

Title: The Evolution of Spousal Age Differences over Marriage Cohorts: Assessing Women's Economic Roles and Gendered Marital Age Norms in First and Higher-Order Marriages

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Short Abstract: Changing spousal age differences shed light on the dynamics of marriage timing and marriage markets. With pooled cross-sectional data from American Community Survey, I find a trend of shrinking spousal age gaps across marriage cohorts in the US. This paper tries to explain the puzzle why the spousal age gaps evolve in opposite directions for men and women throughout their life course. First, it demonstrates the puzzling trend from both genders' perspectives. Second, it tests two alternative explanations. One explanation is that women's economic roles nowadays play as important roles in determining spousal preference and marriage timing as men's roles do. I examine the predictors of spousal age difference with individual and marriage-market characteristics. A related explanation is, the distributions of first marriages and remarriages, along with their respective marital age norms, have gradually changed. This paper extends the literature on assortative mating by highlighting the trend towards age-egalitarian marriages.

Extended Abstract

Background

The United States has experienced steady increases in age at first marriage for both sexes from the 1950s to the 2010s, according to the Census. The changes in spousal age gaps are actually coupled with the delays in marriage, shedding valuable insights into the contemporary mate selection process, the various domains of family life, the society-wide gender dynamics, as well as the structural constraints in the local marriage markets (Casterline, Williams and McDonald 1986; Presser 1975; Qian and Preston 1993). The increase of age homogamy is often deemed as a sign of more gender-egalitarian relationships and that of growing gender symmetry in partner selection preference (Van de Putte et al. 2009).

Past research suggests that the age difference between marital partners depends on individuals' timing of marriage and the orders of marriage. Earlier work on couple's age dissimilarity for the United States (Oppenheimer 1988) shows that, for first marriages, women conventionally marry older men (i.e. age hypergamy) if they get married before the thirties. For women who do not leave singlehood until their 30s, however, they tend to marry men younger than themselves (i.e. age hypogamy); the age gaps widen as women's age at first marriage increases up to early 40s. For remarriages at that time, age hypergamy is the marital age norm. In a recent paper by England and McClintock (2009), the authors explore the changing patterns of age homogamy with respect to men's age at marriage and education at marriage (including all marriages). They find that the older the men's age at marriage, the more years the wives are younger, especially for better-educated men (although variation by education is much smaller than variation by age

at marriage). In contrast, the spousal age differences change very little with women's increasing age at marriage, regardless of women's educational attainments.

Existing findings are mainly based on the 1980s data, but we have sufficient reasons to believe that the marital age norms have undergone tremendous changes within the last few decades. First of all, the age at first marriage have delayed since the 1970s, with parallel trends for men and women (Mare 1991). Second, women's labor force participation increasingly resemble that of men along with the reversal of gendered educational gaps (DiPrete and Buchmann 2013; Schwartz and Han 2014), which has important implications for restructuring the process of union formation. Thirdly, the increasing uncertainties in young men's financial status starting in the 1970s make married women's employment a more adaptive family strategy than that of the traditional marriage in which the husband is the sole breadwinner (Oppenheimer 1994). Aligned with these changes, fourthly, men have placed greater emphasis on a marital partner's economic potential nowadays, which used to be less important for considering a woman's desirability as a potential wife (Buss et al. 2001). Given the powerful shifts in both marriage timing and mate preference, I expect accompanied shifts in marriage age sorting. Whereas social homogamy is extensively studied in terms of spousal matching on education, status and racial/ethnicity, much less attention is paid to age homogamy. The fact that the spousal age gaps across countries differ not only by size but also by trend (Casterline et al. 1986; Kolk 2015; Mu and Xie 2014; Poppel et al. 2001) suggests that a good approach to tackle this topic is to examine the age homogamy patterns of a single country in depth by covering extended periods.

Research Question

This paper tries to explain the puzzle why the spousal age gaps evolve in opposite directions for men and women as they age. I show the trends of increasingly flattening relationships between average spousal age gaps and men's/women's age at marriage in different orders of marriage and across marriage cohorts in the United States. I distinguish first marriages and remarriages from both sexes' perspectives. I test three main arguments. First of all, the resembling economic roles of men and women mutually determine the marriage sorting and marriage timing. That is, the delays of marriage for both sexes, along with the marital dissolutions, expand the pool of similar-aged potential male mates (with or without prior marital history) for women who delay their marriage. Secondly, the spousal age gaps of all marriages are closing due to the increasing prevalence of remarriages and the different spousal age norms associated with first and higher-order marriages.

Contributions

This paper distinguishes itself from prior research in several ways. Earlier works in this line of research mainly focus on how the spousal age gaps vary with age at marriage in general, ignoring the fact that this relationship might have strengthened or weakened over time. Few studies on the spousal age gaps incorporate the perspectives of both men and women. To fill the research voids, I extend this line of research by updating the evolving trends of spousal age difference for marriage cohorts spanning from the 20th to the 21st century. My preliminary

analysis using the pooled ACS datasets has shown that the cohort differences are clear-cut. The spousal age gaps are shrinking over cohorts, especially for marriages contracted since 1980s. By examining the spousal age gaps from the perspectives of both sexes, I set up the contrasts for the gendered aging standards in the marriage market, tracking the gendered changes across marriage cohorts. Last but not the least, I explore both individual-level and contextual-level predictors of spousal age gaps by accounting for the regional variations in marriage timing.

Theoretical Frameworks and Hypotheses

Our preference for mate selection is essentially a portfolio of individual attributes, and age is associated with both desirable and undesirable traits. Younger age is almost always positively related to more physical attractiveness, an important component of female desirability of all times. However, the larger age gap between spouses, the larger disparities between them in terms of one's life stages, health conditions, and shared memories of their times. People who marry early are at heightened risks of marital dissolution than those who tie the knot later (Heaton 2002; Lyngstad and Jalovaara 2010). Younger people tend to be less economically stable and may have yet to figure out their long-term goals in life, and therefore, may eventually grow out of compatibility with the older spouse who has already settled down. Studies have shown that unexpected increases in one partner's earning capacity or relative status during the course of a marriage may elevate their divorce hazards (Tzeng and Mare 1995; Weiss and Willis 1997). The uncertainties of growing out of compatibility is particularly high for age-disparate couples.

Marriages today are increasingly marks of lifetime achievement with high financial thresholds of entrance (Cherlin 2004; Smock, Manning and Porter 2005). As women's economic roles increasingly resemble those of men, studies have shown that men start to emphasize the economic prospects of women when selecting a lifetime partner (Sweeney 2002). Whereas men generally marry several years down in age, as it has always been the norm, I expect the trend across time is that men will try to avoid partners that are too young to be sure of their life prospects and earning capacity, yielding smaller age differences between partners on average when compared to the past.

Hypothesis 1: I anticipate an overall trend of closing the spousal age gaps for men at every age of marriage over marriage cohorts.

From the women's point of view: would women's delay in marriage lead to a thinner pool of potential mates as their age at marriage increases? For instance, if they do not marry until the 30s, do they still have potential marital partners who are of good socioeconomic match and are of similar age too? There are two theoretical reasons to believe "No", at least for today. Oppenheimer's theory of marriage timing (Oppenheimer 1988) points out that women's increasing participation in the labor force not only has impacts on their economic independence with consequently diminishing gains to marriage (Becker 1974), but the gains to marriage are not constant because substantial improvements in women's economic prospects would allow them to keep their standards for the minimally acceptable candidates high, such that they do not need to settle for less-ideal matches. The implications are that they would delay marriage until they have finished educational investments and achieved a stable career. If it is women who wait for the

men to be economically secure before making the marriage decision in the past, then couples nowadays may have to wait for each other to get established before both are ready for marriage.

Hypothesis 2: The resulting spousal age mismatch for women who delay marriage is smaller than it used to be, because the delays in marriage are nowadays mutually impacted by both partners. I hypothesize that, conditioning on women's entry into marriage, women who marry later will not end up with male partners who are too disparate in age.

Hypothesis 3: The narrowing spousal age gaps is explained in part by the higher percentages of remarriages out of all marriages today. Whereas remarriages used to be more common among ever-married men and never-married women, remarriages today are increasingly common among both ever-married partners, who are of more similar ages.

Hypothesis 4: My last hypothesis is about the regional variations in marital age norms. I expect the more favorable a metropolitan area is towards women's marriage delays, the smaller size of the average spousal age difference within that area.

Data and Methods

I use the 2008-2011 pooled cross-sectional data from the census-based American Community Survey (ACS) to test the hypotheses.¹ The analytical sample is stratified by gender, after which the husbands and the wives within households are matched using the household id ("serial"), year of survey ("year"), and the family interrelationship indicators ("pernum" and "sploc"). The merged dataset thus consists of all currently married couples living together. Year of starting a marriage is available for the most recent marriage, and the variable "times married" makes it possible to distinguish first marriages from higher-order marriages, from the wife's as well as from the husband's viewpoint. Therefore, I can separately examine the changing patterns of spousal age difference by four types of marriage orders, including first marriage for both, first marriage for the wife but remarriage for the husband, remarriage for the wife but first marriage for the husband, and remarriage for both. I also examine the average age difference between husband and wife change with respect to husband's/wife's age at marriage, by six marriage cohorts (1928-1959, 1960-1969, 1970-1979, 1980-1989, 1990-1999, and 2000-2011)².

I use regression models to predict spousal age difference (i.e. the dependent variable, husband's age minus wife's age) for both sexes respectively. Individual-level explanatory variables include the husband's and wife's age at marriage, educational attainment of both partners with the interaction between them, race (non-black versus black), dual-career couple or not, women's employment status, wife/husband earnings ratio, and marriage cohort. Contextual variables are collapsed by metropolitan areas. Metropolitan areas are sorted into four-types according to the quartile status of women's average age at first marriage in that area ($\leq 25\%$, $25\%-50\%$, $50\%-$

¹ I exclude the 2012 ACS and 2013 ACS datasets due to the inconsistent definitions of metropolitan areas from earlier years. The ACS datasets are downloaded from the IPUMS website.

² The marriage cohorts are mainly in ten-year intervals, but the number of marriages contracted between 1928(the earliest year available) and 1959 are so few that I decide to categorize them into a single cohort and focus on the five cohorts later.

75%, 75%-100%). Measures of gendered marriageable-age dispersions and prevalence of dual-career couples within metropolitan areas will also be incorporated as proxies for regional marital norms.

I decompose the difference in average spousal age gap across all adjacent cohorts to see the relative contributions to the declines in spousal age gap from first marriages and remarriages respectively, which are further broken down into gap differences and percentage differences. I will make further specifications by the four types of marriage orders. To illustrate:

$$\Delta A_{60-70} = A_{1960} - A_{1970} =$$

$$\begin{aligned} & [(A_{1960,r} - A_{1970,r}) * (\frac{Q_{1960,r} + Q_{1970,r}}{2}) + (Q_{1960,r} - Q_{1970,r}) * (\frac{A_{1960,r} + A_{1970,r}}{2})] \\ & + [(A_{1960,f} - A_{1970,f}) * (\frac{Q_{1960,f} + Q_{1970,f}}{2}) + (Q_{1960,f} - Q_{1970,f}) * (\frac{A_{1960,f} + A_{1970,f}}{2})] \end{aligned}$$

Where $A_{1960,f}$ stands for the average spousal age difference for the marriage cohort 1960-1969, for first marriages only, $Q_{1960,f}$ stands for the percentage of first marriages out of all marriages for the same cohort. (f stands for first marriages; r stands for remarriages; without r/f for all marriages)

Preliminary Findings (Please refer to Figures 1-4)

Hypothesis 1 and 2 are supported, as seen from Figure 1 and Figure 2. We see the evolving spousal age gaps with respect to either sex's life-course perspective, as well as how they change by marriage cohort and by marriage order. From the men's perspective, the positive relationship between the years they marry down and their age at marriage is becoming increasingly flatter across marriage cohorts. For women, marrying in or after their 30s used to be associated with marrying younger men up to the 1980s marriage cohort, but the marital age norm for women nowadays is predominantly marrying slightly older men. Auxiliary analyses by marriage cohorts and by husband's (or: wife's) educational attainment are also performed, but the trends for college graduates and non-college graduates are quite similar and thus not shown here.

For the next steps, I will disentangle the evolving marital age norms by examining different orders of marriage. Figure 3 and Figure 4 give some hints on the importance of distinguishing among his or her first marriages or remarriages. Finally, I will link regional variations in marital age norms to the spousal age gaps for individual couples.

Figure 1. Average Years Husband Older and Men's Age at Marriage (All Marriages)
by Marriage Cohort

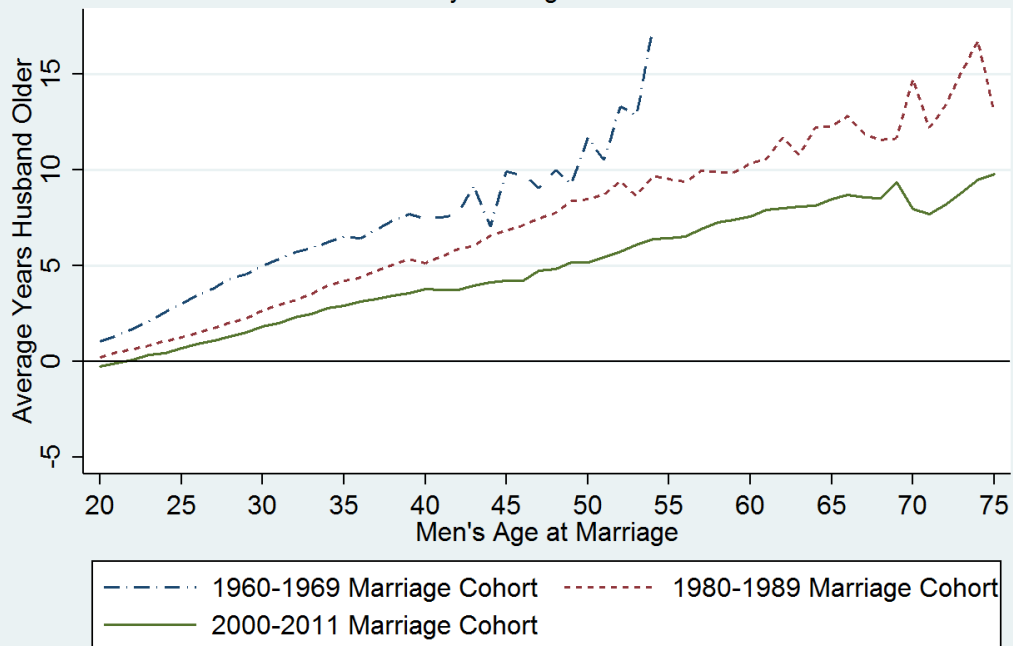


Figure 2. Average Years Husband Older and Women's Age at Marriage (All Marriages)
by Marriage Cohort

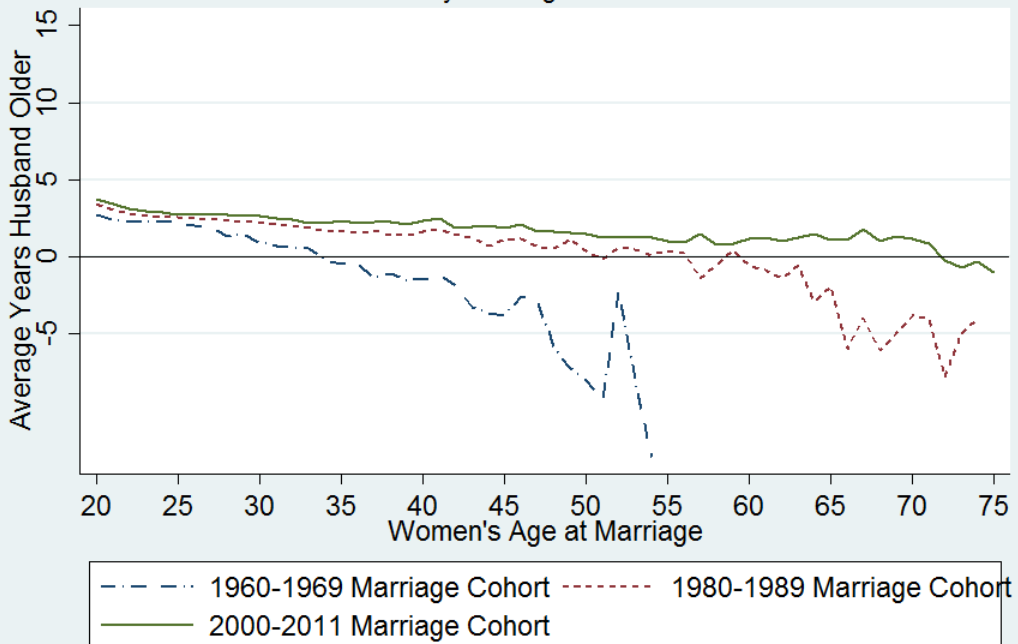


Figure 3. Average Years Husband Older and Men's Age at Marriage:
by Marriage Cohort and Order of Marriage

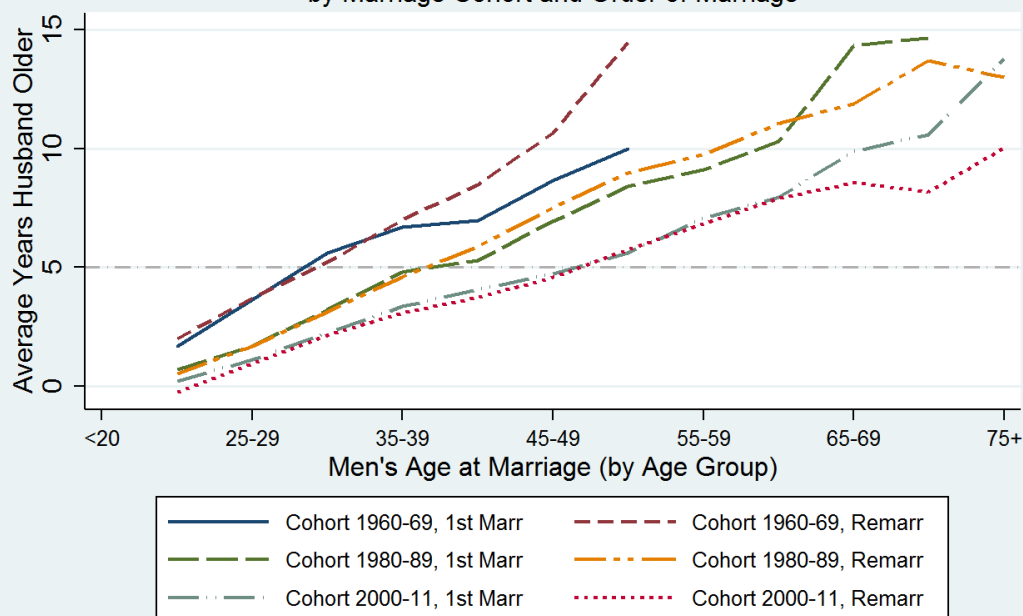
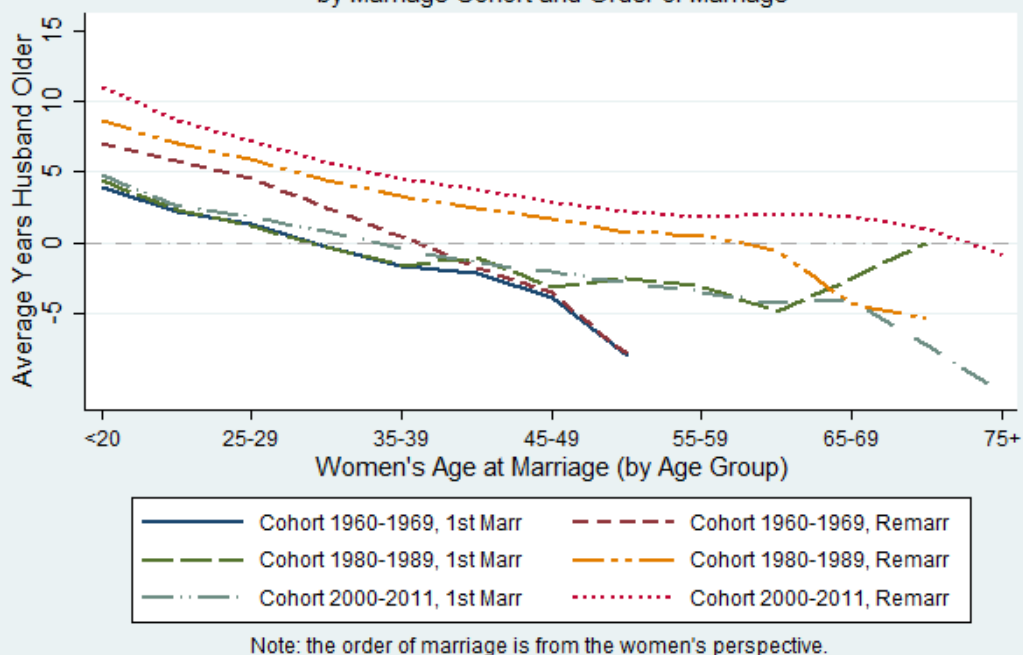


Figure 4. Average Years Husband Older and Women's Age at Marriage
by Marriage Cohort and Order of Marriage



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