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ABSTRACT

The question of whether minority, female, and low income college students are disproportionately attending less-selective and lower-cost institutions was studied. Three sets of student characteristics were assessed: ascribed (race, ethnicity, and gender); socioeconomic (parental income, parents' educational attainments, and family size); and academic (tested ability, school grades, school activities, and educational expectations). Data for 1,608 students were drawn from the the "High School and Beyond" survey of 1980 U.S. high school seniors. Blacks and lower socioeconomic status (SES) students were more likely to attend lower-selectivity institutions, and lower-SES students were more likely to attend lower-cost institutions. Academically-strong students were more likely to attend more selective institutions, and, to a lesser extent, higher-cost institutions. While blacks were likely to attend lower-selectivity institutions, they were not especially likely to attend lower-cost institutions. In addition to test scores, important indicators of entry into a selective institution were educational expectations, high school grades, and experiences in student government and journalism. Students with less educated or lower-income parents were likely to attend lower-selectivity institutions, even if their academic ability and achievements were superior. (SW)

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Who Goes Where?: A Study of
the Postsecondary Destinations of 1980 High School Graduates*

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Paper for Presentation at the
Annual Meeting of the Association for the Study of Higher Education

Chicago

March, 1985

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This paper was presented at the Annual Meeting of the Association for the Study of Higher Education held at the Palmer House Hotel in Chicago, Illinois, March 15-17, 1985. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

Annual Meeting—March 15-17, 1985—Palmer House
Chicago, Illinois

Who Goes Where?: A Study of
the Postsecondary Destinations of 1980 High School Graduates

Abstract

Guaranteeing equality of opportunity for postsecondary education has long been a national commitment. The research reported here investigates one highly topical aspect of that issue: the postsecondary destinations of high school graduates. Specifically, the study employs a nationally representative sample and a multivariate model to examine the relationships between student characteristics (ability, achievement, socioeconomic status, race/ethnicity and gender) and the selectivity and costs of the students' postsecondary institutions. Based on data for the high school class of 1980, the findings suggest the extent to which non-academic factors affect students' postsecondary destinations. The results reveal the persistence of certain inequalities in the midst of a generally meritocratic pattern. Those inequalities are based more in socioeconomic factors than in race/ethnicity or gender. For example, students from lower-income families were particularly likely to attend lower-selectivity institutions, regardless of their levels of academic ability and achievements. Theoretical and policy implications are discussed.

Who Goes Where?: A Study of
the Postsecondary Destinations of 1980 High School Graduates

Guaranteeing "equality of opportunity for postsecondary education" has been for over two decades a primary stated social goal of each of the branches of the federal government (Leslie, 1977). Yet the evidence of success in meeting that goal is a point of intense scholarly and political dispute (e.g., see Hansen, 1982; Breneman, 1982). The present research focuses upon a highly topical aspect of the issue: the college destinations of recent high school graduates. This has become an increasingly significant research topic: demographic, socioeconomic, and legislative trends have lowered the barriers to college access to such an extent that virtually any high school graduate can now enter the postsecondary system. The human and material resources of the specific college one attends, however, can have clear influences on eventual educational, social, and economic attainments (see, for example, Solmon, 1975; Wise, 1975; Tinto, 1980; Trusheim and Crouse, 1981). The basic question addressed in the present research is thus: Are minority, female, and socioeconomically disadvantaged college students in the U.S. disproportionately attending lower-selectivity and lower-cost institutions? Better answers to this question and related questions (e.g., the relative roles of race, gender, and social class) are imperative from both theoretical and policy perspectives.

Previous research (Sewell, 1971; Karabel and Astin, 1975; Alexander and Eckland, 1977; Hearn, 1984) has consistently hinted that despite a generally meritocratic pattern, there was in the 1950's, 1960's, and 1970's indeed a disproportionate distribution of disadvantaged, minority, and female students in lower-selectivity and lower-cost postsecondary institutions. This pattern has held even after applying statistical controls for student achievement,

ability, and motivation.¹ Despite the passage of over a decade since their research on the topic, the conclusion of Karabel and Astin (1975:395) still seems an appropriately concise summary of the research thus far: "The most fundamental aspects of tracking--the allocation of students to educational programs which roughly reflect both their social origins and an occupational destination commensurate with those origins, now exist within higher education."

The root causes of these unequal patterns seem to lie more in socialization than in outright discrimination or lack of financing (see Jackson, 1982). But, as Heyns and O'Meara (1982), Rosenfeld (1980) and others have suggested, the various empirical studies of the topic thus far have been largely incommensurable and noncumulative because of a) widely varying theoretical and operational definitions of equality of educational opportunity, b) a lack of comprehensive, nationally representative data, and c) a lack of data adequate to test the success hypothesis (i.e., the hypothesis that equality of opportunity has been achieved). In addition, few studies have been done using data from the 1980's. The present research seeks to address these problems.

Theoretical Perspective

Debates and studies regarding the nature of equality of opportunity at pre-college levels of education (e.g., the well-known "Coleman Report"; see Coleman et al., 1966) have concentrated on the notion of "equity of condition": Are students receiving a similar quality of schooling regardless of their background? A parallel definition of "success" at the college level would therefore be "equity of condition." But, meritocracy is a legitimated aspect of the college selection process in this country, so a second definition would be equity of condition among students of equal academic ability, achievement, and

aspirations. Such a definition allows the "best students" to attend the "best schools." A third, more radical, definition might be called "redemptive equity": Success lies in providing the "best education" to the least prepared students, so as to narrow the pre-existing differences among college students before they enter the working world.

Each of these definitions of equality has been considered by other analysts as a standard by which to judge educational systems (see, Miller, 1977; Bowman, 1970). The research described here allows an assessment of the extent to which recent national postsecondary data fit each of the three distinct standards. The standards can be stated as alternative hypotheses regarding the current workings of the system that matches postsecondary institutions and their prospective students:

- H₁ (Strict Equity of Condition): Individual characteristics of prospective college students bear no significant relationship to the selectivity or cost levels of the institution attended.
- H₂ (Meritocratic Equity of Condition): The racial, ethnic, gender, and socioeconomic characteristics of prospective college students bear no significant relationship to the selectivity or cost levels of the institution attended, once the confounding influences of academic characteristics are controlled.
- H₃ (Redemptive Equity): Minority race or ethnicity, female gender, a lower socioeconomic background, and lower academic ability and

achievement have a positive relationship to the selectivity and cost levels of the institution attended.

The three alternative hypotheses carry with them a critical, and very debatable, assumption. That assumption is that the "quality of education" at given postsecondary institutions may be assessed by way of the selectivity and cost levels at those institutions. Without defensible indicators of quality, assessments of equity in postsecondary education are inevitably questionable. Nevertheless, the available indicators are rarely ideal. Selectivity may be viewed as one kind of resource held by an institution. Not only is it correlated closely with prestige (see Clark, 1983), but it also may represent the overall intellectual quality of the campus. Selectivity is at best only an indirect measure of the academic quality of undergraduate life, however. Costs, on the other hand, are an indirect index of institutional spending on educational quality as well as a direct index of financial barriers of attendance. Nevertheless, while costs to the student (e.g., tuition charges) are sometimes seen by the public as proxies for quality, those charges become investments in quality education only in a quite indirect and imperfect fashion (Bowen, 1981). Students are only rarely charged fully for the educational services they receive.² In addition, both of these approaches to quality assessment suffer from their aggregation at the institutional level, since in reality each student on a campus experiences a different kind of education, depending on the specifics of his or her major, faculty contacts, living situation, and so forth. Yet these limitations are largely unavoidable in national data. If one is to assess whether barriers to equality in destinations exist, the compromise of imperfect indicators seems necessary, at least for the foreseeable future.

Research Design

Methods: As explanatory factors, the research presented here employed indicators for three sets of student characteristics: ascribed (race, ethnicity, and gender), socioeconomic (parental income, parents' educational attainments, and family size), and academic (tested ability, school grades, school activities and educational expectations). As dependent variable indicators, the analysis employed indicators of selectivity and institutional costs. Generally, the research employs multiple regression techniques.

Data: Student data were drawn from the 1980 and 1982 waves of the "High School and Beyond" [HSB] survey of 30,000 American high school seniors (class of 1980). These data were collected for the National Center for Education Statistics [NCES] (see National Opinion Research Center, 1983). Postsecondary institution data were acquired from NCES and from the Higher Education Research Institute, respectively.³ The sample for the study consists of 1608 students drawn randomly from those in the 1980 senior class who responded fully to the relevant HSB items for this study and attended within one year of graduation an institution having a "FICE" code.⁴ Senior year data for these students was matched with student follow-up data and with institutional data to construct files with all necessary information for the present study.

Variables and Their Indicators: Three variables relate to ascribed gender and racial/ethnic characteristics; the indicators for female, black, and Hispanic are each in dummy form (1 = yes, 0 = no). Four variables relate to socioeconomic status characteristics [SES]. The first two variables are assessed by indicators of fathers' education and mothers' education, respectively. The code for each indicator is ordinal: 2 = less than high school

graduation, 3 = high school graduation only, 4 = less than two years of vocational, trade or business school after high school, 5 = two years or more of vocational, trade or business school after high school, 6 = less than two years of college, 7 = two or more years of college (including two year degree), 8 = finished college (four or five year degree), 9 = masters degree or equivalent, and 10 = Ph.D., M.D., or other advanced professional degree. The second two SES indicators are for family income (coded so that 1 = under \$7,000, 2 = \$7,000 to \$11,999, 3 = \$12,000 to \$15,999, 4 = \$16,000 to \$19,999, 5 = \$20,000 to \$24,999, 6 = \$25,000 to \$37,999, and 7 = \$38,000 or more) and the number of siblings (coded so that 0 = 0 siblings, 1 = 1 sibling, 2 = 2 siblings, 3 = 3 siblings, 4 = 4 siblings, 5 = 5 or more siblings). The siblings indicator is a composite of several HSB items. It is used as an SES-related indicator because each sibling represents a potential drain on family income, and thus a qualification upon the uncorrected income figure.

There are seven indicators in the model relating to the academic characteristics of the student. The indicator of aptitude is a composite score for a standardized test administered to all HSB respondents. The score is the average of reading, vocabulary, and mathematics scores. The indicator was normed to a mean of 50 for all American high school seniors in 1980. The indicator of high school grades is based on a self-report, where 8 = mostly A's (or a numerical average of 90 to 100), 7 = about half A's and half B's (or 85-89), 6 = mostly B's (or 80-84), 5 = about half B's and half C's (or 75-79), 4 = mostly C's (or 70-74), 3 = about half C's and half D's (or 65-69), 2 = mostly D's (or 60-64), and 1 = mostly below D (or below 60). The indicators of high school activities are each dummies, representing respectively student government work, journalism activity, preprofessional clubs, and debate or drama clubs.

One final indicator of academic characteristics relates to the students' educational expectations. This indicator is coded on a nine point scale, where 1 = less than high school graduation, 2 = high school graduation only, 3 = vocational, trade, or business school after high school--less than two years, 4 = vocational, trade, or business school after high school--two years or more, 5 = college program--less than two years of college, 6 = college program--two or more years of college (including two year degree), 7 = college program--finish college (four or five year degree), 8 = college program--Master's degree or equivalent, and 9 = college program--Ph.D., M.D., or other advanced professional degree.

The two dependent variables for the study relate to the characteristics of the institutions first attended by the students in 1980. The first variable, selectivity, is indicated by one-tenth of the combined Verbal and Math Scholastic Aptitude Test [SAT] score average for all students at the institution attended. When the institution tended to rely more in admissions upon scores from the American College Testing Program Assessment [ACT], a conversion was made to SAT scaling, using a procedure agreed upon by ACT and the Educational Testing Service. The selectivity data used are for 1978, the year closest to 1980 of those years for which national selectivity data are available. For more information on the selectivity indicator and data, which were provided by the Higher Education Research Institute [HERI] at UCLA, see HERI (1984). The second dependent variable, institutional cost, is indicated by one-tenth of the institution's reported 1980-81 undergraduate tuition level, as reported to the federal government's annual Higher Education General Information Survey [HEGIS] (see, NCES, 1983).⁵

Results

Although support for the "Strict" and "Redemptive" equity hypotheses was expected to be less pervasive than support for the "Meritocratic" equity hypothesis, the explicit statement of the three competing hypotheses was a useful guiding framework for the analysis. Past research on less comprehensive data sets suggested that the meritocratic hypothesis would not be fully or consistently supported and selected aspects of both of the other hypotheses would indeed be supported. As the results presented below suggest, evidence for each of the three hypotheses was indeed uncovered.

Table 1 presents the correlations, means and standard deviations for the sample. The fact that the data are not weighted is apparent from the high proportion of Hispanic students, an artifact of HBS's special attention to that population, and from the somewhat high levels of SES and academic qualifications found in the sample. These biases are not major, and should have little if any effect on the multiple regression results. The simple correlations reveal few surprises: they are quite in keeping with past results. Blacks and lower-SES students were particularly likely to attend lower-selectivity institutions, and lower-SES students were particularly likely to attend lower-cost institutions. Of course, academically strong students were particularly likely to attend more selective institutions. To a somewhat lesser extent, they were also particularly likely to attend higher-cost institutions. These correlations (each significant at $p \leq .001$) deny support to the hypothesis of strict equity of condition, but some other correlations do not allow rejection of that hypothesis. For example, blacks were not especially likely to attend lower cost institutions. While such data are interesting and are not without policy relevance, the heart of the present study lies in its consideration of the meritocratic and redemptive

equity hypotheses. Assessing those requires a multivariate approach going beyond the bivariate approach of Table 1.

[Insert Table 1 About Here]

Table 2 presents the multiple regression results for institutional selectivity and institutional tuition. The results for institutional selectivity provide strong evidence that the system of matching students and institutions is, at its core, meritocratic. The most powerful effects on entry into a selective institution are, as one would expect, academically based. Test scores dominate all other academic indicators in effects, but also significant are the students' educational expectations, high school grades, and experiences in student government and journalism. Such a pattern would be, in large part, the profile admissions officers and higher education leaders would consider expected and desirable. Nevertheless, even in the context of a model containing these academic characteristics, there were still in the early 1980's traces of non-meritocratic influences on college destinations. Father's education, mother's education, and parental income show significant positive effects on the selectivity of the institution attended. In other words, students with less educated or lower-income parents were in 1980 and 1981 especially likely to attend lower selectivity institutions, even if their academic ability and achievements were superior. Also especially likely to attend such institutions were blacks. Strikingly, however, Hispanics, women, and students from larger families showed no such tendency. Overall, the model explained 30% of the variance in institutional selectivity, with the majority of the power arising from indicators of academic talents, achievements, and motivation.

[Insert Table 2 About Here]

The results for tuition levels are somewhat more equivocal. As with selec-

tivity, academic characteristics dominated in impact. Especially strong were tested ability and educational expectations. The power of non-academic characteristics was extremely small. Even parental income, found in the recent past to be closely related to the cost of institution attended (see the review of the literature and the results presented in Hearn, 1984), showed no significant relationship with tuition. Only the level of the mother's education showed a significant SES-based effect on cost, and that was not, in fact, major. Indeed, the most significant non-academic effect on the cost of institution attended came from being black, and that effect was positive. The overall explanatory power of the model was 19% for tuition, and much of that arose from the power of tested ability and educational expectations. Such a result can be placed within a human capital framework: students with known talent and expectations to further develop that talent may be more willing to invest in high-priced education, in order to take advantage of the potential for greater returns.

The basic regression results of Table 2 may be further examined through blocked regressions. Such an approach allows investigation of the relative explanatory power of the various blocks of independent variable indicators. Table 2 reveals that, alone, the student non-academic characteristics in the model (i.e., race/ethnicity, gender, and the SES-based characteristics) explain 12 percent of the variance in selectivity of institution attended and 6 percent of the variance in the tuition level of the institution attended. Thus, in each case, well under half of the total explanatory power of the model derives from non-academic factors. On the other hand, academic characteristics alone explain 27 percent and 17 percent, respectively, of the variance in selectivity and tuition. These results reinforce the message of the basic regressions: while there are exceptions to meritocratic norm, both in the direction of redemptive

equity (in the case of blacks and high tuition institutions) and in the direction of meritocratic inequities (in the case of SES-based effects on tuition and selectivity), the overall model is largely driven by a meritocratic dynamic.

Implications

The present results can inform analysts at both the theoretical and policy levels. At the theoretical level, the data for the study are representative and comprehensive. The present project should allay some of the representativeness and indicator concerns that troubled earlier studies (although no data set is perfect) and allow improved causal inferences about the processes at work in the matching of colleges and students. At the policy level, the timeliness of the data and its comparability to similar data for 1972 (from Alexander and Eckland, 1977; Peng et al., 1977) and 1975 (from Astin, 1978; Hearn, 1984) are prime assets. The Higher Education Act of 1965 and its Amendments will be reconsidered by the U. S. Congress within the next one to two years. Whether or not the multi-billion dollar federal programs designed to guarantee equal access and choice have succeeded will undoubtedly be a major consideration in these debates. Analysts are already arraying on the pro and con sides of the issue (see Heyns and O'Meara, 1982; Breneman, 1982; Hansen, 1982). The research presented here can play a significant role in those debates.

The message the results here bring to such deliberations is mixed. On the one hand, the persistence of longstanding inequalities is confirmed. The most stubborn barriers to true meritocracy seem to be those based in SES, rather than those based in race, ethnicity, or gender. There remained in the early 1980's a tendency for rich and poor students of equal ability, achievements, and motivation to enroll in somewhat different kinds of schools. For example, all else

equal, offspring of higher income parents tended in 1980-81 to enroll in more selective and higher cost institutions, compared to other students. Earlier findings (see Karabel and Astin, 1975; Alexander and Eckland, 1977; Hearn, 1984) of non-meritocratic tendencies therefore did not disappear when newer data were employed. That the U.S. postsecondary system in 1980 and 1981 had expanded since the 1960's to the point of excess capacity (Stadtman, 1980) apparently did not abrogate its tendency to allocate its prime spots to those more socioeconomically favored.

Yet the data also contain some strong indications of equity. Non-academic characteristics play virtually no unique role in explaining either the selectivity or cost of the institution attended. In addition earlier studies (by Hearn, 1984, using 1976 data, and by Alexander and Eckland, using 1972 data) found hints of "redemptive equity" among minorities and women, and the present study does so as well. Specifically, the results indicate black graduates of 1980 tended to enroll in higher cost schools, all else equal. This finding echoes that of Hearn (1984). In addition, earlier studies found blacks more limited in their entry into selective institutions than does the present study. Inevitably, differences in sampling and models may account for such changes, but the attempt here to attend to such a possibility adds some credibility to the inference of progress.

To the extent one can assume that certain kinds of institutions can have uniquely favorable impacts on eventual educational and occupational careers, as suggested by Tinto (1980), Trusheim and Crouse (1981) and numerous others,⁶ the findings here suggest that access to those benefits is not always equitable as meritocratic norms would suggest. The matching of colleges and students remains in many ways a little understood black box (see Jackson, 1982) and the present

study focuses mainly upon behavioral outcomes (not the evolution of the matching process in individuals). Yet the evidence suggests that within the matching process lies a sorting mechanism which subtly reinforces the non-meritocratic tendencies of U.S. society. When one considers that certain academic characteristics in the study, such as educational expectations, may be in effect proxies for social class,⁷ it is hard to dismiss the arguments of some (see Bowles and Gintis, 1976; Bourdieu, 1977; Karabel, 1972; Pincus, 1980) that expansion of status-differentiated postsecondary education systems, however effective from the standpoint of broadening postsecondary educational opportunity, is not by itself a sufficient antidote to enduring social class differences in educational attainments.

The present findings were pursued with an eye toward replicating earlier research, particularly that by Hearn (1984). As such, certain potentially productive paths to better understanding were not initially pursued. Among those paths are the following: assessing the significance of high school tracks for college destinations, assessing interactions among student characteristics (e.g., race and ability) in affecting destinations, delving more fully into the ambiguities of "college quality" (see Astin, 1982), assessing the influence of parents' occupational status on the process of college choice, and investigating the importance of knowledgeability (regarding college costs, student aid, and so forth) on the process (see El-Khawas, 1977; Olsen and Rosenfeld, 1984). Each of these avenues of analysis is currently being pursued.

Footnotes

1. The pattern of gender differences in college destinations has fit gender difference patterns found in other areas of attainment research. For example, Sandell (1977) found ability playing a larger role in men's destinations than women's, and Alexander and Eckland (1977) found SES playing a larger role for women than men. Each of these findings echoes those of studies of attainment in secondary schools and studies of college access (see the review by Rosenfeld, 1980).
2. Currently, we are conducting similar analyses using educational and general expenditures per undergraduate as the dependent variable, rather than costs to the student and family. This approach should provide a more direct indication of the relationship of resource level to student characteristics.
3. Specifically, selectivity data were drawn from the HERI SAT File with Additional Institutional Data (see HERI, 1984). Data on tuition were drawn from the Higher Education General Information Survey data for 1980-81 (see NCES, 1983). For more details, see the "Variables" section of this paper.
4. The FICE code is the code the federal government uses in its Higher Education General Information Survey (see NCES, 1983). Generally, postsecondary institutions having only specialized programs (such as beauticians' schools, barber colleges, etc.) do not have regular FICE codes, but most other postsecondary institutions do indeed have such codes. The number of institutions having FICE codes roughly approximates the 3000+ figure often used in studies of the "higher education system" (as opposed to the broader notion of the "postsecondary system"). See, for example, Carnegie Council (1980).

5. Because only in-state tuition was used for public institutions in the present study, the analysis inevitably underestimates the true tuition costs of students crossing state boundaries to attend public institutions. This bias is regrettable, but is probably not a major problem, since a) the proportion of students doing so, out of the entire sample, is small, and b) many of those who did indeed do so were no doubt allowed to pay in-state tuition levels, due to the large number of tuition reciprocity agreements in effect between states.
6. Some authors, however, have questioned whether the unique impacts of institutional characteristics are indeed significant. See, for example, Alwin (1974).
7. One can, in fact, argue that SES difference cause most differences in academic credentials (such as test scores and grades), by way of tracking, teacher attitudes, unequal schools and so forth. So goes the argument of many revisionist scholars (see Rehberg and Rosenthal, 1978). Accepting that argument, of course, negates any purely meritocratic interpretation of the positive effects of academic characteristics in the present analysis.

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Table 1
Means, Standard Deviations, and Correlations for the Focal Indicators ^{a,b}

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Mean	Standard Deviation
1. Black	-																.14	.35
2. Hispanic	-.22	-															.22	.41
3. Female	-.01	.01	-														.53	.50
4. Father's Education	-.10	-.16	-.06	-													5.06	2.72
5. Mother's Education	-.01	-.15	-.01	.54	-												4.57	2.37
6. Parental Income	-.12	-.18	-.07	.42	.34	-											4.58	1.71
7. Number of Siblings	.05	.03	.03	-.13	-.16	.13	-										2.65	1.48
8. Tested Ability	-.25	-.23	-.10	.24	.19	.23	-.13	-									53.62	8.05
9. High School Grades	-.14	-.14	.15	.08	.07	.08	-.03	.48	-								6.32	1.27
10. H.S. Student Govt.	.08	-.02	.05	.07	.07	.02	-.00	.07	.18	-							.26	.44
11. H.S. Departmental or Pre-profes- sional Club	.03	.02	.13	-.01	-.02	-.04	.00	.02	.16	.13	-						.27	.45
12. H.S. Journalism	-.06	-.05	.08	.04	.08	.05	-.05	.12	.14	.20	.10	-					.25	.43
13. H.S. Drama or Debate	-.01	-.04	.04	.09	.08	.05	-.04	.12	.08	.14	.08	.19	-				.18	.39
14. Educ. Expectations	-.06	-.07	-.03	.25	.23	.15	-.14	.32	.33	.15	.11	.13	.08	-			6.96	1.61
15. Institutional Selectivity/10	-.16	-.09	-.07	.27	.23	.24	-.08	.48	.31	.12	.04	.13	.09	.33	-		90.07	12.97
16. Institutional Tuition/10	.00	-.10	-.03	.20	.20	.16	-.11	.34	.24	.14	.03	.17	.08	.29	.60	-	182.86	214.12

^a Sample n = 1608. Data are unweighted. Correlations at or above .05 are significant at the $p \leq .05$ level.

^b For indicator definitions, see text.

Table 2

Regressions for Institutional Characteristics^a

	Institutional Selectivity		Institutional Tuition	
	Metric Coefficient	Standardized Coefficient	Metric Coefficient	Standardized Coefficient
Black	-1.94	-.05*	48.11	.08**
Hispanic	.97	.03	13.31	.03
Female	-1.10	-.04	-4.23	-.01
Father's Education	.42	.09***	3.94	.05
Mother's Education	.30	.06*	6.13	.07*
Parental Income	.58	.08**	5.29	.04
Number of Siblings	.18	.02	-5.03	-.03
Tested Ability	.53	.33***	6.19	.23***
High School Grades	.74	.07**	10.15	.06*
H.S. Student Govt.	1.40	.05*	28.36	.06*
H.S. Departmental or Pre-professional Club	.07	.00	-6.23	-.01
H.S. Journalism	1.31	.04*	46.85	.10***
H.S. Drama or Debate	.15	.00	.51	.00
Educ. Expectations	1.19	.15***	18.28	.14***
Constant	42.08	-	-424.47	-

R ²	.30	.19
R ² for Academic Characteristics Alone ^b	.27	.17
R ² for Non-academic Characteristics Alone ^b	.12	.06

*** p < .001

** p < .01

* p < .05

^aSample n 1608^bAcademic Characteristics are defined by the last seven independent variables. Non-academic Characteristics are defined by the first seven independent variables