The Changing Relationship between Education and Marriage in the United States, 1940–2000

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Abstract

In 1940, when gender specialization was high, there was a negative relationship between education and marriage for women. College-educated women were least likely to be currently married and most likely to be never married. Declines in specialization were accompanied by a transition in this relationship. By 2000, when gender specialization was low, there was a positive relationship between education and marriage for women. College-educated women were most likely to be currently married, in part because they were more likely to stay married or remarry after divorce or widowhood. This transition occurred earlier and more completely for black women than for white women. These changes suggest that the relationship between education and marriage is shaped in part by the gender-role context.

Keywords

marriage; marital status; education; race differences in marriage; gender roles

Over the past sixty years, there have been dramatic changes in union formation and living arrangements, gender roles, and work in the United States. Between 1940 and 1960, first marriage rates rose along with fertility rates, creating the high-marriage, high-fertility baby boom years. After 1960, marriage rates and marital fertility began to fall, while age at first marriage and rates of divorce, cohabitation, living alone, and nonmarital childbearing all rose. Declines in marriage rates and the separation of marriage and parenthood have been more pronounced for blacks, suggesting that there may be differential patterns of family change for blacks and whites. These changes in family formation behaviors were accompanied by significant changes in gender roles and increases in women's economic status. Of particular note is the movement of women, particularly married women and mothers, into the labor force.

There is an ongoing debate about the consequences of women's increased economic status on marriage and family formation. Specialization and exchange theorists argue that greater economic status decreases the likelihood of marriage for women, leading to overall declines...
in marriage rates. Others argue that, since men and women now have similar roles in the labor market, they should also have a similar (positive) relationship between economic status and marriage.

Rather than treating these two theories as oppositional, it may make more sense to think of them as complementary theories that can be combined to create a more dynamic theory of marriage, one that allows the relationship between economic status and marriage for women to vary as gender roles and norms about women's participation in market work change. That is, when few women work, women's economic status may have a different relationship to marital status than when most women work.

This study examines changes in the relationship between economic status, as measured by education, and marital status for women between 1940 and 2000. Most prior analyses of economic status and marriage focus on one point in time or on one cohort, with only a few assessing change across periods or cohorts. Most prior work focuses on first marriages, marriage timing, or ever-marriage rates. This study includes census data from 1940 to 2000, allowing an examination of the relationship between education and marital status before, during, and after the baby boom—not previously done in a multivariate context. This analysis also complements prior work by expanding the operationalization of marital status, including the never, currently, and previously married.

Theory and Prior Research

Specialization and Exchange

The coincident timing of changes in marriage and family life, along with changes in gender roles and the expansion of economic opportunity for women, have led many social scientists to theorize a connection between the two. Becker's “New Home Economics” outlines how gendered role specialization and exchange shape marriage in a rational choice framework. Becker argues that people marry in order to maximize their mutual economic benefit. Individuals make attractive marriage partners if they provide something that the other person wants or needs. Exchanges need not be limited to income, housework, or reproduction, though these are the most often considered.

In this framework, the decline in specialization that accompanied increases in women's economic status has two important consequences for marriage. First, higher-status women make less attractive marriage partners because they are less focused on tasks of home production. Second, higher-status women themselves derive less benefit from marriage since they have the financial freedom to opt out of marriage. Demographic constraints on the availability of normatively appropriate (e.g., higher-status) potential spouses for high-status women likely play an additional role in reducing marriage rates. In short, specialization and exchange theory suggests a gendered relationship between economic status and marriage, often called the “independence hypothesis.” Greater economic status increases the marriage chances of men, but decreases the marriage chances of women. In aggregate, this should lead to declines in marriage rates as more women opt out of marriage.
Relative Status

In contrast, Oppenheimer argues that women's recent mass entry into the labor force occurred at the same time that men experienced substantial declines in real wages, considerably narrowing the gap between men's and women's relative status. The relative status theory of marriage builds on the same concept of exchanges being fundamental to marriage, but suggests that men and women contribute the same things. Since women are now like men in the labor market, Oppenheimer argues, they should also be like men in the marriage market. Greater economic status should increase marriage chances regardless of gender. Marriage remains desirable, but declines in men's wages may make marriage infeasible among the economically disadvantaged, leading to declines in marriage rates.

Prior Research on the Relationship between Economic Status and Marriage

Empirical research consistently finds a positive relationship between socioeconomic status and marriage for men at the individual level, both historically and today, regardless of whether economic status is measured as income, education, or employment.

In contrast, the evidence on the relationship between economic status and marriage for women is quite mixed. A few studies have found a negative effect of greater education on marriage, both historically and today, as well as in international contexts. But, most analyses of data for the post-baby boom era find either no relationship or a positive relationship between education and/or income and marriage for women. While Oppenheimer argues that the lack of a negative relationship between economic status and marriage for women suggests that the independence hypothesis has little support, it may simply imply that it is less relevant in the current context of low gender specialization.

Only a handful of studies examine changes across periods or cohorts. Using census data for 1850 through 2000, Fitch finds that greater female economic opportunity is associated (at the bivariate level) with later ages at marriage across the entire period. But, in the latter part of the period, economic opportunity had little effect on marriage rates. Sweeney finds a positive relationship between education and first-marriage rates for two baby boom cohorts of men and women. Goldstein and Kenney similarly find a positive relationship between education and ever-marriage rates for the two later cohorts of baby boomers, but a negative relationship for two earlier cohorts. Again, the main effect of education on marriage is on timing, as highly educated women were likely to marry at later ages, but more likely to marry overall.

Most research on the relationship between education and marriage has focused on first marriages, marriage timing, or ever-marriage rates—measures that all largely ignore divorce, widowhood, and remarriage. A separate literature has focused on marital disruption. The independence hypothesis suggests that higher-status women will be more likely to divorce for the same reasons they are less likely to marry. Empirical support for this hypothesis is also mixed. Some studies find that greater income and employment increase the likelihood of divorce for women; while others find that greater education lowers the risk of divorce. Though Ono suggests that the effect of status varies by historical and
cultural context.\textsuperscript{25} To date, no other study has looked at the relationship between education and all marital statuses simultaneously.

**Differences by Race in the Relationship between Economic Status and Marriage**

No discussion of changes in marriage in the United States can ignore the substantial differences in marriage patterns by race, which have emerged over the last sixty years. While recent studies have shown that blacks are less likely to be married than whites, this is a new pattern, emerging after 1940.\textsuperscript{26} Prior to 1940, blacks had higher marriage rates and earlier ages at first marriage than whites. By 1960, there was a racial crossover in marriage rates, and whites had higher marriage rates and earlier ages at first marriage. Marriage rates declined for all women starting in 1970, but declined more dramatically for black women, resulting in what is often called “the retreat from marriage.”\textsuperscript{27} There are also race differences in marital disruption.\textsuperscript{28}

The independence hypothesis suggests that declines in marriage among black women are a result of their increased status. In contrast, the relative status hypothesis suggests that the race differences in marriage rates are tied to differential economic positions. Black women have historically had higher labor force participation rates than white women and higher wages relative to black men.\textsuperscript{29} Furthermore, recent declines in economic status have disproportionately affected black and less-educated men.\textsuperscript{30} There is also some evidence that the relationship between economic status and marriage may differ by race in intensity or direction.\textsuperscript{31} Since young adults make decisions about marriage in an economic context, we might expect that different constraints and opportunities for young blacks and whites might alter the relationship between economic status and marriage, as well as patterns of change over time. Demographic constraints for blacks, may also play a role, but cannot explain all of the difference in black–white marriage patterns.\textsuperscript{32}

**Current Research: A More Dynamic Theory of Economic Status and Marriage**

This article extends previous work on the relationship between economic status and marriage. First, I examine the relationship between education and marriage and whether this relationship has changed over time. I include the important pre–baby boom period in a multivariate context and focus on all marital statuses, not just first marriages or ever-marriage rates. Second, I examine whether the timing of changes in the relationship between education and marriage are coincident with declines in gender specialization, as women's education and labor force participation increased. I also explore whether changes in the relationship between economic status and marriage result from increases in marriage among higher-status women or from decreases in marriage among lower-status women. Third, I examine whether the relationship between education and marriage, and the changes over time, differ for black and white women.

Finally, I suggest that, rather than considering specialization and exchange and relative status theories as oppositional, it may be more useful to consider them as complementary—describing the relationship between education and marriage in different gender-equity contexts, that is in different historical and cultural contexts. Recent research suggests that the relationship between women's labor force participation and fertility varies depending on
the gender-role context. This framework may also be useful for theories of marriage. Combining the two theories yields a more dynamic and flexible theory of marriage with different predictions for different contexts: where gender specialization is high, we expect more education to increase the marriage chances of men but decrease them for women. Where gender specialization is low, we expect a similar, positive relationship between economic status and marriage for both men and women. In between, we expect a transitional relationship. Although we cannot directly test the gender context here, we can use the different periods as proxy measures of the macro-level gender context.

**Method**

**Data**

Data for this study come from the IPUMS-USA, Integrated Public Use Microdata Series, version 4.0, of the United States decennial censuses. The analytic sample includes census microdata from the one-percent samples for the seven census years 1940 through 2000. The sample includes women aged eighteen to thirty-nine at the time of each census year, to best capture the population at risk of ever marrying across the entire period. Given the possible interplay between age and completed education, alternative specifications of the sample limiting the sample age range to twenty-five to thirty-nine, including square terms and log terms for age were also examined. These alternative sets of analyses did not differ substantively from the results presented below. Thus, the more expansive age restriction was retained. This allows the examination of marriage patterns for persons born as early as 1901 and as late as 1982. Data for 1940, 1950, 1990, and 2000 are weighted; the other three years are self-weighting.

The major limitation of the IPUMS data is that they are cross-sectional and provide a snapshot of educational attainment by marital status at the time of the census, rather than allowing for a longitudinal examination of the effect of completed schooling on subsequent marriage. Despite this limitation, IPUMS data are uniquely suited to an individual-level analysis of changes over time in marriage patterns by education—no other data allow the examination of these relationships using consistent measures across the sixty-year period, and no nationally representative samples with longitudinal data cover the entire period. Furthermore, the large sample sizes allow the inclusion of controls for characteristics that are relatively rare in one census, but common in another (e.g., farm residence, grade school education).

**Method and Analytical Approach**

I use multinomial logistic regression procedures in statistical analysis software (SAS) to examine the relationship between education and marital status for women net of other characteristics. Models are analyzed separately for black and white women in each census year. Given the cross-sectional nature of census data, the findings reported here should be interpreted descriptively rather than causally. However, using a regression approach allows the assessment of the relationship between education and marital status net of other characteristics that may be related to marriage and whose distribution in the population may have changed over time.

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Multinomial logistic regression also has the benefit of allowing comparisons across all three marital statuses, allowing the examination of the likelihood of being (1) currently versus never married, (2) previously versus never married among the unmarried, and (3) currently versus previously married among the ever married.\textsuperscript{36} Where:

Equation 1 (currently versus never married):
\[
\ln(P_1/P_0) = B_{01} + B_{11}X_{11} + B_{21}X_{21} + \ldots + B_{j1}X_{j1} + \epsilon.
\]

Equation 2 (previously versus never married):
\[
\ln(P_2/P_0) = B_{02} + B_{12}X_{12} + B_{22}X_{22} + \ldots + B_{j2}X_{j2} + \epsilon.
\]

Equation 3 (currently versus previously married):
\[
\ln(P_1/P_2) = B_{03} + B_{13}X_{13} + B_{23}X_{23} + \ldots + B_{j3}X_{j3} + \epsilon.
\]

Regression coefficients are then used to calculate the predicted probability of being in each marital status by education level. These predicted probabilities combine the effects across multiple equations yielding one value for each marital status rather than two for each marital status in the regression equations. Thus, the predicted probability of being currently married includes the comparison of both the currently married to the never married and the currently married to the previously married.

Predicted probabilities are calculated by applying the regression coefficients to the actual values for each independent variable for each woman in the sample, holding education constant at the counterfactual level of interest, and taking the mean across all records. Where:

\[
PP \text{ currently married} = \exp(B_{01} + B_{11}X_{11} + B_{21}X_{21} + \ldots + B_{j1}X_{j1})/(1 + \exp(B_{01} + B_{11}X_{11} + B_{21}X_{21} + \ldots + B_{j1}X_{j1}))
\]
\[
+ \exp(B_{02} + B_{12}X_{12} + B_{22}X_{22} + \ldots + B_{j2}X_{j2})).
\]

\[
PP \text{ previously married} = \exp(B_{02} + B_{12}X_{12} + B_{22}X_{22} + \ldots + B_{j2}X_{j2})/(1 + \exp(B_{01} + B_{11}X_{11} + B_{21}X_{21} + \ldots + B_{j1}X_{j1}))
\]
\[
+ \exp(B_{02} + B_{12}X_{12} + B_{22}X_{22} + \ldots + B_{j2}X_{j2})).
\]
Computationally, this yields a slightly different set of predicted probabilities than applying the coefficients to the mean values on each variable, but has the benefit of taking into account the actual distribution of the population on all other characteristics in the model for each year. But note that this holds constant all characteristics in a given year. Thus for example, comparing the predicted probability of being currently married for college graduates versus high school graduates for 2000 isolates the effect of education on the current marriage probability and holds all other values constant (using 2000 population characteristics).

For ease of presentation and discussion, I focus on the results for 1940, 1970, and 2000 (intervening years are available on request from the author). These three years highlight key points in the transition in education levels, marriage rates, and women's labor force participation rates that occurred over the period. Although this analysis cannot directly measure macrolevel gender context, these three years represent dramatic changes in this context. First, 1940 serves as a pre–baby boom reference period and represents a time of high gender specialization (women's education and labor force participation were fairly low) and fairly high marriage rates. Second, 1970 represents a transitional, post–baby boom year, with medium levels of specialization and high marriage rates. Finally, 2000 represents the current era of low gender specialization (high education levels and women's labor force participation rates) and lower marriage rates. These years also highlight major changes in the relationship between economic status and marriage over the period without obscuring them in a wealth of detail.

**Measures**

**Marital status**—The dependent variable is a trichotomous measure of marital status that indicates whether the person was never married, currently married, or previously married at the time of the census. Unfortunately, no distinction can be made between first- and higher-order marriages among the currently married.

**Education**—Educational attainment is operationalized categorically as a set of dummy variables for highest education level completed: grade school only, some high school, high school diploma, some college, and college degree or higher. Although education has expanded dramatically over the sixty-year period, the key advantage of this conceptualization of education, as opposed to a relative measure such as quartiles, is that it retains the real and substantively important distinctions between education levels and the types of jobs and background they typically represent. A relative measure, such as quartiles, obscures such distinctions.

Educational attainment also has two major advantages over income as a measure of economic status in cross-sectional data for women. First, in order to use income, we would need to estimate potential earnings for the large number of women not in the labor force and not earning money. This is particularly relevant prior to 1980, when married women...
(especially white women) were likely to drop out of the labor force and often worked for pay only in times of severe financial hardship.\textsuperscript{40} As a result, most married white women report no income prior to 1980. So, while income is a useful measure of status for women at the end of the period, it is quite problematic as a measure in the early part of the period. Second, using education minimizes issues of indeterminate causality in cross-sectional data, since most women complete their education prior to marriage, though this is not always true.\textsuperscript{41}

**Period and control variables**—Models are estimated separately for each census year and function as full interactions by census year. Census years represent the historical context in which young adults made decisions about marriage. The differences in periods, rather than simply marking the passage of time, are intended to represent the broad changes in historical contexts between 1940 and 2000, including the transformation of gender roles and declining specialization of market work, expansion of education, changing occupational structure, suburbanization, changes in fertility and contraception, and increases in divorce, cohabitation, nonmarital childbearing, and nonfamily living.

While it would be preferable to directly measure gender-role context, rather than measuring it implicitly using period, there are limited contextual variables available in the IPUMS. Furthermore, those contextual variables that are available, such as female labor force participation and female wage ratios can only be matched to IPUMS data at the state level. Since marriage and labor markets are typically conceptualized as operating at much lower geographic levels,\textsuperscript{42} we would not necessarily expect measures at the state-level to be related to the individual measure of marriage. Indeed, additional analyses (not shown) found no relationship between these state-level measures and the individual-level measures. Though there would likely have been a relationship if we could measure these at a more appropriate geographic level.

All models include controls for population characteristics that may be related to marital status and whose representation in the population may have changed over time. Life-course factors, such as younger age and school enrollment, may inhibit marriage.\textsuperscript{43} Marriage and divorce rates differ by race and ethnicity,\textsuperscript{44} foreign-born status,\textsuperscript{45} region,\textsuperscript{46} farm and metropolitan residence,\textsuperscript{47} and home ownership.\textsuperscript{48}

**The Changing Context, 1940–2000**

Between 1940 and 2000, the percentage of all women age eighteen to thirty-nine that were currently married declined, from 62 percent in 1940 to 49 percent in 2000. The percentage never married and previously married both increased, from 30 percent to 39 percent and 8 percent to 12 percent, respectively. However, these overall trends hide substantial divergence in the marriage patterns by race. Table 1 presents descriptive statistics for the samples for 1940, 1970, and 2000 separately for white and black women.

The descriptive statistics for white women are very similar to those for all women, but differ substantially for black women on a few key dimensions. In 1940, black women were less likely than white women to be never married or currently married, but were substantially more likely to be previously married, likely due in part to higher mortality of black men at
younger ages. As a result, black women were more likely to be ever married in 1940, although there was a racial crossover after 1950, consistent with previous research. Current marriage rates also declined more rapidly for black women over the period. By 2000, only 27 percent of black women were currently married, compared with 52 percent of white women.

Access to education increased substantially between 1940 and 2000. In 1940, a majority of women had less than a high school diploma and a grade school education was the modal category. By 2000, the vast majority of women had at least a high school diploma, half or more had at least some college education, and one in ten black women and one in four white women had a college degree. Women’s employment more than doubled over the period, increasing from 32 percent in 1940 to 66 percent in 2000 for all women and from 16 percent to 65 percent for married women (not shown). Black women were more likely than white women to be employed through 1970. After 1970, married black women remained more likely to be employed than married white women.

Results

Changing Relationship between Education and Marriage for White Women

The first analysis examines the relationship between education and marriage for white women. Figure 1 presents the predicted probability of being currently married by education level for each year for white women, holding age, nativity, school enrollment, region, metropolitan status, farm residence, housing tenure, and ethnicity constant at the actual individual population values for each year. Note that the predicted probability of being currently married includes both the comparison of the currently married to the never married and the currently married to the previously married, combining the odds of getting and staying married into one number.

Greater Education Decreases Marriage Probabilities in 1940

As shown in Figure 1, the predicted probability of being currently married decreased with greater education in 1940 all else equal. More than two-thirds of white women with less than a high school diploma and about six in ten white women who were high school graduates or had some college education were predicted to be currently married, all else equal. In contrast, less than half of those with a college degree were predicted to be currently married in 1940.

This negative relationship between education and marriage in 1940 resulted from a combination of three underlying trends. First, as the regression coefficients in the first set of columns in Table 2 show, greater education decreased the likelihood of being currently versus never married for white women in 1940. White women with less than a high school diploma were more likely than high school graduates to be currently versus never married ($\beta = .61$ for grade school and $\beta = .63$ for some high school, respectively). In contrast, women with at least some college education were less likely than high school graduates to be currently married versus never married ($\beta = -.18$ for some college and $\beta = -.79$ for college degree, respectively).
Second, tempering the negative effect of education on marriage in 1940, ever-married white women with less than a high school diploma were more likely than high school graduates to be previously versus currently married in all years. However, as the results presented in the third set of columns in Table 2 show, there was no difference between high school graduates and those with at least some college education in 1940.

Third, there was a negative relationship between education and the likelihood of being previously versus never married in 1940. The second set of columns in Table 2 shows that white women with less than a high school education were more likely to be previously than never married \( (\beta = .82) \), while those with a college degree were less likely to be previously versus never married \( (\beta = -.70) \). There was no difference between high school graduates and some college.

**A Transition in the Relationship between Education and Marriage: 1940–1970**

Between 1940 and 1970, the predicted probability of being currently married declined for women with only a grade school education (although the size of this group also declined dramatically). In contrast, the predicted probability of being currently married increased for white women at all other education levels, with progressively larger increases at higher education levels. The increase was largest for college-educated women, from 46 percent to 63 percent.

Despite these changes, the relationship between education and the predicted probability of being currently married remained slightly negative, with an inverse J-shape. Again, this relationship results from combination of three underlying trends. First, in 1970, white women with a grade school education were now also less likely than high school graduates to be currently versus never married. Second, by 1970, and thereafter, ever-married college-educated white women were more likely to be currently versus previously married. Third, the relationship between education and the likelihood of being previously versus never married also began to change and by 1970, the least educated white women were no more likely to be previously versus never married than high school graduates.


In contrast to the previous increases, the predicted probability of being currently married declined for most white women after 1970. Declines were largest among high school graduates and those with some college education, and lowest among those at the top and bottom of the educational distribution. These declines in marriage rates more than offset the earlier baby boom era increases in marriage rates for all white women, except those with college degrees. By 2000, all white women except college graduates had a lower probability of being currently married than in 1940 (or in 1970). White women with some high school or grade school education experienced the largest decline (from 66 percent in 1940 to 47 percent in 2000); those with high school diplomas experienced a moderate decline (from 59 percent to 50 percent); while those with some college education experienced a smaller decline (from 56 percent to 52 percent). In stark contrast to the rest of the educational distribution, the predicted probability of being currently married rose between 1940 and 2000 for white women with college degrees, from 46 percent to 53 percent. As a result,
white women with college degrees were the most likely to be currently married in 2000, while those with a grade school education were the least likely to be currently married. Thus, in 2000 the relationship between education and the predicted probability of being currently married was positive for the first time for white women.

Again, there are three separate underlying trends that result in the overall positive relationship between education and marriage for white women in 2000. First, by 2000, greater education no longer decreased the likelihood of being currently versus never married. White women with high school degrees or some college education ($\beta = .04$) were most likely to be currently versus never married. College graduates remained less likely than high school graduates to be currently married ($\beta = -.25$), but the strength of that association declined. Second, ever-married white women with less than a high school diploma continued to be more likely to be previously versus currently married. In contrast, those with a college education were more likely to be currently versus previously married. Third, the least educated women were also now less likely to be previously versus never married ($\beta = -.22$).

The Changing Relationship between Education and Marriage for Black Women

The second analysis examines the relationship between education and marital status for black women. Figure 2 presents the predicted probability of being currently married by education level and year for black women, all else constant. Table 3 presents the underlying regression results. In short, black women experienced a similar transition from a negative to a positive relationship between education and the predicted probability of being currently married, as described above for white women, although there are two main differences. First, the predicted probability of being currently married was lower for black women than for white women at all education levels in all years. Second, the transition in the relationship between education and the predicted probability of being currently married occurred earlier for black women. Thus, the relationship between education and marriage was positive by 1970 and remained so through 2000.

Greater Education Decreases Marriage in 1940

Figure 2 shows a negative relationship between education and the predicted probability of being currently married for black women in 1940, similar to that for white women. In 1940, almost 60 percent of the least educated black women were currently married. Current marriage rates fell with increasing education, reaching just under 40 percent for those with a college degree. Marriage rates for black women at all education levels were 8–10 percentage points lower than for whites.

Consistent with previous research,\textsuperscript{50} black women were slightly more likely than white women to be ever married, regardless of education level (not shown). However, as for white women, the relationship between education and the likelihood of being ever married was negative for black women, in 1940, as shown in Table 3. College-educated black women were somewhat less likely to be currently or previously versus never married than their high school counterparts, all else equal. At the other end of the distribution, those with less than a high school diploma were more likely than those with one to be currently ($\beta = .37$ for grade...
school and $\beta = .53$ for some high school) or previously ($\beta = .37$ for grade school and $\beta = .44$ for some high school) versus never married. For the ever married, there was no difference in the likelihood of being currently versus previously married by education.

**Greater Education Increases Marriage for Black Women Starting in 1970**

Between 1940 and 1970, the predicted probability of being currently married declined for black women with a high school diploma or less. In 1970, just 40 percent of black women with a grade school education, 48 percent of those with a high school diploma, and 46 percent of those with some high school were currently married—a decline of over 10 percentage points for those with less than a high school diploma and just three percentage points for those with one. In contrast, the predicted probability of being currently married increased for black women with at least some college education, to 51 percent for those with some college and 53 percent for college graduates—an increase of five and sixteen percentage points, respectively. As a result, there was a positive relationship between education and the predicted probability of being currently married for black women in 1970.

This transition occurred through a combination of declines in the predicted probability of being currently married for less-educated black women combined with increases among more educated black women. By 1970, black women with a grade school education were no longer significantly more likely to be ever married (either previously or currently married) versus never married, and black women with some college education were no longer less likely than their high school graduate counterparts to be ever married. College graduates remained less likely to be ever married, while those with some high school remained more likely to be ever married.

While white women exhibited a similar pattern of decline in current marriage rates among the less educated and an increase among the more educated, the relationship for white women was an inverse J-shape in 1970, similar to the pattern for black women in 1960 (not shown). White women’s somewhat later mass entry into the labor force may explain some of the differential timing of changes in marriage.

**Marriage Declines but Education Still Increases Marriage for Black Women, 1970–2000**

Between 1970 and 2000, the predicted probability of being currently married declined dramatically for all black women to well below 1940 levels. By 2000, just 33 percent of black women who were college graduates, down to 20 percent of those with less than a high school diploma, were predicted to be currently married, all else equal. In contrast, between 47 percent and 53 percent of white women (depending on education level) were predicted to be currently married in 2000. Despite these declines, the relationship between education and the predicted probability of being currently married remained clearly positive between 1970 and 2000.

Black women with some college education were more likely than black women with a high school diploma to be currently ($\beta = .29$) or previously ($\beta = .22$) married versus never married in 2000. College graduates were also more likely to be currently married ($\beta = .32$), but they remained less likely to be previously ($\beta = -.32$) versus never married. Black women with less than a high school diploma were now less likely than high school graduates to be both
currently or previously married versus never married. That is, less-educated black women were now less likely to be ever married. Furthermore, among the ever married, highly educated black women were more likely to be currently than previously married, while those with less education were more likely to be previously married.

Discussion

Marriage is a Dynamic Institution

This analysis extends previous work on the changing relationship between economic status and marriage. A major contribution of this analysis is the use of census microdata for 1940 to 2000, allowing the inclusion of a longer time period than has been previously examined in a multivariate context. This allows the examination of the relationship between economic status, as measured by education, and marriage before, during, and after the baby boom. This study also operationalizes marital status more expansively, including the currently, previously, and never married, allowing the examination of the relationship between education and the likelihood of both getting and staying married (including remarrying). While the cross-sectional nature of census data limits what we can conclude about the causal ordering of the relationship between education and marriage, there is a clear and changing association between education and marital status for women between 1940 and 2000, net of other characteristics.

In 1940, there was a negative relationship between education and marriage for both black and white women, consistent with specialization and exchange theory. College-educated women were most likely to be never married and least likely to be currently married. The opposite was true for women with less than a high school diploma—they were the least likely to be never married and the most likely to be currently married. By 2000, the relationship between education and marriage was positive for both black and white women, consistent with relative status theory. College graduates were most likely to be currently married, while those with less than a high school education were least likely to be currently married. This finding is consistent with previous research suggesting that although education may delay marriage; these delays no longer result in lower marriage rates. In short, in the early part of the period, when separate spheres and the specialization of gender roles were more likely to prevail and low levels of education were normative for women, greater education decreased the likelihood of marriage for women. By the end of the period, when gender roles were more symmetrical and greater levels of education were normative for women, greater education increased the likelihood of both getting married and staying married, or remarrying after divorce and/or widowhood.

Although the reversal of the relationship between education and marriage occurred for both black and white women, there are two notable differences in the patterns of change over time for the two groups. First, although it may be coincidental, both the timing of white women’s mass entry into the labor force and the change in the relationship between education and marriage for white women lagged behind that observed for black women. Black women’s earlier mass entry into the labor force may have increased both the benefit of education and the symmetry of gender roles at an earlier point, leading to an earlier transition in the relationship between education and marital status for black women. Second,
black women experienced a substantial decline in current marriage rates between 1940 and 2000 at all education levels, although those with college degrees experienced the smallest decline. In contrast, current marriage probabilities increased for white women with college degrees, although they declined for all other white women. The relatively poor position of black men in the labor market after 1940 likely helped facilitate these declines. Additional analyses (not shown) find a strong and consistent positive relationship between personal income and the probability of being currently married for men, regardless of race, across the entire period. However, despite the dramatic expansion of education for men as well as women, education has little effect on men's marriage probabilities net of income.

An important component of the changing relationship between education and marriage is the increased propensity of ever-married women with at least some college education to be currently married. Given the increases in divorce and remarriage over the period, it is crucial to understand the role that education plays in both getting married and staying married. Even when they were most likely to be never married, once married, highly educated women—black or white—were likely to remain married or remarry after divorce or widowhood. While this analysis provides a first step toward a more thorough understanding of the role of education in lowering previous marriage rates, census data do not allow a distinction between remaining married and remarrying. This remains an important avenue for further research.

This analysis also suggests that given the dynamic nature of marriage, it may be more useful to think about the theories of marriage based on specialization and exchange and those based on the relative status of men and women as complementary rather than oppositional. This more dynamic approach allows us to assess how the gender-role context shapes, and reshapes, the relationship between economic status and marriage. Such an approach is useful for thinking about past changes over time in marriage and theorizing about future changes. It is also useful for thinking about differences in marriage patterns and differential timing of changes in marriage across groups and across countries with different gender-role contexts. Changes in expectations about women's economic contributions to marriage, as well as women's increased economic status, likely play a role in the changing relationship between education and marriage. As women are increasingly expected to contribute to household finances after marriage, their status became more important in marriage decisions. However, this change does not appear to explain declining marriage rates. Notably, despite the similar transition in the relationship between economic status and marriage for both black and white women, white women's marriage rates have not undergone the same declines. If those declines are a result of the uniquely disadvantaged position of black men, it is unlikely that white women will experience similar declines.

**Consequences for Inequality**

Overall, the transformation of the relationship between education and marital status occurred primarily as a result of the decreasing likelihood of marrying, and staying married or remarrying, among less-educated women. These declines were accompanied by small increases in marriage, and staying married or remarrying, among highly educated white women and smaller decreases among highly educated black women relative to other black
women. Consistent with Oppenheimer's\textsuperscript{52} findings that the increasing disadvantage of men led to declines in marriage rates, economic disadvantage among women also decreases the likelihood of marriage in an era when gender specialization is low. Furthermore, the dramatic decline in marriage rates for black women occurred after the relationship between education and marriage had already transitioned to a positive relationship. Contrary to the predictions of specialization and exchange theory, declines in marriage rates did not result from declines in marriage among highly educated women. Rather, both the “retreat from marriage” and the transformation in the relationship between education and marital status for women were largely driven by declines in marriage among the most disadvantaged women at the same time that women's economic status increased overall.

This finding has serious consequences for inequality, particularly intergenerational inequality. Not only has there been a dramatic decline in the likelihood of marriage among the most disadvantaged women, but also over the same period there have been increases in educational homogamy.\textsuperscript{53} Less-educated women are less likely to marry, and when they do marry, they are more likely to marry men with similar economic disadvantages than in the past. When gender specialization was high, marriage likely helped mitigate some of the economic disadvantages for women with little education. However, as specialization declines and economic status becomes an important determinant of marriage for both men and women, marriage patterns may exacerbate socioeconomic inequalities.

Furthermore, over the period there has been an increasing separation of marriage and parenthood, particularly among black women and more disadvantaged women.\textsuperscript{54} Increases in nonmarital childbearing and single parenthood have reduced some children's access to both parents' economic and emotional resources. However, some of the increase in nonmarital childbearing and single parenthood has been offset by increases in cohabitation, particularly among those of lower socioeconomic status.\textsuperscript{55} If the less educated are increasingly more likely to cohabit than to marry over the period, then this might explain the changing relationship between education and marriage over the period. Alternative specifications of the models, treating cohabiting couples as currently married in 2000 (data not shown), do not alter the findings reported above.\textsuperscript{56} Thus, the changing relationship between education and marriage for women does not appear to be a result of increases in cohabitation.

Although this analysis does not allow us to directly test the gender-role context, it does provide support for the idea that the relationship between economic status and marriage is dependent on the macrolevel gender-role context. When specialization is high, as in 1940—highly educated women are likely to opt out (or be forced out) of the marriage market. However, when specialization is low, as in 2000—those women most able to live independently are also the most likely to be married. In contrast, those who might benefit most (in financial terms) from marriage are the least likely to be married. In between, a transitional relationship is observed. This transition raises interesting questions about what the revolution in gender roles and expectations mean for economically disadvantaged women. The gender revolution is not just about microlevel increases in women's employment and economic status. Instead, it has profoundly altered the roles and statuses available to women. One possible explanation is that less-educated women are using...
macrolevel increases in the acceptance of women's independence outside of marriage to opt out of what they see as “bad” or undesirable marriages. The alternative interpretation is that changing expectations about what makes women good marriage partners, and in particular increasing expectations that women will contribute to household finances, has made economically disadvantaged women, like men with lower socioeconomic status, less attractive marriage partners. Although both interpretations have implications for inequality, distinguishing between these two interpretations is an important avenue for further research.

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Notes


15. Bloom and Bennett, “Modeling American Marriage Patterns”; Blossfeld and Huinik, “Human Capital Investments or Norms of Role Transition?”


20. Sweeney, “Two Decades of Family Change.”

21. Goldstein and Kenney, “Marriage Delayed or Marriage Foregone?”


23. Rodgers, “Dollars, Dependency, and Divorce.”

24. Martin and Bumpass, “Recent Trends in Marital Disruption.”

25. Ono, “Husbands’ and Wives’ Education and Divorce.”


27. See Lichter et al., “Race and the Retreat from Marriage for an example.”


35. While the basic structure and format of the files are similar across years, there are some minor differences in sampling frames, coverage, and definitions. Alaska and Hawaii were not included prior to 1960, no comparable income data are available prior to 1950, multiple race categories were added in 2000, and metropolitan area definitions vary across years. In 1940 and 1950, the sampling procedures used by the Census Bureau collected education and income data for “sample line individuals” only, resulting in a smaller analytic sample for these two census years. See Ruggles et al., Integrated Public Use Microdata Series: Version 4.0 for more detail.

36. Note that never married here refers to those who were single or had never been married but may include cohabiters who have never been married. The ever married includes persons who have been married at least once and are now either currently or previously married (which may include cohabiters). The distinction is important because once married, a person can never return to the never married category.

37. In 1940, there were five possible categories: married spouse present, married spouse absent, divorced, widowed, and single. In 1950 and all subsequent years, the additional category of separated was added and single was renamed never married. For the marital status variable used in this analysis those whose reported marital status was “married spouse present” were coded as currently married, while those whose reported marital status was single (1940) or never married (1950–2000) were coded as never married. Finally, those whose reported marital status was married spouse absent, separated (1950–2000), divorced, or widowed were all coded as being previously married. Although there was no separated category in 1940, IPUMS-USA documentation indicates that such individuals would have been coded as “married spouse absent” and thus included in the previously married category used here. See Ruggles et al., Integrated Public Use Microdata Series: Version 4.0 for more detail.

38. For example, in 1940 the top quartile would include all those with a high school diploma or higher, obscuring the substantial differences between women with a high school diploma and those with at least some college education.

39. Goldstein and Kenney, “Marriage Delayed or Marriage Foregone?”

40. Goldin, Understanding the Gender Gap.


48. Lauster, N. This Land is My Land: Establishing the Historical Link Between Housing and Family Status Within Middle Class Life Course in the USA. Presented at the Annual Meeting of the Population Association of America; Los Angeles, CA. April 2006;
50. Fitch and Ruggles, “Historical Trends in Marriage Formation”; Koball, “Have African American Men Become Less Committed to Marriage?”
51. Fitch, Transitions to Marriage in the United States; Goldstein and Kenney, “Marriage Delayed or Marriage Foregone?”
56. Data on cohabitation are only available from the census for 1990 and 2000. Due to changes in definitions, the data for 1990 are not comparable to the data for 2000.

Biography

Berna M. Torr received her PhD from Brown University in 2005 and is currently an assistant professor in the department of sociology at California State University, Fullerton. Her research interests include how changes in context over time, and via immigration, influence marital status, living arrangements, and well-being of children and families. Her most recent publications include two coauthored articles: “Inequalities in Self-Rated Health: Untangling Ethnicity, Social Class, and Lifestyle Effects on Vietnamese, Other Asians, Hispanics, and Whites,” published in the International Review of Modern Sociology (36, 2) and “Emigration and Schooling Among Second-Generation Mexican-American Children,” published in the International Migration Review (42, 3).
Figure 1. Predicted probability of being currently married for white women by education level, 1940–2000.
Figure 2.
Predicted probability of being currently married for black women by education level, 1940–2000.
<table>
<thead>
<tr>
<th></th>
<th>White Women</th>
<th>Black Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1940 Value or Proportion</td>
<td>1970 Value or Proportion</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>0.30</td>
<td>0.23</td>
</tr>
<tr>
<td>Currently married</td>
<td>0.63</td>
<td>0.68</td>
</tr>
<tr>
<td>Previously married</td>
<td>0.07</td>
<td>0.09</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade school</td>
<td>0.35</td>
<td>0.08</td>
</tr>
<tr>
<td>Some HS</td>
<td>0.23</td>
<td>0.18</td>
</tr>
<tr>
<td>HS diploma</td>
<td>0.29</td>
<td>0.46</td>
</tr>
<tr>
<td>Some college</td>
<td>0.09</td>
<td>0.18</td>
</tr>
<tr>
<td>College degree or higher</td>
<td>0.04</td>
<td>0.10</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (mean)</td>
<td>27.93</td>
<td>27.41</td>
</tr>
<tr>
<td>Hispanic</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Foreign-born</td>
<td>0.07</td>
<td>0.05</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>0.31</td>
<td>0.45</td>
</tr>
<tr>
<td>Unemployed</td>
<td>0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>Not in labor force</td>
<td>0.65</td>
<td>0.52</td>
</tr>
<tr>
<td>Currently in school</td>
<td>0.04</td>
<td>0.13</td>
</tr>
<tr>
<td>Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>0.30</td>
<td>0.24</td>
</tr>
<tr>
<td>Midwest</td>
<td>0.32</td>
<td>0.29</td>
</tr>
<tr>
<td>South</td>
<td>0.27</td>
<td>0.29</td>
</tr>
<tr>
<td>West</td>
<td>0.10</td>
<td>0.18</td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan</td>
<td>0.57</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>1940 Value or Proportion</td>
<td>1970 Value or Proportion</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Farm</td>
<td>0.17</td>
<td>0.03</td>
</tr>
<tr>
<td>Owner occupied housing</td>
<td>0.38</td>
<td>0.58</td>
</tr>
<tr>
<td>N</td>
<td>30,142</td>
<td>264,018</td>
</tr>
</tbody>
</table>

Source: IPUMS-USA.

Note: HS = high school.

The large changes in the percent living in metropolitan areas between 1990 and 2000 are due to changes in definitions between the 1990 and 2000 censuses.
| Table 2 | Multinomial Logistic Regression Coefficients for White Women Aged 18-39 |
|-----------------|-----------------|-----------------|-----------------|
|                 | Currently Versus Never Married | Previously Versus Never Married | Currently Versus Previously Married |
| Education (HS is reference) | | | | | | | | | |
| Grade school | 0.61*** | −0.56*** | −0.25*** | 0.82*** | −0.01 | −0.22*** | −0.21** | −0.54*** | −0.03 |
| Some HS | 0.63*** | 0.49*** | −0.15*** | 0.82*** | 0.80*** | 0.00 | −0.19* | −0.31*** | −0.15*** |
| HS diploma | — | — | — | — | — | — | — | — | — |
| Some college | −0.18* | −0.14*** | 0.04* | −0.17 | −0.29*** | −0.08*** | −0.02 | 0.15*** | 0.12*** |
| College degree or higher | −0.79*** | −0.62*** | −0.25*** | −0.70*** | −0.99*** | −1.11*** | −0.09 | 0.37*** | 0.86*** |
| Age (mean) | 0.18*** | 0.22*** | 0.18*** | 0.20*** | 0.22*** | 0.22*** | −0.02* | 0.00 | −0.04*** |
| Hispanic | — | — | 0.03 | — | — | — | −0.10*** | — | — |
| Foreign-born | 0.06 | 0.01 | 0.69*** | −0.16 | −0.30*** | −0.03 | 0.22* | 0.31*** | 0.72*** |
| Currently in school | −2.75*** | −2.2*** | −1.12*** | −1.57*** | −1.68*** | −0.33*** | −1.18*** | −0.52*** | −0.79*** |
| Region (Northeast is reference) | | | | | | | | | |
| Midwest | 0.48*** | 0.46*** | 0.37*** | 0.04*** | 0.35*** | 0.39*** | 0.03 | 0.10*** | −0.02 |
| South | 0.66*** | 0.70*** | 0.60*** | 0.97*** | 0.74*** | 0.75*** | −0.31*** | −0.03 | −0.15*** |
| West | 0.98*** | 0.52*** | 0.32*** | 1.42*** | 0.75*** | 0.39*** | −0.44*** | −0.23*** | −0.03 |
| Metropolitan | −0.35*** | −0.30*** | −0.44*** | −0.20*** | −0.17*** | −0.40*** | −0.16* | −0.14*** | −0.04* |
| Farm | 0.10* | −0.40*** | 0.18*** | −0.61*** | −0.75*** | −0.86*** | 0.72*** | 0.36*** | 1.04*** |
| Owner occupied housing | −0.83*** | −0.25*** | 0.70*** | −0.87*** | −0.91*** | −0.56*** | 0.03 | 0.66*** | 1.26*** |
| Intercept | −4.22 | −4.17 | −5.05 | −7.38 | −6.06 | −6.78 | 3.16 | 1.89 | 1.73 |

Note: HS = high school.

\* \( p < .10 \)
\*\* \( p < .05 \)
\*\*\* \( p < .01 \)
\*\*\*\* \( p < .001 \)
### Table 3
Multinomial Logistic Regression Coefficients for Black Women Aged 18-39

<table>
<thead>
<tr>
<th>Education (HS is reference)</th>
<th>Currently Versus Never Married</th>
<th>Previously Versus Never Married</th>
<th>Currently Versus Previously Married</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade school</td>
<td>0.37†</td>
<td>−0.35</td>
<td>−0.42***</td>
</tr>
<tr>
<td>Some high school</td>
<td>0.53*</td>
<td>0.13***</td>
<td>−0.32***</td>
</tr>
<tr>
<td>HS diploma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>−0.45</td>
<td>0.09</td>
<td>0.29***</td>
</tr>
<tr>
<td>College degree or higher</td>
<td>−1.17*</td>
<td>−0.06***</td>
<td>0.32***</td>
</tr>
<tr>
<td>Age (mean)</td>
<td>0.16***</td>
<td>0.16***</td>
<td>0.13***</td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign-born</td>
<td>−0.34</td>
<td>−0.03</td>
<td>0.84***</td>
</tr>
<tr>
<td>Currently in school</td>
<td>−2.78***</td>
<td>−1.77***</td>
<td>−0.51***</td>
</tr>
<tr>
<td>Region (Northeast is reference)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td>0.50*</td>
<td>0.36***</td>
<td>0.15***</td>
</tr>
<tr>
<td>South</td>
<td>0.35†</td>
<td>0.27***</td>
<td>0.43***</td>
</tr>
<tr>
<td>West</td>
<td>0.99†</td>
<td>0.59***</td>
<td>0.50***</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>−0.52***</td>
<td>−0.03</td>
<td>−0.11***</td>
</tr>
<tr>
<td>Farm</td>
<td>0.22†</td>
<td>−0.21*</td>
<td>0.19</td>
</tr>
<tr>
<td>Owner occupied housing</td>
<td>−0.64***</td>
<td>−0.03</td>
<td>0.58***</td>
</tr>
<tr>
<td>Intercept</td>
<td>−3.60</td>
<td>−3.81</td>
<td>−5.11</td>
</tr>
</tbody>
</table>

**Note:** HS = high school.

† \( p < .10. \)

* \( p < .05. \)

** \( p < .01. \)

*** \( p < .001. \)