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Educational Heterogamy and Relationship Quality: A Couple-Level Analysis

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Abstract

Women in the United States attend and graduate from college at higher rates than men, with the gender gap growing each year. This trend is reflected in married couples' respective levels of education, or educational heterogamy and homogamy. More women today are married to men who have lower rather than higher levels of education than them, which contradicts the traditional breadwinner model in which men are expected to become strong labor force competitors and serve as their families' chief providers. However, little is known about the association between educational heterogamy and relationship quality within a marriage. The present study used the Married and Cohabiting Couples survey to analyze how educational heterogamy and individuals' perceived relationship quality are related at the couple level.

Introduction

As women in the United States continually receive Bachelor's degrees at higher rates than men, an increasing proportion of married women's levels of educational attainment are higher than their husbands'. Among different-gender married couples in the United States in 2012, over one in five (21%) were educationally heterogamous, in which the woman had more education than the man did. This represents a threefold increase since 1960. The difference is even more pronounced among newlywed couples, with 27% of newlywed women marrying men with less education than them, and only 15% of newlywed men marrying a woman with less education (Pew Research Center, 2014). The share of wives with more education than their husbands surpassed that of husbands with more education than their wives six years ago and continues to grow with each cohort of newlyweds, yet little is known about how this growing phenomenon is associated with determinants of relationship quality.

Most common conceptualizations of relationship quality consist of several distinct yet related dimensions, often emphasizing the importance of qualities such as commitment and satisfaction (White & Booth, 1985; Dorsch et al., 1998; Stanley et al., 2017). Prior research has also established the importance of utilizing both positive and negative indicators of relationship quality, as one is not necessarily the inverse of the other (Johnson et al., 1986). In a recent study comparing the relationship quality of married couples to that of cohabiting couples, relationship happiness and relationship disillusionment were used as the positive and negative indicators of relationship quality, respectively (Brown, Manning, & Payne, 2017). Factors often associated with relationship quality include age of individual (King & Scott, 2005), age at marriage (Hardie & Lucas, 2010), race/ethnicity (Bulanda & Brown, 2007), previous marital status (Brown & Booth, 1996), premarital cohabitation (Bumpass & Sweet, 1989), relationship duration (Skinner et al., 2002), household income (Rogers & DeBoer, 2004), individuals' employment statuses (Vannoy & Philliber, 1992), family structure (Skinner et al., 2002), age heterogamy (Brown et al., 2006), and race/ethnicity heterogamy (Hohmann-Marriott & Amato, 2008). In their 2016 study on the international reversal of the gender gap in education, Esteve et al. observe that women's higher share of Bachelor's degrees than men is associated with changes in couples' relationship dynamics. The authors speculate that one potential change could be higher levels of gender equality within the relationship.

Yet, little is known about how this shift in patterns of educational attainment within marriage might influence relationship quality. Do marriages in which the husband has less education than the woman influence levels of relationship happiness? Could level of happiness vary among couples when the educational attainment is heterogamous, regardless of the direction? The goal of the present study is to address these questions by exploring differences in

relationship quality by the educational composition of couples. A key advantage to this study is the use of couple-level data, which enables observations to be made based on the responses of individuals who are married to each other rather than simply individuals in a general cohort of married couples. Comparisons can be drawn between husbands and their wives regarding demographic factors such as age and race, as well as subjective factors such as relationship happiness and relationship disillusionment. Analyses at the couple level allow for a more comprehensive understanding of mating patterns and how characteristics of one partner might relate to or influence those of the other partner, particularly regarding individuals' subjective responses. The use of couple-level data is necessary to measure and associate the husband's and the wife's perceived relationship quality within a marriage.

Data and Methods

This study uses data from the 2010 Married and Cohabiting Couples (MCC) survey, a nationally representative data set which was collected and funded by the National Center for Family & Marriage Research at Bowling Green State University. The data were collected by Knowledge Networks (KN) using both random-digit-dialing and address-based-sampling. The MCC survey includes 752 married couples and 323 cohabiting couples, which is a total of 2,150 individuals aged 18-64. For this study, the analytic sample was restricted to married couples in which the woman was aged 26-50, yielding 467 couples, or 934 individuals. Other works utilizing these data address topics such as variation in relationship quality between married and cohabiting couples, beliefs about spouse's work-family conflict, and relationship quality and knowledge of partner's end-of-life preferences (Brown, Manning, & Payne, 2017; Nomaguchi & Milkie, 2015; Inoue & Moorman, 2015).

There are two dependent variables measuring relationship quality. Following recent work by Brown, et al (2017), the present study uses relationship happiness and relationship disillusionment to assess relationship quality. *Relationship happiness* is based on the question "how would you rate your relationship with your current spouse/partner?" with possible responses ranging from 1 (completely unhappy) to 10 (completely happy). The variable was then recoded to 1 (happy) if the respondent answered 9 or 10 and recoded to 0 (less happy) if the participant's response was less than 9. *Relationship disillusionment* is based on an 11-item scale with questions that address the extent to which respondents view their partner and relationship more positively or negatively over time. Each item's possible responses are on a Likert scale ranging from 1 to 5 with higher scores indicating higher levels of disillusionment. The scale includes statements such as "our relationship has changed for the worse" and "I no longer really like my spouse/partner as a person."

The key independent variable measures educational heterogamy of the couple. The measure for *educational heterogamy* consists of four categories: only the man has a college degree, only the woman has a college degree, both have a college degree, neither have a college degree.

The present study includes women who are between the ages of 26 and 50 at the time of the interview, along with their husbands, regardless of his age. The majority of students who enroll in a Bachelor's program receive a degree within six years (National Center for Education Statistics, 2017), and those who were 26 in 2010 would have graduated from high school in 2004 or 2005, allowing seven or six years, respectively, for those who attended college to graduate before the administration of the survey. Women who were 50 at the time of the survey and who attended college after high school would have been still in college or graduating

from college around 1982, which is the first year in which more women than men received a bachelor's degree in the U.S. (National Center for Education Statistics, 2018).

Seemingly unrelated regression will be used to analyze the data, as this technique takes into account that errors associated with the dependent variables may be correlated due to the couple-level nature of the data. Although relationship happiness and relationship disillusionment are individual-level variables, they may be associated at the couple level through unmeasured factors. The first model will be bivariate, analyzing only the association between educational heterogamy and relationship quality. In the second model, we will add individual-level factors including age, age at marriage, race, and whether the respondent has been married before the current marriage. The final model will include couple-level factors addressing family structure, premarital cohabitation, household income, employment heterogamy, age difference, and racial/ethnic heterogamy.

Preliminary Findings

Table 1 shows the distributions or means for each variable included in the analysis. The average age in the sample is 38, with an average relationship duration of 16 years. Nearly three-quarters of the participants are white, and almost one-fifth of the couples identify as a different race/ethnicity from each other. The most common work arrangement is one in which the husband and wife both work, followed by only the husband working outside of the home. The majority of households only include children who are biologically related to both the husband and the wife, but one-third of households do not include children at all. For nearly one-fifth of women and men, the current marriage is not their first, and over half of the couples cohabited before the current marriage. Close to four out of five couples have equal levels of education, whether both have a college education or neither have a college education. Of those who are educationally heterogamous, it is more common for only the woman to have a college degree.

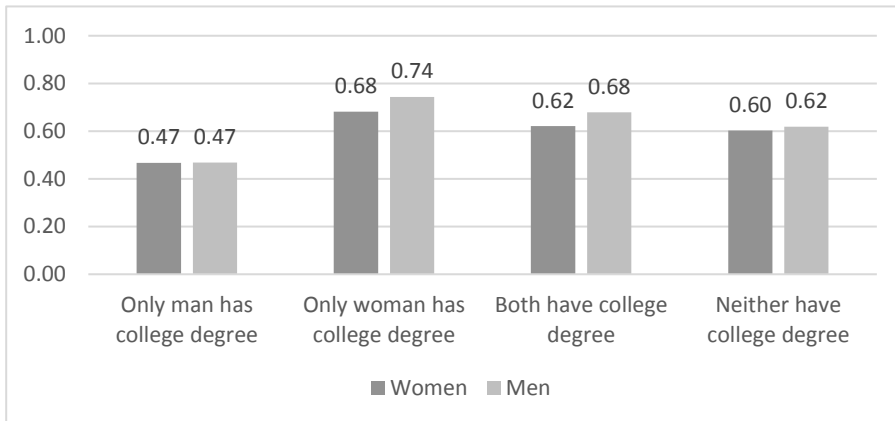
Women's average relationship disillusionment scores are higher than that of men in all categories of educational heterogamy, with the exception of women without a college degree whose husbands do have a college degree (*Figure 2*). The highest average level of relationship disillusionment is observed among women when neither partner has a college degree, and the lowest is observed among men when both partners have a college degree.

Men report higher levels of relationship happiness than women across all four categories of educational heterogamy, with the highest average value (0.74) being reported by men who do not have a college degree but are married to a woman who does have a college degree (*Figure 1*). The highest average value among women is in the same category. The second highest average value of relationship happiness for both genders is seen when both have a college degree. When only the man has a college degree, the average values for men and women are equal at 0.47, which is the lowest average value observed. Future analyses will utilize seemingly unrelated regression to determine the significance of distributions seen in *Figures 1 and 2*.

Table 1. Descriptive Statistics (N = 461 married couples)

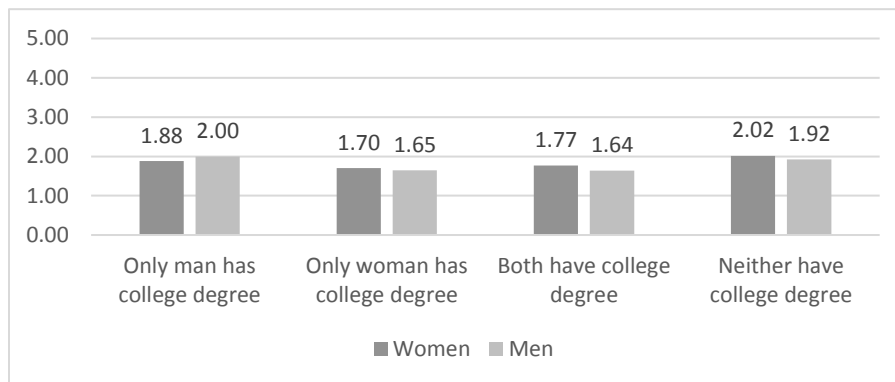
| Variable | Women | Men |
|---|------------|-------|
| Relationship happiness (<i>M</i>) | 0.61 | 0.64 |
| Relationship disillusionment (<i>M</i>) | 1.90 | 1.82 |
| Educational Homogamy | | |
| Only man has college degree | 8.7% | - |
| Only woman has college degree | 12.6% | - |
| Both have college degree | 26.8% | - |
| Neither have college degree | 51.9% | - |
| Individual-level factors | | |
| Age (<i>M</i>) | 38.1 | 39.9 |
| Age when married (<i>M</i>) | 25.3 | 27.4 |
| White | 72.2% | 72.9% |
| Previously married | 17.5% | 18.2% |
| Couple-level factors | | |
| Cohabited before marriage | 55.8% | - |
| Relationship duration (<i>M</i>) | 16.2 | - |
| Children under 18 in household | | |
| Step children present in household | 12.2% | - |
| No children in household | 29.4% | - |
| Biological children only in household | 58.4% | - |
| Household income (<i>M</i>) | \$50-59.9K | - |
| Employment | | |
| Man works, woman does not | 35.7% | - |
| Uncommon work arrangement | 12.7% | - |
| Both working | 51.6% | - |
| Age | | |
| Man older | 22.0% | - |
| Woman older | 13.7% | - |
| Same age | 64.3% | - |
| Different race/ethnicity | 17.0% | - |

Figure 1. Relationship Happiness Among Married Couples in which the Woman is Aged 26-50, by Educational Heterogamy Category



Note: Relationship happiness is based on a 10-point scale from completely unhappy (1) to completely happy (10). Each participant's response was then coded as a 1 if they answered 9 or 10 on the happiness scale, and coded as a 0 if they answered less than 9.

Figure 2. Relationship Disillusionment Among Married Couples in which the Woman is Aged 26-50, by Educational Heterogamy Category



Note: Relationship disillusionment is based on respondents' answers to 11 different questions and coded between 1 and 5 based on the sum of their answers, with 5 being the highest level of disillusionment.

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