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Equalizing or Stratifying? Intergenerational Persistence across College Degrees

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ABSTRACT

The literature has shown inconsistent support for the equalization thesis, that is, the idea that a college degree erases the effect of social origin on socioeconomic destination, and suggested higher intergenerational persistence among advanced degree holders compared to those with bachelor's degrees. The present study sheds light on the origin-destination link by investigating the intergenerational association between parents' education and offspring's earnings, paying attention to parents' education relative to their children's. Drawing on large samples and multiple waves of data from the National Survey of College Graduates, this study also makes an empirical contribution by analyzing intergenerational persistence across degree types. For women, I find highest intergenerational persistence at the bachelor level, but little evidence of intergenerational association for any advanced degrees. For men, results show intergenerational persistence across educational groups. Differences across respondents holding different types of degree support a theory of intergenerational relative education advantage, in which the effect of parents' education on offspring's attainment varies depending on offspring's education relative to their parents. Educational and labor market-related factors do not change the overall picture.

Introduction

The role education plays in social mobility has long been central to research in education and social stratification and, following educational expansion, has been gaining increasing attention in the public debate as well. College degrees have become more widespread (Lindley & Machin, 2016; Morin et al., 2014; The Hamilton Project, 2017). 19.9 million students attended American colleges and universities in fall 2018 and projections state 20.5 million will by fall 2027 (National Center for Education Statistics [NCES], 2019). The total number of master's degrees increased 51% between 2002–03 and 2015–16 and is projected to increase 4% between 2015–16 and 2027–28; the total number of doctoral degrees increased 46% between 2002–03 and 2015–16 and is projected to increase 7% between 2015–16 and 2027–28 (Hussar &

Bailey, 2019). College degrees have also become increasingly rewarding compared to lower educational levels: Higher education is associated with an earnings premium and the returns to educational investments have risen substantially in the past 30 years, in particular for postgraduate education. In ascending order, master's degrees, doctoral degrees, and professional degrees have progressively greater economic returns than bachelor's degrees (Carnevale et al., 2015; Day & Newburger, 2002; Kim et al., 2015; Ma et al., 2016; Posselt & Grodsky, 2017).

However, findings as to whether college degrees mitigate social origin are mixed. Some studies have pointed to an equalizing effect (Breen & Jonsson, 2007; Hout, 1988; Pfeffer & Hertel, 2015; Torche, 2011), such that college erases the effect of social origin on socioeconomic destination; others have found intergenerational persistence,[1] that is, a significant origin-destination link, among college graduates (Gregg et al., 2017; Laurison & Friedman, 2016; Manzoni & Streib, 2019; Witteveen & Attewell, 2017). Furthermore, previous research has suggested higher intergenerational persistence among those with advanced degrees compared to those with bachelor's degrees (Torche, 2011), a finding which questions the meritocratic power of college, but remains unexplained.

This has called for moving beyond categorizing respondents as having "college or more" when examining social mobility in the current U.S. context (Posselt & Grodsky, 2017). As Stolzenberg suggests, "important dissimilarities between different types of educational programs may be masked by lumping together business school, law school, programs in the various disciplines, and other graduate and professional programs" (Stolzenberg, 1994, p. 1045). This study responds to previous contentions that a "comprehensive analysis of mobility among the educational elite requires distinguishing across types of graduate programs" (Torche, 2018, p. 3). Specifically, it examines the extent of intergenerational socioeconomic association across graduates holding different types of degrees.

This paper investigates the equalizing power of college degrees, that is, the origin-destination link among college graduates. Specifically, it examines the extent of intergenerational persistence among college graduates by addressing two major research questions:

(1) What variation exists in intergenerational persistence by type of degree, disaggregating between bachelor's, master's, MBA, doctoral, and professional degree holders?
(2) What is the role of educational and labor market processes in explaining intergenerational association among graduates with different degrees?

It does so within a "relative education" framework, which allows us to investigate the extent of intergenerational association between parents'

education and offspring's earnings paying attention to parents' level of education relative to their offspring's.

Using data from the National Survey of College Graduates (NSCG), I overcome the limitations of previous research, which pooled together all advanced degrees due to the small sample sizes; as I rely on a bigger sample, I limit the possibility of null findings due to the lack of statistical power. Furthermore, I can differentiate by type of degree, so to test the claim that the heterogeneity of graduate degrees may explain the higher intergenerational persistence previously found among advanced graduate degree holders compared to bachelor's degree holders. Torche (2018) advanced such a hypothesis; however, her study focused exclusively on doctoral degree holders, inherently inhibiting a comparison across types of advanced degrees.

Previous research suggests that men and women have unequal experiences, both in college and in the labor market. Women have an advantage in college completion (Buchmann & DiPrete, 2006), but enjoy lower returns to college, even when they graduate with similar degrees (Bobbit-Zeher, 2007); earnings differ significantly for men and women even among the highly educated workforce (Blau & Kahn, 2017; Cha & Weeden, 2014). Accordingly, I analyze processes separately for men and women.

The meritocratic power of education: Heterogeneity across degrees

Previous research provides contradictory evidence about the relation between educational expansion, that is, the increasing share of people completing college (Bloome et al., 2018), and class inequality in education. Roksa et al. (2007) show persistent class inequality in education; Bloome et al. (2018), however, find that educational expansion is associated with declining intergenerational income persistence, although the decline in persistence is offset by the increase associated with growing educational inequality and rising educational returns. The nature of educational expansion helps to understand these trends: in recent decades, not only the share of college graduates has grown, but more people are completing advanced degrees. While persistence is low among those with bachelor's, increases in the share of people with advanced degrees may not contribute to reduced overall persistence, as persistence is higher among the latter (Torche, 2011).

Research investigating the mediating role of education in class mobility showed that the direct effect of social origin on destination varies across educational groups, with bachelor's degree holders displaying much weaker effects than those with lower levels of education (Hout, 1984, 1988). Such finding of lower intergenerational association among college graduates compared to those with less education has often been linked to less discriminatory recruitment in labor market contexts for the highly educated (Torche, 2015) and has been interpreted as a signal of the equalizing effect of a college degree.

However, recent research suggested that universities produce stratified outcomes (Ford, 2018) and has questioned whether the equalizing effect holds across fields of study (Mullen et al., 2003; Perna, 2004), achievement levels, and institutions (Manzoni & Streib, 2019). Such findings question assumptions about the meritocratic power of higher education, that is, the thesis that, among the highly educated, achievement matters more than ascription for attainment. Worse, Torche (2011) suggested that intergenerational persistence may be higher among those with advanced degrees compared to those with bachelor's degrees. Yet, empirical explanation of why advanced degree holders show lower mobility than those with undergraduate degrees is scarce (Posselt & Grodsky, 2017; Torche, 2011). Oh and Kim (2020) recently attempted to investigate the mechanisms behind the alleged re-emergence of intergenerational association at the post-baccalaureate level and identified three educational sorting mechanisms: vertical selection, horizontal selection, and work experience. However, they did not delve into differences across types of advanced degrees and their models rely on strong assumptions about linearity in the effect of parents' years of schooling on their offspring's earnings. Accordingly, our understanding of the origin–destination relationship at higher level of education remains limited.

Stolzenberg (1994) suggested that postsecondary education is highly differentiated, and the origin-destination association may be influenced by characteristics specific to the type of degree. The investment required and the rewards associated with different types of degrees may affect cost-benefit analyses and the overall likelihood that individuals from different backgrounds invest in each type of education. The high differentiation across degrees implies that such influences may differ across degrees due to their different costs and returns. This holds not only in comparing between baccalaureate and post-baccalaureate degrees, but also among types of post-baccalaureate degrees, which are increasingly diversified (Lindley & Machin, 2016). Degrees differ in the investment they require, both in terms of their costs and their time commitment, as well as in their rewards. The high differentiation of advanced degrees may generate distinct (and complex) dynamics linking origin and destinations and, combined with the rising number of people earning advanced degrees (NCES, 2019), makes distinguishing across types of degrees of greater importance. Graduate programs highly differ in their types (e.g., master, professional, PhD) and characteristics, including their lengths, their fields of concentration, the job opportunities they may open, among other factors (Teichler, 2002). Master's cover a variety of disparate fields, the most common being the Master of Business Administration (MBA) and Master of Education (M.Ed.). Professional degrees include Juris Doctorate (J.D.), a law degree, Medical Doctor (M.D.), a physician's degree, Doctor of Dental Surgery (D.D.S.), a dentistry degree. Such degrees prepare for careers in specific fields, such as education, law, pharmacy, and medicine; they often put a strong focus

on real-world application, with many professional programs requiring students to complete internships or projects in their field of study before graduation. Doctorate degrees focus on specific fields of study, and are often highly research-oriented. Advanced degrees also vary in their selectivity, require different levels of commitment, and lead to highly different rewards on the labor market. Master's degree programs, for example, are shorter in length and in many fields lead to occupations that offer modest financial rewards. Doctoral programs are much longer and often give access to academic positions. Professional programs tend to be more expensive but often lead to highly rewarded positions in the labor market.

The earnings premium associated with higher education has been seen as a key factor behind rising wage inequality amongst the college graduate workforce, which increasingly has varying levels of degrees beyond bachelor's (Lindley & Machin, 2016). Previous research suggests that the dispersion of earnings at an educational level could contribute to differences in the earnings premium by social origin (Bartik & Hershbein, 2018). As earnings dispersion tends to be higher at higher educational levels (Budría & Pereira, 2009) and among those who hold specific types of advanced degrees, with professional degrees at the top of the scale, postgraduate education may leave more room for variation in earnings premium. Since advanced degrees differ in terms of their economic rewards, if individuals sort themselves into these programs based on their social origin, then heterogeneity at the graduate level may generate higher intergenerational persistence when advanced degrees are aggregated in one group. If, for example, upper class students become professionals and students from lower social origin get master's, we may see high intergenerational persistence as a result of compositional effects within the group of all advanced degrees. In other words, intergenerational persistence among advanced degree holders may be due to the fact that students from lower social origin are more likely to get advanced degrees with average lower returns, while those from upper class are more likely to get degrees with average higher returns. In this study, I stratify by type of degrees and investigate the extent of the origin-destination association within degrees; if an association remains within degrees, intergenerational persistence is not just the result of heterogeneity. Instead, other mechanisms are responsible for persistence. As I outline below in more details, I address potential mechanisms related to educational as well as labor market factors.

Educational factors, such as field of study, type of institution, or institutional funding may affect the origin-destination association. Social mobility may be higher in some fields or at some institutions; at the same time, fields and institutional characteristics differ across types of degrees. Labor market mechanisms may also play a role in the extent of intergenerational mobility across degree types depending on how education is rewarded. After graduates receive their degrees, they typically enter the labor market in specific sectors

and occupations. Higher education programs have a significant impact on occupational assignments and on the careers for which they provide training. As jobs differ in their working conditions as well as in the rewards they offer, they may appeal to individuals depending upon their work attitudes and preferences (Kalleberg & Loscocco, 1983; Kohn & Schooler, 1988). However, research has shown an increasing role of non-meritocratic criteria in the recruitment process: employers seem to rely on individual characteristics directly related to family background rather than on educational credentials only (Breen & Goldthorpe, 2001). Recent research questions the alleged meritocratic power of a college degree (Witteveen & Attewell, 2020); money, connections, and culture may provide significant advantages and elite work-places can favor those who grew up wealthier (Friedman & Laurison, 2020). For instance, non-meritocratic characteristics, such as appearance, self-presentation, savoir-faire, manners, and accent seem to have gained importance when it comes to reaching certain top occupations (Jackson et al., 2005). Credentialing and closure both in education systems and in the labor market may also contribute to economic stratification. Occupational closure via licensure or educational credentialing, while controlling professional quality, reduces the supply of workers in those fields and protects access to more rewarding jobs (Weeden, 2002). If graduates from different background are distributed differently across sectors and occupations, inequality may be reproduced (Roksa, 2005; Sewell & Hauser, 1975). If, for example, professional degree graduates from high social origin are overrepresented among more lucrative occupations in highly paid sectors while lower-class peers are more likely to end up in low-pay occupations in less lucrative fields, then job placement would provide a vehicle for intergenerational persistence. This may happen as employers evaluate candidates from different social origins differently independent of their educational credentials. This may be the case for some types of degrees more than others. For example, this may be more likely to occur among professional degree holders as occupational closure processes entail gatekeepers who control access.

The origin-destination link and higher education

Social background shapes educational choices, labor market opportunities, career trajectories (Armstrong & Hamilton, 2013; Rivera, 2015), and discrimination individuals face in the job market (Gaddis, 2014). To understand how social origin influences offspring's attainment, it is critical to identify how to measure social origin. In addition to social class or a socioeconomic index (Breen & Jonsson, 2005), scholars have implemented a variety of measures of social origin, among which parental income, wealth, and education, used as proxies for the more complex "socioeconomic origin" concept.

In studying intergenerational persistence, a major concern is with the extent to which social origin captures parental resources transmittable to their off-spring and may allow them different opportunities for success (Stolzenberg, 1994; Wilson & Portes, 1975). These could refer to different forms of capital, including economic, social, or cultural capital. Important cultural capital components relate to having college-educated parents who have experienced such transitions themselves (Rivera, 2015), or having parents who may help their offspring transitioning from college to work by providing financial support as well as cultural resources; they may shape professional perspectives and provide networks (Armstrong & Hamilton, 2013).

For both substantive and data-driven reasons, I focus on parental education as indicator of social origin. I believe that parental education best captures the resources behind the mechanisms that explain the origin-destination link across educational subgroups. This is in line with most recent research (Oh & Kim, 2020; Torche, 2018; Witteveen & Attewell, 2020) and reflects earlier findings that parental education predicts children's labor market attainment (Erola et al., 2016; Hamilton, 2016; Stuber, 2011). Furthermore, parental education is highly correlated to other measures of socioeconomic advantage such as earnings or income (Björklund & Jäntti, 2011; Pfeffer & Hertel, 2015).

In developing a model for investigating the origin-destination association, I believe parental resources offer specific advantages. In other words, I believe advantages come not just from higher parental education, but also from the specific characteristics of parents' education. It may not just be the amount of resources (here, education) parents have, but the type of resources they have that matters. Furthermore, higher parental education may not necessarily provide an increasing advantage; in fact, parental education may matter in relation to children's education. For example, parents with a professional degree may provide children who pursue a professional degree with valuable resources to navigate the labor market, among which specific cultural capital, as well as network. However, the resources parents with professional degrees can offer may not be transferred in the same way to offspring with a bachelor's degree, who may reap higher benefits from parents with an education closer to theirs.

Data and methods

I draw on data from the National Survey of College Graduates (NSCG),[2] a repeated cross-sectional biennial survey that collects information about college graduates. The NSCG samples individuals younger than 76 with at least a bachelor's degree (National Science Foundation, 2017). By surveying college graduates in all academic disciplines, the NSCG provides a unique source for examining the relationship between college education and career, in

addition to other characteristics of college-educated individuals, their degrees, and their activities.

The NSCG started in 1993, with a second wave interviewing a nationally representative sample of graduates in all academic disciplines in 2003. In 2010, researchers introduced a new, rotating panel design involving follow-up interviews in 2013, 2015, and 2017. The study follows initial cycle respondents for three biennial follow-up interviews before they rotate out of the survey. In this study, I draw on data from the 2010–2017 survey cycles, and exclude the 1993 and 2003 cycles, due to several differences in the survey design in the earlier survey years. I construct a combined sample of cases from the 2010, 2013, 2015, and 2017 surveys. Specifically, I use new cohort cases from each cycle. This includes 2010 NSCG cases originating from the 2009 American Community Survey (ACS), 2013 NSCG cases originating from the 2011 ACS, 2015 NSCG cases originating from the 2013 ACS, and NSCG originating from the 2015 ACS.[3] I restrict the analytical sample to individuals between 35 and 67 years old who are US-born citizens.[4] Since I focus on the analysis of earnings, only those reporting wages are included in the analytical sample. As social origin is central in the analyses, I also exclude the few cases who did not report parental education.[5] After these restrictions, the sample size includes 56,819 individuals, 32,337 men and 24,482 women.

Measures and analytic strategy

I distinguish between five degree types: bachelor, master, master of business administration, doctoral, and professional degree (indicated in the tables as BA, MA, MBA, Doct, and Prof, respectively).[6] Vertical stratification occurs in the distinction between bachelor's degrees at the lowest level, followed by master's degrees, MBAs and, at the highest level, professional and doctoral degrees. I perceive professional and doctoral degrees as different types of degrees with equal level.

The key dependent variable is graduates' annual salary,[7] adjusted for inflation and expressed earnings in 2017 constant dollars. I operationalize *social origin* (SES) based on parents' education, which I capture with a similar level of detail as for respondent's education; specifically, I distinguish between parents with no college degree, bachelor's, master's, doctoral, and professional degrees. Such differentiation is particularly important as I assume the shape of the relation between family background and offspring's earnings may vary by respondents' type of degree.

I assess intergenerational socioeconomic association through a series of negative binomial (NB) regression models estimating the effect of parental education on graduates' yearly earnings. NB regression is preferred to the common practice of using an OLS regression on log earnings[8] due to over-dispersion in the outcome variable (Hardin & Hilbe, 2012; Hilbe, 2011, 2014).

Since the focus is on differences in the effect of social origin on earnings across degree types, I estimate separate regression models for each degree type (bachelor, master, MBA, doctoral and professional).[9] I also estimate all the models separately for men and women. The base model (Model 1) can be written as:

$$Y_i = \beta_{i(1-4)}P + \theta_i X + \varepsilon. \tag{1}$$

Respondents' annual logged salaries (Y) are predicted by a measure of highest parental education (P). The coefficients β_{1-4} quantify the expected change in the dependent variable for each level of parental education relative to the reference category (bachelor). X is a vector of demographic and survey-related variables: age, age squared, location of school awarding highest degree, race,[10] marital status, having kids, disability indicator, survey year and weight.

Model 2 (Equation (2)) and 3 (Equation (3)) address the second research question and evaluate the effect of educational and labor market processes, respectively.

$$Y_i = \beta_{i(1-4)}P + \theta_i X + \xi E + \delta_i L + \varepsilon. \tag{2}$$

$$Y_i = \beta_{i(1-4)}P + \theta_i X + \delta_i L + \varepsilon. \tag{3}$$

Model 2 includes a vector (E) of education-related variables, capturing the selectivity and funding of the highest degree-granting institution, field of study, and age at degree. Institutional selectivity is classified as five tiers, combining the Carnegie classification and information on institutional funding to distinguish: Private Research I and II (tier 1), Private Liberal Arts I (tier 2), Public Research I (tier 3), other four-year universities (tier 4), and specialized institutions (tier 5) (Hersch, 2019). Field of study is grouped into ten categories: Art/Humanities, Science, Math/Computer Sciences, Engineering, Business/Economics, Social Science, Health, Law, Education and Other. The age at completion of the highest educational degree, while highly correlated with the age at entering the labor market, is also capturing potential work experience, and is therefore part of the educational stratification process (Oh & Kim, 2020).

Model 3 includes a vector (L) of labor market-related variables. Specifically, the model controls for occupation, grouped into nine categories based on the 2010 Standard Occupational Classification (SOC) intermediate aggregation level (Management, Business, Financial; Computer, Engineering, Science; Education, Legal, Community Service, Arts, Media; Healthcare Practitioners and Technical; Service; Sales and Related; Office and Administrative Support; and traditional blue-collar[11]; sector (in five categories: 4-year universities/research institutes/medical schools; 2-year colleges and pre-college institutions; for-profit business/industry; self-employed; nonprofit business/industry; federal government; and

state or local government); firm size (in eight categories of number of employees: less than 10; 10–24; 25–99; 100–499; 500–999; 1000–4999; 5000–24,999; 25,000 or more); tenure (and its square); hours worked; and a dummy for employer located in the South.[12]

If intergenerational association is attributable to differences in the characteristics of the degree granting institution, the choice of field of study, or the age at degree, controlling for education-related factors should reduce the size and significance of $\beta_{i\ (1-4)}$ in Model 2 compared to Model 1. Similarly, if labor market mechanisms account for intergenerational association, $\beta_{i\ (1-4)}$ should decrease in size and/or become non-significant in Model 3. If education or labor market factors matter differently among educational subgroups, we will observe different changes in $\beta_{i\ (1-4)}$ across models across educational subgroups. The goal here is to investigate the extent of intergenerational association across degree types and by gender net of potential mechanisms, and not to unravel all education and labor market-related processes or demonstrate causality.

Results

Table 1 shows, for men and women separately, the distribution of graduates by degree type and social origin. For both men and women, master's are more

Table 1. Average earnings (in 2017 dollars) and social origins distribution (%). Men and women age 35–67.

	MEN					
	All	BA	MA	MBA	Doct	Prof
	100%	55.71%	23.54%	7.25%	7.51%	6.00%
Salary	$101,420	$93,854	$96,895	$122,644	$112,716	$149,644
Parents' education						
No college	50.81	55.05	48.42	48.87	40.63	35.88
Bachelor	23.31	24.03	22.05	24.29	21.04	23.25
Master	15.45	13.84	18.08	17.58	17.29	15.21
Doctoral	5.04	3.47	6.14	4.40	11.69	7.73
Professional	5.39	3.61	5.32	4.87	9.35	17.94
N	32,337	18,014	7,611	2,343	2,429	1,940
	WOMEN					
	All	BA	MA	MBA	Doct	Prof
	100%	47.78%	35.70%	4.53%	7.19%	4.79%
Salary	$70,931	$63,101	$68,815	$97,138	$87,235	$115,535
Parents' education						
No college	52.84	58.94	50.46	52.39	38.22	32.14
Bachelor	21.51	21.77	21.13	21.64	20.61	23.02
Master	14.87	11.99	16.86	15.96	20.39	19.44
Doctoral	5.01	3.26	5.57	4.24	11.30	9.55
Professional	5.76	4.03	5.97	5.77	9.48	15.86
N	24,482	11,698	8,741	1,109	1,761	1,173

BA = bachelor's degree; MA = master's degree; MBA = master's in business; Doct = doctoral degree; Prof = professional degree. Source: National Survey of College Graduates 2010–2017.

common than any other advanced degrees. Looking at the distribution of graduates from different social origin, the picture about access is clear: Men and women from lower social origin are less likely to access higher levels of education, and adult children whose parents earned higher level degrees are more likely to achieve such degrees as well.

Table 1 also shows average salaries for the whole sample of college degree holders, as well as by degree type. While bachelor's degree graduates have the lowest salaries, high variation exists in salaries across advanced degree holders, with the highest salaries for those with professional degrees, followed by those with MBAs, then doctoral graduates, and last master's graduates.

Table 2 shows the average earnings for men and women from different social origin, by degree type. First, I look at average salary "within rows," that is, I compare average salaries across respondents' degree types within SES groups. For both men and women, within social origin groups, a master's degree is always linked to higher earnings than a bachelor's, although differences are rather small; the only exception is women whose parents earned professional degrees, who make more when only having a bachelor's than when having a master's. Across social origins, MBA degree holders have much higher salaries than those with a master's and also than those with doctorates. Across all social origin groups, men and women with

Table 2. Average earnings (in 2017 dollars) of men and women (age 35–67) from different social origins, by degree type.

	MEN									
	BA		MA		MBA		Doct		Prof	
	$	R	$	R	$	R	$	R	$	R
Parents' education:										
No college	90,601	0.92**	93,035	0.92**	117,104	0.96	105,024	0.93**	142,729	0.99
Bachelor	98,689	1.00	101,523	1.00	121,927	1.00	112,976	1.00	143,871	1.00
Master	95,918	0.97**	97,984	0.97*	129,439	1.06*	114,704	1.02	152,643	1.06
Doctoral	98,714	1.00	101,537	1.00	138,499	1.14**	125,470	1.11**	159,931	1.11**
Professional	98,695	1.00	103,798	1.02	142,972	1.17**	125,941	1.11**	163,977	1.14**
N	18,014		7,611		2,343		2,429		1,940	
	WOMEN									
	BA		MA		MBA		Doct		Prof	
	$	R	$	R	$	R	$	R	$	R
Parents' education:										
No college	60,699	0.93**	67,559	0.98	92,952	0.94	88,100	1.04	112,016	0.97
Bachelor	65,045	1.00	68,957	1.00	99,159	1.00	84,769	1.00	115,380	1.00
Master	67,600	1.04	70,839	1.03	104,365	1.05	85,734	1.01	118,084	1.02
Doctoral	66,443	1.02	73,005	1.06*	102,402	1.03	90,932	1.07	113,525	0.98
Professional	71,632	1.10**	69,296	1.00	103,714	1.05	87,932	1.04	120,979	1.05
N	11,698		8,741		1,109		1,761		1,173	

BA = bachelor's degree; MA = master's degree; MBA = master's in business; Doct = doctoral degree; Prof = professional degree. The column R shows the ratios of earnings of each SES group relative to those whose parents earned a bachelor's. ** $p < .05$ and *$p < .10$ indicate statistically significant differences between the average salaries for each SES category compared to the reference (BA). Source: National Survey of College Graduates 2010–2017.

professional degrees earn the highest salaries. In line with relative education theory (Horowitz, 2020), advanced degrees, being relatively rarer, do provide an advantage for everybody who earns them compared to more widespread types of degrees.

Looking across social origin groups, that is, when comparing "across rows and within columns" in Table 2, we notice salary differences across respondents from different social background within each type of degree; furthermore, variation exists in such differences based on respondents' types of degrees. That is evident in the column "R" in Table 2, which shows the ratio between the salaries of graduates of each SES group, relative to those whose parents earned a bachelor's degree; this represents a first step in addressing the first research question about variation in intergenerational persistence across degree types.

For men, those whose parents did not earn a college degree have a disadvantage over those whose parents earned a college degree, across all degree types, although differences are only statistically significant among bachelor's, master's and doctoral degree holders. Among bachelor's and master's degree holders, having parents with a master's also provides a disadvantage relative to parents with only a bachelor's and parents with higher degrees do not provide an additional advantage. Instead, among those with an MBA, a doctoral, or a professional degree, parents with higher education than a bachelor provide an advantage relative to parents with only a bachelor's, which is strong and statistically significant for parents with a doctoral degree, and even stronger for parents with a professional degree across all three groups of MBA, doctoral, and professional degree holders.

Such descriptive results show that, interestingly, higher social background is not always associated with higher salaries; instead, social background provides advantages (in terms of respondents' salary) only in specific cases, and within certain limits. For example, men whose parents have a master's do not get higher salaries than those whose parents have an undergraduate education among bachelor's and master's degree holders. Overall, inequalities stemming from social origin seem the highest among those earning MBAs and professional degrees.

For women, the picture is quite different. Those whose parents have no college degree earn less than those whose parents have a bachelor's among all groups except those who earned a doctoral degree; however, differences are statistically significant only among bachelor's degree holders. Overall, no clear evidence of higher intergenerational persistence among advanced degree holders than bachelor's degree holders emerges. Rather, intergenerational association seems the highest among bachelor's graduates, for whom we also observe that parents with professional degrees provide a strong and significant advantage over parents with an undergraduate degree.

In order to further investigate the dynamics behind intergenerational socio-economic association, I introduce a series of regression models estimating graduates' salaries.[13]

Results in Table 3 reveal the size of the earning gap between graduates from different backgrounds, separately for respondents with different types of degrees. More specifically, Table 3 shows incidence rate ratios (IRR) associated with parental education, the indicator of social origin, which can be interpreted as the predicted ratios of the earnings of each social origin group compared to respondents whose parents earned a bachelor's degree.

The base model (M1) addresses the first research question about variation in intergenerational persistence across degree types; M2 and M3 address the second research question about the role of education and labor market factors, respectively. First, I focus on men. Results show some evidence of intergenerational persistence across all degree types; however, differences exist in the extent and patterns of intergenerational association across degrees. Among respondents with a bachelor's degree, all the IRRs are either below 1, indicating a persistent advantage when parents have a bachelor's, or are not statistically significant. Having parents with no college degree is associated with a significant disadvantage (IRR = 0.93; $p < .01$), and parents with higher level of education do not provide an advantage compared to parents with a bachelor's. Having parents without college education represents a disadvantage relative to having college-educated parents also among those with MA, doctorates, and MBAs, although for the latter group differences are not statistically significant. One should note that, for offspring in all educational groups, having parents without a college degree means having reached a higher educational level than their parents. Having parents with a bachelor degree, instead, has a different meaning in terms of educational mobility across groups. For BA holders, it means having reached the same education as their parents; for all the other groups, it implies educational upward mobility. Among those holding master's degrees, parents with education higher than a bachelor's do not provide any additional advantage compared to parents with an undergraduate degree; results actually point to a disadvantage in the baseline model. Among those with an MBA, having parents with a master's (although not significant in the baseline model) or higher (significant) provides an advantage compared to having a parents with only a bachelor. The advantage of having parents with a professional degree, in particular, is strong, and also holds for those with doctoral and professional degrees. For those two latter groups, parents with a doctoral degree also seem to provide a strong advantage relative to parents with a bachelor's, although differences are only significant among PhD holders.

Adding education and labor market controls, results remain largely the same.

Table 3. Parental education effects on earnings by degree type. IRR from negative binomial regression models. Men and women age 35–67.

	MEN					WOMEN				
	BA	MA	MBA	Doct	Prof	BA	MA	MBA	Doct	Prof
Parents' education:					**M1: Baseline**					
No college	0.93***	0.93***	0.97	0.92**	1.02	0.94***	0.98	0.96	1.04	0.99
Bachelor (rc.)	.	.	.	.	.	.	.	.	.	.
Master	0.98	0.95*	1.06	1.02	1.06	1.03	1.02	1.06	1.02	1.03
Doctoral	1.01	0.99	1.12*	1.09*	1.08	1.00	1.03	0.99	1.07	0.96
Professional	1.01	1.02	1.17**	1.10*	1.14**	1.11**	1.01	1.03	1.03	1.05
Parents' education:					**M2: Education**					
No college	0.96***	0.96*	1.01	0.96	1.03	0.97	0.99	1.00	1.06	0.98
Bachelor (rc)	.	.	.	.	.	.	.	.	.	.
Master	0.99	0.96	1.04	1.01	1.05	1.04	1.02	1.06	1.02	1.00
Doctoral	1.01	0.98	1.11	1.06	1.04	1.00	1.02	0.97	1.02	0.92
Professional	1.01	1.01	1.11	1.09*	1.09	1.10**	1.02	1.02	1.01	1.02
Parents' education:					**M3: Labor market**					
No college	0.95***	0.97*	1.01	0.95	1.06	0.95***	1.00	0.93	1.04	0.97
Bachelor (rc)	.	.	.	.	.	.	.	.	.	.
Master	1.00	1.00	1.09**	1.04	1.05	1.05**	1.01	0.98	0.97	1.01
Doctoral	1.02	1.02	1.05	1.07*	1.07	1.03	1.04	1.05	1.03	0.94
Professional	1.01	1.04	1.17**	1.14***	1.09*	1.12***	0.99	1.01	1.04	1.03
N	18,014	7,611	2,343	2,429	1,940	11,698	8,741	1,109	1,761	1,173

rc = reference category. BA = bachelor's degree; MA = master's degree; MBA = master's in business; Doct = doctoral degree; Prof = professional degree. M1 controls for age, age squared, location of school awarding highest degree, race, marital status, having kids, disability indicator, survey year and weight; M2 adds institutional tier, field of study, age at degree to M1; M3 adds occupation, sector, working hours, firm size and location to M1. * $p < .05$, ** $p < .01$, *** $p < .001$. Source: National Survey of College Graduates 2010–2017.

Both when accounting for education-related as well as for labor market-related factors, the disadvantage associated with having parents without a college degree persists for bachelor's and master's degree holders, while it becomes insignificant among doctoral graduates. Controlling for education and labor market factors, I confirm no advantage in having parents with more than an undergraduate degree for BA and MA holders. Accounting for educational factors, among MBA and professional graduates results still point to an advantage of having parents with master's, and, more strongly, doctoral or professional degrees. Although effects become not statistically significant, effect sizes are not negligible; accordingly, I refrain from interpreting this as educational factors accounting for intergenerational persistence for this educational subgroup. Adding labor market controls, the advantage of having parents with professional degrees remains strong and significant for MBA and professional degree graduates, and for doctoral graduates becomes even bigger. The finding that among professional and doctoral graduates those from the most privileged backgrounds maintain their advantage does not necessarily contrast with previous findings of weak intergenerational persistence among PhD holders (Torche, 2018). Instead, it builds on Torche's findings by providing detail regarding the impact of advanced levels of parental education. These results are also consistent with previous research showing immobility in the professional-managerial classes linked to closure strategies among top-income earners (Hertel & Pfeffer, 2020; Mitnik et al., 2016).

For women, the picture is again quite different. Overall less intergenerational association than among men emerges, confirming previous research. I do not find evidence of higher intergenerational persistence among advanced degree holders than bachelor's degree holders. Rather, intergenerational association seems the highest among bachelor's graduates, for whom results show a significant advantage of having parents with bachelor's compared to parents with no college and of having parents with professional degrees compared to parents with a bachelor's. Controlling for labor market-related factors both such advantages remain, and the advantage of having parents with a master's compared to a bachelor's also becomes significant. When controlling for education factors, having parents with professional degrees continues to provide a strong and significant advantage, while other effects remain similar in size but are not statistically significant. Overall, this indicates a rather different situation compared to the case of men, who did not get any advantage from having parents with higher education than themselves.

Sensitivity analyses

I conducted several robustness checks for the sample of men.[14] Following Torche (2018), I estimated alternative models using percentile earnings rank,

which expresses the change in respondents' earnings percentile rank associated with different levels of parental education (see Table A2 in the Appendix). These models differ from the ones using negative binomial regression on earnings as they only use the ordinal information about the dependent variable, excluding information about the dispersion of respondents' earnings (Torche, 2015, 2018). Results uphold intergenerational persistence across degree types. For BA holders results corroborate the disadvantage of having parents who did not earn a college degree compared to parents who did and no significant advantage of having parents with higher education across all model steps. For those with MBA and professional degrees, instead, the model confirms a strong advantage of having parents with professional degrees.

I also test the results restricting the sample to respondents age 35–50, following claims that income should be measured in the 30s and 40s in the United States (Haider & Solon, 2006). Results for this subsample point to the same conclusions (see Table A3 in the Appendix).

Last, I delve further into the finding of high intergenerational association among professional degree holders. To understand whether the high gap in earnings by social origin could derive from horizontal differences among professional degrees respondents, I distinguish between professional degrees in health or law, the two major fields for professional degrees. Results show strong and significant intergenerational association among those with professional degree in health, and much weaker, if any, evidence of intergenerational persistence for those with professional degrees in law (see Table A4 in the Appendix).

Discussion

Education-based meritocracy relies on the idea that rewards are distributed based on merit, and not social origin. It follows that education expansion should increase equality and ensure social mobility, weakening the relation between class of origin and class of destination. However, previous findings about intergenerational association have questioned the equalizing power of college degrees. Previous research found that the role of horizontal stratification in reproducing inequality is particularly pronounced among postgraduates (Gerber & Cheung, 2008; Torche, 2011), and suggested that the heterogeneity of graduate programs may be a factor explaining limited mobility among advanced degree holders (Torche, 2018). Advanced degrees highly differ in their economic rewards; therefore, if individuals of different social origin differently access advanced degrees of different types, their unequal distribution across types of degrees may generate high intergenerational association when advanced degrees are aggregated in one group.

In the context of ongoing educational expansion, an in-depth investigation of intergenerational persistence and socioeconomic gaps across types of

college degrees sheds new light on the broader question about the meritocratic power of education at higher levels of education. On the one hand, if education has meritocratic potential, ascription should matter less than merit at higher levels of education. This may work through education-level mechanisms, such that extended exposure to education should remove class differences. Additionally, this may manifest at the labor market level, as at higher levels of education more than at lower levels employers may look at credentials rather than class as signals for expertise. In this way, more education should weaken the effects of social origin. On the other hand, if access to different types of education and to jobs is not only a matter of credentials and skills but of passing gatekeepers who control access, higher education may not realize its meritocratic potential.

The unequal distribution of students of different social origin across degrees associated with differential earnings could contribute to explaining intergenerational persistence. However, the question about the role of education in social mobility goes beyond issues of access to degrees associated with different earnings and is also concerned with whether students from different background graduating with similar degrees reach the same positions.

This study addressed compositional issues possibly responsible for intergenerational persistence by examining the equalizing power of degrees distinguishing among degrees of different types. Additionally, it paid attention to differences in attainment across graduates from different backgrounds who earned similar degrees.

Analyzing the origin-destination link stratifying by type of college degree, I examined degree-specific dynamics. Oh and Kim (2020) recently investigated the mechanisms behind the reemergence of intergenerational association at the advanced level, including vertical and horizontal stratification at the advanced level. However, their assumption of linear effect of parental education on their children's earnings does not reveal which level of parental background matters. I overcame such limitation by evaluating the effect of parental education in relation to their offspring's education; in this way, I captured more nuances in intergenerational association processes and shed light on inconsistent findings in previous literature. By looking within types of college degrees, I was able to investigate the extent of intergenerational association between parents' education and offspring's earnings paying attention to parents' level of education relative to their offspring's. In other words, the effect of parental background on children's earnings is not assumed to be an absolute effect, but instead could possibly vary depending on children's level of education.

First, results showed that intergenerational association exists across all degrees, for men. Parental transmission of advantage occurred for graduates with a bachelor's degree, as well as for individuals with advanced degrees.

Together, these findings contradict the equalization hypothesis: A college degree does not erase the influence of social origin. In this way, I showed that, for men, power and privilege are consolidated and reproduced at higher levels of education and support what others have called a "class ceiling" (Laurison & Friedman, 2016). In other words, barriers exist for men from more disadvantaged backgrounds that preclude their gaining equal earnings as those from more privileged origin (Laurison & Friedman, 2016).

Second, in line with findings from France (Falcon & Bataille, 2018), I confirmed that the influence of social origin does not necessarily decline linearly with educational level. More specifically, I demonstrated that the level of parental education has different implications depending on respondents' education: Higher parental education may not make a difference if that goes much beyond their offspring's education. For example, I showed that those with MBAs, doctoral, or professional degree reap strong advantages from having parents with professional degrees. However, bachelor's graduates do not get such advantage, and instead benefit the most from having parents who also earned an undergraduate degree. This finding is particularly interesting as it suggests degree-specific cultural and social capital, and degree-specific socialization. For men, results described a picture dominated by what I label "intergenerational relative education effect"; in other words, a strong association between parental background and children's earnings exists when children hold similar degrees to their parents. Children benefit from having parents with similar degrees, and not necessarily from having parents with more education. That is to say, the effect of parental education is relative to one's education.

These results suggest that educational expansion alone may not be an effective tool to reduce inequality of educational opportunity. As Wakeling and Laurison (2017) find in their analyses of postgraduate degrees, as attainment of undergraduate qualifications increases overall and among disadvantaged social classes, social class inequalities start appearing in postgraduate degree qualifications. Increasing educational attainment is unlikely to change overall earnings inequality, one reason being related to the high earnings dispersion at the top of the earnings distribution. For men in particular, among those who earn the highest degrees, those from privileged backgrounds are more likely to be highly rewarded.

For women, I confirmed prior research suggesting that their earnings levels, although much lower than men's, are weakly related to their social origin (Jantti et al., 2006; Laurison & Friedman, 2016; Torche, 2011). I expanded on that showing that intergenerational association is weak across all types of advanced degrees. Instead, I found higher intergenerational persistence among bachelor's holders for whom, contrary to men's situation, parents with master's and professional degrees provide an advantage relative to parents with bachelors.

While I accounted for several education and labor market-related factors, much about the mechanisms behind intergenerational persistence for different types of degrees remains unclear. Given the findings of specific effects among those earning MBA and professional degrees, looking at the role of credentialism and occupational closure may be a potential avenue to investigate the dynamics behind intergenerational persistence. It would also be interesting to unravel how social background factors may play out differently across degrees. For example, in addition to the level of parental education, other characteristics related to socioeconomic background may matter, and matter differently at different educational levels, for adults children's success. Questions also remain about *how* social origin exerts its effect. For example, social capital or human capital may be decisive, that is, access to networks or the accumulation of skills through additional activities beyond a degree credential may be determinative.

While I showed that, for men, social origin is associated with future earnings across degrees, the measurement of intergenerational persistence in higher education used in this study may actually underestimate its extent. Selectivity mechanisms have been argued to possibly explain intergenerational mobility, or the lack thereof. Mare's (1980) dynamic selectivity approach posited that students from lower social origin who make it to a higher level of education are positively selected on unobserved attributes such as cognitive ability and motivation. If higher degrees are more difficult and costly, one would expect college degree holders from disadvantaged backgrounds to be positively selected and advanced degree holders to be even more selected. If selection plays a role, so that those from the lowest backgrounds who went on to earn the highest degrees are a selected crop, more talented, ambitious, hardworking -all attributes associated with higher earnings- they should actually significantly out-earn the undifferentiated group of those with higher backgrounds who were not a selected crop, in a perfectly meritocratic society. At the bachelor's level, those whose parents earned advanced degrees are actually downwardly mobile; this may point to negative selection of bachelor's graduates from high family background, which may also be responsible for lower intergenerational persistence at the bachelor's level when parents hold advanced degrees. Yet, recent tests of the selectivity hypothesis find no support that selection mechanisms drive the equalizing effect of a college degree (Karlson, 2019). Other studies, however, suggest that selection processes largely drive the intergeneration mobility that exists among college graduates, although they do not explain away social origin effects (Zhou, 2019). Yet, no study has been able to draw reliable conclusions about selectivity effects among advance degree holders specifically.

The conclusions I draw in this study are mainly descriptive. Future research might investigate the extent to which the association between parental education and adult children's earnings is causal, and the specific

mechanisms through which such causal effect manifests; this would add to our understanding about the meritocratic potential of higher education. With detailed information about educational trajectories and achievement, scholars could shed further light on specific educational mechanisms driving inequalities, including access to colleges of different types and educational success across college degrees. With work history data, scholars could investigate whether inequalities arise already at the beginning of the career or are mostly the results of differences in career progression. With demand-side data, more insight could be gained on hiring and promotion practices, while macro-economic indicators could reveal the role of the occupational structure.

Notes

1. Intergenerational association and intergenerational persistence are used as synonyms across the text.
2. More information can be found at https://www.nsf.gov/statistics/srvygrads/.
3. I thank Lynn Milan and Wan-Ying Chang at NSF for their advice on data sampling and modeling.
4. The lower threshold of age 35 limits the possibility that respondents get an advanced degree at older ages. Only a small number of people acquire an advanced degree after age 35 (Kim et al., 2015).
5. Missingness is very limited. In the selected age range, less than 0.5% of the cases have missing parental education and only 0.4% report zero income. Accordingly, list-wise deletion of such cases should not raise major concerns; additionally, that is in line with previous research using the same data (Witteveen & Attewell, 2020). In line with previous research (e.g., Manzoni & Streib, 2019; Torche, 2018; Witteveen & Attewell, 2020), the analyses only focus on those with a job; about 15% of respondents do not have a job. Sensitivity analyses evaluating selection in the study sample based on two stage Heckman selection models predicting selection into the sample in the first stage and earnings in the second stage confirmed the picture the current analyses reveal.
6. No distinction can be made within these five categories. Bachelor includes BS, BA, AB; Master includes MS and MA; Professional includes JD, LLB, MD, DDS, DVM; Doctorate includes be PhD, DSc, EdD. The NSCG does not distinguish between MA and MBA. However, following the suggestion of the NSCG staff as well as previous work using the NSCG (Hersch, 2019; Oh & Kim, 2020), I classified MA with major in Business as MBA.
7. Annual salary is top-coded at $200,000.
8. I checked results against using OLS regression on log-earnings and results were confirmed across models. Results are not shown but are available upon request.
9. Separating across recipients of different types of degrees facilitates comparison of effects across types of degrees, although does not speak of the statistical significance of differences. In additional analyses (not shown but available upon request), I estimated models on the full sample of all degree recipients including interaction terms between type of degree and parental education. Results from such analyses confirmed that effects which are significant in the sub-group analyses and appear different across groups are also significantly different statistically.

10. While I recognize the relevance of race, as well as the association between race and class, the data only allow us to introduce race as control; separate analyses by race are not feasible due to small cell sizes.

11. This includes Natural Resources, Construction, Maintenance, Production, Transportation, Material Moving.

12. I made empirical choices to account for potential multicollinearity among some of the included controls. For example, rather than looking at work experience, which would be highly correlated with age at degree, I focused on tenure in a job. Additionally, I ran tests to address multicollinearity concerns. A high correlation among control variables would be a first cause of concern; however, results are reassuring in that they reveal that correlation among predictors is low. While correlation only identifies issues for pairs of variables, alternative strategies to detect multicollinearity, such as VIF, may not work well in non-linear regression. Additionally, satisfactory standard errors/confidence intervals in the models suggest that multicollinearity is not causing a problem.

13. Table A1 in the Appendix provides full results for the regression models for men. Given the overall findings of weak or no intergenerational persistence among women, I only show full results for men.

14. Sensitivity tests for women confirmed the picture of weak or no intergenerational association. Thus, I do not show those tests.

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References

Armstrong, E., & Hamilton, L. (2013). *Paying for the party*. Harvard University Press.

Bartik, T. J., & Hershbein, B. (2018). Degrees of poverty: The relationship between family income background and the returns to education. *Upjohn Institute Working Paper* 18-284. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.

Björklund, A., & Jäntti, M. (2011). Intergenerational income mobility and the role of family background. In W. Wiemer Salverda, B. Nolan, & T. Smeeding (Eds.), *The Oxford handbook of economic inequality* (pp. 491–521). Oxford University Press.

Blau, F. D., & Kahn, L. M. (2017). The gender wage gap: Extent, trends, and explanations. *Journal of Economic Literature*, *55*(3), 789–865. https://doi.org/10.1257/jel.20160995

Bloome, D., Dyer, S., & Zhou, X. (2018). Educational inequality, educational expansion, and intergenerational income persistence in the United States. *American Sociological Review*, *83* (6), 1215–1253. https://doi.org/10.1177/0003122418809374

Bobbit-Zeher, D. (2007). The gender income gap and the role of education. *Sociology of Education*, *80*(1), 1–22. https://doi.org/10.1177/003804070708000101

Breen, R., & Goldthorpe, J. (2001). Class, mobility and merit: The experience of two British birth cohorts. *European Sociological Review*, *17*(2), 81–101. https://doi.org/10.1093/esr/17.2.81

Breen, R., & Jonsson, J. O. (2005). Inequality of opportunity in comparative perspective: Recent research on educational attainment and social mobility. *Annual Review of Sociology*, *31*(1), 223–243. https://doi.org/10.1146/annurev.soc.31.041304.122232

Breen, R., & Jonsson, J. O. (2007). Explaining change in social fluidity: Educational equalization and educational expansion in twentieth-century Sweden. *American Journal of Sociology*, *112* (6), 1775–1810. https://doi.org/10.1086/508790

Buchmann, C., & DiPrete, T. (2006). The growing female advantage in college completion: The role of family background and academic achievement. *American Sociological Review*, *71*(4), 515–541. https://doi.org/10.1177/000312240607100401

Budría, S., & Pereira, P. (2009). Education and wage dispersion: New evidence for Europe. In P. Dolton, R. Asplund, & E. Barth (Eds.), *Education and inequality across Europe*(pp. 147–170). Edward Elgar.

Carnevale, A., Cheah, B., & Hanson, A. (2015). *The economics value of college majors*. Georgetown University Center on Education and the Workforce. https://repository.library.georgetown.edu/bitstream/handle/10822/1050288/The-Economic-Value-of-College-Majors-Full-Report-web-FINAL.pdf?sequence=1

Cha, Y., & Weeden, K. A. (2014). Overwork and the slow convergence in the gender gap in wages. *American Sociological Review*, *79*(3), 457–484. https://doi.org/10.1177/0003122414528936

Day, J. C., & Newburger, E. C. (2002). *The big payoff: Educational attainment and synthetic estimates of work-life earnings*. Special Studies. Current Population Reports. U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau.

Erola, J., Jalonen, S., & Lehti, H. (2016). Parental education, class and income over early life course and children's achievement. *Research in Social Stratification and Mobility*, *44*, 33–43. https://doi.org/10.1016/j.rssm.2016.01.003

Falcon, J., & Bataille, P. (2018). Equalization or reproduction? Long-term trends in the intergenerational transmission of advantages in higher education in France. *European Sociological Review*, *34*(4), 335–347. https://doi.org/10.1093/esr/jcy015

Ford, K. (2018). Persisting gaps: Labor market outcomes and numeracy skill levels of first generation and multi-generation college graduates in the United States. *Research in Social Stratification and Mobility*, *56*, 21–27. https://doi.org/10.1016/j.rssm.2018.06.003

Friedman, S., & Laurison, D. (2020). *The class ceiling: Why it pays to be privileged*. Policy Press.

Gaddis, S. M. (2014). Discrimination in the credential society: An audit study of race and college selectivity in the labor market. *Social Forces*, *93*(4), 1451–1479. https://doi.org/10.1093/sf/sou111

Gerber, S., & Cheung, S. (2008). Horizontal stratification in postsecondary education: Forms, explanations, and implications. *Annual Review of Sociology*, *34*(1), 14.1–14.20. https://doi.org/10.1146/annurev.soc.34.040507.134604

Gregg, P., Jonsson, J., Macmillan, L., & Mood, C. (2017). The role of education for inter-generational income mobility: A comparison of the United States, Great Britain, and Sweden. *Social Forces*, *96*(1), 121–152. https://doi.org/10.1093/sf/sox051

Haider, S., & Solon, G. (2006). Life-cycle variation in the association between current and lifetime earnings. *American Economic Review*, *96*(4), 1308–1320. https://doi.org/10.1257/aer.96.4.1308

Hamilton, L. (2016). *Parenting to a degree*. University of Chicago Press.

The Hamilton Project. (2017). *The education wage premium contributes to wage inequality*. The Brookings Institution. Retrieved October 24, 2018, from http://www.hamiltonproject.org/charts/the_education_wage_premium_contributes_to_wage_inequality

Hardin, J. W., & Hilbe, J. M. (2012). *Generalized linear models and extensions* (3rd ed.). Stata Press.

Hersch, J. (2019). Catching up is hard to do: Undergraduate prestige, elite graduate programs, and the earnings premium. *Journal of Benefit-Cost Analysis*, *10*(3), 503–553. https://doi.org/10.1017/bca.2019.29

Hertel, F. R., & Pfeffer, F. T. (2020). The land of opportunity? Long-term trends in social mobility and education in the United States. In R. Breen & W. Müller (Eds.), *Education and intergenerational social mobility in Europe and the United States*(pp. 29–68). Stanford University Press.

Hilbe, J. M. (2011). *Negative binomial regression* (2nd ed.). Cambridge University Press.

Hilbe, J. M. (2014). *Modeling count data*. Cambridge University Press.

Horowitz, J. (2020). Correction: Relative education and the advantage of a college degree. *American Sociological Review*, *85*(3), 381–416. https://doi.org/10.1177/0003122420922505

Hout, M. (1984). Status, autonomy, and training in occupational mobility. *American Journal of Sociology*, *89*(6), 1379–1409. https://doi.org/10.1086/228020

Hout, M. (1988). More universalism, less structural mobility: The American occupational structure in the 1980s. *American Sociological Review*, *93*(6), 1358–1400. https://doi.org/10.1086/228904

Hussar, W. J., & Bailey, T. M. (2019). *Projections of education statistics to 2027 (NCES 2019-001)*. U.S. Department of Education National Center for Education Statistics.

Jackson, M., Goldthorpe, J., & Mills, C. (2005). Education, employers and class mobility. *Research in Social Stratification and Mobility*, *23*, 3–33. https://doi.org/10.1016/S0276-5624(05)23001-9

Jantti, M., Bratsberg, B., Roed, K., Raaum, O., Naylor, R., Osterbacka, E., & Eriksson, T. (2006). *American exceptionalism in a new light: A comparison of intergenerational earnings mobility in the Nordic countries, the United Kingdom and the United States*. IZA Institute of Labor Economics.

Kalleberg, A., & Loscocco, K. (1983). Aging values and rewards: Explaining age differences in job satisfaction. *American Sociological Review*, *48*(1), 78–90. https://doi.org/10.2307/2095146

Karlson, K. B. (2019). College as equalizer? Testing the selectivity hypothesis. *Social Science Research*, *80*, 216–229. https://doi.org/10.1016/j.ssresearch.2018.12.001

Kim, C. H., Tamborini, C., & Sakamoto, A. (2015). Field of study in college and lifetime earnings in the United States. *Sociology of Education*, *88*(4), 320–339. https://doi.org/10.1177/0038040715602132

Kohn, M., & Schooler, C. (1988). *Work and personality*. Ablex.

Laurison, D., & Friedman, S. (2016). The class pay gap in higher professional and managerial occupations. *American Sociological Review*, *81*(4), 668–695. https://doi.org/10.1177/0003122416653602

Lindley, J., & Machin, S. (2016). The rising postgraduate wage premium. *Economica*, *83*(330), 281–306. https://doi.org/10.1111/ecca.12184

Ma, J., Pender, M., & Welch, M. (2016). Education pays 2016: The benefits of higher education for individuals and society. *Trends in Higher Education Series*. College Board.

Manzoni, A., & Streib, J. (2019). The equalizing power of a college degree for first-generation college students: Disparities across institutions, majors, and achievement levels. *Research in Higher Education*, *60*(5), 577–605. https://doi.org/10.1007/s11162-018-9523-1

Mare, R. D. (1980). Social background and school continuation decisions. *Journal of the American Statistical Association*, *75*(370), 295–305. https://doi.org/10.1080/01621459.1980.10477466

Mitnik, P. A., Cumberworth, E., & Grusky, D. B. (2016). Social mobility in a high-inequality regime. *The ANNALS of the American Academy of Political and Social Science*, *663*(1), 140–184. https://doi.org/10.1177/0002716215596971

Morin, R., Brown, A., & Fry, R. (2014). *The rising cost of "not" going to college*. Pew Research Center.

Mullen, A. L., Goyette, K. A., & Soares, J. A. (2003). Who goes to graduate school? Social and academic correlates of educational continuation after college. *Sociology of Education*, *76*(2), 143–169. https://doi.org/10.2307/3090274

National Center for Education Statistics. (2019, May 10). *Fast facts: Back to school basics.* National Center for Education Statistics, U.S. Department of Education. https://nces.ed.gov/fastfacts/display.asp?id=372

National Science Foundation. (2017). *Overview: National survey of college graduates.* National Science Foundation. Retrieved October 24, 2018, from http://www.nsf.gov/statistics/srvygrads/#overview

Oh, B., & Kim, C. (2020). Broken promise of college? New educational sorting mechanisms for intergenerational association in the 21st century. *Social Science Research*, *86*, 102375. https://doi.org/10.1016/j.ssresearch.2019.102375

Perna, L. W. (2004). Understanding the decision to enroll in graduate school: Sex and racial/ethnic group differences. *The Journal of Higher Education*, *75*(5), 487–527.

Pfeffer, F., & Hertel, F. (2015). How has educational expansion shaped social mobility trends in the United States? *Social Forces*, *94*(1), 143–180. https://doi.org/10.1093/sf/sov045

Posselt, J. R., & Grodsky, E. (2017). Graduate education and social stratification. *Annual Review of Sociology*, *43*(1), 353–378. https://doi.org/10.1146/annurev-soc-081715-074324

Rivera, L. (2015). *Pedigree.* Princeton University Press.

Roksa, J. (2005). Double disadvantage or blessing in disguise? Understanding the relationship between college major and employment sector. *Sociology of Education*, *78*(3), 207–232. https://doi.org/10.1177/003804070507800302

Roksa, J., Grodsky, E., Arum, R., & Gamoran, A. (2007). United States: Changes in higher education and social stratification. In Y. Shavit, R. Arum, A. Gamoran, & G. Menahem (Eds.), *Stratification in higher education* (pp. 165–194). Stanford University Press.

Sewell, W. H., Sr., & Hauser, R. (1975). *Education, occupation, and earnings: Achievement in the early career.* Academic Press.

Stolzenberg, R. M. (1994). Educational continuation by college graduates. *American Journal of Sociology*, *99*(4), 1042–1077. https://doi.org/10.1086/230371

Stuber, J. (2011). *Inside the college gates.* Lexington.

Teichler, U. (2002). Diversification of higher education and the profile of the individual institution. *Higher Education Management and Policy*, *14*(3), 177–188. https://doi.org/10.1787/hemp-v14-art24-en

Torche, F. (2011). Is a college degree still the great equalizer? Intergenerational mobility across levels of schooling in the United States. *American Journal of Sociology*, *117*(3), 763–807. https://doi.org/10.1086/661904

Torche, F. (2015). Analyses of intergenerational mobility: An interdisciplinary review. *The ANNALS of the American Academy of Political and Social Science*, *657*(1), 37–62. https://doi.org/10.1177/0002716214547476

Torche, F. (2018). Intergenerational mobility at the top of the educational distribution. *Sociology of Education*, *91*(4), 266–289. https://doi.org/10.1177/0038040718801812

Wakeling, P., & Laurison, D. (2017). Are postgraduate qualifications the 'new frontier of social mobility'? *The British Journal of Sociology*, *68*(3), 533–555. https://doi.org/10.1111/1468-4446.12277

Weeden, K. A. (2002). Why do some occupations pay more than others? Social closure and earnings inequality in the United States. *American Journal of Sociology*, *108*(1), 55–101. https://doi.org/10.1086/344121

Wilson, K. L., & Portes, A. (1975). The educational attainment process: Results from a national sample. *American Journal of Sociology*, *81*(2), 343–363. https://doi.org/10.1086/226077

Witteveen, D., & Attewell, P. (2017). Family background and earnings inequality among college graduates. *Social Forces*, *95*(4), 1539–1576. https://doi.org/10.1093/sf/sow109

Witteveen, D., & Attewell, P. (2020). Reconsidering the 'meritocratic power of a college degree'. *Research in social stratification and mobility* , *66*, 100479.

Zhou, X. (2019). Equalization or selection? Reassessing the 'meritocratic power' of a college degree in intergenerational income mobility. *American Sociological Review*, *84*(3), 459–485. https://doi.org/10.1177/0003122419844992

Appendix.

Table A1. Negative binomial regression on earnings, by degree type. IRR and standard errors. Men age 35–67.

	M1: Baseline					M2: Education					M3: Labor market				
	BA	MA	MBA	Doct	Prof	BA	MA	MBA	Doct	Prof	BA	MA	MBA	Doct	Prof
Parents' education: No college	0.93**	0.93**	0.97	0.92**	1.02	0.96**	0.96*	1.01	0.96	1.03	0.95**	0.97*	1.01	0.95	1.06
	−0.01	−0.02	−0.03	−0.03	−0.04	−0.01	−0.02	−0.03	−0.03	−0.04	−0.01	−0.01	−0.02	−0.02	−0.03
Bachelor (rc.)															
Master	0.98	0.95*	1.06	1.02	1.06	0.99	0.96	1.04	1.01	1.05	1.00	1.00	1.09**	1.04	1.05
	−0.01	−0.02	−0.04	−0.04	−0.05	−0.01	−0.02	−0.04	−0.03	−0.05	−0.01	−0.02	−0.03	−0.03	−0.04
Doctoral	1.01	0.99	1.12*	1.09*	1.08	1.01	0.98	1.11	1.06	1.04	1.02	1.02	1.05	1.07*	1.07
	−0.03	−0.03	−0.06	−0.04	−0.06	−0.02	−0.03	−0.06	−0.04	−0.06	−0.02	−0.03	−0.05	−0.03	−0.06
Professional	1.01	1.02	1.17**	1.10*	1.14**	1.01	1.01	1.11	1.09*	1.09	1.01	1.04	1.17**	1.14**	1.09*
	−0.02	−0.03	−0.06	−0.05	−0.05	−0.02	−0.03	−0.06	−0.04	−0.05	−0.02	−0.03	−0.06	−0.04	−0.06
age	1.09**	1.12**	1.09**	1.11**	1.10**	1.08**	1.12**	1.10**	1.11**	1.10**	1.05**	1.06**	1.05**	1.05**	1.05**
	−0.01	−0.01	−0.02	−0.02	−0.02	−0.01	−0.01	−0.02	−0.02	−0.02	−0.01	−0.01	−0.01	−0.01	−0.02
age squared	1.00**	1.00**	1.00**	1.00**	1.00**	1.00**	1.00**	1.00**	1.00**	1.00**	1.00**	1.00**	1.00*	1.00**	1.00**
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Race: White (rc.)															
Asian	0.79**	0.81*	0.76	0.77	0.89	0.86**	0.9	0.82	0.95	0.95	0.85**	0.86	0.88	0.89	0.85
	−0.04	−0.08	−0.11	−0.15	−0.18	−0.04	−0.08	−0.12	−0.17	−0.19	−0.04	−0.07	−0.11	−0.15	−0.15
Hispanic	0.86**	0.88**	0.81**	1.01	0.93	0.90**	0.93*	0.83**	1.1	0.97	0.93**	0.93**	0.89**	1.08	0.97
	−0.02	−0.03	−0.04	−0.06	−0.06	−0.02	−0.03	−0.04	−0.06	−0.07	−0.01	−0.02	−0.04	−0.05	−0.06
Black	1.06*	1.20**	1.17*	1.22**	1.08	1.03	1.08	1.12	1.12*	1.06	1.09**	1.14***	1.12*	1.12**	1.09
	−0.03	−0.05	−0.07	−0.07	−0.07	−0.03	−0.05	−0.07	−0.06	−0.06	−0.03	−0.04	−0.06	−0.06	−0.06
Other	0.93**	0.92**	0.92	0.99	0.87**	0.97**	0.97	0.95	1.01	0.90*	0.99	0.98	0.97	1.03	0.95
	−0.01	−0.02	−0.04	−0.04	−0.04	−0.01	−0.02	−0.04	−0.04	−0.04	−0.01	−0.02	−0.04	−0.04	−0.04
Marital status: Married (rc.)															
Separated	0.89**	0.91**	0.91*	0.90*	0.83**	0.92**	0.92**	0.92	0.94	0.86**	0.92**	0.96	0.93	0.96	0.90*
	−0.01	−0.02	−0.04	−0.04	−0.04	−0.01	−0.02	−0.04	−0.04	−0.04	−0.01	−0.02	−0.04	−0.04	−0.04
Never married	0.80**	0.83**	0.91	0.83**	0.74**	0.80**	0.83**	0.90*	0.89*	0.78**	0.87**	0.90**	0.98	0.90**	0.83**
	−0.01	−0.02	−0.05	−0.04	−0.05	−0.01	−0.02	−0.04	−0.04	−0.05	−0.01	−0.02	−0.04	−0.04	−0.05
Children: No (rc.)															
Yes	1.06**	1.09**	1.12**	1.06*	1.04	1.05**	1.06**	1.11**	1.07**	1.03	1.05**	1.06**	1.09**	1.05**	1.05

(Continued)

Table A1. (Continued).

	M1: Baseline					M2: Education					M3: Labor market				
	BA	MA	MBA	Doct	Prof	BA	MA	MBA	Doct	Prof	BA	MA	MBA	Doct	Prof
	−0.01	−0.02	−0.03	−0.03	−0.04	−0.01	−0.02	−0.03	−0.03	−0.03	−0.01	−0.01	−0.03	−0.02	−0.03
Field of study: Arts and Humanities (rc.)															
Science						1.10** (−0.03)	1.27** (−0.04)		1.41** (−0.06)						
Math/Computer science						1.34** (−0.03)	1.56** (−0.05)		1.62** (−0.09)						
Engineering						1.38** (−0.03)	1.64** (−0.05)		1.62** (−0.08)						
Business/Economics						1.29** (−0.03)	1.56** (−0.06)		1.80** (−0.1)						
Social Science						1.06* (−0.03)	1.21** (−0.04)		1.29** (−0.06)	(rc.)					
Health						1.29** (−0.04)	1.50** (−0.06)		1.67** (−0.11)	1.54** (−0.16)					
Law						1.44** (−0.13)	1.47* (−0.24)		1.36* (−0.2)	1.28* (−0.13)					
Education						0.83** (−0.03)	1 (−0.03)		1.25** (−0.07)						
Other						1.08** (−0.03)	1.14** (−0.04)		1.08 (−0.06)						
Institution: Tier 1 (rc.)															
Tier 2						0.89** (−0.03)	0.98 (−0.08)	0.73* (−0.11)	0.73* (−0.11)	0.71** (−0.09)					
Tier 3						0.86** (−0.02)	0.86** (−0.02)	0.90** (−0.04)	0.90** (−0.02)	0.87** (−0.04)					
Tier 4						0.79** (−0.02)	0.83** (−0.02)	0.77** (−0.04)	0.85** (−0.02)	0.82** (−0.04)					
Tier 5						0.85** (−0.03)	0.81** (−0.03)	0.76** (−0.04)	0.86** (−0.05)	0.80** (−0.04)					
Age at degree						0.99** (0.00)	0.99** (0.00)	0.99** (0.00)	0.98** (0.00)	0.99** (0.00)					
Sector: 4-year uni (rc.)															
2-year colleges											0.89** (−0.03)	1.10** (−0.03)	1.06 (−0.08)	0.88** (−0.03)	0.59** (−0.05)

(Continued)

Table A1. (Continued).

	M1: Baseline					M2: Education					M3: Labor market				
	BA	MA	MBA	Doct	Prof	BA	MA	MBA	Doct	Prof	BA	MA	MBA	Doct	Prof
for-profit											1.35**	1.45**	1.32**	1.40**	1.30**
											-0.04	-0.04	-0.08	-0.05	-0.07
Bus/Ind, self-employed											1.23**	1.42**	1.25**	1.44**	1.29**
											-0.04	-0.06	-0.1	-0.1	-0.08
Bus/Ind nonprofit											1.14**	1.27**	1.18*	1.21**	1.14*
											-0.04	-0.04	-0.09	-0.05	-0.07
Federal government											1.26**	1.28**	1.16*	1.19**	1.12
											-0.04	-0.04	-0.08	-0.06	-0.09
State or Local government											1.08**	1.06	1.01	1.05	0.91
											-0.03	-0.03	-0.08	-0.07	-0.06
Occupation: Management, Business, Financial (rc.)															
Computer, Engineering, Science											0.88**	0.86**	0.84**	0.81**	0.72**
											-0.01	-0.01	-0.02	-0.02	-0.05
Education, Legal, Comm Serv, Arts, Media											0.68**	0.61**	0.51**	0.69**	0.91*
											-0.01	-0.01	-0.03	-0.02	-0.04
Healthcare											0.94	0.85**	0.68**	0.91	1.04
											-0.03	-0.03	-0.09	-0.09	-0.05
Service											0.66**	0.70**	0.75**	0.60**	0.69**
											-0.01	-0.02	-0.05	-0.06	-0.06
Sales											0.80***	0.78**	0.86**	0.54**	0.68**
											-0.01	-0.03	-0.03	-0.06	-0.08
Office and Admin Support											0.54***	0.58**	0.67**	0.58**	0.51**
											-0.02	-0.04	-0.06	-0.12	-0.11
Traditional Blue Collar											0.63***	0.64**	0.69**	0.32**	0.42**
											-0.01	-0.03	-0.04	-0.05	-0.08
Hours worked											1.02***	1.02***	1.02**	1.02**	1.02**
											0.00	0.00	0.00	0.00	0.00
Employer size: less than 10 (rc.)															
10–24											1.10**	1.14**	1.31**	1.20**	1.29**
											-0.02	-0.04	-0.08	-0.08	-0.06
25–99											1.12**	1.24**	1.29**	1.36**	1.37**
											-0.02	-0.04	-0.06	-0.08	-0.06
100–499											1.16**	1.33**	1.24**	1.34**	1.44**
											-0.02	-0.04	-0.06	-0.07	-0.07

(*Continued*)

Table A1. (Continued).

	M1: Baseline					M2: Education					M3: Labor market				
	BA	MA	MBA	Doct	Prof	BA	MA	MBA	Doct	Prof	BA	MA	MBA	Doct	Prof
500–599											1.17**	1.39**	1.37**	1.44**	1.53**
											−0.02	*−0.04*	*−0.08*	*−0.08*	*−0.09*
1000–4999											1.22**	1.40**	1.29**	1.53**	1.56**
											−0.02	*−0.04*	*−0.06*	*−0.07*	*−0.08*
5000–24999											1.26**	1.40**	1.32**	1.60**	1.47**
											−0.02	*−0.04*	*−0.06*	*−0.08*	*−0.08*
25,000 or more											1.31**	1.47**	1.36**	1.60**	1.54**
											−0.02	*−0.04*	*−0.06*	*−0.08*	*−0.09*
tenure											1.01**	1.01**	1.00	1.01**	1.01**
											0.00	*0.00*	*0.00*	*0.00*	*0.00*
tenure squared											1.00**	1.00*	1.00	1.00	1.00
											0.00	*0.00*	*0.00*	*0.00*	*0.00*
south											1.01	1.02	1.00	0.97	1.03
											−0.01	*−0.01*	*−0.02*	*−0.02*	*−0.03*
lnalpha	0.34**	0.34**	0.29**	0.30**	0.38**	0.32**	0.29**	0.28**	0.25**	0.36**	0.26**	0.23**	0.21**	0.21**	0.29**
N	18,014	7,611	2,343	2,429	1,940	18,014	7,611	2,343	2,429	1,940	18,014	7,611	2,343	2,429	1,940
ll	−220,000	−93,030	−29,063	−29,956	−24,630	−219,000	−92,458	−29,004	−29,740	−24,569	−217,000	−91,421	−28,661	−29,483	−24,331

rc = reference category. All models also control for location of school awarding highest degree, disability, survey year and weight. Standard errors in italics. Source: National Survey of College Graduates 2010–2017. p < .05, ** p < .01, *** p < .001

Table A2. Parental education effects on earnings by degree type. Estimates from regression models on earnings percentile, by degree type. Men age 35–67.

	MEN				
	BA	MA	MBA	Doct	Prof
Parents' education:			**M1: Baseline**		
No college	−3.34***	−3.48***	−0.51	−4.55**	0.72
Bachelor (rc.)	.	.	.	.	.
Master	−1.24	−2.53**	2.19	0.82	2.99
Doctoral	−0.16	0.34	3.21	1.92	4.81
Professional	−1.06	0.14	7.74**	3.16	7.01***
Parents' education:			**M2: Education**		
No college	−2.04***	−1.55*	0.84	−2.23	1.46
Bachelor (rc.)	.	.	.	.	.
Master	−0.86	−1.73*	1.80	0.41	2.87
Doctoral	0.06	−0.05	2.49	1.14	2.94
Professional	−0.06	0.28	5.42*	2.71	5.24**
Parents' education:			**M3: Labor market**		
No college	−2.54***	−1.11	0.63	−2.06	2.10
Bachelor (rc.)	.	.	.	.	.
Master	−0.14	0.33	3.88**	2.41	2.68
Doctoral	0.39	1.74	2.16	2.18	3.22
Professional	0.58	1.41	7.74***	5.68***	4.57**
N	18,014	7,611	2,343	2,429	1,940

rc = reference category. M1 controls for age, age squared, location of school awarding highest degree, race, marital status, having kids, disability indicator, survey year and weight; M2 adds institutional tier, field of study, age at degree to M1; M3 adds occupation, sector, working hours, firm size and location to M1. * $p < .05$, ** $p < .01$, *** $p < .001$. Source: National Survey of College Graduates 2010–2017.

Table A3. Parental education effects on earnings by degree type. IRR from negative binomial regression models. Men age 35–50.

	MEN				
	BA	MA	MBA	Doct	Prof
Parents' education:			**M1: Baseline**		
No college	0.94***	0.94**	0.94	0.93	1.02
Bachelor (rc.)	.	.	.	.	.
Master	1.01	0.97	1.11**	1.03	1.13*
Doctoral	1.06*	1.04	1.16*	1.09	1.12
Professional	1.03	1.03	1.17*	1.07	1.19*
Parents' education:			**M2: Education**		
No college	0.96**	0.96*	0.99	0.99	1.03
Bachelor (rc.)	.	.	.	.	.
Master	1.01	0.97	1.10*	1.02	1.11
Doctoral	1.05	1.01	1.14	1.04	1.10
Professional	1.02	1.01	1.08	1.04	1.13*
Parents' education:			**M3: Labor Market**		
No college	0.95***	0.96*	0.99	0.98	1.09
Bachelor (rc.)	.	.	.	.	.
Master	1.02	1.00	1.13***	1.09*	1.16**
Doctoral	1.06*	1.05	1.10	1.10*	1.10
Professional	1.03	1.05	1.18**	1.12*	1.18**
N	9,594	3,752	1,201	1,003	825

rc = reference category. M1 controls for age, age squared, location of school awarding highest degree, race, marital status, having kids, disability indicator, survey year and weight; M2 adds institutional tier, field of study, age at degree to M1; M3 adds occupation, sector, working hours, firm size and location to M1. * $p < .05$, ** $p < .01$, *** $p < .001$. Source: National Survey of College Graduates 2010– 2017.

Table A4. Parental education effects on earnings by degree type. IRR from negative binomial regression models. Men (age 35–67) with professional degrees in health and law.

	MEN	
	Health	Law
Parents' education:	**M1: Baseline**	
No college	1.01	1.06
Bachelor (rc.)	.	.
Master	1.02	1.11
Doctoral	1.08	1.07
Professional	1.18**	1.1
Parents' education:	**M2: Education**	
No college	1.02	1.07
Bachelor (rc.)	.	.
Master	1.01	1.09
Doctoral	1.07	1.05
Professional	1.16*	1.05
Parents' education:	**M3: Labor market**	
No college	1.01	1.09
Bachelor (rc.)	.	.
Master	1.01	1.09
Doctoral	1.07	1.08
Professional	1.13*	1.09
N	811	1,090

rc = reference category. M1 controls for age, age squared, location of school awarding highest degree, race, marital status, having kids, disability indicator, survey year and weight; M2 adds institutional tier, field of study, age at degree to M1; M3 adds occupation, sector, working hours, firm size and location to M1. * $p < .05$, ** $p < .01$. Source: National Survey of College Graduates 2010–2017.