Intelligence vs Intimacy:
An Examination of Higher Education and Marital Outcomes

Zaheer Coovadia	Jack Passaro	Joseph Porpora
Boston College	Boston College	Boston College
coovadia@bc.edu	passaroj@bc.edu	porporaj@bc.edu

December 2020

Abstract Does a pursuit of further education affect one's likelihood to find a romantic partner? Though there is plenty of discourse concerning the impact of higher education on one's financial earnings, we thought it would be interesting to see how this may affect a person in a less financial and more emotional way: their likelihood to get married. Due to the sharp increase in college attendance among women the last few decades, prior studies into the topic have much different snapshots of the education of prospecting bachelors and bachelorettes. Additionally, as most studies focus solely on the impact of a college degree on getting married, we wanted to examine the impact of other higher education opportunities as well. Upon further research, evidence was found to show positive links between higher levels of education and probability for women, while men appear to experience the opposite until they reach college, at which point the type of degree they earn affects their marriage outcome. As trends of female college enrollment rates increased, education has become a factor guaranteed to garner interest, while, for men, education has been an expectation and can only boost chances once they reach a certain threshold.

1 Introduction

How does one's education affect their romantic relationships? Does the time spent pursuing educational opportunities cut into the amount of time spent searching for and developing a relationship with a significant other? Or do single individuals prefer their partner to have a certain educational background? Do highschool sweethearts tend to get married earlier and focus on starting a household over going to school or do people tend to meet their significant other during their college years? Plenty of hypothetical arguments can be made for whether one's amount of education helps or harms their likelihood to get married. As these can be two defining aspects of a person's existence, we thought it would be valuable to see how these two spheres interact, if at all.

Though considered the pinnacle of a relationship, being married at a certain point is not completely indicative of a happy romantic life. As recent studies show 50% of marriages end in divorce, being married during the administration of a survey only technically gives you a person's legal status at a particular snapshot in time[1]. Being married earlier in one's life is no guarantee of success; one can use every father's favorite expression "It's a marathon, not a sprint" to sum up the length and commitments required for a successful marriage. To examine the true prosperity of one's more intimate endeavours, we turned to times married as a metric of success. A lower number of times married is representative of higher quality marriages that are less likely to end in divorce. By analyzing both the likelihood of being married and the amount of times one remarries, we aimed to examine how education affects one's romantic relationships holistically.

[1] "Marriage and Divorce," https://www.apa.org.

After conducting research, findings include that education has a direct impact on the likelihood of being married. For women, there is a positive effect as education levels increase, with the strongest links observed for women with college degrees and postgraduate education. For men however, increasing amounts of education appear to match with a lower probability of marriage until they reach college. At this point, the type of degree they earn begins to affect their chances of marriage. In terms of quality of marriage, the results show a loose positive correlation between higher levels of education and quality of marriage.

The results of the study make sense alongside recent college gender split trends. Womens' education had been disregarded as a factor in the "marriage market" up until the past several decades. With the introduction of modern feminism and suffrage, attractiveness in the marriage market for a woman has morphed and is beginning to include education. It is functionally impossible for society to exclude education for this long, so it only makes sense that this previously unfairly undervalued quality now garners a woman more worth in the "market." However, for men, education and intellectuality have been a privileged industry standard so it falls in line with expectations that education only begins to help once one reaches a certain threshold upheld by societal norms.

2 Literature Review

Before conducting research, a literature review was needed in order to address if there were any deficiencies in previous studies. By doing this, we were able to focus our investigation in an area where prior work was insufficient. The following are various studies along with summaries of their findings.

2. 1 "The link between a college education and a lasting marriage"[2]

Pew Research's examination into college education and marriage asks many of the same questions as us. Interestingly, while only half of marriages are likely to survive 20 years, for college-educated women the fraction is 8/10. For women without such education, the percentage is only 40%. Furthermore, men or women between 25 and 44 with at least a college degree had a 65% marriage rate, while those without were only 53%. The notable conclusions: education should correlate positively and significantly with the chance of being married and marriage success.

2. 2 "Barely Half of U.S. Adults Are Married - A Record Low"[3]

This article gives valuable information on general marriage trends. In 1960, 72% of adults were married - now just 51% are. Marriage rates have declined greatly, but, the article emphasizes, college-educated peoples have enjoyed some form of buffer to the trend. Female age at first marriage has also increased since the 1970's in 75 out of 77 of the countries examined. We should expect education to correlate with marriageability.

2. 3 "The Gender Gap in Marriages Between College-Educated Partners"[4]

While this organization is known for an explicit right-wing bias, the data can still be used to predict results in our regression. The first important note is that marriages between a spouse with a bachelor's degree and someone with less than a 4-year degree dropped from 54% to 17% for couples between 33-42 from 1972 to 2018. However, women with degrees' rates of educational homogamy rose. In general, marital educational homogamy has decreased. More people are entering into partnerships of differing levels of education. However, the rate for those

[2] Wendy Wang, "The link between a college education and a lasting marriage," Pew Research Center.
[3] D'vera Cohn et al., "Barely Half of U.S. Adults Are Married – A Record Low," Pew Research Center's Social & Demographic Trends Project.
[4] David J. Ayers, "The Gender Gap in Marriages Between College-Educated Partners," Institute for Family Studies.

without a bachelor's degree has decreased while those with a bachelor's has increased. This points to an interesting, growing polarization and divides in marriages and their educational clout. This indicates education may not necessarily correlate with probability of marriage.

2. 4 "The Relationship between Women's Education and Marriage Outcomes"[5]

This BYU survey correlates women's education to both marriage outcomes and husband's earnings. The analysis of 1980 census data found that women's education has strong, statistical interaction with husband earnings but no effect on marriage outcomes. This is not the most helpful result but it should be noted that this was performed on older data. Since the 1980 Census, the percentage of women in college has only risen and it is very possible that this greater increase has led to more significant statistical effect. Our data is different because it examines men and women and their outcomes from 2002, almost a full quarter of a century after. If their census suffered from some hysteresis and thus did not detect an effect, our regression is certainly modern enough to escape that.

The review of existing literature produced conflicting yet nuanced results. The BYU survey appears to be the odd one out with older data which presents no clear trend. However, the remaining studies via the Pew Research Institutes and the Institute for Family Studies all point to clear gains for marriage stability for the educated: simply, they last longer (as explained by Pew). The equality between partners, access to higher-salaried jobs, and greater social rank conferred all certainly help explain these results. However, there is some nuance. As the Institute for Family Studies explains, women are marrying into more educational homogenous marriages than men. Furthermore, marital educational homogeneity is dropping. This data hints at the

[5] Lars Lefgren and Frank McIntyre, "The Relationship between Women's Education and Marriage Outcomes," Journal of Labor Economics 24, no. 4 (2006): xx, doi:10.1086/506486.

emergence of a growing gulf between educated couples and those who are not as fixated on finding a partner with equal educational credentials.

The project differs because of its approach to the question: "what factors affect marriage for men and women?" The regressions performed in this study exploit the "married" binary variable. This means each coefficient is interpreted as an increase or decrease in probability of marriage and can be compared to other variables' coefficients. In the previous studies examined, we see regressions to predict quantities or trends. Furthermore, the data employed is quite modern. While older studies may have suffered from lack of useful data - women's enrollment in college may have still been at non-critical levels - this study uses 2002 data, which is sufficiently up-to-date.

3 Data Overview

To investigate this topic, The National Survey of Family Growth (NSFG) was used. The survey is conducted by the National Center for Health Statistics and gathers plenty of varied information on family life to understand trends concerning family structure and demographics. Questions present in the NSFG range from topics pertaining to education and marriage to health and upbringing. The National Center for Health Statistics has conducted the NSFG ten times, with a new survey occurring roughly every four to five years.

We used Cycle VI of the NSFG, which is available in the University of Michigan ICPSR database, to answer our hypothesis. Cycle VI started in 2002 and polled a total of 12,571 respondents ranging from 15 to 45 years of age. Cycle VI was the first NSFG to survey both men and women, as previous iterations solely surveyed women. The gender split of individuals

surveyed is by no means exact, as the 4,928 men surveyed were outnumbered by the 7,643 women surveyed.

The National Survey of Family Growth is as thorough as a dataset can be; as it contains plenty of information on both education and marriage, it is nearly tailor-made for use to answer our questions. For example, the key dependent variable in our study is the respondent's marital status. This information is included in the variable MARSTAT, a discrete variable containing a range of responses. We converted MARSTAT into a dummy variable named "married", which takes the value of "1" if the respondent is married and "0" if they are not. In addition, the variable "EDUCAT" contains information regarding the years of education attained by the respondent. "EDUCAT" was then converted into a series of four dummy variables regarding education. These dummies include information for if the respondent has a high school degree, some college education, a college degree, and a level of education higher than a four-year college degree. Furthermore, the NSFG also contains other important independent variables. "AGE_R" represents the age of the respondent in years, and was renamed to "age" for simplicity. A variable representing the respondent's age squared was generated in order to view nonlinear age trends and was named "agesquared".

Though thorough, the NSFG is not necessarily designed for simple analysis. As already noted, plenty of variables, including marriage status, are discrete variables where the magnitude of the answer does not hold any intrinsic value. For marital status, both male and female respondents were asked:

> Now I'd like to ask you about your marital status. Please look at Card 1. What is your current marital status?

Responses included "married," "not married but living together with a partner of the opposite sex," "widowed," "divorced," "separated, because you and your spouse are not getting

along," and "never been married." "married" was the most frequently chosen response for women with 40.3% responding as being married while only 0.6% of women reported being widowed. Figure 1 illustrates the distribution of the other possible choices for women. For men, only 25% of respondents answered with "married" and 57.9% stating they have never been married. Figure 2 shows the distribution of other possible choices for men.

Although information such as "widowed," "divorced," and "never been married" are important, a dummy variable is needed in order to run a linear probability model. In order to create this model with marital status as the dependent variable, the binary variable "married" was created and indicates whether or not the respondent is married, as already mentioned. For women, the 40.3% who responded as being married received a value of "1" for "married" while the 59.7% who selected an option other than "married" received a "0". This data is slightly different for men where only 25% received a value of "1" for married and 75% received a value of "0".

Similarly to "MARSTAT", the "EDUCAT" variable also needed to be converted into dummy variables. In the survey, both male and female respondents were asked to provide the number of years of schooling they received. Respondents with exactly 12 years of schooling were added to "highschool_grad", more than 12 but less than 16 years of education resulted in being put in "college_some", exactly 16 years assigns the respondent to "college_grad", and any value greater than 16 put the individual in "college_plus".

For women, the majority of respondents fall into the only completed some high school category, with 27.3% reporting less than 12 years of schooling received. However, it should be noted that 27.1% of women are in the "college_some" category and the two are only separated by 0.02%. For the men, the majority of respondents (32.1%) are included in the some high

school completed group while the least populated category is “college_plus”, with only 8.5% of the men surveyed.

Though not the main focus of this study, age is also an important dependent variable, which was stored in the variable “AGE_R”. Unlike “MARSTAT” and “EDUCAT”, the only real change made to “AGE_R” involved renaming it to “age” for simplicity. In addition, “age” was used to generate “agesquared.” Ages in NSFG, Cycle VI range from 15-44 for women and 15-45 for men. This range provides ample information needed to determine how education may affect an individual’s marriage outcome and quality of marriage. It provides data for younger individuals still in school and for those who have completed their schooling. The average age in this dataset is 29.5 for women and 28.16 for men while the median is 30 and 27, respectively. Figure 3 shows a frequency distribution for women and Figure 4 displays the same information for men.

Other variables, like times married (“TIMESMAR”), which has values from 1 to 4 corresponding to the number of times married, use 98 and 99 as answers corresponding to “refused” and “unsure” respectively, which significantly warps average values of the data. The other data collection issue present in Cycle 6 is the separation of the NSFG into three separate surveys and datasets. The first survey (and its corresponding dataset) is for the female respondents, the second survey is for pregnancy files, and the third survey is for the male respondents. The surveys for male and female respondents each contain questions not present in the other. The survey for women is also slightly more thorough, as evidenced by an average survey time of 80 minutes for women and 60 minutes for men. Though some may view the survey’s acknowledged inaccuracy to capture subnational demographics as an argument against its use, we perceived its broad universality as more valuable.

4 Empirical Results

4.1 Linear Probability Model

To examine the likelihood of being married, we regressed upon the dummy variable "married," which has a value of 1 if the respondent is married. As we regressed upon a dummy variable, our results would give us from 0 to 1 their percentage chance of being married. We also created dummy variables for if the respondent has graduated high school, went to college, graduated college, and had further years of education beyond college. All of the dummy variables are based on the value of EDUCAT, which measures the respondents' years of education. Our omitted dummy variable is if the respondent did not graduate high school. By using this as the omitted dummy, it is more clear to view the effect of every increase in education and the effect it has compared to someone who has completed the fewest degrees of schooling. We also thought it vital to include age in our regression as that was the variable which could lead to the most omitted variable bias. Without including age, we could be comparing the pool of those with college degrees or doctorates to the 15 year olds included in the survey; obviously the pool of those with a degree are older and more likely to be married. Age squared is included as we believed the age at which people are most likely to be married would be modeled quadratically, rather than by a strictly increasing linear line. The linear probability model is shown below in Equation (1):

$$y = \beta_0 + \beta_1 highschoolgrad + \beta_2 somecollege + \beta_3 collegegrad + \beta_4 collegeplus + \beta_5 age + \beta_6 agesquared \qquad (1)^6$$

[6] in Equation (1), "y" refers to the dummy variable "married."

Table 1 shows the results for both male and female respondents. The most obvious results we found were the significance of age and age squared. Though not necessarily a surprising result, the incredibly strong t-values and reasonably sizable beta coefficients in both regressions show us that age is still the most reliable factor to determine when a person gets married. Our coefficients indicate an increase of one year yields a roughly 9% increase in likelihood to be married for women and a 7.5% increase for men, on average. This difference may be attributed to a lower average marriage age for women than men. Though our data only includes the age of first marriage for women ("FMAR1AGE"), which is roughly 23, it is approximately in line with previous census data.[7]

The difference between men and women becomes more apparent when examining the coefficients of the education dummy variables. For women, the first thing to notice is that the coefficient on every dummy variable is positive. Though half are not statistically significant at high levels, the results are consistent with the theory that more education will strictly *increase* the likelihood of being married. While "highschool grad" and "some college" have insignificant t-values and negligibly small coefficients, college grad has a t-value of 5.56, making the coefficient of 0.1035 statistically significant at every significance level. We can say confidently that a woman with a college degree is about 10% more likely to be married than a woman without a college degree, all else held constant. The 95% confidence interval is also very promising, as despite some unavoidable variance, we can still say the increased likelihood of being married due to a college degree is between 6.7% and a whopping 14%. College plus is also statistically significant at every level, so we can also say a woman with post-graduate education experience is 6.6% more likely to be married than her counterpart without post-graduate education.

[7] United States Census Bureau. "Median age at first marriage: 1980 to present." Census.gov.

In many ways, the regression run on men is the complete and total opposite of the same regression run on women. For men, the coefficient on every dummy variable is negative. Again, though half of the dummy variables are not statistically significant at the 90% level, the coefficients are consistent with the theory that more education will strictly *decrease* one's likelihood of being married. While highschool grad and some college were not very significant for women, those are the two most significant dummies for men; similarly, college grad and college plus were the two most significant for women and are the two least significant for men. Graduating high school and attending college are significant at every significance level for men, and result with a 5.2% and 8.2% decrease in likelihood of being married, respectively. Though the t-statistics and coefficients are encouraging, the differences in t values for both men and women do raise questions. Why is a man simply attending college so much more definitively impactful on his chance of getting married than graduating college? Inversely, why does attending college have a negligible effect for women while graduating college is a decisive factor? These questions do not have readily understandable statistical answers, and to truly unravel them may require a dive into more psychological aspects of what a person looks for in a partner.

4.2 Linear Probability with Interaction Term

Following the initial linear probability model for marriage, a new model was created in which an interaction term between years of education and age was included. Rather than use the various dummy variables reflecting one's level of education, the variable "EDUCAT", a continuous variable containing information on an individuals total years of schooling, was used. The model is as follows:

$$married = \beta_0 + \beta_1 education + \beta_2 age + \beta_3 agesquared + \beta_4 education\ x\ age \qquad (2)$$

The results from this regression were encouraging and seem to back the results from the previous model.[8] Although the coefficient for the interaction term was positive for both men and women, this does not allow us to assume education has a positive effect on marital outcome. Instead, the derivative of "married" with respect to "EDUCAT" needed to be taken. The derivatives for men and women can be found in Equations (3) and (4), respectfully.

$$\frac{\delta married}{\delta education} = \text{-0.0495} + .00184age \quad (3)$$

$$\frac{\delta married}{\delta education} = \text{-0.0653} + 0.00193age \quad (4)$$

Using these equations, the mean age for both men and women can be substituted for the age variable to show the effect of education on marital status. For women, substituting the mean age of 29.5 years resulted in a value of 0.004881. With men, the mean age of 28.16 years resulted in -0.011024. Both of these results strengthen the predictions from the first linear probability model. For example, the positive value returned for women supports the idea that as education increases, so does the likelihood of being married. With men, the negative value backs the argument that further education does not have a positive impact on the probability of becoming married.

4.3 Linear Probability Model Using Degrees

Table 3 contains a modified version of the linear probability model in Table 1. Instead of including college grad and college plus, we used the variable "DEGREES", as well as our dummies for "high school graduate" and "some college". "DEGREES" contains values for if the respondent graduated college and goes into more depth on their type of degree, including options

[8] For full results, see Table 2.

for a master's degree, doctorate degree, and professional school degree. We changed the values of those who earned a professional school degree from 5 to 3, as a professional school degree may be classified as a bachelor's, master's, or doctorate degree, and a value of 3 is the average value for those representations in the dataset. This way, a one unit increase in "DEGREES" corresponds to a degree one "level" higher than the one before it. This modified regression wildly changed our results, especially for women. Table 3 shows when including degrees, all variables not pertaining to age are statistically insignificant for women. Additionally, the coefficient on "some college" became negative, which differs from the universal positive coefficients in Table 1, though the low t-value causes us to not truly raise any alarms. "Highschool graduate" and "some college "have much lower t-values when including "DEGREES", though the coefficients are relatively similar to the original regression from Table 1. Interestingly, "DEGREES" is statistically significant at the 90% significance level for men, with a coefficient 0.0399. For men, pursuing further higher education, whether it is pursuing a Bachelor's over an Associate's or a Doctorate over a Master's, can result in a 4% increase in their likelihood of being married. These results do not detract from those from Table 1, and when used in combination tell an interesting story. For men, educational opportunities before earning a degree make them less likely to be married. However, the type of degree they earn can strongly affect their romantic success. Though 4% does not seem like an overwhelming difference, the difference in likelihood of being married between men with an associate's degree and doctorate's degree is 12%.

4.4 Regression on Success of Marriage

Table 4 contains the regression upon the number of times married, which details how different levels of education affect the amount of times one gets married throughout their life.

This information can provide an indication of the success of one's marriages. The results for times married only include respondents who reported being married at least once; omitting those with zero marriages allows us to analyze the quality of marriage rather than the quantity, which would be quite similar to the likelihood of being married present in our regression on "married". Compared to prior regressions, the t-values in Table 4 are less statistically significant. Even age, which was the most consistent indicator of marriage likelihood, has negligible significance for women, though it is notably significant for men. The only statistically significant education coefficients for women were high school grad and college grad. These results indicate women with high school degrees would have roughly .24 more marriages in their lifetime than those without the degree. Women who pursued post-graduate education can expect .29 less marriages, though both of these figures are only significant at the 70% level. None of the dummy coefficients for men are notably significant, though the positive and negative coefficients for both genders give us valuable insight. For both genders, the lower levels of education are loosely associated with slightly more marriages, while higher levels of education are loosely associated with slightly fewer marriages. Though the R^2 of this model is significantly lower than we hoped for, these results are loosely consistent with the idea that higher levels of education are associated with higher quality marriages.

4.5 Age Coefficient Analysis

As age and age-squared consistently had the highest t-values in the regressions, it only makes sense to devote some time to analyzing their effect. The partial derivative of Equation (1), as shown below, can be taken with respect to age.

$$y = \beta_0 + \beta_1 highschoolgrad + \beta_2 somecollege + \beta_3 collegegrad + \beta_4 collegeplus + \beta_5 age + \beta_6 agesquared \quad (1)$$[9]

[9] In Equation (1), "y" refers to the dummy variable "married".

$$\frac{\delta married}{\delta age} = \beta_5 + 2\beta_6 age \quad (5)$$

$$\beta_5 + 2\beta_6 age = 0 \quad (6)$$

$$age = \frac{-\beta_5}{2*\beta_6} \quad (7)$$

Looking at the zero of these partial derivatives gives insight into the assumed quadratic nature of age's effects on "married" status. More specifically, if "age" is positive and "agesquared" is negative, the zero describes when an increase in age begins to have a harmful effect on one's likelihood of being married. If the opposite is the case, vice versa.

In Table 1, the women turning point (WTP) is 38.63 and the male turning point (MTP) is 39.35. These results are quite surprising, not because of their numerical values, but because they are so close. This challenges the generally accepted idea that older men accrue more value over time while women peak around 40.

In Table 3, the WTP is 37.7 and 38.08. This is very consistent and makes sense. Table 1 and 3 are both regressions of the married status on measurements of education.

However, Table 4 is a departure from the trend. There is no change in the effect of age on a woman's number of marriages (the first and second derivatives are the same sign and the result is useless), but the male changes at 32.87 years - this is actually a positive trend; age begins increasing the dependent variable. It must be emphasized, however, that Table 4 measures a different trend. Table 4 is a measurement of the number of times married, the minimum is 1, while Tables 1 and 3 measure the effect of different characteristics on the likelihood that someone is married. The study interprets fewer marriages as more stable marriages; thus, a positive coefficient is seen as a detriment while a negative coefficient is indicative of stability.

So, at 32.87 years, for a man, marriages become less stable. At the same time, it should be noted that the -0.493 coefficient is very high and should be scrutinized for reliability.

Table 2 requires a different approach. Regression 2 predicts the effect of education on "marriage," dependent on the age of the respondent via the interaction term. As seen in Figure 5.1, the values for the effect of education on "marriage" depend on the age of the hypothetical respondent.

$$married = \beta_0 + \beta_1 educ + \beta_2 age + \beta_3 agesquared + \beta_4 educ * age \quad (2)$$

$$\frac{\delta married}{\delta educ} = \beta_1 + \beta_4 age \quad (8)$$

$$\frac{\delta married}{\delta educ} = -0.0495 + 0.00184 age \quad (3)$$

With a negative y-intercept, ages 0 to ~26.90 are predicted as a region where years of education correlate negatively with marriage potential. Past 26.90 years, however, the regression predicts a strictly-increasing relationship between education and marriage potential.

When we consider Figure 5.2, the graph of values for men, a similar trend is noted.

$$\frac{\delta married}{\delta educ} = -0.0653 + 0.00193 age \quad (9)$$

Men start with a negative y-intercept and as they get older, the effect of education becomes more and more positive. The turning point is at ~33.83 years of age. It should be noted how much older this is than the female zero. This result does support the idea that male attractiveness in the marriage market accrues over time.

5 Conclusion

Educational achievement has a pronounced impact on the likelihood of being married, though the directional impact on marriage chance is conditioned on gender. For women, an increase in education is linked to higher marriage chances, especially for college graduates and those with post-graduate education. For men, an increase in education is linked to lower marriage

chances until college, at which point their earned degree has a positive effect on their marriage chances. For both genders, an increase in education is loosely associated with higher quality marriages that are less likely to end in divorce. Based on the R^2 values of our first two models, education levels explain about 17% of the variation in marriage likelihood for both men and women.

Though higher education may seem like a daunting prospect to young academics contemplating their future, it would be valuable to understand the impact those opportunities will have on your life outside of your field of study. If weighing the cost and time commitment of a graduate or postgraduate degree, knowing there could be a huge payoff to your romantic life could be invaluable. While we do not expect college attendance rates to skyrocket due to the revelation that it may help you get married, this information could be an asset to young students discerning their life path as well as universities attempting to advertise the potential futures they can offer.

Using the results gathered from the regression analyses, we can put forward some suggested policies for urban planners and universities. The data is not always consistent, but it is clear that education approximately helps womens' chances and harms mens'. To combat this, we suggest matching up educated men and women. We advise pouring some money into university mixers and fraternizing activities where graduate students can meet potential partners. For city planners, it seems most prudent to host monthly mixers for new, highly-educated transplants to ensure that they feel at home and can assimilate well. We do recognize that current times are not necessarily predisposed to in-person human interaction so we recommend managed Zoom meetings as a stopgap measure. Speed-dating for graduate school graduates via Zoom is something easily imagined and implemented. Such measures could help alleviate the dearth of

highly educated men for (heteroseuxal) women and address the worsening coefficients for men. We suggest focusing on men who are below ~34 and women who are below ~27.

After investigating the effects of general variables on the marriage rates of men and women, it would be interesting to further refine our study. To do so obviously requires more precise data. The first would be an analysis of those with degrees from prestigious Ivy League and higher-ranked colleges. Do their auras of status affect/benefit the marriage potential of their graduates? Would an analysis of these universities also have to take into account the general higher wealth of their students? Perhaps the same sorts of trends this paper has picked up on do not apply to members of a higher wealth bracket.

Secondly, it would be interesting to break down the regression via age. Do different trends/factors appear less or matter more as age brackets change? It is quite possible that income becomes the main factor for male marriage as age increases while income is less of a predictor for those in the 20-30 range. Perhaps education is the main marital eligibility factor, but loses its potency as time progresses.

Thirdly, breaking down the regression via sexuality could be another area ripe for study. Are gay men less likely to focus on education? Are they more likely? Does wealth play a greater role in eligibility? Admittedly, such a study might require a few decades to pass as gay marriage is such a novel concept and data might be in low quantities for analysis. Do gay women have different standards/factor for marriage? How do nonbinary people pick a partner? Trans people? Will future legislation have an effect on sexual minorities' marrying habits? While these studies may provide very interesting results on the psychology of marriage as a sexual minority, there is certainly a dearth of data right now. In 50 years or so, it would be worthwhile rerunning these regressions and making use of specific categories for sexual minorities.

References

Ayers, David J. "The Gender Gap in Marriages Between College-Educated Partners." Institute for Family Studies. https://ifstudies.org/blog/the-gender-gap-in-marriages-between-college-educated-partners.

Cohn, D'vera, Jeffrey S. Passel, Wendy Wang, and Gretchen Livingston. "Barely Half of U.S. Adults Are Married – A Record Low." Pew Research Center's Social & Demographic Trends Project. Last modified August 27, 2020. https://www.pewsocialtrends.org/2011/12/14/barely-half-of-u-s-adults-are-married-a-record-low/.

Lefgren, Lars, and Frank McIntyre. "The Relationship between Women's Education and Marriage Outcomes." *Journal of Labor Economics* 24, no. 4 (2006), 787-830. doi:10.1086/506486.

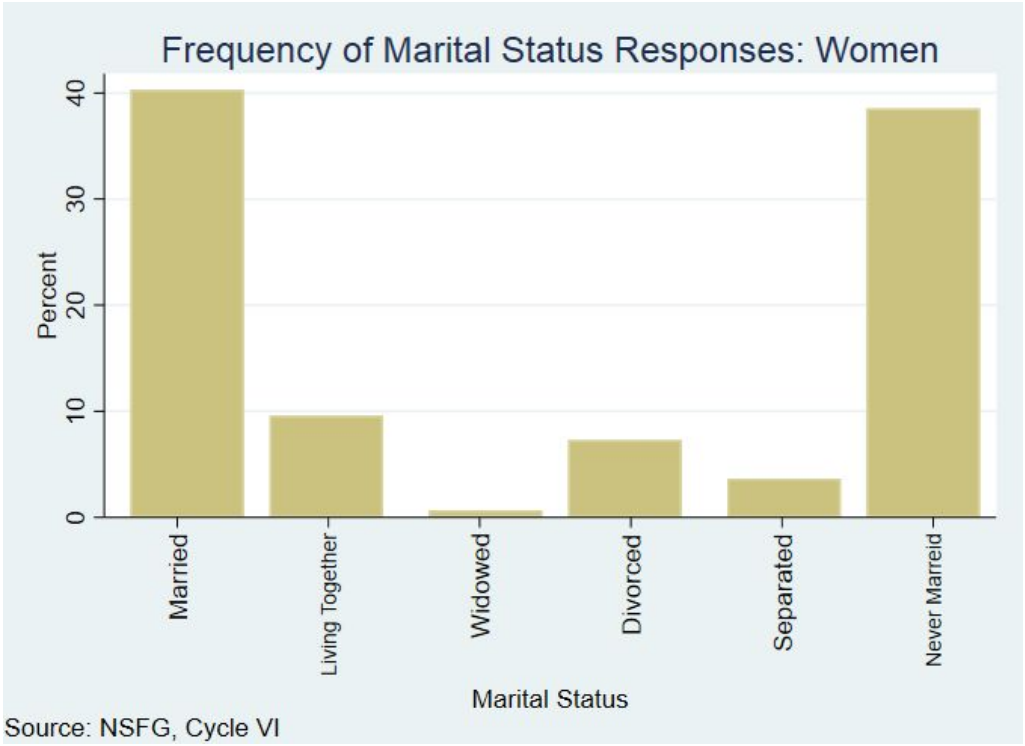
"Marriage and Divorce." https://www.apa.org. Accessed December 8, 2020. https://www.apa.org/topics/divorce#:~:text=However%2C%20about%2040%20to%2050,subsequent%20marriages%20is%20even%20higher.

"NSFG - Cycle 6." Centers for Disease Control and Prevention. Last modified June 8, 2020. https://www.cdc.gov/nchs/nsfg/nsfg_cycle6.htm.

United States Census Bureau. "Median age at first marriage: 1980 to present." Census.gov. Accessed December 9, 2020. https://www.census.gov/content/dam/Census/library/visualizations/time-series/demo/families-and-households/ms-2.pdf.

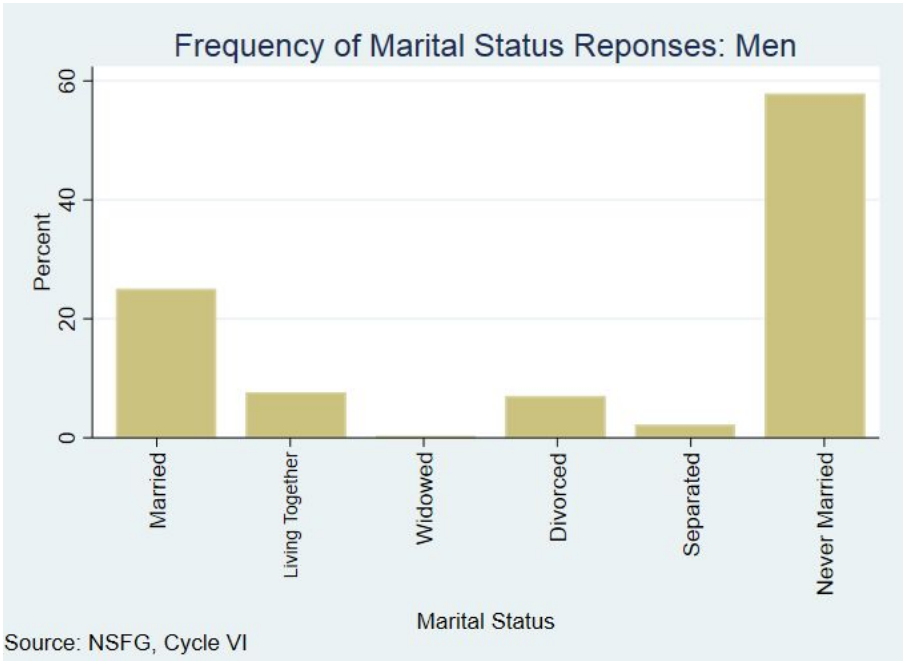
Wang, Wendy. "The link between a college education and a lasting marriage." Pew Research Center. Last modified December 4, 2015. https://www.pewresearch.org/fact-tank/2015/12/04/education-and-marriage/#:~:text=While%20more%2Deducated%20women%20have,high%20school%20diploma%20or%20less.

Figure 1:



* "Living Together" refers to "Not married but living together with a partner of the opposite sex"
** "Separated" refers to "Separated, because you and your spouse are not getting along"

Figure 2:



* "Living Together" refers to "Not married but living together with a partner of the opposite sex"
** "Separated" refers to "Separated, because you and your spouse are not getting along"

Figure 3:

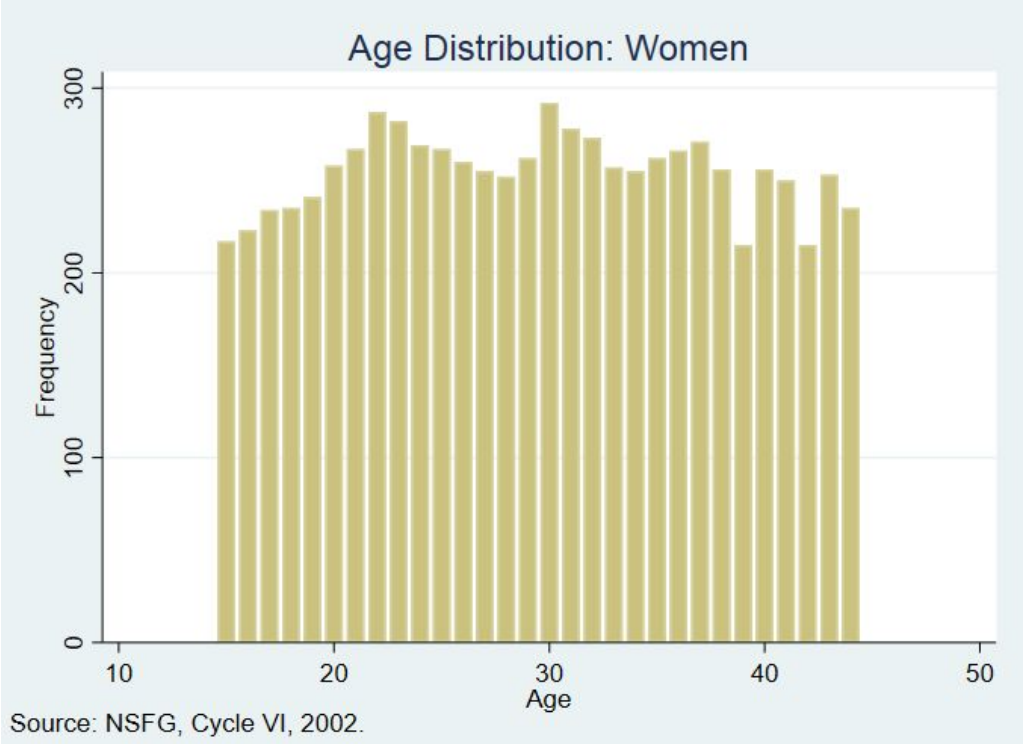


Figure 4:

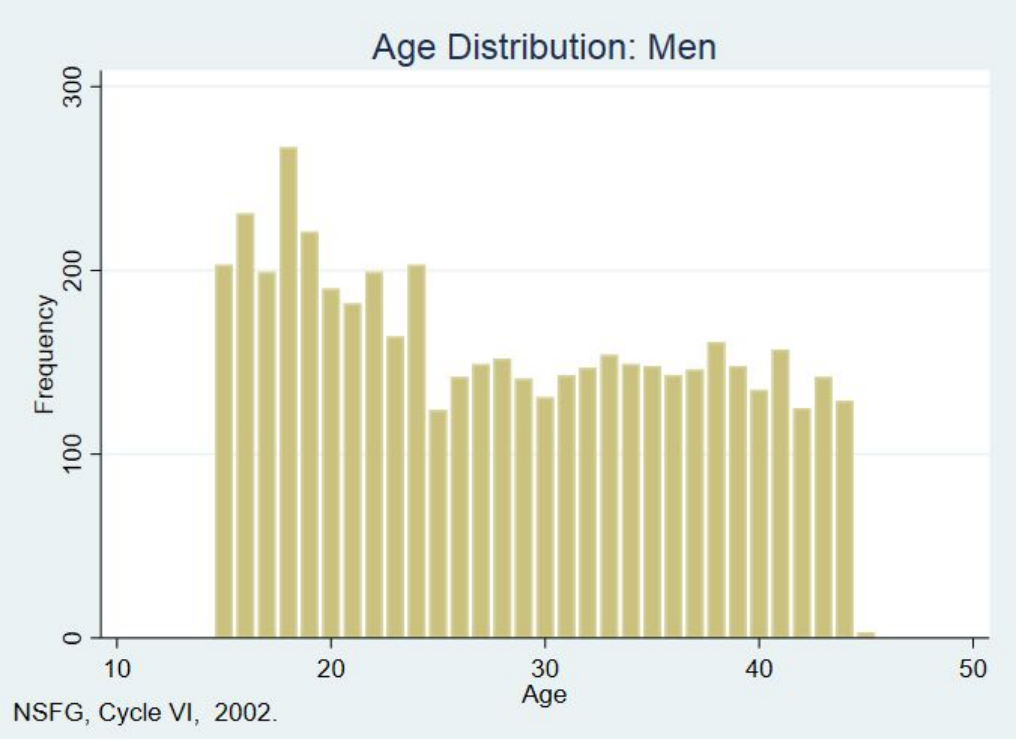


Figure 5.1:
The Effect of "age" on the Partial Derivative of "married" wrt "education" for ***Women***

$$\frac{\delta Married}{\delta educ} = -0.0495 + 0.00184age$$

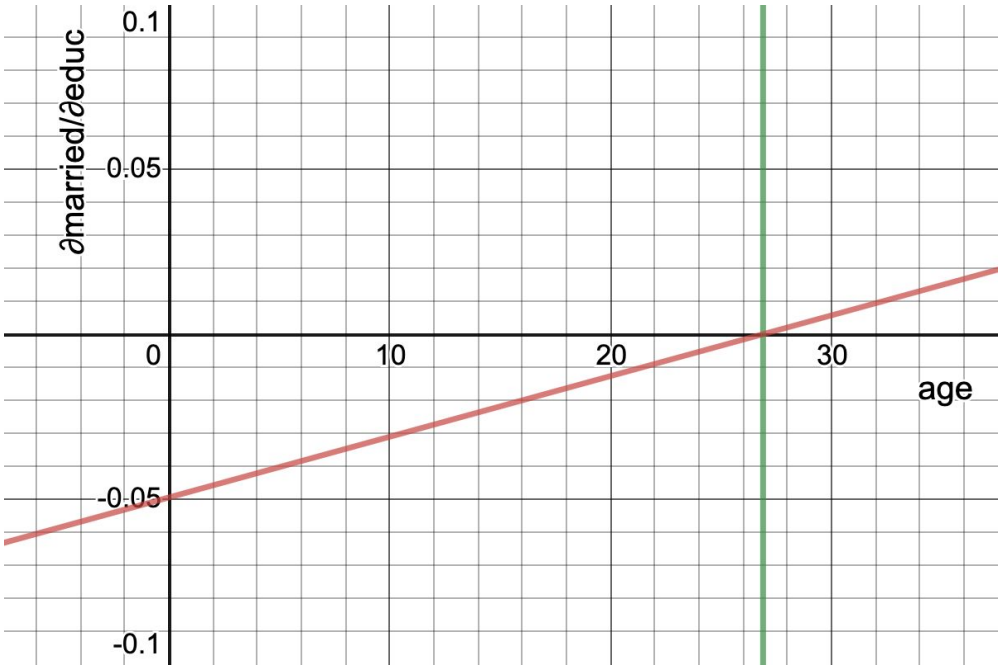


Figure 5.2:
The Effect of "age" on the Partial Derivative of "married" wrt "education" for ***Men***

$$\frac{\delta Married}{\delta educ} = -0.0653 + 0.00193age$$

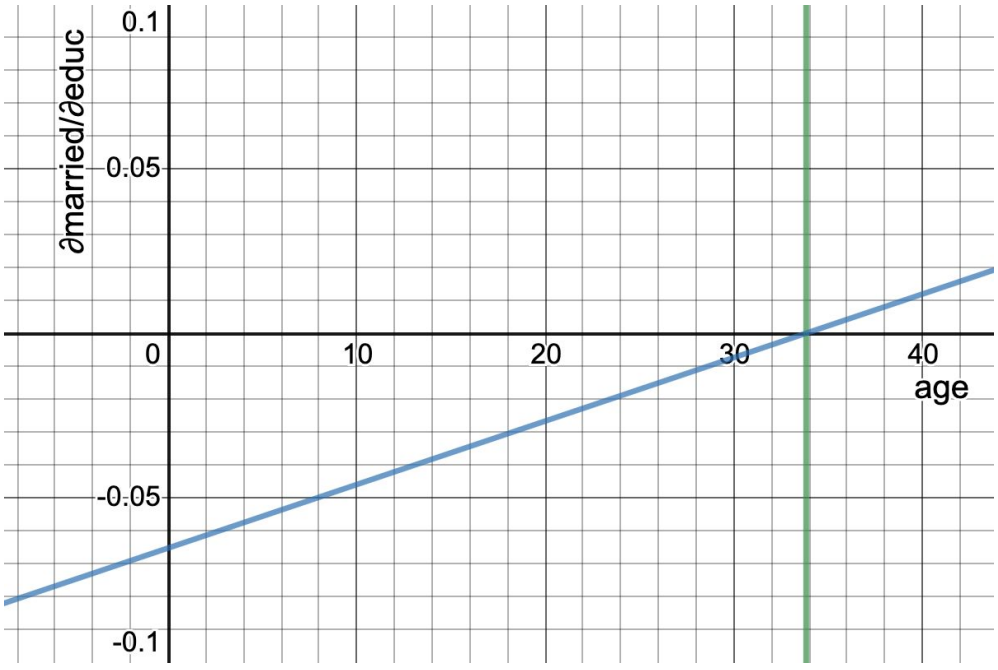


Table 1:

Linear Probability of Marriage Based on Education and Age

	(1) Women b/t	mean	(2) Men b/t	mean
Dummy=1 HS graduate	0.00554	0.23	-0.0523	0.26
	(0.37)		(-3.33)	
Dummy=1 Some college	0.00627	0.27	-0.0821	0.24
	(0.43)		(-5.04)	
Dummy=1 College graduate	0.104	0.12	-0.0356	0.09
	(5.56)		(-1.58)	
Dummy=1 More college	0.0661	0.10	-0.0114	0.09
	(3.32)		(-0.49)	
Age	0.0904	29.50	0.0743	28.16
	(18.35)		(13.84)	
Age Squared	-0.00117	941.58	-0.000944	871.23
	(-14.34)		(-10.44)	
Constant	-1.185		-0.982	
	(-17.58)		(-13.88)	
Observations	7643		4928	
Dep. var. mean	0.403		0.250	
R-squared	0.177		0.170	

Source: NSFG, Cycle VI, 2002.

Table 2:

Linear Probability Model of Marriage with Interaction Term

	(1) Women b/t	mean	(2) Men b/t	mean
Years of schooling	-0.0495	12.97	-0.0653	12.61
	(-5.68)		(-6.78)	
Age	0.0845	29.50	0.0662	28.16
	(17.11)		(12.48)	
Age Squared	-0.00145	941.58	-0.00120	871.23
	(-16.11)		(-11.74)	
Interaction	0.00184	388.70	0.00193	362.91
	(6.87)		(6.49)	
Constant	-0.801		-0.443	
	(-8.37)		(-4.55)	
Observations	7643		4928	
Dep. var. mean	0.403		0.250	
R-squared	0.179		0.173	

Source: NSFG, Cycle VI, 2002.

Table 3:

Linear Probability Model of Marriage Based on Degrees and Age

	(1) Women b/t	mean	(2) Men b/t	mean
Dummy=1 HS graduate	0.0795	0.00	-0.489	0.00
	(0.41)		(-1.49)	
Dummy=1 Some college	-0.0137	0.25	-0.0322	0.26
	(-0.46)		(-0.79)	
Highest Degree	0.00975	1.96	0.0400	1.98
	(0.56)		(1.70)	
Age	0.144	32.95	0.115	33.07
	(8.46)		(5.19)	
Age Squared	-0.00191	1127.27	-0.00151	1137.62
	(-7.40)		(-4.50)	
Constant	-2.042		-1.798	
	(-7.48)		(-5.05)	
Observations	2147		1099	
Dep. var. mean	0.564		0.359	
R-squared	0.0840		0.0809	

Source: NSFG, Cycle VI, 2002.

Table 4:

Number of Times Married based on Education

	(1) Women b/t	mean	(2) Men b/t	mean
Dummy=1 HS graduate	0.238	0.24	0.185	0.30
	(1.17)		(0.84)	
Dummy=1 Some college	-0.0235	0.29	0.196	0.24
	(-0.12)		(0.84)	
Dummy=1 College graduate	-0.116	0.15	-0.0824	0.12
	(-0.50)		(-0.29)	
Dummy=1 More college	-0.291	0.12	-0.0548	0.12
	(-1.19)		(-0.19)	
Age	0.0189	33.84	-0.493	34.75
	(0.18)		(-3.74)	
Age Squared	0.000178	1187.47	0.00750	1246.01
	(0.11)		(3.84)	
Constant	0.539		8.994	
	(0.33)		(4.15)	
Observations	4126		1754	
Dep. var. mean	1.387		1.287	
R-squared	0.00344		0.0101	

Source: NSFG, Cycle VI, 2002.

Table 5:

	Women			**Men**		
Table	**Age**	**AgeSq**	**Turning pt**	**Age**	**AgeSq**	**Turning pt**
1	0.0904	-0.00117	38.63	0.0743	-0.000944	39.35
3	0.144	-0.00191	37.7	0.115	-0.00151	38.08
4	0.0189	0.000178	-53.09	-0.493	0.0075	32.87