

# The Reversal of the Gender Gap in Education and Trends in Marital Dissolution

American Sociological Review 2014, Vol. 79(4) 605–629 © American Sociological Association 2014 DOI: 10.1177/0003122414539682 http://asr.sagepub.com



# Christine R. Schwartz<sup>a</sup> and Hongyun Han<sup>b</sup>

#### Abstract

The reversal of the gender gap in education has potentially far-reaching consequences for marriage markets, family formation, and relationship outcomes. One possible consequence is the growing number of marriages in which wives have more education than their husbands. Past research shows that this type of union is at higher risk of dissolution. Using data on marriages formed between 1950 and 2004 in the United States, we evaluate whether this association has persisted as the prevalence of this relationship type has increased. Our results show a large shift in the association between spouses' relative education and marrial dissolution. Specifically, marriages in which wives have the educational advantage were once more likely to dissolve, but this association has disappeared in more recent marriage cohorts. Another key finding is that the relative stability of marriages between educational equals has increased. These results are consistent with a shift away from rigid gender specialization toward more flexible, egalitarian partnerships, and they provide an important counterpoint to claims that progress toward gender equality in heterosexual relationships has stalled.

#### Keywords

divorce, education, gender, assortative mating

The decline and eventual reversal of the gender gap in education represents a dramatic reversal of a long-standing social gradient in the United States and other countries (OECD 2010). Both men and women complete more schooling now than in the past, but beginning in the mid-1980s, women's college completion rates began to surpass men's in the United States (Buchmann and DiPrete 2006). Much of the literature on the reversal focuses on its causes, pointing to the growing disadvantage of sons with less educated or absent fathers, girls' better academic performance in school, and the growing returns to education for women (Buchmann and DiPrete 2006: Charles and Luoh 2003; DiPrete and Buchmann 2006; Goldin, Katz, and Kuziemko 2006). But the reversal of the gender gap in education also has potentially far-reaching consequences for marriage markets, family formation, and relationship outcomes.

One potential consequence of the reversal of the gender gap in education is the growing number of marriages in which wives have more education than their husbands. On

<sup>a</sup>University of Wisconsin-Madison <sup>b</sup>Northwestern University

**Corresponding Author:** 

Christine R. Schwartz, Department of Sociology, University of Wisconsin-Madison, 1180 Observatory Drive, Madison, WI 53706 E-mail: cschwart@ssc.wisc.edu average, wives have more education than their husbands in almost all countries in which the gender gap in education has reversed (Esteve, García-Román, and Permanyer 2012). In the United States, wives' education exceeded husbands' by the early 1990s, shortly after the reversal occurred in the population (Schwartz and Mare 2005). Previous research consistently shows that couples in which wives have the educational advantage are more likely to divorce. Although the reference groups, control variables, and statistical significance of results vary from study to study, studies typically show that marriages in which wives have more education than their husbands are 27 to 38 percent more likely to dissolve (Bumpass, Castro Martin, and Sweet 1991; Goldstein and Harknett 2006; Heckert, Nowak, and Snyder 1998; Kalmijn 2003; Phillips and Sweeney 2006; Teachman 2002; Tzeng 1992). Furthermore, two studies that examine trends in the relative likelihood of divorce for couples in which wives have more education than their husbands find no evidence that this association has weakened (Heaton 2002; Teachman 2002). Does this mean the reversal of the gender gap in education has created a situation in which men and women are increasingly forming marriages that are likely to end in divorce?

Given past research, this is plausible, but there are also strong reasons to expect that having more education than one's husband may matter less for marital outcomes today than in the past. Many demographic and social trends point to the declining significance of gender in family life. Among other shifts, men's and women's earnings and labor force participation, the division of childcare and housework, and preferences for mates have become less gender differentiated over the past half century (Bianchi, Robinson, and Milkie 2006; Buss et al. 2001; Schwartz 2010). Given these changes, we might also expect the importance of spouses' relative education for marriage outcomes to have diminished. In addition, social and demographic theories point to a decline in the negative relationship between wives' educational advantage and marital stability as the division of labor in marriage becomes less strictly gendered and as these relationships become more common (e.g., Casterline 2001; Oppenheimer 1994).

In contrast, a persistent negative association between wives' educational advantage and marital stability is consistent with a "stalled revolution" perspective, which argues that progress toward gender equality has been uneven and has progressed more slowly in heterosexual romantic relationships than in other realms (e.g., England 2006, 2010; Hochschild 1989; Ridgeway 2011). In recent years, evidence has mounted that the gender revolution has stalled or slowed in many areas. For instance, the pace of change in women's labor force participation, occupational desegregation, the gender pay gap, and egalitarian attitudes all slowed or flattened in the 1990s (Blau, Brummund, and Liu 2013; Cotter, Hermsen, and Vanneman 2011; Goldin 2006).

Consistent with the stalled revolution perspective, previous empirical studies suggest that the negative association between wives' educational advantage and marital stability has not declined (Heaton 2002; Teachman 2002). One reason these studies may not have observed a decline, however, is that they use data on marriages primarily formed prior to the mid-1980s, before the gender gap in education had clearly reversed. It might take a critical mass of couples in which wives have the educational advantage for this arrangement to become less non-normative and for its negative association with marital stability to decline.

Our study is the first to examine trends in the relationship between spouses' relative education and marital dissolution among recent marriage cohorts, in which women's education clearly exceeded men's. We use data from the National Survey of Family Growth (NSFG) and the Panel Study of Income Dynamics (PSID) to reexamine trends among marriages formed between 1950 and the mid-1980s, and to update the time series to include marriages formed through 2004. We corroborate our results using data from the June Current Population Survey (CPS) and the U.S. Decennial Census where possible. Our updated time series allows us to assess whether the reversal of the gender gap in education has been accompanied by a decline in the association between spouses' relative education and marital dissolution, and more to the point, whether there is evidence that wives' educational advantage still matters for divorce.

In so doing, we provide a description of the changing characteristics of couples in which wives' education exceeds their husbands'. Assortative mating studies report trends in the likelihood that wives have more education (Esteve et al. 2012; Qian 1998; Schwartz and Mare 2005), but no study has examined who these couples are and how their characteristics have changed. Given that wives are now more likely to have more education than their husbands than the reverse, a more thorough investigation of these couples and their marital outcomes is warranted.

Our study also contributes to a broad literature on changing gender dynamics in heterosexual relationships. While there are many ways to measure the changing significance of gender in families, change in the association between spouses' relative education and marital stability is a key indicator given the growing mismatch between men's and women's educational attainment. Results from our study can be combined with other indicators of gender egalitarianism to better understand where social change is stalled and where it is moving forward.

In addition, our study speaks to public anxiety about the effects of women's success on their chances of getting and staying married (Cherlin 1990), a concern that continues to be voiced by social commentators and the media in connection with the reversal of the gender gap in education (e.g., Banks 2010; Ludden 2010; Roberts 2010; Thaler 2013; Tierney 2006). We find no evidence that these concerns are warranted for recent marriage cohorts. Couples in which wives have more education than their husbands were once more likely to divorce, but this association has declined markedly. In recent marriage cohorts, these couples are no more likely than other couples to divorce.

# MARRIAGE AS A CHANGING INSTITUTION: FROM SPECIALIZATION TO EGALITARIANISM

In the 1950s and early 1960s, the breadwinner-homemaker ideal dominated U.S. family life. Families who could afford to do so followed a gendered division of labor in which men specialized in the labor market and women specialized in housework and childcare. Husbands held substantial authority in their families. Coontz (2005) gives several examples of how this authority was reaffirmed by the legal system. For instance, the notion that husbands and wives should be treated as "a single person, represented by the husband" continued to appear in judicial proceedings as late as the 1970s, and marital rape was not criminalized in all states until 1993 (Martin, Taft, and Resick 2007; Mason, Fine, and Carnochan 2001). Wives' autonomy was limited in other ways, for example, wives could not apply for credit cards or loans independently from their husbands (Coontz 2005).

The breadwinner-homemaker ideal also appeared in social science of the day. In his classic theory of the family, Parsons (1949) hypothesized that the conventional division of labor in marriage reduced destructive competition between the sexes, thus protecting families from marital strife and divorce. Similarly, Becker's (1974) exchange theory of marriage posited that because men generally have a comparative advantage in market work and women in housework, the gains to marriage are maximized when high-wage men match with low-wage women, and thus the risk of divorce is heightened when wives outearn their husbands. Even Goode ([1963] 1970), who predicted that egalitarian values would continue to rise around the world, saw

little promise of change in women's family roles.

The massive changes in the institution of marriage were thus largely unforeseen by social scientists (Breines 1986; Coontz 2005; Stacey 1998). Since the 1960s, expectations about intimacy and personal fulfillment in relationships have increased (Cherlin 2004). No-fault divorce laws were successively passed by every state in the nation and divorce became an increasingly acceptable way to end unhappy marriages (Mason et al. 2001). Wives' and mothers' labor force participation rose dramatically, as did public acceptance of working mothers (Cotter et al. 2011). Reflecting these shifting values, young people now consider egalitarian marriage to be the ideal (Gerson 2010), a shift that can be seen in men's and women's increasing emphasis on status equality in mate selection (Buss et al. 2001).

The shift from gender specialization toward more flexible, egalitarian partnerships is a common theme among contemporary family scholars (e.g., Cherlin 2004; Goldscheider and Waite 1991; Nock 2001; Oppenheimer 1997). Many scholars note that the world Parsons and Becker described no longer captures the realities of U.S. marriage (e.g., Oppenheimer 1994, 1997; Sayer and Bianchi 2000; Sweeney 2002). What implications might this shift have for the association between spouses' relative education and divorce? Feminist theory provides a way of linking the broad institutional changes in marriage to the couple-level marriage outcomes that are of interest here. Feminist scholars have argued that women married to men with lower earnings or education levels than themselves are likely to have negative marital outcomes because of the non-normative power relations this arrangement symbolizes (Kaukinen 2004; Tichenor 1999, 2005). Relationships in which women have higher status than their male partners may pose a significant threat to men's gender identity as breadwinners and household heads (Tichenor 2005). Given the rise of egalitarian marriage, however, the severity of this threat may be declining. Thus, changes in the institution of marriage imply two hypotheses about the relationship between spouses' relative education and divorce (see Table 1 for a summary of our hypotheses<sup>1</sup>).

- Hypothesis 1: Marriages in which wives have the educational advantage were once more likely than others to dissolve, but this association has declined since the 1950s. Because marriages in which wives have more education than their husbands are inconsistent with male status dominance and potentially threaten the conventional marriage contract, we expect these couples were more likely to divorce relative to other couples when the breadwinnerhomemaker ideal dominated U.S. family life, but that this association has declined with the rise of egalitarian marriage.<sup>2</sup>
- Hypothesis 2: Marriages in which spouses share similar education levels are increasingly stable relative to other marriages. Because the rise of egalitarian marriage has been accompanied by an increasing emphasis on status equality in partnership formation, we expect husbands and wives who share similar educational attainments have become less likely to divorce relative to other couples.

# A STALLED REVOLUTION?

Although there is wide agreement that gender inequality has declined in many ways in the United States, it is evident that change has moved more quickly in some areas than in others. Much research notes that progress toward gender equality has been deeply asymmetric, with changes among men, especially with respect to their family behaviors, occurring much more slowly than changes among women (e.g., Bianchi et al. 2006; Blau, Brinton, and Grusky 2006; England 2006, 2010). For example, women have moved into male-dominated occupations to a greater extent than men have moved into female-dominated ones (Cotter, Hermsen, and Vanneman 2004), and declines in women's housework hours have been more dramatic than increases in men's (Bianchi et al.

| Hypothesis | Perspective             | Couple Type | Predicted<br>Association in 1950s<br>Relative to Other<br>Couple Types | Predicted<br>Change in<br>Association            |
|------------|-------------------------|-------------|--|--|
| (1)        | Institutional Change    | W > H       | Positive   | Decline  |
| (2)        |                         | W = H       | Positive   | Decline, becomes<br>negative                     |
| (3)        | Stalled Revolution      | W > H       | Positive   | Slow to no decline<br>prior to 1990s, no         |
| (4)        | Diffusion of Innovation | W > H       | Positive   | decline in 1990s<br>Decline, pace<br>accelerates |

**Table 1**. Predictions about the Association between Spouses' Relative Education and Marital Dissolution

*Note:* W = wife's education; H = husband's education.

2000; Sayer 2005). The relatively slow pace of change in men's family behaviors, combined with the inflexibility of the workplace, led Hochschild (1989) to compare progress toward gender equality to a "stalled revolution."

Recent years have seen a resurgence of claims that the gender revolution has stalled. These claims are supported by empirical findings showing stability in multiple measures of gender equality in the 1990s, for example, in women's labor force participation, occupational sex segregation, and egalitarian attitudes (Blau et al. 2013; Cotter et al. 2011; Goldin 2006). Whether the 1990s represented a temporary or more long-term stall remains to be seen. Irrespective of what the future holds, the following hypothesis is consistent with the stalled revolution perspective:

Hypothesis 3: Marriages in which wives have the educational advantage are more likely than other couples to dissolve, and there has been little change in this association since the 1950s. Because marriages in which wives have the educational advantage are symbolic of unconventional power relationships, the stalled revolution perspective predicts little change in the association between spouses' relative education and marital dissolution. Furthermore, if these trends are similar to other measures of gender egalitarianism, we would expect to see especially little change in the 1990s. Thus, a pattern of slow to no change prior to the 1990s and no change in the 1990s would be consistent with this perspective.

As predicted by the stalled revolution perspective, evidence from a variety of realms suggests that unions in which women have higher status than their partners remain nonnormative. For example, speed dating experiments and Internet dating studies indicate that men and women prefer equal-status partners, but both men and women tend to avoid forming relationships in which the woman has higher status than the man (Fisman et al. 2006; Hitsch, Hortaçsu, and Ariely 2010). Other studies find that husbands who make less money than their wives are more likely to engage in infidelity (Munsch 2010), domestic violence is more likely to occur in these relationships (Atkinson, Greenstein, and Lang 2005; Melzer 2002), and these partners have lower levels of marital satisfaction (Bertrand, Kamenica, and Pan 2013). With the exception of the speed and Internet dating studies, however, most of these studies use data on romantic relationships primarily formed in the 1980s or earlier (Atkinson et al. 2005; Bertrand et al. 2013; Melzer 2002; but see Munsch 2010); these associations may have changed in more recent marriage cohorts.

# THE DIFFUSION OF INNOVATION TO MARRIAGE MARKET CONSTRAINTS

Evidence from speed and Internet dating studies suggests that young men and women still prefer to avoid relationships in which women have higher status, but we know that more and more couples are, in fact, forming these relationships. One interpretation of this descrepancy is that relationships in which women have more education than their male partners are still not preferred, but discomfort with this arrangement has declined. Indeed, scattered evidence suggests that wife-advantaged relationships have become less nonnormative. For example, when male college students were asked whether they would be bothered if their partners earned a higher salary, almost 60 percent in 1990 said "it wouldn't bother me at all," up from just 41 percent in 1980 (Willinger 1993). In addition, using data from the 1980s, Atkinson and colleagues (2005) find that husbands were more likely to abuse their wives in relationships in which she outearned him, but only if he held traditional values. This finding suggests that the prevalence of domestic violence in relationships in which wives outearn their husbands has declined with the rise of egalitarianism. This idea is supported by a study using more recent data on young adults from the 2000s, which finds that women who are involved in a gainful activity (are either in school or employed full-time) and have male partners who are not (are neither in school nor employed full-time) do not experience a higher risk of domestic violence than do other women (Alvira-Hammond et al. 2013).

Increasing tolerance for relationships in which women have higher status than their male partners can be understood from a diffusion of innovation perspective. Diffusion theory is best known for its application to the rapid spread of ideas about fertility control in Europe during the demographic transition (Casterline 2001). Diffusion theory predicts that adoption of an innovation begins slowly, but once a critical mass is reached, its spread accelerates rapidly as people observe others adopting the innovation and its spread lowers the social costs for subsequent adopters (Cleland 2001). Marriages in which wives have more education than their husbands can be seen as an innovation to marriage market constraints (a shortage of highly educated men) that, as these relationships become more common, are accepted by an increasing portion of the population and therefore become less divorce prone. This perspective suggests the following hypothesis:

Hypothesis 4: The pace of decline in the positive relationship between wives' educational advantage and divorce accelerates as these relationships become more common. Marriages in which wives have more education than their husbands were once non-normative and may still be, but increasing numbers of couples form these relationships. If individuals see others forming these relationships, and this changes their evaluation of their desirability, this could lead to a feedback effect in which the discomfort associated with this marital arrangement rapidly declines.

The institutional change, stalled revolution, and diffusion of innovation perspectives are not mutually exclusive. As Table 1 shows, all three predict that couples in which wives have the educational advantage were once more likely to divorce. These theories differ primarily in their implications for the timing and pace of change. Scholars writing from the stalled revolution perspective often focus on the lack of change over relatively short time intervals (e.g., since the 1990s) or the slow pace of change (e.g., Cotter et al. 2011; Hochschild 1989). Those writing from an institutional change perspective generally consider longer periods, often without considering the pace of change (e.g., Cherlin 2004; Oppenheimer 1994). Like the institutional change perspective, diffusion theory predicts a decline, but an increasingly precipitous one. Of course, it is plausible change has gone through fits, starts, plunges, and reversals within long-run declines or that the pace of change has been slow. Because we use detailed data on marriages formed between 1950 and 2004, we can assess the timing and nature of trends in the relationship between spouses' relative education and divorce, thus offering insights into theories on marriage and divorce by assessing which ideas or combinations of ideas best help us understand observed trends.

# DATA AND ANALYSIS PLAN

Previous research shows that the proportion of couples in which wives have more education than their husbands has increased substantially, but we know little about who these couples are. What are their characteristics and how have they changed? The first part of our study uses data from multiple sources (the 1973, 1976, 1982, 1988, 1995, 2002, and 2006-2010 National Survey of Family Growth [NSFG] [Teachman 2002; U.S. Department of Health and Human Services 2002 and 2006-2010]; the 1968 to 2009 Panel Study of Income Dynamics [PSID n.d.]; the 1960, 1970, and 1980 Decennial Census; and the 1971 to 1995 June Current Population Survey [CPS] [Schwartz and Mare 2005]) to describe the characteristics of couples in which wives have more education than their husbands, compared with other types of couples, among marriages formed between 1950 and 2009. We use data from several different sources because each source has its own unique strengths and weaknesses (see the online supplement for data details [http:// asr.sagepub.com/supplemental]); corroborating our results across sources thus boosts our confidence in the results.

We use our understanding of couples' changing characteristics to inform the second part of our analysis, in which we examine trends in the association between spouses' relative education and marital dissolution to test the four hypotheses outlined in Table 1. This part of the analysis uses hazard models and data from the NSFG and the PSID to examine the changing risk of dissolution for couples married between 1950 and 2004.<sup>3</sup> The NSFG contains information with which

to examine the association for the entire period we examine (marriages formed between 1950 and 2004); data are available for a subset of years for the PSID (marriages formed between 1970 and 2004). We cannot use Census or June CPS data for this part of the analysis because they lack information on spouses' education for respondents who were divorced at the time of the survey.

Our NSFG and PSID samples consist of wives married between the ages of 16 and 40 years. Our 1973 to 1995 NSFG samples were compiled by Teachman (2002) for his analysis of trends in divorce risk factors and include information on wives in their first marriages. Because sample size is an issue in recent marriage cohorts, we retain remarriages in the PSID and in the 2002 and 2006-2010 NSFG samples, but we control for marriage number in our models. Our results are very similar, albeit less precise, when remarried wives are excluded. Following most studies that utilize the longitudinal nature of the PSID, we drop the Latino oversample, because these families were interviewed only from 1990 to 1995 (Gouskova et al. 2008). Table A1 in the Appendix shows our sample sizes by marriage cohort and data source, and for the PSID and NSFG, the number of marital dissolutions for cohorts included in the hazard analysis.<sup>4</sup>

#### **CONCEPTUAL ISSUES**

Changing Selectivity of Marriage

Observed trends in the association between spouses' relative education and divorce may be due to changes in selection into marriage as well as changes in causal effects. We do not attempt to distinguish between these factors here (aside from controlling for a limited set of demographic and economic characteristics), but the theoretical perspectives that frame our analysis are consistent with both types of change. For instance, selection may account for a declining association if wifeadvantaged couples were once especially likely to have non-traditional attitudes or other unmeasured characteristics associated with a heightened risk of divorce but are now a less select group (South 2001).<sup>5</sup> Although this is a selection argument, it is consistent with the loosening of conventional gender expectations in marriage-that is, the selectivity of marriages in which wives have more education may have declined precisely because these relationships are less nonnormative. Because the theories we draw on predict a decline in the significance of gender in both the selection of marriage partners and marriage outcomes, our analysis does not hinge on the identification of causal effects. Indeed, determining whether causal effects are worth estimating requires careful descriptive analyses of trends and differences in associations (Duncan 2008). This is the first study to our knowledge to conduct such an analysis.

Selection may also affect our results through broad societal shifts in marriage formation and dissolution. Since the 1960s, marriage rates have slowly but steadily declined, divorce rates increased rapidly but have declined somewhat since the late 1970s, and cohabitation continues to increase. These shifts occurred at different rates for different segments of the population. African American women and individuals with less education experienced particularly rapid declines in marriage, and declines in divorce are concentrated among women with college degrees (Goldstein and Kenney 2001; Martin 2006; Zeng et al. 2012). Declines in marriage among African American women and those with less education and the rise of cohabitation have implications for our analysis if these changes are correlated with spouses' relative education and the risk of divorce; see the online supplement for details about why we believe these trends do not explain our findings.

## Relative Education versus Relative Earnings

Our analysis focuses on spouses' relative education rather than their relative earnings for several reasons. First, education is multifaceted, reflecting values, beliefs, and life styles

as well as earnings potential. The relationship between relative education and divorce may differ in important ways from the relationship between relative earnings and divorce (Weiss and Willis 1997). Second, a persistent issue in the study of the effects of wives' earnings on divorce is the possibility that wives increase their earnings and labor force participation in anticipation of divorce (Johnson and Skinner 1986; Sayer and Bianchi 2000). Reverse causality is arguably less problematic in analyses of relative education, because wives may be less likely to return to school in anticipation of divorce than to increase their labor force participation and earnings. Finally, from a practical standpoint, only the PSID contains information on both husbands' and wives' earnings, making it impossible to control for earnings over the entire time series we consider. We include the results of sensitivity tests using the PSID, but we leave a complete analysis of the relationship between spouses' relative education, earnings, and divorce to future research.

## METHODS AND MEASURES

We use Cox proportional hazard models to examine the changing association between spouses' relative education and marital dissolution, which can be written as follows:

$$h_i(t) = \lambda_0(t) \exp\left\{\beta_1 x_{i1} + \dots + \beta_k x_{ik}\right\}$$
(1)

Where  $h_i(t)$  is the hazard of marital dissolution at time *t* for couple *i*;  $\lambda_0(t)$  is the baseline hazard, which is unspecified; the x's are independent variables of interest; and the  $\beta$ 's are the parameters to be estimated. Time (*t*) is measured as years from marriage to separation, divorce, or censoring, whichever occurred first.<sup>6</sup> Observations are censored if a marriage did not dissolve before a respondent dropped out of the survey or reached the final survey wave, or if a respondent became widowed.<sup>7</sup>

Our primary independent variable of interest is spouses' relative education. We measure relative education using a three-category variable (P = 1, 2, 3) in which wives have more education than their husbands (hvpogamy); husbands and wives have equal education levels (homogamy); and wives have less education than their husbands (hypergamy). These categories correspond to the relevant contrasts from theory and research on spouses' relative education. To capture non-linearities and credential effects, we constructed our relative education measure using a four-category representation of husbands' and wives' years of schooling completed (*H*, W = <12, 12, 13 to 15, and  $\geq$ 16 years). Previous studies report significant barriers to marriage across these categories (Schwartz and Mare 2005), and data constraints prevent us from using more detailed classifications across the time series. Some previous studies use other measures of spouses' relative education, such as the difference between spouses' years of schooling, or distinguish spouses separated by large educational divides (e.g., Heaton 2002; Kalmijn 2003; Teachman 2002). Our analysis focuses on the simple three-category representation of spouses' relative education, but we also include controls for the size of the difference between spouses' educational attainments.

The relative education coefficients estimated in Equation 1 summarize the higher (or lower) hazard of marital dissolution by couples' relative education across spouses' education levels. For example, the hypogamy coefficient measures the difference in the log hazard of divorce for couples in which wives have more education than their husbands versus the omitted category (hypergamous couples) across hypogamous couples of all education levels. Because we are interested in the association between spouses' relative education and divorce over and above their educational level, we include dummy variables for both spouses' education categories in our models. Thus, rather than estimating the full set of (H-1)(W-1) = 9 interaction terms for husbands' and wives' education, we estimate (H-1) + (W-1) = 6 terms for spouses' education levels and (P - 1) = 2 terms for their relative education. The association between spouses' relative education and divorce might vary by their absolute attainments (e.g., if couples with more education are less affected by wives' educational advantage than are those with less education), but there is no evidence of this in our data (see the online supplement for details). However, our study is limited by relatively small sample sizes in some marriage cohorts. Future studies may thus uncover educational differences in the associations we present.

Educational attainment is measured as closely as possible to the date of couples' marriages. In the 1973 to 1995 waves of the NSFG, this information is based on women's retrospective reports about their husbands' and their own schooling at the time of their first marriages (except for the 1995 wave, in which wives' education is measured at the time of the interview). In the 2002 and 2006-2010 NSFG waves, respondents' and spouses' attainments are measured at the time of the interview because retrospective information about first marriages was not gathered in these waves. Thus, throughout all waves of the NSFG, our measures of education are time-invariant. The PSID gathered spouses' education when new heads of households or wives entered the survey and for all heads and wives in 1976 and 1985. Therefore, the PSID also lacks precise time-varying education measures. For consistency with the NSFG, we define spouses' education as their attainment in the first year the marriage is observed in the data. Because we measure husbands' and wives' educational attainments as closely as possible to the time of couples' marriages, this measure can be viewed as a proxy for the conditions in place at the time of the marital bargain.

A limitation of our education measures is that some people may match on expected future educational attainment rather than on current attainment. This was arguably more likely in the 1950s and early 1960s, when people married at younger ages than they do today. If so, our findings would be biased toward zero in this period, because our sample of couples in which wives have the educational advantage would contain some unknown fraction of couples who transition to a conventional configuration at a later date. Another limitation of our education measures is that we do not capture fine-grained information about spouses' education that may matter for divorce, for example, college prestige or college major. For instance, a man's gender identity may not be threatened if he marries a woman with more education than himself if she graduated with a female-typed college major. This could only explain a decline in the association between spouses' relative education and divorce, however, if men who "marry up" by marrying college graduate women are now more likely to select partners with female-typed college majors than they were in the past. One way to investigate this possibility would be to determine if the probability of marriage has risen faster for women with female-typed college majors than for women with other majors, and if these women are more or less likely to divorce if they have the educational advantage. The same could be done with graduate and professional degrees.

Our analyses control for several additional factors that are associated with the risk of divorce: husbands' and wives' age at marriage, wives' race, and wives' marriage number, defined as shown in Table 2 (results discussed in the next section). We omit other factors that may be associated with divorce, such as fertility and home ownership, as these decisions may be endogenous to a couple's relative education at the time of marriage. For instance, couples in which wives have the educational advantage may choose to have fewer children or may be less likely to buy a home if they perceive their relationships to be less stable. However, because of strong interest in earnings and employment, we test the sensitivity of our results to controls for these variables using data from the PSID, despite their likely endogeneity. We include measures of husbands' and wives' annual wage and salary earnings (in 2008 dollars), relative earnings (the percentage of total couple earnings earned by the wife), and wives' employment in the previous year (wives who had any wage or salary income in the previous year).

Descriptive analyses using the Census, June CPS, and NSFG are weighted using the wife's person weight, and descriptive analyses using the PSID are weighted using family weights. We do not weight our hazard model analysis because our control variables adjust for the major factors used in constructing the weights. Sensitivity tests show that trends are robust to the use of weights.

## RESULTS

### *Reversal of the Gender Gap in Education among Married Couples*

Figure 1 shows trends in the percentage of hypogamous married couples (wives have more education than their husbands) among heterogamous couples (couples who have different levels of education). Although there are minor fluctuations across data sources, a consistent trend emerges. Prior to the early 1980s, it was more common for husbands to have more education than their wives than vice versa. Since then the situation has reversed. For couples married in 2005 to 2009, in over 60 percent of couples with different levels of education, wives had more education than their husbands, and there are no signs this trend is slowing. These findings are consistent with past work (e.g., Esteve et al. 2012; Schwartz and Mare 2005), and the basic similarity of these trends across data sources bolsters our confidence in their comparability.

In addition, despite an increase in the proportion of couples with equal levels of attainment (Schwartz and Mare 2005), the proportion of *all* couples in which wives had more education than their husbands grew. In the most recent marriage cohort, in over 30 percent of all marriages, wives had more education than their husbands, up from about 20 percent in the early 1970s (not shown). These changes have resulted in a reversal of the average years of schooling attained by husbands and wives. Among couples married in

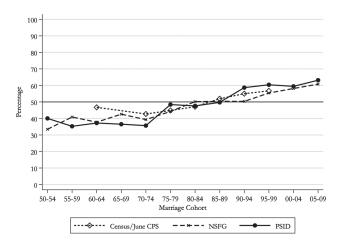


Figure 1. Percentage Hypogamous (W > H) Given Heterogamy (W  $\neq$  H) by Marriage Cohort and Data Source

Sources: Pooled data from the 1960, 1970, and 1980 decennial U.S. Census and the 1971 to 1995 June Current Population Survey (CPS); 1973, 1976, 1982, 1988, 1995, 2002, and 2006–2010 National Survey of Family Growth (NSFG); and the 1968 to 2009 Panel Study of Income Dynamics (PSID). Note: W = wife's education category; H = husband's education category. Education categories are <12, 12, 13 to 15, and  $\geq$ 16 years.

1950 to 1954, husbands had completed an average of 12.4 years of schooling compared with wives' 12.0, but for couples married in 2005 to 2009, husbands had completed 13.8 years compared with wives' 14.1 (authors' calculations from PSID data).

# Changes in Couples' Characteristics by their Relative Education

Table 2 shows descriptive statistics for the variables used in our analysis by couples' relative education. To summarize changes across marriage cohorts, we show the characteristics of couples married in three periods: 1950 to 1954, 1975 to 1979, and 2000 to 2004, which is the most recent cohort in our analysis of marital dissolution. For the 1975 to 1979 cohort, we present results from the NSFG and PSID to facilitate comparison between the surveys. The trends presented here are quite similar across all four data sources for the complete time series (available in the online supplement).

Table 2 shows that educational attainment for all couple types increased since the early 1950s, but this is especially notable for wives with more education than their husbands. In the 1950 to 1954 cohort, only about 4 percent of hypogamous and homogamous wives were college graduates. By 2000 to 2004, this percentage had risen to 44 percent for hypogamous wives but only 38 percent for homogamous wives. Hypogamous wives also had the highest mean levels of schooling of any group in 2000 to 2004, even slightly exceeding husbands with more education than their wives (14.7 versus 14.6 years).

Husbands with less education than their wives had lower educational attainment, on average, than other husbands in all marriage cohorts, but their attainment also rose disproportionately quickly relative to the attainment of husbands with more education than their wives. The average years of schooling completed by husbands in hypogamous marriages increased from 10.3 to 12.2 years between 1950-1954 and 2000-2004, whereas the average increased only from 14.2 to 14.6 for hypergamous husbands. Thus, a key finding from these comparisons is that the educational attainment of both husbands and wives in hypogamous marriages rose more quickly than that of couples in hypergamous

|   |            |                  |       |                  | Marria | ge Cohort          | Marriage Cohort and Data Source | Source |        |        |              |        |
|---|------------|------------------|-------|------------------|--------|--------------------|---------------------------------|--------|--------|--------|--------------|--------|
|   | 16         | 1950 to 1954     | 4     |                  |        | 1975 to 1979       | 1979                            |        |        | 2(     | 2000 to 2004 | 4      |
|   |            | NSFG             |       |                  | NSFG   |                    |                                 | PSID   |        |        | PSID         |        |
| Characteristic  | W > H      | W = H            | W < H | W < H            | W = H  | W < H              | W < H                           | W = H  | W < H  | W > H  | W = H        | W < H  |
| Percent of Marriage Cohort<br>Wife's Years of Schooling (%) | 17.8       | 46.9             | 35.4  | 20.8             | 53.2   | 26.0               | 22.0                            | 54.6   | 23.4   | 29.2   | 50.9         | 19.9   |
| <12   | a          | 46.9             | 37.2  | a                | 13.1   | 31.6               | a                               | 14.0   | 30.9   | a      | 4.7          | 19.1   |
| 12  | 77.7       | 42.8             | 45.0  | 26.7             | 46.4   | 45.7               | 36.9                            | 49.4   | 54.1   | 10.7   | 28.3         | 51.9   |
| 13 to 15  | 18.0       | 6.3              | 17.8  | 39.8             | 19.9   | 22.8               | 35.9                            | 14.7   | 15.1   | 45.8   | 28.7         | 29.1   |
| ≥ 16  | 4.3        | 4.0              | -a    | 33.5             | 20.6   | -a                 | 27.2                            | 22.0   | -a     | 43.5   | 38.3         | a.     |
| Mean <sup>b</sup>   | 12.5       | 11.3             | 11.6  | 14.1             | 13.0   | 11.8               | 13.8                            | 12.9   | 11.7   | 14.7   | 14.0         | 12.2   |
|   | (1.1)      | (1.6)            | (1.3) | (1.7)            | (1.9)  | (1.4)              | (1.7)                           | (1.9)  | (1.3)  | (1.4)  | (1.8)        | (1.4)  |
| Husband's Years of Schooling (%)                            |            |                  |       |                  |        |                    |                                 |        |        |        |              |        |
| <12   | 85.2       | 46.9             | a.    | 34.1             | 13.1   | e.                 | 44.8                            | 14.0   | -a     | 17.2   | 4.7          | в      |
| 12  | 12.5       | 42.8             | 26.8  | 46.2             | 46.4   | 24.7               | 38.9                            | 49.4   | 23.3   | 57.0   | 28.3         | 14.1   |
| 13 to 15  | 2.3        | 6.3              | 34.6  | 19.8             | 19.9   | 37.1               | 16.3                            | 14.7   | 49.7   | 25.9   | 28.7         | 41.9   |
| ≥ 16  | -a         | 4.0              | 38.6  | a.               | 20.6   | 38.2               | e.                              | 22.0   | 27.0   | -a     | 38.3         | 44.0   |
| Mean <sup>b</sup>   | 10.3       | 11.3             | 14.2  | 11.7             | 13.0   | 14.3               | 11.4                            | 12.9   | 14.1   | 12.2   | 14.0         | 14.6   |
|   | (6.)       | (1.6)            | (1.5) | (1.6)            | (1.9)  | (1.5)              | (1.6)                           | (1.9)  | (1.4)  | (1.3)  | (1.8)        | (1.4)  |
| Husband's – Wife's Years of Schooling Category              | 1.10       | .00              | 1.31  | 1.21             | .00    | 1.22               | 1.19                            | .00    | 1.20   | 1.24   | .00          | 1.20   |
|   | (.36)      | (.00)            | (.48) | (.49)            | (00)   | (.39)              | (.43)                           | (00)   | (.43)  | (.49)  | (00.)        | (.44)  |
| Wife's Annual Earnings (2008 \$1,000s)                      | - C        |                  | C     | - c              | - c    |                    | 18.4                            | 16.9   | 15.7   | 29.9   | 30.2         | 23.5   |
|   |            |                  |       |                  |        |                    | (17.3)                          | (14.3) | (14.0) | (24.2) | (28.3)       | (26.8) |
| Husband's Annual Earnings (2008 \$1,000s)                   | - c        | о <b>-</b> Г     | °,    | c                | c      | о <mark>-</mark> С | 37.0                            | 36.7   | 40.9   | 39.8   | 46.4         | 43.6   |
|   |            |                  |       |                  |        |                    | (22.6)                          | (23.0) | (28.1) | (28.4) | (37.6)       | (34.8) |
| Relative Earnings (Wife/[Husband+Wife]) x 100)              | - c        | о <mark>-</mark> | - c   | о <mark>г</mark> |        | - <sup>C</sup>     | 30.7                            | 30.4   | 28.0   | 41.9   | 37.3         | 32.6   |
|   |            |                  |       |                  |        |                    | (22.8)                          | (21.2) | (23.1) | (23.6) | (24.5)       | (24.3) |
| Wife Employed in Previous Year (%)                          | о <b>—</b> | C                | - c   | о<br>Т           | C      | о <mark>-</mark>   | 89.0                            | 87.8   | 83.2   | 94.0   | 88.0         | 84.1   |
| Wife's Age at Marriage                                      | 19.8       | 19.2             | 19.4  | 22.5             | 21.8   | 21.8               | 23.0                            | 22.4   | 23.0   | 27.1   | 26.1         | 26.3   |
|   | (1.9)      | (2.0)            | (2.0) | (3.8)            | (3.3)  | (3.4)              | (2.7)                           | (5.0)  | (5.5)  | (6.3)  | (5.3)        | (6.5)  |
|   |            |                  |       |                  |        |                    |                                 |        |        |        |              |        |

(continued)

**Table 2**. Characteristics of Hypogamous (W > H), Homogamous (W = H), and Hypergamous (W < H) Marriages by Marriage Cohort and Data Source

|                                    |       |              |       |       | Marri         | Marriage Cohort and Data Source | and Data | Source |       |       |              |       |
|------------------------------------|-------|--------------|-------|-------|---------------|---------------------------------|----------|--------|-------|-------|--------------|-------|
|                                    | 1     | 1950 to 1954 | 4     |       |               | 1975 to 1979                    | 0 1979   |        |       | 2(    | 2000 to 2004 | 4     |
|                                    |       | NSFG         |       |       | NSFG          |                                 |          | PSID   |       |       | PSID         |       |
| Characteristic                     | W > H | W = H        | W < H | W > H | W > H $W = H$ | W < H                           | W < H    | W = H  | W < H | W > H | W = H        | W < H |
| Husband's Age at Marriage          | 23.5  | 22.3         | 22.7  | 24.8  | 24.1          | 25.2                            | 25.2     | 24.9   | 26.2  | 29.6  | 28.2         | 29.2  |
|                                    | (4.2) | (4.0)        | (3.1) | (6.3) | (4.4)         | (4.7)                           | (7.2)    | (6.6)  | (6.7) | (8.0) | (6.4)        | (7.5) |
| Wife African American (%)          | 10.5  | 9.9          | 5.7   | 10.8  | 9.3           | 5.9                             | 10.0     | 10.0   | 8.2   | 10.9  | 7.0          | 7.8   |
| Remarriage (Wife) (%) <sup>d</sup> | 0.    | 0.           | 0.    | 0.    | 0.            | 0.                              | 17.1     | 18.1   | 31.6  | 24.6  | 15.3         | 27.9  |
| Sample Size                        | 341   | 890          | 564   | 881   | 1,697         | 763                             | 290      | 604    | 265   | 233   | 375          | 145   |

Table 2. (continued)

*Note:* W = wife's education category: H = husband's education category. Education categories are <12, 12, 13 to 15, and  $\geq$ 16 years. PSID data are weighted using family-level weights. NSFG data are weighted by the wife's person weight. Standard deviations are in parentheses.

<sup>a</sup>Not applicable.

<sup>b</sup>Because the coding of years of schooling varies across years and data sources, we estimated mean years of schooling by assigning constant years of schooling values (10, 12, 14, and 16 years of schooling) to the four-category education variable (<12, 12, 13 to 15, and ≥16 years of schooling). <sup>c</sup>Not available.

<sup>d</sup>NSFG data for the marriage cohorts shown here pertain to wives' first marriages.

marriages. This means any decrease in the likelihood of divorce among hypogamous couples may be partially due to the disproportionate rise in their educational attainment.

Consistent with women's increasing educational advantage, the difference between husbands' and wives' educational attainment for couples in which wives have more education increased between 1950–1954 and 2000– 2004 (from an average difference of 1.10 to 1.24 education categories) but decreased among couples in which husbands had the advantage (from 1.31 to 1.20 categories). Given research showing that greater educational differences are associated with a higher risk of divorce (Kalmijn 2003), these trends should increase the risk of divorce among wife-advantaged couples relative to other couples, holding all else constant.

Table 2 also shows couples' earnings and employment characteristics, measured as closely as possible to the time of their marriages using data from the PSID. Not surprisingly given their higher educational attainment, hypogamous wives had higher earnings than hypergamous ones, they were more likely to work, and they had higher earnings relative to their husbands. Wives with more education than their husbands also increased their earnings and employment more quickly between 1975-1979 and 2000-2004 than did those with less education than their husbands. In 2008 dollars, hypogamous wives' earnings increased by about \$11,500 between 1975-1979 and 2000-2004, whereas hypergamous wives' earnings increased by only \$7,800. Likewise, hypogamous wives' employment increased by 5 percentage points, compared with about 1 percentage point for hypergamous wives. In contrast to the pattern for wives, hypergamous and hypogamous husbands increased their earnings by similar amounts. Interestingly, the earnings of homogamous husbands and wives increased faster than any other group. Depending on the relationship between couples' earnings and divorce, these trends could either contribute to or offset trends in the relationship between couples' relative education and divorce.

Finally, Table 2 shows that wives in hypogamous marriages tend to be slightly older than other wives when they marry, and they are somewhat more likely to be African American, but there is little discernable time trend in these differentials.

## Changing Risk of Marital Dissolution by Spouses' Relative Education

Figure 2 shows trends in the hazard of marital dissolution by spouses' relative education. Because a key finding of our descriptive analysis was that husbands and wives in hypogamous marriages are increasingly well-educated relative to those in hypergamous marriages, all of our models include dummy variable controls for both spouses' education categories. All the models also include a linear term for the difference between couples' education categories<sup>8</sup> and basic demographic controls: linear and quadratic terms for husband's and wife's age at marriage, and dummy variables for wife's race and marriage parity (coded as shown in Table 2).

To evaluate how well trends from the NSFG and PSID correspond, Panel A of Figure 2 shows trends in the relative hazard of dissolution separately by data source (Model 1). Trends from the two sources do not correspond perfectly, but similar patterns emerge. Consistent with previous research (Teachman 2002) and the stalled revolution perspective, changes in the risk of marital dissolution for hypogamous relative to hypergamous couples appear relatively weak from the 1960s to the early 1980s, but they are more pronounced when the entire time series is considered. Trends from both sources suggest that wives with more education than their husbands may have once been more likely to divorce, but this association has declined. There is some evidence of a decline in the relative hazard of divorce for homogamous couples as well, although this trend is more pronounced in the PSID.

How concerned should we be about differences in the point estimates by data source? From a statistical standpoint, none of the

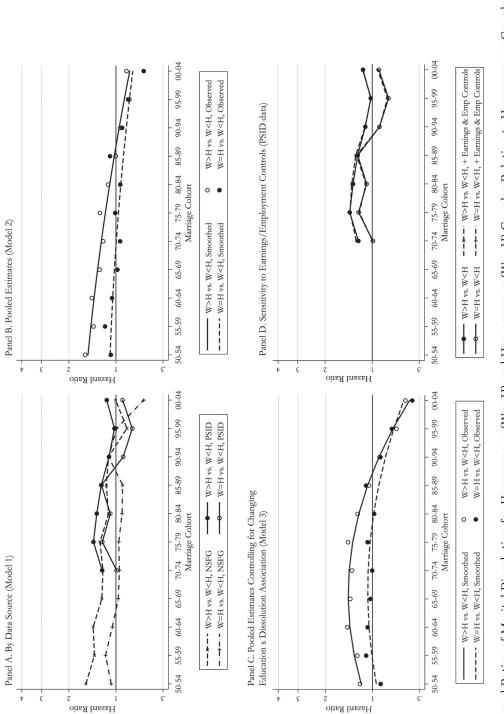


Figure 2. Hazard Ratios of Marital Dissolution for Hypogamous (W > H) and Homogamous (W = H) Couples Relative to Hypergamous Couples (W < H) by Marriage Cohort differences between the two sources within marriage cohorts are significant, and a joint test of differences by data source for hypogamous and homogamous couples relative to hypergamous couples is highly insignificant (p = .879). Given the consistency of the descriptive trends and lack of statistical evidence for differences, we pool the NSFG and PSID data to increase the statistical power of our analyses and to test whether trends are significant over the entire time series.

Panel B of Figure 2 shows trends in the relative hazard of martial dissolution using the pooled NSFG and PSID data. These trends are estimated from a model with the same covariates used to produce those shown in Panel A, but they also contain dummy variables to control for data source (1 = NSFG)1973 to 1995; 2 = PSID; 3 = NSFG 2002 and 2006–2010). We present (1) smoothed trends using a linear and quadratic term for the interaction between marriage cohort and spouses' relative education (Model 2), and (2) observed trends using dummy variable representations of marriage cohort for these interactions. We plot the observed trends to show how well the quadratic function fits the unrestricted trends. Results from this model look much like those shown in Panel A.

To test the significance of the point estimates and trends, Table 3 shows the hazard ratios of marital dissolution in the oldest and youngest marriage cohorts (estimated from Model 2). Consistent with all of the theoretical perspectives (see Table 1), the results indicate that hypogamous marriages formed in 1950 to 1954 were more likely than hypergamous marriages to dissolve (the hazard was 1.51 times higher). Hypogamous marriages were also more likely to dissolve than homogamous ones. The risk of divorce among homogamous and hypergamous couples was virtually identical. As predicted by the institutional change perspective (Hypotheses 1 and 2, Table 1), hypogamous couples were no longer significantly more likely to divorce by 2000 to 2004, and homogamous couples were less likely to divorce than hypergamous couples (the hazard was .78 that of hypergamous couples). In contrast to the stalled revolution perspective (Hypothesis 3, Table 1), declines in the hazard ratios across marriage cohorts were large and statistically significant. The hazard of dissolution for hypogamous relative to hypergamous couples was 1.85 times higher in 1950–1954 than in 2000–2004, and it was 1.40 times higher for homogamous couples. Moreover, as Panel B of Figure 2 shows, there is no evidence that trends stalled in the 1990s.<sup>9</sup>

As mentioned earlier, declines in divorce since the late 1970s are concentrated among highly educated women (Martin 2006; Raley and Bumpass 2003). Our data confirm this. Figure 3 shows that, controlling for husbands' education, spouses' relative education, and other covariates included in Model 2, college graduates, in particular, have become less likely than other women to divorce. These results are quite similar to those Martin (2006) found using data from the Survey of Income and Program Participation, although Martin did not control for husbands' education or spouses' relative education. Although not the main focus of our article, these results contribute to literature on the growing educational gradient in divorce by showing that these trends are not simply a byproduct of changes in husbands' education or the increased tendency for highly educated women to marry highly educated men.

Given that declines in divorce are concentrated among the highly educated and that hypogamous husbands and wives disproportionately increased their education relative to other couples, the declining association between hypogamy and marital dissolution may be due to the increasing stability of marriages among the highly educated. In Model 3, we test this idea by adding interaction terms between husbands' and wives' education categories and marriage cohort (using linear and quadratic terms) to Model 2.

Panel C of Figure 2 shows trends in the hazard ratios from Model 3 and, again, Table 3 shows the point estimates. Table 3 shows that the hazard of dissolution for hypogamous couples is no longer significantly greater than

| Marriage Cohort and Spouses' Relative Education  | Model 2.<br>Pooled<br>Estimates | Model 3.<br>Education<br>Associations |
|--|---------------------------------|---------------------------------------|
| 1950 to 1954 Marriage Cohort                     |                                 |                                       |
| Hypergamous (W < H, omitted)                     |                                 |                                       |
| Hypogamous (W > H)                               | $1.510^{**a}$                   | 1.181                                 |
|  | (3.39)                          | (.61)                                 |
| Homogamous (W = H)                               | 1.090                           | .945                                  |
|  | (.99)                           | (.37)                                 |
| 2000 to 2004 Marriage Cohort                     |                                 |                                       |
| Hypergamous (W < H, omitted)                     |                                 |                                       |
| Hypogamous (W > H)                               | .816                            | .580                                  |
|  | (1.48)                          | (1.69)                                |
| Homogamous (W = H)                               | .780*                           | .631*                                 |
|  | (2.22)                          | (2.53)                                |
| Ratio of 1950–1954 to 2000–2004 Marriage Cohorts |                                 |                                       |
| Hypergamous (W < H, omitted)                     |                                 |                                       |
| Hypogamous (W > H)                               | 1.849**                         | $2.037^{*}$                           |
|  | (4.96)                          | (1.98)                                |
| Homogamous (W = H)                               | 1.397**                         | 1.498*                                |
|  | (3.05)                          | (2.00)                                |
| Likelihood Ratio                                 | 3615.38                         | 3684.30                               |
| Model df   | 23                              | 35                                    |
| N  | 39,589                          | 39,589                                |

**Table 3**. Hazard Ratios of the Association between Spouses' Relative Education and Marital

 Dissolution by Marriage Cohort

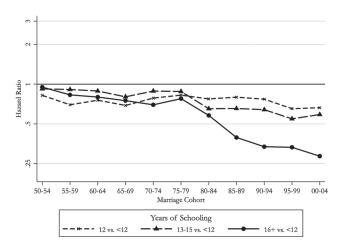
Sources: Pooled data from the 1973, 1976, 1982, 1988, 1995, 2002, and 2006–2010 National Survey of Family Growth (NSFG) and the 1968 to 2009 Panel Study of Income Dynamics (PSID). Note: W = wife's education category; H = husband's education category. Hazard ratios are given with |z| statistics in parentheses. Model 2 contains linear and quadratic terms for marriage cohort, husband's age at marriage, and wife's age at marriage; dummy variables for wife's race (1 = African American, 0 = other), marriage number (1 = remarriage, 0 = first marriage), data source (1 = NSFG 1973 to 1995, 2 = PSID, 3 = NSFG 2002 and 2006–2010), husband's and wife's education category (<12, 13 to 15, >16), and spouses' relative education (1 = hypogamous, 2 = homogamous, 3 = hypergamous); and a linear term for the absolute difference between spouses' education categories. Model 3 also contains interaction terms between linear and quadratic terms for marriage cohort and dummy variables for husband's and wife's education categories.

<sup>a</sup>Hazard ratios for hypogamous versus homogamous couples are statistically significant (two tailed z-test, p < .05).

\*p < .05; \*\*p < .01 (two-tailed z-tests).

for hypergamous couples in the 1950 to 1954 marriage cohort. While this may suggest that, controlling for shifts in the association between spouses' education and divorce, hypogamy did not matter for divorce in the 1950s, this result is primarily due to a large decline in the precision of our estimates (as indicated by the substantially smaller *z*-statistic) and because of somewhat lower point estimates in the earliest cohort compared with those marrying in the 1960s and 1970s. Significance tests from Model 3 indicate that, on average, the hazard of dissolution for hypogamous couples marrying between 1950 and 1979 was 34 percent higher than for hypergamous couples and this is statistically significant (p = .010, not shown). These results imply that wives with more education than their husbands were indeed more likely to divorce, at least through the late 1970s, even after controlling for shifts in the association between education and divorce.

One difference between Models 2 and 3 that can be observed when comparing Panels



**Figure 3.** Trends in the Association between Wives' Education and Marital Dissolution *Source:* Pooled data from the 1973, 1976, 1982, 1988, 1995, 2002, and 2006–2010 National Survey of Family Growth (NSFG) and the 1968 to 2009 Panel Study of Income Dynamics (PSID). *Note:* Model includes linear and quadratic terms for husband's age at marriage and wife's age at marriage; dummy variables for wife's race (1 = African American, 0 = other), marriage number (1 = remarriage, 0 = first marriage), data source (1 = NSFG 1973 to 1995, 2 = PSID, 3 = NSFG 2002 and 2006–2010), husband's and wife's education category (<12, 13 to 15, ≥16), and spouses' relative education (1 = hypogamous, 2 = homogamous, 3 = hypergamous); a linear term for the absolute difference between spouses' education categories; and husband's and wife's education category x dummy variables for marriage cohort.

B and C of Figure 2 is that the hazard ratios in Model 3 shift downward in more recent cohorts. The hazard of dissolution for hypogamous couples was .58 that of hypergamous couples in 2000 to 2004 and .63 for homogamous couples (see Table 3). Although the point estimates suggest that hypogamous marriages are substantially more stable than hypergamous ones in the most recent cohort, this estimate does not attain statistical significance at p < .05 (p = .091). Thus, while we can be confident that couples in which wives had the educational advantage were not more likely to divorce than hypergamous wives in 2000 to 2004, we are not confident that they were less likely to divorce. Overall, the conclusions we draw from Model 3 are the same as from Model 2: (1) hypogamous couples were once more likely to divorce than other couples, but this is no longer the case; (2) homogamous couples have become less likely divorce than hypergamous couples, to whereas there was once no difference; and (3) changes in these associations between 1950-1954 and 2000–2004 were large.<sup>10</sup>

Model 3 allows us to test our prediction from diffusion theory that the pace of change has increased as hypogamous couples have become more common (Hypothesis 4, Table 1). Panel C of Figure 2 shows descriptive evidence of an increasingly negative slope in the hazard ratios, but the quadratic terms in this model, which indicate an increasing speed of change, are not statistically significant at 5 percent (p = .098 for hypogamous couples and .071 for homogamous couples).

## Sensitivity to Spouses' Earnings, Relative Earnings, and Wife's Employment

Could trends in the association between spouses' relative education and divorce simply reflect changes in spouses' earnings, relative earnings, and employment? To assess the sensitivity of our results to controls for spouses' employment and earnings, we first estimate Model 1 using PSID data without these variables as a basis of comparison. Next, we add measures of husbands' and wives' annual earnings, spouses' relative earnings, relative earnings squared (to capture non-linearities in the association between relative earnings and dissolution), and wives' employment using the coding shown in Table 2. These measures were collected at each PSID interview, and thus, unlike other variables in the model, they vary by marital duration. Panel D of Figure 2 shows our estimates are very similar regardless of whether we control for these variables. Allowing the effects of the earnings and employment variables to vary by marriage cohort also has little effect on our estimates (not shown). These results suggest the trends we observe cannot be explained by changes in spouses' earnings and employment, and relative earnings and education operate relatively independently when it comes to trends in the risk of divorce.

# SUMMARY AND DISCUSSION

Wives with more education than their husbands were once more likely to divorce than other women, but this is no longer the case. Couples marrying in the early 1990s were among the first for whom wives' educational advantage was no longer associated with a higher risk of divorce. We find no evidence that this shift is an artifact of the increasing educational attainment of husbands and wives, the increasing similarity between spouses' education, or shifts in spouses' earnings, relative earnings, and employment. Another key finding is that the relative stability of marriages between educational equals has increased. Couples married in the 1950s who shared the same broad education levels were no more likely to divorce than couples in which husbands had more education. Among recent marriage cohorts, however, couples with the same education levels are less likely to divorce than those in which husbands have more education.

These findings are consistent with perspectives emphasizing shifts in the institution of marriage away from rigid gender specialization and toward more flexible, egalitarian partnerships (e.g., Gerson 2010; Goldscheider and Waite 1991; Nock 2001; Oppenheimer 1997). For the majority of the period

studied here, the importance of whether husbands or wives had the educational advantage for divorce declined, and the stability of relationships between educational equals increased (Hypotheses 1 and 2, Table 1). The slow change in the association between wives' educational advantage and divorce between 1950 and the early 1980s is consistent with a stalled revolution perspective (Hypothesis 3, Table 1), but when the longer time series is considered, our findings may better fit a diffusion of innovation story (Hypothesis 4, Table 1). Soon after the reversal of the gender gap in education occurred in the population at large and among married couples, changes in the association became more dramatic, a finding consistent with the notion that it takes a critical mass of couples in which wives have more education than their husbands for the association between wives' educational advantage and divorce to decline. This result must be regarded as tentative, however, as the increasing speed of the decline did not attain conventional levels of statistical significance. One way to test the diffusion hypothesis in future work would be to investigate whether female-advantaged marriages are more stable in states, cities, or neighborhoods where these relationships are more common.

Despite weak evidence for an increasing pace of change, the existence of any decline at all in the 1990s and 2000s provides an important counterpoint to claims that progress toward gender equality has stalled. As Cotter and colleagues (2011) note, one area that has not shown any signs of slowing in recent years is women's increasing educational advantage over men. Our study shows that the declining negative association between wives' educational advantage and marital stability is another such exception. Our findings also highlight the importance of developing theories to explain why progress toward gender equality has occurred more quickly in some realms than in others (e.g., England 2010; Ridgeway 2011). England (2010) argues that gender equality has progressed more quickly in the worlds of market work and education than it has in heterosexual romantic relationships. Our findings may

be an example of how changes in the labor market and education have induced progress toward gender equality in the home. But it is also possible that declines in the significance of gender in this realm have been replaced by increased gender differentiation in other areas (Ridgeway 2011). For example, Tichenor (2005) argues that wives who outearn their husbands compensate for this non-normative arrangement by downplaying their own economic contributions to the household and by increasing their participation in conventionally female behaviors, for example, housework and deference to husbands' authority. Whether similar compensatory behavior occurs in relationships in which wives have the educational advantage should be the subject of further study.

Our findings are consistent with the argument that people's preferences and expectations about male status dominance in heterosexual romantic relationships are weaker than they once were, but there are other explanations that, if correct, would be inconsistent with this claim. For instance, it is possible that couples' discomfort with marriages in which wives have the educational advantage has remained stable, but that increases in returns to women's education (DiPrete and Buchmann 2006) have made it relatively more expensive for men to divorce women who have the same or more education. This is still an argument about gender, but it focuses on economic rather than attitudinal shifts. We consider the purely economic argument unlikely, however, given the insensitivity of our results to controls for husbands' and wives' earnings. Another explanation is that changing marriage market conditions drive our results. Men who prefer to marry women with less education than they have themselves have a diminishing pool of potential mates from which to choose, which may reduce the quality of matches they form, thereby increasing their probability of divorce. Although this explanation is plausible, there is evidence (albeit limited) that men's and women's preferences for mates have become more similar and that attitudes

toward female-advantaged marriages have become less negative (Buss et al. 2001; Willinger 1993). These changes in preferences for mates also suggest that marriage market constraints are unlikely to be the sole explanation for the shifts we observe.

An additional potential caveat to a "declining significance of gender" interpretation of our findings is that, while the importance of spouses' relative education for divorce trended downward for the majority of the period we examine, there are intriguing hints that couples in which wives have the educational advantage may now be less likely to divorce than couples in which husbands have more education-a reversal of the association in earlier cohorts. Again, our estimates are not precise enough to state this with confidence, but if the association has reversed, then, like the larger literature on the reversal of the gender gap in education, our results suggest that gender still matters, but in a way that appears to favor women. Data on future marriage cohorts are necessary to determine whether this is indeed the case.

Finally, the changes we observe may be causal but changes in selection into marriage may also explain the results. In the 1950s, couples who entered relationships in which wives had more education than their husbands may have been more likely to hold non-traditional beliefs associated with a greater risk of divorce. Today, however, both partners in these couples may hold more flexible attitudes about gender in marriage. These relationships may be particularly selective of men with egalitarian values-values that are associated with marital stability (Kaufman 2000; Lye and Biblarz 1993). An interesting way of investigating this hypothesis in future work would be to examine whether gendered patterns of behavior (e.g., time spent on housework and childcare) and egalitarian attitudes differ for couples in which wives have more education than their husbands compared with other couples among recent marriage cohorts. More broadly, how do differences in spouses' relative educational attainment play out in couples' family lives?

Regardless of whether the changes we observe are causal or are due to changes in selection, they have implications for how we understand the impact of the reversal of the gender gap in education on marital stability. Given previous findings, we might have expected the growing number of couples in which wives have more education than their husbands to have increased the pool of couples at heightened risk of divorce. Our results are inconsistent with this claim. In addition, our results speak against fears that women's educational success has had negative effects on their marital outcomes—at least with respect to wives' educational advantage and marital dissolution. While these couples were once more likely to divorce, this is no longer the case.

# APPENDIX

|                    |           | NS                | FG                    |                   |           |                     |           |
|--------------------|-----------|-------------------|-----------------------|-------------------|-----------|---------------------|-----------|
|                    | 1973 to   | 1995              | 2002 & 2006–2010 PSID |                   | ID        | Census/<br>June CPS |           |
| Marriage<br>Cohort | Marriages | Dissolu-<br>tions | Marriages             | Dissolu-<br>tions | Marriages | Dissolu-<br>tions   | Marriages |
| 1950–54            | 1,795     | 501               |                       |                   | 432       |                     |           |
| 1955–59            | 2,730     | 740               |                       |                   | 406       |                     |           |
| 1960-64            | 3,659     | 1,043             |                       |                   | 474       |                     | 11,067    |
| 1965–69            | 5,407     | 1,508             |                       |                   | 689       |                     |           |
| 1970–74            | 6,314     | 1,502             | 2                     | 0                 | 1,049     | 400                 | 20,427    |
| 1975-79            | 3,279     | 1,045             | 62                    | 8                 | 1,159     | 456                 | 4,798     |
| 1980–84            | 3,172     | 816               | 268                   | 27                | 1,139     | 417                 | 23,059    |
| 1985-89            |           |                   | 727                   | 58                | 1,000     | 310                 | 4,903     |
| 1990–94            |           |                   | 1,393                 | 122               | 1,002     | 263                 | 4,097     |
| 1995–99            |           |                   | 1,963                 | 188               | 710       | 169                 | 1,287     |
| 2000-04            |           |                   | 2,006                 | 175               | 753       | 107                 |           |
| 2005-09            |           |                   | 1,060                 |                   | 658       |                     |           |

Table A1. Sample Sizes of Marriages and Dissolutions by Data Source and Marriage Cohort

*Sources*: 1960, 1970, and 1980 U.S. Census; 1971 to 1995 June Current Population Survey (CPS); 1973, 1976, 1982, 1988, 1995, 2002, and 2006–2010 National Survey of Family Growth (NSFG); and 1968 to 2009 Panel Study of Income Dynamics (PSID).

*Note*: Marriages are wives' first marriages in the Census/June CPS and 1973 to 1995 NSFG and all marriages in the PSID and the 2002 and 2006–2010 NSFG. Dissolutions are classified by year of marriage. Dissolutions are shown only for cohorts in our hazard analysis sample.

#### Funding

This research was carried out using the facilities of the Center for Demography and Ecology at the University of Wisconsin-Madison (R24 HD047873) and was funded in part by a grant to the first author from the Wisconsin Alumni Research Foundation (WARF).

#### Acknowledgments

An earlier version of this article was presented at the 2010 meetings of the Population Association of America

in Dallas. We are grateful for helpful comments from seminar participants at the University of Michigan, Princeton University, and the University of Texas at Austin; from Katherine Curtis, Thomas DiPrete, Paula England, Marcus Gangl, Robert Mare, Christopher McKelvey, Jenna Nobles, Jim Walker, and Zhen Zeng; and from the editors and anonymous reviewers of the *American Sociological Review*. We also thank Philip Brenner for excellent research assistance and Jay Teachman for sharing his analysis data from the National Survey of Family Growth.

#### Notes

- Note that our hypotheses all pertain to the likelihood of divorce for a given group of couples relative to other couples. The theories guiding our analyses pertain to changes in how much more or less likely a particular group is to divorce relative to other couples, rather than to trends in absolute levels of divorce.
- Exchange theory (e.g., Becker 1974) also predicts a declining association, but for different reasons, namely, that comparative advantage in housework and market work has become less gender-specific and thus the gains to specialization have weakened.
- Although we take advantage of data on the 2005 to 2009 cohort in the first part of our analysis, we do not use these data in our hazard models to avoid right censoring at very short marital durations.
- The data and statistical code that produced the results in this article are available from the first author upon request.
- Recent studies on the association between premarital cohabitation and divorce similarly argue that the declining selectivity of cohabitation may be responsible for the recent disappearance of its association with divorce (Liefbroer and Dourleijn 2006; Manning and Cohen 2012).
- 6. Very few couples who separate reconcile, but even those who do often go on to separate again permanently (Bumpass and Raley 2007). Because the large majority of couples who separate either divorce or separate permanently, and are effectively divorced from a social perspective, for ease of discussion we refer to "marital dissolution" and "divorce" interchangeably in this article.
- 7. Recent marriage cohorts are followed for less time than earlier ones. Our results are similar when we follow all marriages for 10 years, excluding marriages that are censored before 10 years (see the online supplement for details). In addition, there is no evidence that the hazards of divorce vary nonproportionately across the duration of couples' marriages by their relative education.
- 8. This variable is defined slightly different in our hazard models than shown in Table 2. It is the absolute value of the difference between spouses' education categories, except for homogamous couples, for which the variable equals 1 (D = 1, 2, 3). Homogamous couples are differentiated from other couples by inclusion of the dummy variables for couple type in the model, and thus D controls for shifts in the difference between spouses' education levels for those with different levels of education. The results show that bigger educational differences are associated with a higher likelihood of divorce.
- There is some evidence that these trends vary by race—that is, African American wives have experienced less change (see the online supplement for details)—but trends for African American wives are measured imprecisely and thus are not presented in the main text.

10. Another explanation for the declines we observe could be that hypogamous and homogamous couples have increased their education within the education categories we control for. To test this, we estimated our models controlling for single years of spouses' attainments where possible. Our primary conclusions hold, but within-category education differences do explain some (but not all) of the elevated risk of divorce for hypogamous couples in earlier cohorts (see the online supplement for details).

#### References

- Alvira-Hammond, Marta, Monica A. Longmore, Wendy D. Manning, and Peggy C. Giordano. 2013. "Gainful Activity and Intimate Partner Violence in Emerging Adulthood." 2013 Working Paper Series, Bowling Green State University, The Center for Family and Demographic Research, Bowling Green, OH.
- Atkinson, Maxine P., Theodore N. Greenstein, and Molly Mohahan Lang. 2005. "For Women, Breadwinning Can be Dangerous: Gendered Resource Theory and Wife Abuse." *Journal of Marriage and Family* 67(5):1137–48.
- Banks, Ralph R. 2010. "The Marriage Decline." New York Times, January 24 (http://roomfordebate.blogs. nytimes.com/2010/01/24/alpha-wives-the-trend-andthe-truth/).
- Becker, Gary S. 1974. "A Theory of Marriage." Pp. 299– 344 in *Economics of the Family: Marriage, Children,* and Human Capital, edited by T. W. Schultz. Chicago: National Bureau of Economic Research by the University of Chicago Press.
- Bertrand, Marianne, Emir Kamenica, and Jessica Pan. 2013. "Gender Identity and Relative Income within Households." Chicago Booth Paper No. 13–08, University of Chicago, Booth School of Business, Chicago, IL.
- Bianchi, Suzanne M., Melissa A. Milkie, Liana C. Sayer, and John P. Robinson. 2000. "Is Anyone Doing the Housework? Trends in the Gender Division of Household Labor." Social Forces 79(1):191–228.
- Bianchi, Suzanne M., John P. Robinson, and Melissa A. Milkie. 2006. Changing Rhythms of American Family Life. New York: Russell Sage Foundation.
- Blau, Francine D., Mary C. Brinton, and David B. Grusky. 2006. "The Declining Significance of Gender?" Pp. 3–34 in *The Declining Significance of Gender?*, edited by F. D. Blau, M. C. Brinton, and D. B. Grusky. New York: Russell Sage Foundation.
- Blau, Francine D., Peter Brummund, and Alberto Y-H. Liu. 2013. "Trends in Occupational Segregation by Gender 1970–2009: Adjusting for the Impact of Changes in the Occupational Coding System." *Demography* 50(2):471–92.
- Breines, Wini. 1986. "The 1950s: Gender and Some Social Science." Sociological Inquiry 56(1):69–92.
- Buchmann, Claudia and Thomas A. DiPrete. 2006. "The Growing Female Advantage in College Completion: The Role of Family Background and Academic

Achievement." *American Sociological Review* 71:515–41.

- Bumpass, Larry L., Teresa Castro Martin, and James A. Sweet. 1991. "The Impact of Family Background and Early Marital Factors on Marital Disruption." *Journal* of Family Issues 12(1):22–42.
- Bumpass, Larry and Kelly Raley. 2007. "Measuring Separation and Divorce." Pp. 125–43 in *Handbook of Measurment Issues in Family Research*, edited by S. L. Hofferth and L. M. Casper. Mahwah, NJ: Lawrence Erlbaum.
- Buss, David M., Todd K. Shackelford, Lee A. Kirkpatrick, and Randy J. Larsen. 2001. "A Half Century of Mate Preferences: The Cultural Evolution of Values." *Journal of Marriage and Family* 63(2):491–503.
- Casterline, John B. 2001. *Diffusion Processes and Fertility Transition: Selected Perspectives*. Washington, DC: National Academy Press.
- Charles, Kerwin Kofi and Ming-Ching Luoh. 2003. "Gender Differences in Completed Schooling." *Review of Economics and Statistics* 85(3):559–77.
- Cherlin, Andrew J. 1990. "A Review: The Strange Career of the 'Harvard-Yale Study." Public Opinion Quarterly 54(1):117–24.
- Cherlin, Andrew J. 2004. "The Deinstitutionalization of American Marriage." *Journal of Marriage and Family* 66(4):848–61.
- Cleland, John. 2001. "Potatoes and Pills: An Overview of Innovation-Diffusion Contributions to Explanations of Fertility Decline." Pp. 39–65 in *Diffusion Processes and Fertility Transition*, edited by J. B. Casterline. Washington, DC: National Academy Press.
- Coontz, Stephanie. 2005. Marriage, A History: From Obedience to Intimacy or How Love Conquered Marriage. New York: Viking.
- Cotter, David A., Joan M. Hermsen, and Reeve Vanneman. 2004. *Gender Inequality at Work*. New York: Russell Sage Foundation.
- Cotter, David A., Joan M. Hermsen, and Reeve Vanneman. 2011. "The End of the Gender Revolution? Gender Role Attitudes from 1977 to 2008." *American Journal of Sociology* 117(1):259–89.
- DiPrete, Thomas A. and Claudia Buchmann. 2006. "Gender-Specific Trends in the Value of Education and the Emerging Gender Gap in College Completion." *Demography* 43(1):1–24.
- Duncan, Greg J. 2008. "When to Promote, and When to Avoid, a Population Perspective." *Demography* 45(4):763–84.
- England, Paula. 2006. "Toward Gender Equality: Progress and Bottlenecks." Pp. 245–64 in *The Declining Significance of Gender?*, edited by F. D. Blau, M. C. Brinton, and D. B. Grusky. New York: Russell Sage.
- England, Paula. 2010. "The Gender Revolution: Uneven and Stalled." *Gender & Society* 24(2):149–66.
- Esteve, Albert, Joan García-Román, and Iñaki Permanyer. 2012. "The Gender-Gap Reversal in Education and Its Effect on Union Formation: The End of Hypergamy?" *Population and Development Review* 38(3):535–46.

- Fisman, Raymond, Sheena S. Iyengar, Emir Kamenica, and Itamar Simonson. 2006. "Gender Differences in Mate Selection: Evidence from a Speed Dating Experiment." *Quarterly Journal of Economics* 121(2):673–97.
- Gerson, Kathleen. 2010. The Unfinished Revolution: How a New Generation Is Reshaping Family, Work, and Gender in America. Oxford: Oxford University Press.
- Goldin, Claudia. 2006. "The Quiet Revolution that Transformed Women's Employment, Education, and Family." *American Economic Review* 96(2):1–21.
- Goldin, Claudia, Lawrence F. Katz, and Ilyana Kuziemko. 2006. "The Homecoming of American College Women: The Reversal of the College Gender Gap." *Journal of Economic Perspectives* 20(4):133–56.
- Goldscheider, Frances K. and Linda J. Waite. 1991. New Families, No Families? The Transformation of the American Home. Berkeley: University of California Press.
- Goldstein, Joshua R. and Kristen Harknett. 2006. "Parenting across Racial and Class Lines: Assortative Mating Patterns of New Parents Who Are Married, Cohabiting, Dating and No Longer Romantically Involved." Social Forces 85(1):121–43.
- Goldstein, Joshua R. and Catherine T. Kenney. 2001. "Marriage Delayed or Marriage Forgone? New Cohort Forecasts of First Marriage for U.S. Women." *American Sociological Review* 66(4):506–519.
- Goode, William J. [1963] 1970. World Revolution and Family Patterns. New York: Free Press.
- Gouskova, Elena, Steven G. Herringa, Katherine McGonagle, and Robert F. Schoeni. 2008. "Technical Report: Panel Study of Income Dynamics, Revised Longitudinal Weights 1993–2005." Survey Research Center, Institute for Social Research, University of Michigan, Ann Arbor, MI.
- Heaton, Tim B. 2002. "Factors Contributing to Increasing Marital Stability in the United States." *Journal of Family Issues* 23(3):392–409.
- Heckert, D. Alex, Thomas C. Nowak, and Kay A. Snyder. 1998. "The Impact of Husbands' and Wives' Relative Earnings on Marital Disruption." *Journal of Marriage and the Family* 60(3):690–703.
- Hitsch, Günter J., Ali Hortaçsu, and Dan Ariely. 2010. "Matching and Sorting in Online Dating." *American Economic Review* 100(1):130–63.
- Hochschild, Arlie R. 1989. The Second Shift: Working Parents and the Revolution at Home. New York: Viking.
- Johnson, William R. and Jonathan Skinner. 1986. "Labor Supply and Marital Separation." *American Economic Review* 76(3):455–69.
- Kalmijn, Matthijs. 2003. "Union Disruption in the Netherlands: Opposing Influences of Task Specialization and Assortative Mating?" *International Journal of Sociology* 33(2):36–64.
- Kaufman, Gayle. 2000. "Do Gender Role Attitudes Matter? Family Formation and Dissolution among Traditional and Egalitarian Men and Women." *Journal of Family Issues* 21(1):128–44.

- Kaukinen, Catherine. 2004. "Status Compatibility, Physical Violence, and Emotional Abuse in Intimate Relationships." *Journal of Marriage and Family* 66(2):452–71.
- Liefbroer, Aart C. and Edith Dourleijn. 2006. "Unmarried Cohabitation and Union Stability: Testing the Role of Diffusion Using Data from 16 European Countries." *Demography* 43(2):203–221.
- Ludden, Jennifer. 2010. "Modern Marriages: The Rise of the Sugar Mama." *National Public Radio: Morning Edition*, January 19 (http://www.npr.org/templates/ story/story.php?storyId=122612096).
- Lye, Diane N. and Timothy J. Biblarz. 1993. "The Effects of Attitudes toward Family Life and Gender Roles on Marital Satisfaction." *Journal of Family Issues* 14(2):157–88.
- Manning, Wendy D. and Jessica A. Cohen. 2012. "Premarital Cohabitation and Marital Dissolution: An Examination of Recent Marriages." *Journal of Marriage and Family* 74(2):377–87.
- Martin, Elaine K., Casey T. Taft, and Patricia A. Resick. 2007. "A Review of Marital Rape." Aggression and Violent Behavior 12(3):329–47.
- Martin, Steven P. 2006. "Trends in Marital Dissolution by Women's Education in the United States." *Demographic Research* 15(20):537–60.
- Mason, Mary Ann, Mark A. Fine, and Sarah Carnochan. 2001. "Family Law in the New Millennium: For Whose Families?" *Journal of Family Issues* 22(7):859–81.
- Melzer, Scott A. 2002. "Gender, Work, and Intimate Violence: Men's Occupational Violence Spillover and Compensatory Violence." *Journal of Marriage and Family* 64(4):820–32.
- Munsch, Christin L. 2010. "The Effect of Unemployment and Relative Income Disparity on Infidelity for Men and Women." Presented at the American Sociological Association meetings, Atlanta, GA.
- Nock, Steven L. 2001. "The Marriages of Equally Dependent Spouses." Journal of Family Issues 22(6):755–75.
- Organisation for Economic Co-operation and Development (OECD). 2010. "CO3.1: Educational Attainment by Gender and Average Years Spent in Formal Education." OECD Family Database. Paris: OECD (http://www.oecd.org/els/social/family/database). Updated January 20, 2010.
- Oppenheimer, Valerie Kincade. 1994. "Women's Rising Employment and the Future of the Family in Industrial Societies." *Population and Development Review* 20(2):293–342.
- Oppenheimer, Valerie Kincade. 1997. "Women's Employment and the Gain to Marriage: The Specialization and Trading Model." *Annual Review of Soci*ology 23:431–53.
- Panel Study of Income Dynamics, public use dataset. N.d. Produced and distributed by the Survey Research Center, Institute for Social Research, University of Michigan, Ann Arbor, MI (http://psidon line.isr.umich.edu).

- Parsons, Talcott. 1949. "The Social Structures of the Family." Pp. 173–201 in *The Family: Its Function and Destiny*, edited by R. N. Anshen. New York: Harper.
- Phillips, Julie A. and Megan M. Sweeney. 2006. "Can Differential Exposure to Risk Factors Explain Recent Racial and Ethnic Variation in Marital Disruption?" Social Science Research 35(2):409–434.
- Qian, Zhenchao. 1998. "Changes in Assortative Mating: The Impact of Age and Education, 1970–1990." *Demography* 35(3):279–92.
- Raley, R. Kelly and Larry Bumpass. 2003. "The Topography of the Divorce Plateau: Levels and Trends in Union Stability in the United States after 1980." *Demographic Research* 8(8):246–58.
- Ridgeway, Cecilia L. 2011. Framed by Gender: How Gender Inequality Persists in the Modern World. New York: Oxford University Press.
- Roberts, Sam. 2010. "More Men Marrying Wealthier Women." New York Times, January 19.
- Sayer, Liana C. 2005. "Gender, Time and Inequality: Trends in Women's and Men's Paid Work, Unpaid Work and Free Time." Social Forces 84(1):285–303.
- Sayer, Liana C. and Suzanne M. Bianchi. 2000. "Women's Economic Independence and the Probability of Divorce: A Review and Reexamination." *Journal of Family Issues* 21:906–943.
- Schwartz, Christine R. 2010. "Earnings Inequality and the Changing Association between Spouses' Earnings." *American Journal of Sociology* 115(5):1524–57.
- Schwartz, Christine R. and Robert D. Mare. 2005. "Trends in Educational Assortative Marriage from 1940 to 2003." *Demography* 42(4):621–46.
- South, Scott J. 2001. "Time-Dependent Effects of Wives" Employment on Marital Dissolution." *American Sociological Review* 66(2):226–45.
- Stacey, Judith. 1998. Brave New Families: Stories of Domestic Upheaval in Late-Twentieth-Century America. Berkeley: University of California Press.
- Sweeney, Megan M. 2002. "Two Decades of Family Change: The Shifting Economic Foundations of Marriage." American Sociological Review 67(1):132–47.
- Teachman, Jay D. 2002. "Stability across Cohorts in Divorce Risk Factors." *Demography* 39(2):331–51.
- Thaler, Richard H. 2013. "Breadwinning Wives and Nervous Husbands." New York Times, June 1.
- Tichenor, Veronica Jaris. 1999. "Status and Income as Gendered Resources: The Case of Marital Power." *Journal of Marriage and the Family* 61(3):638–50.
- Tichenor, Veronica Jaris. 2005. Earning More and Getting Less. New Brunswick, NJ: Rutgers University Press.
- Tierney, John. 2006. "Male Pride and Female Prejudice." New York Times, January 3.
- Tzeng, Meei-Shenn. 1992. "The Effects of Socioeconomic Heterogamy and Changes on Marital Dissolution for First Marriages." *Journal of Marriage and the Family* 54(3):609–619.
- United States Department of Health and Human Services. 2002 and 2006–2010. National Center for Health

Statistics. *National Survey of Family Growth, Cycle VI, 2002 and 2006-2010* [Computer files] (http://www.cdc.gov/nchs/nsfg.htm).

- Weiss, Yoram and Robert J. Willis. 1997. "Match Quality, New Information, and Marital Dissolution." *Journal* of Labor Economics 15(1):S293–S329.
- Willinger, Beth. 1993. "Resistance and Change: College Men's Attitudes toward Family and Work in the 1980s." Pp. 108–130 in *Men, Work, and Family,* edited by J. C. Hood. Newbury Park, CA: Sage.
- Zeng, Yi, S. Philip Morgan, Zhenglian Wang, Danan Gu, and Chingli Yang. 2012. "A Multistate Life Table Analysis of Union Regimes in the United States: Trends and Racial Differentials, 1970–2002." *Population Research and Policy Review* 31(2):207–234.

**Christine R. Schwartz** is an Associate Professor of Sociology at the University of Wisconsin-Madison and an affiliate of the Center for Demography and Ecology and the Institute for Research on Poverty. Much of her research focuses on the links between family change and inequality, and often examines trends and variation in assortative mating.

**Hongyun Han** is a Research Data Analyst in the Health Disparities and Public Policy Program at the Feinberg School of Medicine at Northwestern University. Her broad areas of interest include assortative mating, childhood obesity, and health disparities. Her current research examines the health needs and outcomes of detained youth.