Explaining Race and Ethnic Disparities in Educational Ambitions

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Abstract

In this study, we investigate the primary hypotheses proposed to account for differences in educational ambitions across race and ethnic communities in the United States. The most widely cited interpretation is that of socioeconomic differences in families of origin. The children of majority population are advantaged relative to minorities because of higher levels of parental education, family income, and other socioeconomic resources. An alternative interpretation stresses cultural factors, broadly defined. The lower educational ambitions of some minority students may result from lower expectations (or encouragement) of parents, peers, and teachers. Other related dimensions of the cultural interpretation include family socialization (parenting styles) and the behaviors and outlooks of students, including absenteeism, completion of homework, and self-images. These interpretations are, of course, not mutually exclusive, and we examine their overlap in a comprehensive model of educational ambitions. Educational ambitions are measured along a continuum from fairly abstract educational aspirations to concrete plans for college right after high school. The data, based on a sample of almost 5,000 high school seniors in several West Coast metropolitan school districts, reveal patterns of minority over-achievement as well as under-achievement—measured in terms of educational ambitions.

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INTRODUCTION

With high school graduation rates (including GED certification) approaching 90 percent, college education has become the primary stepping-stone to socioeconomic mobility in the United States. At the present time, about half of all high school graduates go on to some sort of post-secondary schooling, although less than half of those who begin college attain a bachelor's degree. The economic fault line between high school and college graduates is wider than ever—college graduates have average earnings 70 percent higher than those of high school graduates (Day and Newburger, 2002). With such wide differences in economic outcomes between the education "haves" and "have-nots," the question of opportunity and access to higher education lies at the heart of the American dream of upward mobility.

There remain, however, significant disparities in college attendance by socioeconomic origins and by race and ethnicity. African American and Hispanic youth are much less likely to enter and to graduate from college than white youth (Mare, 1995). Not all race and ethnic minorities are educationally disadvantaged, however. Asian American students are more likely to attend college than any other group, and many new immigrants (and the children of immigrants) have above average levels of educational enrollment and achievement (Hirschman 2001, Kao and Tienda 1995). In this paper, we seek to understand the sources of race and ethnic disparities in higher education with an in-depth analysis of the educational ambitions.

Adolescent ambitions provide an important vantage point to examine the formative effects of social origins on socioeconomic attainment. In addition to the fact that educational aspirations and college plans of high school seniors are highly correlated with subsequent college attendance and graduation (Sewell and Shah 1967), theories of intergenerational stratification emphasize the impact of social influences on college ambitions formed during the high school years. During adolescence, the influences of family and schooling are solidified as students begin to develop a realistic sense of their future lives. There are many subsequent life course events that will alter adolescent ambitions, but a snapshot of young adults and their educational goals just before leaving high school provides an initial benchmark of the origins of social and ethnic stratification. An additional advantage of studying high school seniors is that it is possible to measure many important influences of family life and school context that would be too distant to be reliably measured in retrospective surveys of adults.

To obtain a comprehensive portrait of the college ambitions of high school seniors, we compare patterns for four indicators: college aspirations and college expectations, as well as the immediate plans to attend college, and the actual college applications by students in the spring of the senior year. Abstract questions such as our measure of educational aspirations, "How far would you like to go in school?" tend to elicit overly optimistic perceptions of student prospects for higher education. For example, more than 7 out of 10 senior students in our sample aspire to graduate from college and about 6 in 10 expect to do so.[1] When behavioral intentions are measured, however, somewhat lower figures are evident. About 40 percent of seniors plan to attend a four-year college the fall following high school graduation and about 30 percent plan to

[1] Based on the question, "Realistically speaking, how far do you think you will get in school?

attend a two-year community college or technical institution. Only a little more than one-half of seniors have actually applied to college by the spring of their senior year.

The sample of high school seniors analyzed here is drawn from a very diverse population of high school seniors in several West Coast metropolitan school districts. We administered a paper and pencil questionnaire to students in the spring of 2000, 2002, and 2003. The merged data file of these three cohorts of seniors contains 4,848 students, with meaningful samples of African Americans, Latinos, several Asian American populations (East Asians, Cambodians, Vietnamese, Filipinos, and other Asians), as well as American Indians and Hawaiians and Pacific Islanders.

There is a range of race and ethnic differences in educational ambitions, depending on the specific dimension of educational ambitions. At the abstract level of educational aspirations, race and ethnic variations are relatively modest. With more realistic measures of educational expectations and immediate college plans, wider inequality emerges. The most disadvantaged groups with the lowest educational expectations include Hispanics, Cambodians, American Indians, and Hawaiians and Pacific Islanders. The college plans of African American students are only slightly below those of white students. The gaps in educational ambitions between historically disadvantaged groups and whites are minimized in this study because the analysis is restricted to high school seniors after high school attrition (dropouts) has taken its toll. East Asian students have much higher educational goals than do white students, but there was considerable variation for other Asian American students.

Most, but not all, of the lower educational ambitions of disadvantaged minorities are due to differences in social origins, that is, lower levels of intact families and poorer socioeconomic conditions. Once socioeconomic origins are held constant, several groups, African Americans, Vietnamese and Cambodians are shown to have high "underlying" educational ambitions to attend college. For the Asian American populations, the higher educational goals are, to a considerable extent, the product of very high levels of encouragement (high expectations of family, friends, teachers) in spite of fairly low levels of economic well being.

RACE AND ETHNIC INEQUALITY IN EDUCATIONAL ASPIRATIONS AND ATTAINMENT

The classical sociological theory proposed to account for race and ethnic inequality has been the assimilation model, which suggests that certain features of modern societies, such as industrialization, competitive labor markets, and democratic institutions, will gradually erode the role of ascriptive characteristics, including race and ethnicity, in social stratification, including educational attainment (Gordon 1964, Treiman 1970). Although assimilation theory has many weaknesses, including the lack of a specific model, the theory is largely consistent with the historical absorption of the children and grandchildren of successive waves of immigration, largely from Europe, into American society (Alba and Nee 2003). Immigrants from southern and eastern Europe who arrived in the early decades of the twentieth century started at the bottom of the urban labor market, but their children were able to reach educational and occupational parity with other white Americans in the middle decades of the twentieth century (Lieberson, 1980, also see Jacobs and Greene 1994). In the decades after World War II, the educational attainments

of the children and grandchildren of European ethnics are comparable to (or exceeded) those of many "older stock" white Americans (Hirschman and Falcon 1985, Lieberson and Waters 1988).

The major empirical limitation of assimilation theory has been the differential treatment of non-whites, especially African Americans (Hirschman 1983). For the first six decades of the twentieth century, African Americans had to confront state sponsored segregation (including public education) in the South and defacto segregation and informal color bars throughout the country. The creation and confinement of blacks to the "ghetto" in American cities has no parallel with any other immigrant or minority group (Massey and Denton 1993). Historically, other race and ethnic groups in the United States have also been handicapped by poverty, residential segregation, and discrimination, but the magnitudes of each have generally been less than those encountered by African Americans. Hispanics (Mexicans, in particular) and American Indians have had educational attainments even lower than African Americans (Mare, 1995). Asian Americans have also experienced considerable political, social, and economic discrimination during the first half the twentieth century, but were able to make important educational gains even under these circumstances (Hirschman and Wong, 1986).

A more nuanced theoretical account of race and ethnic inequality, with an emphasis on the socioeconomic progress of new immigrants and their children, is the segmented assimilation hypothesis of Portes and Zhou (1993, also see Portes and Rumbaut, 1996, 2001; and Zhou 1997). Segmented assimilation implies a diversity of outcomes within and between groups, depending on the resources and cohesion of the group, societal prejudice, and the reception by the government. According to segmented assimilation theory, some immigrant groups who have high levels of human capital and who receive a favorable reception may be quickly launched on a path of upward socioeconomic mobility and integration. Other groups with fewer resources may not be able to find stable employment or wages that allow them to successfully sponsor the education and upward mobility of their children. Indeed the second generation may be exposed to the adolescent culture of inner city schools and communities that discourages education and aspirations for social mobility (Gibson and Ogbu, 1991; C. and M. Suarez-Orozco, 1995). A third path in segmented assimilation theory is one of selective acculturation, where immigrant parents seek to sponsor the educational success of their children, but limit their acculturation into American youth society by reinforcing traditional cultural values.

The segmented assimilation hypothesis provides a lens to understand the discrepant research findings on the educational enrollment of recent immigrants and the children of immigrants in the United States. Rather than expecting a similar process of successful adaptation with greater exposure (longer duration of residence) to American society, the segmented assimilation hypothesis predicts that adaptation is contingent on geographical location, social class of family-of-origin, "race," and place of birth. The segmented assimilation interpretation has been supported by case studies of particular immigrant/ethnic populations that have been able to utilize community resources to pursue a strategy of encouraging the socioeconomic mobility of their children, but only selective acculturation to American society. This outcome is consistent with research that found that Sikh immigrant children were successful precisely because they were able to accommodate to the American educational environment without losing their ethnic identity and assimilating to American society (Gibson, 1988). In another study, Mary Waters (1999) found that Caribbean immigrants are often able to pass along to their children an

immigrant or ethnic identity that slows acculturation into the African American community. Looking at high school enrollment rates of 15-17 year olds from 1990 census data, Hirschman (2001) found moderate support for the segmented assimilation model. Longer exposure to American society led to decreased high school attrition for most immigrant groups (Asians and Latin Americans), but several Hispanic Caribbean groups (Puerto Ricans, Dominicans, and Cubans) evidenced higher rates of high school attrition even with long residence in the United States.

A third theoretical perspective on the race and ethnic socioeconomic mobility, especially of new immigrant groups, is James Coleman's discussion of the significance of social capital (Coleman 1988, 1990: 590-595). Social capital refers to the social cohesion and networks within communities that create a high degree of trust and reciprocity among members. Immigrant parents (perhaps all parents) wish their children to be economically successful and to adhere to traditional values, but only communities with a high degree of social capital can mobilize kin, neighbors, and fellow ethnics to reinforce parental values and to monitor behavior of children in the community. James Coleman (1990:590-595, also see Zhou and Bankston 1998: Chapter 4) speculated that Asian immigrant communities share collective responsibility for children and childrearing with dense ties among families and neighbors. In their study of the Vietnamese community in New Orleans, Zhou and Bankston (1998) report that children who were able to retain their mother tongue and traditional values were more likely to have high educational ambitions.

Although each of these theories has a different emphasis, there are a number of common hypotheses. For example, almost every theory would posit that social class, as indexed by parental educational, occupational statuses, or family income, would be a primary determinant of educational attainment at the individual level, and also the major factor explaining inter-group differences (Featherman and Hauser 1978, Jencks et al. 1979). In the classic study of between school variation in academic outcomes, the "Coleman Report" concluded that family background was the single most important influence (Coleman et al. 1966). Several other attributes of family background, including family size and rural/urban origins, are usually considered to be significant sources of educational inequality.

A related dimension of family background, usually measured as an intervening variable, is the influence of "significant others" (Sewell, Haller and Portes 1969, Sewell and Hauser 1975, Jencks, Crouse, and Mueser 1983). The impact of significant others (parents, peers, teachers) is usually measured as the encouragement (or the student's perceptions of encouragement) for continued schooling. One of the standard arguments in educational circles is that high expectations serve to motivate student ambitions. There is a possibility of reverse causation or a strong feedback from a student's academic success on parental and teacher encouragement. Students who are doing well in school are more likely to receive "pats on the back" and told that they should continue schooling and go to college. But there is probably a significant degree of between family variation in parental encouragement that is independent of the academic ability of students.

Because race and ethnic minorities are often segregated in poorer, inner-city schools, African American and immigrant children are most likely to encounter students and teachers with very

low expectations for student attainment. Ferguson (1998) finds that teachers have lower expectations for blacks than whites and these perceptions have greater impact on blacks than on whites. Other research shows that the academic success of Asian students, both immigrant and higher generations, is due, in part to high parental expectations (Goyette and Xie 1999).

Families provide not only socioeconomic supports for their children, but also transmit cultural values through socialization. There may be habits of reading and communication, which are part of the socialization process among well-educated families that provide advantages in schooling. These social or cultural factors may account for half of the between-family differences on educational attainment that cannot be explained by measured socioeconomic attributes. Lareau (1997) shows how higher levels of cultural capital among white, middle-income families can account for academic performance. Middle class parents tend to have more similar backgrounds to teachers and principals than minority or lower income parents, and thus are able to communicate with them more easily. In addition, families of higher SES are more able, and more likely, to participate in parent-teacher organizations and volunteer in the classroom. This gives them an advantage when it comes to making decisions that would affect their children's schooling.

Differences in "parenting styles" are hypothesized to play a major role in developing aspirations for education in such varied approaches as Bowles and Gintis (1976) and Bourdieu's (1977). In general, successful parenting styles are thought to foster the development of independence and self-direction of children through engagement and encouragement. Although authoritarian parents can instill conformity and obedience, an overly directive parenting style may be less likely to help children gain self- confidence in their own abilities. However it is difficult to find consensus on the specific content of cultural traits and their association with specific ethnic groups. For example, Hao and Bonstead-Bruns (1998) report a low frequency of parent-child interactions in Chinese families, but found that Korean families have parent-child interactions as frequently as whites. The distinction between authoritative and authoritarian parenting styles may not just reflect differences in cultural values (Jambunathan, Burts and Pierce 2000). Exercising close control over children may reflect realistic assessments of different environments. The majority of white children, or at least middle class white children, grow up in small towns and suburban neighborhoods with only modest risks and dangers. In contrast, the neighborhoods of many minority and immigrant youth may be quite dangerous, and cautious parents may seek more control over their children's comings and goings, in order to protect them and foster upward mobility.

There is a considerable literature on the role of self-image on school outcomes, particularly across race and ethnic communities (Portes and Rumbaut 2001, Bankston and Zhou 2002). The conventional hypothesis from the child development literature is that students with higher self-esteem and a more internal sense of locus of control, which are influenced by encouraging home environments, are likely to do better in school and to have higher ambitions, although it is just as likely that the causal path runs in the opposite direction (Rosenberg, Schooler, and Schoenback 1989). Self-esteem represents a person's feeling of self worth—whether they feel as good and capable as others. Locus of control, or self-efficacy, is a summary measure of whether a person feels in charge of their life or whether fate and luck will determine their destiny. Prior research has found that black students have higher self-esteem, but lower self-efficacy than whites (Kao

1999, Hughes and Demo 1989). Based on the NELS (National Educational Longitudinal Survey) data, Kao (1999) reports that race and ethnic minorities, and immigrants had lower levels of locus of control, but there were few systematic differences in self-esteem.

Ogbu and his colleagues (Ogbu 1978, Gibson and Ogbu 1991), argue that the descendants of involuntary immigrants, African Americans in particular, develop orientations that are at odds with the belief that higher schooling will bring upward social mobility. The evidence in support of the Ogbu's thesis is primarily from selected case studies of particular schools where minority students discouraged high achievers by labeling studying and doing well in school as "acting white" (Fordham and Ogbu 1986). The opposite is found, however, in research based on surveys of a broader universe of students. For example, Ainsworth-Darnell and Downey (1998) report that black students are no less educationally ambitious than white students, have pro-school attitudes, and have high regard for successful students (also see Cook and Ludwig 1998).

Along similar lines of Ogbu's ideas about "voluntary minorities," a popular explanation of the relatively strong academic orientation of immigrant parents and their children is one of "immigrant optimism,"—the belief that hard work and perseverance will pay off in America (Kao and Tienda 1995). The decision to migrate across international borders—to give up the familiarity of one's home country and to accept the role of an outsider—requires a powerful ideological motivation. Many immigrants believe that their sacrifices are justified because the lives of their children will be markedly improved in their new homeland. This optimistic orientation—hard work and sacrifice of immigrants will lead to upwardly mobile children—is a pervasive belief of many immigrant cultures in the United States.

These findings suggested that the apparent differences between assimilation theory, segmented assimilation theory, and other theories of race and ethnic inequality in educational attainment may not be as great as suggested in some accounts. Socioeconomic origins and other attributes of families of origin are key explanatory variables in all theoretical perspectives. There are some variations in the emphasis on the role of intervening variables in the educational attainment process, such as parenting styles, encouragement from significant others, the behaviors and social psychological orientations of students and the development of educational ambitions. Our empirical approach, similar to that of Portes and Rumbaut (2001), is to include a broad variety of the significant intervening variables from different theoretical perspectives.

THE SENIOR CLASS SURVEY

The analysis reported here is based on three cross-sectional surveys of high school seniors in several metropolitan school districts on the West Coast in the spring of 2000, 2002, and 2003. One public school district with five large high schools was surveyed in all three years, and seven additional high schools (four public and three private) were added in 2003. This sample of schools does not necessarily represent a broader universe of students, but the race and ethnic differences reported here are similar to those found among other samples of high school students.

With the cooperation of the school administration, we administered an in-school "paper and pencil" questionnaire to senior students in the high schools. In some schools, seniors completed the survey in regular classrooms, while in other schools the students were assembled in an auditorium to take the survey. Overall, student cooperation was very good and less than 2

percent of enrolled seniors (or their parents) refused to participate. In addition to in-school data collection, a series of mailings were sent to "enrolled seniors" who were not present in the school on the day of the survey following the Dillman (2000) procedures to increase survey response. These additional mailings increased the number of completed senior surveys from 10 to 15 percent.

Evaluation of the completeness of coverage of the Senior Class Survey is clouded by the definition of who is a high school senior, and the logistics of locating students who are nominally registered as high school students, but are not attending school on a regular basis. In theory, high school seniors are students who have completed the 11th grade, are currently enrolled in the 12th grade, and are likely to graduate from high school at the end of the year. In practice, however, there are considerable variations from this standard definition. Some students consider themselves to be seniors (and are taking senior classes and are listed as seniors in the school yearbook), but are classified in school records as juniors because they have not earned sufficient credits. In addition to "fourth-year juniors," there are a number of "fifth-year seniors," who were supposed to have graduated the year before. Many of the fifth year seniors are enrolled for part of the year or are taking only one or two courses in order to obtain the necessary credits to graduate. Both fourth year juniors and fifth year seniors are at high risk of dropping out of high school.

In addition to the problems of identifying the potential universe of seniors, errors of coverage arise because about 10 percent of students who are nominally enrolled in public schools do not attend comprehensive high schools. In addition to a small number of home-schooled students, there is a wide range of alternative programs for students with academic, behavioral, or disciplinary problems. Because many of these seniors have only a nominal affiliation with the public schools—the largest group was enrolled in high school equivalency courses at community colleges—they are less likely to respond to our request to complete a survey of high school seniors. Even among students enrolled in the comprehensive high schools, there were "non-mainstream" students who completed the survey at lower rates than others, including the 6 percent of seniors who were taking community college classes for college credit and another 7 percent of students who were in special education classes for part or all of the school day.

The problems of defining senior status and locating them (to take the survey) reduced the coverage of our senior survey. For regular students – graduating seniors enrolled at one of the five major high schools—the response rate is about 80 percent. If we consider a broader universe of students, including students with marginal affiliation to high school and other hard to contact students, our effective rate of coverage of all potential seniors is probably less than 70 percent. Although our rate of survey coverage of all high school seniors is less than desirable, the problems we encountered are endemic in student survey research. Most national surveys of students are limited to students who are present on the day the survey is conducted and probably have even lower levels of coverage than our senior survey. During data processing, we excluded a small number of exchange students, developmentally disabled students, and a few students who appeared to have answered the questionnaire with random responses or who could not be matched with school records. This leaves an effective sample of 4,448 seniors.

MEASURING RACE AND ETHNICITY

Our primary independent variable in this study is race and ethnicity. Following the new approach to measuring race from the 2000 census, the senior survey allowed respondents to check one or more race categories (Perlmann and Waters 2002). The responses to the race question were combined with a separate survey question on Hispanic identity to create a set of ten mutually exclusive and exhaustive race and ethnic categories that reflect the considerable diversity in the population of youth in West Coast cities (see the stub of Table 1). Although most students had an unambiguous race and ethnic identity, there was a significant minority of students of mixed ancestry (about 15 percent) and some (about 5 percent) who refused to give a response. In future research, we plan to investigate the complexity and nuances of race and ethnic measurement, but here our goal is to assign a single "best" race/ethnic category to each student. This requires developing a set of procedures for assignment of persons reporting multiple identities and for those who did not respond.

We established a hierarchy of groups to give precedence for assignment to one category if multiple groups were listed. This hierarchy follows the order of groups listed in Table 1. For example, if a student responded positively to the question on Hispanic identity, they were assigned to the Hispanic group (first category in Table 1) regardless of their response to the race question. About half of Hispanic students checked "other" on the race item and wrote in a Hispanic, Latino, or a specific Latin American national origin. Most other Hispanics checked "white" on the race item, but there were smaller numbers who identified as black or with some other group. The next race/ethnic category is African American, which included all non-Hispanic students who checked "African American or black." About one third of students who checked "black" also checked one or more additional race categories (black/white and black/American Indian were the most common). Assuming that most students who reported partial black ancestry have experiences similar to those who reported only black, we have opted for the more inclusive definition, excluding only Hispanics.

The same logic is applied to the other race/ethnic groups, with students of mixed ancestry being included in the group that is higher on the list (in Table 1). The net result is that the residual group, white, consists of those who marked only white, while the other categories include students who are partially white. For most groups, these procedures only affected the composition at the margins, with the exception of American Indians. There are more persons who report mixed American Indian and white ancestry than who report only American Indian ancestry. For the 5 to 6 percent of students who do not report any race, we have assigned them the ethnicity reported in school administrative records.

In this sample of high school seniors, only 55 percent were (only) white. The remainder were incredibly diverse with about 9% Hispanic, 15% black, 7% East Asian (Chinese, Korean, and Japanese), 3% Cambodian, 4% Vietnamese, 3% Filipino, 3% American Indian, and smaller fractions of Other Asians and Hawaiians and Pacific Islanders. Although the numbers of students in some of these groups are small, our priority is to examine as many groups as possible within the limits of the data.

EDUCATIONAL AMBITIONS

Race and ethnic differences by four indicators of educational ambitions are presented in Table 1. The first is "educational aspirations," which is measured by the question:

How far would you like to go in school?

- less than high school graduation
- high school graduation only
- less than two years of college, vocational, or business school
- two or more years of college, including a two-year. degree
- finish college (4 or 5 year degree)
- master's degree or equivalent
- Ph.D., M.D., or other professional degree.

This measure might be considered as an abstract hope or wish.

The second measure is "educational expectations," which is tapped with the question:

> Realistically speaking, how far do you think you will get in school? (with the same response categories).

Educational expectations are similar to aspirations, but with some awareness of constraints, such as the costs of schooling, family resources, academic interests, and abilities. Although there may still be some degree of "wishing for the best" in educational expectations, we assume that expectations are more realistic assessments of the future than aspirations.

The next two measures represent much more concrete aspects of educational planning right after high school. "College Plans" is measured with the question:

> Do you plan to go on to college or other additional schooling right after high school? That is, do you plan to continue your education <u>THIS FALL</u>?

For students who responded "yes" to this question, a follow-up question asked:

> What is the name and location of the college, professional, or technical school that you will most likely attend in the fall?

For this analysis, we grouped responses into three categories: (1) plan to attend a four year college, (2) plan to attend a two year community or vocational college, and (3) no or uncertain college plans. This last category includes students who gave inconsistent responses: for example, students who planned to go to college, but did not name a specific college. For some of the subsequent analyses, we code College Plans into two dichotomous variables: those planning to attend a four-year college (relative to those with lower or no educational plans), and those planning to attend any college (relative to those with no college plans). The first variable is category (1) relative to (2) and (3) and the second variable is the sum of categories (1) and (2) relative to (3).

The final variable is "College Application," which is a behavioral measure of whether the student has applied to either his or her first or second college choice (regardless of the type of institution)

RACE AND ETHNIC DISPARITIES IN ASPIRATIONS, EXPECTATIONS, COLLEGE PLANS AND APPLICATIONS

Everyone, or almost everyone, hopes to attend and graduate from college in the United States. Among the seniors in our survey, more than 7 of 10 aspire to complete college and more than 6 in 10 expect to do so. The questions on educational expectations, and especially aspirations, did not have a time reference, so students can respond in terms of their hopes for future education,

even if it will not be realized in the near future. Even so, there is an air of unreality in these figures. According to national data, less than 30 percent of young adults currently graduate from college (Newburger and Curry, 2000), so both the educational aspirations and expectations reported in our survey are overly optimistic.

In Table 1, the data on educational aspirations and expectations have been translated into years of completed schooling equivalents (less than high school = 11.5 to Ph.D./M.D. = 20). The mean educational aspiration is 16.6 years, and the average expectation is about a half a year less at 16.0 years.

TABLE 1 ABOUT HERE

There are only moderate race and ethnic differentials in educational aspirations with a range of 1. 5 years. East Asians have the highest educational aspirations at 17.3 years and Hawaiians and Pacific Islanders have the lowest at 15.8 years. Whites are in the middle at 16.6 years. Filipinos, Vietnamese, African Americans have aspirations slightly above average (16.8 –16.9) and Hispanics, Cambodians, Other Asians, and American Indians are below average (16.0 to 16.5). Most groups expect about .6 to .7 of a year less of high education than they aspire to receive. The widest gap between aspirations and expectations gap is evident for Hawaiians and Pacific at .9 of a year.

In terms of planning for the fall after their senior year of high school, more than two-thirds of seniors in our survey have specific plans for post-secondary schooling. Almost 4 of 10 seniors plan to attend a four-year college and another 3 in 10 are planning to go to two-year institutions (community colleges and technical schools). Some of those planning to attend a two-year college see it as a stepping-stone to a college degree, while for others, two years of community college or technical school will be the end of the educational road. The senior survey first asked students whether they planned to attend a college in the fall after high school graduation and they were then asked what college or university they planned to attend. The small numbers of students who gave inconsistent responses (plan to attend, but no college listed or was uncertain about plans but gave a college name) were coded into the “No and Don’t Know” category.

The final column shows that 55 percent of students have applied for college by the spring of their senior year. Almost all students who plan to attend a four-year college have submitted a college application, but only about half of those planning to go to a community college have actually applied by the spring of their senior year.

Relative to their white peers, black seniors have roughly comparable aspirations, expectations, and college plans. Indeed African American students report slightly higher educational aspirations and expectations than white students. The abstract educational ambitions of Hispanic students are only slightly below those of white students, but Hispanic students have lower values on the more concrete outcomes, especially on college plans for the fall after high school graduation.

The most disadvantaged groups, in terms of lower educational ambitions and plans are American Indians and Hawaiians and Pacific Islanders. Only about one quarter of American Indian and

Hawaiian and Pacific Islander seniors plan to attend a four year college. Almost one half of these students have no or uncertain plans for any higher education.

The Asian American populations have widely varied patterns. The East Asian student population (Chinese, Korean, and Japanese) generally have the highest levels of educational aspirations, expectations, and college plans. For example, East Asian seniors are 14 percentage points more likely than white seniors (55% and 41%) to plan to attend a four-year college. Vietnamese and Filipinos have educational ambitions close to those of East Asian students, although plans to attend a four-year college are only about average. There are two telling signs, however, that suggest a very high demand for college among Vietnamese seniors. First, only one in five Vietnamese seniors have "no or uncertain" educational plans for the year after their senior year, compared to about one-third of all seniors. Second, about 68 percent of Vietnamese seniors have applied to a college (two-year or four-year) by the spring of their senior year—this figure is 13 percentage points higher than the percent of white students who have applied. At the other extreme, Cambodians and the residual group of Other Asian students have much lower educational ambitions, closer to levels of Hispanics and other disadvantaged groups.

MODEL OF SOCIAL, ECONOMIC, AND SOCIAL PSYCHOLOGICAL INFLUENCES ON EDUCATIONAL AMBITIONS

The objective of this analysis is to explain the race and ethnic variations in educational ambitions (of aspirations, expectations, and college plans) presented in Table 1, namely the below average ambitions of several under-represented groups and the above average ambitions of others. The analytical model that guides our inquiry is displayed in Figure 1, which includes some of the major social, economic, and social psychological factors that would affect the transition from high school to college, even in the absence of race and ethnic diversity. These variables capture many of the major ideas from the research literature on these topics, including, characteristics of families of origin, parenting styles, encouragement, student behaviors, and student self images. Some of these background variables might offer "compositional" explanations for inter-group differences, while other variables may be intervening social mechanisms whereby differences are created or maintained. Race and ethnicity is not assumed to be the "true cause" of any of the intermediate or outcome variables, but simply serves as key index of the system of racial stratification.

FIGURE 1 ABOUT HERE

The classic sociological explanation for race and ethnic inequality in educational outcomes is socioeconomic differences among families-of-origin. Children growing up in disadvantaged families are less likely to have the economic, social, and cultural supports for continued schooling beyond high school. The senior survey asked students a number of questions about their family background. Here we index family socioeconomic resources with separate measures of mother's and father's schooling and home ownership. Additional social family background variables include whether the student was living in an intact (both mother and father) family and immigrant generation (foreign born, second generation, and third or higher generation).

Race and ethnicity and family background may affect college ambitions through a variety of intervening variables. The first two clusters of intermediate variables in Figure 1 are Parenting

(childrearing styles) and Encouragement. These two variables are considered prior to other intermediate variables that represent the identities and actions of the students themselves. If intergenerational socialization is a means of creating ambitions, then parenting or childrearing styles should have formative influences (Chao 1996, Aunola and Nurmi 2000). Here, we identify three major indices of parenting: Communication and Support (a six item scale of the frequency of communications with parents and the level of parental support felt by students), Knows Friends (a two item scale measured by whether parents know their child's friends and the parents of her or his friends), and Control and Checking (a two item scale based on whether parents limit time spent with friends on school nights and check homework). More details on each of these variables are provided in the appendix.

The encouragement of parents, friends, and teachers has long been considered the primary means by which high educational aspirations are transmitted across generations (Sewell and Hauser 1975). Encouragement is an index of 6 items measuring the student's perception of whether her or his father (and mother, siblings, friends, teacher, or other adult) thinks that going to college is the most important thing that the student should do right after high school.

The next clusters of intervening variables are lumped into two categories: Student Behaviors and Student Self Images. There are conventions of conformity within schools that identify some adolescents as "good students." These may be causal variables in their own right, but more importantly, these variables may reveal how students from economically or socially advantaged backgrounds are able to do well in school and to develop high ambitions. Here we identify four important behavioral indices that test important hypotheses. The first is an index, "Late/Miss/Cut," which measures the number of times that a student reported to have been late for school, miss days of school, or cut classes. Developmental psychology research has shown that "time spent on task" is an important determinant of learning. The second index, labeled here as "Ready to Learn," is composed of three items that measure the number of times a student went to class without a pencil (or pen and paper), books, and homework. The third scale, "In Trouble," is a three-item index that measures the number of times that a student was in trouble because s/he didn't follow school rules, was suspended, and put on probation. The last behavioral item of Homework Hours is a measure of the number of hours spent on homework outside of school per week.

The next two variables in the model are orientations or self-images of the student. These are the classic measures in the adolescent development literature: self-esteem and locus of control. Self-esteem is a scale of items that taps the student's feelings of self worth—whether s/he is equal to or inferior to others. Locus of control measures the student's feelings of being in charge of her/his own life or whether s/he is a pawn of fate.

FAMILY AND SOCIOECONOMIC BACKGROUNDS OF STUDENTS

Differences in college plans among high school seniors may reflect, in part, the economic and social support available from their families. In Table 2, we show race and ethnic variations in five salient background variables that may be indicators of the potential economic, social, and cultural resources that might support student aspirations for higher education: intact family, father's education, mother's education, home ownership, and generational status. For ease of

presentation, some of the background variables are dichotomized in Table 2, with unknown and missing responses added to the complementary category of those presented here.

TABLE 2 ABOUT HERE

Intact family is indexed by the percentage of students who are living with both parents at the time of the survey. This variable was intended to measure intact biological families, but some students may have included step-parents as mothers and fathers in answering the survey question. Parental education is summarized by the mean years of completed schooling of the student's mother (or father). Home ownership was measured in response to a survey question asking if the student's family owned or rented their home (don't know responses are coded as not owning). Generational status is dichotomized into first and second generation (foreign born or the children of foreign born) relative to third and higher generation.

With the very high rate of marital dissolution in contemporary America, only a little more than one-half of high school seniors report living with both their mother and father. Family stability and the presence of both parents in the household may provide social support (and indirectly economic support) as students plan for their future. The highest levels of intact families are found among East Asian (66%), Cambodian (68%) and Vietnamese (74%) students, while black students are least likely to be living in an intact family (only 34%). About 60 percent of white students were reported to be living with both parents, while other groups were intermediate in the 40 to 50 percent range of intact families.

White students are most likely to have highly educated fathers and mothers (in the absence of parents, this includes guardians and other adults who were father or mother figures), but Filipino, East Asian, African American, Other Asian, and American Indian students also had relatively well educated parents. Students with below average levels of parental education included Hispanics, Hawaiian/Pacific Islanders, Vietnamese, and Cambodians. The mothers of Cambodian and Vietnamese students have very low educational attainments.

Family socioeconomic resources are also indexed by home ownership. About 8 in 10 white and Filipino seniors live with families that own their homes and three-quarters of East Asian students are in a similar status. At the other extreme, less than one-half of Vietnamese, Cambodian and Hawaiian/Pacific Islander students live in owner-occupied housing, and African American students are only somewhat higher on this scale.

There is a strong association between ethnicity and generational status. All of the Asian origin groups are newcomer populations (recent immigrants), with 77 to 96 percent first or second generation. On the other hand, only one in five, or less, of white, African American, or American Indian students are immigrants or the children of immigrants. Hispanic students are intermediate with about 50 percent being newcomers (first and second generation).

The distribution of family and socioeconomic background characteristics across race and ethnic groups, as shown in Table 2, shows that, in general, white students are most advantaged, and that East Asians are not too far behind. Beyond this, things are mixed. Black students have the lowest level of intact families and very low levels of home ownership, but have fairly well

educated parents (even though only a minority have a father present at home). Vietnamese and Cambodian students are very disadvantaged in terms of the standard measures of social class (parental education and home ownership), but they have very high levels of two parent families.

The subsequent research attempts to address the question of how much the observed race and ethnic differences in educational ambitions are due to unequal social and economic resources. The simple compositional description of family origin attributes in Table 2 shows that not all resources (or attributes) are distributed in a consistent pattern. With the exception of whites—the most advantaged population on most dimensions—different groups who are advantaged on one dimension may be disadvantaged on other dimensions.

PARENTING, ENCOURAGEMENT, STUDENT BEHAVIORS AND SELF IMAGES

Students reach adolescence, not only with varying degrees of family socioeconomic resources, but also with different social and cultural experiences in their families, neighborhoods, and communities. These experiences help to mold, at least in part, a student's feelings of self worth, perceptions of independence and confidence, and plans for their lives after high school. In Table 3, we present descriptive data on some of these salient dimensions of social and cultural background experiences as well as student orientations and behaviors from the senior survey. As noted earlier, much of the research on educational attainment, and in particular on race and ethnic patterns, emphasizes cultural variables and socialization (family, peer) as intervening or as alternative explanations to the standard socioeconomic model.

TABLE 3 ABOUT HERE

The three indices of parenting measured in our survey are identified as: "Communication and Support," "Knows Friends," and "Control and Checking." Although reported by students, these measures are thought to reflect parental socialization or childrearing styles that are hypothesized to have positive impacts on adolescent development, academic achievement, and ambitions beyond high school. "Communication and Support," which taps the frequency of parental-child interactions and the student's feelings of (unconditional) support from parents might be considered part of the classic mode of American middle class culture, perhaps epitomized by the stereotype of the "Ozzie and Harriet" television show. Table 3 shows that the average levels of "Communication and Support" felt by students are quite high—around 2 or "agree" on a scale that ranges from 0 "strongly disagree" to 3 "strongly agree."

White students report the highest levels of communication with their parents—"in depth and frequent conversations about school activities and college plans." Most other groups with long term exposure to American society report levels of support and communication slightly below that of whites, perhaps reflecting a common American style of childrearing. Recent immigrant groups, especially Cambodians and Vietnamese, report lower levels of exposure to the high "Communication and Support" style of childrearing

The parenting variable, "Knows Friends," is based on survey responses, which indicate that parents know their child's (the senior respondents) friends and the parents of their child's friends. This variable is a measure of community solidarity or integration, very close to Coleman's (1988) notion of social capital. Social capital encompasses informal ties within a

community that allow for monitoring of behavior. If Asian American parents are more likely to share collective responsibility for children and childrearing with kin and neighbors, this may account for a higher rate of conformity to parental values of hard work, persistence, and high ambitions. However, these data show that the parents of Vietnamese and Cambodian students are somewhat less likely to know their friends and the parents of their friends than are other groups. The groups with the highest degree of community integration according to this index are whites, African Americans, and Hawaiian/Pacific Islanders.

"Control and Checking" is an index based on how often parents restrict what their children do (go out on school nights) and check their homework. This measure is a proxy for the dimension of an authoritarian parenting style. Prior research has shown that white middle-class families tend to follow parenting styles that grant children more independence and autonomy, while African American and immigrant families are more likely to follow authoritarian parenting styles that attempt to control their children's behaviors (Jambunathan, Burts and Pierce 2000). The standard interpretation is that independence and autonomy, which are fostered by authoritative childrearing (not authoritarian) are more conducive to long term upward mobility. This argument, however, ignores, differences in context or neighborhoods. The majority of white children, or at least middle class white children, grow up in small towns and suburban neighborhoods with only modest risks and dangers. In contrast, the neighborhoods of many minority and immigrant youth may be quite dangerous, and cautious parents may seek more control over their children's comings and goings, in order to protect them and foster upward mobility.

The empirical patterns show only modest variation across ethnic communities in the degree of Control and Checking by parents. Asian (especially Vietnamese) and Hawaiian/Pacific Islander parents appear to make the the highest degree of effort to control their children, while American Indian families are somewhat less controlling than other groups.

Encouragement or parental expectations that the students will go to college is one of the most influential background variables. Sewell and Hauser (1975) report that the influences of significant others (family, friends, teachers) mediate most of the impact of social background on college plans and attainment. Most students report receiving lots of encouragement. About two-thirds to three-fourths of students report that their father, mother, friends, favorite teacher, and another respected adult thought that going to college was the most important thing to do after high school. Only for siblings, does the average level of encouragement drop to 60 percent (presumably because some seniors do not have older siblings who are in a position to provide encouragement).

One group stands out as systematically receiving less encouragement—American Indians. Hawaiians/Pacific Islanders and Hispanics also appear to receive less encouragement to attend college, especially from family members. African Americans receive less parental encouragement from fathers (perhaps because of the absence of father figures), but are about average from other family members. On the other end of the spectrum, Asian American students receive above average levels of encouragement from every source. East Asian and Vietnamese students have extraordinarily high levels of encouragement.

The next panel shows differences in four measures of student behaviors. The first is "Late/Miss/Cut"—an index of lost time due to absences, tardiness, and cutting classes. Presumably students with more class time will do better in school and hold higher ambitions for themselves. "Ready to Learn" is a composite of several variables indicating whether a student comes to class with appropriate tools (pencil, pen, book etc.) and with their homework done. "In Trouble" is an indicator based on several items measuring whether the student had gotten in trouble, had been suspended from school, or had been put on probation. The fourth behavioral measure "Homework Hours" is the student's response to a question on the number of hours spent on homework outside of school.

In contrast to the socioeconomic background variables, white students do not report especially favorable standings on these measures of adherence to conformity to school norms. African American and American Indian students are slightly more likely to have missed school time, come to class unprepared, gotten into trouble, and done less homework than other groups but the absolute differences are relatively small. The most distinctive pattern is the high conformity levels of Asian students, especially East Asians, Cambodians, and Vietnamese. Not all these differences are large, but many of them are, especially for Vietnamese students. For example, Vietnamese students report doing almost 4.7 hours of homework a week, not a huge number but it is about 60 percent higher than the average of 2.9 hours per week by all seniors.

Prior research has shown that student self-images haven an impact of on school outcomes, particularly across race and ethnic communities (Portes and Rumbaut 2001, Bankston and Zhou 2002). Self-esteem represents a person's feeling of self worth—whether they feel as good and capable as others. Locus of control, or self-efficacy, is a summary measure of whether a person feels in charge of their life or whether fate and luck will determine their destiny. The conventional hypothesis from the child development literature is that students with higher self-esteem and an internal locus of control are likely to do better in school and to have higher ambitions. Positive self-images are thought to be a product of encouraging home environments and authoritative styles of parenting. Some research suggests, however, that the causal path runs in the opposite direction with good students having more positive self-images (Rosenberg, Schooler, and Schoenback 1989).

There are only modest race and ethnic variations in the senior survey measures of self-esteem and locus of control. Black and American Indian students have slightly higher self-esteem than white students, which is consistent with earlier scholarship (Kao 1999, Hughes and Demo 1989). White students, however, have relatively high self esteem and locus of control. The most distinctive finding is that Asians, and Vietnamese and Cambodian students in particular, have lower self-esteem and locus of control than other groups. This pattern is similar to results found in national survey data (Kao 1999).

TRANSLATING RESOURCES INTO AMBITIONS: DESCRIPTIVE PATTERNS

It is not just group differences in social origins, childrearing patterns, and orientations that will "explain" race and ethnic disparities in educational outcomes. The other part of the equation is whether the background and intermediate variables make a difference in producing differences in educational aspirations or college plans. Aspirations and expectations are summarized here as the percentage who would like to graduate from college. College plans are presented as the

percentage of seniors who plan to attend a four year (and any college) this fall and the percentage who have applied to a college by the spring of their senior year. The descriptive patterns are presented in Tables 4 and 5 for all race and ethnic groups combined.

TABLES 4 AND 5 ABOUT HERE

Simply put, family structure and socioeconomic origins make an important difference. Students living in intact families, having college-educated parents, and living in owner occupied homes have higher educational aspirations and expectations, are more likely to plan to go to college (especially a four year college), and to have applied to college. These attributes certainly tap an economic dimension that reflects differential family resources. Parents with more income can afford the best for their children, such as books, computers and educational materials in the home and to hire private tutors to assist children who fall behind. There are also social and cultural dimensions reflected in these socioeconomic variables. More successful parents may have more time to spend with their children, or choose to spend their time with their children doing things that encourage learning and high aspirations. In most cases, families would probably support their children to go at least as far, educationally, as the parents went. In other words, the economic standard of the family of origin sets a minimum floor for the aspirations of the children.

Generational status has a moderate impact on aspirations, expectations, college plans and college applications. Specifically, second-generation students having an edge over first generation and third and higher generation students. The effect is strongest for planning to attend a four-year college. This finding is consistent with other research on the high educational attainment and ambitions of second generation Americans, both at present and historically (Hirschman and Falcon 1985, Jacobs and Greene 1994). Second generation Americans appear to absorb the "immigrant optimism" of the parents (Kao and Tienda 1995).

Of the three parenting variables, only "Communication and Support" has a clear and unequivocal association with aspirations and college plans. There is no effect on educational ambitions from the low to medium range of this variable, but from medium to the high range, there is about a 30 to 35 percentage-point increase in all measures. The other two parenting variables, "Knows Friends" and "Control and Checking," have only a modest impact on college ambitions. The effects of these two variables are only around 10 percentage points for the more concrete behavioral measures, such as college applications. Although parents are often advised to exercise close supervision of adolescent children—keeping a close reign on what they do and with whom they associate, these results do not support strong claims that such efforts will promote college aspirations and plans.

The one parenting practice that does make a difference is encouragement or the expectation that college is the most important thing to do after high school. In Table 5, we show the level of college aspirations, expectations, plans, and application for an index of the sum of encouraging "significant others." Significant others include father (father figure), mother (mother figure), siblings, friends, favorite teacher, and an "adult who's advice you value." Each of these sources of encouragement is important and is statistically independent from the others. The total effect of

encouragement is more important for producing college ambitions than any other variable measured here.

Student behaviors are associated with positive impacts on college aspirations and plans in the expected direction, but the impacts as measured here are fairly modest and sometimes inconsistent. The weakest relationship is for the index of missing school time (Late/Miss/Cut), which only seems to be sensitive at the highest levels of absenteeism. Students who miss lots of school (more than 10 times) are less likely to expect to go to or apply to college. Even in this range, the impact is fairly modest—ten percentage points or less. A comparable pattern is found for the index of "Ready to Learn" (reversed coded, so that a higher score means less ready to learn). Most students occasionally come to class unprepared (no pencil, book, or homework), and these students seem to be just as ambitious as those who are always prepared. Indeed those who claim to be perfect in this regard may be slightly less likely to plan to attend college.

Getting into trouble does make a difference, although only a minority of seniors in our sample report ever getting into trouble. Students who get into trouble once or twice are about 10 percentage points below (in aspirations, college plans, etc.) those who have never been in trouble and the very rare student who has had more brushes with school rules is 10 percentage points lower than those with one or two occurrences. Of course, most students with many disciplinary problems have probably dropped out of school and are not represented in our sample of seniors.

Doing homework does matter. Students who do more than 5 hours a week are much more likely to plan to attend college than students who do little or no homework. Homework is not a prerequisite for going to college. About half of the seniors who do not report doing any homework aspire to graduate from college and approximately the same number plan to attend a two year or four year college

The final variables reviewed in Table 5 are self-esteem and locus of control (or self-efficacy). Both are positively associated with college ambitions, but the relationship is stronger for locus of control. In general, there is a 10 to 20 percentage-point difference in college ambitions between low and high self esteem, and 15 to 30 point differences for locus of control.

MULTIVARIATE ANALYSIS OF COLLEGE AMBITIONS

In Tables 6 and 7, we bring together the various elements from the prior descriptive analyses to explain the background sources and intervening mechanisms of the race and ethnic disparities in college ambitions guided by the logic of the model presented in Figure 1. Table 6 contains the regression of educational aspirations and educational expectations on race and ethnicity and 15 background and intervening variables in six sequential and cumulative multivariate models. Table 7 presents a comparable logistic regression analysis of college plans right after high school ("any college" and only "four year colleges") as the dependent variables.

TABLE 6 AND 7 ABOUT HERE

The first model shows the results of the baseline equation with race/ethnicity as the sole independent variable. These patterns, though expressed in a regression format, are comparable to descriptive patterns in Table 1. The second model adds family structure, three measures of

socioeconomic origins (mother's education, father's education, and home ownership), and immigrant generation. Comparisons of the race and ethnic coefficients between model 1 and model 2 tests the "socioeconomic hypothesis," that is, how much of the race/ethnic gaps can be explained by differences in the composition of families of origin? Model 3 adds in the three Parenting variables, Model 4 adds in the Encouragement Index, Model 5 adds the four Student Behaviors, and Model 6 adds the two Self-Images.

With white students as the omitted category, the results in Model 1 shows several ethnic groups with lower aspirations, expectations, and college plans than whites, and only one group—East Asian students—with consistently higher ambitions. Groups with above or below predicted values (relative to whites) have the expected plus and negative signs in the regression models in Table 6, but in the logistic regression models in Table 7, the coefficients are shown as odds ratios, so a positive value (relative to whites) is above 1.0 and groups with predicted ambitions less than white students (the omitted category) have an odds ratio below 1.0.

The most disadvantaged populations are American Indians and Hawaiians/Pacific Islanders, which have statistically significant lower educational aspirations and expectations (Table 6) and lower college plans (Table 7). Hispanic students have educational aspirations comparable to white students, but significantly lower educational expectations and college plans. African American students have higher educational aspirations than whites in the baseline model, but their plans for college right after high school are comparable to white students (Table 7)

Among Asian students, only one group, East Asians, consistently has educational ambitions higher than white students. The other Asian groups are mixed with Vietnamese having significantly higher aspirations and any college plans (including both 2 and 4 year), and Cambodians having significantly lower aspirations, expectations and plans to attend to a 4-year college. Filipino and Other Asians are not significantly different from whites.

Once family and socioeconomic composition is adjusted in Model 2, there are dramatic changes from the observed levels of race and ethnic differences. In general, inequality is reduced for minorities and a broad range of groups are shown to have above average (higher than white students) ambitions for higher education, which are constrained by the circumstances of their families of origin. Although two disadvantaged groups, American Indians and Hawaiians/Pacific Islanders, are generally still below whites in Model 2, the overall change in coefficients from Model 1 to Model 2 shows that poorer socioeconomic origins are a fundamental reason why minorities have lower educational ambitions than white students. None of the negative Hispanic coefficients are significant in Model 2. The net effects of background variables in the Model 2 equations show that social origins count. Students who grow up in intact families, have mothers and fathers with high education, and live in owner occupied homes are much more likely to have high college ambitions. Because minority groups are disadvantaged on one or more of these attributes, their observed levels of college ambitions are depressed in Model 1.

Even more remarkable is that quite a few minority groups have positive (relative to white students) net effects on college ambitions in Model 2. The list expands beyond East Asians to include African American students (for 2 of the 4 dependent variables), Cambodians (4 out of 4), and Vietnamese (4 out of 4). The magnitudes of the positive Cambodian and Vietnamese

coefficients in Model 2 rival those of East Asian students. These gaps widen even further in Model 3 when the three Parenting variables are added. That is, East Asian, African American, Cambodian, and Vietnamese students would have even higher educational ambitions (relative to whites) if they had comparable socioeconomic origins and experienced the same childrearing patterns as their white peers. Among the childrearing patterns measured here, it is only "Communication and Support" that is consequential. Minorities (and especially Vietnamese and Cambodian students) have lower levels of "Communication and Support" from their parents than do white students. When the Parenting variables are held constant (in Model 3), the positive impacts of Vietnamese and Cambodian on college plans are particularly strong (Table 7).

Model 4 introduces the Encouragement Index, which is the most important variable in our analysis, as a covariate. Model 4, with Encouragement included, increases variance explained from 11 to 21 percent for educational aspirations and from 14 to 25 percent for educational expectations. Comparable leaps are recorded in the psuedo R-squared measure for the logistic regressions of college plans in Table 7. No other variable comes remotely close to encouragement as a predictor of educational ambitions and as a mediating variable in the relationship between race/ethnicity and educational ambitions. The Encouragement Index mediates part of the positive effects of family background, including high levels of "Communication and Support."

In addition to the predictive power of the Encouragement Index itself, the most important finding is that encouragement, as measured here, mediates 20% to 50% of the positive effects of East Asians, Cambodians, and Vietnamese on educational outcomes. Although the coefficients of these Asian populations generally remain statistically significant in Model 4, many are only at the borderline. These results suggest that the high expectations of family and others can account for a very important share of the expressions of high ambitions and college plans of these groups of Asian American students (net of social origins).

African American students receive only about average levels of encouragement to go to college (Table 3), but the change in coefficients from Model 3 to Model 4 indicates that encouragement is an important element in maintaining the relatively high levels of African American educational ambitions. African American students have higher educational aspirations and expectations than college plans, but the encouragement is important for both dimensions. The very low level of encouragement for higher education received by American Indian students plays a small role in accounting for their lower educational ambitions and college plans.

Net of all these variables, student behaviors that conform to the expectations of schools, can also make a modest difference. Students who do more hours of homework are most likely to have above average plans for college. Or perhaps, it is the other way around--students planning to go to college spend more time doing homework. There are very little net associations of missing school ("Late/Miss/Cut") and the "Ready to Learn" index on the measured educational outcomes in Tables 5 and 6. There is a modest negative effect of "In Trouble" on aspirations, expectations, and plans to attend a four-year college. With the introduction of the student behavior variables in Model 5, the race and ethnic coefficients change in a consistent fashion, but not enough to approach statistical significance. The Asian American coefficients decline a little bit, suggesting that doing homework may be one of the ways by which Asian American students do better. The

positive effect of African American students rises a bit from Model 4 to Model 5 in all four equations, suggesting that African Americans have high aspirations in spite of the behavioral patterns measured here.

High self-esteem is predictive of only one of the four measures of educational ambitions (expectations), but Locus of Control is a significant (net) predictor in all four equations in Tables 5 and 6. These self-images, however, play only a minor role in mediating the impact of race and ethnicity and social background variables on educational ambitions. Asian American students have high educational ambitions and college plans, in spite of the fact that they have lower levels of self esteem and self efficacy than other students. The impact of parental Communication and Support appears to be mediated, in part by student self-images. Perhaps intensive interaction with parents provides students with feelings of self-efficacy that lead to higher ambitions.

CONCLUSIONS

American folklore celebrates the United States as a land of opportunity, unlike other societies where social and economic status are inherited from generation to generation. This claim, like most societal myths, has a grain of truth. There is considerable inheritance of property and status across generations in American society, but there is also a considerable degree of social mobility (Blau and Duncan, 1967; Jencks et al., 1979). Education is at the nerve center of the American stratification system, with schooling serving as the primary means of both intergenerational stability and mobility. Advantaged parents are able to pass along their socioeconomic position primarily by insuring that their children enter and graduate from college. College education is also a passport to prestigious and highly remunerated occupations for many Americans from working class families.

The fundamental question for research on the American opportunity structure, and the one addressed in this study, is who is able to enter college? The question is framed here with a particular focus on race and ethnic disparities. Race and ethnic inequality has been a permanent feature of American society from the founding of the republic to the present time. State sanctioned segregation and discrimination against African Americans, American Indians, and other "racial" minorities were ubiquitous until the 1960s, and popular prejudices linger on. On the other hand, the United States has welcomed millions of immigrants from around the world over the last two hundred years, and many of the descendants of these immigrants have moved up the socioeconomic ladder with education from public schools and colleges as a primary means of social mobility.

In this empirical study, we have examined educational aspirations, expectations, and college plans among high school seniors in West Coast metropolitan school districts. Although not generalizable to the United States as a whole, this regional sample provides an opportunity to study the wide range of race and ethnic diversity that is emerging in an age of renewed mass immigration. How are race and ethnic minority students faring, relative to majority white students, in their plans for college as they prepare to leave high school and begin their adult lives?

The most disadvantaged groups, in terms of plans for higher education, are American Indians and Hawaiian/ Pacific Islander students. There is a consistent pattern on all four indicators of

educational ambitions of lowered expectations and plans for college. These students face two major hurdles: the first is their impoverished socioeconomic background (measured by the covariates added in Model 2), and the second is the lack of encouragement from family members, friends, and others. Even with statistical adjustment for these two factors, American Indians and Hawaiian/Pacific Islander students still have below average educational expectations for their future. Hispanic students encounter many of the same problems as do American Indians and Hawaiian/Pacific Islander students, but their educational ambitions are not quite as low.

The African American seniors in our sample appear to have average or even above average educational ambitions. Black seniors report slightly higher educational aspirations than white students and have plans to go to college right after high school that are roughly comparable to those of whites. These ambitions are all the more remarkable because of relative disadvantages of African American students in our sample. Only about one third of black students reported that they lived with both of their parents. Assuming home ownership is a reasonably good proxy for economic status, black students are also more likely to come from poorer families. Holding these factors constant, African American students consistently have above average educational ambitions (in Models 2 through 6) for three of the four measures of educational outcomes. Although black students are somewhat less likely to "conform" to normative behaviors than other students (homework hours, etc.), this is unrelated to their high underlying educational ambitions.

Beliefs and desires expressed in high school do not always predict behavior, and it is possible that African American students may not be able to realize their educational goals in the coming years. And there is additional evidence, not presented here, that black students are less prepared for college in terms of their course work, grades, and taking the SAT. Nonetheless, the underlying optimism expressed by black students about their future education provides a very real challenge to the popular thesis that African Americans are reluctant to invest in education for fear of "acting white."

The most complex findings reported here are for Asian Americans. The most basic finding is heterogeneity. For example, East Asian students are very similar to whites in terms of their social and economic backgrounds, and their educational ambitions exceed those of white students. On the other hand, the characteristics of Filipino students appear to be closer to majority populations than other recent immigrant populations, both in terms socioeconomic background and educational ambitions.

One of the most remarkable findings from these data is the emerging pattern of extraordinarily high educational ambitions of students from Vietnam and Cambodia, once their socioeconomic backgrounds are held constant. There are some signs of these latent ambitions, even in the descriptive data with the above average numbers planning to attend community colleges and the very low percentage of Vietnamese students who do not have any college plans (or are uncertain). Both Vietnamese and Cambodians are newcomer populations (almost all of whom are first or second generation), and they generally come from relatively impoverished families, as measured by parental education and home ownership. One positive feature, however, is very high proportions of intact families – 69% of Cambodian and 76% of Vietnamese students live with both parents.

When socioeconomic background is held controlled (in Model 2) in Tables 6 and 7, Vietnamese and Cambodian students emerge as "education superstars"—with educational ambitions that exceed even those of East Asian students. Although these numbers may be boosted in part by some assumptions in the statistical models, (the steep slopes of educational ambitions on social backgrounds for the majority population are imputed for the smaller populations in the model), there is little doubt that the educational goals of Vietnamese and Cambodian students are very high given their socioeconomic characteristics.

The high educational motivations of Asian students are often attributed to "culture," although it is not always clear what culture means. Culture, or cultural orientations, is not directly measured in most studies, but the concept is used as a post-hoc interpretation for the very high educational attainments or aspirations of Asian American students that cannot be explained by socioeconomic background. If cultural orientations are transmitted from generation to generation by familial socialization, one possibility is that culture might be measured in childrearing patterns. This is a plausible assumption, but we were not able to identify strong support for the cultural hypothesis in this analysis. We measured three childrearing or parenting styles: "Communication and Support," "Knows Friends," and "Control and Checking." None of these variables has any mediating role in explaining the positive effect of Asian American students (East Asian, Vietnamese, and Cambodian) on high educational ambitions.

Another problem with the cultural interpretation is the assumption that Asian American communities share similar beliefs and outlooks. This is not always the case. For example, there are quite different cultural traditions between Vietnam and Cambodia. Vietnam shares a common Buddhist culture (Mahayana) with East Asia, while the Thervada Buddhism of Cambodia is more closely linked to Buddhist cultures in mainland Southeast Asia (Keyes 1995, Swearer 1995). There has been a strong historical and cultural influence of China on Vietnam, and a significant number of Vietnamese immigrants are of Chinese ancestry. There has been, however, relatively little influence from the East Asian or Confucian culture on Cambodia.

Another possible cultural dimension is high motivations for upward mobility. In the immigration literature, this interpretation has been recently given the label of "immigrant optimism" (Kao and Tienda, 1995). The decision to migrate across international borders—to give up the familiarity of one's home country and to accept the role of an outsider—requires a powerful ideological motivation. Many immigrants believe that their sacrifices are justified because the lives of their children will be markedly improved in their new homeland. This optimistic orientation—hard work and sacrifice of immigrants will lead to upwardly mobile children—is a pervasive belief of many immigrant cultures in the United States. This pattern has historical parallels, including the rapid educational progress among the children of immigrants to the United States in the early twentieth century (Lieberson, 1980; Jacobs and Greene, 1994).

Our results strongly support this interpretation. The introduction of the Encouragement Index in Model 4 mediates much of the effect of Asian American ethnicity on educational ambitions in Tables 6 and 7. There may be other factors in the immediate environment of Asian American students, such as the role of peers and counselors that led to the translation of aspirations into actions (such as taking the GRE, spending time on homework, making a college application).

Our analysis provides relatively little support for the interpretation that student behaviors or self-images (self esteem, locus of control) play an important mediating role for Asian American students.

There is a great deal of overlap between ethnicity, family structure, and immigrant generation in the United States. The very educationally ambitious Asian national origin groups tend to be first or second generation Americans and with above average levels of intact families. The net positive effects of "intact family" and "first and second generation" on educational ambitions are occasionally mediated (in small part) by encouragement. Perhaps as East Asians, Vietnamese, and Cambodians become more "Americanized," with successive generations in the U.S., they will lose their tight knit family structure and become less "driven" by "immigrant optimism" to push their children to higher education and worldly success.

This adaptation to American society, however, may be counter-balanced by intergenerational changes in the socioeconomic status of parents. While the second generation of Vietnamese and Cambodian students were the children of relatively poor and only modestly educated immigrants, the third generation is likely to be reared in families of highly educated parents employed in professional occupations. In this scenario, Asian American progress would continue but with class resources replacing "immigrant optimism."

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Figure 1. Model of Effects of Race/Ethnicity and Social Background on College Aspiration, Expectations, and Plans.

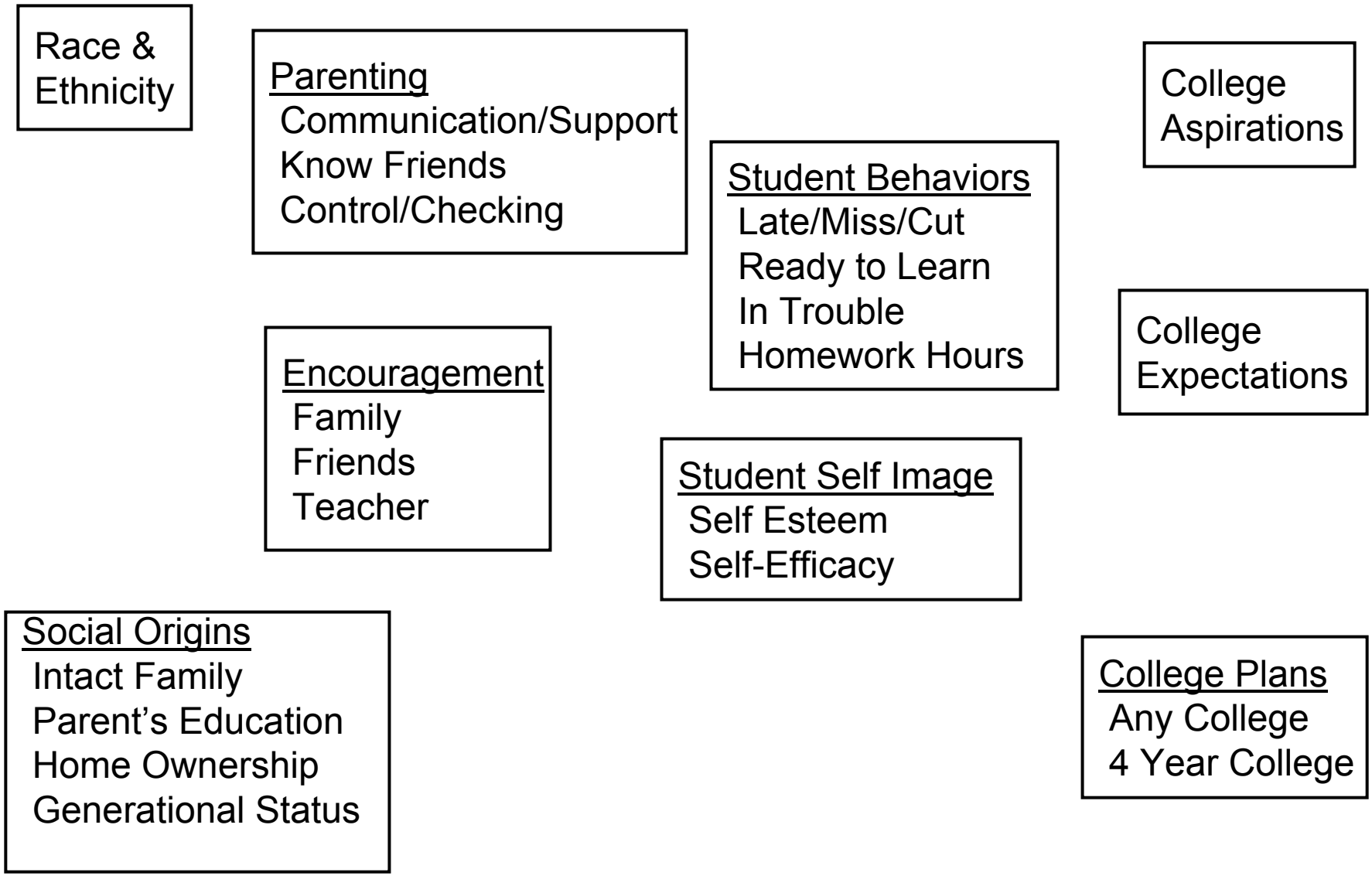

Table 1. Educational Aspirations and Expectations, College Plans, and College Application Among High School Seniors in West Coast Metropolitan School Districts, Classes of 2000, 2002, and 2003 by Race and Ethnicity.

	Educational		College Plans for This Fall				Applied to	
	Aspirations	Expectations	Four Year	Two Year	No/DK	Total	College	(N)
RACE/ETHNICITY	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hispanic	16.5	15.7	30%	33%	38%	100%	52%	449
African American	16.8	16.1	38%	30%	32%	100%	56%	725
East Asian	17.3	16.6	55%	23%	22%	100%	65%	327
Cambodian	16.1	15.4	28%	45%	27%	100%	59%	140
Vietnamese	16.9	16.2	36%	47%	17%	100%	68%	173
Filipino	16.9	16.2	42%	30%	28%	100%	61%	133
Other Asian	16.4	15.8	31%	33%	36%	100%	40%	70
American Indian	16.0	15.3	24%	30%	47%	100%	47%	131
Hawaiian/Pacific Islander	15.8	14.9	29%	22%	49%	100%	51%	79
White	16.6	16.0	41%	28%	31%	100%	54%	2,621
TOTAL	16.6	16.0	39%	30%	31%	100%	55%	4,848

Notes:
(1) Aspirations are measured by the question: "How far would you like to go in school?"
(2) Expectations are measured by the question: "Realistically speaking, how far to you think you will get in school?"
(3) College Plans are measured by a question on plans to go to college this fall and naming a specific college.
(4) Applied to College is measured by whether the senior has applied to the first or second preference college.
Additional details on the coding of variables is presented in the appendix.

Table 2. Family and Socioeconomic Characteristics Among High School Seniors in a Metropolitan School District in West Coast Metropolitan School Districts, Classes of 2000, 2002, and 2003 by Race and Ethnicity.

	Intact Family	Average Education of		Family Owns Home	1st or 2nd Generation	(N)
		Father	Mother			
RACE/ETHNICITY	(1)	(2)	(3)	(4)	(5)	(7)
Hispanic	48%	12.7	12.6	63%	52%	449
African American	34%	13.7	13.7	56%	18%	725
East Asian	66%	14.0	13.0	73%	85%	327
Cambodian	68%	9.6	7.7	44%	96%	140
Vietnamese	74%	12.7	10.2	46%	95%	173
Filipino	56%	14.4	13.9	83%	83%	133
Other Asian	54%	13.6	13.1	65%	77%	70
American Indian	48%	13.5	13.2	66%	11%	131
Hawaiian/Pacific Islander	60%	12.9	12.7	46%	27%	79
White	60%	14.4	14.1	80%	13%	2,621
TOTAL	55%	13.8	13.4	71%	31%	4,848

Notes:
Column 1 is the percent of students who are living with both their mother and father in the spring of their senior year.
Columns 2 and 3 are the mean years of schooling completed by the student's father (father figure) and mother (mother figure).
Columns 4 is the percent of students who live in owner occupied housing (not renting).
Column 5 is the percent of students who are immigrants or the children of immigrants.
DK/NA responses are excluded (parental education) or coded zero (intact family, home ownership, and generation).
Additional details on the coding of variables is presented in the appendix.

Table 3. Perceptions of Parental Childrearing Styles, Encouragement by Significant Others, Student Behaviors, and Self Images Among High School Seniors in in West Coast Metropolitan School Districts: Classes of 2000, 2002 and 2003 by Race and Ethnicity.

Parental Childrearing Styles

	Communication & Support		Knows Friends		Control & Checking	
RACE/ETHNICITY	mean	Std. Dev.	mean	Std. Dev.	mean	Std. Dev.
Hispanic	1.99	0.59	1.63	0.76	1.45	0.89
African American	2.05	0.60	1.76	0.79	1.45	0.90
East Asian	1.97	0.60	1.62	0.75	1.55	0.85
Cambodian	1.65	0.53	1.49	0.73	1.49	0.92
Vietnamese	1.71	0.52	1.53	0.72	1.71	0.84
Filipino	1.95	0.55	1.74	0.71	1.58	0.92
Other Asian	1.88	0.65	1.65	0.79	1.43	0.84
American Indian	1.99	0.60	1.61	0.69	1.26	0.90
Hawaiian/Pacific Islander	2.03	0.59	1.78	0.76	1.71	0.91
White	2.11	0.56	1.78	0.73	1.46	0.87
TOTAL	2.04	0.58	1.73	0.75	1.47	0.88

Encouragement for College By:

	Father	Mother	Siblings	Friends	Teacher	Other Adult
RACE/ETHNICITY	%	%	%	%	%	%
Hispanic	61%	74%	57%	63%	79%	79%
African American	63%	77%	60%	69%	82%	81%
East Asian	85%	90%	72%	83%	83%	87%
Cambodian	70%	79%	71%	81%	86%	84%
Vietnamese	89%	93%	79%	83%	91%	91%
Filipino	73%	80%	65%	78%	80%	86%
Other Asian	69%	76%	63%	73%	79%	80%
American Indian	60%	69%	48%	62%	69%	64%
Hawaiian/Pacific Islander	62%	68%	58%	62%	81%	78%
White	71%	79%	57%	69%	79%	79%
TOTAL	70%	79%	60%	70%	80%	80%

Student Behaviors

	Late/Miss/Cut		Ready to Learn		In Trouble		Homework Hours	
RACE/ETHNICITY	mean	Std. Dev.	mean	Std. Dev.	mean	Std. Dev.	mean	Std. Dev.
Hispanic	4.50	2.87	2.90	2.66	0.46	1.24	2.70	2.63
African American	5.05	2.71	3.22	2.76	0.49	1.17	2.49	2.51
East Asian	4.25	2.82	2.73	2.52	0.33	1.00	3.63	3.25
Cambodian	3.73	2.74	2.67	2.45	0.30	0.74	2.70	2.79
Vietnamese	2.86	2.64	2.01	2.27	0.25	1.14	4.68	3.44
Filipino	4.42	2.65	3.29	2.96	0.26	0.57	2.91	2.95
Other Asian	4.07	2.88	3.05	3.15	0.32	0.67	2.78	2.70
American Indian	4.71	2.65	3.26	2.76	0.47	1.13	2.40	2.54
Hawaiian/Pacific Islander	4.41	2.90	2.56	2.40	0.47	0.98	2.87	2.80
White	4.54	2.75	3.23	2.74	0.39	1.00	2.86	2.91
TOTAL	4.50	2.78	3.09	2.72	0.40	1.04	2.89	2.89

Student Self Images

	Self Esteem		Locus of Control	
RACE/ETHNICITY	mean	Std. Dev.	mean	Std. Dev.
Hispanic	2.11	0.53	2.06	0.47
African American	2.23	0.52	2.10	0.44
East Asian	2.03	0.53	2.03	0.43
Cambodian	1.86	0.49	1.84	0.42
Vietnamese	1.85	0.49	1.83	0.46
Filipino	2.12	0.54	2.03	0.46
Other Asian	2.12	0.48	1.97	0.46
American Indian	2.21	0.51	2.10	0.43
Hawaiian/Pacific Islander	2.01	0.56	1.94	0.45
White	2.17	0.51	2.12	0.42
TOTAL	2.14	0.52	2.08	0.44

Note: See appendix for survey questions and details of index construction.

Table 4. Educational Aspirations and Expectations, College Plans and Application by Background Characteristics

	Educational Ambitions		College Plans This Fall		Applied to	
	Aspire	Expect	4 Year	4 or 2 Yr.	Any College	N
TOTAL	69%	61%	39%	69%	55%	4879
FAMILY STRUCTURE						
Not Intact	65%	56%	32%	63%	50%	2055
Intact	73%	67%	46%	75%	61%	2569
Not Reported	--	--	--	--	--	255
MOTHER'S EDUCATION						
No Mother Figure	61%	55%	23%	54%	43%	80
Less than 12 years	55%	45%	23%	61%	48%	617
High School Grad	64%	55%	32%	64%	51%	1138
13 to 15 years	70%	63%	39%	71%	57%	1600
16 or more years	83%	79%	59%	80%	67%	1182
Not Reported	--	--	--	--	--	342
FATHER'S EDUCATION						
No Father Figure	63%	51%	26%	60%	52%	282
Less than 12 years	54%	43%	22%	59%	46%	545
High School Grad	63%	54%	31%	65%	50%	1038
13 to 15 years	71%	64%	40%	73%	57%	1451
16 or more years	81%	77%	57%	77%	65%	1333
Not Reported	--	--	--	--	--	517
HOME OWNERSHIP						
Rent	65%	53%	27%	64%	49%	1300
Own	72%	66%	46%	73%	59%	3216
Not Reported	--	--	--	--	--	363
NATIVITY						
First Generation	66%	58%	32%	69%	57%	702
Second Generation	73%	66%	47%	74%	60%	800
Third or Higher Generation	68%	61%	38%	67%	54%	3377
PARENTING						
Communication and Support						
0.0 Low	56%	44%	24%	48%	32%	25
0.5	56%	50%	21%	41%	45%	121
1.0	59%	47%	28%	58%	44%	320
1.5 Medium	58%	47%	24%	55%	45%	868
2.0	67%	60%	37%	68%	55%	1686
2.5	75%	70%	49%	78%	60%	1349
3.0 High	84%	81%	56%	85%	69%	510
Missing	--	--	--	--	--	38
Knows Friends						
0.0 Low	66%	59%	30%	59%	46%	202
0.5	68%	60%	36%	67%	57%	255
1.0	63%	53%	32%	61%	50%	834
1.5 Medium	69%	61%	39%	68%	54%	1002
2.0	69%	63%	40%	72%	58%	1460
2.5	72%	66%	48%	77%	61%	599
3.0 High	75%	70%	44%	74%	60%	483
Missing	--	--	--	--	--	73
Control and Checking						
0.0 Low	66%	56%	34%	63%	51%	589
0.5	67%	57%	35%	64%	48%	538
1.0	67%	59%	39%	70%	56%	768
1.5 Medium	66%	61%	38%	67%	53%	1071
2.0	72%	64%	42%	71%	57%	844
2.5	71%	65%	43%	73%	60%	688
3.0 High	74%	69%	40%	75%	62%	381
Missing	--	--	--	--	--	16

Table 5. Educational Aspirations and Expectations, College Plans and Application by Background Characteristics

	Educational Ambitions		College Plans This Fall		Applied to	
	Aspire	Expect	4 Year	4 or 2 Yr.	Any College	N
Total	69%	61%	39%	69%	55%	4879
ENCOURAGEMENT INDEX						
0	27%	21%	4%	23%	24%	379
1	33%	23%	7%	31%	29%	229
2	44%	33%	15%	37%	31%	264
3	60%	48%	26%	58%	45%	372
4	68%	58%	33%	68%	52%	583
5	76%	68%	43%	78%	59%	1056
6	82%	77%	54%	84%	68%	1996
STUDENT BEHAVIORS						
Late/Miss/Cut						
Never	66%	59%	38%	67%	51%	111
1-2 times	69%	62%	40%	71%	58%	1167
3-6 times	71%	65%	40%	69%	56%	2310
7-9 times	65%	55%	37%	67%	53%	991
Over 10 times	62%	53%	31%	62%	49%	300
Missing	--	--	--	--	--	71
Ready to Learn						
Never	65%	59%	33%	65%	53%	418
1-2 times	70%	62%	40%	71%	57%	1962
3-6 times	70%	63%	40%	68%	55%	1810
7-9 times	67%	60%	37%	66%	55%	439
Over 10 times	61%	52%	34%	63%	51%	250
Missing	--	--	--	--	--	70
In Trouble						
Never	72%	65%	42%	73%	59%	3336
1-2 times	63%	54%	33%	61%	48%	1323
3-6 times	55%	47%	24%	55%	48%	186
7-9 times	53%	47%	0%	20%	27%	15
Over 10 times	32%	21%	11%	42%	21%	19
Missing	--	--	--	--	--	71
Homework Hours/Week						
None	50%	38%	18%	49%	40%	473
Less than 1	61%	52%	28%	63%	46%	1040
1 to 2	67%	59%	35%	69%	54%	1209
3 to 4	74%	68%	44%	74%	62%	864
5 to 6	85%	81%	56%	81%	65%	411
7 to 9	86%	84%	65%	83%	75%	296
10 or more	86%	83%	66%	86%	73%	350
Missing	--	--	--	--	--	236
SELF IMAGES						
Self Esteem						
Low	61%	49%	25%	56%	44%	525
Medium	63%	54%	34%	65%	54%	1645
High	74%	69%	45%	75%	59%	2625
Missing	--	--	--	--	--	84
Locus of Conrol/Self Efficacy						
Low	55%	39%	21%	49%	41%	575
Medium	65%	56%	34%	67%	53%	1908
High	75%	72%	48%	76%	61%	2351
Missing	--	--	--	--	--	45

Table 6. Regression of Educational Aspirations and Educational Expectations on Race and Ethnicity and Other Social Background Variables of High School Seniors in in West Coast Metropolitan School Districts, Spring 2000, 2002 and 2003 by Race and Ethnicity.

	EDUCATIONAL ASPIRATIONS						EDUCATIONAL EXPECTATIONS					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
RACE/ETHNICITY												
Hispanic	-0.08	0.25	0.27 *	0.26 *	0.32 **	0.31 **	-0.31 **	0.10	0.13	0.12	0.17	0.17
African American	0.30 **	0.58 ***	0.59 ***	0.49 ***	0.54 ***	0.52 ***	0.08	0.44 ***	0.44 ***	0.35 ***	0.41 ***	0.36 ***
East Asian	0.73 ***	0.66 ***	0.72 ***	0.47 **	0.45 **	0.47 **	0.59 ***	0.60 ***	0.67 ***	0.43 **	0.41 **	0.45 ***
Cambodian	-0.43 *	0.76 **	0.91 ***	0.47 *	0.46 *	0.50 *	-0.66 **	0.67 **	0.83 ***	0.39	0.39	0.46 *
Vietnamese	0.36 *	0.81 ***	1.00 ***	0.55 **	0.32	0.39 *	0.14	0.69 ***	0.93 ***	0.48 **	0.24	0.36 *
Filipino	0.31	0.12	0.21	0.18	0.25	0.25	0.16	0.05	0.17	0.13	0.21	0.20
Other Asian	-0.16	0.05	0.13	0.07	0.12	0.12	-0.27	0.05	0.16	0.07	0.12	0.10
American Indian	-0.53 *	-0.28	-0.25	-0.12	-0.09	-0.11	-0.71 **	-0.43 *	-0.38 *	-0.24	-0.21	-0.25
Hawaiian/Pacific Islander	-0.74 **	-0.43	-0.39	-0.33	-0.32	-0.25	-1.08 ***	-0.72 **	-0.68 **	-0.63 **	-0.61 **	-0.49 *
White	omitted	omitted	omitted	omitted	omitted	omitted	omitted	omitted	omitted	omitted	omitted	omitted
FAMILY STRUCTURE												
Not Intact		omitted	omitted	omitted	omitted	omitted		omitted	omitted	omitted	omitted	omitted
Intact		0.23 **	0.18 *	0.0856	0.06	0.05		0.33 ***	0.27 ***	0.17 *	0.13 *	0.12
Not Reported		--	--	--	--	--		--	--	--	--	--
MOTHER'S EDUCATION												
Years of education		0.10 ***	0.10 ***	0.0808 ***	0.07 ***	0.07 ***		0.10 ***	0.09 ***	0.07 ***	0.07 ***	0.07 ***
Not Reported/No Mother		--	--	--	--	--		--	--	--	--	--
FATHER'S EDUCATION												
Years of education		0.11 ***	0.10 ***	0.0831 ***	0.07 ***	0.07 ***		0.12 ***	0.11 ***	0.09 ***	0.08 ***	0.08 ***
Not Reported/No Father		--	--	--	--	--		--	--	--	--	-- *
HOME OWNERSHIP												
No		omitted	omitted	omitted	omitted	omitted		omitted	omitted	omitted	omitted	omitted
Yes		0.19 *	0.18 *	0.12	0.15 *	0.13 *		0.29 ***	0.27 **	0.21 **	0.24 **	0.21 **
Not Reported		--	--	--	--	--		--	--	--	--	--
IMMIGRANT GENERATION[a]												
First Generation		0.22	0.25	0.03	-0.08	-0.02		0.10	0.14	-0.07	-0.19	-0.09
Second Generation		0.39 ***	0.41 ***	0.28 **	0.16	0.16 *		0.28 **	0.32 **	0.20 *	0.08	0.07
Third or Higher Generation		omitted	omitted	omitted	omitted	omitted		omitted	omitted	omitted	omitted	omitted
PARENTING												
Communication & Support			0.65 ***	0.31 ***	0.19 **	0.04			0.83 ***	0.50 ***	0.37 ***	0.10
Missing			--	--	--	--			--	--	--	-- **
Knows Friends			-0.07	-0.14 **	-0.10 *	-0.11 *			-0.08	-0.14 **	-0.10 *	-0.13 **
Missing			--	--	--	--			--	--	--	--
Control and Checking			-0.09 *	-0.12 **	-0.16 ***	-0.14 ***			-0.09 *	-0.11 **	-0.16 ***	-0.12 ***
Missing			--	--	--	--			--	--	--	--
ENCOURAGEMENT INDEX				0.43 ***	0.39 ***	0.39 ***				0.42 ***	0.38 ***	0.37 ***
STUDENT BEHAVIORS												
Late/Miss/Cut					0.01	0.01					0.00	0.00
Missing					--	--					--	--
Ready to Learn					0.01	0.01					0.01	0.02
Missing					--	--					--	--
In Trouble					-0.10 **	-0.07 *					-0.07 *	-0.03
Missing					--	--					--	--
Homework Hours					0.17 ***	0.16 ***					0.18 ***	0.16 ***
Missing					--	--					--	--
STUDENT SELF IMAGES												
Self Esteem						0.12						0.25 ***
Not Reported						--						--
Locus of Control						0.45 ***						0.72 ***
Not Reported						--						--
Constant	16.55	13.23	12.39	11.93	12.10	10.70	16.02	12.49	11.38	10.92	11.12	8.73
Adjusted R-Squared	1.2%	8.7%	10.6%	20.6%	24.7%	25.4%	1.4%	10.9%	14.3%	24.6%	29.2%	31.5%
N	4,518	4,518	4,518	4,518	4,518	4,518	4,508	4,508	4,508	4,508	4,508	4,508

Notes:

* Significant at the .05 level in Additive Models.

** Significant at the .01 level in Additive Models.

*** Significant at the .001 level in Additive Models.

Table 7. Logistic Regression of College Plans on Race and Ethnicity and Other Social Background Variables of High School Seniors in West Coast Metropolitan School Districts, Spring 2000,2002 and 2003 by Race and Ethnicity.

	EXP(B): ODDS RATIO OF: Plan to Attend a Four Year or Two Year College						EXP(B): ODDS RATIO OF: Plan to Attend a Four Year College					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
RACE/ETHNICITY												
Hispanic	0.74 **	0.91	0.94	0.92	0.95	0.96	0.62 ***	0.87	0.88	0.87	0.92	0.92
African American	0.95	1.20	1.20	1.09	1.13	1.12	0.88	1.24	1.26 *	1.21	1.30 **	1.27 *
East Asian	1.59 **	1.64 **	1.90 ***	1.45 *	1.44 *	1.48 *	1.79 ***	2.08 ***	2.31 ***	1.96 ***	2.02 ***	2.09 ***
Cambodian	1.20	2.71 ***	3.52 ***	2.36 ***	2.39 ***	2.52 ***	0.56 **	1.89 **	2.47 ***	1.80 *	1.83 *	1.95 **
Vietnamese	2.22 ***	3.50 ***	4.59 ***	2.99 ***	2.65 ***	2.93 ***	0.82	1.70 **	2.19 ***	1.58 *	1.27	1.35
Filipino	1.16	1.08	1.22	1.16	1.17	1.19	1.06	0.98	1.08	1.03	1.07	1.08
Other Asian	0.81	1.10	1.32	1.15	1.18	1.20	0.67	0.89	0.99	0.91	0.98	0.99
American Indian	0.51 ***	0.57 **	0.59 **	0.63 *	0.63 *	0.62 *	0.45 ***	0.55 **	0.56 **	0.60 *	0.63 *	0.60 *
Hawaiian/Pacific Islander	0.46 **	0.52 **	0.53 **	0.51 **	0.51 **	0.54 *	0.60 *	0.85	0.90	0.96	0.98	1.04
White	omitted	omitted	omitted	omitted	omitted	omitted	omitted	omitted	omitted	omitted	omitted	omitted
FAMILY STRUCTURE												
Not Intact		omitted	omitted	omitted	omitted	omitted		omitted	omitted	omitted	omitted	omitted
Intact		1.45 ***	1.35 ***	1.26 **	1.24 **	1.23 **		1.42 ***	1.37 ***	1.29 **	1.25 **	1.25 **
Not Reported		--	--	--	--	--		--	--	--	--	--
MOTHER'S EDUCATION												
Years of Education		1.07 ***	1.07 ***	1.06 ***	1.05 **	1.05 **		1.11 ***	1.11 ***	1.10 ***	1.09 ***	1.09 ***
Not Reported/ No Mother		--	--	--	--	--		--	--	--	--	--
FATHER'S EDUCATION												
Years of Education		1.03 *	1.01	1.00	0.99	0.99		1.09 ***	1.09 ***	1.08 ***	1.07 ***	1.07 ***
Not reported/ No Father		--	--	--	--	--		--	--	--	--	--
HOME OWNERSHIP												
No		omitted	omitted	omitted	omitted	omitted		omitted	omitted	omitted	omitted	omitted
Yes		1.25 **	1.23 *	1.18	1.20 *	1.18		1.52 ***	1.53 ***	1.48 ***	1.53 ***	1.50 ***
Not Reported		--	--	--	--	--		--	--	--	--	--
IMMIGRANT GENERATION[a]												
First Generation		0.95	0.99	0.78	0.73	0.78 *		0.83	0.87	0.72 **	0.63 ***	0.65 **
Second Generation		1.23 *	1.26 *	1.14	1.07	1.07		1.33 **	1.36 **	1.27 *	1.15	1.13
Third or Higher Generation		omitted	omitted	omitted	omitted	omitted		omitted	omitted	omitted	omitted	omitted
PARENTING												
Communication & Support			2.42 ***	1.86 ***	1.75 ***	1.54 ***			2.05 ***	1.63 ***	1.46 ***	1.23 *
Missing			--	--	--	--			--	--	--	--
Knows Friends			0.96	0.89 *	0.93	0.92			0.94	0.87 **	0.91	0.90 *
Missing			--	--	--	--			--	--	--	--
Control and Checking			0.92 *	0.89 **	0.86 **	0.87 **			0.88 **	0.85 ***	0.81 ***	0.82 ***
Missing			--	--	--	--			--	--	--	--
ENCOURAGEMENT INDEX				1.52 ***	1.50 ***	1.49 ***				1.52 ***	1.49 ***	1.48 ***
STUDENT BEHAVIORS												
Late/Miss/Cut					0.99	0.99					1.00	0.99
Missing					--	--					--	--
Ready to Learn					1.04 *	1.04 **					1.06 ***	1.07 ***
Missing					--	--					--	--
In Trouble					0.87 ***	0.89 **					0.83 ***	0.84 ***
Missing					--	--					--	--
Homework Hours					1.11 ***	1.10 ***					1.18 ***	1.18 ***
Missing					--	--					--	--
STUDENT SELF IMAGES												
Self Esteem						1.04						1.18
Not Reported						--						--
Locus of Control						1.63 ***						1.45 ***
Not Reported						--						--
Constant	2.234	0.423	0.115	0.068	0.069	0.018	0.685	0.026	0.009	0.004	0.003	0.001
Psuedo R-Squared	1%	5%	9%	18%	19%	20%	1%	9%	11%	17%	20%	21%
N	4,879	4,879	4,879	4,879	4,879	4,879	4,879	4,879	4,879	4,879	4,879	4,879

Notes:

* Significant at the .05 level in Additive Models.

** Significant at the .01 level in Additive Models.

*** Significant at the .001 level in Additive Models.

Table A1. Survey Questions Measuring Dependent Variables of Educational Plans, Aspirations, Expectations, Taken SAT/ACT, and Applied to College.

1. Educational Aspirations: "How far would you like to go in school?

Recoded Values		
Continuous	Nominal	Original Metric
11.5	0	1. Less than high school
12	0	2. High school graduation only
13	0	3. Less than 2 years of college, vocational, or business school
14	0	4. Two or more years of college, including a 2 year degree
16	1	5. Finish college (4 or 5 year degree)
18	1	6. Master's degree or equivalent
20	1	7. Ph.D., MD or other professional degree

2. Educational Expectations: "Realistically speaking, how far do you think you will get in school?

Recoded Values		
Continuous	Nominal	Original Metric
11.5	0	1. Less than high school
12	0	2. High school graduation only
13	0	3. Less than 2 years of college, vocational, or business school
14	0	4. Two or more years of college, including a 2 year degree
16	1	5. Finish college (4 or 5 year degree)
18	1	6. Master's degree or equivalent
20	1	7. Ph.D., MD or other professional degree

3. College Plans: "Do you plans to go to college or other additional schooling right after high high school? That is, do you to planto be continuing your education This Fall?"

Recoded Values		
4 Yr	2 or 4 Yr	Original Metric
0	0	1. No
0	0	2. Don't Know
0	0	3. Yes [follow up question about names of colleges most likely to attend]
0	0	--no response to follow up question on specific college
0	1	--response to follow up question was a community or technical college
1	1	--response to follow up question was a four year college or university

4. College Application: "Have you applied to this school?"
If the respondent mentioned one or more specific schools in response to the follow up follow up question about colleges most likely to attend, then s/he was asked, "Have you applied to this school?"

Recoded Values	
Nominal	Original Metric
1	1. Yes to either first or second choice school
0	2. No
0	3. Don't Know or no response.

Table A2. Survey Questions Measuring Independent Variables of Intact Family, Socioeconomic Origins, Immigrant Generation, Parental/Teacher Encouragement, Communications, Control, Supervision, Self Esteem, Locus of Control, Conformity, Hours of Homework, and Self Reported Grades.

1. Intact Family: "Are you living with both your mother and your father (biological or adoptive)?"

Recoded Values	
Nominal	Original Metric
MVD: 0,1	No Response
1	1. Yes
0	2. No

2. Father's Education: "What is the highest degree or level of schooling that he (your father or father figure) has completed?"

Continuous	Nominal	Original Metric
MVD: 0,1	MVD: 0,1	No Response, No Father Figure
0	0	1. Less than 1st grade
2.5	0	2. 1st, 2nd, 3rd or 4th grade
5.5	0	3. 5th or 6th grade
7.5	0	4. 7th or 8th grade
9	0	5. 9th grade
10	0	6. 10th grade
11	0	7. 11th grade
11.5	0	8. 12th grade, no diploma
12	1	9. High school grad or equivalent
14	2	10. Some college, no degree
14	2	11. Associate degree (occupational/vocational)
14	2	12. Associate degree (academic program)
16	3	13. Bachelor's degree
18	3	14. Master's degree
20	3	15. Professional degree

3. Mother's Education
[same question and coding as father's education]

4. Home Ownership: "Does your family own or rent their home?"

Recoded Values	
Nominal	Original Metric
MVD: 0,1	No Response
1	1. Own (with our without mortage)
0	2. Rent

5. Immigrant Generation: "Where were you born?;" "Where was she (biological mother) born?;" and "Where was he (biological father) born?
[State or country of birth were coded according the Census Bureau classification. Students (or parents) with an unknown place of birth were assumed to be born in the United States.]

Recoded Values	
Nominal	Original Metric
MVD: 0,1	No Response
1	1. First Generation: foreign born
2	2. Second Generation: student is native born, but one or both parents are foreign born
3	3. Third or Higher Generation: student is native born and both parents are native born. This category includes persons born abroad of American citizens.

Table A3. Survey Questions Measuring Independent Variables of Intact Family, Socioeconomic Origins, Immigrant Generation, Parental/Teacher Encouragement, Communications, Control, Supervision, Self Esteem, Locus of Control, Conformity, Hours of Homework, and Self Reported Grades.

PARENTING

6. Communication and Support: Summary index based on the following items

"How often have you and your parents discussed school activites" (never, rarely, sometimes, often)?
"How often have you and your parents discussed going to college" (never, rarely, sometimes, often)?
"I have frequent in-depth conversations with my parents" (strongly agree, agree, disagree, strongly disagree).
"I can go to my parent(s) or guardian(s) for advice and support" (strongly agree, agree, disagree, strongly disagree).
"My parent(s) or guardian(s) are usually unhappy or disappointed with what I do" (reverse coded: *strongly disagree, disagree, agree, strongly agree).*
"My family will support me in whatever I choose to do after high school" (strongly agree, agree, disagree, strongly disagree).

Recoded Values		
Continuous	Nominal	Original Metric
	MVD: 0,1	No Response
		0. Never; strongly disagree
(a)	(b)	1. Rarely, disagree
		2. Sometimes, agree
		3. Often, strongly agree

(a). The continuous variable is based on the average (mean) score of responses to these six items.
If one or more items are missing, the score is based on the number of non-missing items.
(b). Low = 0 to x.x
Medium = x.x to x.x
High = x.x to 3.0

7. Knows Friends: Summary index based on the following items:

"My parents know many of the parents of my closest school friends." (strongly agree, agree, disagree, strongly disagree).
"My parents know many of my closest school friends." (strongly agree, agree, disagree, strongly disagree).

Recoded Values		
Continuous	Nominal	Original Metric
	MVD: 0,1	No Response
		0. Strongly disagree
(a)	(b)	1. Disagree
		2. Agree
		3. Strongly agree

(a). The continuous variable is based on the average (mean) score of responses to these two items.
If one or more items are missing, the score is based on the number of non-missing items.
(b). Low = 0 to x.x
Medium = x.x to x.x
High = x.x to 3.0

8. Control and Checking: Summary index based on the following items:

"How often do your parent(s) or guardians help with or check on whether you have done your homework (never, rarely, sometimes, often)?
"How often do your parents or guardian limit amount of time you go out with friends on school nights (never, rarely, sometimes, often)?

Recoded Values		
Continuous	Nominal	Original Metric
	MVD: 0,1	No Response
		0. Never
(a)	(b)	1. Rarely
		2. Sometimes
		3. Often

(a). The continuous variable is based on the average (mean) score of responses to these two items.
If one or more items are missing, the score is based on the number of non-missing items.
(b). Low = 0 to x.x
Medium = x.x to x.x
High = x.x to 3.0

Table A4. Survey Questions Measuring Independent Variables of Intact Family, Socioeconomic Origins, Immigrant Generation, Parental/Teacher Encouragement, Communications, Control, Supervision, Self Esteem, Locus of Control, Conformity, Hours of Homework, and Self Reported Grades.

ENCOURAGEMENT

9. Father's Encouragement: "What does your father or the person most like a father to you, think is the most important thing for you to do after high school?

Recoded Values		
Continuous	Nominal	Original Metric
	1	1. Go to college
	0	2. Enter a trade school…
	0	3. Enter military service
	0	4. Get a job
	0	5. Get married
	0	6. I don't know
	MVD: 0,1	7. Does not apply, no male parent or guardian

10. Mother's Encouragement
[Same question and coding as father's ecouragement]

11. Brother's or Sister's Encouragement
[Same question and coding as father's ecouragement]

12. Friend's Encouragement
[Same question and coding as father's ecouragement]

13. An Adult Whose Advice You Value's Encouragement
[Same question and coding as father's ecouragement]

12. Your Favorite Teacher's Encouragement
[Same question and coding as father's ecouragement]

13. Encouragement Index:
This index is the sum of the values of items 9 through 12, with a range from 0 to 6.

STUDENT BEHAVIORS

15. Late/Miss/Cut: Summary index based on the average of following items. If one or more of the items are missing, the average is computed on the non-missing items.
"I was late for school (Never, 1-2 times, 3-6 times, 7-9 times, over 10 times).
"I cut or skipped classes (Never, 1-2 times, 3-6 times, 7-9 times, over 10 times).
"I missed a day of school (Never, 1-2 times, 3-6 times, 7-9 times, over 10 times).

Recoded Values		
Continuous	Nominal	Original Metric
	MVD: 0,1	No Response
0	1	0. Never
1.5	1	1. One to two times
4.5	2	2. Three to six times
8	3	3. Seven to nine times
10	3	4. Over ten times

16. Ready to Learn: Summary index based on the average of the following items. If one or more of the items are missing, the average is computed on the non-missing items.
"I went to class with a pencil, pen, or paper (Never, 1-2 times, 3-6 times, 7-9 times, over 10 times)."
"I went to class without my books (Never, 1-2 times, 3-6 times, 7-9 times, over 10 times)."
"I went to class without my homework (Never, 1-2 times, 3-6 times, 7-9 times, over 10 times)."

Recoded Values		
Continuous	Nominal	Original Metric
	MVD: 0,1	No Response
0	1	0. Never
1.5	1	1. One to two times
4.5	2	2. Three to six times
8	3	3. Seven to nine times
10	3	4. Over ten times

15. In Trouble: Summary index based on the average of the following items. If one or more of the items are missing, the average is computed on the non-missing items.
"I got into trouble for not following school rules (Never, 1-2 times, 3-6 times, 7-9 times, over 10 times)."
"I was put on in school suspension (Never, 1-2 times, 3-6 times, 7-9 times, over 10 times)."
"I was suspended or put on probation from school (Never, 1-2 times, 3-6 times, 7-9 times, over 10 times)."

Recoded Values		
Continuous	Nominal	Original Metric
	MVD: 0,1	No Response
0	1	0. Never
1.5	1	1. One to two times
4.5	2	2. Three to six times
8	3	3. Seven to nine times
10	3	4. Over ten times

16. Homework Hours: "Overall, about how much time do you spend on homework each week outside of school?"

Recoded Values		
Continuous	Nominal	Original Metric
	MVD: 0,1	No Response
0	1	0. None
0.5	1	1. Less than 1 hour
1.5	1	2. 1 to 2 hours
3.5	2	3. 3 or 4 hours
5.5	2	4. 5 or 6 hours
8	3	5. 7, 8, or 9 hours
10	3	6. Over 10 hours

STUDENT SELF-IMAGES

17 Self Esteem: Summary index based on mean of the following items. If one or more of the items are missing, the average is computed on the non-missing items.

"I feel that I do not have much to be proud of." (strongly agree, agree, disagree, strongly disagree)
"I feel that I am a person of worth, the equal of other persons." (strongly agree, agree, disagree, strongly disagree)
"I feel useless at times." (strongly agree, agree, disagree, strongly disagree)
"On the whole I am satisfied with myself." (strongly agree, agree, disagree, strongly disagree)
"At times, I think that I am no good at all." (strongly agree, agree, disagree, strongly disagree)
"I feel good about myself." (strongly agree, agree, disagree, strongly disagree)
"I am able to do things as well as most other people." (strongly agree, agree, disagree, strongly disagree)

Recoded Values		
Continuous	Nominal	Original Metric
	MVD: 0,1	No Response
		0. Strongly disagree
(a)	(b)	1. Disagree
		2. Agree
		3. Strongly agree

(a). The continuous variable is based on the average (mean) score of responses to these two items.
If one or more items are missing, the score is based on the number of non-missing items.
(b). Low = 0 to x.x
Medium = x.x to x.x
High = x.x to 3.0

18. Locus of Control: Summary index based on mean of the following items. If one or more of the items are missing, the average is computed on the non-missing items.

"In my life, good luck is more important than hard work for success." (strongly agree, agree, disagree, strongly disagree)
"When I make plans, I am almost certain that I can make them work." (strongly agree, agree, disagree, strongly disagree)
"Every time I tried to get ahead, something or somebody stops me." (strongly agree, agree, disagree, strongly disagree)
"My plans hardly ever work out, so planning only makes me unhappy." (strongly agree, agree, disagree, strongly disagree)
"I don't have enough control over the direction my life is taking." (strongly agree, agree, disagree, strongly disagree)
"Chance and luck are very important to what happens in my life." (strongly agree, agree, disagree, strongly disagree)

Recoded Values		
Continuous	Nominal	Original Metric
	MVD: 0,1	No Response
		0. Strongly disagree
(a)	(b)	1. Disagree
		2. Agree
		3. Strongly agree

(a). The continuous variable is based on the average (mean) score of responses to these two items.
If one or more items are missing, the score is based on the number of non-missing items.
(b). Low = 0 to x.x
Medium = x.x to x.x
High = x.x to 3.0