THE ACTUATION OF COLLEGE PLANS: EXPLAINING WHY SOME SENIORS MAKE IT AND OTHERS DON’T*

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ABSTRACT

The transition from high school to college has become increasingly important for
economic success and mobility in the United States. Most students form definite plans regarding
post-secondary schooling by their senior years. Yet, not all seniors who plan to attend college
immediately after graduation are successful in achieving that goal. We use information from a
longitudinal study of high school seniors to determine the factors that influence their ability to
actuate their college plans. Special attention is devoted to racial and ethnic variation in the
realization of college plans, and in the possible explanations for such variation. Multivariate
binary and multinomial logistic regression analyses reveal an enrollment *advantage* for Asian
students and an enrollment *disadvantage* for African American students. In addition, Asian
students are more likely than whites or blacks to attend *two-year* schools, while African
American students are less likely than whites or Asians to attend *four-year* schools.

Encouragement for a college attendance from parents, teachers, and friends is responsible for the
greater likelihood of enrollment among Asians. Weaker high school academic performance
appears to explain the disadvantage for African American students. The possibility of a cultural
explanation is acknowledged for the greater encouragement enjoyed by Asian students, while
alternative mechanisms are suggested for the role of academic performance in the lower
likelihood of college actuation for black students.
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INTRODUCTION

The educational requirements for socioeconomic success in the United States experienced a significant upward shift during the second half of the twentieth century. Over time, a high school diploma became an inadequate credential for successful competition in those sectors of the labor market that offered well-paying jobs and satisfying employment. Rather, a college degree became the educational threshold for those seeking better access to society’s scarce resources of power, prestige, and wealth. And, even that higher level of educational achievement was no guarantee of success, as more and more college graduates found themselves toiling in positions that were unrelated to their collegiate training and that paid far less than they had hoped for and expected. Nonetheless, a college degree has increasingly become viewed as a key pre-requisite for access to the “good life” in American society. As stated by Brooks-Gunn and her colleagues (1993:272), “Whatever the process by which they are made, decisions about dropping out of or continuing beyond high school, in and of themselves, constitute some of the most important made by youth in Western society.”

Evidence of this important transition can be drawn from a number of sources, but two will suffice. First, the percentage of adults who extend their educations beyond high school has increased sharply, as has the percentage receiving a college degree. For example, in 1950 these two percentages stood at 13.5% and 6.2%, respectively. By 2000 they had increased to 51.8% and 24.4%, respectively. Second, the gap between the earning power of those with high school diplomas and those with bachelor degrees has grown sharply during the same time period. In 1950 the difference in median annual wage income between those with only a high school diploma and those with at least a bachelor’s degree stood at $2,705. That difference grew to
$18,410 by the close of the twentieth century.¹

The vast literatures on educational attainment and status attainment in the U.S. have devoted a great deal of attention to identifying those factors that affect the length of schooling for Americans (e.g., Alexander and Eckland 1974; Astone and McLanahan 1991; Blau and Duncan 1967; Portes and Wilson 1969; Portes and Rumbaut 2001; Sewell, Haller, and Portes 1969; Sewell, Haller, and Ohlendorf 1970; Wojtkiewicz and Donato 1995). A separate, but also large, literature has examined the educational aspirations, expectations, and plans of American youth (e.g., Hanson 1994; Hauser and Anderson 1991; Hirschman 2002; Kerchoff and Campbell 1977; Wong 1990). Combined, these literatures have told us a great deal about social stratification in the U.S., as well as about the micro-level processes that shape the educational perceptions and objectives of young children and adolescents. However, relatively little research has considered the degree to which the specific educational plans of students are realized, or explored the factors affecting the likelihood that students will actuate their schooling objectives.

In this paper we use longitudinal data to examine the experiences of high school students who planned to enroll in college during the year immediately following their graduation. The central question to be examined is whether the students were actually successful in carrying out their stated college plans. Within that larger objective, we are especially interested in the extent to which students from different racial or ethnic groups varied in their ability to actuate their college plans, as well as in the factors that might account for any racial/ethnic differences. These issues are explored using data from a survey of high school seniors in a metropolitan school district located in the Pacific Northwest. The students reported their college plans in the original

¹ Information about educational attainment and wage income was obtained from the 1950 and 2000 Public Use Microdata files, as made available by the Integrated Public Use Microdata Series Project at the Minnesota Population Center (Ruggles and Sobek 2001). The differences in wage income are expressed in constant, 2000 dollars.
survey that was conducted near the end of their senior year. Their actual educational status following graduation was obtained from a follow-up survey that took place during the Spring of the subsequent year.  

BACKGROUND AND THEORY

Consistent with its central importance for status attainment and social mobility, educational achievement has been extensively researched by social scientists. This scholarship has focused largely on when people terminate their formal schooling and why. Increasingly, it is recognized that educational behavior is best viewed as a developmental process in which experiences at even very early stages in the life cycle can affect outcomes at much later stages. For example, some investigators have inferred significant effects of events during the first grade on the likelihood of students dropping out sometime before graduating from high school (Alexander, Entwistle, and Kabbani 2001; Alexander, Entwistle, and Horsey 1997; Ensminger and Slusarcick 1992). Extending even further back in time, a student’s prospects for completing high school have been linked to the age of their mother when the student was born (Brooks-Gunn, Guo, and Furstenberg 1993). The availability of longitudinal data bases, some of them spanning most of the years of a student’s life, has made it easier to study educational achievement from a developmental perspective. Whether viewed as part of a longer-term developmental process, or from a more restricted temporal perspective, two important educational milestones have dominated the attention of researchers – graduation from high school and progression to post-secondary schooling.

The successful completion of high school serves both as a credentialing event and as the springboard for the transition to college. As a result, the failure to reach this educational milestone...
milestone has, reasonably, been viewed as a significant problem, with both individual and societal consequences (Rumberger 1987). For individual dropouts, the premature termination of schooling often means settling for an unskilled or semi-skilled job in the secondary labor market (Newburger and Curry 1999). The attendant low wages offer little economic security, and the likelihood of upward occupational mobility typically is low. For the larger society, a lower rate of high school completion implies a work force with less human capital, consumers with lower incomes, and a more poorly informed electorate (Alexander, Natriello, and Pallas 1985; Fine 1986; Newburger and Day 2002).

Extensive research on the correlates or predictors of dropping out before high school graduation has implicated a wide variety of demographic, economic, behavioral, and attitudinal risk factors. Although the operation of specific risk factors, and the inferred strength of their effects, vary somewhat across studies, it is possible to glean some general conclusions about the individual- and family-level influences on high school completion. *Demographically*, the likelihood of dropping out is often found to vary by race/ethnicity, gender, and family structure. African Americans, Hispanics, and Native Americans tend to exhibit higher drop out rates than non-Hispanic whites and Asians (Ekstrom, Goertz, and Pollack 1986; Paulsen and Fernandez 1989; Rumberger 1983, 1995). Males are less likely to complete high school than are females (Brooks-Gun, Guo, and Furstenberg 1993; Rumberger 1987). Children from intact families are more likely to complete high school than are those from disrupted families (Astone and McLanahan 1994; McLanahan 1985; Sandefur, McLanahan, and Wojtkiewicz 1992).

*Economically*, one of the strongest predictors of dropping out is family SES, as measured by such parental characteristics as education, occupation, or home ownership (Alexander, Entwistle, and Kabbani 2001; Ekstrom, Goertz, and Pollack 1986; Haveman, Wolfe, and Spaulding 1991; Rumberger 1983; Rumberger 1990). A variety of *behavioral* factors have also been found to
increase the chances of high school graduation, including: better grades, higher scores on standardized tests, behavioral conformity, and association with non-deviant peers who place a higher value on education (Ekstrom, Goertz, and Pollack 1986; Matute-Bianchi 1985; Rumberger 1987; Velez 1989). Among the possible *attitudinal* predictors of dropping out, self-esteem and locus of control have received the most attention. Students who believe that control over the events in one’s life are internally, rather than externally, located tend to fare better educationally (Alexander, Entwistle, and Horsey 1997; Ekstrom, Goertz, and Pollack 1986; Fejgin 1995; Rumberger 1987; Wehlage and Rutter 1986). The theoretical debates and evidence regarding the educational benefits of positive self-esteem are more mixed and ambiguous (Bankstron and Zhou 2002; Hendrie 1998; Ekstrom, Goertz, and Pollack 1986; Filozof, Albertin, and Jones 1998; Portner 1998; Rumberger 1987; Wehlage and Rutter 1986; Wiest, Wong, and Kreil 1998). In a general way, the same set of risk factors has been associated with the propensity for high school graduates to continue on to post-secondary schooling (Sewell 1971).

At the risk of over-simplification, one might summarize this smorgasbord of educational influences as reflecting the following general antecedents: (1) social and emotional support for schooling, (2) academic preparation for schooling, and (3) adequate financial resources for schooling. However, given fundamental differences in the outcomes to be explained – graduation from high school versus enrollment in college – it is reasonable to expect that the relative importance of their predictors might differ. For example, only students with the best grades and test scores, and adequate financial resources, will be able to attend the most exclusive colleges and universities. But, good grades and rich parents may not be enough to compensate for a lack of motivation on the part of the prospective student. It is with regard to the pursuit of higher education that the distinction among educational *aspirations, expectations*, and *plans* has most relevance (Hanson 1994; Hauser and Anderson 1991; Hirschman 2002).
Although closely related, these three dimensions of the educational achievement process are actually distinct. They might be best viewed as concepts in a causal model in which a student’s plans to continue or discontinue schooling are based on his or her educational aspirations and expectations (see Figure 1). Educational aspirations describe the level of schooling that a student would hope to achieve in the absence of internally, or externally, imposed constraints or obstacles. Because there are usually constraints or obstacles (e.g., academic ability, financial resources, inadequate information, etc.) a student’s expectations for educational attainment may fall short of their aspirations. Based on a consideration of their educational aspirations and expectations, students make specific short- and long-term plans about school enrollment and continuation, for example, to complete high school, to enroll in college after high school, and to complete a college degree.

[Figure 1 About Here]

It is the final transition in this conceptual model that is the central concern of this paper – the degree of success that students have in accomplishing their educational plans. The likelihood that students are able to actuate their educational plans most likely varies inversely with the length of time between the point at which the plans are expressed and the specific goal occurs (e.g., high school graduation or college attendance). For example, plans to attend college that are expressed by 9th graders will probably be less predictive of subsequent behavior than will similar plans expressed by high school seniors. Our focus is on the ability of high school seniors to realize their plans for college attendance within a very narrow window of time – roughly one year from the end of their senior year. The primary objective is to identify factors that increase or decrease the likelihood that high school seniors who plan to enroll in college in the Fall following graduation actually do so. We consider a variety of possible determinants of the actuation of college plans that have been linked to educational attainment, in general, or to the
continuation or discontinuation of schooling at earlier stages. These factors, which are described more fully in a later section of the paper, fall into one of the four broader categories of educational influences mentioned above: demographic, economic, behavioral, and attitudinal.

No prior research has examined the actualization of educational plans with the same methodological approach that is used in our study, that is, by comparing specific, stated, plans and subsequent behavior within a relatively short period of time. However, the general topic of student’s abilities to translate educational aspirations or expectations into later schooling outcomes has been broached by other investigators. Hauser and Anderson (1991) traced trends in the propensity for black and white high school seniors to enter college between 1976 and 1986, and linked those trends to concomitant changes in students’ aspirations for higher education. They concluded that the downward swing in college enrollment for black students from 1977 through the mid-1980s could not be accounted for by a simultaneous decline in their desire for a college education. Although pointing to the possibility that blocked educational opportunities (or the availability of alternative post-high school opportunities) were greater for black students than for white students, the evidence presented by Hauser and Anderson was not based on a matching of the aspirations and the actual subsequent college enrollment (or non-enrollment) for the same students. Rather, they described general trends in actual college “entry” using data from the Current Population Surveys for 1968 through 1985 and corresponding trends in college aspirations for 1976 to 1986 using data from the “Monitoring the Future” survey.  

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Hauser and Anderson (1991:272-3) also used data from the Monitoring the Future survey to compare the college “aspirations” and college “plans” as expressed by the same students. The relationship between aspirations and plans did not change over time, which they inferred as further support for their conclusion that changing aspirations could not explain the decline in college entry for African Americans.
In a study that employed a research design somewhat similar to ours, Hanson (1994) used data from the “High School and Beyond” longitudinal survey to investigate three dimensions of unrealized educational aspirations and expectations. The dimension that is most closely related to our analysis was labeled “unfulfilled educational expectations” and described those high school seniors who, in 1980, expected to receive a college degree sometime in the future but had not enrolled in college by 1986. Among the notable findings from Hanson’s analyses was that “non-White” students were actually less likely than white students to experience unrealized educational expectations – after controlling for a wide variety of factors including test scores, high school GPA, family SES, and parental education. Only two variables, other than race, emerged as significant predictors of unfulfilled educational expectations in Hanson’s full models: the student’s occupational aspirations for age 30 and the educational values held by their friends (both negatively associated with unfulfilled expectations).

Although Hanson’s results offer interesting and intriguing insights into the ability of students to actuate their college plans, it is limited in important ways. First, the students were asked to describe their educational “expectations” rather than their “plans” for a specific educational outcome. Second, the expectations that they reported referred to an educational goal (college graduation) that was to occur, if at all, quite far in the future. Third, Hanson’s analyses are limited in their ability to reveal racial or ethnic variation because of her use of a “non-White” versus “white” racial classification. For example, the “non-White” category lumps together Asians and African Americans, two groups with much different educational patterns (Hirschman 2002; Hirschman and Wong 1986; Newberger and Curry 2000; Portes and Wilson 1976; Wong 1990). Fourth, the results from Hanson’s multivariate logistic regression analysis of unfulfilled educational expectations are somewhat difficult to interpret given the inclusion of predictor variables (i.e., whether the student attended college by 1982 or 1984) that are also used
in the construction of the binary dependent variable (expected to graduate from college but did not attend before 1986). The model specification that results from the inclusion of those variables on the right-hand-side of the equation changes the meaning of the dependent variable to become whether the student entered college sometime between 1984 and 1986.

In the analyses to follow we pursue many of the same general issues that concerned Hauser and Anderson (1991) and Hanson (1994) – that is, how successful students are at achieving their educational objectives. We focus on a relatively brief interval of time in the overall educational careers of students, but one that is quite critical to their ultimate progression to post-secondary education. We ask, “Did high school seniors who planned to attend college in the year following graduation actually do so?” And, to what extent can the likelihood of realizing one’s educational plans be explained by key individual- and family-related characteristics? To be sure, some students who failed to attend college immediately after high school, as they had planned, will eventually go on to complete advanced degrees. Therefore, our investigation does not address the problem of permanently unfulfilled educational plans. Rather, it should be viewed as an examination of the short-term achievement of a very specific educational goal.

DATA, VARIABLES, AND METHOD

Data

The data used in our analyses were obtained from a survey of high school seniors in a metropolitan school district in the Pacific Northwest region during the late Spring of 2000. A total of 1,156 seniors from five separate high schools completed the original survey which was administered within the schools, either in separate classrooms or in an auditorium setting. The full questionnaire included a wide variety of items designed to measure the students’ educational and occupational aspirations, expectations, and plans. In addition, information was gathered
about the students’ demographic characteristics, family background, extracurricular activities, support networks, attitudes, and beliefs. From the complete sample of students, we have selected those who expressed definite plans to attend college in the Fall immediately after their high school graduation. This was determined by the students’ responses to the following question, “Do you plan to go to college or other additional schooling right after high school? That is, do you plan to be continuing your education?” A total of 872 students reported such plans.

A follow-up survey of the complete sample of students who participated in the in-school survey was conducted in the Spring of 2001. The follow-up survey of 1,018 students was very short and focused, asking students to report on: (1) their high school graduation, (2) their post-graduation employment, and (3) their post-graduation school enrollment. The students were contacted via a combination of phone calls, email exchanges, and a web-based response system. Most students were contacted directly for the follow-up survey, but the information for some students was obtained from “proxies” such as parents, friends, or siblings. Of the 872 students who reported plans to attend college in the Fall of 2000, follow-up surveys were obtained from 786. The latter number represents the eligible sample for our study, though it is slightly reduced by missing information for the variables included in our analyses.

Variables

Dependent Variables. The dependent variables used in our analyses are based on the responses provided by the students in the follow-up survey, and are meant to measure whether or not the student successfully carried through with their stated plans to continue their educations immediately after completing high school. Two strategies are used to measure the actuation of college plans, with each strategy lending itself to somewhat different analytic objectives. A simple binary measurement approach is used which distinguishes those who did realize their educational plans from those who did not. A more complex, trichotomous, classification scheme
is used to further distinguish those who continued their educations in two-year institutions from those who proceeded to four-year institutions. In our analysis of this trichotomy, those who did not immediately continue their educations serve as the reference category.

Independent Variables. A key predictor variable in our analysis classifies students by race and ethnicity. In light of the modest sample size, we distinguish among four racial/ethnic groups in our analyses: Non-Hispanic Whites, African Americans, Asians, and Other. The last category is heterogenous, including: Native Americans, Pacific Islanders, and Hispanics. Membership in a racial/ethnic group was determined through self-reports to a question about racial/ethnic identity. In all multivariate analyses reported in the following tables, Non-Hispanic Whites serve as the reference category. In supplementary analyses we change the reference category to African Americans in order to compare them to Asians and Others. A second demographic variable is gender, with males used as the reference category.

A second set of predictor variables is included to describe a student’s family background, including family structure and socioeconomic standing. Students from “intact” families are compared to those who have experienced family disruption, with an intact family defined as one in which the student resides with his or her biological father and biological mother (coded “1”). Previous research has linked residence in an intact family with a lower probability of dropping out and higher levels of educational attainment. Family SES is represented by a variable that distinguishes home owners (coded “1”) from renters (coded “0”) and another that indicates whether a student had at least one parent who had attended college.\(^4\) Home ownership and

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\(^4\) Separate analyses were also conducted in which mother’s and father’s education were measured separately. Both were found to be positively related to college attendance. In addition, we experimented with more detailed measures of parental education. None of those alternative model specifications appreciably changed the estimated effects of other covariates. In the interest of parsimony we have opted for this simpler measurement strategy.
More information about the construction of the self-esteem index is contained in the Appendix.

In order to tap a more “internal” emotional resource upon which students may draw as they strive to achieve their educational objectives, we include measures of self-esteem and locus of control in our analyses. Both concepts are represented by indices that have been constructed from a number of individual indicators. A “higher” value on the self-esteem index implies that the student holds a more positive view of his or her own competencies or worth;\(^5\) while a higher value for locus of control indicates a belief by the student that he or she has a greater influence over the outcome of life events that affect them.\(^6\) Students who express a more positive self-esteem and a more “internal” locus of control are hypothesized to be more effective in carrying out their short-term educational plans. However, the results from previous research suggest that locus of control has a more powerful influence on educational attainment than does self esteem (e.g., Hirschman 2002).

The support and encouragement that students receive from others for their educational objectives has the potential to improve their chances of realizing college plans, over and above the financial support at their disposal. We consider the educational encouragement received by the high school seniors from three different sources: parents, teachers, and friends. We include three separate variables that indicate whether the student reported that each possible source of

\(^5\) More information about the construction of the self-esteem index is contained in the Appendix.

\(^6\) More information about the construction of the index measuring locus of control is presented in the Appendix.
encouragement (parents, teachers, or friends) placed strongest emphasis on college attendance when discussing post-high school plans with them.

We include officially recorded cumulative grade point averages (GPA) in our analyses to account for differences in academic performance among the students – which might influence the likelihood that they enrolled in college after graduation. In fact, however, the hypothesized effect of GPA on actuation of college plans may not be quite that straightforward. The students included in our sample expressed their educational plans very near the completion of their senior years. Therefore, their stated plans to attend college were made with nearly complete knowledge of their high school grade point average. If a student’s academic record posed a serious obstacle to post-secondary schooling, one might expect it to be reflected in their plans to attend college, rather than in their ability to attain that goal. This would seem especially likely, given the opportunity for students to enroll in two-year community colleges that impose no minimum grade point average for admission. For these reasons, the impact of cumulative grade point average in our models may be somewhat weaker than has been inferred from studies of educational attainment for less restricted samples of students (Hirshman 2002; Sewell, Haller, and Portes 1969; Sewell, Haller, and Ohlendorf 1970).

A final independent variable allows us to distinguish students who expressed plans to attend a two-year college from those who planned to enroll in four-year schools. Conflicting hypotheses may be proposed for this predictor. On the one hand, four-year students are required to take steps during their senior years, prior to enrolling, for example by formally applying and submitting examination scores. These requirements may reflect a stronger commitment to post-secondary schooling, and therefore mean that such students are more likely to realize their educational plans than are students who intend to enroll in two-year schools. On the other hand, students planning to attend two-year schools face fewer bureaucratic obstacles, and lower
financial costs, which may increase their chances of actuating college plans. Our a priori hypothesis is that students intending to enroll in four-year schools were more likely to achieve their college plans. However, we recognize the possibility of counterbalancing influences.

Where necessary, we have imputed missing values for all independent variables. For categorical variables we have assigned the modal category. For continuous variables we have imputed the mean. Constructed indices (e.g., self-esteem and locus of control) were based only on the number of items for which we had valid responses. In addition, we have included as predictors a set of independent, dummy variables that identify those cases for which values have been imputed, and to determine whether the cases with missing values are significantly different from cases with reported values. The coefficients for those dummy variables are not reported in the tables in order to avoid clutter. However, they suggested that there were no problems associated with the imputation of information for missing data.

Method

Our analysis is conducted in two stages. In the first stage we treat the dependent variable as a dichotomous outcome – students either realized their plans to attend college, or they did not. Binary logistic regression is used to assess the influence of the independent variables on the likelihood of college attendance. In the second stage of the analysis, we treat the dependent variable as polytymous, with three possible outcomes: (1) attended a four-year school, (2) attended a two-year school), (3) did not attend college. Multinomial logistic regression is used to identify those variables that were most important for distinguishing the two types of college attendees from those who did not achieve their educational plans. In both the binary and multinomial logistic regression analyses, we begin by estimating models that describe basic racial/ethnic and gender differentials in the dependent variables. We then proceed to estimate a series of models that include different combinations of variables on the right-hand-side of the
prediction equation. This strategy allows us to discern the most important predictors of the actuation of college plans, as well as to assess their impact, if any, on the basic racial/ethnic and gender variation.

**FINDINGS**

**Descriptive Patterns**

Descriptive statistics for all variables included in our analyses, as reported in Table 1, provide an informative portrait of the sample of high school seniors represented in our sample. Means and standard deviations are presented for continuous variables; proportions are presented for dichotomous variables. Information is presented for the entire sample, and separately by race/ethnicity. Within the total sample, fully 82.2% of all students were able to realize their plans to attend college after high school. This overall percentage masks considerable variation by race/ethnicity, with Asian students exhibiting the greatest likelihood of actuating their college plans (88.5%) and African American students the smallest likelihood (73.7%). The sample also includes considerable racial/ethnic diversity. A slight majority (52.7%) are non-hispanic whites; one-in-five is Asian, roughly 1-in-6 is African American, and 1-in-10 falls into the “Other” racial/ethnic group. Somewhat more than half of all students (57.9%) resided with their biological mother and father, with the largest percentage of intact homes reported by Asian students (71.3%) and the smallest percentage by African American students (34.8%). Home ownership, averaging 70.2% for the entire sample, was most common among whites (84.2%) and least common among Asians (50.3%). Whites students were more likely than the other groups to have a mother or father who attended college (84.7%), with only 42.7% of Asian students reporting that at least one parent proceeded beyond high school. All groups enjoyed relatively strong encouragement to attend college from their parents, teachers, and friends, though Asians reported the highest levels of all types of encouragement. A majority of white and black
students planned to attend four-year schools after graduation, while a majority of Asian and “Other” students planned to enroll in two-year institutions. Whites and Asians had achieved roughly similar cumulative grade point averages (3.213 and 3.267, respectively), with GPAs for blacks and “Others” falling somewhat lower (2.737 and 2.88, respectively). In sum, Table 1 reveals ample racial and ethnic variation in the likelihood that students successfully achieved their college plans. And, there is corresponding variation in the predictor variables that we have identified to explain such variation.

[Table 1 About Here]

**Actuating College Plans: Attending Versus Not Attending**

The first stage of our multivariate analyses focuses on the dichotomous distinction between those students who carried through with their plans to attend college and those who did not. Table 2 presents the results from a series of logistic regression models that build incrementally upon Model 1 that describes basic racial/ethnic and gender differentials. We include a control for the type of school (two-year versus four-year) that the student planned to attend in light of its potential to influence the effects of other covariates in the models. Model 1 reveals statistically significant racial/ethnic differentials in the actuation of college plans, but no apparent difference between males and females. African American students were significantly *less likely* than white students to realize their college plans in the year after high school graduation. In contrast, Asian students were significantly *more likely* to attend college than were white students. These racial/ethnic differentials in the actuation of college plans are consistent with the findings of much previous research that considers more general patterns of educational attainment. The odds ratios for both groups also suggest sizeable differentials. The odds that

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7 Logistic regression coefficients are reported in Table 1. These describe the effect on the logged odds of college attendance resulting from a one-unit change in the predictor variable.
black students attended college stand at roughly one-half the odds for whites, while the odds for Asian students are more than three-quarters greater than for whites (.516 and 1.784, respectively). The gap is even greater between African American and Asian students, with the odds that Asian students attended college being 3.458 times greater than the odds for black students.\(^8\) However, the point estimates for the logistic regression coefficients (and therefore the odds ratios) should be interpreted with some caution, given their relatively large standard errors. The results from Model 1 also indicate that students planning to attend four-year schools were significantly more likely to carry through with their plans.

[Table 2 About Here]

Three measures of family socioeconomic status or family background are added to the right-hand-side of the equation in Model 2: parental college attendance, home ownership, and family structure. Students with at least one parent who attended college, and who reside in intact families, were more likely to realize their plans for college attendance following graduation. In contrast, students from home owning families were no more likely to attend college than their counterparts from families that rented. Controlling for family SES and family background has only a modest effect on the racial and ethnic differentials that were observed in Model 1. African American students continue to trail white students in their ability to carry through with their educational plans, though their disadvantage is reduced slightly in Model 2 (e.g., Odds

8 Odds ratios can be obtained by exponentiating these coefficients (i.e, \(e^\hat{b}\)). For example, the odds ratio for African American students in Model 1 is \(e^{.662} = .516\) and the odds ratio for Asian students is \(e^{.579} = 1.784\).

\(^8\) The odds ratio comparing Asian and African American students was obtained by re-estimating Model 1 while using African Americans as the reference group. A similar procedure is used to compare Asian students and African American students in subsequent models. The full results from these supplementary analyses are not reported in the text, but are available from the authors upon request.
Ratios of .516 and .560 in Model 1 and Model 2, respectively). Although the relative advantage for Asian students actually increases in magnitude with the inclusion of the additional predictors in Model 2, it falls slightly below the conventional threshold for statistical significance ($p < .061$). Still, the difference between the ability of Asian students and white students to realize their college plans, net of family SES and family background, is substantial. Furthermore, the difference between Asian students and African American students is even greater. Net of other variables in the model, the odds of an Asian student attending college are more than three times greater than the odds for black students (odds ratio = 3.302; $p < .001$).

The addition of students’ self-esteem and locus of control as predictor variables (Model 3) has relatively little impact on the results. Neither measure has a statistically significant effect on the likelihood of attending college, nor do they alter in a meaningful way the influence of other covariates in the model. The enrollment advantage for Asian students is strengthened, slightly, in Model 3, with the odds ratio for Asians rising from 1.848 to 2.028, and its $p$-value once again achieving statistical significance by conventional standards ($p < .036$). The weak performance of these two attitudinal measures is not surprising, given the findings from previous research which have raised questions about the relationship between self-esteem and educational attainment (Ekstrom, Goertz, and Pollack 1986; Hendrie 1998; Portner 1998;). However, it should be noted that our analysis uses a global measure of self-esteem, rather than a measure that taps more directly academic self-esteem (e.g., Rosenberg et al. 1995). It is possible that the latter measure would perform more successfully in our models. In general, locus of control has fared better in previous research – as it does in Model 3 with a $p$-value of .073, compared with the $p$-value of .496 for self-esteem.

Encouragement from others proves to have an important influence on the ability of students to actuate their college plans (Model 4). Teachers, parents, and friends are able to
increase the likelihood that students will attend college by placing the highest value on obtaining a college education after graduating from high school. Moreover, it appears that stronger encouragement from others plays a very important role in the college enrollment advantage for Asian students. Once the three sources of encouragement are taken into account, the logistic regression coefficient for Asian students is more than cut in half ($\beta = .707$ versus $\beta = .347$ in Model 3 and Model 4, respectively), and becomes non-significant. In supplemental analyses we controlled, separately, for each of the three measures of encouragement. Although all three measures reduce the advantage for Asian students to non-significance, controlling for encouragement from friends attenuates the relationship the most. In contrast, controlling for encouragement actually increases slightly the disadvantage for African American students vis-a-vis white students ($\beta = -.600$ versus $\beta = -.673$ in Model 3 and Model 4, respectively). Including the encouragement variables also reduces the enrollment differential between Asian and African American students ($\beta = 1.306$ versus $\beta = 1.020$), though it remains highly significant at $p < .01$.

In the final Model reported in Table 2 we consider the role of high school academic performance in the students’ ability to realize their post-graduation college plans. As mentioned, above, the position of the students’ grade point average in the underlying causal process is somewhat complex, given that students were well aware of their academic records when they described their college plans during the Spring of their senior years. Nonetheless, it appears that cumulative grade point average has a strong, positive, effect on the likelihood that students attended college ($\beta = 1.126; p < .001$). Furthermore, it reduces the disadvantage for African American students to non-significance – compared to both white and Asian students. Therefore, through some mechanism(s) that deserve further exploration, the weaker academic records of black students prevented them from realizing their post-graduation educational plans. A variety of pathways is possible. Perhaps low GPAs prevented some black students from entering four-
year colleges to which they had applied, but not, yet, been admitted. Alternatively, a disappointing academic record in high school may have reduced some black students’ enthusiasm for post-secondary education (even at a two-year school), at least in the short-run. Finally, it is possible that black students were more likely than others to make “unrealistic” educational plans, in light of lower GPAs. Regarding this last possibility, we did find, from supplementary analyses, that there was a weaker relationship between cumulative grade point average and planning to attend college for black students than for Asians or whites. Moreover, the correlation between *self-reported* GPA and *officially recorded* GPA was found to be somewhat weaker for African American students (r = +.717) than for either whites (r = +.773) or Asians (r = +.833).

**Actuating College Plans: Two-Year or Four-Year Schools**

The results from the binary logistic regression analyses provide valuable evidence regarding the overall likelihood that students proceeded to enroll in college following high school. We now shift our focus to include a distinction between the types of schools that students attended – two-year versus four-year. In the following multinomial logistic regression analyses, students who did not enroll in college are used as the reference group. Therefore, one set of coefficients contrasts those who attended two-year schools versus non-attenders while the other set contrasts those who attended four-year schools with non-attenders. The results are presented, once again, in an incremental series of models, beginning with the basic equation that describes race/ethnic and gender differences, net of the type of school the student planned to attend and ending with the full model with all covariates. We are especially interested in determining parallels to, and differences from, the logistic regression analyses.

[Table 3 About Here]

The results described for Model 1 suggest that the overall enrollment advantage for
Asians, relative to whites, described in Table 2 resulted primarily from their greater propensity to enroll in two-year schools. In contrast, the overall enrollment disadvantage experienced by African American students, relative to whites, was due to their lower probability of enrolling in four-year schools. When compared with blacks, Asian students were also significantly more likely to enroll in two year schools and four-year schools (Odds Ratios = 3.10 and 4.29, respectively).  

The same race/ethnic differentials persist when the family background and family SES variables are added to the right-hand-side of the equation. That is: (1) Asian students continue to exhibit a greater propensity than white students to enroll in two-year schools, (2) African American students are less likely than white students to enroll in four-year schools, and (3) Asian students are more likely than black students to enroll in both two-year and four-year schools. In addition, the family-related characteristics have significant effects on the likelihood of attending four-year schools, but not two-year schools. Students from intact families, and those with at least one parent who attended college, were significantly more likely to enroll in four-year schools following high school. These findings suggest that the influence of these two variables on overall college enrollment was at least partially due to the differential resources available to students with different family backgrounds.

The race/ethnic differentials continue to remain quite stable when student self-esteem and locus of control are added to the prediction equation (Model 3). Furthermore, the effects of family stability and parental college attendance also remain statistically significant, positive,
predictors of attendance at a four-year school versus non-attendance, as they had in Model 2. In an interesting departure from the findings for the binary logistic regression analysis, locus of control emerges as a statistically significant predictor of attendance at four-year schools. Students who believe that they have greater control over the outcome of life events are more likely to enroll in a four-year school than to be non-attenders following high school. Locus of control is not related to the likelihood of attending a two-year school. The impact of locus of control on attending four-year, but not two-year, schools may be due to the greater planning and foresight required to enroll in the former – including more lead time in the application process and the need to take entrance examinations well in advance.

The result of adding parental, friend, and teacher encouragement to the multinomial logistic regression models echoes those observed in the binary logistic regression analysis. That is: (1) encouragement to attend college reduces to non-significance the greater propensity for Asian students (than whites) to attend two-year schools, (2) the lower likelihood that African American students (than whites) will attend a four-year school persists when the three sources of encouragement are controlled, and (3) the differentials between Asian and African American students in the probability of attending a two-year or four-year school remain statistically significant but is reduced. Interestingly, encouragement from teachers and friends emerge as statistically significant predictors of attendance in both two-year and four-year schools, but parental encouragement does not. This stands in contrast to the findings from the binary logistic regression analysis in which parental encouragement did have a significant impact.

In the final multinomial logistic regression model we once again control for the high school academic performance of students. Cumulative grade point average exerts a positive, and statistically significant influence on the likelihood that students enrolled in either a two-year or four-year school following graduation. As might be expected, the impact of GPA is substantially
stronger in predicting attendance at a four-year school than at a two-year school ($\beta = 2.999$ and $\beta = .634$, respectively). Furthermore, as was found in our earlier analysis, controlling for academic performance reduces the college enrollment disadvantage for African American students to non-significance. Once GPA is included, black students are no longer less likely than white students or Asian students to attend four-year schools, and they are also no longer less likely than Asian students to attend two-year schools. These findings reinforce our earlier conclusions regarding the impact of GPA on the observed enrollment differentials involving African American students. Since academic performance eliminates such differentials for both two-year and four-year school attendance, it appears that low GPAs may have: (1) prevented black students from being admitted to four-year schools, and (2) reduced their enthusiasm for post-secondary schooling, even at two-year institutions. And, it is also possible that African American students were more likely to make unrealistic college plans, in light of their academic records. Finally, the model for attendance at a four-year school yields some additional, interesting findings. For the first time in our analyses, gender attains statistical significance, with female students having a lower likelihood of attendance than males, net of all other covariates. In addition, none of the sources of encouragement is statistically significant, once cumulative grade point average is controlled. We have no convincing explanations for the female disadvantage or the non-significance of college encouragement in the final model for attendance at four-year schools.

**DISCUSSION**

The large majority of seniors in our survey who reported plans to attend college following high school were successful in achieving their objective. Still, one-sixth of all aspiring college students failed to actuate their educational plans. The results yielded by our investigation describe racial variation in the likelihood of achieving college plans, and provide
interesting and important clues about the explanations for such variation.

Two relatively persistent patterns emerge from our analyses. First, Asian students were more likely than white students or black students to actuate their college plans, often by enrolling in two-year schools following graduation. Second, African American students were particularly disadvantaged in their efforts to realize their educational plans, especially in their success at enrolling in four-year schools. At the risk of simplifying what are really a rather complex set of findings, our results also point to the primary explanations for these patterns. The educational advantage enjoyed by Asian students appears to stem from the stronger encouragement they receive from parents, teachers, and friends to attend college after high school. This finding points to the potential importance of culturally-based influences on the emphasis that is placed on higher education within different racial and ethnic communities. The educational disadvantage suffered by African American students in our sample is due largely to their weaker academic performance during high school. Additional research is needed to identify the precise mechanisms through which academic performance influences the ability of black students to realize their educational objectives.

In addition to the racial/ethnic variation documented by our findings, the results point to a variety of factors that have strong effects on the ability of students to carry through with their college plans. In addition to the role of academic performance and encouragement from teachers, parents, and friends, we found that the likelihood of attending college was enhanced by origin in an intact family and having at least one parent who had attended college. Students who believed that they had greater control over events occurring in the lives were also more likely to attend a four-year school following graduation. In contrast, gender, self-esteem, and home ownership proved to be relatively unimportant, net of other variables, in predicting which students would be successful in actuating their college plans.
Although answering many questions about the factors that influence the realization of college plans, our results also point to a number of issues that deserve additional attention. For example, why do Asian students enjoy higher levels of encouragement to attend college than other groups even though their own parents report the least experience with college education? Second, via what mechanisms does high school academic performance account for the weaker likelihood that African American students will actuate their college plans – despite the fact that students should have been well-aware of their high school GPAs when they reported their college plans in the Spring of their senior years? Third, will those students who failed to realize their college plans immediately after high school eventually attend college? Or, is delaying a college education tantamount to foregoing a college education for most students? Finally, how can we account for the positive impact of family stability on the actuation of college plans, net of all of the other covariates, including high school GPA, that are included in the full models represented in Table 2 (Model 5) and Table 3 (Model 5)? These, and other, questions represent an interesting agenda for future research into the actualization of educational plans by high school students.
REFERENCES


Appendix

Table A1. Survey Questions Used in the Creation of the Self Esteem and Locus of Control Indices.

I. Self Esteem is the mean of an index based on the sum of the responses:

1. “I feel that I do not have much to be proud of.” (strongly agree, agree, disagree, strongly disagree)
2. “I feel that I am a person of worth, the equal of other persons.” (strongly agree, agree, disagree, strongly disagree)
3. “I feel useless at times.” (strongly agree, agree, disagree, strongly disagree)
4. “On the whole I am satisfied with my self.” (strongly agree, agree, disagree, strongly disagree)
5. “At times, I think that I am no good at all.” (strongly agree, agree, disagree, strongly disagree)
6. “I feel good about myself.” (strongly agree, agree, disagree, strongly disagree)
7. “I am able to do things as well as most other people.” (strongly agree, agree, disagree, strongly disagree)

II. Locus of Control is the mean of an index based on the sum of the responses:

1. “In my life, good luck is more important than hard work for success.” (strongly agree, agree, disagree, strongly disagree)
2. “When I make plans, I am almost certain that I can make them work.” (strongly agree, agree, disagree, strongly disagree)
3. “Every time I tried to get ahead, something or somebody stops me.” (strongly agree, agree, disagree, strongly disagree)
4. “My plans hardly ever work out, so planning only makes me unhappy.” (strongly agree, agree, disagree, strongly disagree)
5. “I don’t have enough control over the direction that my life is taking.” (strongly agree, agree, disagree, strongly disagree)
6. “Chance and luck are very important to what happens in my life.” (strongly agree, agree, disagree, strongly disagree)
Table 1. Descriptive Statistics: Means and Standard Deviations for all Variables

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Pseudo-R^2                  | .107      | .122      | .126      | .174      | .213      |

Note: Standard Errors are in Parentheses.
* p < .05 (two-tailed test for gender and race/ethnicity, one-tailed test for remaining variables)
Table 3. Coefficients for Multinomial Regression Analysis of Two-Year or Four-Year College Plans. (N= 732)

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Pseudo-R²: .372 .387 .390 .411 .462

Note: Standard Errors are in Parentheses

*p < .05 (two-tailed test for gender and race/ethnicity, one-tailed test for remaining variables)