

# The Relationship between College Major Prestige/Status and Post-baccalaureate Outcomes

Sociological Perspectives

1–21

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DOI: 10.1177/0731121418803325

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## Abstract

Since Blau and Duncan's seminal work on social mobility, researchers have used subjective measures of occupational prestige to understand either the change or stability in generational socioeconomic statuses. While subjective measures of occupational prestige have been developed, the creation of measures of educational status and prestige that might serve as parallels to these measures has received less attention. In this paper, we attempt to create such a measure and then use it to test the relationship between educational status (measured through the status of college majors) and three important post-baccalaureate outcomes: income, educational attainment, and occupational prestige. Our results, based on a survey of 718 undergraduate seniors, shows that majors differ in prestige just as occupations do. Then, using the National Survey of College Graduates, we confirm that those differences are meaningful in predicting early career incomes, the attainment of an advanced degree, and the prestige rating of college graduates' occupations.

## Keywords

higher education, occupational prestige, educational prestige, college majors, social mobility

A great deal of research has sought to determine the variables associated with social mobility. Understanding the mechanisms whereby people move up (or down) in socioeconomic status has been a major focus of the literature on stratification for decades. Numerous factors (including social networks, family wealth, and even gender and race) affect intergenerational and intragenerational mobility. Whatever the intervening variables associated with status attainment and/or social mobility, measures of people's origins and outcomes almost invariably include some operationalization of their or their parents' occupational status or prestige. The long-standing use of occupational prestige to measure the change and/or stability in occupational mobility suggests that it is not simply a substitute for educational attainment or income in determining one's socioeconomic status. In fact, it is used in composite form with and separately alongside education and income measures in analyses of racial-ethnic social mobility (Flippen 2013; Gullickson 2010; Waldinger and Gilbertson 1994), gendered social mobility (Aisenbrey, Evertsson, and Grunow 2009; N. J. Davis and Robinson 1998; K. Yamaguchi and Wang 2002), and general social mobility (Lin 1999; Marsden and Hurlbert 1988; Mouw 2003).

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Since Peter Blau and Otis Duncan's (1967) seminal work in this area, researchers have consistently found education to be an important mediator between family origins and one's eventual social class. While education can be a measure of social class, it also has independent effects on the occupational components of one's social class. Until recently, those effects were mainly operationalized in terms of "educational attainment" and represented in models as "years of education." As scholars began to focus on the unique impact of postsecondary education, beyond its role as the avenue whereby people could continue to accumulate years of schooling, some began to pay particular attention to the influences on and effects of students' choices of college majors. Consistent with the rest of the work on education's effect on social mobility, researchers uncovered the complexities of the relationship between college major, educational attainment, and occupational income (Johnson and Elder 2002; Mullen, Goyette, and Soares 2003; Roksa and Levey 2010; B. Useem 1989).

While prestige is an important characteristic of the occupations parents and students might have, attempts at gauging prestige in the education of parents and students have focused almost exclusively on either the source of that education or, somewhat tautologically, the outcomes associated with it. One would expect that college fields of study—such as occupational fields—are stratified in the public imagination as prestigious or not, and this subjective evaluation differs in a meaningful way from the objective measures associated with the value of a college major.

We argue that a subjective measure of college-major prestige, such as occupational prestige, can be determined, *and* it can be used in analyses of the three common socioeconomic outcomes: income, educational attainment, and occupational prestige. Like Otis Duncan (1961) and others, we believe that the best way to determine people's perceptions of the value, or worth, of college majors is to directly ask members of the society to evaluate them. In this paper, we pursue this line of thinking in two ways. First, we survey 718 students about their own evaluation of 10 disciplinary clusters. Then, using the *National Survey of College Graduates*, we measure the predictive power of these prestige ratings on three important post-baccalaureate outcomes: income, advanced-degree attainment, and occupational status.

## Background

Whether the focus is on the mobility of individuals within their own lifetime (Sorokin 1927) or the change in social position experienced from one family generation to the next (Becker and Tomes 1979; Chetty et al. 2014; Corak 2013), trying to understand the influence of one's social origins on their final destinations has been a long-standing concern for researchers interested in social stratification (Blau and Duncan 1967; DiPrete and Grusky 1990; Hout 1988; Kerckhoff 1976; Mouw 2003; Sewell, Haller, and Ohlendorf 1970). Most of the research in this area shows that where one begins in life, often measured through parental holdings of status markers such as occupational prestige, income, and education, is predictive of where one ends up in life. These outcomes are measured in the same way, as the child's holdings of the same status-marking resources: occupational prestige, income, and education.

Ultimately, these status indicators—whether measured on the origins or the outcomes side of the model—are based primarily on occupational information (Chan and Goldthorpe 2004; Hollingshead 1975). As modern society holds the idea that individual levels of wealth, prestige, and power depend more on what one does rather than who one is, a person's occupation plays an important role in their rankings in other hierarchies (Haller and Portes 1973). Although occupational prestige/status cannot "exhaust the range of status variations," it is the most representative measure of status in modern society (Haller and Portes 1973:54).

Researchers have sought to better understand the social status of occupations, recognizing that workers not only benefit from the wages of their work but also from the associated status of their work. This status, alternately referred to as "occupational prestige," reflects an evaluation of an

occupational sector—in terms of reputation and respect—by members of society. The earliest survey on occupational prestige was North and Hatt's National Opinion Research Center (NORC) survey in 1947, which covered 90 titles. This instrument created a subjective assessment of the social standing of occupations by having workers evaluate the job categories/titles on a scale ranging from excellent to poor. The NORC survey became the foundation of Duncan's (1961) Socioeconomic Index for All Occupations (SEI).

Duncan's SEI is a composite of two objective measures and a subjective one. The objective measures are a weighted average of the proportion of workers who have attained a particular level of schooling ("occupational education") and the proportion of workers who annually earn a particular amount of income ("occupational earnings"). These scores, sometimes described as "prestige scores," do not really measure prestige. They measure education and income, the customary way scholars determine an individual's socioeconomic status or class (Warren, Sheridan, and Hauser 1998). They are, therefore, more accurate measures of the socioeconomic status of an occupation, not that occupation's standing or prestige. Recognizing the importance of "occupational prestige" as something different from these, Duncan also used the subjective measures of occupational prestige included in the NORC survey as the third leg of his composite index. Future iterations of his SEI also included a subjective measure of prestige drawn from updates of the NORC survey (Nakao and Treas 1992, 1994; Stevens and Cho 1985; Stevens and Featherman 1981).

In 1971, another important tool for measuring social mobility was created: Siegel's Occupational Prestige Score (OPS). Unlike Duncan's SEI, Siegel's measure of occupational status is purely based on subjective evaluations of occupation, again using the NORC survey methodology. Scores were created by having respondents situate occupational titles into nine categories (e.g., bottom, middle, top) reflecting their subjective sense of each occupation's social standing or value (Siegel 1971). The occupations are then ranked (scored) based on where they fall among these responses. Updates have been made to both Siegel's OPS and the NORC survey to represent possible changes in the reputations of these occupations (Hauser and Featherman 1977; Nakao, Hodges, and Treas 1990; Nakao and Treas 1994; Stevens and Hoisington 1987). These subjective measures of occupational hierarchy have been shown to be consistent over time and across societal boundaries (Hauser and Warren 1997; Siegel 1971; Treiman 1977).

### *Education in Models of Social Mobility*

Some version of these subjective indices of occupational status has been used in studies investigating both the effects of parents' occupational statuses on educational outcomes (Conley 2001; Elman and O'Rand 2004; Goyette and Xie 1999; Hagan, MacMillan, and Wheaton 1996; Hopcroft 2005; Kalmijn 1994; Kuo and Hauser 1995; Stolzenberg 1994) and the impact of education on a student's occupational status (Kerckhoff, Raudenbush, and Glennie 2001; Orr 2003; Torche 2011; Warren, Sheridan, and Hauser 2002).

The influential Blau and Duncan (1967) status attainment model supports this measurement of occupational status. That model uses students' education as an intervening variable that is affected by parents' education and occupation and, in turn, affects the student's occupational outcomes. While variations of this model (e.g., Sewell, Haller, and Portes's 1969 Wisconsin model) have added other important institutional, cultural, and social psychological components to it, the positive impact of education on one's future occupational outcomes has been a fairly consistent finding. Research has shown that college participation, in particular, has demonstrable benefits for one's social mobility. Graduating from any college and in practically any field is likely to yield greater earnings for the college graduate than those of their peers who only graduate from high school (Arum and Hout 1998; Pascarella and Terenzini 1991). As

a result, many analyses of social mobility include either a basic measure of years of education or a measure indicating holdings of postsecondary credentials.

Since the 1990s, researchers have begun to look beyond the educational attainment or numerical-participation approach—what Charles and Bradley (2002:574) refer to as the “tertiary” or “vertical” dimension of status attainment—to more “horizontal” characteristics of students’ academic careers. They argue that as access to college has increased, the value of merely completing an additional four years of schooling beyond high school has decreased (Gerber and Cheung 2008; Torche 2011). Employers could no longer make distinctions between prospective employees simply by counting up the years they were in school or checking if they had a diploma. Eventually, differences between applicants’ human capital holdings would become more symbolic than numeric. Researchers began to wonder if the benefits of educational attainment should be analyzed differently, shifting our attention from “the ‘quantitative’ dimension—the association between social background and years of schooling completed or educational transitions made—to the ‘qualitative’ dimension of stratification—the type of schooling attained at any particular level” (Torche 2011:768). This more qualitative and subjective dimension of educational attainment is the focus of our analysis here.

### *Prior Attempts to Do Research on Educational Status*

While researchers have sought to measure occupational status and prestige, measurements of educational status and prestige are less developed. Attempts to measure status or prestige of one’s educational background have focused on two qualities of that education: the quality of the institution students attended (Bobbitt-Zeher 2007; Kingston and Lewis 1990; M. Useem and Karabel 1985; Velez 1985) and the status of the field of study or major students graduated in.

Proxies for institutional quality have included institutional control (i.e., public or private), national rankings by trade publications (e.g., *Barron’s*, *U.S. News and World Report*), institutional resources (e.g., percentage of faculty with PhDs, student-faculty ratios), value-added outcome measures (e.g., retention rates, graduation rates), and, most commonly, measures of institutional selectivity (Astin and Henson 1977; Brewer, Eide, and Ehrenberg 1999; Dale and Krueger 1999; Loury and Garman 1995; Tsinidou, Gerogiannis, and Fitsilis 2010). With notable exceptions (e.g., Bobbitt-Zeher 2007), the research shows that attending a high-quality school has a small, but significant, impact on both higher salaries and the advancement to pursuing graduate degrees (Brand and Halaby 2006; Dale and Krueger 2002; Monks 2000). Beyond its role as an important part of a college student’s experience, is institutional quality a comparable proxy for the way occupational status/prestige is measured? We argue it is not. In both Duncan’s SEI and Siegel’s OPS, where work takes place is irrelevant to either objective or subjective evaluations of an occupation’s worth.

Clearly, the educational field (e.g., accounting, engineering, education) is a much more intuitively convincing analog for occupational fields (e.g., accounting, engineering, education). Therefore, if a model purports to measure educational status or prestige, doing so by determining the value of a college graduate’s field of study or major seems to be the more practical approach. There have been attempts to create status hierarchies of fields. In practically every case, these evaluations of disciplinary clusters privileged the natural sciences, either in their focus or their findings (Hearn and Olzak 1981; Kuhn 1970). Janice Lodahl and Gerald Gordon (1972, 1973) and John Braxton and Lowell Hargens (1996) determined the status of disciplinary clusters based on the level of paradigmatic knowledge development in those fields. By that definition, they argue that physics (a high-paradigm field) is a prestigious field while sociology is not. Likewise, Anthony Biglan (1973a, 1973b) places disciplinary clusters in high- and low-status categories based on consensus and paradigmatic knowledge (hard/soft) but also based on the discipline’s concern with applying knowledge to practical concerns (pure/applied)

Other researchers determined disciplines' statuses based on the congruence of the field with high-earning occupations; the more applicable the field was to the work done in a high-paying occupation, the higher the status the field earned. These analyses placed economics, engineering, and biological sciences in the high-status category and art, English, history, political science, and psychology in the low-status category. They operationalized these strong connections in terms of the probability at which majors either fed directly into high-status occupations or were described as doing so in course catalogs, arguing that this kind of targeted education focuses on specific skills and developing marketable credentials (Bourdieu 1988; Hearn and Olzak 1981; Kerr 1991; Riley 1982; Wilson and Smith-Lovin 1983).

In some ways, these measures approximate the objective measures—occupational education and occupational income—of occupational status used in Duncan's SEI. The first is a measure of what we might call "educational education," where the status of the major is based on how much concrete, easily measured knowledge is accumulated by students in those fields. The second is a measure of "educational income," where the major's status is based on how much holders of the degree might earn. Unlike the subjective measures of occupational prestige, neither of these approaches is based on the subjective evaluations of people who have to choose among these fields. Instead, the value of academic fields is either based on researchers' subjective evaluations of the content of these fields (Biglan 1973a; Braxton and Hargens 1996) or on the conflation of prestige/status and earnings potential (Kerr 1991). As no study evaluating the status/prestige of majors actually asks respondents to either rank order or rate academic fields, none of these approaches measures society's subjective assessment of the social standing of one's education in the way Siegel's OPS or the third factor of Duncan's SEI measures society's subjective assessment of occupational social standing.

## Current Study

This paper is a response to this difference between the subjective evaluation of occupational prestige and the mostly objective evaluation of educational prestige. We believe that college fields of study are arrayed on a prestige scale in the public imagination in the same way Cecil North and Paul Hatt (1947), Duncan (1961), and Paul Siegel (1971) showed that occupational fields are. We believe it is important to understand what these distinctions might be for two reasons.

First, research on students' decision making regarding college majors shows that students do not simply choose majors based on their assumptions about earnings (Beffy, Fougere, and Maurel 2012; Beggs, Bantham, and Taylor 2006; Long, Goldhaber, and Huntington-Klein 2015; Louie 2004; Ma 2009; Monaghan and Jang 2017; Morgan, Gelbgiser, and Weeden 2013; Mullen 2013; Pabler and Hell 2012; Song and Glick 2004; Zafar 2013). Investigations into these decisions have produced a broad range of factors that motivate them, from expressive individualism (e.g., interest in the material, the major reflects students' humanitarian values) to instrumentalism (e.g., access to particular jobs, ability to succeed in the major) to interpersonal factors (e.g., esteem of peers and parents, fondness for professors). While it is beyond the scope of this study to determine exactly how any of these factors might shape student evaluations of majors as important or worthy of esteem, it is likely that some of them combine to make a major "esteemed" and "high status" enough to consider when choosing a major. Creating a measure representing this evaluation is important for being able to model what is, undoubtedly, an important part of students' decision-making process.

But it is not students alone who think about the symbolic value of college disciplines. In a 2012 survey of employers aimed at determining what matters when they hire recent college graduates, in a list of eight attributes, college major came in third under internships and employment during college, two concrete measures of human capital accumulation (Chronicle of Higher Education 2012). The human capital attributes associated with college degrees such as relevance of course work and college grade-point average (GPA) were nearly at the bottom, followed by

“college reputation.” Research is clear that college disciplines matter in post-baccalaureate placements, but if employers barely care about the actual content learned in a discipline or students’ mastery of that content evidenced by GPAs, the value of the college major becomes mostly symbolic.<sup>1</sup> It signals something important, but the research is unclear about what that something (or somethings) might be. We argue that status/prestige, a subjective but ultimately measurable attribute, may be one of those things.

Like the rank ordering of occupational prestige, a prestige ranking (or more precisely, rating) of college majors can best be determined by asking the sector of society—in this case, college students—most engaged in selecting among them to evaluate their worth or value. Rather than infer the prestige of majors by mapping them onto post-baccalaureate outcomes or other correlated data (e.g., popularity, institutional resource allocation), we set out to determine what reputation majors have in the minds of the students who choose them. We do this by going directly to the source, asking students to score 10 broad disciplinary clusters as either having very low status/prestige, an average level of status/prestige, or very high status/prestige.

Ultimately, the aggregate (average) status ratings for our respondents represent an important portion of society’s—students who choose one of them—evaluation of each of these clusters of majors. We use these status ratings to determine if there are real relationships between these subjective assessments of college disciplines and important post-baccalaureate outcomes, particularly those outcomes that are often related to occupational status—income and pursuit of advanced degrees—and occupational status itself. We make the following predictions:

**Hypothesis 1 (H1):** The status of one’s college major (as a member of a disciplinary cluster) will be positively correlated with that person’s post-baccalaureate income. The higher status a college graduate’s major has, the more income that graduate will earn.

**Hypothesis 2 (H2):** The status of one’s college major (as a member of a disciplinary cluster) will be positively correlated with that person’s attainment of advanced degrees. The higher the status of the undergraduate major, the more likely it is that this graduate will earn an advanced degree.

**Hypothesis 3 (H3):** The status of one’s college major (as a member of a disciplinary cluster) will be positively correlated with that person’s occupational prestige. The higher status a graduate’s major has, the higher that graduate’s occupation’s prestige rating is.

## **Data and Method**

To determine student ratings of the college major clusters, we used data from a Web-based survey that gathered information from undergraduate students at nine colleges and universities: two large comprehensive public universities, three large comprehensive private universities, two medium-sized private universities, and two small private liberal arts colleges.<sup>2</sup> The survey solicited demographic data and detailed information about students’ academic choices (e.g., influences, aspirations, courses taken). The survey targeted students who were entering their seventh semester of college at each of the participating institutions. Late-career students were chosen because most students at this stage are done choosing the majors they will graduate with. Seeking to better understanding of double-majoring as a phenomenon, the original researchers oversampled students with two majors. As our analysis seeks to isolate possible differences between the evaluations of students who are exclusively in a particular discipline and those who are not, the sample analyzed in this paper has been reduced. We exclude students with either cross-disciplinary double-majors (e.g., business and physical science) or interdisciplinary majors (e.g., ethnic studies). Our paper uses only those 718 students with either a single major represented in one of 10 broad disciplinary clusters described below or two majors within the same cluster (e.g., an English and philosophy double-major in “humanities”).<sup>3</sup>

Additional data for this study were taken from the *National Survey of College Graduates* (NSCG; National Science Foundation 2003). This National Science Foundation database was composed of a sample of U.S. residents under the age of 76 who had received at least a bachelor's degree from a U.S. institution (prior to April 2000). The NSCG contain information on fields and levels of education, occupation, earnings, and demographic characteristics. We used these data to estimate the relationship between undergraduate college-major status and three post-baccalaureate outcomes: occupational status, occupational income, and advance degree attainment. To approximate the relationship of undergraduate major on early career outcomes, we included only those graduates who were within 10 years of graduating with their first bachelor's degree who were working full-time in 2003 when the sample was taken. This reduced the NSCG sample from 100,400 to 13,734 respondents.

### *College-discipline Status*

Students were asked to score 10 disciplinary clusters—agriculture, arts, business, communications, education, engineering, health-related fields, humanities, natural sciences, and the social sciences—as either having (1) very low status or prestige, (2) an average level of status or prestige, or (3) very high status or prestige.<sup>4</sup> They were given examples of majors that might fit within each cluster; these examples are similar to those shown in Table 1. Students were asked to rate these clusters in terms of their own perspective on the major. We included all students, including those students majoring in any of the 10 clusters that they were rating. The average disciplinary cluster rating was 2.23 (range = 1.85–2.76).

These 10 ratings can be used to determine their covariance with other important higher education outcomes (e.g., post-baccalaureate income) likely affected by the status of students' majors. We use them this way in our analysis of respondents in the 2003 National Survey of College Graduates. In those data, undergraduate (i.e., bachelors) majors—of which there were more than 150 for respondents to choose—were grouped into the 10 major disciplinary clusters listed above and a residual category. Our classification of each major into the disciplinary clusters is based, primarily, on the guidelines established by the National Science Foundation in its classification of fields of study (National Science Foundation 2015).<sup>5</sup> Given that the aggregated ratings of our 718 undergraduates serve as a proxy for, at least, the portion of society represented on college campuses, each disciplinary cluster was then assigned the average rating for that cluster. These ratings of each cluster's status ("status of discipline") served as independent variables in our second analysis. As we had no ratings for the majors in the "residual category," respondents who graduate with degrees in those fields were culled from the analysis. We also excluded NSCG respondents with more than one major; the final NSCG sample was 10,051 respondents.

### *Dependent Variables*

For the analysis examining the impact of college-major status on post-baccalaureate income, we used three variables available in the 2003 NSCG. Respondents were asked to indicate their earned income (not including bonuses, overtime, or additional compensation) and at what rate (e.g., hourly, weekly, etc.). These two variables were then recoded into a variable that represents the annual income. This response was logged. To determine the relationship between status and advanced degree attainment, students who received additional degrees beyond the first or primary bachelors were coded as one (1); BA-only students were coded as zero (0). We measured occupational prestige using respondents' answers to the following prompt: "Using the job category list . . . choose the code that best describes the work you were doing on your principal job during the week of October 1." This list included a mixture of narrow categories (e.g., "sociologists," "elementary teachers"), broad related categories (e.g., "lawyers and judges"), and a residual category

**Table 1.** Student Prestige Ratings of Disciplinary Clusters ( $N = 718$ ).

% Majors in sample	% Majors in NSCG	Cluster (with examples)	A <sup>a</sup>	B <sup>b</sup>	C <sup>c</sup>
			Student view: Only majors	Student view: Non-majors	Student view: All majors
2.2	2.0	Agriculture (e.g., agriculture, ecology, forestry)	2.69**	1.87 (7)	1.89 (7)
4.5	3.5	Arts (e.g., fine arts, music, drama, film, and video)	2.81**	2.10 (5)	2.13 (4)
22.4	24.3	Business and Economics (e.g., finance, economics, marketing)	2.74**	2.24 (4)	2.36 (3)
2.8	2.9	Communications (e.g., journalism, speech)	2.35**	1.84 (8)	1.85 (7)
8.8	10.9	Education (e.g., elementary, secondary, special)	2.94**	2.34 (3)	2.39 (3)
12.9	10.9	Engineering (e.g., civil, chemical, mechanical)	2.96**	2.73 (1)	2.76 (1)
4.2	8.9	Health-related Fields (e.g., nursing, soc. work, but NOT “pre-med”)	2.83**	2.34 (3)	2.36 (3)
8.5	6.8	Humanities (e.g., English, history, Spanish)	2.45**	1.86 (7)	1.91 (6)
15.8	13.5	Natural Sciences (e.g., biology, chemistry, math)	2.81**	2.58 (2)	2.62 (2)
17.5	16.2	Social Sciences (e.g., sociology, political science, psychology)	2.50**	1.99 (6)	2.07 (5)
Average for all Disciplinary Clusters			2.73**	2.18	2.23

Note. NSCG = National Survey of College Graduates.

<sup>a</sup>Column A lists ratings of students majoring in the cluster. Asterisks indicate differences between “Only Majors” (A) and “Non-Majors” (B).

<sup>b</sup>Column B lists ratings of students not majoring in the cluster—rank orders in parentheses (ties represent statistically identical means at  $p < .01$ ).

<sup>c</sup>Column C lists ratings for all students—rank orders in parentheses (ties represent statistically identical means at  $p < .01$ ).

\* $p < .05$ . \*\* $p < .01$ .

“other occupations not listed.” We assigned the occupational prestige ratings collected in the 1989 General Social Survey (J. Davis et al. 1991) to each of the job categories available to respondents in the aforementioned list. For example, sociologists were assigned the number 61 and elementary school teachers were assigned the number 64. When the single category available to respondents (e.g., “lawyers and judges”) included related categories that have their own ratings (i.e., lawyers = 75 and judges = 72), we averaged the two ratings; therefore, 73.5 was the rating “lawyers and judges” received. Those respondents who chose “other occupations” ( $n = 1,078$ ) were excluded from this analysis. We use ordinary least squares (OLS) regression modeling to determine the relationship between college major status evaluations and these three dependent measures.

### Control Variables

Two of the dependent variables, advanced degree and logged income, are included in the “Job Status” regression model because of these objective socioeconomic indicators’ long-standing



association with the subjective measure of occupational prestige (Duncan 1961; Ganzeboom, DeGraaf, and Trieman 1992; Stevens and Featherman 1981; Wegener 1992).

To account for other characteristics of the undergraduate experience that are likely related to post-baccalaureate outcomes, we control for four characteristics of the graduate's undergraduate training. Two of them are related to the graduates' baccalaureate majors. The first, whether the graduate perceives their job as closely related to their major, is used as a proxy for the value of industry-specific human capital found to have a positive impact on occupational outcomes (Kinsler and Pavan 2015; S. Yamaguchi 2012). The other is drawn from the "objective" measure of discipline status created by Biglan (1973a, 1973b), which places disciplines in four categories based on the degree (soft/hard) of paradigmatic knowledge and (pure/applied) concern for applied knowledge engaged in by the disciplines: soft pure (arts, humanities, social sciences), hard pure (natural sciences), soft applied (education, communications, and business), and hard applied (engineering, agriculture, and health). We also control for the number of years since respondents graduated with their first baccalaureate degree and if they attended a publicly controlled institution.

The final group of possible covariates includes demographic characteristics commonly associated with post-baccalaureate occupational success and educational attainment: citizenship, race, age, gender, parents' education, respondent's marital status (either married or living in a marriage-like relationship), and if they have children under 18 years of age living at home, which have been found to have an impact on wage potential (e.g., Hemelt 2010; Roksa and Levey 2010).

## Analyses and Results

### *Status Descriptives*

The first two columns in Table 1 (labeled "% Majors in sample" and "% Majors in NSCG") show us how close our sample of student raters comes to the national distribution of college graduates in most of these disciplines. For most disciplines, z-score analyses indicate that there are not significant differences between the two population proportions. The only discipline that exceeds its NSCG distribution is "health-related fields," a category that includes a number of fields present in the NSCG sample (e.g., fitness studies, physical therapy, medical technologies, health services administration) that are not available at the institutions our student respondents attend. While it should not be overstated, some caution is warranted in the interpretation of the average ratings (column C in Table 1) for each discipline; fewer "health" majors weighed in on these evaluations than might have on a different set of college campuses.

That said, we are confident that the ratings represent an accurate balance of students in our sample who have majors within each discipline and students who do not. Nevertheless, there is value in knowing how these ratings may differ. With that in mind, columns A and B show the average ratings for each discipline, with column A showing ratings by students who have majors in the discipline cluster and column B showing ratings by students who do not.

As we would expect, column A reveals that students rate their own majors higher than those who are not in those majors. Two majors in particular—engineering and education—are rated especially highly by students within them, with no student considering the majors as "very low status or prestige" and 94 percent to 96 percent evaluating the majors as "very high status or prestige." While most students in other majors held their majors in high or average esteem, 3 percent of arts majors, 3 percent of communications majors, 5 percent of social science majors, and 8 percent of humanities majors rated their disciplines as having "very low status or prestige."

Turning to column B, we see that students were more critical of the majors their peers were in, but the one constant is the status of engineering. Its high 2.73 rating by non-majors is influenced by the 75 percent of those students who said the discipline is "very high status or prestige." Only 2 percent said it was "very low status or prestige." Engineering is followed by the other broad

science, technology, engineering, and mathematics (STEM) category, physical sciences, which has a 2.58 rating buoyed by 47 percent of its evaluators agreeing that it has very high status; 1 percent say it has low status. Education's very high rating by its majors is somewhat echoed in the evaluations of non-majors. At 2.34, it comes third among the 10 disciplines with 45 percent of non-majors saying it has high status and only 11 percent of students saying it has low status. Compare this with communications, agriculture, and humanities, which all had 30 percent of the non-majors evaluating them as very low in status and prestige.

Ultimately, any consensus about the status of a college major/discipline includes its natural advocate (i.e., its majors) as well as those who might be more circumspect about it (i.e., non-majors). These ratings are, appropriately, affected by the proportion of evaluators who have the major and those who do not, as well as the more positive evaluation of students with the major. For example, if nearly 25 percent of students major in business and think highly of their own major ( $\bar{X} = 2.74$ ), an accurate accounting of the major's status ( $\bar{X} = 2.36$ ) would balance their high evaluation with the much more tempered evaluation ( $\bar{X} = 2.24$ ) of the 75 percent of students who have majors in other disciplines. Therefore, we believe the best estimation of college students' evaluation of these disciplines is represented by column C, which includes the ratings of both sets of students. For the most part, those ratings are higher but nearly identical statistically to the ratings found in column B. The only marked differences exist between the average and "non-major" ratings for business and social sciences, two highly subscribed-to majors (24 percent and 16 percent, respectively) with about half a percentage point difference between the evaluation of their majors and those not majoring in them.<sup>6</sup>

If the 10 disciplinary clusters were organized by average rating (from highest status rating to lowest), they would be ordered in the following way: (1) engineering, (2) natural sciences, (3; tied) education and health and business, (4) arts, (5) social sciences, (6) humanities, (7; tied) communications and agriculture. The ties for third and seventh place represent statistically insignificant ( $p < .0001$ ) differences between the clusters' means. This ordering persists if we only look at the average ratings of those students who are not majors in the discipline with an interesting change: Education and health-related majors remain in the number three spot while business majors drop down to four. The ordering would be as follows: (1) engineering, (2) natural sciences, (3) education and health, (4) business, (5) arts, (6) social sciences, (7) agriculture, (8) humanities, and (9) communications.<sup>7</sup>

### Status Regressions

As the aggregate scores shown in Table 1 represent the evaluation of 718 college students in a range of contexts (private, small liberal-arts colleges to large public universities) with a broad range of majors (agriculture to social sciences), they serve as a proxy for at least some portion of society, that is, students and their peers. To further test whether this measure of status is meaningful and reliably related to outcomes that might follow from having it, we ran OLS regressions of the relationship between a discipline's status (i.e., the average of respondents' ratings) and post-baccalaureate income, advanced-degree attainment, and occupational status. The findings of this analysis of more than 10,000 recent graduates (NSCG) are presented in Table 2. For all students who were within 10 years of graduating, their average logged income was 10.71 (~\$49,782) and 24 percent of them had earned advanced degrees. The average status—on a scale ranging from 25 to 75—for their occupation was 56.

In the three models, disciplinary status is measured using the ratings offered by all students (see Table 1, column C) and also using the ratings supplied by only those students who did not major in the discipline they were evaluating (see Table 1, column B). Disciplinary status, determined by these full and more narrow sets of students, is significant and positive across all three outcomes. Moreover, the larger standardized coefficients show that the status of discipline has a

**Table 2.** OLS Standardized (Beta) Coefficients for Predictors of Post-baccalaureate Outcomes for Graduates within 10 Years of Graduating (Data from the National Survey of College Graduates).

	Logged income (n = 10,051)		Advanced degree (n = 10,051)		Job status (n = 8,973)	
	All majors <sup>a</sup>	Only non-majors <sup>b</sup>	All majors <sup>a</sup>	Only non-majors <sup>b</sup>	All majors <sup>a</sup>	Only non-majors <sup>b</sup>
Status of Discipline	0.13***	0.10***	0.04**	0.06***	0.17***	0.20***
Advanced Degree Attainment						
Post-baccalaureate Income						
Job Is Related to BA Major	0.11***	0.11***	0.24***	0.23***	0.10***	0.09***
Major Is "Soft-Pure"	-0.17***	-0.09***	0.08***	0.11***	0.15***	0.14***
Major Is "Hard-Pure"	-0.03**	-0.05***	0.04**	0.03*	0.32***	0.31***
Major Is "Soft-Applied"	-0.12***	-0.07***	-0.03*	-0.00	-0.18***	-0.01
Years Since Graduation	0.17***	0.17***	0.15***	0.15***	0.02	-0.00
Public BA Institution	-0.04***	-0.04***	-0.03***	-0.03***	-0.16***	-0.07***
R is black, African-American	-0.02*	-0.02*	0.03***	0.03***	-0.03**	-0.03***
R is Hispanic, Latino	-0.06***	-0.06***	0.01	0.01	-0.01	-0.01
R is Asian, Asian American	0.09***	0.08***	0.05***	0.05***	-0.02	-0.01
R's Citizenship Status	0.00	0.00	-0.04***	-0.04***	0.00	-0.00
R's Age	0.05***	0.05***	-0.04***	-0.04***	0.01	0.01
R Is Female	-0.22***	-0.22***	-0.04***	-0.04***	-0.01	-0.01
R's Father's Education	0.06***	0.06***	0.06***	0.06***	0.02	0.02*
R's Mother's Education	-0.01	-0.01	0.06***	0.06***	0.03**	0.05***
R Is Married	0.07***	0.07***	0.05***	0.05***	-0.02	-0.02
R Has Young Children	-0.02	-0.02*	0.01	0.01	0.02	0.02
			-0.03**	-0.03**	0.02*	0.02
Adjusted R <sup>2</sup>	.153	.160	.110	.112	.229	.240
F Ratio Value	77.46***	36.59***	7.63**	12.35***	122.93***	151.10***

Note. OLS = ordinary least squares; <sup>a</sup>Independent variable ("Status of Discipline") is status of discipline cluster based on ratings of students who have the major and who do not have it (Table 1, column C).

<sup>b</sup>Independent variable ("Status of Discipline") is status of discipline cluster based on ratings of students who do not have the major (Table 1, column B). \*p < .05. \*\*p < .01. \*\*\*p < .001.

relatively stronger relationship with post-baccalaureate outcomes than some other important control variables (i.e., public/private BA institution, race, age, and marital status). In all three models, the variables representing other key characteristics of majors (perceived relationship between the major and the job and where the major is situated among Biglan's hard/soft dimensions of paradigmatic knowledge and pure/applied dimension of concern with applied knowledge) are quite strong relative to both disciplinary status and other common covariates.<sup>8</sup> This provides further evidence that majors matter in complex ways that must be considered when trying to assess what these fundamental features of a college education mean for graduates' future educational and economic outcomes.

The first set of models in Table 2 supports H1, which states that a discipline's higher status would be predictive of higher earnings upon graduation for fairly recent graduates. This relationship exists even when controlling for other characteristics that we might also predict would have an impact. All of the controls—the job's relationship to the major (+), having a non-hard-applied major (–), years since graduating (+), public BA institutions (–), race (+/–), citizenship (+), age (+), female gender (–), father's education (+), and marital status (+)—retain their association with post-baccalaureate income once status of the discipline is added to the model.

We also predicted (H2) that students graduating in high-status undergraduate disciplines would also pursue advanced degrees. Again, using only those graduates who were within 10 years of graduating, Table 2 shows that the status of their undergraduate discipline was significantly correlated with their advanced degree attainment, in the direction we predicted: The higher the discipline's status, the more likely it was that students would have earned an advanced degree within those 10 years.

Of course, the most important test of the relationship of discipline status and post-baccalaureate outcomes would be a test of that discipline's status with a similarly constructed occupational status measure. The status of one's major discipline is positively and significantly correlated with the status of their occupation; the higher the discipline's status, the higher the status of their post-baccalaureate occupation (H3). This relationship exists even when controlling for other characteristics that we might expect to have an impact on occupational status just as they had impacts on income and advanced degree attainment. Surprisingly, few of the usual covariates predict one's occupational status. Respondents have higher occupational statuses if they have advanced degrees, if they have high incomes, if their job is (in their mind) related to their undergraduate major, the closer they are to the year they earned the baccalaureate degree, and if they are women.

In sum, across all three of the component parts of the socioeconomic index—income, educational attainment, and occupational status—students' undergraduate discipline's status is significant and its sign is in the predicted direction.

While our hypotheses hold up, we recognize that the coefficients produced are correlation coefficients and not causal ones. Although we believe students' undergraduate discipline's status has an effect on these three post-baccalaureate outcomes, this cannot be proven definitively by this analysis. In fact, some might argue that the relationship goes in the opposite direction, that is, when students evaluate majors, their evaluations are based primarily on their perceptions of each majors' implications for early career income, advanced-degree attainment, and occupational status. We suspect there is some truth to this assertion: It is likely that the three post-baccalaureate outcomes may be part of the calculation students make when they decide if a major is low or high status.

That said, we do not believe these outcomes are exclusively, or even primarily, what students have in mind. One reason for this belief is the third-place tie in the ratings of business majors and education majors, whose average earnings equal \$53,844 and \$36,250, respectively. As we described earlier, when the ratings only include students who are not majoring in these disciplines, business majors, evaluated as a disciplinary cluster, actually receive lower prestige ratings

**Table 3.** OLS Coefficients for Post-baccalaureate Predictors of Disciplinary Clusters' Status Ratings (National Survey of College Graduates 2003). Standardized (Beta) Coefficients in Parentheses.

	status ratings for various disciplines		
	All 10 disciplines	Top and BTM disciplines Engineering & agri./comm.	Tied for third Education, business, & health
INTERCEPT	0.996 (.00)**	-1.056 (.00)	2.496 (.00)
Logged Income	0.091 (.16)***	0.257 (.30)***	-0.027 (-.26)***
Advanced Degree	-0.023 (.00)***	0.062 (.07)***	0.012 (.11)***
Job Status	0.005 (.28)***	0.012 (.44)***	0.001 (.35)***
Mean	2.335	2.622	2.367
Adjusted R <sup>2</sup>	.1166	.3358	.1967
Variation Left Unexplained	88%	66%	80%

Note. OLS = ordinary least squares.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

than majors in education. Clearly, something more than potential earnings is in the mind of students when determining status or value of these disciplines.

One way to test this belief is to examine how much of the variation between the major-clusters' average ratings is explained by the post-baccalaureate outcomes. Table 3 shows the outcome of such a test. The three models in Table 3 show OLS coefficients representing the relationship between the three aforementioned post-baccalaureate outcomes and three sets of variables: (1) the differences among all 10 disciplinary clusters, (2) the differences between the top-rated discipline (engineering) and the bottom-rated ones (agriculture and communication, tied), and (3) the differences among the three disciplines (education, business, and health) that, surprisingly, were tied for third in spite of considerable differences between them in average earned income for their graduates. The mean major status for each of those variables is 2.34, 2.62, and 2.37, respectively.

As the adjusted  $r^2$  figure shows, a model listing all three outcomes explains less than 35 percent of the variation that occurs around these means. They leave 88 percent of the variation between all of the disciplines' status ratings explained and 66 percent of the variation between the top and bottom disciplines' status ratings. These findings affirm our belief that, while students likely take some estimation of the effects of disciplines on these post-baccalaureate outcomes into account when evaluating them, those estimations are only part of their calculation. Other factors matter, and, as we will explain, any extension of this work would do well to begin unpacking what those factors might be.

## Conclusion and Further Implications

Social mobility has long been a widely researched topic among social scientists. From the beginning, occupational status/prestige has been one of the tools used to determine the shift from a person's socioeconomic origins to their socioeconomic outcomes (Blau and Duncan 1967; Haller and Portes 1973). While measures of occupational status/prestige have long been a part of social mobility analyses, measures of status for the most powerful engine of social mobility—education—have largely been neglected. This paper is an attempt to further understand if the status of one's education can be measured and, if so, how a high-status educational experience might predict high-status occupational outcomes.

With that goal in mind, we sought to create a rudimentary measure of the status/prestige of a student's educational experience and then examine the relationship between that measure and three important post-baccalaureate outcomes: income, educational attainment, and occupational status/prestige. Taking a cue from the subjective measures of occupational status developed or used by North and Hatt (1947), Duncan (1961), Siegel (1971), Treiman (1977), Stevens and Featherman (1981), Nakao and Treas (1994), and others, we believe there is value in determining a *subjective* measure of educational status. Like other researchers who have considered the impact of educational status on occupational outcomes, we focused our attentions on postsecondary training and, more specifically, the disciplines college students major in.

We developed a subjective measure of the status of these fields (by broad cluster) by asking 700+ undergraduates to evaluate them as being low, average, or high in terms of status/prestige. Our findings reveal that fields of study are stratified in the minds of college students and, likely because this pattern exists in the larger society, are correlated with how much money college graduates make, the status and prestige of the kinds of jobs they receive, and even how successful they are at pursuing post-baccalaureate degrees.

According to our undergraduate respondents, fields of study can be ordered from high to low in an evaluation of their prestige: (1) engineering, (2) natural sciences, (3; tied) education and health and business, (4) arts, (5) social sciences, (6) humanities, (7; tied) communications and agriculture. In addition, we find that there is a statistically significant and positive relationship between the status of these fields of study and three important post-baccalaureate outcomes, each of which is a key component of Duncan's (1961) SEI of respondent's origins and outcomes: occupational prestige, income, and educational attainment. We applied the ratings (range = 1.85–2.76; average 2.23) in an OLS analysis aimed at estimating this relationship. When we controlled for a range of other common covariates, we discovered that possessing a high-status major is significantly correlated with higher incomes, greater post-BA educational attainment, and a higher status occupation. These patterns, while expected, have been heretofore unexamined. Certainly, research has been done that shows that college majors have an impact on post-baccalaureate outcomes (Berger 1988; Bobbitt-Zeher 2007; Davies and Guppy 1997; Monaghan and Jang 2017; Mullen et al. 2003; Pascarella and Terenzini 1991; Ransom and Phipps 2017; Riley 1982; Roksa and Levey 2010; Torche 2011; B. Useem 1989; Xie and Goyette 2003; Zafar 2013). This project has given us more insight into what this impact might be based upon.

These findings raise two important questions. First and most obviously, if students recognize college majors as having different statuses, does this recognition factor into their decision making about which major(s) to pursue? This becomes especially salient in the case of students who might wish to major in a high-earning discipline such as engineering, but do not have the level of prerequisite success or training in science necessary to be accepted into the major. How does that student decide among the other options? Nearly 75 percent of students change their major at least once (Gordon 1995), and often those decisions are based on very little dependable data on the income associated with them. Do students take status into account when choosing among the fields available to them? Are there majors that students are less likely to choose because doing so would be considered too far a step down in terms of prestige? Are there better and worse (in terms of status) answers to the question "what's your major" just as there are to the question "what do you do for a living"? The literature on students' choice of major suggests there is a broad range of expressive, social, *and* instrumental reasons for these decisions (Beffy et al. 2012; Beggs et al. 2006; Long et al. 2015; Louie 2004; Ma 2009; Monaghan and Jang 2017; Morgan et al. 2013; Mullen 2013; Pabler and Hell 2012; Song and Glick 2004; Zafar 2013). We suspect that the esteem students hold majors in (expressive) is partially based on their sense of the esteem majors are held in by parents and peers (social) and future employers (instrumental). A subjective measure of these impressions is informative if we intend to better determine factors students may use when choosing which of many majors they will graduate with.

We believe that these subjective ratings can also help us understand some of the persistent differences in disciplinary choices observed among different demographic categories. Women and men have consistently been shown to graduate with different majors. Women are more likely to graduate in the arts, education, and humanities, while men are more likely to graduate with majors in business, engineering, and the natural sciences (Charles and Bradley 2002; Goyette and Mullen 2006; Hearn and Olzak 1981; Jacobs 1995; Morgan, Gelbgiser, and Weeden 2013). This pattern may be due, in part, to differences between women's and men's evaluations of major status. Similarly, the differences observed in the literature (e.g., Ma 2009; Simpson 2001; Song and Glick 2004; Xie and Goyette 2003) between white and non-white students' preferences for professional/vocational versus standard liberal-arts majors may also be reflected in their evaluations of these disciplines' status. Knowing what those differences in evaluation might be would inform efforts to better understand gender and racial segregation in majors and, ultimately, occupational outcomes often based on those majors.

The second question, which is not entirely resolved in the research on subjective ratings of occupations either, is what factors into respondents' evaluations of prestige. Research has been done to determine what characteristics, beyond income and educational qualifications, might be associated with occupational prestige. Subjective judgments about occupations such as standard of living afforded by an occupation, power and influence, scarcity of personnel available to that occupation, job security, job complexity, and autonomy have been found to be correlated with occupational prestige scores (Adler and Kraus 1985; Garbin and Bates 1966; Hope 1982; Lopata et al. 1985; MacKinnon and Langford 1994; Marsh 1971). This list, while comprehensive, is not exhaustive in terms of providing us with insights into why respondents order occupations the way they do. Although related to the subjective ratings of occupations, none of these characteristics—either individually or in the aggregate—fully explains what the dominant attributes of occupations' prestige might be for those who rate them. Nevertheless, they do give us some sense of what factors, in addition to the rewards of occupations, may be ingrained in the collective conscience of those members of society asked to rate and rank the occupations (Hope 1982; Kraus, Schild, and Hodge 1978; Wegener 1992).

Just as income and educational qualifications are not the only factors contributing to an occupation's prestige, evaluations of academic fields of study are not based exclusively on student expectations about career advancement. In fact, as we mentioned earlier, research on students' choices of college majors has produced a broad range of factors they may consider, from expressive benefits (e.g., interest in the material, the major reflects social justice orientation) to instrumental benefits (e.g., access to particular jobs, ability to succeed in the major) to interpersonal benefits (e.g., esteem of peers and parents, fondness for professors). Each of these factors may also be reflected in students' broad evaluation of fields. For example, are more interesting majors—however defined—higher status majors in students' minds? We know that career potential is a factor in raising a major's status, but do students also evaluate status based on a major's perceived difficulty? The third factor, interpersonal benefits, seems most strongly tied to a major's reputation or prestige. When students evaluate "education" as positively as they do "business," are they taking into account some other factor such as "perceived contribution to humanity" or "broad importance"? While not every attribute of a college major factors into students' collective conscience about its broad value to or in society, there is likely a set of characteristics students value—broadly—that shapes the reputation of each undergraduate field of study. We believe further investigation of these characteristics is necessary to develop a more nuanced definition of college-major status and prestige.

Improvements on our, admittedly, exploratory research would be extensions of this project in two directions: expanding the set of evaluated majors and adding more evaluators. In this paper, we collapsed majors into clusters (e.g., social science). This strategy is one long-used by scholars seeking to understand why majors matter (Berger 1988; Davies and Guppy 1997; Daymont and

Andrisani 1984; Jacobs 1995; Kinsler and Pavan 2015; Roksa and Levey 2010; Shauman 2006; Turner and Bowen 1999). This approach, while still enabling us to produce meaningful ratings (Table 1) associated with post-baccalaureate outcomes (Table 2), probably reduced our ability to examine the full impact a solid measure of prestige might have. Assigning ratings by cluster rather than by individual majors likely caused us to underestimate the effect of major prestige/status, a possible explanation for the marginal, but still statistically significant, improvements in the three models. We believe that further data collection should explore students' subjective evaluations of specific majors within those clusters (e.g., the specific majors of anthropology, sociology, and psychology in the cluster of social sciences). Just as status differences exist among our two broad, but related, STEM clusters—natural sciences and engineering—we are certain there are status differences among the majors (e.g., chemistry and biology, chemical engineering and biomedical engineering) housed within those clusters. A more granular set of ratings—similar to that available for occupational prestige—would enable us to better estimate the impact of the choice of specific majors.

Also, further research could extend the role of evaluator from students alone to parents as well as (future) stakeholders in student's major decision: employers. As employers are the ultimate arbiter of the value of the college major to a graduating senior, discovering how they, as a broad class, evaluate the status and prestige, reputation, and respect-worthiness of these college majors is important in understanding the role of majors in the college-to-work transition that is so important to our understanding of social mobility.

This research underscores the value of understanding one of the few aspects of their educational career that students can exercise agency in: the choice of an undergraduate major. If simply increasing one's years of education by four were enough, students could choose any field of study available to them without giving much thought to the impact of those decisions. But we know that having equality in years of education (i.e., 16 total for elementary, secondary, and college) does not produce equality of outcomes. This analysis—with its sample of college graduates—further reinforces the need to consider the college experience as well as the college credential. It supports the notion that simply measuring years of education does not capture the nuanced ways education operates in the lives of individuals.

### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by a grant from the Teagle Foundation, New York.

### **Notes**

1. The value of the college major is not necessarily a matter of job-matching (i.e., graduates are hired into positions where their job is closely related to their undergraduate degree). Using the 2010 American Community Survey, researchers have found that while 62 percent of recent undergraduates work in jobs that require a college degree, only 27 percent work in jobs directly related to their college major (Abel and Deitz 2015). There is considerable variety among the occupations attained by graduates of any particular major (Ransom and Phipps 2017).
2. With few exceptions (mostly military academies and branch campuses of larger university systems), most baccalaureate-only schools are private.
3. Sensitivity tests show that the reduced sample's ratings are not significantly different from either the original sample's or the ratings of the students we removed from the analysis.



4. The exact wording in the survey was as follows: “Below is a list of majors combined into groups (sample majors are in parentheses). How much status or prestige would you give each group of majors: very little status or prestige, average status or prestige, and lots of status or prestige.”
5. A table matching the *National Survey of College Graduates* (NSCG) majors to our 10 disciplinary clusters is available upon request.
6. We suspect this is an artifact of the inclusion of economics—nominally a “social science” major on most campuses—in the business cluster. This decision was made because a plurality of the institutions the students attended did not offer an undergraduate major in business. As a result, economics often served as a proxy for a business major at those institutions. There may be some variation in the way students evaluated economics in the survey, where some considered it among their social science as well as their business evaluations.
7. Interestingly, while the ratings appear to be different for students’ evaluating their own majors, a rank ordering of the 10 clusters based on those ratings has only four levels: (1; tie) engineering, education, and health; (2; tie) physical sciences, arts, business, and agriculture; (3; tie) social sciences and humanities, and (4) communications.
8. Both of these variables are related to a discipline’s status, but only loosely. The Pearson’s correlation coefficient for “job is related to major” and status is .18 while the correlation coefficient for Biglan’s dimensions range from .08 for both applied dimensions to practically .00 for both non-applied (“pure”) dimensions.

## References

- Abel, Jaison, and Richard Deitz. 2015. “Agglomeration and Job Matching among College Graduates.” *Regional Science & Urban Economics* 51:14–24.
- Adler, Israel, and Vered Kraus. 1985. “Components of Occupational Prestige Evaluations.” *Work and Occupations* 12:23–39.
- Aisenbrey, Silke, Marie Evertsson, and Daniela Grunow. 2009. “Is There a Career Penalty for Mothers’ Time Out? A Comparison of Germany, Sweden and the United States.” *Social Forces* 88:573–605.
- Arum, Richard, and Michael Hout. 1998. “The Early Returns: The Transition from School to Work in the United States.” Pp. 471–510 in *From School to Work*, edited by Y. Shavit and W. Muller. Oxford, England: Clarendon Press.
- Astin, Alexander, and James Henson. 1977. “New Measures of College Selectivity.” *Research in Higher Education* 6:1–9.
- Becker, Gary S., and Nigel Tomes. 1979. “An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility.” *Journal of Political Economy* 87:1153–89.
- Beffy, Magali, Denis Fougere, and Arnaud Maurel. 2012. “Choosing the Field of Study in Post-secondary Education: Do Expected Earnings Matter?” *Review of Economics and Statistics* 94:334–47.
- Beggs, Jeri, John Bantham, and Steven Taylor. 2006. “Distinguishing the Factors Influencing College Students’ Choice of Major.” *College Student Journal* 42:381–94.
- Berger, Mark. 1988. “Predicted Future Earnings and Choice of College Major.” *Industrial and Labor Relations Review* 41:418–29.
- Biglan, Anthony. 1973a. “The Characteristics of Subject Matter in Different Scientific Areas.” *Journal of Applied Psychology* 57:195–203.
- Biglan, Anthony. 1973b. “Relationships between Subject Matter Characteristics and the Structure and Output of University Departments.” *Journal of Applied Psychology* 57:204–13.
- Blau, Peter, and Otis Duncan. 1967. *The American Occupational Structure*. New York: Free Press.
- Bobbitt-Zeher, Donna. 2007. “The Gender Income Gap and the Role of Education.” *Sociology of Education* 80:1–22.
- Bourdieu, Pierre. 1988. *Homo Academicus*. Stanford, CA: Stanford University Press.
- Brand, Jennie, and Charles Halaby. 2006. “Regression and Matching Estimates of the Effects of Elite College Attendance on Educational and Career Achievement.” *Social Science Research* 35:749–70.
- Braxton, John, and Lowell Hargens. 1996. “Variation among Academic Disciplines: Analytical Frameworks and Research.” Pp. 1–46 in *Higher Education: Handbook of Theory and Research*, edited by J. Smart, vol. 11. New York: Agathon Press.

- Brewer, Dominic, Eric Eide, and Ronald Ehrenberg. 1999. "Does It Pay to Attend an Elite Private College? Cross Cohort Evidence on the Effects of College Type on Earnings." *Journal of Human Resources* 34:104–23.
- Chan, Tak Wing, and John Goldthorpe. 2004. "Is There a Status Order in Contemporary British Society? Evidence from the Occupational Structure of Friendship." *European Sociological Review* 20:383–401.
- Charles, Maria, and Karen Bradley. 2002. "Equal but Separate? A Cross-national Study of Sex Segregation in Higher Education." *American Sociological Review* 67:573–99.
- Chetty, Raj, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez. 2014. "Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States." *The Quarterly Journal of Economics* 129:1553–1623.
- Chronicle of Higher Education. 2012. *The Role of Higher Education in Career Development: Employer Perceptions*. Washington, DC: Chronicle of Higher Education.
- Conley, Dalton. 2001. "Capital for College: Parental Assets and Postsecondary Schooling." *Sociology of Education* 74:59–72.
- Corak, Miles. 2013. "Income Inequality, Equality of Opportunity, and Intergenerational Mobility." *The Journal of Economic Perspectives* 27:79–102.
- Dale, Stacy, and Alan Krueger. 1999. "Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables." NBER Working Paper No. 7322. Cambridge, MA: National Bureau of Economic Research.
- Dale, Stacy, and Alan Krueger. 2002. "Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables." *The Quarterly Journal of Economics* 117:1491–1527.
- Davies, Scott, and Neil Guppy. 1997. "Fields of Study, College Selectivity, and Student Inequalities in Higher Education." *Social Forces* 75:1417–38.
- Davis, James, Tom Smith, Robert Hodge, Keiko Nakao, and Judith Treas. 1991. "Occupational Prestige Ratings from the 1989 General Social Survey." Ann Arbor, MI: Interuniversity Consortium for Political and Social Research.
- Davis, Nancy J., and Robert V. Robinson. 1998. "Do Wives Matter? Class Identities of Wives and Husbands in the United States, 1974–1994." *Social Forces* 76:1063–86.
- Daymont, Thomas, and Paul Andrisani. 1984. "Job Preferences, College Majors, and the Gender Gap in Earnings." *The Journal of Human Resources* 19:408–28.
- DiPrete, Thomas, and David Grusky. 1990. "Structure and Trend in the Process of Stratification for American Men and Women." *American Journal of Sociology* 96:107–43.
- Duncan, Otis. 1961. "A Socioeconomic Index for All Occupations." Pp. 109–138 in *Occupations and Social Status*, edited by A. Reiss. New York: Free Press.
- Elman, Cheryl, and Angela O'Rand. 2004. "The Race Is to the Swift: Socioeconomic Origins, Adult Education, and Wage Attainment." *American Journal of Sociology* 110:123–60.
- Flippen, Chenoa. 2013. "Relative Deprivation and Internal Migration in the United States: A Comparison of Black and White Men." *American Journal of Sociology* 118:1161–98.
- Ganzeboom, Harry, Paul DeGraff, and Donald Treiman. 1992. "A Standard International Socio-Economic Index of Occupational Status." *Social Science Research* 21:1–56.
- Garbin, Albano, and Frederick Bates. 1966. "Occupational Prestige and Its Correlates: A Re-examination." *Social Forces* 44:295–302.
- Gerber, Theodore, and Sin Yi Cheung. 2008. "Horizontal Stratification in Postsecondary Education: Forms, Explanations, and Implications." *Annual Review of Sociology* 34:299–318.
- Gordon, Virginia. 1995. *The Undecided College Student: An Academic and Career Advising Challenge* (2nd Edition). Springfield, IL: Charles C. Thomas Press.
- Goyette, Kimberly and Ann Mullen. 2006. "Who Studies the Arts and Sciences? Social Background and the Choice and Consequences of Undergraduate Field of Study." *The Journal of Higher Education* 77:497–538.
- Goyette, Kimberly, and Yu Xie. 1999. "Educational Expectations of Asian American Youths: Determinants and Ethnic Differences." *Sociology of Education* 72:22–36.
- Gullickson, Aaron. 2010. "Racial Boundary Formation at the Dawn of Jim Crow: The Determinants and Effects of Black/Mulatto Occupational Differences in the United States, 1880." *American Journal of Sociology* 116:187–231.

- Hagan, John, Ross MacMillan, and Blair Wheaton. 1996. "New Kid in Town: Social Capital and the Life Course Effects of Family Migration on Children." *American Sociological Review* 61:368–85.
- Haller, Archibald, and Alejandro Portes. 1973. "Status Attainment Processes." *Sociology of Education* 41:51–91.
- Hauser, Robert, and David Featherman. 1977. *The Process of Stratification: Trends and Analyses*. New York: Academic Press.
- Hauser, Robert, and John Warren. 1997. "Socioeconomic Indexes for Occupations: A Review, Update, and Critique." *Sociological Methodology* 27:177–298.
- Hearn, James, and Susan Olzak. 1981. "The Role of College Major Departments in the Reproduction of Sexual Inequality." *Sociology of Education* 54:195–205.
- Hemelt, Steven. 2010. "The College Double Major and Subsequent Earnings." *Education Economics* 18:167–89.
- Hollingshead, August. 1975. "Four Factor Index of Social Status." Unpublished manuscript. New Haven, CT: Yale University.
- Hopcroft, Rosemary. 2005. "Parental Status and Differential Investment in Sons and Daughters: Trivers-Willard Revisited." *Social Forces* 83:1111–36.
- Hope, Keith. 1982. "A Liberal Theory of Prestige." *American Journal of Sociology* 87:1011–31.
- Hout, Michael. 1988. "More Universalism, Less Structural Mobility: The American Occupational Structure in the 1980s." *American Journal of Sociology* 93:1358–1400.
- Jacobs, Jerry A. 1995. "Gender and Academic Specialties: Trends among Recipients of College Degrees in the 1980s." *Sociology of Education* 68:81–89.
- Johnson, Monica, and Glen Elder. 2002. "Educational Pathways and Work Value Trajectories." *Sociological Perspectives* 45:113–38.
- Kalmijn, Matthijs. 1994. "Mother's Occupational Status and Children's Schooling." *American Sociological Review* 59:257–75.
- Kerckhoff, Alan C. 1976. "The Status Attainment Process: Socialization or Allocation?" *Social Forces* 55:368–681.
- Kerckhoff, Alan C, Stephen Raudenbush, and Elizabeth Glennie. 2001. "Education, Cognitive Skill, and Labor Force Outcomes." *Sociology of Education* 74:1–24.
- Kerr, Clark. 1991. *The Great Transformation in Higher Education 1960-1980*. Albany, NY: State University of New York Press.
- Kingston, Paul William, and Lionel S. Lewis. 1990. *The High Status Track: Studies of Elite Schools and Stratification*. Albany, NY: State University of New York Press.
- Kinsler, Josh, and Ronni Pavan. 2015. "The Specificity of General Human Capital: Evidence from College Major Choice." *Journal of Labor Economics* 33:933–72.
- Kraus, Vered, Erling Schild, and Robert Hodge. 1978. "Occupational Prestige in the Collective Conscience." *Social Forces* 56:900–18.
- Kuhn, Thomas. 1970. *The Structure of Scientific Revolutions*. Chicago, IL: University of Chicago Press.
- Kuo, Hsiang-Hui, and Robert Hauser. 1995. "Trends in Family Effects on the Education of Black and White Brothers." *Sociology of Education* 68:136–60.
- Lin, Nan. 1999. "Social Networks and Status Attainment." *Annual Review of Sociology* 25:467–87.
- Lodahl, Janice, and Gerald Gordon. 1972. "The Structure of Scientific Fields and the Functioning of University Graduate Departments." *American Sociological Review* 37:57–72.
- Lodahl, Janice, and Gerald Gordon. 1973. "Differences between Physical and Social Sciences in University Graduate Departments." *Research in Higher Education* 1:191–213.
- Long, Mark, Dan Goldhaber, and Nick Huntington-Klein. 2015. "Do Completed College Majors Respond to Changes in Wages?" *Economics of Education Review* 49:1–14.
- Lopata, Helena Znanieck, Kathleen Fordham Norr, Debra Barnewolt, and Cheryl Allyn Miller. 1985. "Job Complexity as Perceived by Workers and Experts." *Work and Occupations* 12:395–415.
- Louie, Vivian. 2004. "'Being Practical' or 'Doing What I Want': The Role of Parents in the Academic Choices of Chinese Americans." Pp. 79–109 in *Becoming New Yorkers: Ethnographies of the New Second Generation*, edited by P. Kasinitz, J. Mollenkopf, and M. Waters. New York: Russell Sage Foundation.
- Loury, Linda, and David Garman. 1995. "College Selectivity and Earnings." *Journal of Labor Economics* 13:289–308.

- Ma, Yingyi. 2009. "Family Socioeconomic Status, Parental Involvement, and College Major Choices—Gender, Race/Ethnic, and Nativity Patterns." *Sociological Perspectives* 52:211–34.
- MacKinnon, Neil, and Tom Langford. 1994. "The Meaning of Occupational Prestige Scores: A Social Psychological Analysis and Interpretation." *The Sociological Quarterly* 35:215–45.
- Marsden, Peter, and Jeanne Hurlbert. 1988. "Social Resources and Mobility Outcomes: A Replication and Extension." *Social Forces* 66:1038–59.
- Marsh, Robert M. 1971. "The Explanation of Occupational Prestige Hierarchies." *Social Forces* 50:214–22.
- Monaghan, David, and Sou Hyun Jang. 2017. "Major Payoffs: Postcollege Income, Graduate School, and the Choice of 'Risky' Undergraduate Majors." *Sociological Perspectives* 60:722–46.
- Monks, James. 2000. "The Returns to Individual and College Characteristics: Evidence from the National Longitudinal Survey of Youth." *Economics of Education Review* 19:279–89.
- Morgan, Stephen, Dafna Gelbgiser, and Kim Weeden. 2013. "Feeding the Pipeline: Gender, Occupational Plans, and College Major Selection." *Social Science Research* 42:989–1005.
- Mouw, Ted. 2003. "Social Capital and Finding a Job: Do Contacts Matter?" *American Sociological Review* 68:868–98.
- Mullen, Ann. 2013. "Gender, Social Background, and the Choice of College Major in a Liberal Arts Context." *Gender & Society* 28:289–312.
- Mullen, Ann, Kimberly Goyette, and Joseph Soares. 2003. "Who Goes to Graduate School? Social and Academic Correlates of Educational Continuation after College." *Sociology of Education* 76:143–69.
- Nakao, Keiko, and Judith Treas. 1990. "Computing 1989 Occupational Prestige Scores." Chicago, IL: National Opinion Research Center.
- Nakao, Keiko, and Judith Treas. 1992. "The 1989 Socioeconomic Index of Occupations: Construction from the 1989 Occupational Prestige Scores." Chicago, IL: National Opinion Research Center.
- Nakao, Keiko, and Judith Treas. 1994. "Updating Occupational Prestige and Socioeconomic Scores: How the New Measures Measure Up." *Sociological Methodology* 24:1–72.
- Nakao, Keiko, Robert Hodge, and Judith Treas. 1990. "On Revising Prestige Scores For All Occupations." Chicago, IL: National Opinion Research Center.
- National Science Foundation. 2003. *National Survey of College Graduates*. Arlington, VA: National Center for Science and Engineering Statistics.
- National Science Foundation, National Center for Science and Engineering Statistics. 2015. *Science and Engineering Degrees, 1966-2012*. Detailed Statistical Tables NSF 15-326 (Appendix B. Classification of Fields of Study). Arlington, VA: National Center for Science and Engineering Statistics.
- North, Cecil, and Paul Hatt. 1947. "Jobs and Occupation: A Popular Evaluation." *Opinion News* 9:3–13.
- Orr, Amy. 2003. "Black-White Differences in Achievement: The Importance of Wealth." *Sociology of Education* 76:281–304.
- Pabler, Katja, and Benedikt Hell. 2012. "Do Interest and Cognitive Abilities Help Explain College Major Choice Equally Well for Women and Men?" *Journal of Career Assessment* 20:479–96.
- Pascarella, Ernest, and Patrick Terenzini. 1991. *How College Affects Students: Findings and Insights from Twenty Years of Research*. San Francisco, CA: Jossey-Bass.
- Ransom, Michael, and Aaron Phipps. 2017. "The Changing Occupational Distribution by College Major." Pp. 129–171 in *Skill Mismatch in Labor Markets*, edited by S. Polachek, K. Pouliakas, G. Russo, and K. Tatsiramos. Bingley, England: Emerald Publishing.
- Riley, Sarah. 1982. "The Applicability of Undergraduate Education in Jobs." *Higher Education* 11:155–75.
- Roksa, Josipa, and Tania Levey. 2010. "What Can You Do with That Degree? College Major and Occupational Status of College Graduates over Time." *Social Forces* 89:389–416.
- Sewell, William, Archibald Haller, and George Ohlendorf. 1970. "The Educational and Early Occupational Status Attainment Process: Replication and Revision." *American Sociological Review* 35:1014–27.
- Sewell, William, Archibald Haller, and Alejandro Portes. 1969. "The Educational and Early Occupational Attainment Process." *American Sociological Review* 34:82–92.
- Shauman, Kimberlee. 2006. "Occupational Sex Segregation and the Earnings of Occupations: What Causes the Link among College-educated Workers?" *Social Science Research* 35:577–619.
- Siegel, Paul. 1971. "Prestige in the American Occupational Structure." Chicago, IL: Department of Sociology, University of Chicago.
- Simpson, Jacqueline C. 2001. "Segregated by Subject: Racial Differences in the Factors Influencing Academic Major between European Americans, Asian Americans, and African, Hispanic, and Native Americans." *The Journal of Higher Education* 72:63–100.

- Song, Chunyan, and Jennifer Glick. 2004. "College Attendance and Choice of College Majors among Asian-American Students." *Social Science Quarterly* 85:1401–21.
- Sorokin, Pitirim. 1927. *Social Mobility*. New York: Routledge.
- Stevens, Gillian, and Joo Hyun Cho. 1985. "Socioeconomic Indexes and the New 1980 Census Occupational Classification Scheme." *Social Science Research* 14:142–68.
- Stevens, Gillian, and David Featherman. 1981. "A Revised Socioeconomic Index of Occupational Status." *Social Science Research* 10:364–95.
- Stevens, Gillian, and Elizabeth Hoisington. 1987. "Occupational Prestige and the 1980 U.S. Labor Force." *Social Science Research* 16:74–105.
- Stolzenberg, Ross. 1994. "Educational Continuation by College Graduates." *American Journal of Sociology* 99:1042–77.
- Torche, Florencia. 2011. "Is a College Degree Still the Great Equalizer? Intergenerational Mobility across Levels of Schooling in the United States." *American Journal of Sociology* 117:763–807.
- Treiman, Donald. 1977. *Occupational Prestige in Comparative Perspective*. New York: Academic Press.
- Tsinidou, Maria, Vassilis Gerogiannis, and Panos Fitsilis. 2010. "Evaluation of the Factors That Determine Quality in Higher Education: An Empirical Study." *Quality Assurance in Education* 18:227–44.
- Turner, Sarah, and William Bowen. 1999. "Choice of Major: The Changing (Unchanging) Gender Gap." *ILR Review* 52:289–313.
- Useem, Bert. 1989. *Liberal Education and the Corporation: The Hiring and Advancement of College Graduates*. New York: Aldine de Gruyter.
- Useem, Michael, and Jerome Karabel. 1985. "Educational Pathways to Top Corporate Management." *American Sociological Review* 51:184–200.
- Velez, William. 1985. "Finishing College: The Effects of College Type." *Sociology of Education* 58:191–200.
- Waldinger, Roger, and Greta Gilbertson. 1994. "Immigrants' Progress: Ethnic and Gender Differences among U.S. Immigrants in the 1980s." *Sociological Perspectives* 37:431–44.
- Warren, John, Jennifer Sheridan, and Robert Hauser. 1998. "Choosing a Measure of Occupational Standing: How Useful Are Composite Measures in Analyses of Gender Inequality in Occupational Attainment." *Sociological Methods & Research* 27:3–76.
- Warren, John, Jennifer Sheridan, and Robert Hauser. 2002. "Occupational Stratification the Life Course: Evidence from the Wisconsin Longitudinal Study." *American Sociological Review* 67:432–55.
- Wegener, Bernd. 1992. "Concepts and Measurement of Prestige." *Annual Review of Sociology* 18:253–80.
- Wilson, Kenneth, and Lynn Smith-Lovin. 1983. "Scaling the Prestige, Authority, and Income Potential of College Curricula." *Social Science Research* 12:159–86.
- Xie, Yu, and Kimberly Goyette. 2003. "Social Mobility and the Educational Choices of Asian Americans." *Social Science Research* 32:467–98.
- Yamaguchi, Kazuo, and Yantao Wang. 2002. "Class Identification of Married Employed Women and Men in America." *American Journal of Sociology* 108:440–75.
- Yamaguchi, Shintaro. 2012. "Tasks and Heterogeneous Human Capital." *Journal of Labor Economics* 30:1–53.
- Zafir, Basit. 2013. "College Major Choice and the Gender Gap." *Journal of Human Resources* 48:545–95.

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