possible that they share the characteristic of multiple

cultural heritages, and multiethnic groups may face similar challenges that lead to poorer outcomes.

This study is not without limitations. The Add Health data were selected from a national student population, which necessarily excludes youth who do not attend school. Thus, the findings are only generalizable to student populations. In addition, several subgroups were aggregated into other API American category despite their differences in national origin and possibly other important factors. However, it seemed important to include as many API subgroups as possible when investigating subgroup differences. Additional studies should be conducted to better understand small subgroups of API Americans, especially because we know now that they potentially exhibit more problems than other API subgroups.

Although the results were quite consistent, there were some differences in the demographic profiles across in-school and in-home data. This is intriguing given that in-home data were randomly selected from the in-school data. The difference may reflect how the characteristics of API American samples can fluctuate even when they are randomly selected, probably owing to the small sample size. Finally, the age of the data set is noted. It would be ideal to have more recent data. However, Add Health is one of the very few surveys that include enough API subgroup samples for meaningful analyses. It is hoped that future large-scale data include many and enough API American samples in their data.

Implications for Research and Intervention

The results from this study show that subgroups of API American youth do not behave uniformly. The field, in its efforts to design interventions and policies that are responsive to the needs of these populations, should not overlook this diversity, especially the higher risk for problem behaviors among certain API American subgroups. Resources for prevention and intervention of youth problem behaviors are inadequately allocated to API groups (Sue et al., 1995). The findings from this study further underscore the need for more resources, especially for the API subgroups facing higher risk.

The next step in developing a more inclusive body of research and effective intervention should be to explain these subgroup differences, with a special focus on increasing an understanding of the two seemingly distinct clusters of subgroups with divergent outcomes in some behaviors. A critical examination of youth development among API American subgroups could illuminate factors that promote distinct outcomes. In other words, it would be useful to identify the factors associated with positive behaviors among Chinese, Korean, and especially Vietnamese American youth. At the same time, more attention is needed to identifying the factors associated with relatively poorer outcomes among Filipino, other API, and multiethnic API Americans. The discrepancies of problem behaviors between Chinese and Filipino American youth were most extensive, and coupled with several studies that report heightened risk of mental health problems among Filipino Americans (e.g., Wolf, 1997), it seems urgent to conduct more research on Filipino Americans. The population of multiracial and multiethnic youth is increasing dramatically, yet we know little about them (Choi et al., 2006). A recent study suggests that, for multiracial youth, a strong sense of race and ethnic identity can lower the rates of problems behaviors while the experience of racial discrimination likely increases the risk of problem behaviors (Choi et al., 2006). The similar patterns can be expected for multiethnic API Americans.

The “model minority” myth is clearly an inadequate description of the diversity of API Americans. It is imperative, however, to resist the urge to crudely divide subgroups of API Americans into two extremes. It is hoped that this study increases our awareness that API American are a heterogeneous group, with some subgroups of youth at higher risk in some areas and needing more attention than others. These findings may also indicate a need for

sustained research to better understand the reasons for these differences so that appropriate interventions can be planned.

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REFERENCES

- Agbayani-Siewert P. Assumptions of Asian American similarity: The case of Filipino and Chinese American students. *Social Work* 2004;49:39–51. [PubMed: 14964517]
- Baba Y. Vietnamese gangs, cliques and delinquents. *Journal of Gang Research* 2001;8:1–20.
- Bachman JG, Wallace JM Jr, O'Malley PM, Johnston LD, Kurth CL, Neighbors HW. Racial/ethnic differences in smoking, drinking, and illicit drug use among American high school seniors, 1976–89. *American Journal of Public Health* 1991;81:372–377. [PubMed: 1994746]
- Bankston CL III, Zhou M. Being well vs. doing well: Self-esteem and school performance among immigrant and nonimmigrant racial and ethnic groups. *International Migration Review* 2002;36:389–415.
- Bonacich, E.; Ong, P.; Cheng, L., editors. *The new Asian immigration in Los Angeles and global restructuring (Asian American history and culture)*. Temple University Press; Philadelphia: 1994.
- Cheng, L.; Yang, PQ. The “model minority” deconstructed.. In: Zhou, M.; Gatewood, JV., editors. *Contemporary Asian America*. NYU Press; New York: 2000. p. 459–482.
- Choi Y, Harachi TW, Gillmore MR, Catalano RF. Are multiracial adolescents at greater risk? Comparisons of rates, patterns, and correlates of substance use and violence between monoracial and multiracial adolescents. *American Journal of Orthopsychiatry* 2006;76:86–97. [PubMed: 16569131]
- Choi Y, Lahey BB. Testing model minority stereotype: Youth behaviors across racial and ethnic groups. *Social Service Review* 2006;80:419–452.
- Cowart MT, Cowart RE. Southeast Asian refugee youth and the cycle of violence. *NASSP Bulletin* 1993;41–45.
- Egan T. Little Asia on the hill. *New York Times*. 2007
- Harachi TW, Catalano RF, Kim S, Choi Y. Etiology and prevention of substance use among Asian American youth. *Prevention Science* 2001;2:57–65. [PubMed: 11519375]
- Jang SJ. Race, ethnicity, and deviance: A study of Asian and non-Asian adolescents in America. *Sociological Forum* 2002;17:647–680.
- Kim RY. Ethnic differences in academic achievement between Vietnamese and Cambodian children: Cultural and structural explanations. *The Sociological Quarterly* 2002;43:213–235.
- Kristof ND. The Model Students. *New York Times* 2006:Op–Ed 4.13.
- Kroll J, Habenicht M, Mackenzie T, Yang M, Chan S, Vang T, et al. Depression and posttraumatic stress disorder in Southeast Asian Refugees. *American Journal of Psychiatry* 1989;146:1592–1597. [PubMed: 2589553]
- Kuo W. Prevalence of depression among Asian Americans. *Journal of Nervous and Mental Disease* 1984;172:449–456. [PubMed: 6747614]
- McNulty TL, Bellair PE. Explaining racial and ethnic differences in serious adolescent violent behavior. *Criminology* 2003;41:709–746.
- Portes, A.; Rumbaut, RG., editors. *Legacies: the story of the immigrant second generation*. University of California Press & Russell Sage Foundation; Berkeley, New York: 2001.
- Price RK, Risk NK, Wong MM, Klingler RS. Substance use and abuse by Asian Americans and Pacific Islanders: Preliminary results from four national epidemiologic studies. *Public Health Reports* 2002;117:39–50.
- Rado D. Asians thank parents for top grades. *Chicago Tribune* 2005:News 28.
- Rimonte, N. Colonialism's legacy: The inferiorizing of the Filipino.. In: Root, MPP., editor. *Filipino Americans: Transformation and identity*. Sage; Thousand Oaks, CA: 1997.

- Rumbaut, RG. Working Paper No. 215. The Jerome Levy Economics Institute of Bard College; Annandale-on-Hudson, NY: 1997. Achievement and ambition among children of immigrants in Southern California..
- Sue S, Kitano HHL. Stereotypes as a measure of success. *Journal of Social Issues* 1973;29:83–98.
- Sue S, Okazaki S. Asian-American educational achievements: A phenomenon in search of an explanation. *American Psychologist* 1990;45:913–920. [PubMed: 2221563]
- Sue S, Sue DW, Sue L, Takeuchi DT. Psychopathology among Asian Americans: A model minority? *Cultural Diversity and Mental Health* 1995;1:39–51. [PubMed: 9225547]
- Takaki, R. *Strangers from a different shore: A history of Asian Americans*. Penguin Books; New York: 1998.
- Tran T, Ferullo DL. Indochinese mental health in North American: measures, status and treatments. *Journal of Sociology and Social Welfare* 1997;24:3–20.
- Uba, L. *Asian Americans: Personality patterns, identity and mental health*. Guilford Press; New York: 1994.
- Wolf DL. Family secrets: Transnational struggles among children of Filipino immigrants. *Sociological Perspectives* 1997;40:457–482.
- Zhou, M.; Gatewood, JV. *Contemporary Asian America*. New York University; New York: 2000.
- Zhou, M.; Lee, J. Introduction: The making of culture, identity, and ethnicity among Asian American youth.. In: Lee, J.; Zhou, M., editors. *Asian American youth: Culture, identity and ethnicity*. Rutledge; New York: 2004. p. 1-30.

Table 1
Summary of Group Characteristics and Sample Sizes for API American Subgroups in This Study

<i>API subgroups</i>	<i>In-school sample</i>		<i>In-home sample</i>		<i>Parental SES</i>	<i>Immigrant status</i>	<i>Refugee status</i>	<i>Far East culture</i>
	<i>N</i>	<i>% of total</i>	<i>N</i>	<i>% of total</i>				
Asian Indian American	542	9.5	—	—	High mean of parental education; integrated into the mainstream	Long history of immigration; even distribution of 1st thru 3rd or later generation	No	No
Chinese American	749	13.1	262	22.2	High mean of parental education; entrepreneurial (business); high proportion of high-skill occupations	Long history but largely recent immigrants	No	Yes
Filipino American	1579	27.7	528	44.6	High mean of parental education; many of parents have professional jobs (e.g. nurses, lab technicians); low proportion of high-skill occupations	Long history of immigration; many recent immigrants and some 3rd and later generation.	No	No
Japanese American	521	9.1	—	—	High mean of parental education; integrated into the mainstream	Long history of immigration; mostly 3rd or later generation	No	Yes
Korean American	664	11.6	85	7.2	High mean of parental education; large proportion in family based small business	Mostly recent immigrants	No	Yes
Multietnic Asian American	497	8.7	77	6.5	Low mean of parental education, (e.g. 5% of college graduates among Cambodians and Laots); mostly low-skill occupations	Mostly recent immigrants	Yes/No	No
Other Asian American	660	11.6	166	14.0				
Vietnamese American	499	8.7	65	5.5	Earlier group with high mean of education level and later group with low mean; many parents in low-skill occupations	Mostly recent immigrants	Yes/No	Yes

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Table 2
Immigrant Status and Parental Education by API American Subgroups

	Asian Indian	Chinese	Filipino	Japanese	Korean	Multietnic API	Other API	Vietnamese
<i>In-school (n (%))</i>								
<i>Immigrant status</i>								
Immigrant	169 (31.18)	285 (38.05)	641 (40.60)	73 (14.01)	407 (61.30)	84 (16.90)	261 (39.55)	304 (60.92)
2nd generation	178 (32.84)	339 (45.26)	636 (40.28)	97 (18.62)	194 (29.22)	90 (18.11)	221 (33.48)	147 (29.46)
3rd generation & later	195 (35.98)	125 (16.69)	302 (19.13)	351 (67.37)	63 (9.49)	323 (64.99)	178 (26.97)	48 (9.62)
total	542 (100)	749 (100)	1,579 (100)	521 (100)	664 (100)	497 (100)	660 (100)	499 (100)
<i>Parent education</i>								
Mean (SD)	3.39 (1.41)	2.91 (1.48)	3.08 (1.27)	3.30 (1.16)	2.95 (1.30)	2.80 (1.20)	2.73 (1.38) $\chi^2 = 516.61$	2.04 (1.23) $p < .001$
<i>In-home (n (%))</i>								
<i>Immigrant status</i>								
Immigrant	12 (41.38)	110 (41.98)	308 (58.33)	3 (8.33)	65 (76.47)	14 (18.18)	56 (33.73)	43 (66.15)
2nd generation	17 (58.62)	128 (48.85)	199 (37.69)	8 (22.22)	16 (18.82)	26 (33.77)	87 (52.41)	20 (30.77)
3rd generation & later	0 (0.00)	24 (9.16)	21 (3.98)	25 (69.44)	4 (4.71)	37 (48.05)	23 (13.86)	2 (3.08)
Total	29 (100)	262 (100)	528 (100)	36 (100)	85 (100)	77 (100)	166 (100)	65 (100)
<i>Parent education</i>								
Mean (SD)	3.76 (1.27)	3.07 (1.47)	3.38 (1.09)	3.72 (1.06)	3.23 (1.23)	2.95 (1.21)	2.55 (1.29) $\chi^2 = 194.26$	2.28 (1.17) $p < .001$

Table 3-1

In-School Data: Weighted Means/Proportions

<i>API subgroups</i>	<i>GPA Mean</i>	<i>Ever drunk Yes (%)</i>	<i>Smoking Mean</i>	<i>Drinking alcohol Mean</i>	<i>Drunk Mean</i>
Asian Indian	2.82	44.92	1.05	1.04	0.66
Chinese	3.22	41.05	0.74	0.90	0.52
Filipino	2.95	52.68	1.22	1.23	0.81
Japanese	3.04	56.36	1.46	1.31	0.88
Korean	3.11	47.95	0.98	0.89	0.47
Multithnic API	2.92	58.54	1.60	1.53	1.08
Other API	2.98	50.60	1.01	1.18	0.83
Vietnamese	3.07	35.78	0.81	0.87	0.63
Unweighted Stat	$F = 13.67$ ***	$\chi^2 = 92.78$ ***	$F = 7.84$ ***	$F = 7.07$ ***	$F = 5.17$ ***
Weighted Stat	$F = 6.08$ ***	$F = 5.78$ ***	$F = 3.39$ **	$F = 2.08$ **	$F = 1.66$

* $p < .05$

** $p < .01$

*** $p < .001$, and n.s. nonsignificant.

Table 3-2

In-Home Data: Weighted Means/Proportions

API subgroups	GPA Mean	Retention Yes (%)	Suspension Yes (%)	Expulsion Yes (%)	Agg delin Mean	Nonagg Mean	Ever smoked Yes (%)	Drinking Mean	5+ drinks Mean	Drunk Mean	Mtp subuse Mean	Sex Yes (%)
Asian Indian	—	—	—	—	—	—	—	—	—	—	—	—
Chinese	3.48	7.96	11.13	0.10	0.33	0.57	27.83	0.47	0.10	0.09	0.12	9.80
Filipino	2.97	7.33	12.00	1.17	0.61	0.88	47.88	0.67	0.39	0.31	0.33	25.47
Japanese	—	—	—	—	—	—	—	—	—	—	—	—
Korean	3.23	8.93	18.18	2.50	0.65	0.68	38.16	0.55	0.23	0.22	0.21	9.70
Multithnic	2.96	7.38	21.01	0.00	0.71	0.87	54.48	1.20	0.69	0.65	0.65	27.98
Other API	3.03	20.78	15.45	2.82	0.72	0.77	54.70	0.50	0.40	0.30	0.25	26.93
Vietnamese	3.21	12.85	10.79	0.00	0.42	0.71	20.22	0.40	0.04	0.05	0.03	10.02
Unweighted	$F = 26.33^{***}$	n.s.	$\chi^2 = 38.84^{***}$	$\chi^2 = 17.66^{***}$	$F = 9.91^{***}$	$F = 6.10^{**}$	$\chi^2 = 58.34^{***}$	$F = 6.50^{***}$	$F = 8.56^{***}$	$F = 6.73^{***}$	$F = 11.73^{***}$	$\chi^2 = 78.96^{***}$
Weighted	$F = 10.29^{***}$	$F = 2.56^*$	n.s.	n.s.	$F = 7.19^{***}$	n.s.	$F = 4.87^{**}$	$F = 3.29^{**}$	$F = 5.87^{**}$	$F = 5.32^{**}$	$F = 6.42^{***}$	$F = 4.21^{**}$

* $p < .05$

** $p < .01$

*** $p < .001$, and n.s. nonsignificant.

Table 4
In-School Subgroup Differences with Covariates Unadjusted and Adjusted

		<i>Unadjusted</i>	<i>Parental education adjusted</i>	<i>Immigrant status adjusted</i>
GPA				
Asian Indian (A)		A<C; A<K ^{*****}	A<C ^{***} ; A<J [*] ; A<K ^{**} ; A<V [*]	A<C; A<J ^{*****}
Chinese (C)				
Filipino (F)		F<C ^{***}	F<C; F<K ^{*****}	
Japanese (J)		J<C [*]	J<C [*]	
Korean (K)				
Multiethnic (M)		M<C; M<K ^{*****}	M<C; M<K ^{*****}	M<C ^{**}
Other (O)		O<C ^{***}	O<C [*]	O<C ^{**}
Vietnamese (V)				V<C [*]
Unweighted Stat	Covariates (PE/IM)		$F = 162.56^{***}$	$F = 42.85^{**}$
	Group differences	$F = 13.67^{***}$	$F = 15.82^{***}$	n.s.
Weighted Stat	Coefficients of covariates		$b = 0.12^{***}$	$b = -0.13^{***}$
	Model fit	$F = 6.08^{***}$	$F = 9.02^{***}$	$F = 8.45^{***}$
Ever drunk				
Asian Indian (A)				
Chinese (C)				
Filipino (F)		F>C; F>A ^{*****}	F>C; F>A ^{***}	F>C; F>A ^{*****}
Japanese (J)		J>C; J>V ^{*****}	J>C; J>V ^{*****}	J>V [*]
Korean (K)				K>V [*]
Multiethnic (M)		M>C ^{***} ; M>A ^{***} ; M>K [*] ; M>V ^{***} ; O>V ^{**}	M>C ^{***} ; M>F [*] ; M>A ^{***} ; M>V ^{***} ; O>C; O>V ^{**}	M>C; M>A ^{*****}
Other (O)				O>V [*]
Vietnamese (V)				
Unweighted Stat	Covariates (PE/IM)		n.s.	$F = 32.07^{***}$
	Group differences	$\chi^2 = 92.78^{***}$	$F = 10.89^{***}$	$F = 6.07^{*}$
Weighted Stat	Coefficients of covariates		n.s.	$b = 4.59^{***}$
	Model fit	$F = 5.78^{***}$	$F = 4.70^{**}$	$F = 5.89^{***}$
Smoking				
Asian Indian (A)				
Chinese (C)				
Filipino (F)		F>C; F>V ^{*****}	F>C; F>A ^{*****}	F>C; F>V ^{*****}
Japanese (J)		J>C; J>V ^{**}	J>C; J>V ^{*****}	
Korean (K)				
Multiethnic (M)		M>C; M>K ^{***}	M>C ^{***} ; M>A ^{**} ; M>K [*] ; M>V ^{**} ; M>O [*] ; O>C; O>V ^{**}	M>C; M>V ^{***}
Other (O)				
Vietnamese (V)				
Unweighted Stat	Covariates (PE/IM)		$F = 25.81^{***}$	$F = 17.72^{***}$
	Group differences	$F = 7.84^{***}$	$F = 11.02^{***}$	$F = 5.41^{*}$
Weighted Stat	Coefficients of covariates		$b = -0.10^{**}$	$b = 0.18^{**}$
	Model fit	$F = 3.39^{**}$	$F = 4.47^{**}$	$F = 3.35^{**}$
Drinking				
Asian Indian (A)				
Chinese (C)				
Filipino (F)		F>C; F>K ^{****}	F>C; F>K ^{*****}	F>C; F>K ^{****}
Japanese (J)			J>C ^{**}	
Korean (K)				
Multiethnic (M)		M>C ^{**} ; M>A [*] ; M>K ^{***} ; M>V ^{**}	M>C ^{**} ; M>A ^{**} ; M>K ^{**} ; M>V ^{**} ; O>C; O>K ^{***}	M>C ^{**} ; M>A [*] ; M>K [*] ; M>V [*]
Other (O)				
Vietnamese (V)				
Unweighted stat	Covariates (PE/IM)		$F = 9.30^{**}$	$F = 19.23^{***}$
	Group differences	$F = 7.07^{***}$	$F = 9.48^{***}$	$F = 5.72^{*}$
Weighted stat	Coefficients of covariates		n.s.	$b = 0.14^{*}$
	Model fit	$F = 3.39^{**}$	$F = 2.55^{*}$	n.s.
Drunk				
Asian Indian (A)				
Chinese (C)				
Filipino (F)		F>C [*]	F>C; F>K ^{***}	F>C; F>K ^{**}
Japanese (J)			J>C ^{**}	
Korean (K)				
Multiethnic (M)		M>C; M>A ^{***}	M>C ^{**} ; M>A [*] ; M>V [*] ; M>K ^{**}	M>C; M>K ^{**}

		<i>Unadjusted</i>	<i>Parental education adjusted</i>	<i>Immigrant status adjusted</i>
Other (O)		O>C; O>K ^{**}	O>C; O>K ^{****}	O>C; O>K ^{**}
Vietnamese (V)				
Unweighted stat	Covariates (PE/IM)		$F = 9.30^{**}$	$F = 19.23^{***}$
	Group differences	$F = 5.17^{***}$	$F = 9.48^{***}$	$F = 5.72^*$
Weighted stat	Coefficients of covariates		$b = -0.09^{**}$	$b = 0.13^*$
	Model fit	$F = 1.66^{**}$	$F = 3.74^{**}$	n.s.

Note. X>Y indicates that the group X reports significantly higher rates of the behavior than the group Y.

*
 $p < .05$

**
 $p < .01$

 $p < .001$, and n.s. nonsignificant.