Academic and Occupational Choices of Elite American Students 1951, 1976 & 1989

by

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Second Draft

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May 2004

Acknowledgements

"The spectacle of career vogues sweeping across the elite young is not new…Before, what you were if you wanted to stay on track but didn't have a specific goal was premed or pre-law. But doctors and lawyers have come to seem less glamorous…as business people have come to seem more so." - Nicholas Lemann (1999) The Kids in the Conference Room: How McKinsey & Company became the next big step (The New Yorker)

Academic and Occupational Choices of Elite American Students -1951, 1976 & 1989[1]

Abstract

This paper focuses on the academic and occupational choices of high ability students at very selective institutions in the 1951, 1976, and 1989 cohorts. Their choice of college major, postgraduate degree and occupations as of graduation and of 1995 are analyzed using a descriptive approach and multinomial logit estimates. It is found that in general, cohort quality increased over time when ability is expressed in terms of percentile rank in the SAT distribution of the 1989 cohort. However, the dispersion across the average scores of individuals in various majors and occupations widened over these cohorts. The differences in the ability of the average individual in the occupational fields of higher education, medicine, and finance as opposed to education, the health professions, and business related fields point to the stratification of these professions by ability. However, what was not expected is that by 1995, individuals in the fields of medicine, engineering, and higher education had lower mean SAT scores than those individuals who were in these fields right after graduation. As such, these occupations appear to be less attractive to high ability students who, with several years of experience in the workforce, opt instead to pursue jobs in finance and other executive fields.

[1] The author would like to thank the Williams College Project on the Economics of Higher Education (WPEHE) and the Andrew W. Mellon Foundation for providing all the data used in this paper.

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I. Introduction

This is an empirical longitudinal study that provides an econometric analysis of four decisions made by the "brightest and smartest" students in elite colleges and highly selective universities[2]. The four decisions are of college major, postgraduate degree, and occupation both at the time of graduation and as of 1995.

More specifically, I analyze the choices made by students who display high pre-collegiate ability (HIPCA), (that is, those who are within the top decile of the SAT distribution in their class year) in light of the choices made by all students in the cohort. I also study the choice patterns of those students who display relatively strong academic aptitude while in college as evidenced by their GPA (measured as the ratio of a student's cumulative grade point average (GPA) to the GPAs of other students in that year).

It is recognized that academic ability and intelligence are not exclusively captured by a student's SAT scores and GPA ratio. In fact, there are no doubt many other dimensions to consider in gauging a student's level of academic ability and intellect in classifying a student as among the "best and the brightest". However, SAT score and GPA play a key role in the admissions process at elite colleges and are useful proxies for at least some elements of pre-collegiate academic ability and academic success during college. As such, they readily facilitate the identification and categorization of students as being members of what might be called the "best and brightest" in each cohort.

This study alters the approach of similar analyses as I focus on the choices of students who are deemed to have high levels of cognitive ability even among the most academically selective institutions. In the higher education literature, data on students are

[2] These are all four year baccalaureate granting institutions that receive "many more applications from well-qualified students than they have places in their entering classes and thus must pick and choose among applicants on a variety of criteria" Shulman and Bowen (2001 p.xxvii).

predominantly analyzed along categories of students' race, ethnicity, and sex. After this, variations of academic skills and/or cognitive ability are highlighted[3]. Thus, there is a surprising dearth in the existing economic literature on this topic even though these groups of students are endowed with high cognitive ability and form a core part of the valuable human capital resource for any society[4].

Recently however, there have been empirical studies (see Corcoran et al., 2004 and Hoxby et al., 2003) that provide evidence on the choices of high ability students in terms of certain occupations. In light of the above and the increasing conversation on the rising appeal of certain careers among high caliber students in selective universities as well as the declining attractiveness of other careers (ibid. and Lemann, 1999a); I seek to discover what choices are being made by this select group of students, and how these choices have been changing over time.

In sum, this paper focuses on the academic and occupational choices made by students at very selective institutions who are identified as high ability students from their SAT scores and relative GPA's. I will describe patterns and investigate the changes and differences in the choices made by this select population especially in light of the wider trends being displayed by all students. Further, I will investigate how the relative strengths of these students in different majors, postgraduate degrees, and occupations - as signaled by SAT score and GPA ratios - have been changing over time.

In the next section, I will provide some more background information on this topic and in Section III will review pertinent empirical studies. Section IV will describe the motivations behind the use of the multinomial logit model. Section V and VI will describe

[3] For a complete discussion see Turner et al. (1990), Turner et al. (1999), and Herrnstein et al. (1994).
[4] See Murphy et al. (1991) for an account of the cognitive ability, occupational choice and implications for economic growth.

the data used and methodology employed in this paper. I proceed to discuss the descriptive and multinomial logit results in Sections VII and VIII. Section IX concludes with a brief summary and implications of the data. Section X points out some limitations of my study and proposes directions for future research.

II. Background Information

Growing arguments found in the empirical literature, the mainstream press[5], and in discussions among faculty, administration, and students in elite higher education institutions center on a growing concern on the purpose and outcome of higher education for this segment of the student population. It is thought that education, especially for the brightest students, should also foster strong moral, civic, and social consciousness which would motivate a higher proclivity for self-selection into high social value fields such as research and service (Pascarella, et al., 1988 and Carnegie Commission, 1973).

But now, the issue is the apparent rise of careerism as opposed to intellectualism among the bright student population at these elite institutions[6] as other goals such as citizenship, research, and service are weighted with less personal importance (Carnegie Commission, 1973). It is theorized that the rise of careerism and the waning of intellectualism will lead to a fusion between careerism and elitism among the students at the more elite schools (Lemann, 1999a). These schools act as a signaling mechanism to prospective high paying employers as potential sources of ideal candidates while the career-oriented bright college graduates vie for a limited number of career opportunities and occupations at these elitist driven organizations of corporate America (ibid.).

Thus, an almost straightforward channeling process is created and these corporate organizations are directly benefiting from the (publicly subsidized) education and the experiences being provided to high ability students from attending selective schools[7] (ibid.,

[5] See in particular, Nicholas Leman (1999) *The Kids in the Conference Room; How McKinsey & Company became the next big step* The New Yorker and V. Postrel's *Getting the Most Out of the Nation's Teachers* in The New York Times (March 25, 2004).

[6] Katchadourian et al. (1985) noted that in Stanford University the 1970's witnessed a substantial shift in the distribution of students across different disciplines, with business, engineering and other career-oriented disciplines expanding while the humanities and most other social science contracted.

[7] See Karen, 1990 for a description of the model of Gatekeeping as it refers to elite colleges.

Frank et al., 1995 and Karen, 1990). By their individual actions, a channeling process is initiated and "winner-take-all" markets[8] emerge within the realm of higher education. The prospective students as well as their families are aware that merely attending certain elite schools will position them to effectively compete for a narrow band of high paying jobs such as consulting and investment banking. Thus,

"*Over time the American meritocracy has evolved into a more general way of distributing opportunity to millions of people, fitting them into places in a highly tracked university system that leads to jobs and professions. And its assumed purpose has changed from being a way to obtain highly capable and well-trained public officials to a way of determining fairly who gets America's material awards"* (Lemann, 1999b p. 345)

Conversely, if a student attends another less selective institution, he would severely reduce his chances of having such opportunities (Frank and Cook, 1995). Attracted to these high paying jobs, it is argued that these top students enter a type of market that has "increased the disparity between the rich and poor… and has lured some of our most talented citizens into socially unproductive…tasks… [*leading*] indirectly to greater concentration of our most talented college students in a small set of elite institutions" (Frank et al., 1995 p.4).

It has been shown that in the labor market higher returns go to those with more education (Acemoglu, 1998 and 1997). In effect, the incorporation of the highly skilled in the workforce facilitates greater variation in earning potential, as potential employers are better able to react to the growing mix in candidates' abilities. Thus, it is now worth the employers' time to seek out high ability individuals from a pool of candidates and to duly compensate them for the value added to their organization (Acemoglu, 1998).

[8] They argue that these markets are different from the ones conventionally studied in economic theory. They attract too many resources and generate wasteful patters of on consumption and investment. These markets depend on the relative performance of the agents and only top performers are rewarded for what may be only minimal difference in talents or effort. Frank and Cook concluded that the, "top prizes in many winner-take-all markets…significantly overstate the social value added by top performers" (Frank and Cook, 1995 p. 16).

So, although the educated elite represent a very small segment of the population, their potential impact and any lost social contribution may have far reaching ramifications on society (Katchadourian et al., 1994). Society may suffer a net loss in growth potential if there is a growing tendency for high ability students to enter high paying fields as opposed to those fields that may be lower paying but would confer a higher social value (Murphy et al., 1991). And although the exact extent of this trend is unknown for certain professional/occupational and academic choices it has already been assumed in the literature that elementary and secondary school teaching and academic ability in college are negatively correlated (Corcoran et al., 2004).

In fact, concern has been expressed over the overall propensity for any student to elect to carry out graduate research and to pursue a Ph.D. However, this fear that the supply of Ph.D.s would outstrip the demand for them has been both directly and indirectly shaken in the literature[9] (Schapiro et al., 1990, Bowen et al., 1992, Khan, 1995, and Ehrenberg, 1992). Now, the focus should be on the qualitative changes of these Ph.D.s since "all Ph.D.s are not the same" (Khan, 1995 p.330) and the qualitative outcome of a doctoral education is significantly influenced by the individual's own academic and cognitive abilities. Hence, this paper also questions the relative academic ability of economists (as a special, but locally interesting case!) and other academics over time. More generally, the question is asked, has there been a decline in cohort quality over time? Are professors of recent vintage demonstrably different, in "quality" terms, than those of earlier cohorts?

[9] By Ph.D.'s it is meant the number of persons holding Ph.D. degrees and that are then assumed to be available to be a part of the productive workforce post-attainment of this degree.

III. Review of the Literature

I conduct a general review of the literature associated with undergraduate choice of major, postgraduate degree, and occupation and highlight the most significant findings in this section. Katchadourian et al. (1985) conducted one key study. They focused on different characteristics and influencers on students concomitant with their respective decisions on college major, postgraduate degree, and occupation for a 20% random sample of the 1981 Stanford University cohort. The students were interviewed individually and given a detailed questionnaire each year from 1977 until graduation.

However, Katchadourian et al.'s (1985) study covered all students for that one Stanford University cohort, without any specific singling out (and separate study) of the brightest within the cohort. They were able to classify students within a two by two (2×2) matrix, identifying careerists, intellectuals, strivers, and the unconnected as four basic and fairly easily demarcated categories of students. Given their description of students within these categories by the SAT scores, they found that the brightest students by this measure were disproportionately found within the careerist category.

Careerists were reported to major in engineering more than any other group (24% of careerists, as opposed to 16% of any other group). Students who chose to major in the social sciences and natural sciences did so because they saw them as opportunities into more career-oriented fields. Thus, there was a greater election for the fields of economics and biology as opposed to anthropology and physics. However, they also found that a large proportion of careerists (42%) intended on pursuing a doctoral degree while 92% of them planned to pursue careers in the four standard professional fields of business, law, medicine, and engineering.

Neither race nor ethnicity predisposed any student to be more or less career-orientated. However, men were far more likely to be careerists than women. By SAT score, they found that those who can be categorized as having a high SAT math score (601-800) were more likely (27% of them) to be careerists while only 19% of those with a low score were careerists. There was a complementary though weaker correlation with the SAT verbal score. Thus in the final analysis, the high-math, low-verbal students were more likely to be careerists than those students in the rest of the sample.

In Katchadourian et al.'s (1985) typology, strivers were those students who seemingly valued their liberal education as well as their future careers. They were fairly evenly distributed across majors, being only slightly more likely to major in engineering and less so to major in the humanities. Most of them also had high postgraduate aspirations, 44% intended on obtaining doctoral level degrees and 50% master level degrees. However, they were usually among the weaker students in the cohort. Around 30% of low scoring students on the math and verbal SAT dimensions were found in this category compared to 20% of high scoring (scores of 610 and above) students (ibid.). Ethnic minority students were usually found to be strivers with 35% of Black and Chicano students and 36% of Asian-American students compared to a lower 22% of White students[10] (ibid.).

Choice of College Major

The choice of college major has important ramifications for the options available to the student after graduation. The major plays an instrumental role on her performance

[10] However, other studies of the general population of college students (that is, not specific to the most selective schools) have found Blacks to be less likely to choose the more lucrative careers such as business, engineering, and physical science (Loury et al., 1995).

throughout her undergraduate academic career and on her subsequent earning potential. As such, her GPA (especially in her major) is also an important determinant of subsequent success.

Grade inflation has been occurring in American colleges over the past 25 years and results in some universities being internally divided along the lines of high- and low-grading departments. This impacts the analysis, since grades - as a signal of the relative strengths and weaknesses of a student - become more difficult to interpret (Sabot et al., 1991) and complicates classifying students as the 'brightest' in any cohort. Further, students make their course choices in response to a set of incentives which include their expected grades as indicators of ability. However, prior level of skill and a student's motivation level are poor predictors of grades in high-grading departments. Consequently, grades awarded in high-grading departments are less accurate predictors of subsequent performance (Sabot et al., 1991).

Economics, chemistry, and math tend to be the low-grading departments, while art, English, philosophy, psychology, and political science all tend to be the high-grading departments (Sabot et al., 1991). The catch for high-grading departments, with their more compressed grading system, is that grades from such departments convey a cruder signal than grades from lower grading, more dispersed departments. Grade inflation in these departments has been documented in such elite colleges such as Williams College during the periods of 1962-1963 and 1985-1986 [11](Sabot et al., 1991). Therefore such inflation must be controlled for in the overall analysis of relative academic caliber of different

[11] In the first time period the mean grade was a 2.49 on a 4 point scale but rose to 2.93 in the 1985-1986 year. The proportion of students receiving a B- has fallen from 47% to 26% while the proportion receiving a B+ has risen from 11.9% to 20.6% over this same time period (ibid., p. 161). However, the dispersion of grades within the low grading is around .1916 but in the high grading department it is around .1105 (Sabot et al., 1991).

cohorts as well as the relative signaling mechanism of grades to potential employers and graduate programs from various departments over the years.

In terms of choice of major on a national scale, Katchadourian et al. (1985) using data from the National Center for Education Statistics, illustrated that the 1970s was a watershed period in the movement of students from the humanities and most of the social sciences to other fields that were more career-oriented such as business and engineering (see also Turner et al., 1990). By 1979-1980, business degrees increased by 64% over 1970-1971 and engineering degrees also increased by 39% while English and the social sciences declined by 44% and 33% respectively.

The modeling of the different choices of various groupings of students by Katchadourian et al. (1985) drew attention to the fact that sex differences at Stanford University were surprisingly small. Women were also found to be only slightly more likely to choose the humanities and social sciences. However, it was concluded that the ethnic and race differences among choices made were quite disparate. Asian Americans were heavily concentrated in the natural sciences and engineering (62% of their sample upon graduation). Blacks and Chicanos were more likely to major in the social sciences (50% compared to 25% Caucasians).

Turner et al. (1990) looked at the 1951, 1976, and 1989 cohorts using data from the College and Beyond database. More importantly, they used 12 highly selective, entirely private intuitions that offered a basic liberal arts curriculum. This is a particularly interesting study since it used the same data that is used in this paper. They looked at the extent to which differences in entering SAT scores (again as proxies for pre-collegiate ability) may explain differences in the choice of major between the sexes in these cohorts.

They found that for men and women, increases in the math SAT scores increased the probability of the students choosing to major in engineering, math or the physical sciences relative to any other field. They also concluded that an increase in SAT verbal scores holding the math scores constant increased the probability of majoring in biology relative to the probability of majoring in economics for both men and women. Further, women with high SAT scores were much more likely than men to choose to major in the life sciences and the humanities than in engineering, math, or the physical sciences.

The male-female differences in choice of major have converged between the 1951 and 1976 cohorts. This is largely reflective of the movement of women out of the humanities and into fields like economics and the life sciences. However, there were little changes between the 1976 and 1989 cohorts. Turner et al. (1990) found that the science-non-science dichotomy that was once applicable to men and women had been replaced by the taxonomy along the lines of the life sciences and the physical sciences in their attractiveness to women.

Post-Baccalaureate Degrees

Overall, there has been a reported increase in the total number of Ph.D.'s conferred by U.S. universities in all fields between the years of 1920 and 1970 (Bowen et al., 1992, Schapiro et al., 1991). The question of whether there would be a shortage of Ph.D's was hotly debated issue in the early 1990's[12] (see Bowen et al., 1992, Schapiro et al., 1990; and

[12] The economic definition of such a shortage occurs when at the prevailing salaries in an occupation the quantity of labor demanded exceeds the quantity of labor supplied. But as long as salaries are free to rise, then such shortages should eventually be eliminated. The concern of such shortages in the field of academia occurred because academic institutions were not though to posses the needed resources to increase faculty salaries quickly enough so that a time lag results between the increase in demand and increase in professor salaries (Ehrenberg, 1992).

Ehrenberg, 1992). Bowen et al. (1992) aggregated recipients of doctorates by the years in which the received their B.A.'s (coined as "B.A. cohorts"). They were able to match the actual doctoral recipients to the conditions that prevailed at around the time that students began their graduate study. They found that the Ph.D. peak was about eight years apart (in 1973) from the B.A. peak of the cohort (in 1964). Between 1954 and 1974 the total number of B.A.'s awarded was on a steady and rapid rise.

Bowen et al. (2002) attributed this to an increase in the college age population as well to rising enrollment rates during most of this period. The period of 1954 to 1962 was a period of marked expansion and this increase in Ph.D. proclivity among the B.A. classes was attributed to the need of faculty members, availability of financial aid to graduate students, and a positive attitude toward higher education. This increase is very much due to a scale effect caused by larger B.A. cohorts during those years and the appeal of draft deferments (Bowen et al., 1992).

However, following the steady increase, there were fewer Ph.D.s accrued by the 1966 B.A. cohort than by the 1964 cohort and then fewer yet by each succeeding cohort through 1974. The Ph.D. proclivity, p dropped from around 5.5 % in 1964 to 4% in 1966 and then to around 1.7 percent in 1974. This swing was attributed to the change in draft law that eliminated graduate deferments (see Bowen et al., 1992 for succinct description of change). They hypothesized that the sharp decline in Ph.D. proclivity for men across a range of six academic fields in the humanities and social sciences (this decline was much less for women) was due to this new possibility of being drafted even while as a graduate student.

Bowen at al. (1992) also documented another contraction in the number of Ph.D.s over 1970 to 1976 and attributed this to a general "*flight from the arts and sciences"* coupled with the poor job market for academics (Bowen et al., 1992 and Turner et al., 1990). Even though the flow of college graduates obtaining doctoral degrees was now smaller (Ehrenberg, 1992) the potential flow of these students depended on the number of undergraduate seniors and their chosen majors.

Schapiro et al.'s (1990) study also focused on the concern surrounding the possible decline in the number of students pursuing doctoral degrees and other academic careers. They focused on the undergraduate student body of 32 highly selective institutions. Surveying the classes of 1982, 1984, and 1989 they researched students' immediate intentions to pursue a graduate degree in the arts and sciences[13]. There is no differentiation among different degrees since, for example, a student who intended on enrolling in a program in the humanities or sciences was coded along with those who intended to complete a masters degree or doctoral degree in any other academic area. They concluded that the percentage of those who intended to immediately pursue a graduate degree remained more or less constant over the 1982 to 1989 cohorts. It rose from 11% in 1982, to 13% in 1984, and then receded to 10% in 1989.

Schapiro et al. (1990) went even further in disaggregating the data by race and found that Whites, Blacks and Hispanics exhibited gains from 1982 to 1984 but their numbers decreased again in the 1989 cohort while Asians exhibited major decline over the entire period (Schapiro et al., 1990). However, among the 5% who constituted the "cream of the crop" – defined by them as the students who report an average grade 'A' or higher in

[13] This is based on their assumption that immediate plans have a greater likelihood of being realized than more long term education plans (Schapiro et al., 1990 p. 10).

their undergraduate course work, the 1982 and 1989 cohorts' intended progression rates were roughly equal to 25%, with the 1984 cohort's rates spiking a bit higher. Furthermore, there is a similar trend for those students who planned to enroll in graduate school at some future date.

There is no evidence of any variation in the progression intentions that existed at the first survey date. That is to say, females behaved in roughly the same way as males, and likewise, all racial/ethnic groups also began to show very similar graduate progression intentions. Although progression intent does not secure actual progression rates, the researchers reported that these figures were close reflections of the actual enrollment (in the preferred graduate degree program) when matched to actual enrollment data in follow-up surveys of the Consortium on Financing Higher Education (COFHE) group.

Occupation Choice

College attendance has already been documented in the literature as significantly increasing earning potential; however, college selectivity also plays an important role in determining future job and earnings. Brewer et al. (1999) undertook a cross-cohort study and found that there were larger market premiums to merely attending a middle-rated private institution, relative to bottom-rated public school. However the return to elite private institutions increased significantly for the 1980s cohorts compared to the 1972 cohort.

Other work has illustrated the importance of college performance as well as college selectivity on future private earnings (Loury et al., 1995 and Brewer et al., 1999). Loury et al. (1995) showed that when college performance is taken into consideration, college

selectivity has been historically overstated for Whites and understated for Blacks. Years of college, work experience, and college selectivity raised the earnings of both Blacks and Whites.

College major and grade point average when added to the explanatory variables had large and significant effects on earnings of both racial groups. Each one (1) point in GPA raised White earnings by about 9.5% and Black earnings by about 25% (ibid.). However, there was a special interaction of SAT scores and GPAs for Black and Whites at selective institutions (ibid.). High SAT Blacks who attended selective schools had slightly lower grades than Whites. And, if Blacks were mismatched in terms of SAT scores they received much lower grades.

Moreover, labor markets are continually being impacted by qualitative changes in the composition of jobs. Acemoglu (1998) researched and found evidence for the hypothesis that as more and more highly skilled individuals enter the workforce, the less likely it is that there would be a pooling equilibrium of 'middling' jobs that both skilled and unskilled (or less-skilled workers) may occupy. The job market thus splits off into two factions, a separating equilibrium for the skilled and unskilled groups and a continuation of such a trend would lead to an increase in inequality.

Authors such as Acemoglu (1998) and Lemann (1999a) concur on the fact that the interviewing procedures and recruitment practices now followed by some companies, while extremely costly, is done to avoid having to 'pool' workers across different skills. These companies now prefer to attract and correctly identify the highest skilled workers for certain high paying jobs. While the firms must ensure that they are attracting and hiring the very brightest, they must also work at making themselves equally desirable to those

students who they would want to hire (Lemann, 1999). Hence, a rigorous and expensive recruiting process is set up which also doubles in its role as a signal to these students that firm X in industry Y is the best option to pursue.

Corcoran et al. (2004) specifically analyzed women's career choices as teachers in five high school classes from 1964 to 2000. They assessed teacher quality using a measure of relative cognitive ability – cohort-specific rankings based on scores of a test of verbal and mathematical skills. They investigated the propensity for high school graduates with high test scores to enter teaching over time using five logit models where the likelihood of becoming a teacher was assumed to be a function of the individual's test scores, age, and race. They also looked at the skill distribution of new female teachers.

They found that throughout this period, the average female teacher scored consistently below the average female college graduate and that the average percentile rank of the new female teacher fell slightly but consistently over this period. They also found a substantial weakening in the relationship between ability and entry into teaching since 1964. In fact, now more so than the earlier years, women in the top decile are much less likely to become teachers relative to the average. So while in 1964 the chance of getting a teacher who scored in the top 10% was more than one in five (5), by the year 2000, this was a little over one in 10. However, they also found that the average test score ranking of male teachers rose from 1964-2000 and when both male and female teachers were counted, the proportion of teachers coming from the top decile of the test score distribution was 18.9% in 1964 and 13.7% by 2000.

IV. Random Utility Model

In the random utility model the utility to a consumer of an alternative is specified as a linear function of the characteristics of the consumer and the attributes of the alternative plus an error term (Kennedy, 1998). The probability that a particular consumer will choose a specific alternative is given by the likelihood that the utility of that alternative to the consumer is greater than the utility to the consumer of all other available alternatives. Hence, the consumer picks the alternative that maximizes his or her utility.

The basic assumption of this model is that the utility function of a consumer is unknown but can be partially understood by relating an individual's consumption choices to the individual's socio-economic characteristics, the relative prices that he or she faces, and the characteristics of the goods available for consumption (Huang and Nychka, 2000). Thus, the utility function in the random utility model can be explained by known factors, but it also contains a random error component that indicates unknown variation across individuals.

The Multinomial Logit Model

Since it is assumed that the random utility error terms are independently and identically distributed, the multinomial logit model can be appropriated[14]. In this unordered choice model, for the *i*th agent faced with *J* choices, we can suppose that the utility choice of *j* is:

$$U_{ij} = \boldsymbol{\beta}\, \mathbf{z}_{ij} + \boldsymbol{\varepsilon}_{ij}$$

[14] However, the disadvantage of this model specification is the assumption of the property of independence of irrelevant alternatives. The independence of irrelevant alternatives (IIA) problem arises from the fact that in the multinomial logit model the relative probability of choosing two existing alternatives is unaffected by the presence of additional alternatives. It occurs whenever there are two or more alternatives in an individual's option set which are very close substitutes.

If the agent makes choice *j* in particular, we assume that U_{ij} is the maximum utility among the *J* utilities. Hence, the statistical model is driven by the probability that choice *j* is made when the probability that the utility derived from this choice is greater than that derived for any other choice which is not *j*. That is:

$$\text{Prob} (U_{ij} > U_{ik}) \text{ for all other } k \neq j.$$

The multinomial logit model is used as a means of estimating the probabilities of an event's occurrence or non-occurrence within a 0-1 interval. This method of estimating is superior to the simple regression model since the stochastic term is no longer represented by an error term. This is because the stochastic element is inherent in the modeling itself since the logit equation provides the expression for the probability that an event will occur.

Estimation is undertaken by maximum likelihood of an event's occurrence. The function provides the probability that the event will occur and one minus this function for the probability that it does not occur. Thus, this likelihood is the product of the logit functions for all observations for which the event occurred multiplied by the product of one minus the logit functions for all observations for which the event did not occur.

The maximum likelihood method used to establish probability is characteristic of the method used in very large datasets such as the one used in my study. A reliable estimate of the probability of an observation in a group experiencing the event can be produced by calculating the percentage of observations in that group experiencing the event. The log of this probability to one minus this probability (the log-odds ratio) can be thought of as the dependent variable in a regression on the group characteristics to estimate a logit function.

The probability of obtaining the dependent variable is:

$$\Pr ob(y = 1) = \log it(X\beta) = \frac{\mathbf{e}^{x\beta}}{1 + \mathbf{e}^{x\beta}}$$

This multinomial logit model is constructed by specifying that the utility of an alternative to an individual is a linear function of that individual's *n* characteristics with a different set of parameters for each alternative. In this case, *n* coefficients must be estimated for each of the alternatives (less one – the base or reference group).

Controlling for certain characteristics of each individual, I estimate the probabilities that the individual would choose each type of college major, postgraduate degree, and occupation. So the probability of not doing a particular major, say economics is:

$$\Pr ob(no\_econ) = (1 - prob(econ) = \frac{1}{1 + \mathbf{e}^{x\beta}})$$

The likelihood function is formed as:

$$L = \prod_i \frac{\mathbf{e}^{x_i\beta}}{1 + \mathbf{e}^{x_i\beta}} \prod_j \frac{1}{1 + \mathbf{e}^{x_j\beta}}$$

Where *i* refers to those who choose economics as their major and *j* refers to those who do not. Maximizing this likelihood with respect to the vector β produces the MLE of β. Then, for the *n*th individual, the probability of doing economics as a major is estimated as:

$$\frac{\mathbf{e}^{x_n\beta MLE}}{1 = \mathbf{e}^{x_n\beta BMLE}}$$

The formulae above for the logit model imply that:

$$\frac{\Pr ob(econ)}{\Pr ob(no\_econ)} = \mathbf{e}^{x\beta}$$

So that the logit log-odds ratio is:

$$\ln[\frac{prob(econ)}{prob(no\_econ)}] = X\beta$$

This result of prob(econ)/prob(no econ) = $e^{X\beta}$ is generalized in the multinomial model. The ratio of the probability of taking the *k*th alternative to the probability of taking some base alternative is given by $e^{X\beta_k}$ where β_k is a vector of parameters relevant for the *k*th alternative. The coefficient estimates change if the base alternative is changed. For example, suppose that there are three alternatives: econ, polisci, and psych representing three options available to a student majoring in the social sciences either in economics (econ), political science (polisci), or psychology (psych). The model is specified as:

$$\frac{\Pr ob(econ)}{\Pr ob(psych)} = \mathbf{e}^{x\beta_{econ}} \; and \; \frac{\Pr ob(polisci)}{\Pr ob(psych)} = \mathbf{e}^{x\beta_{polisci}}$$

Here, doing economics for the undergraduate major is the 'standard' or base alternative. Using the fact that the sum of the probabilities of the three alternatives must be unity the following must be true:

$$\Pr ob(econ) = \frac{\mathbf{e}^{x\beta_{econ}}}{1 + \mathbf{e}^{x\beta_{econ}} + \mathbf{e}^{x\beta_{polisci}}}$$

$$\Pr ob(polisci) = \frac{\mathbf{e}^{x\beta_{polisci}}}{1 + \mathbf{e}^{x\beta_{econ}} + \mathbf{e}^{x\beta_{polisci}}}$$

$$\Pr ob(psych) = \frac{1}{1 + \mathbf{e}^{x\beta_{econ}} + \mathbf{e}^{x\beta_{polisci}}}$$

In the multinomial logit model the estimated equations provide a set of probabilities for the (J + 1) choices for a decision maker with characteristics $\mathbf{x_i}$. If we assume that $\boldsymbol{\beta_0} = \mathbf{0}$. The probabilities are:

$$\Pr ob(Y = j) = \frac{\mathbf{e}^{x_i \beta_j}}{1 + \sum_{k=1}^{J} \mathbf{e}^{x_k \beta_j}} = for\ j = 1,2,\ldots,\mathrm{J},$$

$$\Pr ob(Y = 0) = \frac{1}{1 + \sum_{k=1}^{J} \mathbf{e}^{x_k \beta_j}} = for\ j = 1,2,\ldots,\mathrm{J},$$

Thus, the J log-odds ratio is:

$$\ln[\frac{p_{ij}}{P_{i0}}] = \mathbf{X_i \beta_j}$$

We could normalize on any other probability as well and obtain:

$$\ln[\frac{p_{ij}}{P_{jk}}] = \qquad -$$

V. Description of Data

The data for the descriptive analyses is taken from several databases found at the Williams College Project on the Economics of Higher Education (WPEHE). This work draws primarily from the College and Beyond Institutional (C & B) databases, which comprises the C & B's Survey data and the institutional surveys conducted by various individual colleges and universities created and provided by the Andrew W. Mellon Foundation. The C & B Survey data provides survey information for the college graduates from the 1951, 1976, and 1989 class years. In particular, it includes statistics on the students' cumulative GPAs at the point of graduation. The Institutional Data provides additional, complementary information on the same college graduates when they were incoming freshmen at the various colleges. Specifically, the data used from this survey provides the information on the students' SAT scores and also each institution's GPA.

The universities and colleges that make up these samples are all academically selective universities and colleges. Shulman and Bowen (2001) explain that this term speaks to the fact that such schools on average receive many more applications from well-qualified students than they have spaces. These schools then select applicants based on many different criteria. It is also quite expected that by national standards, the freshman classes that they admit have very strong academic qualifications such as SAT scores which are well above the national averages.

All available observations from the merged datasets across the three cohorts are considered. For the class of 1951 there are a total of 3,719 observations taken from a sample of 16 schools. For the 1976 cohort a larger sample of 18,307 students is

represented for a total of 31 schools and in the 1989 sample there are 9,184 students in a sample of 20 schools.

The C & B dataset contains information on the students' primary majors during college and whether they received further tuition and as such attained a second bachelor degree, masters degrees, professional degrees and/or doctoral degrees. Respondents were also asked to provide information on their occupations. Specifically data was also recorded on the first job that the student held for six months or longer after attaining his undergraduate degree or graduate degree (if he went into graduate study immediately obtaining his first degree) and the job that the individual held in 1995 or the most recent job to that year.

VI. Methodology

This is an empirical longitudinal study of the trends in major choice[15], postgraduate professional and academic degrees, and occupational choices at different points of the life cycle among students of high academic ability [16] compared to the trends exhibited by all students in a given cohort. I characterize students as high ability along two dimensions – SAT score and relative GPA ratio. They are deemed to be high ability students if they are within the top decile of the SAT distribution for their class year. That is to say that they are students with high indicators of pre-collegiate ability. They are also seen as high ability students if they are in the top decile in the GPA ratio distribution for the class year.

This GPA ratio statistic is calculated in an effort to control for the problems of grade inflation at different colleges as well as the different grading techniques used at the various schools. The GPA ratio is used as an alternate measure of a student's ability – instead of being an assessment of a student's pre-collegiate ability, it is a measure of a student's relative academic strength (that is, when compared to other students in her year) when in college. The student's GPA ratio represents the cumulative GPA of that student relative to her school's GPA for that year then averaged over all schools in the sample (again for that class year). The school's GPA represents the average of the cumulative GPA's of all students who attend that specific school.

[15] Choice of college major is expected to be an important influence on post-baccalaureate decisions and career paths of this group (Katchadourian et al., 1985 and Turner et al., 1999, and Loury et al., 1995).

[16] However, it is recognized that academic ability and productive potential are not exclusively measured across these two dimensions of SAT score and relative GPA ratio. And in fact, there are many other items to consider in gauging a student's level of academic ability and intellect. Nonetheless, SAT scores and the relative GPA ratio of students readily facilitate such identification and categorization of students at least for some elements of pre-collegiate academic ability and academic success during college. Because of this, they are extremely useful signals of such ability in this analysis.

Two types of analyses are performed – a descriptive analysis as well as a multinomial logit analysis. This descriptive exercise allows the investigation of two questions. The first concerns whether students with high SAT scores and students with high GPA's are displaying a greater propensity to choose certain academic and career options over others. It also facilitates the investigation of whether the choices made by students in the more elite categories significantly differ from what is being made by the average student. Secondly, the data also allows investigation of whether the academic ability of the average student opting to pursue various degrees or careers is increasing or declining over time relative to others students in her class year.

In this phase of the analysis, I step away from solely focusing on those students who are found to be within the top decile either by SAT score or cumulative GPA (since there is hardly any variation among this top group of students) to looking more broadly at the average SAT scores and average GPA ratios of all students in each category for each class year. To further facilitate comparison across cohorts, the mean SAT scores for the average student in each cohort is translated into a percentile rank in the 1989 class year's SAT distribution.

With the use of the multiple logit regressions, I model the data on college major and occupation choice at two different points in the life cycle of individuals within the top 10% of the SAT and the top 10% of the GPA ratio distributions in the respective class years. The multinomial logit models allow for a more robust analysis of the data than may be illustrated in descriptive results. The multinomial analysis allows the study of the nature of the choices made by this select group of students versus the choices made by the

rest of the student population while explicitly controlling for other variables such as the students' sex, race/ethnicity, and the selectivity of the undergraduate institution attended.

The sex dummy variable takes on a value of 1 for persons who are female and 0 for males. Race/ethnicity is decomposed into five categories: Black, White, Asian, Hispanic and Other. The 'Other' category is for students who did not identify themselves by race or ethnicity or who identified themselves as belonging to an altogether different category than the options provided in the survey. The variable controlling for the selectivity of undergraduate institutions attended is included because even among highly selective institutions there is some variation in the selectivity and ethos of the schools which can impact the decisions made by all students, including those with high SAT scores and GPA ratios[17].

I use the stratification of schools employed by Shulman and Bowen (2001) outlined in their book, *College Sports and Educational Values, The Game of Life.* They grouped the institutions reported in the College and Beyond Institutional dataset into three categories of selectivity based on the mean combined SAT scores of entering freshmen. They used natural SAT breakpoints that would create the most homogeneous groupings [18](see Appendix A (4) for the detailed description of the classification system used). These groupings are absent for the 1951 cohort, so I followed the pattern laid out by Shulman and Bowen (2001) and constructed a similar three (3) tiered selectivity grouping of these institutions following the natural breakpoints found in the distribution of the average combined SAT scores of the schools represented in the 1951 sample.

[17] See footnote 14.

[18] It should be noted that this classification was carried out by Shulman and Bowen (2001) in the full recognition that there is some risk that such "classifications inevitably run the risk of arbitrariness" (Shulman and Bowen, 2001 p. 337).

Using these basic explanatory variables, I run the multinomial models controlling for whether or not a person is found in the top decile of his or her class year by SAT distribution and then also whether or not the individual is found in the top decile of his GPA ratio distribution. The results that are of specific interest to this study are the significant or otherwise notable relative risk ratios of these choices. This relative risk ratio (rrr) is a ratio of the two odds and resembles relative odds ratios. In general, the rrr for category *j* of *y*, and predictor x_k, equals the amount by which predicted odds favoring $y = j$ (compared with y = base) are multiplied, per one-unit increase in x_k, other things being equal. In other words the rrr_{jk}, is a multiplier such that, if all x variables except x_k stay the same:

$$rrr_{jk} \times \frac{p(y = \frac{j}{x_k})}{p(y = \frac{base}{x_k})} = \frac{p(y = \frac{j}{x_k + 1})}{P(y = \frac{base}{x_k + 1})}$$

The estimated relative risk ratios, the *Z* ratios, and standard errors for the different choices under consideration are given in this paper in Appendix C. Asymptotic Z tests indicate the significance of the *x* variable's effects – whether they differ significantly from 1.0 and these are also given in the results tables. Thus, this test of significance is applicable to the coefficient on the variable which is in the computation of the relative risk ratio for the same variable.

The relative risk ratios change whenever the base categories are changed. I present the results attained when 'other social sciences' is the reference group for the choice of college major. This category serves as a good base group since in the 1989 cohort it attracted 15% of all students in that class year as well as 14% of those in the top decile of

the SAT distribution and 10.08% of those in the top decile by GPA distribution. The base category for occupation choice is the 'other' category which contains a wide assortment of mismatched occupation groupings that were all lumped together in the survey. In my analysis they accounted for 31% of all respondents as well as 28% of those in the top decile by SAT distribution and 22% of those in the top decile by the GPA ratio.

VII. Discussion of Descriptive Results

This section summarizes some of the key results of the descriptive analysis that are presented in tables and figures in Appendix B. I review the salient observations for each type of decision using the 1989 class year as a base for comparing and contrasting observations made in the 1951 and 1976 class years. I start with the decision of college major before reviewing postgraduate decisions and decisions of choice of first and recent occupations.

In each of these, I first discuss the percentage distribution of students in the top decile of the SAT distribution, as well as those in the top decile of the GPA ratio distribution in relation to the percentage distribution of all students across these options in each cohort. I then evaluate the relative strength of all the students within different choice categories as signaled by their mean SAT scores, mean GPA ratios, and the percentile ranks of their mean SAT scores expressed in terms of the SAT distribution of the 1989 cohort.

College Major

a. Distribution of Students

By college major, the largest draw of students in the 1989 class cohort was in the social sciences. A large 40.64% of all students decided to major in economics, psychology, political science or some other social science. Political science accounted for one of the largest majors of students with high SAT scores and high relative GPAs in the

social sciences[19] as 8.1% of students in the top decile of the SAT distribution and a slightly higher 9% of those in the top decile of the year's cumulative GPA ratio chose this major. The field of economics attracted 6.9% and 5.2% of students with high SAT scores and high GPA ratios respectively. But, in the economics major unlike the political science major, the percentages of high ability students were more proportional to the percentage of all students that chose this field (6.16%).

Thus, even though there was a lower proportion of students electing to do economics than political science the likelihood that an economics major was within the top decile of the SAT and GPA ratio distributions for that year was higher than the probability that a student in the political science major was also in the top decile of the SAT or GPA ratio distributions. Hence the economics department may be said to have a fairer share of the high SAT and GPA scoring students than the political science department given each major's overall representation among all students.

This trend was less pronounced in the 1951 class year in which political science accounted for around 7.62% of students who were found to be in the top 10% of the SAT distribution for that cohort as well as 8.2% of such students by their GPA ratio. Fewer high ability students elected for the economics major and it attracted 6.45% of high SAT scores and 5.85% of those with high GPA ratios. However, in the 1976 class year the very top students by SAT scores went into economics – a large 10.3% - while a lower 6.5% majored in political science. This is especially surprising given that in that year, economics majors accounted for 7.24% of all students and political science accounted for a larger 7.5%.

[19] Altogether, other social sciences apart from economics, psychology, and political science account for 15.6% of the general student body, 14.6% of those with HIPCA and 10% of those in the top tenth percentile of the GPA ratio for the 1989 class year.

About one quarter of the total student population in 1989 elected to major in the sciences, while a much higher proportion of students - 40% of those in the top 10% by SAT score and 35% of those in the top 10% by GPA ratio - chose to major in a science sub-field. The fields of engineering and the physical sciences had a much higher proportion of higher ability students than may be expected given their choice as a major by all students. While 6.72% and 9.15% of all students majored in the physical sciences and engineering; almost double, 13.08% and 14.36% of those with high SAT scores majored in these two fields respectively.

Also, in the 1976 cohort a greater percent of those in the sciences was from the top decile of the SAT distribution than from the overall proportion of students majoring in this area (28.2% as opposed to 41.4%). In the 1951 class year the trend is very different. For while 6.8% of all students majored in the life sciences, this major was selected by only 5.28% of those found in the top 10% of the cohort by SAT score and 8.7% of those in the top 10% by GPA ratio. However, the large representation of high ability students in the physical science and engineering majors is still seen in the 1951 cohort.

In the 1989 cohort, the professional fields attracted around 13% of the total population, but only around 3% of those with high SAT scores elected these majors as undergraduates. However, the students who chose to major in professional fields represented 17% of those students with the highest GPA ratios in that class year. The 1976 cohort also sustained the 1989 trend of having a very low proportion (5%) of the high SAT students electing to do professional studies, but these students accounted for a larger percentage of the brightest students if categorized by GPA ratio (they accounted for around 19% of this group).

An interesting characteristic in the distribution of students across the majors is the fact that in the 1989 cohort, the very lowest fraction of the student body chose to major in the arts. In this cohort, 3.97% of the total student population and a similar 3.04% of those in the top 10% by SAT score elected this major. This year also marked the smallest fraction of students in this major across all the three cohorts for there has been a consistent decline in the proportions of all students and high ability students that chose this field. For in the 1951 cohort, 7.34% of all students and 4.40% of high scoring SAT students selected this field. By the 1976 cohort, the percentages in these categories were 6.24% and 3.54% respectively.

b. Differences and changes in average ability

In the 1989 cohort, students in the sciences had the highest mean SAT scores. The mean SAT scores of students electing for those majors was 1261.3, with SAT math scores being the highest attained by students across all disciplines. Among the sciences, the average student in the physical sciences had a high mean SAT score of 1283.2 and a high GPA ratio of 1.029 – the mean SAT score as was the highest attained by students in any other science major and the mean SAT math score of 680.8 was the second highest achieved (the SAT math score of 681 was the average of those majoring in engineering).

Such trends appear to be a reinforcement of those preceding them in the 1976 and 1951 cohorts. In the 1976 cohort, the sciences were again the select group of majors that had students with the highest mean combined SAT and SAT math scores and cumulative GPAs in that school year. Also, within this category, the mean test scores of students in the physical sciences were superior to all others at an average of 1258 – higher than those

majoring in the sciences for that year (1241), but within the physical sciences category itself, slightly lower than those students in 1989 cohort whose mean scores were 1283.3. Again in the 1951 class year, the mean scores of students who majored in the sciences were higher than those who majored in any other division, with a mean SAT score of 1168.51.

In all three cohorts, within the social sciences sub-group, students majoring in economics led in having the highest mean SAT scores and highest GPA ratios. These students not only had the highest mean test scores, but the data also reflected less variability in the caliber of students who elected to do economics rather than, say, political science. Students majoring in economics in the 1989 cohort had an overall mean SAT score of 1259 (668.1 SAT math and 591.2 SAT verbal) whereas those majoring in political science had an average score of 1227 (630 SAT math and 597.4 SAT verbal).

In general, students electing to pursue the humanities on average seemed to have higher SAT scores (1264.2) than the students majoring in any other subject area except the physical sciences (1283) and engineering (1264). However, on average, students in the humanities, while having lower average SAT math scores (636.6) than those in the physical sciences and engineering (SAT math of 680.5 and 681.1 respectively), had higher mean SAT verbal scores than those majoring in these areas – 627.6 versus a mean SAT verbal score of 602.8 in the physical sciences and 583.6 in engineering.

In the 1989 cohort, students in the humanities had a mean SAT score of 1264 (635 math and 628 verbal) with a cumulative GPA which was about 1% higher than the average GPA for that year. To the contrary, those majoring in professional subject areas performed the worst among their peers in these selective universities with SAT scores that were 93

points lower than those students in other majors (with the largest standard deviation of 176 points). They had particularly low SAT verbal scores, of 526.3 but higher SAT math scores of 609.7. Students in the business fields in particular also managed to have a GPA ratio that was around 1.5% higher than the average in this year.

The strongest students by mean SAT scores were still found in the economics major more so than other majors in the 1951 and 1976 class years. In the 1976 cohort, these students had scores that were 3% higher than the average scores in the social sciences, an increase of 2 percentage points over the 1951 cohort. However, the variation in these scores, as represented by the difference in standard deviations, was larger in the 1976 cohort than the 1951 cohort. Overall, only students who majored in the humanities in the 1951 cohort had higher scores than the economics majors in that year. The mean SAT score in the humanities was 1140 (547 SAT math and 593 SAT verbal) with a GPA ratio that was 1% higher than the average GPA for that school year. Average student scores increased in 1976, with the mean SAT score of around 1231 (612 math and 620 verbal) and with a higher GPA ranking about 2% above the average GPA's in the school.

Student majors in the humanities usually had higher average test scores and GPA ratios than those in the arts for all years. However, over time, both subject areas showed increases in the average ability of its students from the 1951 to the 1989 cohorts. On average, students who majored in the arts had low SAT scores (1198 in the 1989 distribution and 1141 in the 1976 distribution), while those who majored in the humanities had much higher SAT scores. And in all three class years, students in the humanities had the highest SAT verbal scores than students in other divisions – 627.6 in 1989, 620 in 1976, and 593.1 in the 1951 cohort.

When mean combined SAT scores are translated into percentiles in terms of the 1989 distribution, a definite increase in the caliber of students is observed. In the 1989 cohort, those who majored in the humanities were on average found to have SAT scores that were in the 58th percentile of the 1989 SAT distribution, while those who majored in the arts were in 44th percentile. This difference in the ability of students in the above majors was maintained in every class year. In the 1951 class year those who majored in the humanities were in the 32nd SAT percentile while those in the arts were again a tenth of the distribution lower in the 22nd percentile of the SAT distribution of the 1989 cohort.

The increase in percentile rank occurred appreciably more in the subject areas of the humanities, economics, and the physical sciences – and this increase took place predominantly between the 1951 and 1976 class years. The only exception to this appears to occur in the professional studies subject areas. Again, in terms of the 1989 class distribution of SAT scores, the average student in the 1951 cohort was in the 29th percentile, by the 1976 cohort in the 30th percentile, and by the 1989 cohort in the 29th percentile of this same distribution. Other subject areas such as the physical sciences and economics on average had students who were among the top ranked in the 1989 SAT distribution by the 1989 cohort. In the 1951 cohort they were in the 46th and 31st percentiles respectively. But by the 1989 cohort they were in the 53rd and 57th percentiles respectively.

Moreover there is a greater dispersion in the percentiles of the average student in these majors by the 1989 cohort. In the 1951 cohort, all students who majored in the social sciences were found in the 30th percentile of the 1989 SAT distribution. On average, the entire division had students in the 29th percentile with students in the economics,

psychology, and political science departments peaking in the 30.88th percentile and other social sciences bearing the brunt of the dip in average ability with students in the 29th percentile. By the 1976 cohort, this variation in the social sciences was larger. Generally a student in the social sciences was in the 44th percentile, but this could peak to the 51st percentile for those in economics and be as low as in the 37th percentile for those in psychology. The 1989 cohort showed more of the same, again with economics and psychology having the most dispersion among the majors in the social sciences.

Postgraduate Degrees

a. Distribution of Students

Moving away from looking at the choice of undergraduate major to the choice of postgraduate degree, there are some fixed and clear trends that are evident throughout these cohorts. Separating the postgraduate degrees received into three (3) classifications of doctoral, professional, and masters levels, the data reveals sustained differentiating features in students' choices. For the 1989 cohort, the largest proportion of students in the high SAT or high GPA ratio distributions attained professional degrees. The professional degrees of law and medicine accounted for approximately 10.41% and 12.42% of the students in the top decile of the SAT distribution and a similar 10.26% and 13.37% of those in the high end of the GPA ratio distribution. However, only a smaller 9.35% and 8.14% of all students pursued and attained professional degrees of law and medicine respectively.

Other postgraduate degrees that accounted for a sizeable portion of the population of students within the top decile of the SAT distribution were the Ph.D. degrees in the

humanities and physical sciences, as well as the masters degrees in engineering and the humanities. Around 17.67% of the population of students in the high SAT sub-group pursued these graduate degrees while only 9.39% of all students pursued these degrees.

Only very small percentages of students in either the general student population or in the more elite population pursued doctoral degrees. However, no students in the top decile of the GPA distribution and less than 1% of students in the top decile of the SAT distribution pursued a Ph.D. in education.

The 1951 and 1976 cohorts reflected even more salient features described in the 1989 cohort. In the 1951 cohort, larger percentages of students with high SAT scores and high GPA ratios were getting doctoral degrees. The range was around 3% to 6% in each category across all doctoral degrees apart from the biological sciences, education and other unspecified doctoral degrees. These percentages were at times nearly double the proportions of students entering into these postgraduate fields from the general population. For example while 1.16% of all students chose to undertake a doctoral program in engineering, 4.28% of the students in the top 10% of the SAT distribution but 1.51% of students with a high GPA ratio selected this postgraduate degree option.

The professional degrees were still the most widely attained degrees. Around 12.57% of students within the top decile of the SAT distribution pursued professional degrees in law while 8.56% of them pursued professional degrees in medicine. A similar 11.46% of students with high GPA ratios received law degrees while a lower 9.72% pursued medicine. However, when these figures are compared to the proportions being represented from the general student population it is seen that while the legal field was getting a proportionally higher representation of more elite students in its division, the

medical field was not. Medicine attracted around 9.12% of all students and received comparable proportions of students in the top SAT and GPA ratio brackets. The field of law also attracted around 9.28% of all students and a significantly higher representation of high ability students.

The 1976 cohort displayed similar trends as the 1951 and 1989 cohorts in terms of the fraction of students who attained doctoral degrees and professional degrees. However, the proportion of students who attained a masters degree in business up to the time of the survey in this cohort was particularly high and this was the only year that displayed such a large bulge in the attainment of master level degrees by its cohort. A large 12.36% of the total student population pursued this degree, while 9.83% of those in the top 10% by SAT distribution and 10.60% of those in the top 10% of students by GPA ratio also pursued this degree. The corresponding figures for those with high SAT and high GPA ratios in the 1951 and 1989 cohorts was much lower at 9.36% and 9.40%; and 3.31% and 6.119% respectively.

b. Differences and changes in average ability

Apart from individuals who pursued a Ph.D. in education, those who pursued doctoral degrees in any other discipline had consistently higher SAT scores than individuals who pursued any other professional or masters degrees. Similarly, those who pursued professional degrees (specifically in law or medicine) had higher mean SAT scores than those who elected to only pursue masters degrees. However, individuals with masters degrees in the humanities/arts and physical sciences had comparable scores to individuals who pursued professional degrees.

Among all doctoral degree recipients, individuals in the field of education were the lowest scoring by SAT score. Their mean SAT score was 1124 compared to the mean of 1272 in the social sciences, 1295 in the biological sciences, and 1342 in engineering. The standard deviation of mean SAT scores of students with a Ph.D. in education was 184 (102 in SAT math and 97 in SAT verbal) and this was the largest standard deviation noted for any degree (doctoral or otherwise).

Those with a Ph.D. in engineering were the highest scoring students by both SAT math and SAT verbal scores. The second highest in terms of SAT math scores were those who pursued a masters degree in engineering. The third group in this hierarchy was those who pursued a Ph.D. in the biological sciences. These Ph.D. engineering students were also the highest scoring by SAT verbal score, with an average of 621.7 which is higher than those who majored in law (615.4 SAT verbal) who, though with strong SAT verbal scores, were still weaker than students in this Ph.D. program.

The highest scoring students among those who pursued professional degrees were found in the field of medicine. These students also had GPAs that were almost 5% higher than the average GPAs for that class year while those who pursued law had a mean GPA ratio that was 3% higher than the average for that cohort. However, the holders of masters degrees were consistently among the lowest scoring students from this select cohort of students, with GPAs ranging between 1% and 2% above the average GPA for that class year. Students with a masters degree in engineering, the physical sciences, and the humanities had mean SAT scores of 1293, 1246, and 1236 respectively. However, individuals with the highest SAT verbal scores were found in the humanities while those with the highest SAT math scores were found in engineering.

In both the 1951 and 1976 cohorts there is the same three (3) tiered stratification between doctoral, professional, and master level degrees that occurred in the later 1989 cohort. In the 1976 class year, among doctoral degrees, engineering students had a mean GPA ratio that was 13% higher than the average. Moreover, students who pursued a doctoral degree in the humanities and the physical sciences had GPA ratios that were 11% and 8% higher than the average student in that cohort.

These Ph.D. students in engineering were also the strongest students in this year in terms of SAT math scores but not SAT verbal scores as was seen in the 1989 cohort. They had a mean SAT math score of 720.2 which was followed by those students who pursued a Ph.D. in the physical sciences and a Ph.D. in the social sciences. Students who pursued their Ph.D. in the humanities had the highest SAT verbal scores of 660.8, and were then followed by Ph.D. engineering students who had a mean SAT verbal score of 627.2.

Furthermore, the average SAT scores of those pursing a doctoral degree in engineering were as high as those of the 1989 cohort, at 1347 for combined mean SAT score (720 math SAT math and 627 SAT verbal). Students with a doctoral degree in education were again the lowest scoring students among doctoral degree recipients by SAT scores. However, the scores in the 1976 cohort were a bit lower than those of the 1989 cohort but they were the same as the 1951 cohort.

Across the cohorts, a more rigid hierarchy is held among the recipients of master level degrees in engineering, physical sciences, and humanities. In the 1951 cohort, students' mean SAT scores students in those three degrees were 1190, 1163, and 1156 respectively and increased in the 1976 cohort to 1265, 1255, and 1218 respectively. And,

by the 1989 cohort, there was yet another improvement in the strength of these candidates in terms of their SAT scores.

Among the professional degrees, the stronger students in the 1976 cohort were choosing medical degrees. Their mean combined SAT score was 1240, 654 for SAT math and 586 for SAT verbal, while those students who entered law programs had a mean combined SAT score of 1234 with a mean SAT math score of 628 and a mean SAT verbal of 606. This marked a switch from what is seen in the 1951 cohort in which students who pursued law had the higher mean SAT score (1173) but a much lower GPA ratio when compared to those students who pursued medicine in the 1976 and 1989 class years. However, by the 1976 cohort, students were getting stronger, as the SAT scores increased for students coming into fields of law and medicine.

For the most part, the SAT percentiles of students who chose to pursue various postgraduate degrees increased from the 1951 class year to the 1989 class year. However, this trend was violated in several instances among master degree holders and Ph.D. engineering students. In this latter category, in the 1951 cohort, these students scored in the 60th percentile in terms of the 1989 cohort's SAT distribution. By the 1976 cohort this decreased to the 34th percentile and then in 1989 rose to the 51st percentile. Individuals in masters level programs in the biological sciences and physical sciences did consistently worse over these cohorts as they were in lower percentiles in each successive cohort.

The hierarchy noted earlier among students in postgraduate degrees by their mean SAT scores is also evident by students' SAT percentiles in terms of the 1989 SAT distribution. However, students who pursued masters degrees in the humanities, physical sciences, and engineering did consistently better over these cohorts. Further, these

students continually had higher SAT scores than students who pursued other master level degrees. But those who pursued the Ph.D. in education always scored in the 29th percentile in each cohort making it the only postgraduate degree option that was selected by individuals of very similar ability in each cohort.

First Occupation

a. Distribution of Students

In the 1989 cohort, larger percentages of students had their first jobs in the fields of finance, business, and education. While around 9% of the general population of students chose finance positions, 7% of the top decile by SAT distribution and a similar 9% of students in the top decile by GPA ratio distribution did the same. But although 9.66% of the total student population went into general business positions, only 3.96% of those in the top decile of the SAT distribution and 5.91% of those in the top decile of the GPA ratio distribution sought these types of jobs.

Further, in the 1989 cohort, a larger share of individuals with high SAT scores had jobs in the primary and secondary education sectors (8.01%) and in higher education (6.26%) than may be expected given the share of all students that pursued these roles. Around 4.4% of all students chose math related occupations but 6.45% of those students in the top decile of the SAT distribution selected it (a smaller 4% of the top students by GPA ratio pursued this field).

The 1951 and 1976 cohorts displayed slightly different trends. In the more recent 1976 cohort, students with high SAT scores were predominantly entering into the fields of engineering (11.29%), medicine (10.51%), and law (9.47%) right after undergraduate or

graduate study. In fact, only between 4% and 5% of students in the high SAT and high GPA ratio brackets had executive positions and jobs in finance and business. Not only were these percentages low compared to the percentages of high ability students that were pursuing engineering, medicine or law, but these percentages were also low compared to the fraction of all students entering these fields.

In the 1976 cohort, although 8.63% of the total student population chose this field, only a smaller 5.57% of students in the top 10% of the SAT distribution elected this category. A greater percentage of high ability students than all students in this cohort ended up in roles in higher education and math related fields. In this cohort, 6% of students with high SAT scores had jobs in higher education whereas only 3% of all students went into this area.

In the 1951 cohort, a larger 11.44% of students from the top decile of the SAT distribution had jobs in higher education while only 4.01% of all students entered this field. While 9.73% of all students went into positions in elementary and secondary education, a larger fraction of students in the top decile of the GPA ratio distribution took similar jobs (12.28%) and a smaller fraction of students in the top decile by SAT score (4.69%) did likewise.

b. Differences and changes in average ability

In the 1989 cohort, individuals in math related fields had the highest average SAT scores with a combined average score of 1269. However, by GPA these students had fairly average grades in compared to others in that school year. Those students who pursued their first job in a legal field also scored pretty high in terms of the SAT, with a verbal

SAT score that was the highest for any occupational category (including math). Individuals in this field also had the highest average GPA ratios, being around 5% higher than the average GPAs of their colleagues.

The highest scoring students by SAT math score were also those individuals who entered into math related fields. On average, they had a SAT math score of 662.4, followed then by students in engineering fields (SAT math of 660.2), and then by individuals who entered positions in higher education. Conversely, students with the highest SAT verbal scores were found to enter into the legal field right after graduation. On average, they had a mean SAT verbal score of 614.5 and were then followed by individuals who went into higher education (612) and math related fields.

On average, individuals who chose jobs in higher education, medicine, and finance scored systematically above others who chose jobs in the related fields of education, medicine/health, and business. Students who pursued roles in higher education had higher SAT scores and higher GPA ratios than those who entered fields in elementary and secondary levels of education. This difference is as much as 4.4% in combined SAT score (4.3% SAT math and 4.6% SAT verbal) with students who pursued jobs in the field of higher education having a cumulative GPA that was 3% higher than the average student's and about 1 percentage point higher than those in the other fields of education. Similarly, those who immediately pursued jobs in medicine had SAT scores of 1245 in contrast with the lower scores of 1123 of those who pursued other jobs in health. A 56 point difference is also maintained between those who got into finance (SAT combined score of 1221) and those who pursued other less challenging areas in business (SAT combined score of 1165).

As is witnessed in the other categories, the average strength of the students in the 1989 cohort marks an improvement over the 1951 and 1976 cohorts. In the 1976 cohort however, health was the weakest field, with a mean SAT score of 1114. Students who found jobs in the elementary and secondary levels of the education sector had a mean SAT score that was higher at 1134, but with a larger standard deviation (187 compared with the 161 for the mean SAT score of students in health). Students in math related fields were again the highest scoring individuals – with an average of 1247 on the SATs, while individuals in the field of medicine averaged at a close 1246. Again in this year the individuals with finance, business, and executive roles were stratified by SAT score. Individuals in finance and other executive fields had higher combined SAT scores of 1183 and 1171 respectively. Though lower than the average scores of individuals in these occupations in the 1989 cohort, these scores still marked a 50 point increase over the scores of individuals in the 1976 cohort who went into business.

In the 1976 and 1951 cohorts, the strongest students in terms of SAT math scores were also found in the occupational fields of engineering, medicine, and math for the 1976 cohort and higher education, math, and engineering for the 1951 cohort. High scoring SAT verbal students in both cohorts were found in the fields of higher education, law, the social sciences, and math while some of the weakest students by SAT verbal score were in health and business related fields.

Overall, the SAT percentiles of students filing into the 12 occupational groups attest to a real increase in ability in each cohort. The largest increase was in the field of education. In the 1951 cohort, students entering this field were in the 23rd percentile of the

1989 class SAT distribution. By the 1989 cohort, these students were in the 47th percentile - by far the largest increase in any occupational category.

However, while the average ability of students with jobs in education increased over time, students who pursued engineering jobs had lower mean SAT scores and GPA ratios. In the 1951 cohort, these students were in the 36th percentile of the 1989 SAT distribution. By the 1976 cohort they were up to the 51st percentile, but in the 1989 cohort, there was a slip in mean SAT scores of these individuals to the 49th percentile. By the 1989 class year, individuals who had occupations in math, higher education, law, the social sciences and medicine had the highest average SAT scores (in that order). However, in the 1951 cohort, individuals in medicine had relatively low scores, but the 1976 cohort showed a vast improvement in scores which increased even further in the 1989 cohort.

Recent Occupation (occupation as of 1995)

a. Distribution of students

Analysis of the survey data for individuals' occupations as of 1995 indicates a shift in allocation of students later on in their careers. In the 1989 cohort, many of the trends were less apparent and there was more of an even distribution of students across the various occupational fields. When students chose occupations right after graduation, the field of higher education attracted a larger proportion of higher ability students than all students. However by 1995 this field attracted 3.56% of all students, 4.79% of those students in the top decile of the SAT distribution, and 3.94% of students in the top decile of the GPA ratio distribution.

There is also some evidence of occupational advancement as a larger percentage of these students were found in executive positions (7% of the total student population) and the largest reported percentage of students in the top 10% by SAT score was also found in this field. This exodus to executive positions is also quite evident in the 1976 cohort and follows if we accept that people in the 1976 cohort would have been in a much more advanced stage in their professional careers and could have made this career switch. In this cohort, 21% of all students who reported an occupation were in executive positions and around 16% of students within the top decile of the SAT distribution and 16.5% of students with high GPA ratios were in executive positions.

High ability students were also more commonly found in the occupational fields of law and medicine. In the 1976 cohort, medicine attracted 12% of individuals with high SAT scores and 15% of those with high GPA ratios, while only accounting for 7.72% of all students in that cohort. A much smaller percentage was found in education. A mere 2% of the high ability population by SAT score was still found in this field, while 8.49% of the high ability population by GPA ratio had jobs in higher education.

There were similar movements seen among individuals in the 1951 cohort (now 44 years after their graduation) as was observed in the two succeeding cohorts. In this cohort almost a quarter of its total student population was in executive positions, while 23% of its top students by SAT score and 17.54% of its top students by GPA ratio were in executive positions. Moreover, 15% of its high ability students were in positions in the higher education sector while around 16% were in the fields of medicine and law. Very few remained in the general field of business with barely 1% of its students in the top decile of its SAT distribution were in this field by 1995.

b. Differences and changes in average ability

The average SAT scores of students in different occupations were not radically different later on in their life cycle. In the 1989 cohort, individuals in the field of law had the highest combined average SAT scores (1248) among all occupations. They led in mean SAT verbal scores (611) but were closely followed by students in higher education who also had high combined SAT scores (1245) and high SAT verbal scores (610).

Some of the students with lower combined SAT scores were in the fields of finance and business. By this point, students in these fields had GPA ratios that were between 2% and 5% below the average GPA ratio for that class year. However, those in positions in higher education and in the social sciences had GPA ratios that were 3% higher than the average for the 1989 class year. For the 1976 cohort, students in positions in higher education had even higher mean SAT scores than those in the 1989 distribution. They also had the highest SAT scores in that year. Furthermore, students in this field had an average GPA ratio that was 7% above the mean for that year and 9% above the mean in the 1951 cohort.

In the 1989 cohort those with the highest mean SAT math scores were now found in the fields of math, engineering, and finance, while those with the highest mean SAT verbal scores were still found in the fields of law, higher education, and the social sciences. However, students in executive positions and other business related fields were also doing much better in terms of mean SAT math and verbal scores – coming much closer to those high scoring students in the fields of law, higher education, and the social sciences.

Individuals from the 1989 cohort who had jobs in education in 1995 had higher SAT scores than those in the 1951 cohort who were also in this field by 1995. However,

the relative academic ability of students in the fields of engineering and medicine fluctuated from one cohort to the next. In the 1951 cohort, students in the field of engineering were in the 40th percentile of the 1989 distribution. By the 1976 cohort they were up to the 49th percentile. This advantage then declined and by the 1989 cohort they were down to the 42nd percentile. Students in medicine were in the 36th percentile in the 1951 cohort. By the 1976 cohort these students were scoring higher and were in the 55th percentile based on the 1989 SAT distribution. However by the 1989 class year, they fell again to the 44th percentile.

Moreover, by the 1989 cohort, the leading occupations by average SAT percentile of students in decreasing order were: higher education, law, the social sciences, math and finance. The greatest growth in the academic ability of students as seen by their SAT scores was in the field of finance. In the 1951 cohort, these students were in the 26th percentile of the SAT distribution but by the 1989 cohort they were up to the 46th percentile. The SAT percentile of students in the math related occupations changed very little over these cohorts. In the 1951 cohort, students in math related fields were in the 51st percentile of the 1989 SAT distribution. The next closest ranked, were students in engineering and higher education who were in the 40th percentile.

VIII. Discussion of Multinomial Logit Results

In this section I discuss the findings of the multinomial logit models with the base category of 'other social sciences' in the analysis of choice of college major and 'other' – a category which contains a wide assortment of occupation groupings - for choice of first and later occupations. This model allows a formalization of the descriptive evidence provided above. It also allows the inclusion of various control variables in the model. The relative risk ratios of the high SAT and high GPA variables[20] are discussed with an emphasis on the most interesting and significant results.

College Major

Compared to the reference or base category of other social sciences, students in the top 10% by SAT distribution were less likely than others to major in social sciences such as political science and psychology in the 1989 cohort. The choice of political science by these students is significant at the 5% level and while they were only 7% more likely to enter into economics, the relative risk ratio on the choice between economics and other social sciences for high SAT scorers was not significant. However, attending selectivity 1 or selectivity 2 schools made students around 34.5% less likely than students in selectivity 3 schools to choose to major in economics and this result is significant at the 5% level.

Other social science majors were more attractive to high ability students when sex, race, and ethnicity were controlled for. These students were almost 150% more likely to get into the physical science and had a 68% increased chance of getting into engineering. Furthermore, for the sciences in general, these high SAT scores increased these students' likelihood of entering the sciences rather than other social sciences and again these results

[20] See Section IV Methodology for an explanation of variables used.

are significant at the 1% level. However, attending selectivity 1 or selectivity 2 schools decreases this likelihood for all students and this is also significant at the 1% level.

In the 1976 cohort, high scoring SAT students were again much less likely to get into other social science areas with the exception of economics and had an increased probability of 31% of choosing economics over other social sciences (significant at the 5% level). But in this year they were also less likely to get into other professional areas. They were around 49% less likely to go into any professional field, as well as 25% less likely to go into the arts. However, there still was a greater partiality on the side of these high scoring students to get into any science area over the social sciences and again this increased probability is significant at the 1% level.

Similar trends are found in the 1951 cohort, but overall there are less significant relative risk ratios although they still reflect trends that were continued in the 1976 and 1989 cohorts. This time, within the social science division, economics appeared to be less desired by students with high SAT scores compared to other students in that class year. Students in this 1951 class year were now 17% less likely to major in economics, but were 21% more likely to do psychology.

They were also more likely to do any other science subject except life sciences in which there was a 26% decreased likelihood that a student in the high SAT category will enter into this field. However, in the physical sciences high SAT scorers were 138% more likely to opt for physical sciences rather than other social sciences and this relative risk ratio of 2.385 is significant at the 1% level. Here again, if a student was from a selectivity 1 or selectivity 2 school, they were less likely to choose physical sciences than other social sciences.

A contrary picture is painted when students were separated into those who are within the top 10% of the GPA distribution for the class year and those who were not in this category. For the 1989 cohort in particular, students who were in the top 10% of this distribution were more likely to do any other subject other than other social sciences, compared to students who were not within the top 10% of this distribution. The relative risk ratios for economics, psychology, and political science in particular are not statistically significant at even the 10% level.

Students with high GPA ratios in this cohort were much more likely to be in the sciences. They were 146% more likely to be in the life sciences (significant at the 1% level) and 66% more likely to be in the physical sciences. However, this result is not statistically significant but still notable. The 1976 cohort also displayed this trend. With 'other social sciences' as the reference group, it appeared that in fact, the most alluring college major option open to high GPA students relative to other students in that year was the physical sciences. These students were also more likely (with an increase of 57%) to get into psychology than economics or political science but again these ratios are not statistically significant.

The 1951 cohort showed a reverse in many of the trends in preferences exhibited by students with high GPA ratios. In this cohort, high GPA students were less likely than other students to choose any major except the humanities and some professional studies over the base group - other social sciences. In fact these students were 3% more likely to major in the humanities – and this is significant at the 5% level. They were 23% more likely to opt for other professional studies than to go into other social sciences. The strength of their choices reflect what is seen in the other cohorts since, when compared to

other social sciences, they were the least likely to choose political science over any other social science, and engineering over any other science subject. However, these ratios are merely indicators of direction of this relationship since none of them were statistically significant.

First Occupation

In the 1989 cohort, many of the relative risk ratios for the high SAT variable are significant at either the 0.05 or 0.01 levels. Students in the high SAT category were more likely to enter medicine than all other students when sex, race, and selectivity of school were controlled for. They were in fact 173% more likely to enter into medicine – a result which is significant at the 1% level and also 69% more likely to get into higher education – significant at the 5% level.

However, compared to other students they were 9% less likely to get into other areas of education with also a 51% decreased chance of getting into other health related fields such as nursing (again all of these findings are significant at the 1% level). Interestingly enough, in light of this analysis, they were also slightly less apt to enter into law (a decreased chance of 6%) but were much more disinclined to get into finance or business than law. The relative risk ratios on the latter two choices are significant at the 5% and 1% levels respectively.

In the 1976 cohort, the top SAT students were much more likely to get into positions in higher education than other occupations compared to students who are not within the top decile of the distribution. The relative risk ratio for this option is 2.37 and is significant at the 1% level. They were also more inclined to get into occupations in the

social sciences and math related fields than other occupational areas. In this cohort these top students were 9% more likely to get into law. However, they were much less likely to get into finance, other business, or executive positions as their first occupation upon attaining an undergraduate or graduate degree.

Looking back to the 1951 cohort, the draw to higher education seemed to be even stronger for students in the top 10% of the SAT distribution. They were 358% more likely than other students to enter into positions in higher education and 8% less likely to secure positions lower down in the education sector – results that are significant at the 1% level. In descending order, they were also more likely to go into the social sciences, math, and engineering. In this year however, they were around 5% less likely to get into medicine but 53% more likely to get into other health related fields.

Very different observations are made on students' choices when their status as high ability students is controlled for by using their relative GPA's in that year. Not only are the results different from those related by the multinomial analysis using SAT scores, but there are also far fewer statistically significant relative risk ratios. When academic ability is controlled for by a student's relative cumulative GPA in the 1989 cohort, students who displayed strong ability in this indicator were much more likely to get into medicine than any other occupation. They were 200% more likely to get into medicine than other students and were 148% more likely to get into law. The very strong former effect is significant at the 1% level. They were also much more likely to get into higher education than they were to get into other areas of education (118% as opposed to 74% in the latter, again significant at the 1% level).

In the 1976 cohort, a similar pattern is observed. Though not statistically significant but still very much pronounced in terms of absolute risk ratios, students with high GPAs were much more likely to enter into fields of medicine (296%) and law (132%) than other occupational fields. They were also much more likely to go into the social sciences (107%) than students who were not in the top 10% of the class' GPA distribution.

In the 1951 cohort high GPA students were 112% more likely to go into finance than other occupational fields compared with students who were not in the top 10% of the distribution. The former were also only 5% more likely to go into law. But, they were 71% more likely to go into higher education and actually 8% less likely go into positions in elementary or secondary education. The top students in this cohort were also 39% more likely to go into math related fields and 41% more likely to go into occupations in the social sciences.

Recent Occupation (as of 1995)

In the 1989 class year, students in the top 10% of the SAT distribution for that year were 148% more likely than other students to get into careers in medicine when compared to other occupations later on in their life cycle. They were also still more likely to be in higher education, however at this time in their life cycle only 52% more likely. They were the least likely to be in any lower ranked business position and other areas of health such as nursing. However, according to the multinomial regression, they were also 28% less likely to be in executive positions than other students.

Individuals in the 1976 cohort were more likely to go into the areas of higher education, medicine, law and math (in that order). They were still 35% less likely to be in

executive positions and around 50% less probable to be in either lower level business positions or occupations in the primary or secondary educations sector.

In the 1951 cohort, the revealed preferences of students in the top 10% of that class year's SAT distribution were again slightly different from the two years thereafter. While these top students still showed a stronger likelihood of going into professions in higher education than elementary or secondary education, they were also much more likely to get into math related occupational fields. In this cohort, they appeared to be less likely than other students to go into medicine (5% less likely) or law (3% less likely). But students with high SAT scores were still more likely to go into these two fields of medicine and law than into business, finance or other executive fields.

In the 1989 cohort, after controlling for the sex, race/ethnicity, and selectivity of school variables, students with relatively high GPA ratios when compared to the other students in that year had high odds of being found in areas of higher education (2.07 odds increase) and medicine (2.04 odds increase). These students were therefore less likely to be in health related fields when compared to their tendency to be found in other occupations which were more directly related to medicine. They were also 30% more likely to be in education that those who are not in this top decile of the SAT distribution, yet they were three times more likely to be in positions in the higher education sector than in other sectors of education.

In the 1976 cohort, though the relative standing of the relative risk ratios of these students were similar to what was seen in the 1989 cohort, there were still some small differences that are important to note. Even though students in the top 10% of the GPA distribution in this cohort were more likely to be in law than finance or business, top GPA

students in this cohort were nonetheless, 4% more likely than other students to be in executive positions than in other occupations. They were also 53% more likely to be in business and 2% more likely to be in other general educational fields.

In the 1951 cohort, the change was more dramatic in that students in the top 10% of the GPA ratio distribution were 44% more likely to be in executive positions than other students. Furthermore, they were more likely to be in executive positions than law (22%). In this year, such high ability students were 126% more likely to be in math related fields than other students and were the most likely to be in the field than in any other in that year. They were also much more likely to be in law than medicine since students in the top 10% by GPA ratio were 3% less likely to be in medicine than all other students.

IX. Conclusion

This paper deals with the academic and career choices of the "brightest" students in elite American universities over the three separate cohorts of 1951, 1976, and 1989. Although the analysis in this paper rests primarily on the assessment of ability by an individual's SAT scores, it is also facilitated by data on her relative GPA as a separate measure of academic ability.

The many significant relative risk ratios on the variables which controlled for the selectivity of school in the multinomial logit results indicate that students' choices were significantly influenced by the type of elite institution attended. Hence, it appears that the funnel function[21] of elite schools is differentiated across the various institutions.

It has also been found that for the greater part, there were clear, marked, and consistent increases in the caliber of the average student in these highly selective schools across college majors, postgraduate degrees, and occupations over the three cohorts. This finding is maintained even when student ability in all cohorts is evaluated in terms of the SAT distribution of the 1989 cohort.

On average, the highest scoring students were choosing subjects such as the physical sciences and economics rather than fields such as psychology and the life sciences. This mirrors the choice pattern displayed by the 1981 Stanford University cohort reviewed earlier. Careerists in the Stanford study explained that these college major choices (that is, economics and the natural sciences) were made because these subject majors would eventually lead them to more career-oriented fields of business, law, medicine, and engineering (Katchadourian, 1985).

[21] See Frank et al., 1995 and Lemann, 1999(a).

However, the dispersion among the average scores of individuals in various majors grew to be even wider over time. In the social sciences, students who majored in economics kept getting stronger over time, thus widening the gap between the average ability of the students in economics and those in other social sciences such as psychology and political science. This is not to say that students in the latter categories were not also getting stronger over these cohorts, but that they were simply not showing increases in mean SAT scores as fast as or faster than individuals in economics. Among the sciences, students in the physical sciences showed the greatest increases in average ability, even across the 1976 and 1989 cohorts. However, the variation of mean SAT scores of all students in these majors was not as wide as in the social sciences.

In the social science division, the political science major was the most highly represented among students from the top deciles of the SAT and GPA ratio distributions in both the 1951 and 1976 class years. However the percentages of high ability students in this field were clearly lower than the percentages of all students who chose this major. On the other hand, while a lower proportion of all students usually selected economics, it received a comparable percentage of high ability students. Hence, there are greater odds in these cohorts that any economics major was in the top tenth of the SAT distribution than any political science major was in the top tenth of the SAT distribution. However the standard deviation of the scores of these economics students got larger from one cohort to the next indicating an increasing variability in the quality of the average student in this field.

In looking at choice of occupation right after graduation, individuals in the 1976 and 1989 cohorts were on average brighter than those who graduated in the 1951 cohort.

Individuals in elementary and secondary education roles were particularly low scoring in the 1951 cohort but by the 1989 cohort, their average ability significantly increased. However, high ability students more so than all other students had a higher probability of being found in the fields of finance and law than medicine and math related fields. When viewed in this light, the brightest students may be said to be opting for more careerist options than academic and social options in the 1989 cohort than in the earlier cohorts.

By mean SAT score, individuals in some fields have displayed inconsistent and sometimes no increases in students' average ability. Individuals in health professions did not show any substantial growth in terms of their mean SAT scores over this period while those in medicine – a field which demands higher cognitive skills, displayed substantial growth in the ability of all individuals in this field over the three cohorts.

The differences in the ability of the average student in the fields of higher education, medicine, and finance compared to the ability of the average student in other education sectors, the health professions, and business related fields, points to the stratification of these professions by ability. High ability students have consistently displayed a stronger predilection of opting for more demanding aspects of these fields and the results of the maximum likelihood estimates mirror this dichotomy. In the 1989 cohort, there are significant findings that show that students in the top decile by SAT distribution were 9% less likely to get into other areas of education but 69% more likely to get into higher education. They were also 52% less likely to get into other health related fields such as nursing but 173% more likely to enter into medicine.

The high and significant relative risk ratios on the high SAT variables for occupations related to math, social sciences, and higher education stay consistent over

time. Students with such high scores were consistently and strongly more likely to into these jobs right after graduation but they were much less likely to get into finance, other business or executive positions.

The differences noted among the cohorts' occupational decisions by 1995 confirm expected life cycle effects. For this year marked 44 years since the graduation of the 1951 cohort, 19 years for the 1976 cohort, and six (6) years for the more recent 1989 cohort. In each of these cohorts there was more dispersion among the very bright students by this year as they re-positioned themselves in different professional roles. In the 1989 cohort, 7% of these individuals were in executive positions six (6) years after graduation and in the 1976 cohort, 16% of high ability students were in these positions. However, the extent of occupational mobility was particularly pronounced among individuals from the 1951 cohort as the largest 23% of high SAT students were found in executive positions by 1995.

Fortunately, there were also strong increases in the average student quality in other professional areas. However, what was not expected and I think more worrying is the fact that by this year, individuals in each cohort in the fields of medicine, engineering, and higher education had lower mean SAT scores than the students in these fields right after graduation. As such, these occupations appear to less attractive to high ability students who, with several years of experience in the workforce, opt instead to pursue jobs in finance and other executive fields. Thus, faced with job market pressures or changing preferences, the high ability students shifted into finance and business oriented positions. Consequently, individuals in medicine, engineering, elementary and secondary education roles were the less likely to have been in the top 10% of the class.

X. Limitations of Study and Future Research

It should be borne in mind that in this as well as any analysis of longitudinal data, we are allowed only a very slim perspective of what these cohorts look like at the time in which the data were collected. Furthermore, there is more homogeneity in the age distribution of the cohorts for the data on college major, postgraduate degree, and first occupation choice than there is for the cohort data on occupation as of 1995 as this year marked 44 years since the graduation of the 1951 cohort, 19 years for the 1976 cohort, and six (6) years for the more recent 1989 cohort.

The use of the descriptive statistics for analyzing postgraduate choices of high ability students is limited because of the way in which the data is sorted. Since the analysis focuses only on the highest degrees that students attained there is a margin for misrepresentation of the choices of a small minority of students who may have pursued multiple degrees but are only analyzed as having made a certain choice.

Further research should attempt to apply a nested multinomial logit model to the analysis of students' decisions to pursue different postgraduate degrees. This model would allow for multiple stages in the decision making process since the first decision that should be modeled is the students' decision to pursue any form of postgraduate study. The second would then be on the choice of degree given a range of doctoral, masters, and professional degrees.

Future study should also attempt to more formally model the occupational choices of students with high SAT scores and high GPA ratios. A more complex model of this sort was precluded in this study for several reasons. Firstly, such a model would require wage data that would adequately correspond to various occupational categories for different time

periods. The College and Beyond and Institutional datasets lack this type of wage data, although they do have data on students' incomes from all sources in certain years.

Furthermore, even if wage data could have been found for the years of 1951/1952, 1976/1977, 1989/1990 and 1994/1995, this data would also be needed to be a fair match for the occupational categories given in the College and Beyond dataset. In many cases that College and Beyond dataset lumped athletes together with writers and performers in a single occupational category of 'other' (see Appendix A3) thus further complicating any attempt to match this data with the appropriate wage indices.

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Appendix A: Description of Variables

1. Undergraduate Major Classification

1) Humanities: Classics, Literature, Languages, Philosophy
2) Arts: Music, Theater, Art
3) Social Sciences: Economics, Psychology, Political Science, Area Studies, Sociology, History
4) Economics
5) Psychology
6) Political Science
7) Other Social Science: Area Studies, Sociology, History only
8) Sciences: Life Sciences, Math/Physical Science, Engineering
9) Life Sciences: Biological Sciences, Pre-Medicine
10) Math/Physical Science: Mathematics, Geological Sciences, Physics, Astronomy
11) Engineering/Computers: Engineering, Computer and Information Sciences
12) Professional: Communications, Architecture, Business
13) Business
14) Other Professional: Communications, Architecture only
15) Other Studies: Agriculture, Education, Nursing, Health Sciences, Other fields

2. Postgraduate Degree Classification

Doctoral Degrees:

1) Biological Sciences
2) Education

3) Engineering

4) Humanities or Arts

5) Physical Sciences

6) Social Sciences

7) Other

Professional Degrees:

8) Law

9) Medicine

10) Other

Masters Degrees:

11) Biological Sciences

12) Business

13) Education

14) Engineering

15) Humanities or Arts

16) Physical Sciences

17) Social Sciences

18) Other

3. Occupational Classification for job held in 1995 (or most recent job to that date)

1) Education: preschool/elementary/secondary school (teaching, coaching)

2) Higher Education: postsecondary (faculty, teaching, coaching)

3) Medicine: physician, dentist, veterinarian

4) Health: other health occupations, e.g. nurse, therapist, pharmacist, health technologist
5) Social Science: e.g. sociologist, economist, librarian (excluding education, higher education)
6) Natural Science/Math: e.g. chemist, biologist, statistician
7) Engineering: engineering and architecture including engineering technology and technician
8) Law: lawyer, judge
9) Business: marketing and sales- real estate sales, retail sales and service
10) Finance: banker, stockbroker, investment manager
11) Executive: management consultant, managerial/administrative executive
12) Other: clergy, other religious/social worker, clerical support, computer occupation, insurance, military, writing, editing, performer, athlete, other – e.g. cook, construction, mechanic

4. Selectivity of Undergraduate Institution

For the 1989 and 1976 cohorts[22] the selectivity groupings are as follows:

SEL_1: The most selective institutions. Those in which the mean combined SAT scores of the entering class was 1250 or higher in 1976 and 1300 or higher in 1989

SEL_2: Institutions at which the mean SAT score of the entering class was at least 1125 but not less than 1250 in 1976 and at least 1150 but less than 1300 in 1989

[22] The definitions of the categories shift upwards by 25-50 points between the two cohorts because of the increase in selectivity of the College and Beyond cohort that occurred between 1976 and 1989 class years.

SEL_3: Institution s at which the average combined SAT scores of the entering class was below 1125 in 1976 and below 1150 in 1989.

For the 1951 cohort the classification system for the SEL_1, SEL_2, and SEL_3 groupings are as follows:

SEL_1: Institutions at which the average combined SAT score of the class was 1200 or higher in 1951

SEL_2: Institutions at which the average combined SAT score was at least 1100 but less than 1200 in 1951

SEL_3: Institutions at which the average combined SAT score was below 1100 in 1951.

Appendix B

College Major

Table B1. Distribution of students by College Major, 1989 cohort

Major	Percent of ALL students	Percent of students in the top 10% by SAT	Percent of students in the top 10% by GPA Ratio
Humanities	14.69	18.32	9.86
Arts	3.97	3.04	2.74
Social Science:	40.64	34.53	29.90
Economics	6.16	6.91	5.15
Psychology	7.55	4.88	5.37
Poli. Sci.	11.30	8.10	9.31
Other	15.63	14.64	10.08
Science:	25.89	40.70	34.06
Life Science	10.03	13.26	11.94
Physical Sci.	6.72	13.08	10.84
Engineering	9.15	14.36	11.28
Professional:	12.76	2.85	17.09
Business	7.37	2.12	10.95
Other	5.39	0.74	6.13
Other Studies	2.66	0.55	6.35

Table B2. Distribution of students by College Major, 1976 cohort

Major	Percent of ALL students	Percent of those in the top 10% by SAT	Percent of those in the top 10% by GPA Ratio
Humanities	10.46	14.31	8.99
Arts	6.24	3.54	4.55
Social Science:	31.87	33.87	27.23
Economics	7.24	10.30	6.54
Psychology	5.44	4.32	5.71
Poli. Sci.	7.48	6.76	6.71
Other	11.72	12.49	8.26
Science:	28.42	41.42	36.61
Life Science	9.46	12.12	11.31
Physical Sci.	7.39	14.26	12.15
Engineering	11.57	15.04	13.14
Professional:	19.13	5.25	18.86
Business	10.61	2.50	10.43
Other	8.52	2.76	8.43
Other Studies	3.88	1.61	3.77

Table B3. Distribution of students by College Major, 1951 cohort

Major	Percent of ALL students	Percent of students in the top 10% by SAT	Percent of students in the top 10% by GPA Ratio
Humanities	17.75	19.20	19.30
Arts	7.34	4.40	4.68
Social Science:	40.15	35.78	36.26
Economics	7.31	6.45	5.85
Psychology	4.68	4.99	4.68
Poli. Sci.	9.41	7.62	8.19
Other	18.74	16.72	17.54
Science:	23.74	36.36	32.75
Life Science	6.80	5.28	8.77
Physical Sci.	9.52	17.60	22.22
Engineering	7.42	13.49	1.75
Professional:	2.10	2.93	2.92
Business	0.48	0.29	0
Other	1.61	2.64	2.92
Other Studies	2.34	1.47	1.17

Table B4. Average scores of all students by College Major, 1989 cohort

Major	Mean SAT	Mean SAT MATH	Mean SATVERBAL	Mean GPA-Ratio
Humanities	1264.2	636.5893	627.6102	1.015456
	(152.3249)	(85.97042)	(86.23765)	(.1227964)
Arts	1198.63	618.411	580.2192	1.022477
	(170.836)	(94.79994)	(95.95647)	(.1232003)
Social Science	1232.074	636.9989	595.075	1.000076
	(159.3152)	(89.78128)	(89.08222)	(.1358106)
Economics	1259.311	668.0742	591.2367	1.00476
	(141.8277)	(77.62858)	(84.06207)	(.1310487)
Psychology	1195.065	620.5195	574.5455	.9939358
	(168.3159)	(97.45173)	(89.76834)	(.1490007)
Poli. Sci.	1227.659	630.2697	597.3892	1.000975
	(163.5804)	(93.13528)	(88.66972)	(.1422846)
Other	1242.397	637.5679	604.8293	1.000532
	(154.9674)	(84.83478)	(89.33051)	(.1258738)
Science	1261.312	669.1253	592.1867	1.010523
	(169.3728)	(90.25086)	(98.31913)	(.160353)
Life Science	1243.55	650.684	592.8664	1.016022
	(173.8105)	(94.74031)	(98.15379)	(.157444)
Physical Sci.	1283.274	680.47	602.8039	1.029128
	(165.8136)	(87.16088)	(97.82081)	(.1575079)
Engineering	1264.655	681.0119	583.6429	.9908991
	(165.0734)	(83.94646)	(98.18649)	(.1636237)
Professional	1115.068	594.2918	520.7765	1.004831
	(176.7683)	(101.6773)	(94.66284)	(.1609885)
Business	1136.012	609.6898	526.322	1.015505
	(170.9304)	(96.79352)	(93.33199)	(.1596532)
Other	1086.424	573.2323	513.1919	.9900667
	(180.7338)	(104.4809)	(96.03007)	(.1618231)
Other Studies	1085.492	565.2869	520.2049	1.03293
	(171.731)	(95.80673)	(98.099)	(.1852589)

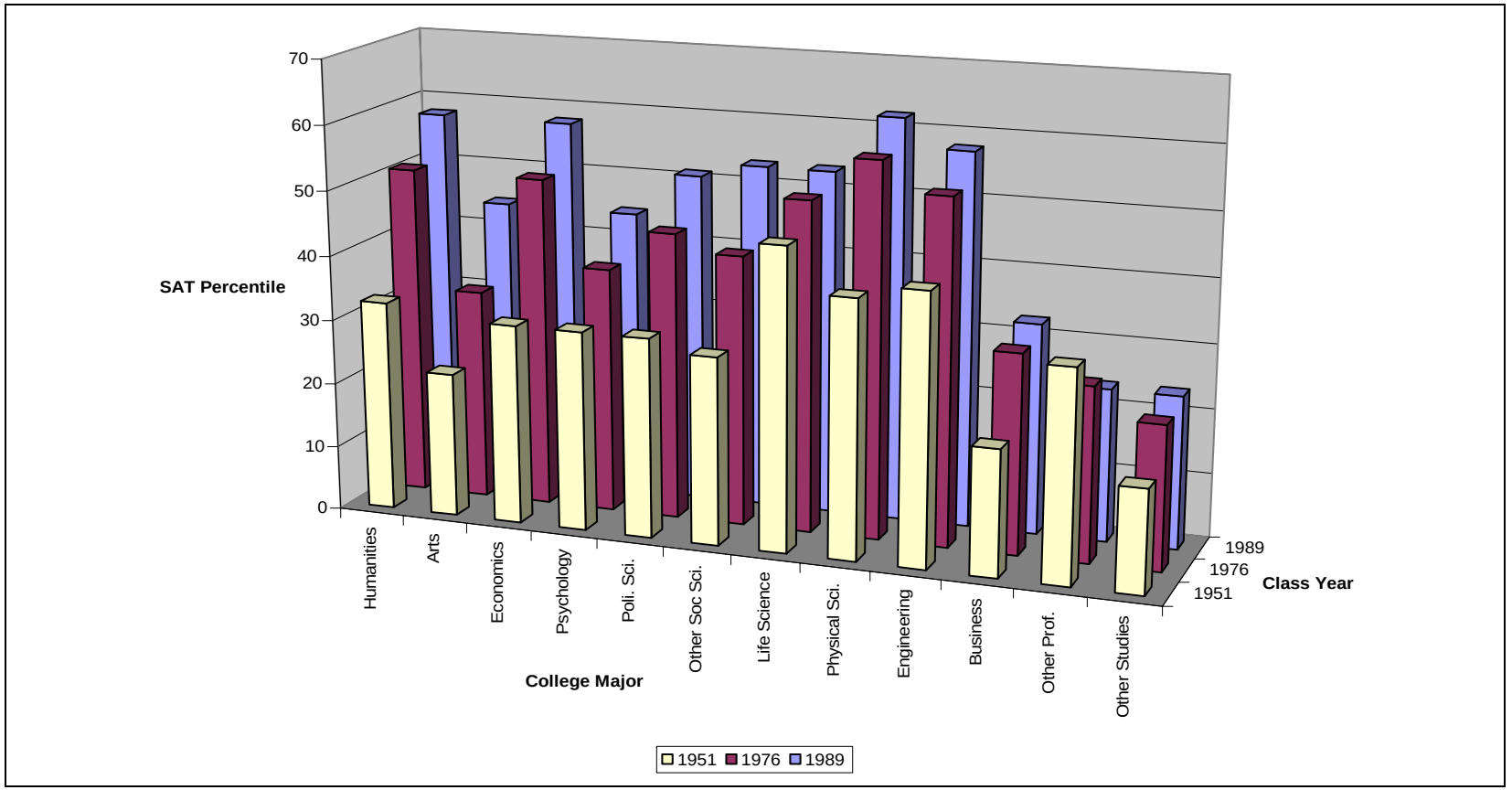
Table B5. Average scores of all students by College Major, 1976 cohort

Major	Mean SAT	Mean SAT MATH	Mean SATVERBAL	Mean GPA Ratio
Humanities	1231.676	611.6139	620.0622	1.021626
	(154.1349)	(91.13758)	(86.0555)	(.1434716)
Arts	1141.535	582.4383	559.0971	.9694098
	(168.9061)	93.3781	98.88986	.2009224
Social Science	1195.014	610.0141	584.9995	1.008822
	(168.2507)	(95.88691)	(93.8417)	(.1518432)
Economics	1226.76	643.1374	583.6226	1.008488
	(156.6289)	(87.0028)	(90.55053)	(.1517964)
Psychology	1166.04	598.2362	567.804	1.013169
	(178.0312)	(101.04960	(95.61537)	(.1577647)
Poli. Sci.	1195.72	605.2146	590.5051	1.015664
	(158.0099)	(92.15733)	(86.61194)	(.1473796)
Other	1188.392	598.0821	590.31	1.002645
	(173.7415)	(96.37117)	(98.41048)	(.1517538)
Science	1241.367	659.3228	582.0442	1.010817
	(151.1695)	(82.91147)	(90.58534)	(.1737302)
Life Science	1226.383	638.7148	587.668	1.027511
	(157.2294)	(86.88146)	(89.70926)	(.1549059)
Physical Sci.	1258.786	667.5754	591.2101	1.040184
	(152.5575)	(81.75972)	(91.7448)	(.172781)
Engineering	1242.5201	670.907	571.5944	.9783505
	(143.8678)	(76.97703)	(89.54841)	(.1834494)
Professional	1125.42	593.3809	532.0391	.9978918
	(153.5142)	(88.8614)	(86.8614)	(.1652052)
Business	1134.254	606.2769	527.9768	.9856736
	(147.5193)	(84.88944)	(83.14706)	(.1686571)
Other	1114.411	577.3085	537.102	1.013107
	(160.0394)	(91.08104)	(91.05286)	(.1595538)
Other Studies	1075.821	553.3783	522.443	1.002478
	(184.2907)	(99.56001)	105.2862	(.1813908)

Table B6. Average scores of all students by College Major, 1951 cohort

Major	Mean SAT	Mean SAT MATH	Mean SAT VERBAL	Mean GPA Ratio
Humanities	1140.627	547.5	593.127	1.015
	(147.485)	(91.9931)	(84.21502)	(.1895998)
Arts	1082.674	531.300	551.373	.9445839
		(151.6168)	(92.67411)	(.1866537)
Social Science	1124.328	552.799	571.528	1.01954
	(150.8486)	(90.47557)	(88.83227)	(.1731253)
Economics	1134.787	573.5846	561.2022	.9742596
	(152.5873)	(84.1287)	(94.33159)	(.191199)
Psychology	1132.092	554.7586	577.3333	1.035598
	(18.2989)	(81.38661)	(90.67259)	(.1631867)
Poli. Sci.	1128.094	553.5343	574.56	1.034959
	(141.9356)	(89.27038)	(82.2411)	(.1700665)
Other	1116.416	543.8307	572.5854	1.022511
	(154.9707)	(94.33387)	(89.22132)	(.1686857)
Science	1168.505	598.3058	570.1993	1.027386
	(145.4162)	(83.80603)	(92.74469)	(.1975026)
Life Science	1129.178	569.2688	559.9091	1.036363
	(139.602)	(83.50144)	(87.25426)	(.1805437)
Physical Sci.	1182.435	611.2571	571.178	1.043204
	(152.2372)	(82.91635)	(95.6784)	(.2292593)
Engineering	1186.688	608.3116	578.3768	.9841932
	(134.9352)	(78.86401)	(93.24386)	(.1422282)
Professional	1124.769	571.2821	553.4872	.9733576
	(172.4152)	(94.6268)	(107.5529)	(.1921052)
Business	1062.056	565.2222	496.8333	.8354977
	(177.1946)	(102.1784)	(98.27946)	(.0995731)
Other	1143.583	573.1	570.4833	.9971265
	(167.8974)	(93.07637)	(105.0747)	(.19519)
Other Studies	1029.989	502.6207	527.3678	.9894714
	(170.0314)	(100.8724)	(93.35704)	(.1559358)

Figure B1. SAT Percentile in 1989 distribution of average SAT scores of students by College Major



Postgraduate Degrees

Table B7. Distribution of students by Postgraduate degree, 1989 cohort

Degree	Percent of ALL students	Percent of students in the top 10% by SAT	Percent of students in the top 10% by GPA Ratio
Doctoral:			
Biological Sci.	1.77	3.22	2.80
Education	0.22	0	0.21
Engineering	0.89	2.67	2.28
Humanities/Arts	1.79	4.05	2.38
Physical Sci.	1.31	4.60	2.90
Social Sci.	2.25	3.59	3.32
Other Degree	0.21	0.37	0.41
Professional:			
Law	9.35	10.41	10.26
Medicine	8.14	12.52	13.37
Other	0.33	0.18	0.10
Masters:			
Biological Sci.	2.04	1.75	2.59
Business	5.40	3.31	6.61
Education	3.30	1.20	4.04
Engineering	2.47	4.60	3.83
Humanities/Arts	3.82	4.42	4.25
Physical Sci	0.70	1.01	0.93
Social Sci.	3.51	2.21	3.32
Other Master’s	1.71	2.03	1.35

Table B8. Distribution of students by Postgraduate degree, 1976 cohort

Degree	Percent of ALL students	Percent of students in the top 10% by SAT	Percent of students in the top 10% by GPA Ratio
Doctoral:			
Biological Sci.	1.59	3.07	2.17
Education	0.19	0.05	0.15
Engineering	0.87	3.12	2.62
Humanities/Arts	1.05	3.23	1.97
Physical Sci.	1.34	4.47	2.02
Social Sci.	1.49	3.12	2.62
Other Degree	0.26	0.16	0.61
Professional:			
Law	12.06	15.50	15.09
Medicine	8.28	11.76	15.19
Other	0.66	0.73	0.76
Masters:			
Biological Sci.	1.81	0.94	1.97
Business	12.36	9.83	10.60
Education	2.55	0.57	2.07
Engineering	3.32	6.09	4.29
Humanities/Arts	3.07	3.49	3.08
Physical Sci	0.78	1.35	1.26
Social Sci.	3.07	2.24	2.88
Other Master’s	2.18	1.87	2.17

Table B9. Distribution of students by Postgraduate degree, 1951 cohort

Degree	Percent of ALL students	Percent of students in the top 10% by SAT	Percent of students in top 10% by GPA Ratio
Doctoral:			
Biological Sci.	1.08	2.67	1.05
Education	1.26	0.80	1.10
Engineering	1.16	4.28	1.51
Humanities/Arts	2.42	4.81	3.15
Physical Sci.	2.04	5.35	2.42
Social Sci.	2.53	4.55	2.56
Other Degree	0.67	0.53	1.10
Professional:			
Law	9.28	12.57	11.46
Medicine	9.12	8.56	9.72
Other	1.53	1.34	1.60
Masters:			
Biological Sci.	0.56	0.53	0.32
Business	7.85	9.36	9.40
Education	5.75	3.21	3.97
Engineering	1.72	3.48	1.46
Humanities/Arts	3.71	5.35	4.42
Physical Sci	0.97	0.80	1.14
Social Sci.	3.85	2.14	2.92
Other Master’s	1.69	1.87	1.78

Table B10. Average scores of all students by Postgraduate degree, 1989 cohort

Degree	Mean SAT	Mean SAT MATH	Mean SAT Verbal	Mean GPA Ratio
Doctoral:				
Biological Sci.	1294.8	680.0571	614.7429	1.054275
	(151.0912)	(76.86005)	(93.81332)	(.1555171)
Education	1124.5	570	554.5	1.022074
	(184.8036)	(102.9563)	(97.25036)	(.1252778)
Engineering	1342.53	720.8434	621.6867	1.101515
	(124.6247)	(60.32847)	(87.49661)	(.1157915)
Humanities/Arts	1319.529	660.2941	659.2353	1.078532
	(139.7665)	(85.4603)	(79.8964)	(.0956939)
Physical Sci.	1360.413	714.7934	645.6198	1.069994
	(130.3035)	(66.67207)	(85.51698)	(.1346207)
Social Sci.	1272.01	653.0622	618.9474	1.080183
	(154.3559)	(92.59715)	(84.98779)	(.1054107)
Other Degree	1294.737	677.8947	616.8421	1.078917
	(128.425)	(74.95028)	(89.50808)	(.113945)
Professional:				
Law	1260.894	645.4637	615.4302	1.037245
	(150.9525)	(86.544290	(84.12339)	(.1224862)
Medicine	1270.661	667.2222	603.4392	1.057093
	(158.2147)	(86.01068)	(89.35426)	(.1390361)
Other	1209.667	611	598.6667	1.019626
	(131.6077)	(74.57234)	(79.81588)	(.1047166)
Masters:				
Biological Sci.	1175.245	613.1373	562.1078	1.009532
	(177.9784)	(94.337)	(101.7287)	(.1311145)
Business	1225.777	652.1689	573.6084	1.016291
	(149.1109)	(83.65048)	(84.13606)	(.1431631)
Education	1169.099	601.8323	567.2671	1.013982
	(170.318)	(93.78538)	(96.99528)	(.129357)
Engineering	1293.644	697.9237	595.7203	1.032302
	(144.6237)	(70.31487)	(92.96482)	(.1488308)
Humanities/Arts	1236.964	621.9499	615.0139	1.052889
	(167.0395)	(95.98701)	(92.54283)	(.1084004)
Physical Science	1246.308	657.3846	588.9231	1.026787
	(183.2311)	(94.36096)	(102.4256)	(.1299741)
Social Science	1198.117	614.537	583.5802	1.027432
	(164.7284)	(91.21184)	(93.43541)	(.1327206)
Other Master’s	1212.42	629.8089	582.6115	1.01705
	(181.1728)	(102.3347)	(102.3765)	(.1257602)

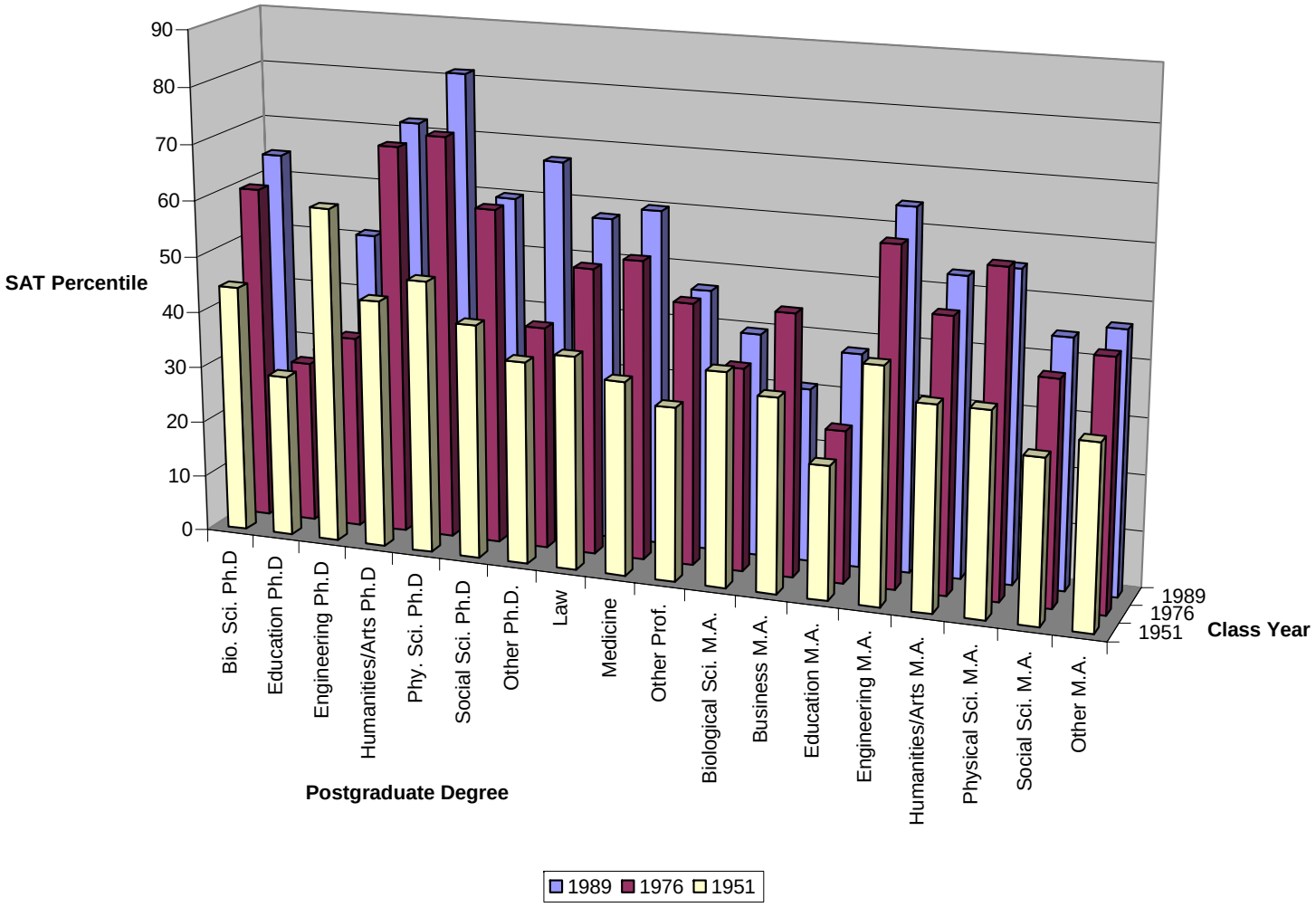
Table B11. Average scores of all students by Postgraduate degree, 1976 cohort

Degree	Mean SAT	Mean SAT MATH	Mean SAT Verbal	Mean GPA Ratio
Doctoral:				
Biological Sci.	1270.389	656.2248	614.1644	1.058921
	(139.6899)	(76.68265)	(83.05661)	(.1292803)
Education	1118.676	567.9412	550.7353	1.044061
	(147.4907)	(90.54647)	(84.5499)	(.1026428)
Engineering	1347.494	720.253	627.241	1.131814
	(108.6519)	(60.34112)	(76.51106)	(.1270259)
Humanities/Arts	1305.779	644.9333	660.8462	1.108666
	(142.3413)	(86.08962)	(79.83183)	(.1125475)
Physical Sci.	1320.323	695.5927	624.7298	1.080085
	(139.8173)	(78.77251)	(87.16848)	(.1288222)
Social Sci.	1267.353	642.7138	624.6396	1.088207
	(154.2357)	(92.15081)	(82.41839)	(.1301521)
Other Degree	1175	611.3462	563.6538	1.062156
	(160.6543)	(100.2943)	(82.55785)	(.1815764)
Professional:				
Law	1234.45	628.1695	606.2808	1.059869
	(150.9985)	(88.59979)	(85.09423)	(.1389543)
Medicine	1240.468	654.0425	586.4251	1.088945
	(150.5932)	(82.62886)	(89.07903)	(.1368848)
Other	1209.273	614.1818	595.0909	1.008036
	(161.3511)	(91.74582)	(94.20389)	(.1589203)
Masters:				
Biological Sci.	1155.583	594.9382	560.6452	1.03039
	(158.2036)	(88.44962)	(87.76109)	(.1409878)
Business	1209.262	636.1776	573.0849	1.011404
	(142.6192)	(81.88664)	(84.7688)	(.1422995)
Education	1114.82	566.0812	548.7386	1.011059
	(170.7131)	(94.56645)	(99.09397)	(.1551076)
Engineering	1265.405	677.9888	587.416	1.031728
	(142.5308)	(77.82408)	(88.6005)	(.1485154)
Humanities/Arts	1218.238	602.973	615.2648	1.056863
	(153.523)	(90.96255)	(87.89858)	(.1245571)
Physical Sci	1255.235	659.1275	596.1074	1.059945
	(147.7001)	(78.91094)	(93.4219)	(.1492666)
Social Sci.	1176.085	591.364	584.721	1.022737
	(173.4145)	(100.0655)	(96.80233)	(.1403438)
Other Master’s	1203.784	619.01	584.7744	1.032056
	(150.8467)	(87.9089)	(88.6205)	(.1388716)

Table B12. Average scores of all students by Postgraduate degree, 1951 cohort

Degree	Mean SAT	Mean SAT MATH	Mean SAT Verbal	Mean GPA Ratio
Doctoral:				
Biological Sci.	1199.14	614.8605	584.2791	1.09243
	(165.8056)	(92.71759)	(100.9456)	(670193)
Education	1124.833	551.5625	573.2708	1.02835
	(141.424)	(89.92027)	(88.37751)	(1801307)
Engineering	1269.17	632.6383	636.5319	1.111753
	(132.5547)	(81.32314)	(85.91575)	(1296766)
Humanities/Arts	1198.111	581.1444	616.9667	1.083648
	(130.5228)	(81.73038)	(74.4652)	(.2130363)
Physical Sci.	1220.658	623.3291	597.3291	1.087563
	(141.141)	(80.75489)	(91.29702)	(.2078171)
Social Sci.	1194.124	574.7835	619.3402	1.107063
	(144.8038)	(96.90182)	(80.86652)	(.1576149)
Other Degree	1160.296	587.0741	573.2222	1.267462
	(113.1374)	(77.77429)	(59.06081)	(.1239225)
Professional:				
Law	1173.569	584.2873	589.2818	1.008458
	(138.6283)	(83.59292)	(84.28514)	(.1695243)
Medicine	1148.322	582.2667	582.2667	1.067606
	(137.7538)	(78.92216)	(78.92216)	(.1707906)
Other	1126.717	547.1167	579.6	1.072861
	(130.4115)	(86.68022)	(80.69049)	(.1796178)
Masters:				
Biological Sci.	1166.296	572.5926	593.7037	1.032792
	(121.7415)	(65.93718)	(72.12479)	(.1345118)
Business	1148.89	579.1877	569.7023	.9803882
	(150.8167)	(84.41266)	(92.72695)	(.1833828)
Education	1085.551	524.6406	560.9102	1.022536
	(154.3883)	(94.37358)	(89.25502)	(.1585786)
Engineering	1190.969	624.3077	566.6615	1.007404
	(147.4138)	(79.74195)	(97.12352)	(.1870657)
Humanities/Arts	1156.477	545.5359	610.9412	1.112552
	(136.9326)	(88.10147)	(77.86799)	(.1499043)
Physical Sci	1163.667	589.2051	574.4615	.9939953
	(135.5465)	(76.17334)	(90.50759)	(.2285235)
Social Sci.	1115.253	535.1644	580.089	1.044791
	(145.1858)	(88.9633)	(84.75083)	(.1684089)
Other Master's	1138.413	567.4444	570.9683	1.029603
	(135.8836)	(82.39789)	(87.77077)	(.1429741)

Figure B2. SAT Percentile in 1989 distribution of average SAT scores of students by Postgraduate Degree



First Occupation

Table B13. Distribution of students by First Occupation, 1989 cohort

Occupation	Percent of ALL students	Percent of students in the top 10% by SAT	Percent of students in the top 10% by GPA Ratio
Education	7.94	8.01	8.32
Higher Education	3.90	6.26	4.27
Health	3.48	1.01	4.49
Social Science	2.95	2.85	2.41
Math	4.41	6.45	3.61
Engineering	4.16	4.05	4.93
Medicine	0.65	1.38	1.20
Law	4.52	4.88	6.35
Finance	8.66	6.72	8.76
Business	9.66	3.96	5.91
Executive	5.91	5.80	5.48
Other	31.75	28.55	22.89

Table B14. Distribution of students by First Occupation, 1976 cohort

Occupation	Percent of ALL students	Percent of students in top 10% by SAT	Percent of students in the top 10% by GPA Ratio
Education	4.80	3.33	4.16
Higher Education	2.62	6.35	4.71
Health	5.65	1.66	5.55
Social Science	2.76	4.37	3.49
Math	4.81	8.22	5.60
Engineering	9.61	11.29	9.65
Medicine	6.98	10.51	16.47
Law	7.25	9.47	11.20
Finance	8.63	5.57	7.43
Business	8.75	4.06	3.77
Executive	5.18	4.01	4.33
Other	31.25	30.28	22.52

Table B15. Distribution of students by First Occupation, 1951 cohort

Occupation	Percent of all students	Percent of students in the top 10% by SAT	Percent of students in the top 10% by GPA ratio
Education	9.73	4.69	12.28
Higher Education	4.01	11.44	9.94
Health	1.59	1.47	0.58
Social Science	2.45	4.99	6.43
Math	3.31	8.21	6.43
Engineering	6.05	9.09	1.75
Medicine	8.79	5.28	13.45
Law	4.30	5.28	2.92
Finance	3.23	2.05	1.17
Business	7.13	2.93	3.51
Executive	3.23	4.99	1.75
Other	39.12	34.31	29.24

Table B16. Average scores of all students by First Occupation, 1989 cohort

Occupation	Mean SAT	Mean SAT MATH	Mean SAT Verbal	Mean GPA Ratio
Education	1209.273	623.786	585.487	1.025949
	(181.3666)	(98.31374)	(98.99531)	(.1240843)
Higher Education	1262.179	650.1397	612.0391	1.034482
	(164.3773)	(92.64391)	(92.63663)	(.1212078)
Health	1123.813	590.5938	533.2188	1.008905
	(184.0706)	(97.72951)	(105.2506)	(.1345919)
Social Science	1245.203	639.9262	605.2768	1.029596
	(152.0717)	(87.77493)	(87.74868)	(.1161564)
Math	1269.778	662.3951	607.3827	1.000552
	(154.0821)	(83.31583)	(89.40432)	(.1509797)
Engineering	1223.141	660.2094	562.9319	.9989759
	(162.7893)	(86.31845)	(98.4728)	(.1537221)
Medicine	1245.5	651.3333	594.1667	1.041518
	(173.1407)	(96.2424)	(103.5848)	(.1450258)
Law	1260.458	645.9518	614.506	1.051867
	(148.1318)	(83.6631)	(84.27689)	(.1267282)
Finance	1221.019	649.283	571.7358	1.010368
	(155.4869)	(88.27119)	(90.22645)	(.1366319)
Business	1165.333	608.0158	557.3168	.9679495
	(166.5663)	(91.37591)	(96.46935)	(.1519619)
Executive	1232.339	642.5414	589.7974	1.004101
	(166.5746)	(93.28064)	(91.64827)	(.1428833)
Other	1217.747	629.6056	588.1413	.9855016
	(177.0285)	(97.24445)	(99.106)	(.1495827)

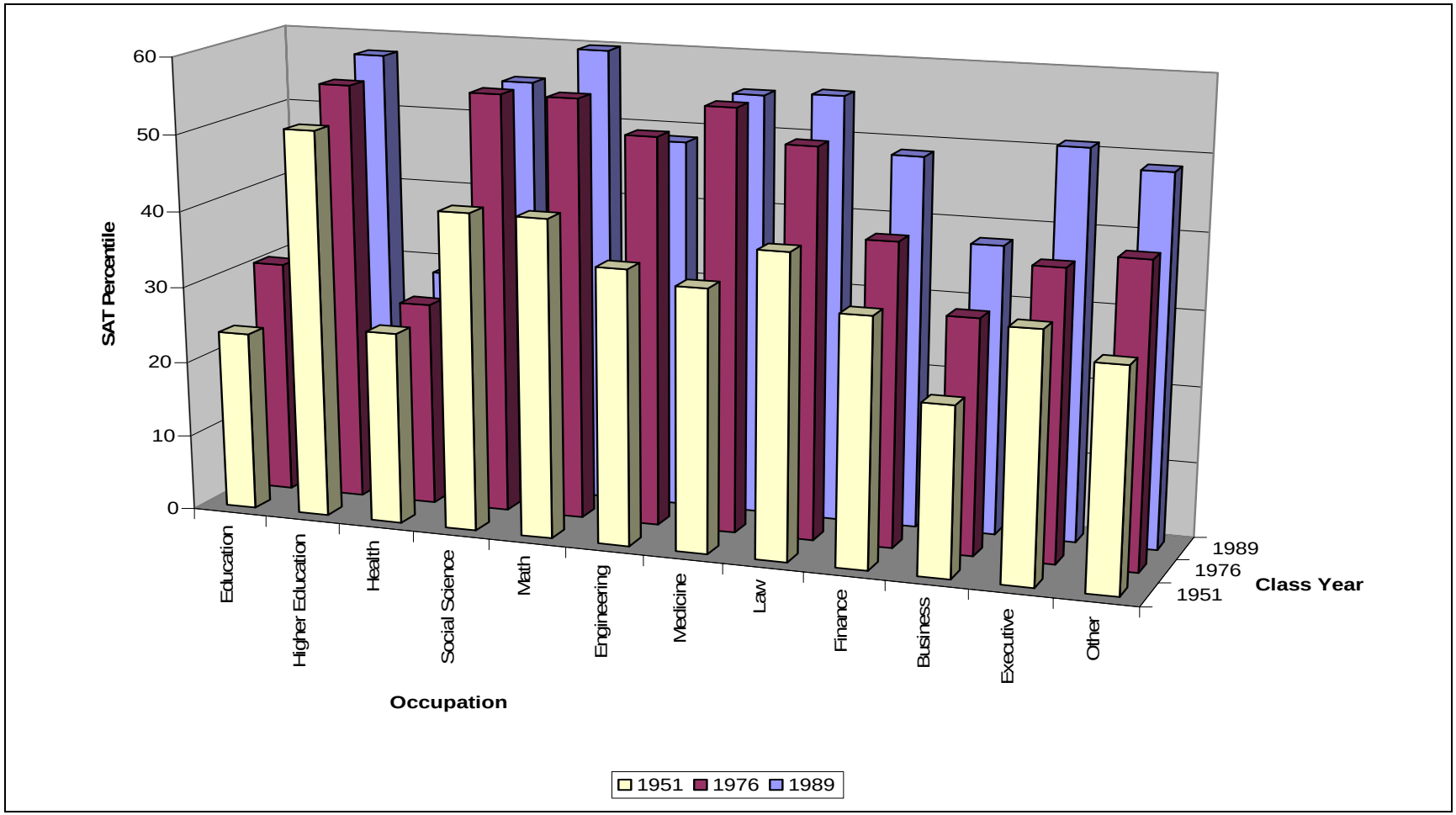
Table B17. Average scores of all students by First Occupation, 1976 cohort

Occupation	Mean SAT	Mean SAT MATH	Mean SAT Verbal	Mean GPA Ratio
Education	1134.072	577.861	556.2107	1.017006
	(186.6175)	(103.1235)	(104.1637)	(.1536725)
Higher Education	1253.088	639.9792	613.1083	1.071712
	(177.6521)	(101.3252)	(98.50823)	(.1515778)
Health	1114.809	576.088	538.7205	1.007977
	(161.1633)	(88.66013)	(91.48155)	(.1573445)
Social Science	1245.466	631.1383	614.3281	1.060993
	(153.3679)	(88.83584)	(85.84261)	(.1320136)
Math	1247.965	653.3246	594.6402	1.022272
	(150.1332)	(82.9821)	(90.22083)	(.1559688)
Engineering	1225.276	659.1535	566.1228	.9885397
	(148.9175)	(80.69975)	(90.85555)	(.167551)
Medicine	1246.249	658.9953	587.2535	1.112277
	(147.8207)	(80.79503)	(87.96033)	(.1306674)
Law	1234.532	627.8803	606.6514	1.080031
	(147.6631)	(86.42531)	(82.93581)	(.1334081)
Finance	1183.063	625.0557	558.007	1.00036
	(151.0471)	(85.30785)	(87.73061)	(.1562971)
Business	1134.369	587.6667	546.7022	.9464251
	(159.8532)	(91.34978)	(92.57495)	(.1627922)
Executive	1171.068	610.019	561.0485	.9822038
	(161.7228)	(94.39132)	(92.0081)	(.16519340
Other	1184.703	605.9675	578.7352	.9781057
	(173.6601)	(98.14313)	(99.16186)	(.1696828)

Table B18. Average scores of all students by First Occupation, 1951 cohort

Occupation	Mean SAT	Mean SAT MATH	Mean SAT Verbal	Mean GPA Ratio
Education	1087.481	522.4807	565	1.024171
	(152.6012)	(95.07027)	(85.95599)	(.1601221)
Higher Education	1225.564	602.2483	623.3154	1.1173
	(141.9439)	(91.25528)	(83.28412)	(.1827784)
Health	1104.085	545.4576	558.6271	.9919636
	(154.7224)	(91.18876)	(92.64037)	(.1626358)
Social Science	1193.505	570.4835	623.022	1.109451
	(154.459)	(94.29909)	(78.95512)	(.1610779)
Math	1192.35	602.1057	590.2439	1.047561
	(139.7458)	(81.45398)	(88.31003)	(.2042604)
Engineering	1159.84	600.2267	559.6133	.9658943
	(141.6149)	(80.99365)	(95.5705)	(.1409971)
Medicine	1147.731	584.7859	562.945	1.078207
	(140.6169)	(79.7955)	(89.6083)	(.1678617)
Law	1176.719	587.8062	588.9125	1.03051
	(136.7165)	(79.05101)	(82.2451)	(.1621608)
Finance	1140.15	575.5	564.65	.9510507
	(142.9237)	(83.02819)	(87.43119)	(.2113882)
Business	1078.079	536.9434	541.1358	.9382455
	(147.5069)	(88.59399)	(93.10094)	(.1604971)
Executive	1139.842	567.2917	572.55	.9525823
	(152.699)	(88.76656)	(94.70439)	(.2048662)
Other	1121.038	554.3072	566.7306	.9826715
	(152.4984)	(93.30797)	(90.50443)	(.1835068)

Figure B3. SAT Percentile in 1989 distribution of average SAT scores of students by First Occupation



Recent Occupation

Table B19. Distribution of students by Recent Occupation, 1989 cohort

Occupation	Percent of ALL students	Percent of students in the top 10% by SAT	Percent of students in the top 10% by GPA Ratio
Education	5.12	3.31	4.60
Higher Education	3.56	4.79	3.94
Health	2.67	0.92	3.07
Social Science	2.06	2.03	1.42
Math	1.87	2.03	0.77
Engineering	1.95	1.57	2.30
Medicine	0.23	0.37	0.33
Law	3.21	3.22	2.19
Finance	5.51	4.51	3.94
Business	5.96	2.58	3.50
Executive	7.27	5.06	5.04
Other	20.46	18.42	13.69

Table B20. Distribution of students by Recent Occupation, 1976 cohort

Occupation	Percent of ALL students	Percent of students in the top 10% by SAT	Percent of students in the top 10% by GPA Ratio
Education	3.80	1.46	2.83
Higher Education	4.85	9.68	8.49
Health	4.07	0.99	3.55
Social Science	2.14	2.34	1.72
Math	2.40	3.95	2.55
Engineering	4.48	5.05	3.77
Medicine	7.72	12.02	15.53
Law	9.50	12.75	12.04
Finance	5.99	4.58	5.38
Business	5.77	3.02	1.94
Executive	21.49	16.02	16.53
Other	17.38	17.48	11.54

Table B21. Distribution of students by Recent Occupation, 1951 cohort

Occupation	Percent of ALL students	Percent of students in the top 10% by SAT	Percent of students in the top 10% by GPA ratio
Education	6.24	3.52	4.68
Higher Education	8.12	15.25	18.13
Health	1.69	0.29	1.75
Social Science	2.34	2.05	5.26
Math	1.51	4.11	2.34
Engineering	2.69	5.87	1.17
Medicine	7.53	8.80	11.70
Law	6.86	8.21	4.68
Finance	4.84	2.93	0.58
Business	6.86	0.88	1.17
Executive	24.52	23.75	17.54
Other	16.86	18.18	21.05

Table B22. Average scores of all students by Recent Occupation, 1989 cohort

Occupation	Mean SAT	Mean SAT MATH	Mean SAT Verbal	Mean GPA Ratio
Education	1179.106	608.2128	570.8936	1.009252
	(177.5024)	(100.246)	(95.13793)	(.1265662)
Higher Education	1245.688	635.5046	610.1835	1.035408
	(169.1736)	(96.38388)	(91.19838)	(.1271046)
Health	1137.265	594.6122	542.6531	.9943281
	(175.016)	(95.49457)	(98.14207)	(.1521845)
Social Science	1242.434	639.3651	603.0688	1.033392
	(160.3633)	(86.06417)	(93.03454)	(.1058405)
Math	1244.593	646.9767	597.6163	.973677
	(169.393)	(87.56044)	(99.51704)	(.133901)
Engineering	1193.408	642.0112	551.3966	.9781487
	(167.862)	(88.12262)	(101.8192)	(.1746261)
Medicine	1204.286	627.619	576.6667	.9489496
	(172.6433)	(102.8545)	(86.44844)	(.2250707)
Law	1248.576	637.7288	610.8475	1.018055
	(151.2443)	(86.8492)	(82.73571)	(.1181678)
Finance	1214.19	644.0711	570.1186	.9814729
	(168.9696)	(92.02898)	(97.44044)	(.1469253)
Business	1168.702	609.0676	559.6344	.9598858
	(166.1621)	(92.62576)	(94.11947)	(.1458386)
Executive	1206.003	626.6018	579.4012	.9868817
	(164.5421)	(90.92549)	(92.99901)	(.1336242)
Other	1215.785	626.3704	589.4146	.9827985
	(179.1891)	(97.41998)	(101.5764)	(.1501612)

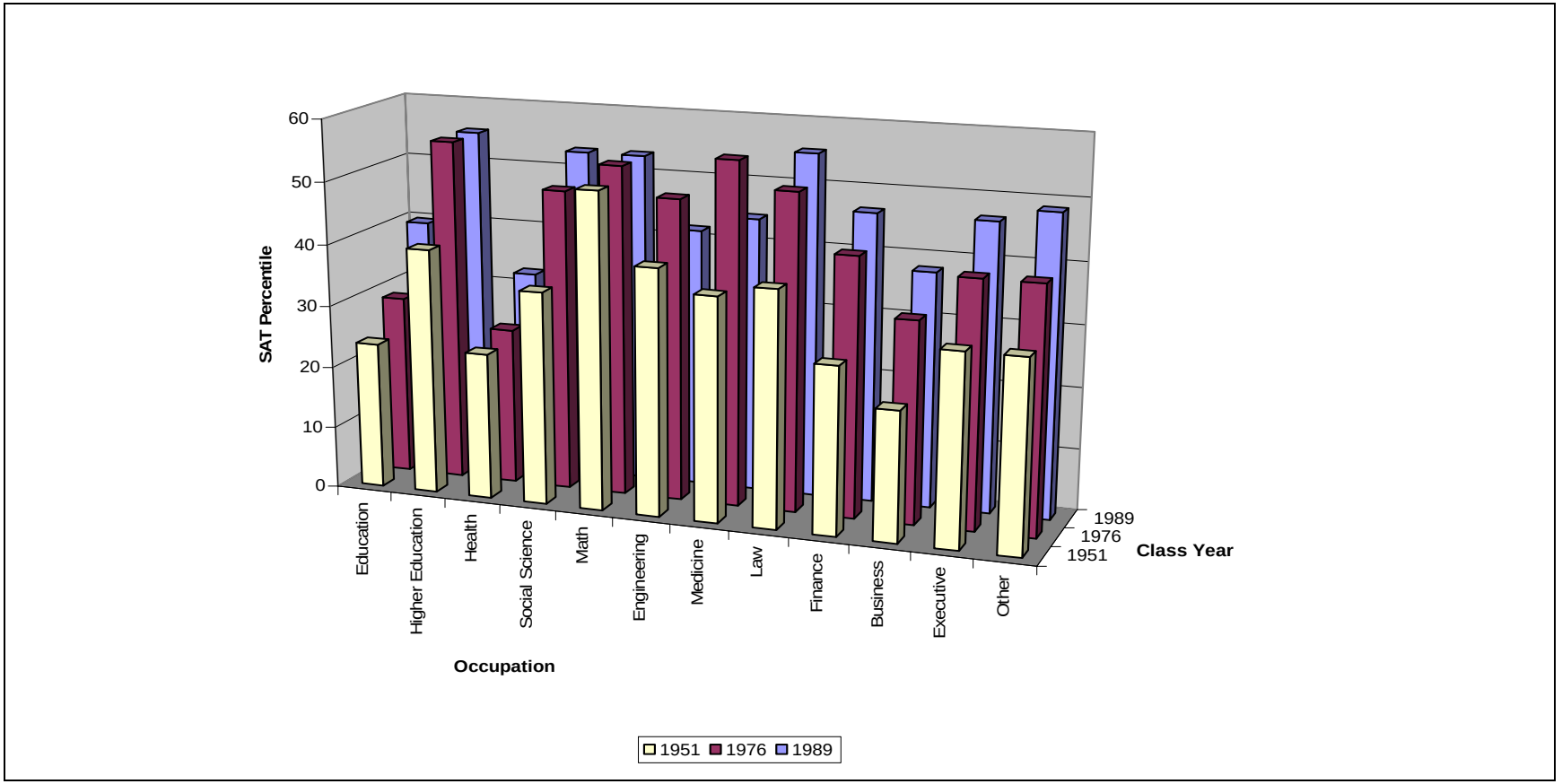
Table B23. Average scores of all students by Recent Occupation, 1976 cohort

Occupation	Mean SAT	Mean SAT MATH	Mean SAT Verbal	Mean GPA Ratio
Education	1118.102	569.305	548.7971	.9910132
	(176.7581)	(98.04163)	(100.1164)	(.1623627)
Higher Education	1254.99	636.2309	618.759	1.071791
	(165.2657)	(96.64297)	(92.75287)	(.1414637)
Health	1104.965	567.1944	537.7708	.9926184
	(161.8234)	(90.67152)	(91.97849)	(.1655734)
Social Science	1220.128	617.5064	602.6215	1.038802
	(162.1218)	(92.71312)	(90.63788)	(.1267549)
Math	1243.58	647.0114	596.5682	1.017701
	(158.0342)	(85.2077)	(92.77202)	(.1590132)
Engineering	1216.033	651.6866	564.3463	.9739208
	(148.8053)	(80.93766)	(90.97727)	(.1713812)
Medicine	1251.73	658.8309	592.8995	1.09254
	(146.0111)	(80.58941)	(86.8378)	(.1339402)
Law	1230.571	624.5009	606.0702	1.055246
	(152.6745)	(89.00131)	(85.83767)	(.1412036)
Finance	1186.23	624.8997	561.33	.990173
	(155.023)	(89.16228)	(87.82925)	(.158171)
Business	1138.753	588.263	550.4901	.9454418
	(161.7025)	(92.80316)	(92.87993)	(.1604111)
Executive	1177.094	614.5934	562.5004	.9842917
	(159.4377)	(91.64975)	(92.23681)	(.1606834)
Other	1181.323	604.1654	577.1581	.9728617
	(175.8242)	(99.17865)	(99.92523)	(.1742693)

Table B24. Average scores of all students by Recent Occupation, 1951

Occupation	Mean SAT	Mean SAT MATH	Mean SAT Verbal	Mean GPA Ratio
Education	1090.134	523.0431	567.0905	1.01863
	(149.4258)	(96.34335)	(84.19024)	(.1485959)
Higher Education	1180.917	581.8642	599.053	1.091611
	(149.3231)	(89.23211)	(90.94749)	(.186106)
Health	1086.111	538.7302	547.381	1.027053
	(137.0151)	(86.66774)	(84.65746)	(.1482947)
Social Science	1146.805	539.069	607.7356	1.088789
	(125.9198)	(91.42856)	(69.90233)	(.1394331)
Math	1233.946	616.5357	617.4107	1.0548
	(136.0222)	(89.13707)	(75.32397)	(.1984703)
Engineering	1175.44	601.69	573.75	.9840631
	(144.1676)	(83.50572)	(100.9446)	(.1512601)
Medicine	1164.179	590.325	573.8536	1.074205
	(137.6722)	(79.46369)	(86.95389)	(.1646195)
Law	1171.608	579.5843	592.0235	1.01391
	(136.0282)	(82.62509)	(83.10457)	(.1837002)
Finance	1114.261	563.3	550.9611	.9483065
	(144.9923)	(83.36049)	(91.11037)	(.1435468)
Business	1073.855	532.098	541.7569	.9347059
	(144.6694)	(86.49101)	(91.88985)	(.1639126)
Executive	1127.902	566.6711	561.2314	.9724628
	(154.6484)	(92.71711)	(93.02973)	(.1955622)
Other	1132.604	550.2373	582.3662	1.010693
	(149.7578)	(93.55098)	(85.44067)	(.1825737)

Figure B4. SAT Percentile in 1989 distribution of average SAT scores of students by Recent Occupation



Appendix C: Results from Multinomial Logit Regressions

College Majors

Table C1. Multinomial Logit Estimates of Choice of College Major, 1989 cohort

Choice of Major	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Social Sciences			Reference Group	
Humanities	High SAT	1.592903*	0.1915996	3.87
	Female	1.182932***	0.0929595	2.14
	White	1.010365	0.2433213	0.04
	Black	0.7767292	0.2073873	-0.95
	Asian	1.041619	0.2948061	0.14
	Hispanic	0.870631	0.2486613	-0.49
	SEL_1	0.6745057*	0.0760038	-3.49
	SEL_2	0.7866097**	0.0869845	-2.17
Arts	High SAT	1.072067	0.2247995	0.33
	Female	1.256709***	0.1526406	1.88
	White	0.6149279	0.19312	-1.55
	Black	0.3850581**	0.1426227	-2.58
	Asian	0.6674799	0.2584081	-1.04
	Hispanic	0.746249	0.2827897	-0.77
	SEL_1	0.4111083*	0.0719684	-5.08
	SEL_2	0.8437138	0.1318544	-1.09
Economics	High SAT	1.076311	0.1705587	0.46
	Female	0.4307227*	0.0447473	-8.11
	White	1.274385	0.4448426	0.69
	Black	1.072095	0.4071279	0.18
	Asian	3.366351*	1.277305	3.2
	Hispanic	1.070603	0.4354124	0.17
	SEL_1	0.6500041**	0.0912168	-3.07
	SEL_2	0.6443004**	0.0902184	-3.14
Psychology	High SAT	0.8698574	0.150729	-0.8
	Female	1.873943*	0.1876474	6.27
	White	0.9452251	0.2822215	-0.19
	Black	1.444075	0.459052	1.16
	Asian	1.435988	0.4911368	1.06
	Hispanic	1.522723	0.5122422	1.25
	SEL_1	0.5745171*	0.0740051	-4.3
	SEL_2	0.593125*	0.0757736	-4.09
Political Science	High SAT	0.7339196**	0.1068158	-2.13
	Female	0.7087021*	0.0587378	-4.15
	White	1.003066	0.2558953	0.01
	Black	0.9784029	0.2712101	-0.08

	Asian	0.9380936	0.289091	-0.21
	Hispanic	1.194663	0.3507246	0.61
	SEL_1	0.5963795*	0.0656141	-4.7
	SEL_2	0.3756637*	0.0433637	-8.48
Life Sciences	High SAT	1.537506*	0.2049041	3.23
	Female	1.078496	0.0939778	0.87
	White	0.7974631	0.2131176	-0.85
	Black	1.20008	0.3448181	0.63
	Asian	3.381087*	0.9940542	4.14
	Hispanic	0.9469949	0.2967584	-0.17
	SEL_1	0.5271612*	0.0618489	-5.46
	SEL_2	0.4271672*	0.0512375	-7.09
Physical Sciences	High SAT	2.58513*	0.3555023	6.91
	Female	0.6544581*	0.0647283	-4.29
	White	0.5100508**	0.130521	-2.63
	Black	0.5278935	0.1524721	-2.21
	Asian	0.9005983	0.2724263	-0.35
	Hispanic	0.2983764**	0.1048735	-3.44
	SEL_1	0.4365362*	0.0581341	-6.22
	SEL_2	0.4257363*	0.0570337	-6.37
Engineering	High SAT	1.683866*	0.2231436	3.93
	Female	0.2517623*	0.0248694	-13.96
	White	0.9483583	0.2716285	-0.19
	Black	1.139292	0.3522047	0.42
	Asian	2.726726**	0.8683765	3.15
	Hispanic	1.179271	0.389539	0.5
	SEL_1	0.4475423*	0.0533179	-6.75
	SEL_2	0.3469033*	0.0430159	-8.54
Business	High SAT	0.8662468	0.2081631	-0.6
	Female	0.5641767*	0.0559275	-5.77
	White	2.228393***	0.9467848	1.89
	Black	2.714871**	1.188243	2.28
	Asian	2.571826**	1.222809	1.99
	Hispanic	2.616187**	1.211272	2.08
	SEL_1	1.66E-17	1.26E-10	0
	SEL_2	0.2231702*	0.0259135	-12.92
Other Professional	High SAT	0.3506718**	0.1313427	-2.8
	Female	1.633058*	0.1846548	4.34
	White	0.7007433	0.2183671	-1.14
	Black	0.7951358	0.2631803	-0.69
	Asian	0.8990821	0.3492133	-0.27
	Hispanic	0.7794398	0.2885767	-0.67
	SEL_1	0.0600144*	0.0106229	-15.89
	SEL_2	0.113536*	0.0160699	-15.37

Other Studies	High SAT	0.6997839	0.3037052	-0.82
	Female	2.308269*	0.3637246	5.31
	White	1.133126	0.5193729	0.27
	Black	0.7243688	0.3536936	-0.66
	Asian	0.3237055	0.2406835	-1.52
	Hispanic	0.9462465	0.5095469	-0.1
	SEL_1	0.0204992*	0.0072787	-10.95
	SEL_2	0.1152949*	0.020244	-12.3

Number of obs: 9161 Pseudo-R^2: 0.0628

* Significant at 1% , ** Significant at 5%, *** Significant at 10%

Table C2. Multinomial Logit Estimates of Choice of College Major, 1976 cohort

Choice of Major	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Social Sciences			Reference Group	
Humanities	High SAT	1.29107**	0.1289172	2.56
	Female	1.282659*	0.0825176	3.87
	White	0.8495431	0.2042162	-0.68
	Black	0.465543**	0.1314025	-2.71
	Asian	0.624914	0.2185314	-1.34
	Hispanic	0.6490911	0.2016133	-1.39
	SEL_1	1.137024	0.0963671	1.52
	SEL_2	1.07397	0.0847893	0.9
Arts	High SAT	0.7570698***	0.1123071	-1.88
	Female	1.190605**	0.0894539	2.32
	White	0.921713	0.2733223	-0.27
	Black	0.5948436	0.2005679	-1.54
	Asian	0.8884367	0.3778507	-0.28
	Hispanic	1.05245	0.3836479	0.14
	SEL_1	0.2867151*	0.0303555	-11.8
	SEL_2	0.4737838*	0.0403526	-8.77
Economics	High SAT	1.31483**	0.1439078	2.5
	Female	0.5092419*	0.0368715	-9.32
	White	0.8699375	0.2301523	-0.53
	Black	0.7918442	0.2409	-0.77
	Asian	1.768997***	0.6083093	1.66
	Hispanic	0.8676545	0.2919143	-0.42
	SEL_1	0.9315688	0.0883728	-0.75
	SEL_2	1.076381	0.093193	0.85
Psychology	High SAT	0.9378062	0.1308661	-0.46
	Female	1.447174*	0.1156041	4.63
	White	1.377284	0.4997465	0.88
	Black	2.44594**	0.9382737	2.33

	Asian	1.733916	0.7943076	1.2
	Hispanic	1.60342	0.6800821	1.11
	SEL_1	0.689515*	0.0728794	-3.52
	SEL_2	0.9762575	0.089285	-0.26
Political Science	High SAT	0.9057216	0.1089678	-0.82
	Female	0.7540822*	0.0529526	-4.02
	White	0.8942785	0.2412197	-0.41
	Black	1.071599	0.3210076	0.23
	Asian	0.89786	0.3407633	-0.28
	Hispanic	0.9049635	0.3059246	-0.3
	SEL_1	0.7457948**	0.0693403	-3.15
	SEL_2	0.8919027	0.0742691	-1.37
Life Sciences	High SAT	1.29868**	0.1349652	2.51
	Female	0.7727157*	0.0507167	-3.93
	White	1.337808	0.3806036	1.02
	Black	1.713146***	0.5310999	1.74
	Asian	4.471808*	1.53536	4.36
	Hispanic	2.151609**	0.714179	2.31
	SEL_1	0.8481904**	0.073604	-1.9
	SEL_2	0.9420892	0.0748735	-0.75
Physical Sciences	High SAT	2.218469*	0.229203	7.71
	Female	0.5115476*	0.0370643	-9.25
	White	1.198242	0.3434187	0.63
	Black	0.6756161	0.2284017	-1.16
	Asian	2.966348**	1.060202	3.04
	Hispanic	0.8318332	0.3107077	-0.49
	SEL_1	0.5284874*	0.0503843	-6.69
	SEL_2	0.76855**	0.0643981	-3.14
Engineering	High SAT	1.295001***	0.1294243	2.59
	Female	0.256568*	0.0175908	-19.84
	White	1.090281	0.270682	0.35
	Black	0.8655107	0.2464086	-0.51
	Asian	3.341402*	1.052237	3.83
	Hispanic	1.120282	0.3464364	0.37
	SEL_1	0.5223041*	0.043621	-7.78
	SEL_2	0.6720043*	0.0501151	-5.33
Business	High SAT	0.4276817*	0.0716243	-5.07
	Female	0.5025475*	0.0334617	-10.33
	White	2.069718***	0.6783382	2.22
	Black	1.492654	0.5291976	1.13
	Asian	2.495115***	1.05427	2.16
	Hispanic	1.476744	0.581478	0.99
	SEL_1	0.0483094*	0.0068399	-21.4
	SEL_2	0.2733866*	0.0206328	-17.18

Other Professional	High SAT	0.5993805**	0.0966838	-3.17
	Female	1.58893*	0.1116385	6.59
	White	1.484348	0.4828021	1.21
	Black	1.288565	0.4511119	0.72
	Asian	1.751166	0.7462181	1.31
	Hispanic	1.272803	0.4993728	0.61
	SEL_1	0.0986409*	0.0121228	-18.85
	SEL_2	0.3720536*	0.028717	-12.81
Other Studies	High SAT	0.767945*	0.1569978	-1.29
	Female	2.037798	0.1911429	7.59
	White	1.195285	0.4814205	0.44
	Black	0.9241538	0.4035082	-0.18
	Asian	0.8995269	0.5377972	-0.18
	Hispanic	1.201426	0.5860516	0.38
	SEL_1	0.1318065*	0.0184248	-14.5
	SEL_2	0.1306538*	0.0159216	-16.7

Number of obs: 18234 Pseudo R^2: 0.0483

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C3. Multinomial Logit Estimates of Choice of College Major, 1951 cohort

Choice of Major	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Social Sciences			Reference Group	
Humanities	High SAT	1.091605	0.2029679	0.47
	Female	1.192141	0.1365276	1.53
	White	0.8243037	0.3281433	-0.49
	Black	1.041583	0.7538254	0.06
	Asian	0.8289731	1.217739	-0.13
	Hispanic	0.8867413	0.7183782	-0.15
	SEL_1	1.403442*	0.2562013	1.86
	SEL_2	1.169824	0.1581553	1.16
Arts	High SAT	0.8343455	0.252897	-0.6
	Female	2.60644*	0.3937185	6.34
	White	2.524874	1.965231	1.19
	Black	1.30E-19	na	na
	Asian	9.678308	14.08771	1.56
	Hispanic	6.82E-20	na	na
	SEL_1	0.0745661*	0.0393341	-4.92
	SEL_2	0.5128129*	0.0797792	-4.29
Economics	High SAT	0.8308799	0.2127886	-0.72
	Female	0.4665278*	0.079932	-4.45
	White	4.711282	4.922612	1.48
	Black	2.351693	3.561627	0.56

	Asian	9.63E-19	na	na
	Hispanic	2.933147	4.490525	0.7
	SEL_1	1.053198	0.2361482	0.23
	SEL_2	0.7921702	0.1353941	-1.36
Psychology	High SAT	1.213794	0.338513	0.69
	Female	1.538739**	0.2751577	2.41
	White	3.352466	3.509774	1.16
	Black	3.032225	4.598856	0.73
	Asian	5.15E-19	na	na
	Hispanic	7.056555	9.58517	1.44
	SEL_1	1.258603	0.3196499	0.91
	SEL_2	0.5656707**	0.1129511	-2.85
Political Science	High SAT	0.7483326	0.1808252	-1.2
	Female	1.137619	0.158717	0.92
	White	0.9108918	0.4394533	-0.19
	Black	0.7733343	0.7472644	-0.27
	Asian	6.939478	8.458482	1.59
	Hispanic	0.9249732	0.9163533	-0.08
	SEL_1	1.576049*	0.3200184	2.24
	SEL_2	0.7869508	0.1249959	-1.51
Life Sciences	High SAT	0.746309	0.2079049	-1.05
	Female	0.6874263	0.1145552	-2.25
	White	4.381503	4.580487	1.41
	Black	2.778554	4.213591	0.67
	Asian	42.67529	66.57675	2.41
	Hispanic	12.18406	15.40233	1.98
	SEL_1	0.88703	0.1941408	-0.55
	SEL_2	0.4397835	0.0749824	-4.82
Physical Sciences	High SAT	2.385976*	0.4701811	4.41
	Female	0.3459644*	0.0574321	-6.39
	White	1.121132	0.6128629	0.21
	Black	4.33E-20	na	na
	Asian	17.55287**	21.69168	2.32
	Hispanic	1.730446	1.638932	0.58
	SEL_1	0.3906442*	0.0853801	-4.3
	SEL_2	0.4781391*	0.0717226	-4.92
Engineering	High SAT	1.382102	0.3036368	1.47
	Female	2.96E-22	na	na
	White	1.10E+10*	1.26E+10	20.34
	Black	4.49E-10	na	na
	Asian	1.57E+11*	2.69E+11	15.01
	Hispanic	7.19E+09	na	na
	SEL_1	1.418233***	0.2977818	1.66
	SEL_2	0.6298002**	0.1143679	-2.55

Business	High SAT	0.6786504	0.706754	-0.37
	Female	4.74E-21	na	na
	White	5.16E+07	na	na
	Black	1.67E-11	na	na
	Asian	1.76E-10	na	na
	Hispanic	3.29E-11	na	na
	SEL_1	1.91E-20	na	na
	SEL_2	0.8610399	0.4395356	-0.29
Other Professional	High SAT	1.495802	0.6045504	1
	Female	0.5035543**	0.1726427	-2
	White	1.085792	1.151456	0.08
	Black	3.442831	5.323235	0.8
	Asian	18.77847	33.44324	1.65
	Hispanic	2.50E-19	na	na
	SEL_1	0.7325054	0.2468273	-0.92
	SEL_2	0.1229068*	0.0461311	-5.59
Other Studies	High SAT	0.9262486	0.449698	-0.16
	Female	2.687003*	0.6463105	4.11
	White	1.635644	1.731729	0.46
	Black	2.54E-19	na	na
	Asian	6.95E-19	na	na
	Hispanic	3.174532	4.90413	0.75
	SEL_1	0.0499005**	0.0511069	-2.93
	SEL_2	0.3759029*	0.0891413	-4.13

Number of obs: 3447 Pseudo R^2: 0.0530

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C4. Multinomial Logit Estimates of Choice of College Major, 1989 cohort

Choice of Major	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Social Sciences			Reference Group	
Humanities	High GPA Ratio	0.999196	0.1509336	-0.01
	Female	1.150332*	0.0899201	1.79
	White	1.043712	0.2511016	0.18
	Black	0.758992	0.2024294	-1.03
	Asian	1.104483	0.3119321	0.35
	Hispanic	0.856269	0.2443455	-0.54
	SEL_1	0.736445**	0.0822489	-2.74
	SEL_2	0.794538**	0.0885075	-2.06
Arts	High GPA Ratio	0.956725	0.2164046	-0.2
	Female	1.250921***	0.1514273	1.85
	White	0.621224	0.1950782	-1.52
	Black	0.383299**	0.1419331	-2.59

	Asian	0.677669	0.2620787	-1.01
	Hispanic	0.745076	0.2823034	-0.78
	SEL_1	0.413212*	0.0716887	-5.09
	SEL_2	0.840267	0.1324127	-1.1
Economics	High GPA Ratio	1.104259	0.2096813	0.52
	Female	0.42839*	0.044367	-8.19
	White	1.275629	0.4452525	0.7
	Black	1.072006	0.4070281	0.18
	Asian	3.406596*	1.291098	3.23
	Hispanic	1.069699	0.4350153	0.17
	SEL_1	0.663098**	0.0925009	-2.95
	SEL_2	0.652007**	0.0920672	-3.03
Psychology	High GPA Ratio	1.037482	0.1876834	0.2
	Female	1.883385*	0.188053	6.34
	White	0.939812	0.2805695	-0.21
	Black	1.449446	0.4607096	1.17
	Asian	1.418591	0.4845171	1.02
	Hispanic	1.530131	0.5146615	1.26
	SEL_1	0.567888*	0.0731023	-4.4
	SEL_2	0.594141*	0.0766625	-4.03
Political Science	High GPA Ratio	1.096753	0.1708182	0.59
	Female	0.718699*	0.059382	-4
	White	0.985571	0.2514083	-0.06
	Black	0.99241	0.2750845	-0.03
	Asian	0.904805	0.2784588	-0.33
	Hispanic	1.210002	0.3551791	0.65
	SEL_1	0.577267*	0.0635143	-4.99
	SEL_2	0.3773*	0.0439223	-8.37
Life Sciences	High GPA Ratio	1.90603*	0.2829334	4.35
	Female	1.051985	0.0912908	0.58
	White	0.790927	0.2113639	-0.88
	Black	1.187186	0.3410308	0.6
	Asian	3.544194*	1.040082	4.31
	Hispanic	0.93002	0.2914178	-0.23
	SEL_1	0.628868*	0.0734903	-3.97
	SEL_2	0.464651*	0.0564396	-6.31
Physical Sciences	High GPA Ratio	2.462857*	0.3806912	5.83
	Female	0.610787*	0.0599994	-5.02
	White	0.518088**	0.1321962	-2.58
	Black	0.503408**	0.1450169	-2.38
	Asian	1.015648	0.3055771	0.05
	Hispanic	0.284604*	0.099854	-3.58
	SEL_1	0.63239*	0.0828554	-3.5
	SEL_2	0.489189*	0.0662844	-5.28

Engineering	High GPA Ratio	1.660041*	0.2556263	3.29
	Female	0.243674*	0.0239878	-14.34
	White	0.957013	0.2738268	-0.15
	Black	1.11085	0.3430369	0.34
	Asian	2.900155*	0.9212872	3.35
	Hispanic	1.152076	0.3802116	0.43
	SEL_1	0.534654*	0.0630089	-5.31
	SEL_2	0.370272*	0.0463358	-7.94
Business	High GPA Ratio	1.29211	0.2020736	1.64
	Female	0.563464*	0.0557066	-5.8
	White	2.2216***	0.9439217	1.88
	Black	2.731734**	1.195304	2.3
	Asian	2.635747**	1.252911	2.04
	Hispanic	2.616529**	1.211186	2.08
	SEL_1	3.82E-23	na	na
	SEL_2	0.227463*	0.0266243	-12.65
Other Professional	High GPA Ratio	1.057478	0.1877078	0.31
	Female	1.664394*	0.1878267	4.51
	White	0.695862	0.2169353	-1.16
	Black	0.805345	0.2666096	-0.65
	Asian	0.876848	0.34027	-0.34
	Hispanic	0.791716	0.2932385	-0.63
	SEL_1	0.054182*	0.0095636	-16.52
	SEL_2	0.112117*	0.0159815	-15.35
Other Studies	High GPA Ratio	2.236346*	0.4223942	4.26
	Female	2.298641*	0.3617146	5.29
	White	1.068509	0.4906386	0.14
	Black	0.728611	0.3561844	-0.65
	Asian	0.319542	0.2376554	-1.53
	Hispanic	0.934468	0.503948	-0.13
	SEL_1	0.022258*	0.0078583	-10.78
	SEL_2	0.126332*	0.0224214	-11.66

Number of obs: 9161 Pseudo R^2: 0.0617

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C5. Multinomial Logit Estimates of Choice of College Major, 1976 cohort

Choice of Major	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Social Sciences			Reference Group	
Humanities	High GPA Ratio	1.349758**	0.1540947	2.63
	Female	1.266245*	0.0811187	3.68
	White	0.842602	0.2025211	-0.71
	Black	0.456291**	0.1286628	-2.78

	Asian	0.617307	0.2158176	-1.38
	Hispanic	0.631274	0.1959033	-1.48
	SEL_1	1.235554**	0.1020908	2.56
	SEL_2	1.10178	0.0870902	1.23
Arts	High GPA Ratio	1.162239	0.1494192	1.17
	Female	1.204026**	0.0902252	2.48
	White	0.923368	0.2737408	-0.27
	Black	0.607821	0.2048384	-1.48
	Asian	0.896031	0.3810068	-0.26
	Hispanic	1.071203	0.3902551	0.19
	SEL_1	0.276391*	0.0286011	-12.43
	SEL_2	0.472408*	0.0402728	-8.8
Economics	High GPA Ratio	1.246508	0.1579806	1.74
	Female	0.502069*	0.036217	-9.55
	White	0.85885	0.2270534	-0.58
	Black	0.766494	0.232774	-0.88
	Asian	1.734271	0.5959144	1.6
	Hispanic	0.836496	0.2810041	-0.53
	SEL_1	1.011785	0.0931352	0.13
	SEL_2	1.1031	0.0955131	1.13
Psychology	High GPA Ratio	1.570672*	0.2053751	3.45
	Female	1.453975*	0.115831	4.7
	White	1.370805	0.4974105	0.87
	Black	2.5008**	0.9589524	2.39
	Asian	1.747349	0.800392	1.22
	Hispanic	1.619356	0.6865409	1.14
	SEL_1	0.714778*	0.0741342	-3.24
	SEL_2	0.99847	0.0915698	-0.02
Political Science	High GPA Ratio	1.195615	0.1501973	1.42
	Female	0.758414*	0.0530921	-3.95
	White	0.896795	0.2418943	-0.4
	Black	1.09172	0.3267902	0.29
	Asian	0.906668	0.3440411	-0.26
	Hispanic	0.918399	0.3102215	-0.25
	SEL_1	0.74326*	0.0674528	-3.27
	SEL_2	0.896006	0.0746753	-1.32
Life Sciences	High GPA Ratio	1.766496*	0.1965382	5.11
	Female	0.765131*	0.0500635	-4.09
	White	1.323135	0.3765353	0.98
	Black	1.704524***	0.5281267	1.72
	Asian	4.440755*	1.524777	4.34
	Hispanic	2.104113**	0.6980485	2.24
	SEL_1	0.950338	0.0803973	-0.6
	SEL_2	0.981525	0.0781378	-0.23

Physical Sciences	High GPA Ratio	2.292874*	0.2553545	7.45
	Female	0.489738*	0.035328	-9.9
	White	1.153953	0.3301919	0.5
	Black	0.626776	0.2113704	-1.39
	Asian	2.814019**	1.004031	2.9
	Hispanic	0.747929	0.2788202	-0.78
	SEL_1	0.720029*	0.0657808	-3.6
	SEL_2	0.843318	0.0706396	-2.03
Engineering	High GPA Ratio	1.484306*	0.1608118	3.65
	Female	0.253773*	0.0173543	-20.05
	White	1.077383	0.2674267	0.3
	Black	0.851956	0.2422678	-0.56
	Asian	3.295475*	1.037371	3.79
	Hispanic	1.088574	0.3362776	0.27
	SEL_1	0.574989*	0.046429	-6.85
	SEL_2	0.693639*	0.0517161	-4.91
Business	High GPA Ratio	1.06488	0.1197885	0.56
	Female	0.512392*	0.0340399	-10.07
	White	2.088577**	0.6837919	2.25
	Black	1.541496	0.5459527	1.22
	Asian	2.535732**	1.070513	2.2
	Hispanic	1.519116	0.5975939	1.06
	SEL_1	0.042527*	0.0059618	-22.52
	SEL_2	0.26756*	0.0201901	-17.47
Other Professional	High GPA Ratio	1.107113	0.1303019	0.86
	Female	1.612846*	0.1130622	6.82
	White	1.484929	0.4827308	1.22
	Black	1.315872	0.4603684	0.78
	Asian	1.752177	0.7464838	1.32
	Hispanic	1.290206	0.5059507	0.65
	SEL_1	0.091827*	0.0111253	-19.71
	SEL_2	0.368016*	0.028434	-12.94
Other Studies	High GPA Ratio	1.015613	0.1519503	0.1
	Female	2.062586*	0.1931688	7.73
	White	1.191756	0.4799689	0.44
	Black	0.933157	0.4073393	-0.16
	Asian	0.89362	0.5343529	-0.19
	Hispanic	1.206345	0.5883737	0.38
	SEL_1	0.126047*	0.0172245	-15.16
	SEL_2	0.129411*	0.0157823	-16.77

Number of obs: 18234 Pseudo R^2: 0.0473

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C6. Multinomial Logit Estimates of Choice of College Major, 1951 cohort

Choice of Major	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Social Sciences			Reference Group	
Humanities	High GPA Ratio	1.034297	0.1402419	0.25
	Female	1.207954	0.1508181	1.51
	White	0.824129	0.3280833	-0.49
	Black	1.045755	0.7569307	0.06
	Asian	0.822055	1.207554	-0.13
	Hispanic	0.879963	0.7129757	-0.16
	SEL_1	1.413988***	0.2639617	1.86
	SEL_2	1.160015	0.1711357	1.01
Arts	High GPA Ratio	0.495531*	0.0854377	-4.07
	Female	2.077815*	0.3365526	4.52
	White	2.470471	1.922444	1.16
	Black	7.66E-15	1.10E-07	0
	Asian	10.127	14.76841	1.59
	Hispanic	1.15E-14	1.34E-07	0
	SEL_1	0.089989*	0.0475646	-4.56
	SEL_2	0.678463**	0.1157198	-2.27
Economics	High GPA Ratio	0.785923	0.1452913	-1.3
	Female	0.428368*	0.0790925	-4.59
	White	4.7531	4.967264	1.49
	Black	2.315436	3.507588	0.55
	Asian	5.99E-14	9.87E-07	0
	Hispanic	3.039745	4.654483	0.73
	SEL_1	1.126979	0.2657563	0.51
	SEL_2	0.87987	0.1713762	-0.66
Psychology	High GPA Ratio	0.833336	0.1718203	-0.88
	Female	1.422704***	0.2765777	1.81
	White	3.350281	3.506455	1.16
	Black	2.981812	4.523072	0.72
	Asian	3.05E-14	6.04E-07	0
	Hispanic	7.073534	9.606822	1.44
	SEL_1	1.389581	0.3605078	1.27
	SEL_2	0.619869**	0.1355241	-2.19
Political Science	High GPA Ratio	0.691767**	0.1118514	-2.28
	Female	0.99248	0.1520689	-0.05
	White	0.919506	0.4440913	-0.17
	Black	0.74713	0.7232876	-0.3
	Asian	7.324721	8.941387	1.63
	Hispanic	0.978151	0.9694134	-0.02
	SEL_1	1.733843**	0.3627963	2.63
	SEL_2	0.924067	0.1618964	-0.45

Life Sciences	High GPA Ratio	0.796123	0.1468415	-1.24
	Female	0.635045**	0.1134627	-2.54
	White	4.429587	4.630939	1.42
	Black	2.758625	4.182589	0.67
	Asian	44.91247**	70.08842	2.44
	Hispanic	12.75254**	16.12205	2.01
	SEL_1	0.929163	0.2127373	-0.32
	SEL_2	0.483735*	0.0930088	-3.78
Physical Sciences	High GPA Ratio	0.946125	0.160517	-0.33
	Female	0.326672*	0.0569931	-6.41
	White	1.125642	0.6108276	0.22
	Black	2.52E-15	3.41E-08	0
	Asian	16.01954**	19.77189	2.25
	Hispanic	1.657757	1.563447	0.54
	SEL_1	0.480555*	0.1083246	-3.25
	SEL_2	0.506429*	0.0868637	-3.97
Engineering	High GPA Ratio	0.585416**	0.1163361	-2.69
	Female	2.12E-15	3.45E-09	0
	White	1.12E+10*	1.28E+10	20.34
	Black	2.67E-05	376.4827	0
	Asian	1.74E+11*	2.99E+11	15.06
	Hispanic	7.50E+09	na	Na
	SEL_1	1.986571**	0.4637638	2.94
	SEL_2	0.859676	0.1871108	-0.69
Business	High GPA Ratio	0.887709	0.6070685	-0.17
	Female	2.01E-15	1.24E-08	0
	White	5.15E+07	na	Na
	Black	1.33E-07	6.503399	0
	Asian	1.47E-06	72.83594	0
	Hispanic	2.70E-07	11.15683	0
	SEL_1	3.01E-15	2.48E-08	0
	SEL_2	0.883548	0.5751721	-0.19
Other Professional	High GPA Ratio	1.23124	0.4001395	0.64
	Female	0.514265***	0.1825247	-1.87
	White	1.090155	1.155109	0.08
	Black	3.419744	5.298938	0.79
	Asian	18.11695	32.26292	1.63
	Hispanic	5.37E-15	1.32E-07	0
	SEL_1	0.716304	0.2527018	-0.95
	SEL_2	0.112182*	0.0452514	-5.42
Other Studies	High GPA Ratio	0.421752**	0.1176956	-3.09
	Female	2.073918**	0.5293256	2.86
	White	1.581898	1.673972	0.43
	Black	5.56E-15	1.42E-07	0

Asian	1.65E-14	4.16E-07	0
Hispanic	3.180336	4.924574	0.75
SEL_1	0.06417**	0.0657283	-2.68
SEL_2	0.527138**	0.1366963	-2.47

Number of obs: 3447 Pseudo R^2: 0.0530

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

First Occupation

Table C7. Multinomial Logit Estimates of Choice of First Occupation, 1989 cohort

Choice of First Occupation	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Occupations			Reference Group	
Education	High SAT	1.093998	0.1499963	0.66
	Female	1.770104*	0.155126	6.52
	White	0.7442871	0.1680612	-1.31
	Black	0.8510592	0.209615	-0.65
	Asian	0.613276***	0.1736275	-1.73
	Hispanic	0.8752543	0.2365544	-0.49
	SEL_1	1.510924*	0.162843	3.83
	SEL_2	0.957471	0.1048494	-0.4
Higher Education	High SAT	1.627054*	0.2578643	3.07
	Female	1.093691	0.1249503	0.78
	White	0.6415766	0.1861127	-1.53
	Black	0.6040082	0.2013017	-1.51
	Asian	0.9065866	0.3077272	-0.29
	Hispanic	0.865642	0.3025178	-0.41
	SEL_1	2.007013*	0.3201465	4.37
	SEL_2	1.56795*	0.249052	2.83
Health	High SAT	0.4885811**	0.1578883	-2.22
	Female	3.699947*	0.5452898	8.88
	White	1.077318	0.4111689	0.2
	Black	1.096305	0.4397901	0.23
	Asian	2.086498***	0.8845188	1.73
	Hispanic	1.055028	0.4710032	0.12
	SEL_1	0.3540628*	0.0601306	-6.11
	SEL_2	0.4351635*	0.061371	-5.9
Social Science	High SAT	0.9171611	0.1928317	-0.41
	Female	1.476895*	0.1954238	2.95
	White	0.7163786	0.2371467	-1.01
	Black	0.5495124	0.2100742	-1.57
	Asian	0.8264941	0.3282644	-0.48
	Hispanic	0.9306497	0.366156	-0.18
	SEL_1	1.954868*	0.3426451	3.82
	SEL_2	1.417791**	0.2480554	2
Math	High SAT	1.361983**	0.2110411	1.99
	Female	1.214226***	0.1322852	1.78
	White	0.7304044	0.2111543	-1.09
	Black	0.5674997***	0.1895582	-1.7
	Asian	1.620196	0.518658	1.51

	Hispanic	0.6651165	0.242187	-1.12
	SEL_1	1.950228*	0.2946689	4.42
	SEL_2	1.485673*	0.2224208	2.64
Engineering	High SAT	0.9275877	0.1689139	-0.41
	Female	0.3741722*	0.0448032	-8.21
	White	0.894151	0.2843605	-0.35
	Black	0.8366419	0.2890882	-0.52
	Asian	1.384148	0.5078224	0.89
	Hispanic	0.9227725	0.3506006	-0.21
	SEL_1	0.8533562*	0.1176354	-1.15
	SEL_2	0.6104397	0.0856228	-3.52
Medicine	High SAT	2.753597*	0.9578932	2.91
	Female	1.052771	0.2790703	0.19
	White	0.6804565	0.5022415	-0.52
	Black	0.8239581	0.656319	-0.24
	Asian	3.120029	2.412924	1.47
	Hispanic	0.237133	0.2923309	-1.17
	SEL_1	0.5516785***	0.1846335	-1.78
	SEL_2	0.3708139*	0.131389	-2.8
Law	High SAT	0.9451836	0.1595262	-0.33
	Female	0.7172377*	0.0765144	-3.12
	White	2.492911**	1.159783	1.96
	Black	2.391157***	1.160225	1.8
	Asian	2.187301	1.11624	1.53
	Hispanic	2.809346**	1.409004	2.06
	SEL_1	1.740905*	0.2422432	3.98
	SEL_2	1.190101	0.1678448	1.23
Finance	High SAT	0.7025108**	0.1009983	-2.46
	Female	0.5405837*	0.0447781	-7.43
	White	2.98091*	1.114937	2.92
	Black	2.424792**	0.9417918	2.28
	Asian	4.203353*	1.6751	3.6
	Hispanic	2.758995**	1.117955	2.5
	SEL_1	1.011688	0.1042322	0.11
	SEL_2	0.7715595*	0.0781535	-2.56
Business	High SAT	0.4860892*	0.0840647	-4.17
	Female	0.990852	0.077021	-0.12
	White	1.248427	0.3110347	0.89
	Black	1.1363	0.3015896	0.48
	Asian	0.9910628	0.2978242	-0.03
	Hispanic	1.108278	0.3235331	0.35
	SEL_1	0.6661955*	0.0690459	-3.92
	SEL_2	0.7933409**	0.0729138	-2.52

Executive	High SAT	0.9144041	0.1421064	-0.58
	Female	0.759221*	0.0719153	-2.91
	White	3.834024*	1.976066	2.61
	Black	4.518097*	2.380649	2.86
	Asian	5.62926*	3.027782	3.21
	Hispanic	4.297424*	2.334165	2.68
	SEL_1	1.393875*	0.168604	2.75
	SEL_2	0.9603257	0.1174893	-0.33

Number of obs: 9161 Pseudo R^2: 0.0245

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C8. Multinomial Logit Estimates of Choice of First Occupation, 1976 cohort

Choice of First Occupation	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Occupations			Reference Group	
Education	High SAT	0.7372698**	0.1060368	-2.12
	Female	1.848944*	0.1436447	7.91
	White	1.180443	0.3810538	0.51
	Black	1.126333	0.392599	0.34
	Asian	0.6620705	0.3131909	-0.87
	Hispanic	1.313079	0.5155003	0.69
	SEL_1	0.9890527	0.0969039	-0.11
	SEL_2	0.8327476**	0.0697993	-2.18
Higher Education	High SAT	2.374388*	0.2939291	6.99
	Female	0.8065359**	0.0782546	-2.22
	White	0.9870249	0.3514204	-0.04
	Black	0.7690098	0.3251226	-0.62
	Asian	1.185365	0.5530937	0.36
	Hispanic	1.700744	0.738133	1.22
	SEL_1	1.835319*	0.2372073	4.7
	SEL_2	1.407286*	0.1694876	2.84
Health	High SAT	0.4973048*	0.0944152	-3.68
	Female	4.207574*	0.3657727	16.53
	White	1.483061	0.5292001	1.1
	Black	1.089623	0.413444	0.23
	Asian	1.641227	0.7276125	1.12
	Hispanic	1.124994	0.4954485	0.27
	SEL_1	0.2693723*	0.0349102	-10.12
	SEL_2	0.7452811*	0.0547646	-4

Social Science	High SAT	1.416625**	0.1936429	2.55
	Female	1.60119*	0.1568512	4.81
	White	0.6753056	0.2114427	-1.25
	Black	0.50372	0.1892108	-1.83
	Asian	1.14252	0.458526	0.33
	Hispanic	0.8477292	0.3500805	-0.4
	SEL_1	2.261891*	0.29082	6.35
	SEL_2	1.756885*	0.2079585	4.76
Math	High SAT	1.610996*	0.1693609	4.54
	Female	0.7786362*	0.0573182	-3.4
	White	5.246301*	3.088946	2.82
	Black	2.766557	1.715324	1.64
	Asian	11.48611*	7.086915	3.96
	Hispanic	5.43601*	3.441744	2.67
	SEL_1	1.431205*	0.1390672	3.69
	SEL_2	1.159107***	0.101114	1.69
Engineering	High SAT	0.9602431	0.0872258	-0.45
	Female	0.3228326*	0.0196918	-18.54
	White	0.7822164	0.1516342	-1.27
	Black	0.3920971*	0.0961012	-3.82
	Asian	1.536863	0.3842983	1.72
	Hispanic	0.8808617	0.2279616	-0.49
	SEL_1	1.165248**	0.0844325	2.11
	SEL_2	0.7762298*	0.051287	-3.83
Medicine	High SAT	1.376791*	0.1305357	3.37
	Female	0.3704719*	0.0250361	-14.69
	White	1.300196	0.3496946	0.98
	Black	1.467167	0.4361792	1.29
	Asian	3.997438*	1.234524	4.49
	Hispanic	2.514897*	0.7906397	2.93
	SEL_1	1.316269*	0.1128897	3.2
	SEL_2	1.358101*	0.0997609	4.17
Law	High SAT	1.095477	0.1063814	0.94
	Female	0.4439315*	0.028674	-12.57
	White	1.251312	0.3207593	0.87
	Black	1.067366	0.3086244	0.23
	Asian	1.464537	0.4790392	1.17
	Hispanic	1.75159***	0.5430765	1.81
	SEL_1	1.54182*	0.1285134	5.19
	SEL_2	1.416994*	0.1026341	4.81
Finance	High SAT	0.587344*	0.0669105	-4.67
	Female	0.5298787*	0.0312738	-10.76
	White	1.638701***	0.4490672	1.8
	Black	1.007904	0.3075592	0.03
	Asian	2.472488*	0.810325	2.76

	Hispanic	1.801994***	0.5883118	1.8
	SEL_1	0.9389489	0.0732166	-0.81
	SEL_2	0.8204435*	0.0541062	-3
Business	High SAT	0.5211213*	0.0671318	-5.06
	Female	0.7501098*	0.0431105	-5
	White	1.531255	0.4195816	1.55
	Black	1.34184	0.3966205	0.99
	Asian	1.177973	0.4314205	0.45
	Hispanic	1.529836	0.5071245	1.28
	SEL_1	0.5630029*	0.0482224	-6.71
	SEL_2	0.7561263*	0.047994	-4.4
Executive	High SAT	0.7371955**	0.0975143	-2.31
	Female	0.7025237*	0.0501073	-4.95
	White	1.262024	0.391347	0.75
	Black	1.290197	0.4357307	0.75
	Asian	1.464112	0.5755384	0.97
	Hispanic	1.68284	0.6230805	1.41
	SEL_1	1.071262	0.1031738	0.71
	SEL_2	1.046235	0.0842015	0.56

Number of obs: 18234 Pseudo R^2: 0.0302

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C9. Multinomial Logit Estimates of Choice of First Occupation, 1951 cohort

Choice of First Occupation	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Occupations			Reference Group	
Education	High SAT	0.9297631	0.2499104	-0.27
	Female	9.810206*	1.434797	15.61
	White	1.220318	0.7101291	0.34
	Black	0.7947642	0.9984125	-0.18
	Asian	2.031423	1.980268	0.73
	Hispanic	2.034191	1.796467	0.8
	SEL_1	0.5828293**	0.1509971	-2.08
	SEL_2	1.068721	0.1470549	0.48
Higher Education	High SAT	4.589074*	0.9864188	7.09
	Female	1.331513	0.2570649	1.48
	White	0.8504462	0.6422783	-0.21
	Black	2.304241	2.553986	0.75
	Asian	2.522456	3.40488	0.69
	Hispanic	1.031032	1.343668	0.02
	SEL_1	0.8373434	0.2536476	-0.59
	SEL_2	1.662745**	0.3619418	2.34

Health	High SAT	1.536708	0.7527495	0.88
	Female	9.25921*	3.019756	6.82
	White	5.79E+07	na	Na
	Black	1.25E-09	0.5684688	0
	Asian	1.55E-11	na	Na
	Hispanic	1.82E-09	0.5215711	0
	SEL_1	0.460487	0.2582872	-1.38
	SEL_2	0.6703208	0.1887759	-1.42
Social Science	High SAT	2.978*	0.8835709	3.68
	Female	6.235658*	1.509214	7.56
	White	0.424819	0.278743	-1.3
	Black	1.998941	2.124428	0.65
	Asian	4.86E-20	na	Na
	Hispanic	1.33E-17	3.39E-09	0
	SEL_1	2.46028**	0.8675533	2.55
	SEL_2	1.578454	0.448404	1.61
Math	High SAT	2.461778*	0.6692862	3.31
	Female	1.97768*	0.3928584	3.43
	White	0.3696273***	0.2088894	-1.76
	Black	5.56E-18	1.93E-09	0
	Asian	5.04109***	4.420581	1.84
	Hispanic	9.30E-18	2.21E-09	0
	SEL_1	0.8033534	0.251514	-0.7
	SEL_2	1.11252	0.2409794	0.49
Engineering	High SAT	1.480124***	0.3251234	1.79
	Female	0.1975889*	0.0549315	-5.83
	White	1.313722	0.9906503	0.36
	Black	1.2034	1.57795	0.14
	Asian	14.59541**	15.35534	2.55
	Hispanic	3.050462	3.085272	1.1
	SEL_1	1.241619	0.257927	1.04
	SEL_2	1.050728	0.1837183	0.28
Medicine	High SAT	0.9567514	0.209142	-0.2
	Female	0.1202053*	0.0337506	-7.55
	White	8.87E+09*	1.02E+10	19.97
	Black	1.63E+10*	2.20E+10	17.51
	Asian	1.55E+10	na	Na
	Hispanic	8.81E+09*	1.23E+10	16.44
	SEL_1	0.813733	0.1485626	-1.13
	SEL_2	0.8873884	0.1262541	-0.84
Law	High SAT	1.290987	0.3403105	0.97
	Female	0.1818802*	0.0607236	-5.11
	White	0.9671727	0.7304166	-0.04
	Black	1.55E-17	4.16E-09	0

	Asian	2.15E-19	na	na
	Hispanic	1.015309	1.320305	0.01
	SEL_1	1.296373	0.3383408	0.99
	SEL_2	1.595945**	0.3369302	2.21
Finance	High SAT	0.7469721	0.2730689	-0.8
	Female	0.3818814*	0.108925	-3.37
	White	0.4823149	0.3063443	-1.15
	Black	7.62E-18	2.40E-09	0
	Asian	8.51E-20	na	Na
	Hispanic	0.6690122	0.8233185	-0.33
	SEL_1	1.483639	0.4518037	1.3
	SEL_2	1.770715**	0.4326733	2.34
Business	High SAT	0.4798667**	0.156279	-2.25
	Female	1.230492	0.181376	1.41
	White	0.4620927***	0.2088944	-1.71
	Black	7.03E-18	1.58E-09	0
	Asian	0.5790821	0.6979786	-0.45
	Hispanic	0.2778941	0.3184051	-1.12
	SEL_1	0.9675672	0.2120939	-0.15
	SEL_2	1.221484	0.1896304	1.29
Executive	High SAT	1.387928	0.3975366	1.14
	Female	0.7423791	0.17964	-1.23
	White	4.07E+09*	4.60E+09	19.59
	Black	6.39E+09*	9.93E+09	14.52
	Asian	1.56E+10	na	Na
	Hispanic	1.11E-07	25.23333	0
	SEL_1	2.728372*	0.8260977	3.31
	SEL_2	2.036387*	0.5451987	2.66

Number of obs: 3687 Pseudo R^2: 0.0717

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C10. Multinomial Logit Estimates of Choice of First Occupation, 1989 cohort

Choice of First Occupation	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Occupations			Reference Group	
Education	High GPA Ratio	1.748855*	0.2465336	3.97
	Female	1.756945*	0.153304	6.46
	White	0.7257199	0.163988	-1.42
	Black	0.8526893	0.2101124	-0.65
	Asian	0.6141351***	0.1736126	-1.72
	Hispanic	0.8693362	0.2350878	-0.52

	SEL_1	1.668208*	0.1795038	4.76
	SEL_2	1.024712	0.1139248	0.22
Higher Education	High GPA Ratio	2.181857*	0.399617	4.26
	Female	1.051461	0.1192753	0.44
	White	0.6380323	0.1851381	-1.55
	Black	0.5921766	0.197303	-1.57
	Asian	0.9629682	0.3260336	-0.11
	Hispanic	0.8439844	0.2950343	-0.49
	SEL_1	2.528804*	0.401977	5.84
	SEL_2	1.752415*	0.282741	3.48
Health	High GPA Ratio	1.683117*	0.2998298	2.92
	Female	3.787998*	0.5572202	9.05
	White	1.022808	0.3905911	0.06
	Black	1.113114	0.4467092	0.27
	Asian	1.975024	0.8364626	1.61
	Hispanic	1.064201	0.4752719	0.14
	SEL_1	0.3465829*	0.0587181	-6.25
	SEL_2	0.457922*	0.0655829	-5.45
Social Science	High GPA Ratio	1.36916	0.3214631	1.34
	Female	1.483612*	0.1954402	2.99
	White	0.700658	0.2319338	-1.07
	Black	0.5522843	0.2111089	-1.55
	Asian	0.8114727	0.3216895	-0.53
	Hispanic	0.9310685	0.3662871	-0.18
	SEL_1	2.009112*	0.3519716	3.98
	SEL_2	1.463396**	0.2593201	2.15
Math	High GPA Ratio	1.373159	0.2742199	1.59
	Female	1.183981	0.1281866	1.56
	White	0.7353597	0.2125497	-1.06
	Black	0.55923***	0.1867064	-1.74
	Asian	1.681261	0.5369623	1.63
	Hispanic	0.654397	0.2382761	-1.16
	SEL_1	2.175024*	0.3253584	5.19
	SEL_2	1.54586*	0.2341696	2.88
Engineering	High GPA Ratio	1.585873*	0.2813932	2.6
	Female	0.3750906*	0.0447692	-8.22
	White	0.8688517	0.2763696	-0.44
	Black	0.8415455	0.2907702	-0.5
	Asian	1.363386	0.4994883	0.85
	Hispanic	0.9227425	0.3505951	-0.21
	SEL_1	0.8971855	0.1223119	-0.8
	SEL_2	0.6418302*	0.0910499	-3.13
Medicine	High GPA Ratio	3.004864*	1.042262	3.17
	Female	0.9722815	0.2553234	-0.11

	White	0.677296	0.4999451	-0.53
	Black	0.7862611	0.6257848	-0.3
	Asian	3.55002	2.733709	1.65
	Hispanic	0.222468	0.2742055	-1.22
	SEL_1	0.8990014	0.2874998	-0.33
	SEL_2	0.4438056*	0.1600971	-2.25
Law	High GPA Ratio	2.485684*	0.4002419	5.65
	Female	0.7172943*	0.0762702	-3.12
	White	2.351584***	1.094655	1.84
	Black	2.421993***	1.17593	1.82
	Asian	2.130591	1.086919	1.48
	Hispanic	2.803736**	1.40698	2.05
	SEL_1	2.013745*	0.2828554	4.98
	SEL_2	1.341742**	0.1929227	2.04
Finance	High GPA Ratio	1.320754**	0.1856902	1.98
	Female	0.5500074*	0.0453988	-7.24
	White	2.886842*	1.079669	2.83
	Black	2.46184**	0.956064	2.32
	Asian	4.038921*	1.608424	3.51
	Hispanic	2.786569**	1.128974	2.53
	SEL_1	0.984865	0.1007837	-0.15
	SEL_2	0.788992**	0.0808112	-2.31
Business	High GPA Ratio	0.7529039***	0.1160806	-1.84
	Female	1.021745	0.0791925	0.28
	White	1.231968	0.3069199	0.84
	Black	1.155885	0.3067598	0.55
	Asian	0.9447415	0.2836346	-0.19
	Hispanic	1.128324	0.3293753	0.41
	SEL_1	0.5822168*	0.0598505	-5.26
	SEL_2	0.7631326*	0.0707445	-2.92
Executive	High GPA Ratio	1.338133***	0.2250101	1.73
	Female	0.7622305*	0.0719061	-2.88
	White	3.756038*	1.935862	2.57
	Black	4.545758*	2.395114	2.87
	Asian	5.545419*	2.981022	3.19
	Hispanic	4.304805*	2.33813	2.69
	SEL_1	1.425207*	0.1714758	2.94
	SEL_2	0.9888323	0.122451	-0.09

Number of obs: 9161 Pseudo R^2: 0.0268

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C11. Multinomial Logit Estimates of Choice of First Occupation, 1976 cohort

Choice of First Occupation	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Occupations			Reference Group	
Education	High GPA Ratio	1.142588	0.143982	1.06
	Female	1.872953*	0.1451127	8.1
	White	1.184476	0.3822048	0.52
	Black	1.162784	0.4050484	0.43
	Asian	0.6720362	0.3178134	-0.84
	Hispanic	1.35199	0.5304253	0.77
	SEL_1	0.943335	0.0901676	-0.61
	SEL_2	0.8278298**	0.0695334	-2.25
Higher Education	High GPA Ratio	3.010964*	0.3928201	8.45
	Female	0.7539531*	0.0726205	-2.93
	White	0.944878	0.3359616	-0.16
	Black	0.6958936	0.293274	-0.86
	Asian	1.128177	0.5257594	0.26
	Hispanic	1.498245	0.6486325	0.93
	SEL_1	2.752165*	0.3406709	8.18
	SEL_2	1.612349*	0.1943533	3.96
Health	High GPA Ratio	1.151959	0.128984	1.26
	Female	4.294984*	0.3728581	16.79
	White	1.480438	0.5278715	1.1
	Black	1.126705	0.4272474	0.31
	Asian	1.647277	0.7299249	1.13
	Hispanic	1.153256	0.5076799	0.32
	SEL_1	0.2443325*	0.0312841	-11.01
	SEL_2	0.7347752*	0.0541415	-4.18
Social Science	High GPA Ratio	2.075108*	0.2960888	5.12
	Female	1.561202*	0.1520784	4.57
	White	0.6653715	0.2084131	-1.3
	Black	0.4955388***	0.1859352	-1.87
	Asian	1.134672	0.4554311	0.31
	Hispanic	0.8218816	0.3391564	-0.48
	SEL_1	2.686786*	0.3370064	7.88
	SEL_2	1.876098*	0.2228555	5.3
Math	High GPA Ratio	1.686023*	0.1947283	4.52
	Female	0.7524425*	0.0550996	-3.88
	White	5.130658*	3.020029	2.78
	Black	2.624142	1.625902	1.56
	Asian	11.16272*	6.884979	3.91
	Hispanic	5.098655*	3.226277	2.57

	SEL_1	1.722423*	0.1601938	5.85
	SEL_2	1.228863**	0.1071792	2.36
Engineering	High GPA Ratio	1.357994*	0.1261974	3.29
	Female	0.322739*	0.0196321	-18.59
	White	0.782913	0.151901	-1.26
	Black	0.3997382*	0.0979238	-3.74
	Asian	1.556042***	0.3892692	1.77
	Hispanic	0.8937307	0.2311597	-0.43
	SEL_1	1.189494**	0.0827506	2.49
	SEL_2	0.7871287*	0.0519741	-3.63
Medicine	High GPA Ratio	3.96655*	0.3338853	16.37
	Female	0.3620835*	0.0245738	-14.97
	White	1.28619	0.3490335	0.93
	Black	1.58858	0.4755877	1.55
	Asian	4.131398*	1.287079	4.55
	Hispanic	2.54667*	0.8069728	2.95
	SEL_1	1.718168*	0.1435339	6.48
	SEL_2	1.512182*	0.1122387	5.57
Law	High GPA Ratio	2.302046*	0.210114	9.14
	Female	0.4402984*	0.0283957	-12.72
	White	1.246821	0.3204126	0.86
	Black	1.114463	0.3226322	0.37
	Asian	1.495301	0.4900079	1.23
	Hispanic	1.779697***	0.5525272	1.86
	SEL_1	1.730889*	0.1398446	6.79
	SEL_2	1.491755*	0.1083452	5.51
Finance	High GPA Ratio	1.110425	0.1112811	1.05
	Female	0.5410955*	0.0318392	-10.44
	White	1.667771***	0.4568761	1.87
	Black	1.068903	0.325998	0.22
	Asian	2.567231*	0.8408896	2.88
	Hispanic	1.915671**	0.6249234	1.99
	SEL_1	0.8539319**	0.0646952	-2.08
	SEL_2	0.8074652*	0.0532377	-3.24
Business	High GPA Ratio	0.5323505*	0.066252	-5.07
	Female	0.7729818*	0.0443436	-4.49
	White	1.554472	0.4258098	1.61
	Black	1.381622	0.4082126	1.09
	Asian	1.198244	0.4387138	0.49
	Hispanic	1.591974	0.527549	1.4
	SEL_1	0.4807146*	0.0401673	-8.77
	SEL_2	0.7229868*	0.0458936	-5.11
Executive	High GPA Ratio	1.097283	0.1373118	0.74
	Female	0.7116762*	0.0506075	-4.78

	White	1.27396	0.3950042	0.78
	Black	1.337924	0.4515793	0.86
	Asian	1.496382	0.5880671	1.03
	Hispanic	1.746071	0.6460285	1.51
	SEL_1	1.015798	0.0950787	0.17
	SEL_2	1.03795	0.0835693	0.46

Number of obs: 18234 Pseudo R^2: 0.0332

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C12. Multinomial Logit Estimates of Choice of First Occupation, 1951 cohort

Choice of First Occupation	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Occupations			Reference Group	
Education	High GPA Ratio	0.9270972	0.12887	-0.54
	Female	9.606708*	1.460342	14.88
	White	1.202174	0.6994253	0.32
	Black	0.8074039	1.014508	-0.17
	Asian	2.018455	1.967494	0.72
	Hispanic	2.022656	1.78656	0.8
	SEL_1	0.5903197**	0.1531245	-2.03
	SEL_2	1.094996	0.1591766	0.62
Higher Education	High GPA Ratio	1.719716**	0.368421	2.53
	Female	1.430531***	0.2862575	1.79
	White	0.8693841	0.6540507	-0.19
	Black	2.337893	2.5694	0.77
	Asian	1.968041	2.654353	0.5
	Hispanic	0.908176	1.175762	-0.07
	SEL_1	0.9729525	0.2965869	-0.09
	SEL_2	1.423167	0.32914	1.53
Health	High GPA Ratio	1.183762	0.3509404	0.57
	Female	9.557325*	3.22029	6.7
	White	4.67E+07	na	na
	Black	8.23E-12	na	na
	Asian	9.72E-12	na	na
	Hispanic	1.15E-11	na	na
	SEL_1	0.4760719	0.2665431	-1.33
	SEL_2	0.6405686	0.1912596	-1.49
Social Science	High GPA Ratio	1.416102	0.3514071	1.4
	Female	6.631195*	1.712302	7.33
	White	0.4222736	0.2751111	-1.32
	Black	1.969115	2.093968	0.64

	Asian	9.17E-20	na	na
	Hispanic	3.54E-20	na	na
	SEL_1	2.809609*	0.9829533	2.95
	SEL_2	1.449474	0.42887	1.25
Math	High GPA Ratio	1.391423	0.3066101	1.5
	Female	2.097816*	0.4370469	3.56
	White	0.3702579***	0.2090912	-1.76
	Black	4.71E-20	na	na
	Asian	4.464498***	3.912663	1.71
	Hispanic	2.57E-20	na	na
	SEL_1	0.8537947	0.2696822	-0.5
	SEL_2	1.004881	0.2330215	0.02
Engineering	High GPA Ratio	0.734805***	0.1282602	-1.77
	Female	0.1756457*	0.0499427	-6.12
	White	1.349694	1.017942	0.4
	Black	1.201858	1.576171	0.14
	Asian	15.64013*	16.45585	2.61
	Hispanic	3.199786	3.23911	1.15
	SEL_1	1.571539**	0.352068	2.02
	SEL_2	1.228337	0.2375001	1.06
Medicine	High GPA Ratio	0.8506865	0.1274475	-1.08
	Female	0.1147301*	0.0326162	-7.62
	White	7.34E+09*	8.41E+09	19.81
	Black	1.33E+10*	1.78E+10	17.37
	Asian	1.34E+10	na	na
	Hispanic	7.45E+09*	1.04E+10	16.33
	SEL_1	0.880734	0.1734511	-0.64
	SEL_2	0.9570787	0.1522541	-0.28
Law	High GPA Ratio	1.053144	0.2210179	0.25
	Female	0.1831171*	0.0622381	-4.99
	White	0.9651954	0.7291009	-0.05
	Black	4.69E-20	na	na
	Asian	1.47E-19	na	na
	Hispanic	0.9923936	1.291188	-0.01
	SEL_1	1.316106	0.3673799	0.98
	SEL_2	1.566778**	0.3644516	1.93
Finance	High GPA Ratio	2.128123*	0.5599382	2.87
	Female	0.4756914**	0.1395361	-2.53
	White	0.4545567	0.289267	-1.24
	Black	6.15E-20	na	na
	Asian	1.48E-19	na	na
	Hispanic	0.5852623	0.7214635	-0.43
	SEL_1	1.001174	0.3213741	0
	SEL_2	1.278839	0.3385172	0.93

Business	High GPA Ratio	0.9640704	0.1508502	-0.23
	Female	1.237604	0.1914238	1.38
	White	0.4604434***	0.2079389	-1.72
	Black	2.04E-20	na	na
	Asian	0.6004985	0.7239339	-0.42
	Hispanic	0.2836492	0.3250104	-1.1
	SEL_1	0.9043688	0.2059638	-0.44
	SEL_2	1.227416	0.2062435	1.22
Executive	High GPA Ratio	0.5141296*	0.1125486	-3.04
	Female	0.570582**	0.1456433	-2.2
	White	3.31E+09*	3.76E+09	19.32
	Black	4.71E+09*	7.36E+09	14.25
	Asian	1.33E+10	na	na
	Hispanic	2.97E-10	na	na
	SEL_1	3.973619*	1.256447	4.36
	SEL_2	2.752262*	0.7833184	3.56

Number of obs: 3687 Pseudo R^2: 0.0692

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Recent Occupation

Table C13. Multinomial Logit Estimates of Choice of Recent Occupation, 1989cohort

Choice of First Occupation	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Occupations			Reference Group	
Education	High SAT	0.7390563	0.1460802	-1.53
	Female	2.053871*	0.2296672	6.44
	White	0.8424932	0.2349474	-0.61
	Black	0.8154702	0.2470725	-0.67
	Asian	0.5112879***	0.1904821	-1.8
	Hispanic	0.8416404	0.2908455	-0.5
	SEL_1	1.091032	0.145999	0.65
	SEL_2	0.7679134	0.1010498	-2.01
Higher Education	High SAT	1.522117**	0.2747171	2.33
	Female	1.687303*	0.2136025	4.13
	White	1.277902	0.492183	0.64
	Black	0.9912319	0.4169477	-0.02
	Asian	1.274523	0.5645512	0.55
	Hispanic	1.55512	0.6926806	0.99
	SEL_1	1.382383***	0.2314791	1.93
	SEL_2	1.203885	0.1937532	1.15
Health	High SAT	0.5724083	0.1964435	-1.63
	Female	3.733267*	0.6387691	7.7
	White	1.433668	0.6834309	0.76
	Black	1.397835	0.6959544	0.67
	Asian	1.868057	1.004713	1.16
	Hispanic	1.926855	1.030377	1.23
	SEL_1	0.4127585*	0.0794053	-4.6
	SEL_2	0.525306*	0.084378	-4.01
Social Science	High SAT	1.16804	0.2959459	0.61
	Female	2.583845*	0.4547391	5.39
	White	1.376589	0.7252991	0.61
	Black	0.9753159	0.560539	-0.04
	Asian	2.458063	1.399544	1.58
	Hispanic	2.243022	1.310053	1.38
	SEL_1	1.202216	0.2643459	0.84
	SEL_2	1.344829	0.2720345	1.46
Math	High SAT	1.029374	0.2613801	0.11
	Female	1.292793	0.2127846	1.56
	White	0.8652392	0.3813293	-0.33

	Black	0.5455175	0.2794981	-1.18
	Asian	1.530298	0.7569779	0.86
	Hispanic	1.025982	0.5480618	0.05
	SEL_1	1.743827**	0.4066709	2.38
	SEL_2	1.547916***	0.3476852	1.95
Engineering	High SAT	0.8198139	0.2295163	-0.71
	Female	0.3680547*	0.0634177	-5.8
	White	1.903065	1.143787	1.07
	Black	1.381289	0.8740758	0.51
	Asian	1.736472	1.195841	0.8
	Hispanic	2.325462	1.541904	1.27
	SEL_1	0.6429881**	0.1289507	-2.2
	SEL_2	0.5104447*	0.1001754	-3.43
Medicine	High SAT	2.285909	1.467109	1.29
	Female	1.566335	0.7148657	0.98
	White	1.10E+09*	1.16E+09	19.71
	Black	2.34E+09*	2.56E+09	19.72
	Asian	3.21E+09*	3.79E+09	18.52
	Hispanic	1.21E+09	na	na
	SEL_1	0.6659006	0.3571131	-0.76
	SEL_2	0.2369211*	0.1617403	-2.11
Law	High SAT	0.8620212	0.1772571	-0.72
	Female	0.6802613*	0.0866602	-3.02
	White	1.13031	0.4367724	0.32
	Black	1.349534	0.5556144	0.73
	Asian	1.079295	0.4968616	0.17
	Hispanic	1.640269	0.7240759	1.12
	SEL_1	1.846151*	0.3001717	3.77
	SEL_2	0.9071402	0.1579766	-0.56
Finance	High SAT	0.7503607	0.1324284	-1.63
	Female	0.5000034*	0.0520305	-6.66
	White	1.795241	0.6544658	1.61
	Black	1.29852	0.5041546	0.67
	Asian	2.158847***	0.8808033	1.89
	Hispanic	2.05467***	0.8436902	1.75
	SEL_1	0.9703419	0.1269833	-0.23
	SEL_2	0.7838812***	0.0992644	-1.92
Business	High SAT	0.4957877*	0.1066599	-3.26
	Female	1.069253	0.105622	0.68
	White	1.001621	0.2836159	0.01
	Black	0.8300127	0.2540419	-0.61
	Asian	1.133655	0.3836316	0.37
	Hispanic	0.8853947	0.3094533	-0.35
	SEL_1	0.6728674*	0.0877203	-3.04
	SEL_2	0.7049512*	0.0831426	-2.96

Executive	High SAT	0.7217764***	0.1205331	-1.95
	Female	1.036488	0.0946821	0.39
	White	1.766441***	0.5697194	1.76
	Black	1.389806	0.4749809	0.96
	Asian	2.119518**	0.7671687	2.08
	Hispanic	1.985458***	0.7253692	1.88
	SEL_1	0.9098726	0.107389	-0.8
	SEL_2	0.737875*	0.0833733	-2.69

Number of obs: 9161 Pseudo R^2: 0.0203

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C14. Multinomial Logit Estimates of Choice of Recent Occupation, 1976 cohort

Choice of First Occupation	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Occupations			Reference Group	
Education	High SAT	0.4215919*	0.0873665	-4.17
	Female	2.486465*	0.2390227	9.48
	White	0.8783795	0.2972316	-0.38
	Black	0.7542979	0.2786143	-0.76
	Asian	0.2167846**	0.1476333	-2.24
	Hispanic	0.9551866	0.4122055	-0.11
	SEL_1	0.825037	0.0981413	-1.62
	SEL_2	0.7942287**	0.075458	-2.42
Higher Education	High SAT	1.771183*	0.1917326	5.28
	Female	0.9841477	0.0763043	-0.21
	White	1.222833	0.3861125	0.64
	Black	0.9431095	0.3358416	-0.16
	Asian	1.15018	0.4758558	0.34
	Hispanic	1.684242	0.6525013	1.35
	SEL_1	2.027018*	0.211649	6.77
	SEL_2	1.598497*	0.1497883	5.01
Health	High SAT	0.3938781*	0.0964596	-3.8
	Female	5.886917*	0.6984568	14.94
	White	1.328779	0.5472339	0.69
	Black	0.9514447	0.4166083	-0.11
	Asian	1.196391	0.6413813	0.33
	Hispanic	0.8543091	0.4551528	-0.3
	SEL_1	0.2780071*	0.0439535	-8.1
	SEL_2	0.7630629*	0.0674538	-3.06
Social Science	High SAT	0.9004239	0.1611563	-0.59
	Female	1.822969*	0.2133626	5.13

	White	0.7474581	0.2891952	-0.75
	Black	0.7653071	0.330616	-0.62
	Asian	1.092748	0.5433889	0.18
	Hispanic	0.8219685	0.4202917	-0.38
	SEL_1	2.310112*	0.3380295	5.72
	SEL_2	1.717448*	0.2277552	4.08
Math	High SAT	1.409026**	0.2094041	2.31
	Female	0.6516061*	0.0675443	-4.13
	White	8.211243**	8.309085	2.08
	Black	4.022619	4.21659	1.33
	Asian	12.49726**	13.16699	2.4
	Hispanic	8.222969**	8.765163	1.98
	SEL_1	1.477676*	0.2013947	2.86
	SEL_2	1.153793	0.1403366	1.18
Engineering	High SAT	0.9047356	0.1186007	-0.76
	Female	0.3129484*	0.0272715	-13.33
	White	1.082214	0.3328242	0.26
	Black	0.4469047**	0.1707906	-2.11
	Asian	1.914182***	0.7363658	1.69
	Hispanic	1.235478	0.4878186	0.54
	SEL_1	1.026117	0.1081682	0.24
	SEL_2	0.7272302*	0.0682624	-3.39
Medicine	High SAT	1.250375**	0.1236081	2.26
	Female	0.4483751*	0.0300103	-11.98
	White	1.477623	0.4211277	1.37
	Black	1.571518	0.4899229	1.45
	Asian	4.074057*	1.355871	4.22
	Hispanic	2.72844*	0.9184035	2.98
	SEL_1	1.767114*	0.1555174	6.47
	SEL_2	1.527983*	0.117292	5.52
Law	High SAT	1.05307	0.1010806	0.54
	Female	0.532628*	0.0327369	-10.25
	White	1.071168	0.2541125	0.29
	Black	0.9290095	0.2476361	-0.28
	Asian	1.022621	0.3269809	0.07
	Hispanic	1.649447***	0.4860261	1.7
	SEL_1	1.733115*	0.1418587	6.72
	SEL_2	1.477571*	0.1044076	5.52
Finance	High SAT	0.6071711*	0.0795891	-3.81
	Female	0.5274772*	0.0380182	-8.87
	White	0.9805601	0.2678918	-0.07
	Black	0.7008142	0.2184602	-1.14
	Asian	1.202198	0.4322664	0.51
	Hispanic	1.008566	0.3587628	0.02
	SEL_1	1.279606*	0.1221403	2.58

	SEL_2	1.094214	0.0886051	1.11
Business	High SAT	0.5017074*	0.0762838	-4.54
	Female	0.933438	0.0672023	-0.96
	White	1.264797	0.3973929	0.75
	Black	0.7525418	0.2635258	-0.81
	Asian	1.004615	0.4278729	0.01
	Hispanic	1.685708	0.6377548	1.38
	SEL_1	0.8457012***	0.085312	-1.66
	SEL_2	0.8743638***	0.0702008	-1.67
Executive	High SAT	0.6599525*	0.05751	-4.77
	Female	0.5969007*	0.0290457	-10.6
	White	1.440314***	0.299535	1.75
	Black	1.122374	0.2559966	0.51
	Asian	1.82383**	0.4861113	2.25
	Hispanic	1.58479***	0.4120601	1.77
	SEL_1	0.9887484	0.0658013	-0.17
	SEL_2	0.943069	0.0515714	-1.07

Number of obs: 18234 Pseudo R^2: 0.0264
* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C15. Multinomial Logit Estimates of Choice of Recent Occupation, 1951 cohort

Choice of First Occupation	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Occupations			Reference Group	
Education	High SAT	0.6127962	0.1955479	-1.53
	Female	1.946984*	0.3265463	3.97
	White	4.444981	4.650077	1.43
	Black	8.80E-16	4.56E-08	0
	Asian	5.11E-13	1.30E-06	0
	Hispanic	30.37986*	38.1468	2.72
	SEL_1	0.609062	0.1913457	-1.58
	SEL_2	1.035894	0.1798093	0.2
Higher Education	High SAT	1.9206*	0.3926869	3.19
	Female	0.3762572*	0.0580272	-6.34
	White	0.8870349	0.4548558	-0.23
	Black	1.134448	1.024077	0.14
	Asian	3.596677	3.326947	1.38
	Hispanic	1.126338	1.184268	0.11
	SEL_1	0.762671	0.1799016	-1.15
	SEL_2	1.084294	0.1794348	0.49

Health	High SAT	0.1609999***	0.1644523	-1.79
	Female	3.3457*	1.08004	3.74
	White	1.357923	1.434282	0.29
	Black	3.52E-16	3.14E-08	0
	Asian	3.075075	4.803686	0.72
	Hispanic	5.233694	8.209236	1.06
	SEL_1	1.077429	0.4738519	0.17
	SEL_2	0.6069405***	0.1744919	-1.74
Social Science	High SAT	0.930013	0.3749997	-0.18
	Female	3.238398*	0.9005783	4.23
	White	0.8233873	0.6437296	-0.25
	Black	1.75E-16	1.30E-08	0
	Asian	1.592562	2.223997	0.33
	Hispanic	1.80E-14	2.09E-07	0
	SEL_1	3.425775*	1.518323	2.78
	SEL_2	2.761732*	0.9424989	2.98
Math	High SAT	2.315728**	0.8174704	2.38
	Female	0.368244*	0.1209965	-3.04
	White	1.080453	1.144593	0.07
	Black	5.83138	7.926522	1.3
	Asian	1.85E-13	1.08E-06	0
	Hispanic	2.29E-14	2.96E-07	0
	SEL_1	1.022079***	0.3935087	0.06
	SEL_2	0.5248935***	0.1747734	-1.94
Engineering	High SAT	1.808804**	0.5310236	2.02
	Female	0.0603291*	0.0261108	-6.49
	White	0.8843733	0.6987081	-0.16
	Black	1.176104	1.615692	0.12
	Asian	8.034192***	10.00133	1.67
	Hispanic	1.79E-14	1.64E-07	0
	SEL_1	0.9497389	0.3060623	-0.16
	SEL_2	0.8781814	0.2282834	-0.5
Medicine	High SAT	0.9564924	0.2266116	-0.19
	Female	0.0613079*	0.0162338	-10.54
	White	1.57E+10*	1.84E+10	20.09
	Black	1.42E+10*	2.07E+10	16.01
	Asian	0.0037632	9118.957	0
	Hispanic	8.85E+09	.	.
	SEL_1	0.8961758	0.2045841	-0.48
	SEL_2	0.9335737	0.1621659	-0.4
Law	High SAT	0.9732638	0.2328421	-0.11
	Female	0.1012036*	0.0234394	-9.89
	White	2.35949	1.843835	1.1

	Black	1.135871	1.550502	0.09
	Asian	5.25E-13	1.38E-06	0
	Hispanic	1.51165	2.118147	0.29
	SEL_1	1.34089	0.3171363	1.24
	SEL_2	1.243073	0.2325212	1.16
Finance	High SAT	0.4998098**	0.1673016	-2.07
	Female	0.1320407*	0.0316925	-8.44
	White	1.674346	1.308542	0.66
	Black	1.83E-16	1.41E-08	0
	Asian	3.22E-13	1.01E-06	0
	Hispanic	1.504988	2.106687	0.29
	SEL_1	1.137349	0.3190626	0.46
	SEL_2	1.43038***	0.3006062	1.7
Business	High SAT	0.1376456*	0.0720418	-3.79
	Female	0.5856923*	0.0901458	-3.48
	White	1.218826	0.7135357	0.34
	Black	1.54E-16	9.38E-09	0
	Asian	1.32E-13	3.65E-07	0
	Hispanic	1.82E-14	1.25E-07	0
	SEL_1	0.6290886***	0.1690092	-1.73
	SEL_2	0.9417803	0.1566856	-0.36
Executive	High SAT	0.7114997***	0.1297396	-1.87
	Female	0.2169066*	0.0260804	-12.71
	White	1.674571	0.7465839	1.16
	Black	0.9511381	0.7851632	-0.06
	Asian	2.924774	2.548455	1.23
	Hispanic	1.234633	1.102552	0.24
	SEL_1	1.207715	0.2039458	1.12
	SEL_2	0.9170602	0.1146677	-0.69

Number of obs: 3687 Pseudo R^2: 0.0575

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C16. Multinomial Logit Estimates of Choice of Recent Occupation, 1989 cohort

Choice of First Occupation	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Occupations			Reference Group	
Education	High GPA Ratio	1.30529	0.2452331	1.42
	Female	2.085765*	0.2324985	6.59
	White	0.8204609	0.228755	-0.71
	Black	0.8250385	0.2499227	-0.63

	Asian	0.4914867***	0.1828176	-1.91
	Hispanic	0.8499806	0.2936414	-0.47
	SEL_1	1.076323	0.1432881	0.55
	SEL_2	0.7826436***	0.1041586	-1.84
Higher Education	High GPA Ratio	2.073341*	0.407951	3.71
	Female	1.634353*	0.2056756	3.9
	White	1.264216	0.4870043	0.61
	Black	0.9797099	0.4119714	-0.05
	Asian	1.335183	0.5904866	0.65
	Hispanic	1.524913	0.6792217	0.95
	SEL_1	1.681185*	0.2785539	3.14
	SEL_2	1.325895***	0.2163694	1.73
Health	High GPA Ratio	1.686322**	0.3612828	2.44
	Female	3.806208*	0.6499542	7.83
	White	1.370648	0.6535693	0.66
	Black	1.419811	0.7070256	0.7
	Asian	1.783304	0.9582653	1.08
	Hispanic	1.946704	1.041075	1.25
	SEL_1	0.4099018*	0.0784998	-4.66
	SEL_2	0.5504013*	0.089741	-3.66
Social Science	High GPA Ratio	1.168916	0.3485826	0.52
	Female	2.555175*	0.447766	5.35
	White	1.380487	0.7273136	0.61
	Black	0.9680971	0.5562311	-0.06
	Asian	2.481494	1.411265	1.6
	Hispanic	2.226273	1.300047	1.37
	SEL_1	1.260491	0.2734659	1.07
	SEL_2	1.365454	0.2792351	1.52
Math	High GPA Ratio	0.6509967	0.2609068	-1.07
	Female	1.289	0.211293	1.55
	White	0.8770393	0.3864104	-0.3
	Black	0.5407853	0.2769451	-1.2
	Asian	1.53349	0.7572538	0.87
	Hispanic	1.022399	0.5460448	0.04
	SEL_1	1.686728**	0.3877931	2.27
	SEL_2	1.4993***	0.3388449	1.79
Engineering	High GPA Ratio	1.429842	0.3711599	1.38
	Female	0.3713995*	0.0638192	-5.76
	White	1.8575	1.116511	1.03
	Black	1.400342	0.886046	0.53
	Asian	1.697171	1.167862	0.77
	Hispanic	2.343554	1.553797	1.28
	SEL_1	0.6474324**	0.1279908	-2.2
	SEL_2	0.5262451*	0.104182	-3.24

Medicine	High GPA Ratio	2.042116	1.332709	1.09
	Female	1.480346	0.6710176	0.87
	White	1.16E+09*	1.22E+09	19.84
	Black	2.34E+09*	2.55E+09	19.72
	Asian	3.81E+09*	4.45E+09	18.9
	Hispanic	1.19E+09	na	Na
	SEL_1	0.8918701	0.4581953	-0.22
	SEL_2	0.2595124**	0.1788751	-1.96
Law	High GPA Ratio	1.161726	0.2888344	0.6
	Female	0.6861203*	0.0870814	-2.97
	White	1.11191	0.4296046	0.27
	Black	1.364188	0.5614557	0.75
	Asian	1.056247	0.4853996	0.12
	Hispanic	1.65317	0.7295956	1.14
	SEL_1	1.83265*	0.2968855	3.74
	SEL_2	0.9182509	0.1613467	-0.49
Finance	High GPA Ratio	0.9920985	0.1949029	-0.04
	Female	0.5076367*	0.0526584	-6.54
	White	1.770769	0.645496	1.57
	Black	1.318547	0.5118024	0.71
	Asian	2.103971***	0.8575737	1.82
	Hispanic	2.079183***	0.8536165	1.78
	SEL_1	0.9202254	0.1189371	-0.64
	SEL_2	0.7797803***	0.0995282	-1.95
Business	High GPA Ratio	0.7651141	0.154138	-1.33
	Female	1.10166	0.1085436	0.98
	White	0.9881307	0.2797535	-0.04
	Black	0.8448316	0.2585378	-0.55
	Asian	1.076776	0.3639359	0.22
	Hispanic	0.902586	0.3154161	-0.29
	SEL_1	0.5908163*	0.0763159	-4.07
	SEL_2	0.6812609*	0.0809843	-3.23
Executive	High GPA Ratio	0.9160336	0.1650789	-0.49
	Female	1.054524	0.0960036	0.58
	White	1.74704***	0.5633759	1.73
	Black	1.405561	0.4802587	1
	Asian	2.052563**	0.7421258	1.99
	Hispanic	2.009372***	0.7339621	1.91
	SEL_1	0.8528425	0.0994577	-1.36
	SEL_2	0.7273098*	0.0828754	-2.79

Number of obs: 9161 Pseudo R^2: 0.0227

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C17. Multinomial Logit Estimates of Choice of Recent Occupation, 1976 cohort

Choice of First Occupation	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Occupations			Reference Group	
Education	High GPA Ratio	1.023568	0.1556648	0.15
	Female	2.56846*	0.2463892	9.83
	White	0.8857994	0.2993397	-0.36
	Black	0.7998653	0.295099	-0.61
	Asian	0.2218956**	0.1510431	-2.21
	Hispanic	1.011034	0.4358314	0.03
	SEL_1	0.7150506*	0.083479	-2.87
	SEL_2	0.7719122*	0.073494	-2.72
Higher Education	High GPA Ratio	2.998647*	0.3371394	9.77
	Female	0.9444028	0.0728778	-0.74
	White	1.186576	0.3748714	0.54
	Black	0.9059116	0.3223263	-0.28
	Asian	1.125734	0.4658982	0.29
	Hispanic	1.570569	0.6082814	1.17
	SEL_1	2.751077*	0.277329	10.04
	SEL_2	1.785565*	0.1679705	6.16
Health	High GPA Ratio	1.096996	0.1538153	0.66
	Female	6.059022*	0.7180834	15.2
	White	1.331304	0.5478277	0.7
	Black	0.9960976	0.4358456	-0.01
	Asian	1.203259	0.6447029	0.35
	Hispanic	0.8854602	0.4715411	-0.23
	SEL_1	0.2418691*	0.0378036	-9.08
	SEL_2	0.7444571*	0.0659858	-3.33
Social Science	High GPA Ratio	1.463608**	0.2747424	2.03
	Female	1.828294*	0.2131243	5.18
	White	0.7483352	0.2895091	-0.75
	Black	0.7865355	0.3394368	-0.56
	Asian	1.107942	0.5508369	0.21
	Hispanic	0.83822	0.4282614	-0.35
	SEL_1	2.338713*	0.3348233	5.93
	SEL_2	1.74329*	0.2318813	4.18
Math	High GPA Ratio	1.546244*	0.2605121	2.59
	Female	0.6353638*	0.0655476	-4.4
	White	8.042117**	8.137104	2.06
	Black	3.851358	4.035358	1.29
	Asian	12.18779**	12.83922	2.37
	Hispanic	7.797678**	8.308866	1.93
	SEL_1	1.701403*	0.2212005	4.09

	SEL_2	1.207696	0.1467634	1.55
Engineering	High GPA Ratio	1.163325	0.1625017	1.08
	Female	0.3141714*	0.027301	-13.32
	White	1.080222	0.332239	0.25
	Black	0.4514836**	0.1723912	-2.08
	Asian	1.927743***	0.7414906	1.71
	Hispanic	1.249472	0.4928697	0.56
	SEL_1	1.020633	0.1028668	0.2
	SEL_2	0.7317513*	0.0685968	-3.33
Medicine	High GPA Ratio	3.53644*	0.338292	13.2
	Female	0.442685*	0.0296685	-12.16
	White	1.458706	0.417942	1.32
	Black	1.665018	0.5210453	1.63
	Asian	4.161661*	1.391976	4.26
	Hispanic	2.742563*	0.9270549	2.98
	SEL_1	2.199909*	0.1881416	9.22
	SEL_2	1.675877*	0.1295618	6.68
Law	High GPA Ratio	1.97448*	0.1945915	6.9
	Female	0.5297084*	0.0324675	-10.37
	White	1.064702	0.2529465	0.26
	Black	0.9520289	0.2537892	-0.18
	Asian	1.03326	0.330698	0.1
	Hispanic	1.659833***	0.4892336	1.72
	SEL_1	1.887237*	0.1492315	8.03
	SEL_2	1.538141*	0.108869	6.08
Finance	High GPA Ratio	1.311023**	0.1601862	2.22
	Female	0.5386905*	0.0387001	-8.61
	White	0.998184	0.272678	-0.01
	Black	0.7503803	0.2337517	-0.92
	Asian	1.251819	0.4499331	0.62
	Hispanic	1.077966	0.3831129	0.21
	SEL_1	1.181352***	0.1093828	1.8
	SEL_2	1.085644	0.0879194	1.01
Business	High GPA Ratio	0.4762806*	0.0801326	-4.41
	Female	0.9631815	0.0691772	-0.52
	White	1.287999	0.4044935	0.81
	Black	0.7834352	0.2741563	-0.7
	Asian	1.027292	0.4373274	0.06
	Hispanic	1.77473	0.6709731	1.52
	SEL_1	0.7103249*	0.0696644	-3.49
	SEL_2	0.8322019**	0.0668264	-2.29
Executive	High GPA Ratio	1.048864	0.09279	0.54
	Female	0.6079188*	0.0294646	-10.27
	White	1.458559***	0.3032067	1.82

	Black	1.17308	0.267283	0.7
	Asian	1.873033**	0.4989448	2.36
	Hispanic	1.6615***	0.4315904	1.95
	SEL_1	0.9105004	0.058506	-1.46
	SEL_2	0.9297784	0.0508257	-1.33

Number of obs: 18234 Pseudo R^2: 0.0289

* Significant at 1%, ** Significant at 5%, *** Significant at 10%

Table C18. Multinomial Logit Estimates of Choice of Recent Occupation, 1951 cohort

Choice of First Occupation	Explanatory Variable	RRR	Std. Error	Z-Statistics
Other Occupations			Reference Group	
Education	High GPA Ratio	1.122177	0.1930529	0.67
	Female	2.045035*	0.3577774	4.09
	White	4.382927	4.584368	1.41
	Black	3.51E-17	9.24E-09	0
	Asian	6.95E-14	4.84E-07	0
	Hispanic	30.23662*	37.96071	2.72
	SEL_1	0.5469769***	0.1723532	-1.91
	SEL_2	0.9813252	0.1802805	-0.1
Higher Education	High GPA Ratio	1.616793*	0.2675741	2.9
	Female	0.4219077*	0.0677368	-5.38
	White	0.890406	0.4558351	-0.23
	Black	1.143	1.031081	0.15
	Asian	3.138128	2.910136	1.23
	Hispanic	1.032121	1.083356	0.03
	SEL_1	0.7332084	0.1760418	-1.29
	SEL_2	0.9174698	0.1630356	-0.48
Health	High GPA Ratio	0.9323873	0.2804878	-0.23
	Female	3.376536*	1.134701	3.62
	White	1.331024	1.404752	0.27
	Black	1.44E-17	6.52E-09	0
	Asian	3.255992	5.08326	0.76
	Hispanic	5.451421	8.549378	1.08
	SEL_1	0.919783	0.4043167	-0.19
	SEL_2	0.6019966***	0.1820758	-1.68
Social Science	High GPA Ratio	1.720854**	0.438891	2.13
	Female	3.936933*	1.162306	4.64
	White	0.815792	0.6388212	-0.26
	Black	6.91E-18	2.65E-09	0
	Asian	1.526012	2.131927	0.3

	Hispanic	2.29E-15	7.20E-08	0
	SEL_1	3.051147**	1.353272	2.52
	SEL_2	2.298035**	0.8080584	2.37
Math	High GPA Ratio	2.264524**	0.7772561	2.38
	Female	0.445673**	0.1523144	-2.36
	White	1.058569	1.119333	0.05
	Black	5.785205	7.856393	1.29
	Asian	2.06E-14	3.21E-07	0
	Hispanic	2.49E-15	8.81E-08	0
	SEL_1	0.9142499	0.3603623	-0.23
	SEL_2	0.3946192*	0.1405488	-2.61
Engineering	High GPA Ratio	0.7549758	0.1917196	-1.11
	Female	0.053976*	0.0237712	-6.63
	White	0.9128303	0.7201429	-0.12
	Black	1.166792	1.601431	0.11
	Asian	8.654837***	10.78	1.73
	Hispanic	2.38E-15	6.07E-08	0
	SEL_1	1.320388	0.449557	0.82
	SEL_2	1.039422	0.2960005	0.14
Medicine	High GPA Ratio	0.9732647	0.1702445	-0.15
	Female	0.0611769*	0.016488	-10.37
	White	1.56E+10*	1.82E+10	20.07
	Black	1.40E+10*	2.04E+10	15.99
	Asian	0.0005237	3467.488	0
	Hispanic	8.87E+09	na	na
	SEL_1	0.9359321	0.2255315	-0.27
	SEL_2	0.9590834	0.1832211	-0.22
Law	High GPA Ratio	1.225975	0.2247325	1.11
	Female	0.1078454*	0.0256278	-9.37
	White	2.343838	1.831324	1.09
	Black	1.139249	1.555125	0.1
	Asian	6.97E-14	4.98E-07	0
	Hispanic	1.466804	2.056339	0.27
	SEL_1	1.241021	0.3088198	0.87
	SEL_2	1.145007	0.2334787	0.66
Finance	High GPA Ratio	2.100213*	0.460046	3.39
	Female	0.1647329*	0.0405922	-7.32
	White	1.588139	1.241309	0.59
	Black	6.61E-18	2.67E-09	0
	Asian	4.03E-14	3.35E-07	0
	Hispanic	1.340704	1.878657	0.21
	SEL_1	0.7354443	0.2162181	-1.05
	SEL_2	1.023528	0.2339971	0.1

Business	High GPA Ratio	0.8234978	0.1385352	-1.15
	Female	0.5732762*	0.0921333	-3.46
	White	1.205184	0.7044953	0.32
	Black	6.37E-18	1.93E-09	0
	Asian	2.01E-14	1.50E-07	0
	Hispanic	2.56E-15	4.83E-08	0
	SEL_1	0.5763708*	0.1579111	-2.01
	SEL_2	0.9937813	0.1771117	-0.04
Executive	High GPA Ratio	1.440884*	0.1792919	2.94
	Female	0.2439256*	0.030548	-11.27
	White	1.654778	0.7380876	1.13
	Black	0.9666019	0.7997087	-0.04
	Asian	2.833592	2.476635	1.19
	Hispanic	1.189832	1.063281	0.19
	SEL_1	0.98334	0.171179	-0.1
	SEL_2	0.7813607***	0.1052763	-1.83

Number of obs: 3687 Pseudo R^2: 0.0552

* Significant at 1%, ** Significant at 5%, *** Significant at 10%