

College as a Great Equalizer? Marriage and Assortative Mating Among First- and Continuing-Generation College Students

Michael D. King

ABSTRACT College has been hailed as a “great equalizer” that can substantially reduce the influence of parents’ socioeconomic status on their children’s subsequent life chances. Do the equalizing effects of college extend beyond the well-studied economic outcomes to other dimensions, in particular, marriage? When and whom one marries have important implications for economic and family stability, with marriage acting as a social safety net, encouraging joint long-term investments, and potentially producing dual-earner families. I focus on the marriage timing and assortative mating patterns of first- and continuing-generation college graduates to test whether college acts as an equalizer for marriage against alternative hypotheses. Using discrete-time event-history methods and data from the National Longitudinal Survey of Youth 1997, I find small differences between first- and continuing-generation graduates in marriage timing, but larger differences in assortative mating, particularly for women. First-generation women have a substantially lower likelihood of marrying another college graduate than do continuing-generation women, and a higher likelihood of marrying a noncollege graduate. These findings highlight the importance of examining noneconomic outcomes when studying social mobility and offer insight into how inequality may persist across generations, especially for women, despite apparent upward mobility.

KEYWORDS Marriage timing • Assortative mating • Educational homogamy • Intergenerational mobility • Higher education

Introduction

A college education has been hailed as a “great equalizer,” one that substantially reduces the influence of parents’ socioeconomic status on their children’s life chances. Multiple studies have shown that earning a college degree effectively eliminates the intergenerational association between a father’s and a son’s occupational status (Hout 1984, 1988; Torche 2011). More recently, scholars have found that college also reduces and sometimes eliminates the associations between parents’ and children’s social class, individual earnings, and total family income (Chetty et al. 2017; Torche 2011). The results from this body of research suggest that college offers a path to

social mobility, allowing children the opportunity to move up the social ladder relative to their parents and providing an “answer to the old question about education’s overcoming disadvantaged origins. A college degree can do it” (Hout 1988:1391).

Do the equalizing effects of college extend beyond the well-studied economic outcomes to other dimensions? Where someone lives, one’s health status, and one’s family formation experiences are just a few noneconomic outcomes that may or may not be equalized among college graduates. Even if occupational status or income differences are minimal among college graduates, if disparities remain along other stratifying dimensions then the extent of equalization and social mobility implied by prior work may have been overstated.

Whether and when one marries, in particular, have important implications for economic and family stability, with marriage acting as a social safety net (Oppenheimer 1988), building trust that encourages joint long-term investments (Cherlin 2004), and potentially producing dual-earner families (Raley et al. 2006). Marriage is increasingly considered a symbolic indicator of success, partially because many couples see financial security as a prerequisite for marriage (Smock et al. 2005; Xie et al. 2003). Whom one marries also matters. Given high levels of spousal resemblance in education and income, advantage (or disadvantage) is concentrated within couples (Schwartz 2010; Schwartz and Mare 2005), which has important implications for social reproduction across generations (Maralani 2013; Mare and Maralani 2006).

Many studies have documented variation in marriage patterns by social background. For example, research consistently shows that those from more disadvantaged backgrounds (e.g., children of non-college-educated parents) marry at younger ages (Axinn and Thornton 1992; South 2001; Sweeney 2016; Uecker and Stokes 2008; Wiik 2009), which is in turn related to marital stability (Teachman 2002). Despite these findings, we know little of whether this relationship varies by children’s own education or even whether the relationship holds when accounting for children’s education. In treating college graduates as a uniform group when studying marriage, most prior work has assumed that the relationship between a college degree and marriage is similar for all college graduates—an assumption consistent with the great equalizer hypothesis. However, there is currently little empirical evidence to support this assumption.

If an association between parents’ social status and their children’s marital outcomes exists among college graduates, then college may not be as much of an equalizer as past work has suggested. Little prior research has investigated this possibility, despite the importance of whether, when, and whom one marries for economic and social outcomes. In this study, I use the National Longitudinal Survey of Youth 1997 (NLSY97) to examine heterogeneity in marriage outcomes within college graduates by parental education. In particular, I focus on differences in marriage timing and assortative mating patterns between first-generation college graduates—those who have earned a bachelor’s degree but do not have at least one parent with a bachelor’s degree—and continuing-generation graduates—those who have earned a bachelor’s degree and also have at least one parent with a bachelor’s degree.

First-generation college students are an increasingly visible population, receiving attention both from universities in recruitment and retention efforts as well as from researchers seeking to understand their unique educational experiences. A large literature documents the educational outcomes of first-generation college students (e.g., Ishitani 2006; London 1989; Pascarella et al. 2004; Wilbur and Roscigno 2016), but few studies (if any) have explored their postcollege social experiences, such as

marriage. If college is a great equalizer for marriage, we would expect differences in marriage patterns by parents' socioeconomic status (Axinn and Thornton 1992; South 2001; Sweeney 2016; Uecker and Stokes 2008; Wiik 2009) to be minimal among college graduates. In other words, marriage patterns of first- and continuing-generation college graduates would be indistinguishable.

But recent research suggests that college may not act as an equalizer for marriage as it does for socioeconomic outcomes (Armstrong and Hamilton 2013, 2021; Musick et al. 2012). Instead, a marriage market mismatch may exist for college students from more disadvantaged social backgrounds (Musick et al. 2012), such as first-generation college students. These students may find themselves torn between their social origins and destinations—not quite fitting in with their more advantaged continuing-generation peers but also no longer fitting in with their high school friends (Hurst 2018; Lee and Kramer 2013; London 1989). This liminal position may result in difficulty finding compatible partners from either group both during and after college (Armstrong and Hamilton 2021).

This marriage market mismatch faced by first-generation college students may result in delaying or forgoing marriage and may influence whom they marry by changing their preferences for partners in the face of marriage market constraints. In particular, first-generation college students may be more likely to “cast a wider net” for partners and “marry down” in terms of educational attainment (Lichter et al. 1995). Some researchers have found support for this argument among more disadvantaged college-goers who “struggled to find ideal [relationship] candidates” and sometimes viewed their upward mobility as coming at the cost of serious relationship commitments (Armstrong and Hamilton 2013:213, 2021).

I make three primary contributions in this article. First, I extend prior work on college as a great equalizer to one noneconomic outcome, testing the notion of college as a great equalizer for marriage against alternative hypotheses. By neglecting marriage outcomes, previous work in this area has implied that a college degree's ability to level the playing field in terms of individual socioeconomic status outcomes (e.g., occupation, income, education) is the ultimate indicator of social mobility. However, if an association between social origins and marriage patterns exists among those who earn a college degree, the social mobility implied by great equalizer arguments might be overstated given that marriage is a key component of economic well-being, especially for women (Smock et al. 1999; Waite 1995). Second, I contribute to recent research on class-based marriage market mismatch by integrating it with work on first-generation college students, who provide an ideal case for studying potential social origin and destination conflicts, and by updating previous research with more recent data. Finally, this article contributes to the existing literature on first-generation college students—a field dominated by research focused on their educational experiences (e.g., Pascarella et al. 2004; Rodini et al. 2018; Wilbur and Roscigno 2016)—by examining marriage to understand the broader consequences of first-generation college student status for later life outcomes.

Is College a Great Equalizer? Moving Beyond Economic Outcomes to Marriage

Education is often recognized as both a system that promotes social reproduction (Bourdieu and Passeron 1977) and a site for social mobility (Hout 1984, 1988; Mare

1980; Torche 2011). On the one hand, one of the strongest predictors of children's socioeconomic status is their family background, especially their parents' education, often leading to the reproduction of advantage or disadvantage across generations (Blau and Duncan 1967; Calarco 2014; Hauser and Featherman 1976). On the other hand, college provides an opportunity for moving up the social ladder, as evidenced by rising educational attainment and upward social mobility over the last 70 years, particularly among women (Buchmann and DiPrete 2006; Hout and Janus 2011; Ryan and Siebens 2012).

Stratification scholars have been trying to make sense of education's dual reproduction and mobility roles for decades. Until the 1980s, research suggested that no amount of education could overcome the consequences of disadvantaged social origins (Blau and Duncan 1967; Featherman and Hauser 1978). However, Hout (1984, 1988) showed that the relationship between parents' status and children's outcomes depends on children's ultimate educational attainment. More specifically, his work showed that the link between fathers' and sons' occupational status was effectively broken for sons who earned a college degree, a phenomenon that earned college the title of the "great equalizer."

This finding has not been limited to children's occupational outcomes, as others have found similar results for education outcomes. Among those who earn a bachelor's degree, the link between parental socioeconomic status and the likelihood of continuing on to a graduate degree is minimal (Mare 1980; Stolzenberg 1994). Evidence of college as an equalizer has also been found using more recent data, despite changing social contexts and the expansion of higher education (Chetty et al. 2017; Torche 2011). This work shows that the associations between fathers' and children's social class, individual earnings, and family income are all substantially reduced or eliminated among children who earn a college degree (Torche 2011). And although previous research on college as a great equalizer has tended to focus on the same measures of status in both the parent and child generations, this need not be true. At its core, the great equalizer argument suggests that parents' status characteristics become less important for children's outcomes at each additional level of children's educational attainment, with the relationship disappearing among those who earn a college degree.

It is important to note that although the phrase "great equalizer" may imply a causal effect of a college degree, the mechanisms responsible for this finding are not well understood and most researchers are quick to acknowledge that results may be due to selection (e.g., Giani 2016; Torche 2011). Recent attempts to quantify the extent to which these findings are driven by selection have produced mixed results (Fiel 2020; Karlson 2019; Smith et al. 2019; Zhou 2019). Even without having identified the mechanisms responsible, previous research provides strong evidence that, among those who earn a college degree, socioeconomic status as an adult is not strongly tied to their parents' socioeconomic status. But despite consistency regarding college as an equalizer for socioeconomic outcomes, very little is known about whether a college degree is also an equalizer for noneconomic outcomes, like marriage.

A substantial body of research documents the relationship between parents' characteristics and children's marriage and family formation patterns (e.g., Axinn and Thornton 1996; Cunningham and Thornton 2006; Mooyaart and Liefbroer 2016; Uecker and Stokes 2008; Wiik 2009). With few exceptions, this literature shows that individuals from more disadvantaged backgrounds (e.g., those who have non-college-educated parents) form unions and marriages earlier than their more advantaged counterparts (Wiik 2009) and are less likely to experience educational homogamy

(Blackwell 1998). These differences in marriage outcomes by parents' socioeconomic status are analogous to the differences observed in income or occupational status outcomes, suggesting that marriage experiences may be a candidate for a similar equalization process.

At the same time, previous research has demonstrated that a person's own educational attainment is closely related to their marriage patterns. Those with higher levels of education are more likely to ever marry (Isen and Stevenson 2010; Kalmijn 2013), marry later (Manning et al. 2014), and marry someone who also has a high level of education (Schwartz and Mare 2005). However, little research has examined marriage outcomes while simultaneously accounting for own education as well as parents' education. This is critical for understanding the equalization hypothesis for two reasons.

First, without looking at the interaction between children's and parents' educations, we cannot determine whether there is variation in the relationship between marriage and children's education by parents' education. Second, most work documenting differences in marriage outcomes by parents' education does not adjust for children's own educational attainment. In research that does include both parents' and children's education in models of marriage, results are mixed regarding whether a relationship persists between parents' education and children's marriage (McClendon 2018; Mooyaart and Liefbroer 2016; Sweeney 2002; Wiik 2009). If parents' education is not related to children's marriage once children's education is accounted for, there may be nothing to equalize. This necessitates not only examining first- and continuing-generation graduates' marriage experiences, but also making similar comparisons by parental education among those with lower levels of education.

Most prior work on the relationship between marriage and education has not allowed for potential variation in the relationship by social background. The implicit assumption is that education *does* act as a great equalizer and that the relationship between having a college degree and marriage is constant, regardless of parents' socioeconomic status. I directly test this assumption in the form of the great equalizer hypothesis against alternatives that suggest differences may remain between first- and continuing-generation graduates' marriage timing and educational homogamy.

The first alternative I examine is a related, though weaker, version of equalization. In this weaker form, it is possible that any differences in marriage outcomes by parental education are *reduced* but not completely *eliminated*—that is, differences may only be partially equalized. Under partial equalization, first-generation graduates may be more similar to other college graduates than they would be had they not earned a bachelor's degree, but differences important to marriage may still remain. For instance, though first-generation students often increase social and cultural capital while in college (Lehmann 2007), they never reach parity with their more advantaged peers (Pascarella et al. 2004). In short, first-generation graduates are different from others with similarly educated parents in part because of their college experiences, but they still may not be equivalent to other college graduates in ways that influence marriage.

An Alternative to Equalization: Marriage Market Mismatch

Although most past research has implicitly assumed that college acts as a great equalizer for marriage, there are multiple reasons to suggest otherwise. One alternative

hypothesis is that marriage market constraints faced by first-generation college students produce different marriage experiences than those of other college students (Musick et al. 2012). First-generation college students occupy a unique position in the social order and may find themselves torn between their social origins and destinations as they climb the social ladder (Armstrong and Hamilton 2013; Lee and Kramer 2013).

Despite their upward mobility, first-generation students often do not develop the same resources or levels of social and cultural capital as continuing-generation students (Lehmann 2007, 2014) and struggle to connect socially with their higher status peers (Lee and Kramer 2013; Stuber 2011). Both of these processes can hinder opportunities for cross-class dating during college (Armstrong and Hamilton 2013). First-generation students' upward mobility can also strain relationships with family and friends from their social origin (Lee and Kramer 2013), which may develop into incompatibility in the search for partners from their social origins. This constraint from both sides may result in a marriage market mismatch for first-generation graduates and marriage experiences that are different from those of their continuing-generation counterparts.

Some prior research has supported the marriage market mismatch hypothesis. Musick and colleagues (2012) find differences in the likelihood and timing of marriage by social origins (which includes parental education, among other components) among those attending college. Specifically, they show that more disadvantaged students had a lower likelihood of marriage at all ages than more advantaged students, both delaying marriage and resulting in a reduced likelihood to marry at all. One potential limitation of this approach, however, is its focus on college attendance. More disadvantaged students are more likely to drop out of college (Goldrick-Rab 2006; Lehmann 2007) and may be saddled with debt associated with college attendance without the rewards associated with a college degree (Goldrick-Rab 2016). Because of this, it is difficult to disentangle the marriage market mismatch experiences of those who attend college but do not finish from those who attend and earn a bachelor's degree.¹ I expand prior work on marriage market mismatch by primarily focusing on college graduates and leveraging more recent data to speak to contemporary marriage experiences.

Summary of Hypotheses and Predictions

The great equalizer and partial equalization hypotheses build upon conflicting predictions for marriage outcomes on the basis of first-generation graduates' parents' education and first-generation graduates' own education. In considering their parents' education, we would expect first-generation graduates to have earlier ages of first marriage and lower levels of educational homogamy (Axinn and Thornton 1996;

¹ Musick and colleagues (2012) briefly compared those who completed college with those who did not when assessing the marriage market mismatch hypothesis, finding results consistent with, albeit weaker than, those for college attendance. They found that more disadvantaged college completers were less likely to ever marry than were more advantaged completers, although differences in marriage timing were no longer statistically significant between advantaged and disadvantaged college completers.

Blackwell 1998; Cunningham and Thornton 2006; Mooyaart and Liefbroer 2016). However, considering their own education, first-generation graduates should have later ages of first marriage and higher levels of educational homogamy (Isen and Stevenson 2010; Manning et al. 2014; Schwartz and Mare 2005). If the great equalizer hypothesis holds, I expect first-generation graduates to have later ages of marriage and higher levels of educational homogamy that are equivalent to those of their continuing-generation counterparts. In other words, among college graduates, parents' education should not be related to children's marriage outcomes.

If the partial equalization hypothesis holds, though, I expect first-generation graduates to have later ages of marriage than others with similarly educated parents, yet earlier ages of marriage than continuing-generation graduates. That is, some of the difference in age at first marriage predicted by parents' education will be reduced, but not completely eliminated. For assortative mating, this would mean first-generation graduates would have a higher likelihood of marrying someone with a bachelor's degree than would others with similarly educated parents, though they would still have a lower likelihood of educational homogamy than their continuing-generation counterparts. For both equalization hypotheses, differences in marriage outcomes by parents' education should be larger for those with less education and get smaller with each additional level of education.

Under the marriage market mismatch hypothesis, conflicting social origin and destination statuses may make it difficult for first-generation graduates to find compatible partners. If the marriage market mismatch hypothesis holds, I expect first-generation graduates will marry later than their continuing-generation counterparts owing to difficulty in finding a partner. And in light of a prolonged partner search, I also expect to see a reduced likelihood of educational homogamy as first-generation graduates are forced to either forgo marriage or broaden their search beyond college graduates.

Finally, though I make no gender-specific hypotheses or predictions because of limited prior research, I do examine men and women separately given well-established gender differences in marriage patterns and a small body of literature suggesting gender variation in the importance of parents' status for children's outcomes (Blackwell 1998; DiMaggio and Mohr 1985; Torche 2011). I also assess the hypotheses for marriage timing and educational homogamy independently. In other words, results for marriage timing may support one hypothesis while results for educational homogamy support a different hypothesis.

Data and Methods

Data

The NLSY97 is a nationally representative longitudinal survey in which a cohort of 12- to 18-year-olds in 1997 were surveyed yearly from 1997 to 2011 and every other year since then. I use data through 2015 when respondents were between 30 and 36 years of age. The NLSY97 collects a detailed relationship history from each respondent, measured at the month level, which allows for precision in estimating the timing of first marriage. The longitudinal nature of data collection also allows for the inclusion of detailed time-varying covariates. Because respondents are between

ages 30 and 36 in 2015, a nontrivial proportion have not yet entered their first marriage at the time of the most recent data collection and some may have not yet finished their education. However, about three quarters of bachelor's degrees are earned prior to age 30 (Bauman 2016), the youngest age at the last interview. Further, there are sufficient data available to compare the initial marriage patterns of first- and continuing-generation students as they transition through early adulthood. For many respondents, this amounts to at least 10 years of data after college completion.²

Analytic Strategy and Measures

I estimate a discrete-time complementary log-log hazard model for timing to first marriage, as shown in Eq. (1). The data are in person-month format, with duration at risk of marriage measured from the month and year of high school completion to the month and year of first marriage or censoring (*time* in Eq. (1)), and I include a squared term to allow for nonlinearity in the hazard of marriage (*time*²).³ Defining the risk of marriage beginning at the time of high school completion allows for comparisons across multiple levels of educational attainment (i.e., high school graduate, some college, bachelor's degree), including the comparison of first- and continuing-generation college graduates. This specification excludes those who married prior to high school completion or those who did not finish a high school degree, though this is a relatively small number of respondents. To assess the sensitivity of the results to the point at which marriage eligibility begins, I use two additional risk parameterizations as robustness checks: one beginning marriage risk at the time of college enrollment and another at the time of bachelor's degree completion.

$$\begin{aligned} \log(-\log(1 - P)) = & \alpha + \sum \beta_{1k} \text{attain}_k + \beta_2 \text{time} + \beta_3 \text{time}^2 + \beta_4 \text{gender} \\ & + \sum \beta_{5k} (\text{attain}_k \times \text{time}) + \sum \beta_{6k} (\text{attain}_k \times \text{time}^2) \\ & + \sum \beta_{7k} (\text{attain}_k \times \text{gender}) + \beta_8 (\text{time} \times \text{gender}) \\ & + \beta_9 (\text{time}^2 \times \text{gender}) + \sum \beta_{10k} (\text{attain}_k \times \text{time} \times \text{gender}) \\ & + \sum \beta_{11k} (\text{attain}_k \times \text{time}^2 \times \text{gender}) + \sum \beta_l \text{controls}. \end{aligned} \quad (1)$$

The dependent variable in Eq. (1) is equal to 1 if an individual is first married in a given month and 0 if they are never married or are censored (models examining first unions, either cohabitation or marriage, produce similar results; see the online appendix). Censored cases are those who have not yet married by the time of the last interview or leave the survey owing to attrition or death.

² It is possible that this age restriction reduces differences between first- and continuing-generation college graduates. That is, first-generation students who are likely to have graduated by this point may be more like continuing-generation students than they would be if we observed them later in life (when more first-generation students may have finished college). Given that the vast majority of college degrees are completed by the early 30s, though, the marriage patterns of those who finish college later would have to be substantially different to alter the results. That said, future work should explore this as the NLSY97 cohort is followed into later life.

³ I examined alternative functional forms for the baseline time hazard. The quadratic formulation offered the best balance of parsimony and model fit based on the Bayesian information criterion.

I make no distinction between same- and different-gender unions in my analyses. Same-gender partnerships were not well identified in early waves of NLSY97, meaning they are difficult to remove from the sample. The more recent data that allow same-gender marriages to be identified show that less than 1% of marriages were same gender. To maintain a consistent sample throughout the study period, these couples are included. However, because their numbers are small, their inclusion in the analysis is unlikely to substantively change the results. The marriage patterns examined here may be different for same- and different-gender couples, though, and would offer an interesting avenue for future research.

The main independent variables of interest ($attain_i$) are a cross-classification of respondent's parental education (less than a bachelor's degree, bachelor's degree or more) and respondent's own ultimate education (high school graduate, some college, bachelor's degree or more). The combined parent and respondent education variables form a six-category ($K=1, 2, \dots, 6$) parent-by-child education grouping. This combined variable represents an explicit measure of generation status along with other parent-by-child educational categories, though it is analytically equivalent to an interaction between parent and respondent education. Parent's education is based on a combination of both child and parent reports from the first interview in 1997. I use highest biological parent's education in all analyses. Recent work suggests that nonresidential fathers and stepfathers may contribute differently to intergenerational status transmission, although these differences are small and vary by father involvement (de Leeuw and Kalmijn 2020; de Leeuw et al. 2018). Despite this, my results are robust to alternative specifications of parental education (using only mother's education, only father's education, and highest residential parent's education). Respondent's education is based on the most recently available report of educational attainment from the respondent.

In the results presented below, I focus primarily on differences between first-generation and continuing-generation college graduates. However, all models are estimated using information from all available groups. This allows for alternative comparisons (e.g., between first-generation college graduates and first-generation students who attend college but do not earn a bachelor's degree) as well as comparisons of the relationship between parental education and marriage across different educational levels to fully assess the equalization hypotheses.

Although using respondents' ultimate educational attainment limits my ability to draw causal conclusions about the *effect* of a college education on marriage timing, it facilitates a simple, constant definition of social mobility. Additionally, uncovering descriptive differences between these groups is a necessary step in understanding any relationships between generation status and marriage. Alternatives such as using time-varying educational attainment are conceptually problematic, particularly in terms of interpretation. For instance, using time-varying attainment treats those who never finish college as indistinguishable from those who do finish while both are in the "some college" attainment level. But those who eventually finish college have different marriage patterns during this important time,⁴ and using ultimate educational

⁴ This may be because those who eventually earn a college degree are distinct in some way or because certain marriage patterns during college influence who does (or does not) eventually graduate.

attainment allows me to account for these differences. That said, I present alternative specifications in the online appendix (Tables A11 and A12), and results are similar across the alternative attainment measures.

The duration measures (*time*, *time*²) are interacted with the parent-by-child education categories (*attain_k*) to allow for nonproportionality in this relationship. It is well established that those with less education marry earlier than those with more, but that the more educated eventually catch up (Cherlin 2010; Goldstein and Kenney 2001). This may also be true for the comparison between first- and continuing-generation students. Given that marriage timing also varies by gender, the time and parent-by-child education variables are further interacted with gender (e.g., *attain_k* × *time* × *gender*), and results are presented separately for men and women.⁵

Finally, the models control for background factors related to marriage timing and educational attainment. I include time-varying controls for geographic region (Northeast, North Central, South, West) and religious affiliation (Protestant, Catholic, other, none), as well as time-invariant controls for age at high school completion, race/ethnicity⁶ (Black, White, Hispanic, other), and family structure while growing up (two biological parents, single parent, other). Missing data on control variables are filled using previously known values when available. This helps reduce data loss to missing values and poses few problems since none of the measures used are highly variable over time. Models including additional background factors that may be endogenous to marriage patterns, such as parenthood, enrollment patterns, cognitive skills, and attitudes toward self (e.g., first-generation students may have different fertility or college enrollment patterns, which may influence both their marriage patterns and their educational attainment), can be found in the online appendix, though results are consistent with those presented below.

The original NLSY97 sample included 8,984 respondents designed to be nationally representative when used with the provided sampling weights, which I use in all analyses presented here. Of the full NLSY97 sample, I remove 1,139 cases for which information on high school graduation date is unavailable (primarily owing to not completing high school or an equivalent credential). I additionally remove 372 cases reporting marriage prior to high school graduation and 345 cases that are missing information on their own or their parents' educational attainment. Finally, I remove seven cases that are missing data on the remaining covariates. This produces an analytic sample of 7,121 respondents who ever graduated from high school or earned an equivalent credential. Of those who earned a high school credential, 5,367 ever attended a postsecondary institution and 2,232 earned a bachelor's degree. In the results presented below, I focus primarily on those who earned a bachelor's degree, although as mentioned earlier, additional groups are included in the models.

Given the nonproportionality and nonlinearity of the models, model coefficients are difficult to interpret (Mize 2019). Instead, I present predicted proba-

⁵ An alternative is to estimate a fully interacted model or separate models for men and women. However, results from fully interacted (i.e., gender-stratified) models are nearly identical to those presented here.

⁶ Given differences in the likelihood and timing of marriage across racial and ethnic groups (Raley et al. 2015), I also estimated separate models for Whites and Blacks (the only groups with substantial enough sample sizes). Although some differences exist, results are descriptively consistent with those presented in the following (see the online appendix).

bilities from the models to compare the likelihood of having married at different durations since high school completion for different subgroups (full model results are available in the online appendix). Because I am presenting predicted probabilities, I also present bootstrapped confidence intervals and significance tests to assess the precision of my estimates and make comparisons across groups (Efron and Tibshirani 1994).⁷

To examine assortative mating patterns, I extend the timing analysis to estimate a competing risk multinomial logit model (see Eq. (2)), distinguishing whether a respondent does not marry, marries someone with less than a bachelor's degree, or marries someone with a bachelor's degree or more ($J=1, 2, 3$). This allows me to compare the likelihood of first-generation graduates marrying someone with a bachelor's degree (i.e., educational homogamy) to the same likelihood for continuing-generation graduates. Unlike the timing analysis, I use a proportional hazard model for the assortative mating analysis to maximize parsimony (though nonproportional models produced very similar results).

$$\log\left(\frac{P_j}{1-P_j}\right) = \alpha_j + \sum \beta_{1kj} \text{attain}_k + \beta_{2j} \text{time} + \beta_{3j} \text{time}^2 + \beta_{4j} \text{gender} + \sum \beta_{5kj} (\text{attain}_k \times \text{gender}) + \beta_{6j} (\text{time} \times \text{gender}) + \beta_{7j} (\text{time}^2 \times \text{gender}) + \sum \beta_{ij} \text{controls}. \quad (2)$$

Results

Descriptive Findings

Table 1 presents weighted descriptive statistics for college graduates by generation status and gender.⁸ Women outnumbered men among college graduates, especially among first-generation students, which is consistent with the widening gender gap in college completion (Buchmann and DiPrete 2006). In general, continuing-generation students were more likely to be White and have grown up with both biological parents than were first-generation students. There were relatively small differences by religion or region.

There were few differences in the median age at high school completion (the beginning of the start of marriage eligibility), suggesting that any observable differences between groups in their marriage patterns were not a result of differences in when they finished high school. Relatively few differences were seen between groups in the probability of being married five, 10, or 14 years after high school completion; the largest difference was found 10 years after high school completion among men (42% of first-generation graduates had married compared with 35% of continuing-generation graduates), although that gap nearly disappeared within four additional years of observation. This is consistent with the equalization hypotheses

⁷ Each confidence interval and significance test is constructed by randomly selecting 1,000 samples of the same size from the original sample with replacement.

⁸ Table A1 in the online appendix includes descriptive statistics for additional groups.

Table 1 Weighted descriptive statistics of college graduates by gender and generation status, NLSY97

Characteristic	Women		Men	
	First Generation	Continuing Generation	First Generation	Continuing Generation
Race				
White	68.9	81.1	69.4	83.4
Black	15.0	6.7	12.5	5.4
Hispanic	5.3	3.4	5.8	2.2
Other	10.8	8.8	12.3	9.0
Family Structure				
Two biological parents	57.9	74.2	58.8	76.7
Single parent	26.7	15.4	22.9	11.6
Other	15.4	10.4	18.3	11.8
Region				
Northeast	22.8	17.0	24.1	17.5
North Central	26.9	30.8	27.8	31.9
South	30.5	30.7	31.0	28.6
West	19.8	21.6	17.1	22.0
Religion				
Catholic	29.8	26.7	35.8	32.7
Protestant	58.6	59.3	52.0	48.3
Other	2.6	5.5	2.9	6.7
None	9.0	8.5	9.3	12.4
Median Age at High School Graduation	18.5	18.4	18.7	18.5
Proportion Married^a				
At age 23	0.14	0.11	0.12	0.07
At age 28	0.44	0.45	0.42	0.35
At age 32	0.60	0.64	0.60	0.59
Marriage Relative to Education^b				
Married before college	2.1	0.4	3.0	0.6
Married during college	27.5	17.2	28.4	19.6
Married post-BA completion	70.3	82.3	68.5	79.8
Assortative Mating				
Never married	40.2	35.2	38.1	40.4
Married <BA	32.1	20.2	21.8	13.6
Married ≥BA	27.7	44.6	40.1	46.1
Number of Person-Months	84,820	72,301	51,207	66,305
Number of Respondents	693	602	420	517

Notes: BA=bachelor's degree. Totals may not add to 100.0 because of rounding.

^a Based on Kaplan-Meier estimates, roughly five, 10, and 14 years after high school completion.

^b Conditional on marriage being observed in NLSY97.

for marriage timing. However, conditional on marriage, first-generation respondents were much more likely to have married during college than were continuing-generation graduates. Given similar marriage timing patterns, this finding is consistent with first-generation students' longer time to earning a degree (Ishitani 2006).

Unlike the small differences in marriage timing, I found large differences in educational assortative mating patterns between first- and continuing-generation college graduates, particularly for women. First-generation women were the least likely to

have married homogamously, with about a quarter married to a partner with at least a bachelor's degree (compared with 45% of continuing-generation women). The differences in educational assortative mating were smaller among men, where homogamy was the most common outcome for both first- and continuing-generation men (40% and 46%, respectively). These descriptive results suggest that college may not be uniformly equalizing for all outcomes or all students.

Time to Marriage From High School Graduation

Figure 1 presents model-based survival curves for first- and continuing-generation college graduates, separately for women (panel a) and men (panel b); curves are based on a model that allows for nonproportional hazards and controls for race, region, religion, family structure while growing up, and age at high school completion (see Eq. (1)).⁹ Panel a shows that differences in marriage timing between first- and continuing-generation women were small across the duration examined. For both groups, the predicted time it took for 50% to experience their first marriage was approximately 10 years after high school graduation, or around age 28. As shown in panel b, the difference between first- and continuing-generation men was somewhat larger. Especially in the years immediately following high school completion, first-generation men appeared to be marrying slightly earlier, although this gap closed by the time they were in their early 30s. It took first- and continuing-generation men approximately 10.5 and 11.5 years after high school completion, respectively, for 50% to experience their first marriage.

For women, the small differences between first- and continuing-generation graduates in predicted marriage timing provides initial support for the great equalizer hypothesis, suggesting that the notion may apply to noneconomic outcomes, such as marriage. For men, though, first-generation graduates' earlier marriage offers initial support for the partial equalization hypothesis. For both genders, there was no evidence of delayed marriage for first-generation graduates compared with continuing-generation graduates, thus offering no support for the mismatch hypothesis.

Upon closer examination, however, comparisons across additional education groups provided little evidence of equalization, either partial or full. For either equalization hypothesis to be supported, we would also expect larger differences by parental education for children with lower levels of education. To assess this, I compared differences by parental education across child educational attainment levels at three different time points following high school completion. Panel a of **Figure 2** shows that differences in marriage timing by parental education for women were not only small for those who earned a bachelor's degree, but were small within each education group. For men (panel b), differences by parental education were somewhat larger (particularly among those in the "some college" group) but did not present a pattern consistent with an equalization process. Instead, the timing gap between men with or without college-educated parents was either consistent across educational attainment levels (10 and 14 years after high school

⁹ Table A2 in the online appendix presents full model results.

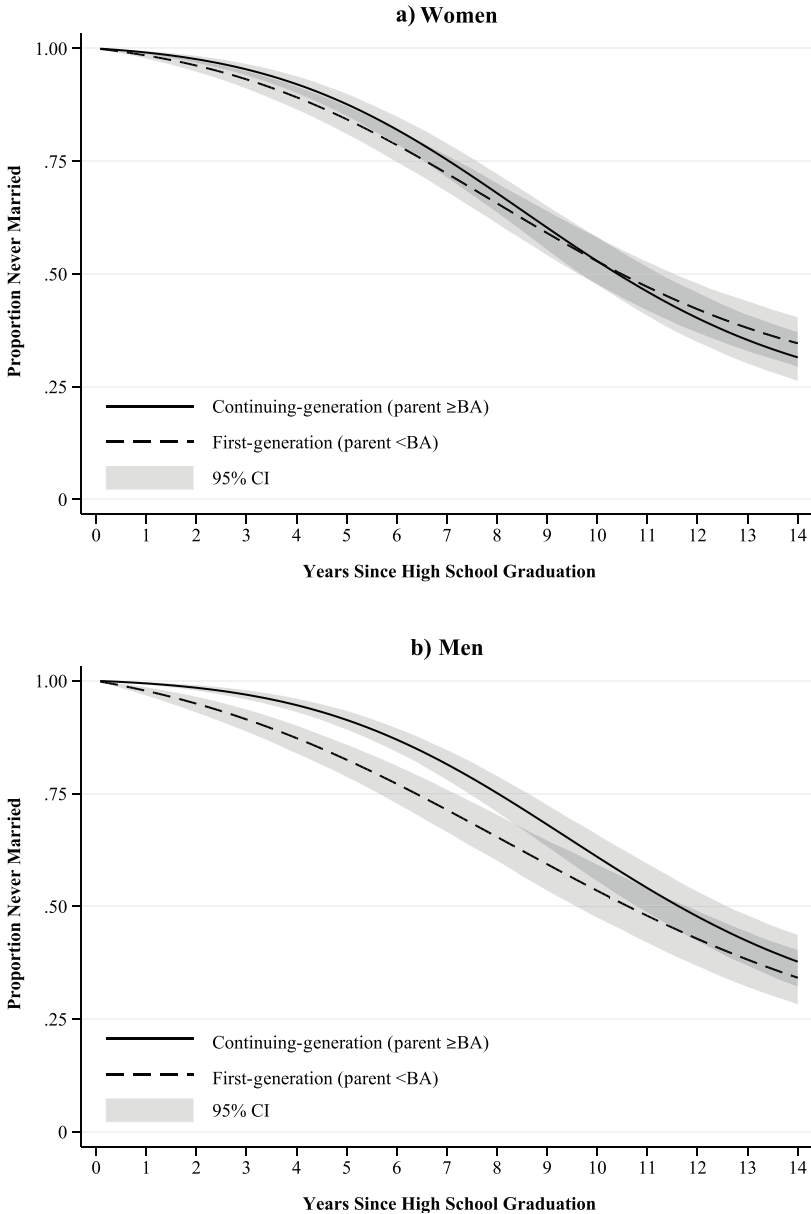


Fig. 1 Predicted marriage survival curves beginning at high school graduation by generation status and gender, NLSY97. Predictions are based on an individual with the following characteristics: White, Protestant, grew up with both biological parents, Northeast resident, and graduated high school at age 18. Bootstrapped confidence intervals (1,000 iterations).

completion) or grew with additional education level (five years after completion), offering no support for the equalization hypotheses. That differences in marriage timing by parents' education were small, even for lower levels of educational attainment, suggests that parents' education has little relationship with children's marriage timing after adjusting for children's own education.

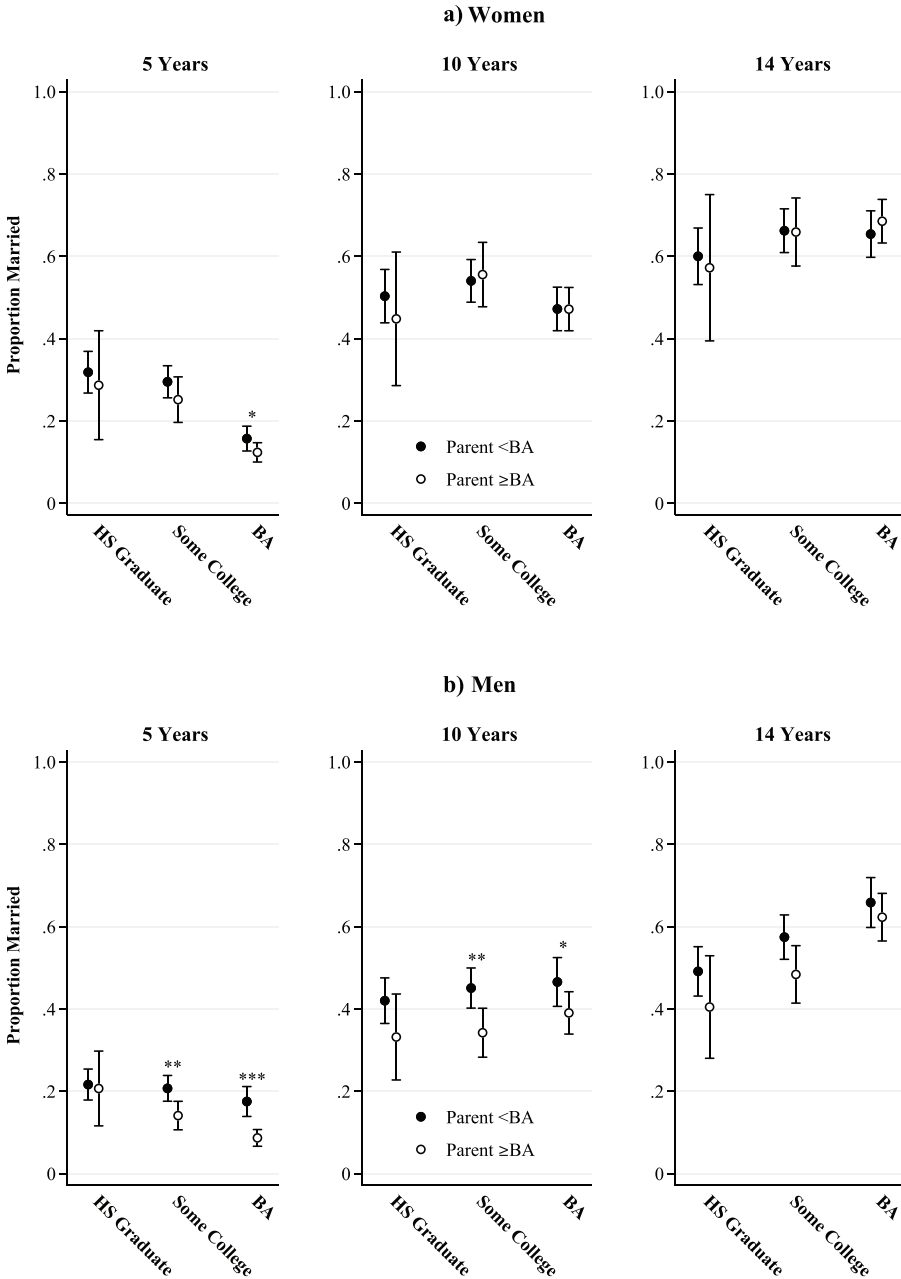


Fig. 2 Predicted probabilities of marriage by years since high school graduation, respondent education, parental education, and gender, NLSY97. Error bars represent 95% confidence intervals (bootstrapped, 1,000 iterations). Predictions are based on an individual with the following characteristics: White, Protestant, grew up with both biological parents, Northeast resident, and graduated high school at age 18. * $p < .05$; ** $p < .01$; *** $p < .001$ (significance test of differences between parental education groups: Parent \geq BA vs. Parent $<$ BA; bootstrapped, 1,000 iterations)

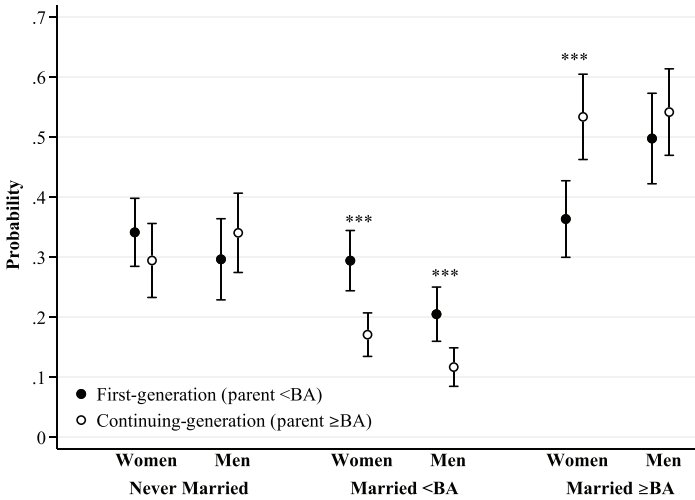


Fig. 3 Predicted probabilities of first marriage type by age 32, by generation status and gender, NLSY97. Error bars represent 95% confidence intervals (bootstrapped, 1,000 iterations). Predictions are based on an individual with the following characteristics: White, Protestant, grew up with both biological parents, Northeast resident, and graduated high school at age 18. *** $p < .001$ (significance test of differences between parental education groups: Parent \geq BA vs. Parent $<$ BA; bootstrapped, 1,000 iterations)

This is surprising given past research documenting differences in children’s marriage timing by parents’ status (Axinn and Thornton 1992; Mooyaart and Liefbroer 2016; South 2001; Uecker and Stokes 2008).

Competing Risk Models for Assortative Mating

Differences in marriage timing are one measure of whether a college degree acts as an equalizer for marriage. Another is whom one marries. Figure 3 plots the cumulative predicted probabilities of each of the three possible marriage outcomes through 14 years after high school completion: (1) never marrying, (2) marrying someone without a bachelor’s degree, and (3) marrying someone with a bachelor’s degree or more. These predicted probabilities are presented by gender and generation status and are based on models that control for race, region, religion, family structure growing up, and age when completing high school (see Eq. (2)).¹⁰

The predicted probabilities show that three of the four groups of college graduates (first- and continuing-generation men and continuing-generation women) were substantially more likely to marry someone with at least a bachelor’s degree (i.e., marry homogamously) than someone with less than a bachelor’s degree (i.e., marry “down”). This is consistent with work documenting high levels of educational homogamy among college graduates (Schwartz and Mare 2005). For men, first- and continuing-generation graduates had similar predicted probabilities of marrying a partner with a

¹⁰ Table A3 in the online appendix presents full model results.

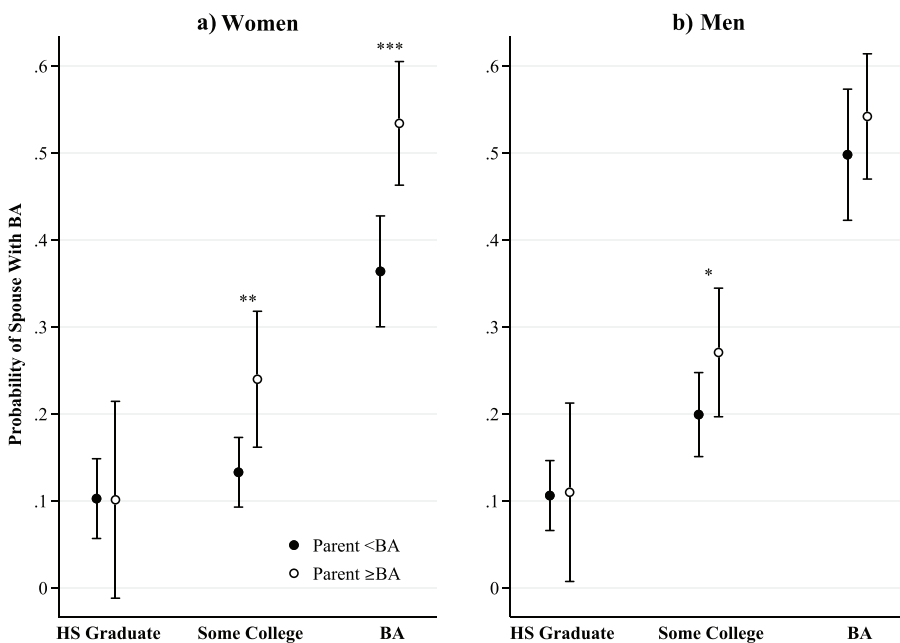


Fig. 4 Predicted probabilities of marrying spouse with BA by age 32, by respondent education, parental education, and gender, NLSY97. Error bars represent 95% confidence intervals (bootstrapped, 1,000 iterations). Predictions are based on an individual with the following characteristics: White, Protestant, grew up with both biological parents, Northeast resident, and graduated high school at age 18. * $p < .05$; ** $p < .01$; *** $p < .001$ (significance test of differences between parental education groups: Parent \geq BA vs. Parent $<$ BA; bootstrapped, 1,000 iterations)

bachelor's degree (50% chance or higher by age 32), though first-generation men were more likely than their continuing-generation counterparts to marry someone with less than a bachelor's degree (21% vs. 12%).

For women, assortative mating patterns for first- and continuing-generation graduates were noticeably different. The predicted probability of first-generation women marrying a partner with at least a bachelor's degree was 17 percentage points lower than that of continuing-generation women (36% vs. 53%). Continuing-generation women experienced levels of educational homogamy similar to those of men, but first-generation women were much less likely to marry a college graduate. Furthermore, the estimates show that first-generation women were 12 percentage points more likely to marry a partner with less than a bachelor's degree than were continuing-generation women (29% vs. 17%).

The relatively small differences in educational homogamy between first- and continuing-generation men are initial evidence in favor of the great equalization hypothesis, which predicted similar levels of educational homogamy. As with the marriage timing results, though, closer examination across additional education groups (Figure 4, panel b) reveals patterns inconsistent with equalization. In particular, there is no evidence of a gap by parental education that diminishes with each additional level of education. Although first- and continuing-generation men had similar likelihoods of marrying a partner with a bachelor's degree, the evidence does not support the great equalizer

hypothesis given the lack of differences at lower levels of education. Furthermore, similar levels of homogamy among first- and continuing-generation men also provide no support for either partial equalization or marriage market mismatch hypotheses.

For women, the much lower likelihood of educational homogamy among first-generation graduates did not support the great equalizer hypothesis, but both partial equalization and marriage market mismatch predicted lower levels of homogamy among first-generation graduates. Comparisons in panel a of [Figure 4](#) show that the difference in the likelihood of marrying someone with a bachelor's degree by parental education grew with each additional level of educational attainment. This is further evidence against any form of equalization (which would predict shrinking differences at higher levels of education) and provides the most support for some form of marriage market mismatch for women's educational assortative mating. I return to possible explanations for gender differences in the likelihood of educational homogamy in the Discussion.

Robustness Checks

The marriage timing and assortative mating results presented earlier are based on analyses conditional on high school completion. Examination of alternative definitions of when the risk of marriage begins allows me to explore whether the results are consistent across samples and identify if there is a specific educational transition where differences between first- and continuing-generation students emerge or disappear. To test whether the results are sensitive to alternative risk set parameterizations, I estimate two additional models. The first begins the risk of marriage at college enrollment (which includes only those who ever enrolled in postsecondary education) and the second at college completion (which includes only those who ultimately finished a bachelor's degree). As with the model beginning at high school completion, these models exclude those who marry prior to enrolling or finishing college, respectively.

Comparisons across models in [Table 2](#) show that the marriage timing results from alternative risk definitions ("since college enrollment" and "since BA completion") are largely consistent. In all three models, the differences by parental education in the proportion married by a given time are minimal for each educational attainment level. For instance, approximately two thirds of first-generation women are predicted to be married by their early 30s, regardless of risk parameterization. Taken together, this is evidence that the similarities between first- and continuing-generation graduates are not a result of the analytic samples or marriage risk parameterizations. The alternative models are also consistent with the main results when examining differences for less educated groups by parental education. For example, the differences by parents' education for "some college" women are nearly identical whether marriage risk begins at high school completion or college enrollment.

I also assessed the sensitivity of the assortative mating results to these different analytic samples and marriage risk parameterizations (not shown). Regardless of when risk of marriage begins, first- and continuing-generation men had similar levels of educational homogamy—more than 50% predicted probability in all cases. At the same time, first-generation women were consistently less likely (between 13 and 17 percentage points less likely) to marry someone with a bachelor's degree. The consistency of these additional analyses for both marriage timing and educational

Table 2 Predicted probability of marriage at five, 10, and 14 years after educational transition, by risk parameterization, gender, parental education, and respondent education, NLSY97

	Since High School Completion			Since College Enrollment			Since BA Completion		
	5 Years	10 Years	14 Years	5 Years	10 Years	14 Years	5 Years	10 Years	
Women									
High school graduate									
Parent <BA	.32 (.27, .37)	.50 (.44, .57)	.60 (.53, .67)	—	—	—	—	—	
Parent ≥BA	.29 (.15, .42)	.45 (.29, .61)	.57 (.39, .75)	—	—	—	—	—	
Some college									
Parent <BA	.29 (.26, .33)	.54 (.49, .59)	.66 (.61, .72)	.28 (.24, .32)	.54 (.48, .60)	.66 (.60, .72)	—	—	
Parent ≥BA	.25 (.20, .31)	.56 (.48, .63)	.66 (.58, .74)	.24 (.19, .30)	.55 (.46, .64)	.66 (.57, .75)	—	—	
Bachelor's degree									
Parent <BA (first gen.)	.16 (.13, .19)	.47 (.42, .52)	.65 (.60, .71)	.15 (.12, .18)	.47 (.41, .52)	.65 (.59, .72)	.40 (.33, .47)	.67 (.58, .76)	
Parent ≥BA (cont. gen.)	.12 (.10, .15)*	.47 (.42, .52)	.69 (.63, .74)	.12 (.10, .15)	.47 (.41, .53)	.69 (.63, .74)	.40 (.33, .46)	.70 (.62, .78)	
Men									
High school graduate									
Parent <BA	.22 (.18, .25)	.42 (.36, .48)	.49 (.43, .55)	—	—	—	—	—	
Parent ≥BA	.21 (.12, .30)	.33 (.23, .44)	.40 (.28, .53)	—	—	—	—	—	
Some college									
Parent <BA	.21 (.18, .24)	.45 (.40, .50)	.57 (.52, .63)	.21 (.18, .25)	.44 (.39, .50)	.56 (.50, .62)	—	—	
Parent ≥BA	.14 (.11, .18)**	.34 (.28, .40)**	.48 (.41, .55)	.14 (.10, .17)***	.34 (.28, .40)**	.49 (.41, .56)	—	—	
Bachelor's degree									
Parent <BA (first gen.)	.18 (.14, .21)	.47 (.41, .52)	.66 (.60, .72)	.16 (.13, .20)	.45 (.39, .52)	.65 (.58, .72)	.38 (.30, .45)	.63 (.54, .72)	
Parent ≥BA (cont. gen.)	.09 (.07, .11)***	.39 (.34, .44)*	.62 (.56, .68)	.09 (.07, .11)***	.39 (.34, .45)	.62 (.56, .69)	.32 (.26, .39)	.66 (.57, .74)	

Notes: 95% confidence intervals are shown in parentheses (bootstrapped, 1,000 iterations). Predictions are based on an individual with the following characteristics: White, Protestant, grew up with both biological parents, Northeast resident, graduated high school at 18, enrolled in college at 19, and graduated college at 23. BA=bachelor's degree.

* $p < .05$; ** $p < .01$; *** $p < .001$ (significance test of differences between parental education groups: Parent ≥BA vs. Parent <BA; bootstrapped, 1,000 iterations)

homogamy suggests that the findings are not only a function of the specific sample analyzed or the choice of risk parameterization.

Discussion and Conclusions

Is college a “great equalizer” of differences in marriage timing and assortative mating by parental education? The evidence presented in this article suggests that it is not. First, there appear to be few differences to equalize in marriage timing. Though the differences between first- and continuing-generation college students’ timing of marriage are small, differences by parental education among lower levels of education are also small—a finding inconsistent with any form of equalization. This is surprising given prior research documenting the relationship between parents’ status and children’s marriage (Axinn and Thornton 1992; Blackwell 1998; Mooyaart and Liefbroer 2016; South 2001; Wiik 2009), but it highlights the importance of accounting for children’s own education when examining this relationship. Research that includes both parents’ and children’s education in models of children’s marriage is relatively rare and has produced mixed results depending on the context and data (Mooyaart and Liefbroer 2016; Sweeney 2002; Wiik 2009). More research should examine the conditions under which parents’ education matters for children’s marriage, net of children’s own education, and whether this relationship has evolved over time.

The similarities in marriage timing also do not support the marriage market mismatch hypothesis, which predicted that first-generation college graduates may delay marriage more than their continuing-generation counterparts (Musick et al. 2012). This inconsistency with prior work does not appear to be solely due to differences in analytic samples. Although the data used here follow respondents only into their early 30s, it is unlikely that the marriage timing patterns presented earlier will diverge enough to support the mismatch hypothesis with a longer period of observation. It is possible, however, that period or cohort differences between the two populations studied (NLSY79 in prior work and NLSY97 here) may explain the inconsistency in findings. Future work should continue to investigate this class-based marriage market mismatch, the conditions under which it applies, and how it may have changed over time.

Second, the patterns of assortative mating presented here also do not support the great equalizer hypothesis. Differences between first- and continuing-generation graduates were large for women, with first-generation women being nearly 20 percentage points less likely to marry a college graduate than their continuing-generation counterparts. Additionally, there was no evidence of declining differences by parental education at higher levels of respondents’ education. Given that differences in women’s likelihood of marrying a college graduate by parental education were actually smaller for lower levels of education, the assortative mating results for women provide more support for the mismatch hypothesis than for the partial equalization hypothesis.

The small assortative mating differences observed between first- and continuing-generation men, paired with small differences by parental education among other educational attainment levels, do not support either equalization hypothesis. Thus, the assortative mating results for men are similar to the null results for timing, which suggest that parental education for men in this cohort is not strongly related to educational assortative mating once controlling for respondents’ own education. These gender-specific assortative mating findings are also inconsistent with Musick and

colleagues' (2012) brief examination of mismatch and homogamy, further highlighting potential period or cohort differences in these processes.

The large difference observed between first- and continuing-generation women is in line with prior work suggesting that parents' status may be more important for daughters' than for sons' outcomes (Blackwell 1998; DiMaggio and Mohr 1985; Torche 2011). It also mirrors recent qualitative work documenting the marriage experiences of less and more privileged college-educated women (Armstrong and Hamilton 2021). The higher likelihood of marrying a less educated partner suggests that first-generation women may not be realizing the full potential of their upward social mobility, a finding previously masked by research focusing on economic outcomes. For instance, first-generation women's lower probability of marrying a college graduate has implications for their household income (men's median annual earnings are more than \$25,000 higher among those who graduate college than among those who only graduate high school) and their children's development and outcomes (Beck and González-Sancho 2009; Rauscher 2020; Ryan and Siebens 2012; Schwartz 2013).

Analyses identifying the reasons for the gender differences in educational assortative mating between first- and continuing-generation college graduates are outside the scope of this study, but these differences may result from a number of processes that should be explored in future research. One possible explanation is that gender differences in educational homogamy are the result of differences in the kinds of schools that first-generation women attend. For instance, partner choice may be linked to the distance between home and college (Mulder and Clark 2002; Turley 2009), the gender and socioeconomic composition of a school (Lichter et al. 1992; Warner et al. 2011), and college selectivity (Arum et al. 2008; Giani 2016; Rivera 2012; Torche 2011), all of which vary by generation status and can shape the development of networks and availability of partners during and after college.

A second possibility is that the increased importance of women's economic status on the marriage market (Sweeney 2002; Sweeney and Cancian 2004), combined with the growing female advantage in college completion (Buchmann and DiPrete 2006), has resulted in a supply-side constraint of eligible partners (i.e., college graduates), which disadvantages particular women. High levels of educational homogamy among men, regardless of generation status, suggest that they are not as constrained as women in finding college-educated partners (Guttentag and Secord 1983; South 1991). If men also prefer women with highly educated parents (Blossfeld 2009; Blossfeld and Timm 2003), first-generation women may face a shortage of available college-educated partners, forcing them to either forgo marriage or adjust their preferences (Lichter et al. 1995; Lichter et al. 1992). The results presented here suggest the latter, since first-generation women do not have a higher likelihood of forgoing marriage, at least by their early 30s, but do have a higher likelihood of marrying less educated partners.

A third, related, possible explanation for first-generation women's lower likelihood of marrying a college graduate is partner preferences. Women's changing economic prospects may have altered their willingness to select partners for noneconomic reasons (Fernandez et al. 2005; Oppenheimer and Lew 1995; Sweeney 2002). In conjunction with a rise in individualization and the deinstitutionalization of marriage (Cherlin 2004, 2020), there are now fewer normative pressures regarding marriage and more room for personal development and choice. To the extent that first-generation women prioritize noneconomic factors in searching for a partner, this may help explain their higher likelihood of marrying a less educated partner. It should be noted, though, that

exchange may also be occurring (Schwartz et al. 2016), such that first-generation women may pair with partners in the higher end of the income distribution, even if those partners have lower levels of education. More work is necessary to identify the sources and consequences of the observed gender differences in assortative mating.

Finally, it is important to acknowledge that this research focuses on marriage outcomes of first-generation college graduates, but differences in other important social outcomes may also temper social mobility prospects. To the extent that first-generation graduates are different in terms of other stratifying dimensions such as health or where they live, the ability of college to equalize later life outcomes may have been overstated by prior work. Future research that identifies the mechanisms responsible for the findings presented here and explores other potential stratifying outcomes will help us better understand the persistence of inequality across generations, particularly among those who appear upwardly mobile on the basis of traditional measures such as educational attainment or occupational status. ■

Acknowledgments This research was conducted before the author joined the U.S. Census Bureau, and the views expressed are those of the author and not necessarily those of the Census Bureau. This research was supported by center and training grants from the National Institute of Child Health and Human Development awarded to the Center for Demography and Ecology at the University of Wisconsin–Madison (P2C HD047873, T32 HD007014). Earlier versions of this manuscript were presented at the 2017 annual meeting of the Population Association of America in Chicago and the 2018 meeting of the American Sociological Association in Philadelphia. The author is grateful to Eric Grodsky, Sarah Halpern-Meekin, John A. Logan, Ariane Ophir, Jim Raymo, Nora Cate Schaeffer, Christine Schwartz, the *Demography* editors, and the anonymous reviewers for their helpful comments and advice.

References

- Armstrong, E. A., & Hamilton, L. T. (2013). *Paying for the party: How college maintains inequality*. Cambridge, MA: Harvard University Press.
- Armstrong, E. A., & Hamilton, L. T. (2021). Classed pathways to marriage: Hometown ties, college networks, and life after graduation. *Journal of Marriage and Family*, 83, 1004–1019.
- Arum, R., Roksa, J., & Budig, M. J. (2008). The romance of college attendance: Higher education stratification and mate selection. *Research in Social Stratification and Mobility*, 26, 107–121.
- Axinn, W. G., & Thornton, A. (1992). The influence of parental resources on the timing of the transition to marriage. *Social Science Research*, 21, 261–285.
- Axinn, W. G., & Thornton, A. (1996). The influence of parents' marital dissolutions on children's attitudes toward family formation. *Demography*, 33, 66–81.
- Bauman, K. (2016). *College completion by cohort, age and gender, 1967 to 2015* (SEHSD Working Paper No. 2016–04). Washington, DC: U.S. Census Bureau, Social, Economic, and Housing Statistics Division. Retrieved from <https://www.census.gov/content/dam/Census/library/working-papers/2016/demo/SEHSD-WP2016-04.pdf>
- Beck, A., & González-Sancho, C. (2009). *Educational assortative mating and children's school readiness* (Working Paper No. 2009–05–FF). Princeton, NJ: Center for Research on Child Wellbeing. Retrieved from <http://core.ac.uk/download/pdf/6258067.pdf>
- Blackwell, D. L. (1998). Marital homogamy in the United States: The influence of individual and paternal education. *Social Science Research*, 27, 159–188.
- Blau, P. M., & Duncan, O. D. (1967). *The American occupational structure*. New York, NY: The Free Press.
- Blossfeld, H.-P. (2009). Educational assortative marriage in comparative perspective. *Annual Review of Sociology*, 35, 513–530.
- Blossfeld, H.-P., & Timm, A. (Eds.). (2003). *Who marries whom? Educational systems as marriage markets in modern societies*. Norwell, MA: Kluwer Academic Publishers.

- Bourdieu, P., & Passeron, J.-C. (1977). *Reproduction in education, society and culture*. London, UK: Sage Publications.
- Buchmann, C., & DiPrete, T. A. (2006). The growing female advantage in college completion: The role of family background and academic achievement. *American Sociological Review*, *71*, 515–541.
- Calarco, J. M. (2014). Coached for the classroom: Parents' cultural transmission and children's reproduction of educational inequalities. *American Sociological Review*, *79*, 1015–1037.
- Cherlin, A. J. (2004). The deinstitutionalization of American marriage. *Journal of Marriage and Family*, *66*, 848–861.
- Cherlin, A. J. (2010). Demographic trends in the United States: A review of research in the 2000s. *Journal of Marriage and Family*, *72*, 403–419.
- Cherlin, A. J. (2020). Degrees of change: An assessment of the deinstitutionalization of marriage thesis. *Journal of Marriage and Family*, *82*, 62–80.
- Chetty, R., Friedman, J. N., Saez, E., Turner, N., & Yagan, D. (2017). *Mobility report cards: The role of colleges in intergenerational mobility* (NBER Working Paper Series No. 23618). Cambridge, MA: National Bureau of Economic Research. <https://doi.org/10.3386/w23618>
- Cunningham, M., & Thornton, A. (2006). The influence of parents' marital quality on adult children's attitudes toward marriage and its alternatives: Main and moderating effects. *Demography*, *43*, 659–672.
- de Leeuw, S. G., & Kalmijn, M. (2020). The intergenerational transmission of socioeconomic status in stepfamilies: What happens if two fathers are involved in the transmission process? *Journal of Marriage and Family*, *82*, 657–674.
- de Leeuw, S. G., Kalmijn, M., & van Gaalen, R. (2018). The intergenerational transmission of educational attainment among non-residential fathers and their children. *Research in Social Stratification and Mobility*, *55*, 40–50.
- DiMaggio, P., & Mohr, J. (1985). Cultural capital, educational attainment, and marital selection. *American Journal of Sociology*, *90*, 1231–1261.
- Efron, B., & Tibshirani, R. J. (1994). *An introduction to the bootstrap*. London, UK: Chapman & Hall.
- Featherman, D. L., & Hauser, R. M. (1978). *Opportunity and change*. New York, NY: Academic Press.
- Fernandez, R., Guner, N., & Knowles, J. (2005). Love and money: A theoretical and empirical analysis of household sorting and inequality. *Quarterly Journal of Economics*, *120*, 273–344.
- Fiel, J. E. (2020). Great equalizer or great selector? Reconsidering education as a moderator of intergenerational transmissions. *Sociology of Education*, *93*, 353–371.
- Giani, M. S. (2016). Are all colleges equally equalizing?: How institutional selectivity impacts socioeconomic disparities in graduates' labor outcomes. *Review of Higher Education*, *39*, 431–461.
- Goldrick-Rab, S. (2006). Following their every move: An investigation of social-class differences in college pathways. *Sociology of Education*, *79*, 67–79.
- Goldrick-Rab, S. (2016). *Paying the price: College costs, financial aid, and the betrayal of the American dream*. Chicago, IL: University of Chicago Press.
- Goldstein, J. R., & Kenney, C. T. (2001). Marriage delayed or marriage forgone? New cohort forecasts of first marriage for U.S. women. *American Sociological Review*, *66*, 506–519.
- Guttentag, M., & Secord, P. F. (1983). *Too many women? The sex ratio question*. Beverly Hills, CA: Sage Publications.
- Hauser, R. M., & Featherman, D. L. (1976). Equality of schooling: Trends and prospects. *Sociology of Education*, *49*(2), 99–120.
- Hout, M. (1984). Status, autonomy, and training in occupational mobility. *American Journal of Sociology*, *89*, 1379–1409.
- Hout, M. (1988). More universalism, less structural mobility: The American occupational structure in the 1980s. *American Journal of Sociology*, *93*, 1358–1400.
- Hout, M., & Janus, A. (2011). Educational mobility in the United States since the 1930s. In G. J. Duncan & R. J. Murnane (Eds.), *Whither opportunity? Rising inequality, schools, and children's life chances* (pp. 165–185). New York, NY: Russell Sage Foundation.
- Hurst, A. L. (2018). Moving between classes: Loyalists, renegades, and double agents. In A. C. Rodini, B. N. Richards, & N. P. Simon (Eds.), *Clearing the path for first-generation college students: Qualitative and intersectional studies of educational mobility* (pp. 105–133). Lanham, MD: Lexington Books.
- Isen, A., & Stevenson, B. (2010). *Women's education and family behavior: Trends in marriage, divorce and fertility* (NBER Working Paper Series No. 15725). Cambridge, MA: National Bureau of Economic Research.
- Ishitani, T. T. (2006). Studying attrition and degree completion behavior among first-generation college students in the United States. *Journal of Higher Education*, *77*, 861–885.

- Kalmijn, M. (2013). The educational gradient in marriage: A comparison of 25 European countries. *Demography*, *50*, 1499–1520.
- Karlson, K. B. (2019). College as equalizer? Testing the selectivity hypothesis. *Social Science Research*, *80*, 216–229.
- Lee, E. M., & Kramer, R. (2013). Out with the old, in with the new? Habitus and social mobility at selective colleges. *Sociology of Education*, *86*, 18–35.
- Lehmann, W. (2007). “I just didn’t feel like I fit in”: The role of habitus in university dropout decisions. *Canadian Journal of Higher Education*, *37*(2), 89–110.
- Lehmann, W. (2014). Habitus transformation and hidden injuries: Successful working-class university students. *Sociology of Education*, *87*, 1–15.
- Lichter, D. T., Anderson, R. N., & Hayward, M. D. (1995). Marriage markets and marital choice. *Journal of Family Issues*, *16*, 412–431.
- Lichter, D. T., McLaughlin, D. K., Kephart, G., & Landry, D. J. (1992). Race and the retreat from marriage: A shortage of marriageable men? *American Sociological Review*, *57*, 781–799.
- London, H. B. (1989). Breaking away: A study of first-generation college students and their families. *American Journal of Education*, *97*, 144–170.
- Manning, W. D., Brown, S. L., & Payne, K. K. (2014). Two decades of stability and change in age at first union formation. *Journal of Marriage and Family*, *76*, 247–260.
- Maralani, V. (2013). The demography of social mobility: Black–White differences in the process of educational reproduction. *American Journal of Sociology*, *118*, 1509–1558.
- Mare, R. D. (1980). Social background and school continuation decisions. *Journal of the American Statistical Association*, *75*, 295–305.
- Mare, R. D., & Maralani, V. (2006). The intergenerational effects of changes in women’s educational attainments. *American Sociological Review*, *71*, 542–564.
- McClendon, D. (2018). Crossing boundaries: “Some college,” schools, and educational assortative mating. *Journal of Marriage and Family*, *80*, 812–825.
- Mize, T. D. (2019). Best practices for estimating, interpreting, and presenting nonlinear interaction effects. *Sociological Science*, *6*, 81–117. <https://doi.org/10.15195/v6.a4>
- Mooyaart, J. E., & Liefbroer, A. C. (2016). The influence of parental education on timing and type of union formation: Changes over the life course and over time in the Netherlands. *Demography*, *53*, 885–919.
- Mulder, C. H., & Clark, W. A. V. (2002). Leaving home for college and gaining independence. *Environment and Planning A: Economy and Space*, *34*, 981–999.
- Musick, K., Brand, J. E., & Davis, D. (2012). Variation in the relationship between education and marriage: Marriage market mismatch? *Journal of Marriage and Family*, *74*, 53–69.
- Oppenheimer, V. K. (1988). A theory of marriage timing. *American Journal of Sociology*, *94*, 563–591.
- Oppenheimer, V. K., & Lew, V. (1995). American marriage formation in the eighties: How important was women’s economic independence? In K. O. Mason & A.-M. Jensen (Eds.), *Gender and family change in industrialized countries* (pp. 105–138). New York, NY: Oxford University Press.
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education*, *75*, 249–284.
- Raley, R. K., Sweeney, M. M., & Wondra, D. (2015). The growing racial and ethnic divide in U.S. marriage patterns. *Future of Children*, *25*(2), 89–109.
- Raley, S. B., Mattingly, M. J., & Bianchi, S. M. (2006). How dual are dual-income couples? Documenting change from 1970 to 2001. *Journal of Marriage and Family*, *68*, 11–28.
- Rauscher, E. (2020). Why who marries whom matters: Effects of educational assortative mating on infant health in the United States 1969–1994. *Social Forces*, *98*, 1143–1173.
- Rivera, L. A. (2012). Hiring as cultural matching: The case of elite professional service firms. *American Sociological Review*, *77*, 999–1022.
- Rodini, A. C., Richards, B. N., & Simon, N. P. (Eds.). (2018). *Clearing the path for first-generation college students: Qualitative and intersectional studies of educational mobility*. Lanham, MD: Lexington Books.
- Ryan, C. L., & Siebens, J. (2012). *Educational attainment in the United States: 2009*. Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau.
- Schwartz, C. R. (2010). Earnings inequality and the changing association between spouses’ earnings. *American Journal of Sociology*, *115*, 1524–1557.
- Schwartz, C. R. (2013). Trends and variation in assortative mating: Causes and consequences. *Annual Review of Sociology*, *39*, 451–470.

- Schwartz, C. R., & Mare, R. D. (2005). Trends in educational assortative marriage from 1940 to 2003. *Demography*, *42*, 621–646.
- Schwartz, C. R., Zeng, Z., & Xie, Y. (2016). Marrying up by marrying down: Status exchange between social origin and education in the United States. *Sociological Science*, *3*, 1003–1027. <https://doi.org/10.15195/v3.a44>
- Smith, C. M., Grodsky, E., & Warren, J. R. (2019). Late-stage educational inequality: Can selection on noncognitive skills explain waning social background effects? *Research in Social Stratification and Mobility*, *63*, 100424. <https://doi.org/10.1016/j.rssm.2019.100424>
- Smock, P. J., Manning, W. D., & Gupta, S. (1999). The effect of marriage and divorce on women's economic well-being. *American Sociological Review*, *64*, 794–812.
- Smock, P. J., Manning, W. D., & Porter, M. (2005). “Everything's there except money”: How money shapes decisions to marry among cohabitators. *Journal of Marriage and Family*, *67*, 680–696.
- South, S. J. (1991). Sociodemographic differentials in mate selection preferences. *Journal of Marriage and the Family*, *53*, 928–940.
- South, S. J. (2001). The variable effects of family background on the timing of first marriage: United States, 1969–1993. *Social Science Research*, *30*, 606–626.
- Stolzenberg, R. M. (1994). Educational continuation by college graduates. *American Journal of Sociology*, *99*, 1042–1077.
- Stuber, J. M. (2011). *Inside the college gates: How class and culture matter in higher education*. Lanham, MD: Rowman & Littlefield.
- Sweeney, M. M. (2002). Two decades of family change: The shifting economic foundations of marriage. *American Sociological Review*, *67*, 132–147.
- Sweeney, M. M. (2016). Socioeconomic standing and variability in marriage timing in the twentieth century. *Annals of the American Academy of Political and Social Science*, *663*, 270–291.
- Sweeney, M. M., & Cancian, M. (2004). The changing importance of White women's economic prospects for assortative mating. *Journal of Marriage and Family*, *66*, 1015–1028.
- Teachman, J. D. (2002). Stability across cohorts in divorce risk factors. *Demography*, *39*, 331–351.
- 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*, 763–807.
- Turley, R. N. L. (2009). College proximity: Mapping access to opportunity. *Sociology of Education*, *82*, 126–146.
- Uecker, J. E., & Stokes, C. E. (2008). Early marriage in the United States. *Journal of Marriage and Family*, *70*, 835–846.
- Waite, L. J. (1995). Does marriage matter? *Demography*, *32*, 483–507.
- Warner, T. D., Manning, W. D., Giordano, P. C., & Longmore, M. A. (2011). Relationship formation and stability in emerging adulthood: Do sex ratios matter? *Social Forces*, *90*, 269–295.
- Wiik, K. A. (2009). ‘You'd better wait!’—Socio-economic background and timing of first marriage versus first cohabitation. *European Sociological Review*, *25*, 139–153.
- Wilbur, T. G., & Roscigno, V. J. (2016). First-generation disadvantage and college enrollment/completion. *Socius*, *2*. <https://doi.org/10.1177/2378023116664351>
- Xie, Y., Raymo, J. M., Goyette, K., & Thornton, A. (2003). Economic potential and entry into marriage and cohabitation. *Demography*, *40*, 351–367.
- Zhou, X. (2019). Equalization or selection? Reassessing the “meritocratic power” of a college degree in intergenerational income mobility. *American Sociological Review*, *84*, 459–485.

Michael D. King
michael.king2@census.gov

Program Participation and Income Transfers Branch, U.S. Census Bureau, Washington, DC, USA; <https://orcid.org/0000-0003-1848-4616>