Research Article

**Educational and age assortative mating in
China: The importance of marriage order**

Yang Hu

Yue Qian

Contents

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Yang Hu[1]

Yue Qian[2]

Abstract

BACKGROUND
Family change in China is characterized by increasing divorce rates and a growing number of remarriages, like in many Western countries. Assortative mating is a crucial part of the institution of (re)marriage and plays a key role in the (re)production of socioeconomic inequality. However, no research has examined assortative mating in remarriage in China, despite the recent emergence of studies on this topic in Western contexts.

METHOD
Our analysis drew on pooled, nationally representative data from seven waves of the Chinese General Social Survey and China Family Panel Studies between 2010 and 2015 ($N = 49,530$ individuals). We used logistic regression models to examine educational and age assortative mating patterns of people in first and higher-order marriages.

RESULTS
For both men and women, educational homogamy was less likely to occur in remarriages than in first marriages. Holding age at marriage constant, compared with those married to a similarly-aged spouse, men and women married to a spouse who was older than themselves were more likely to be in a remarriage as opposed to a first marriage.

CONCLUSION
Our findings suggest that social norms that encourage status homogamy in first marriages are less salient in configuring assortative mating patterns in remarriages. Thus, remarriage appears to be incompletely institutionalized in China.

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[1] Lancaster University, Lancaster, UK. Email: yang.hu@lancaster.ac.uk.
[2] University of British Columbia, Vancouver, Canada. Email: yue.qian@ubc.ca. Both authors contributed equally to the work and their names are listed alphabetically.

CONTRIBUTION
This is the first study that has compared assortative mating patterns between first-married and remarried people in China. This study highlights the importance of marriage order – as an advantage for the never married and a disadvantage for the previously married – in shaping marital mobility in China.

1. Introduction

Assortative mating, the question of 'who marries whom,' has important implications for the production and reproduction of social inequality (Schwartz 2013). Despite the decline of first marriage and the rise of remarriage in many countries (Cherlin 2004; Raymo et al. 2015; Sweeney 2010; Wang and Zhou 2010), scholarly efforts examining how assortative mating patterns differ between first marriages and remarriages remain limited, apart from a few recent exceptions that focus on Western societies (Choi and Tienda 2017; Gelissen 2004; Qian and Lichter 2018; Shafer 2013a, 2013b). It is widely believed that patterns of assortative mating are conditional on the extent to which (re)marriage is institutionalized and stigmatized (Cherlin 2004; Kalmijn 1998; Qian and Lichter 2018; Qian and Qian 2017; Schwartz 2013). Compared to Western societies, in China the increase in remarriage is recent and remarriage tends to be strongly stigmatized (Hu and To 2018; Ma, Turunen, and Rizzi 2018). Thus, we cannot readily assume that assortative mating in remarriage will operate similarly in China and in Western contexts.

It is pertinent to compare assortative mating in first and higher-order marriages against the backdrop of unfolding demographic transitions in China (Raymo et al. 2015; Wang and Zhou 2010). Annual rates of marriage and divorce (i.e., the number of marriages/divorces per 1,000 population) from 1985 to 2016 are shown in Figure 1. The marriage rate fluctuated in post-reform China and has been in steady decline since 2013. The divorce rate has undergone a nearly eight-fold increase over the same period, from 0.4‰ to 3.0‰. Notably, the divorce rate in today's China is comparable to that in Western countries such as the United States, where the divorce rate was 3.2‰ in 2016 (National Center for Health Statistics 2017). In addition, in 1985 only 3.0% of newly-married people had been married previously, and this figure has increased dramatically, to 16.3% in 2016 (China Statistics Yearbook 2017). Clearly, the decline in first marriage rates and the increase in divorce and remarriage have become the defining features of family change in contemporary China. Comparing assortative mating patterns in first marriages and in remarriages thus promises important new insights into the implications of family change for social stratification.

Figure 1:   **Rates of marriage and divorce in China, 1985–2016**
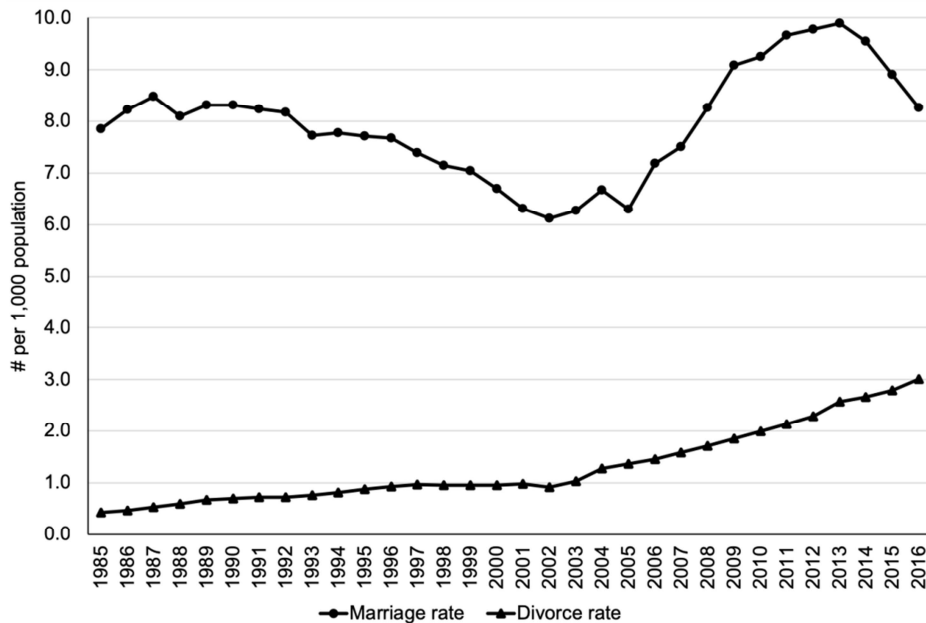
In this study we also aim to demonstrate the value of extending the focus of research on assortative mating to consider relatively understudied dimensions, such as age. Existing research has predominantly examined marital sorting on characteristics such as education, race/ethnicity, and immigrant status, but much less is known about how age may affect assortative mating patterns (for reviews, see Blossfeld 2009; Kalmijn 1998; Schwartz 2013). Since the availability of potential spouses and individuals' marital behavior and strategy change over the life course (Hu and To 2018; Oppenheimer 1988; Rosenfeld and Thomas 2012; Qian and Preston 1993; Qian and Qian 2014), it is important to also consider the role played by age in shaping assortative mating, and how patterns of age pairing differ between first and higher-order marriages.

Analyzing pooled data from multiple waves of the Chinese General Social Survey and China Family Panel Studies between 2010 and 2015, we compared educational and age assortative mating patterns between first and higher-order marriages. The results show that educational homogamy is less likely in remarriages than in first marriages, and remarried individuals are more likely than their first-married counterparts to marry

a spouse older than themselves, for men and women alike. The results suggest that the weaker strength of educational homogamy in remarriage than in first marriage may help mitigate economic inequality arising from marital sorting on education (Hu and Qian 2015). Furthermore, being previously married appears to be a disadvantage in the marriage market, which in turn influences age assortative mating outcomes. The results highlight the importance of marriage order for the study of assortative mating.

2. Background and theoretical considerations

2.1 Remarriage in China

We first provide a brief historical overview of remarriage in China, and then theorize and hypothesize the patterns of assortative mating in remarriage vis-à-vis first marriage. In the feudal and imperial eras, remarriage was mainly formed following widowhood rather than divorce, as women were afforded limited rights to file for divorce (Waltner 1981). Although the then-dominant ideal of female chastity obliged widows to remain faithful to their deceased husbands (Waltner 1981), widows, particularly those from less well-off families, often had to remarry, due to their exclusion from the labor force and lack of inherited assets (Huang 2012).

Following the founding of socialist China in 1949 and the country's economic reforms since 1979, the formation of remarriage has been influenced by broader legal and social contexts. First, the 1950 Marriage Law granted Chinese men and women equal rights to marriage and divorce according to personal will (Chen and Li 2014). Since then, in addition to widowhood, divorce has become another pathway leading to remarriage. Secondly, as the socialist state promulgated gender egalitarianism, women's labor force participation rate increased to more than 90% in the socialist era (World Bank 2018), which enhanced women's economic independence. As a result, women's remarriage may now be driven to a lesser extent by their economic needs than it was in pre-socialist China (Holmgren 1985). However, it is also worth noting that as the state retreated from promoting gender equality in the post-reform era (Ji et al. 2017), the female labor force participation rate declined to 73% in 1990 and down to 61% in 2018 (World Bank 2018). Given the persistent employment and wage disadvantages facing women (Zhang and Hannum 2015), less well-off women may still be more likely to remarry, particularly when they have young children (Hu and To 2018). By contrast, men's socioeconomic resources may bolster their desirability in the remarriage market (Huang 2012). Lastly, the mass expansion of (higher) education since the 1990s has contributed to detraditionalizing public attitudes towards divorce and remarriage (Hu 2016a; Huang 2012). Thus, in post-reform China, educated people,

particularly educated women, are more likely to divorce and remarry (Ma, Turunen, and Rizzi 2018; Wang and Zhou 2010).

Despite the changing context of remarriage described above, certain negative stigmas attached to remarriage remain. For example, Chinese parents still express serious concerns regarding the negative implications of stepfamilies for child well-being (Hu and To 2018). In rural areas the persistent ideal of female chastity still prevents women from remarrying (Huang 2012). Due to the persistence of patrilineal traditions, many Chinese families still strive to ensure that bequests are passed down the family bloodline and kin network (Zhang 2012). This renders the boundary of and entitlement to inheritance a highly contested area in people's remarriage considerations. In light of these sociocultural barriers and stigmas attached to remarriage, marriage order may play an important role in shaping individuals' position and prospects in the Chinese marriage market.

2.2 Theorizing assortative mating

The pattern of assortative mating is shaped by individual preferences as well as structural opportunities and constraints in the marriage market. Individuals seek to maximize their utility as they search for a spouse (Becker 1981). Although individuals may develop personalized preferences for a 'suitable' spouse, such preferences are often informed by the social, economic, and cultural institutions in which the marital institution is embedded (Cherlin 2004; Oppenheimer 1988; Qian and Qian 2014). In the meantime, individuals' chances of realizing their preferences are constrained by structural opportunities that define the pool of potential spouses (Schwartz 2013). Moreover, individual traits, such as marriage order, socioeconomic status, and age, may also represent potential resources or barriers in determining the extent to which people can realize their preferences and maximize their utility in the marriage market (Qian and Lichter 2018).

Chinese people have long upheld the tradition of "marriages of matching doors" (*men dang hu dui*): Parents prefer that their adult children marry someone of a similar socioeconomic status (Hu 2016b; Lui 2016), and such preferences in turn shape adult children's spouse selection, through socialization and parental intervention (Ji 2015; Qian and Qian 2014; Riley 1994). In the past few decades the increasing prevalence of educational homogamy has contributed to growing inter-household earnings inequality in urban China (Hu and Qian 2015). In addition to the strong emphasis on status homogamy, there is also a long-standing tradition of female hypergamy in China, where women marry men of a higher status than themselves (Lui 2016). Prior studies on assortative mating in China have focused almost exclusively on first marriages. The

empirical patterns of educational and age assortative mating are found to align with those traditions that encourage status homogamy and female hypergamy (e.g., Han 2010; Mu and Xie 2014; Qian and Qian 2014). Overall, people tend to marry a similarly-aged and similarly-educated spouse in first marriages (Han 2010; Qian and Qian 2014). When two spouses differ in educational level, husbands are usually more educated than their wives (Qian and Qian 2014). As for age assortative mating, men tend to marry a wife who is younger than themselves, and on average husbands are about two years older than their wives (Mu and Xie 2014; Qian and Qian 2014).

However, the patterns of educational and age assortative mating in remarriage may differ from those in first marriage due to differential marital preferences and opportunities between never-married and previously-married individuals. Cherlin (1978) argues that remarriage is an "incomplete institution" in Western societies: While the formation and organization of first marriage are closely regulated by social conventions that encourage status homogamy, the formation of remarriage may be bound to a lesser extent by established norms. A similar observation may hold true in China, where the increase in the number and visibility of remarriages, particularly after divorce, is a recent phenomenon (Holmgren 1985; Wang and Zhou 2010). Because the marital institution provides no "standard solutions" for how family roles and relations should be organized in remarriages (Cherlin 2004; Sweeney 2010), endorsement of marriages of matching doors – the tradition that emphasizes status homogamy – may be weaker among remarried than first-married people in China.

2.2.1 Educational assortative mating

In contemporary China, education has played an increasingly important role in shaping individual preferences and structural opportunities in mate selection (Han 2010; Qian and Qian 2014). With the reinstatement and expansion of formal schooling and tertiary education following China's 1978 economic reform, education has become a crucial indicator of individuals' social status and human capital (Yeung 2013). Over the past few decades, gender gaps in all levels of education have narrowed (Treiman 2013). Because educational institutions are potential sites for dating and mating, educational homogamy tends to increase with prolonged schooling (Mare 1991). Education also helps homogenize ideological orientation and cultural tastes, which may reinforce preferences for status homogamy (Bruze 2011). Prior research has indeed documented the presence and rise of educational homogamy in first marriages in contemporary China (Han 2010; Qian and Qian 2014, 2017).

We hypothesize that educational homogamy is less likely among remarried than among first-married people (*Hypothesis 1*). Individuals tend to prefer marrying

someone of a similar educational level (Higgins et al. 2002). However, divorced and widowed people, usually concentrated in the later stage of the life course, face a thin market for potential spouses because most people of similar ages are already partnered (Rosenfeld and Thomas 2012: 538). As a result, divorcé(e)s and widow(er)s may have fewer opportunities to fulfill their preferences and often have to cast a wider net when searching for a spouse by relaxing their preferences for educational homogamy (Shafer 2013b). Furthermore, education may be less relevant as a structural condition and a status symbol in the remarriage market than in the first-marriage market. Although educational institutions serve as key match-making sites for the never married, the previously married are less likely to meet their remarriage partners in schools, given the concentration of remarriages in later life stages (Hu and To 2018; Shafer 2013a). Whereas education is often a proxy for long-term economic potential in the first-marriage market, the socioeconomic status of previously-married people is more clearly signaled by their occupation, income, and wealth, rendering education a tangential socioeconomic indicator in the remarriage market (Oppenheimer 1988; Qian 2017).

2.2.2 Age assortative mating

The patterns of age pairing in first and higher-order marriages have received scant scholarly attention (for exceptions, see Gelissen 2004; Qian and Lichter 2018; Shafer 2013a). Unlike socioeconomic resources that confer sought-after status, age is a double-edged sword, representing both an asset and a liability in the marriage market. Especially for men, age is indicative of symbolic status and power in the Chinese family, in which patriarchal norms regulate the distribution of power by individuals' age-cum-sex attributes (Hu 2016a). Since patriarchal traditions oblige men to be the breadwinners and age correlates with the accumulation of economic resources, women tend to marry men who are older than themselves in pursuit of economic stability, especially given the recent resurgence of gender inequality in China's labor market (Mu and Xie 2014; van Poppel et al. 2001). Furthermore, a woman's youth is considered a valuable resource, as the sexualized construction of femininity associates 'youthful looks' with physical attractiveness and fecundity in China and elsewhere (England and McClintock 2009; Ji 2015).

We expect age homogamy to be less likely in remarriages than in first marriages (Hypothesis 2). First, the opportunity structure encourages age homogamy to a greater degree in the first-marriage market than in the remarriage market. The cohort-based organization of education fosters marriages between individuals of a similar age (Smits 2003). Compared with first marriages, the routes through which remarriage partners meet are more diverse (Shafer 2013b), which may contribute to age heterogamy in

remarriages. Second, remarriage opportunities are constrained by the social stigma attached to divorce and widowhood (Hu and To 2018). Because raising someone else's heir is frowned upon in China, children from previous marriages are often viewed as a "heavy burden" and make remarriage more difficult for both genders (Hu and To 2018). Given their weaker bargaining position in the marriage market, divorcé(e)s and widow(er)s may be less able to fulfill their age preferences for mates than the never married. Moreover, divorcé(e)s and widow(er)s may have to draw on additional resources to compensate for their disadvantage in the marriage market. Indeed, marrying a spouse older than oneself is a key compensatory strategy, particularly for women (van Poppel et al. 2001).

3. Methods

3.1 Data and sample

Individual-level data on remarriage is very limited in China. To ensure a sufficient number of remarriages for analysis, we pooled multiple waves of data from two national surveys. Our first data source is the Chinese General Social Survey (CGSS, http://cgss.ruc.edu.cn), a repeated cross-sectional survey conducted by the National Survey Research Center at Renmin University of China. Using a multistage stratified random sampling strategy, the CGSS surveyed one random member aged 18 and above from each household, with response rates of around 72% for the years we used. We used data from the 2010, 2011, 2012, 2013, and 2015 CGSS (N = 11,783, 5,620, 11,765, 11,438 and 10,968, respectively), because they collected information on respondents' marriage order and used the same sampling design.[3] Our second data source is the adult panel from the 2010 and 2012 waves of the China Family Panel Studies (CFPS, http://www.isss.pku.edu.cn/cfps/en),[4] a longitudinal household panel survey newly launched by Peking University (Xie and Hu 2014). Multistage probability-proportional-to-size sampling was used, and the household-level response rate was 81.25% for the 2010 baseline. Although the CFPS is a longitudinal survey, few respondents changed marital status between the two waves. Thus, we used the cross-sectional samples of the 2010 respondents (N = 33,600) and the new respondents in 2012 (N = 9,326).

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[3] We did not use the CGSS data collected before 2010, due to differences in sampling design and sampling frames before and after the 2010 wave of the survey. For further information, please see http://cgss.ruc. edu.cn/index.php?r=index/sample.

[4] The 2014 and 2016 CFPS data were available when this research was conducted. However, we did not include the two waves in our analysis because they did not contain spousal information such as education and age.

To construct our analytical sample, we kept currently married respondents in different-sex marriages[5] ($N = 72,948$) – the only group who provided spousal information. We further restricted our sample based on four criteria: (1) respondents were born after the founding of the People's Republic of China (i.e., 1950 or later), which means that the upper age limit of our sample was 65 years, thereby minimizing mortality selection bias; (2) respondents were born before 1991, because no respondent born after 1990 was in a remarriage at the time of the survey; (3) respondents entered their current marriage after 1978 (i.e., post-reform marriage cohort), because of the small number of remarriages contracted before 1979; and (4) both spouses were aged 16 years and older when they entered the current marriage. After excluding 246 respondents with missing information on the variables used in the analysis, we obtained a final analytical sample of 49,530 respondents ($N = 28,347$ for CGSS and 21,183 for CFPS).

3.2 Dependent variable

Our dependent variable is marriage order – a binary variable distinguishing first (reference category) and higher-order marriages. Unfortunately, our data did not contain information on whether the respondents' spouses were in their first or higher-order marriages. Thus, our classification of 'first marriage' and 'remarriage' was based on the respondents' marriage order, irrespective of their spouses' marriage order. Since mixed-order marriage contains only one remarried spouse, remarriage was under-represented in our sample. Furthermore, not knowing both spouses' marriage order means that our analysis can only be conducted and interpreted at the individual rather than couple level, an approach we take in the current study. Admittedly, not being able to capture mixed-order marriages is a major limitation of our analysis, and our results should be cautiously interpreted in relation to this limitation, which we discuss in greater detail in the conclusion section.

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[5] Our analysis did not include individuals in unmarried cohabiting relationships because they did not provide information on their partners in the CFPS. According to the analysis conducted by Yu and Xie (2015: 616) using the 2010 and 2012 CFPS data, 8.1% of adult men and 6.2% of adult women were in an unmarried cohabiting relationship at the time of survey. It is also worth noting that in China unmarried cohabitation is still largely practiced as a prelude to, rather than a substitute for, marriage (Yu and Xie 2015).

3.3 Key predictors

3.3.1 Educational assortative mating

In the surveys, married respondents were asked about their own and their spouses' educational attainment at the time of survey – a good proxy for education at the time of marriage, because only rarely do Chinese people pursue further formal education after getting married (Treiman 2013). The responses were recoded into four categories: (1) primary school or below, (2) junior high school, (3) senior high school, and (4) college or above (including vocational college [*da zhuan*], four-year university, and advanced degrees). We did not further distinguish university graduates from vocational college graduates due to small sample sizes.

Based on own and spouse's educational levels, we devised two sets of variables to measure educational assortative mating. First, a series of dummy variables was created to measure educational homogamy (two spouses having the same level of education), hypergamy (wives having a lower level of education than their husbands), and hypogamy (wives having a higher level of education than their husbands),[6] respectively. Secondly, because the odds of marriage may differ depending on how far apart the educational levels of the spouses are (Qian 1997), we calculated an educational distance measure as the absolute value of difference in educational levels between the respondents and their spouses. Following Schwartz and Han (2014, Note 8 on page 626), the educational distance measure ranged between 1 and 3 if two spouses differed in their educational levels, whereas for educationally homogamous couples the distance measure was coded as 1 (instead of 0).[7]

3.3.2 Age assortative mating

To measure age assortative mating, we calculated husband–wife age gap based on respondents' and their spouses' year of birth and respondents' gender. Following Verbakel and Kalmijn (2014), we grouped the husband–wife age gap, which ranged

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[6] Following prior literature (e.g., Esteve et al. 2016; Mare 1991; Qian 2017; Schwartz and Mare 2005), we define hypergamy and hypogamy from women's perspective, without adding 'female' as a qualification, for the sake of simplicity. That is, if women marry up in education/age, it is referred to as 'educational/age hypergamy;' if women marry down in education/age, it is referred to as 'educational/age hypogamy.'

[7] Because educational homogamy was already captured by a separate dummy variable, coding educational homogamy using a unique value (i.e., 0) in the educational distance measure and including it together with the homogamy dummy in a model would lead to multicollinearity. Therefore, following Schwartz and Han (2014), we coded educational homogamy as 1 in the educational distance measure before including the distance measure alongside the educational homogamy dummy in our models.

between –34 and 34, into five categories to capture age hypogamy, homogamy, and hypergamy: (1) husband younger than wife by 3 or more years ([–34, –3]), (2) husband–wife age difference within 2 years ([–2, 2], reference), (3) husband older than wife by 3 to 5 years ([3, 5]), (4) husband older than wife by 6 to 10 years ([6, 10]), and (5) husband older than wife by 11 or more years ([11, 34]). Among the respondents in the category of –34 to –3 (husband younger than wife by 3 or more years; age hypogamy), 55% had a husband–wife age gap of –3 years, and another 23% and 9%, respectively, had an age gap of –4 and –5 years, whereas the husband–wife gap of –34 represented only one extreme case in our sample. Due to the small number of cases in which the husband was younger than the wife by 3 to 34 years, we did not make any further distinction within this group in order to ensure an adequate cell size for statistical modeling. As a robustness check, we experimented with alternative classifications of husband–wife age gaps (i.e., [–34, –2], [–1, 1], [2, 4], [5, 34] following Lamidi, Brown, and Manning 2015), and obtained substantively the same results as those reported in this article.

Although in some prior research, scholars classified spouses' ages into 5-year intervals and modeled the cross-tabulation of spouses' age categories to examine age assortative mating (e.g., Gelissen 2004; Qian and Qian 2014; Schwartz and Graf 2009), we chose to directly measure the absolute level of spousal age gap. We did so because 75% of the respondents had a husband–wife age gap between –3 and 3 years, which means that using age intervals would substantially increase the misclassification rate of age pairing.

3.4 Control variables

We included several control variables in our models.[8] We controlled for respondents' and their spouses' educational levels (Hou and Myles 2013). As individuals' marital preferences and opportunities may change over the life course (England and McClintock 2009; Qian and Preston 1993), we controlled for respondents' age at current marriage, which was calculated based on respondents' year of current marriage and year of birth. To account for social changes since China's 1978 economic reform,

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[8] Although the presence of children is found to shape men's and women's remarriage prospects and status mobility in the remarriage market (Hu and To 2018; Qian and Lichter 2018), children are seldom present to influence the formation of first marriages due to the very low level of nonmarital childbearing in China (Raymo et al. 2015). For example, Hu and To (2018) found that after divorce, Chinese women with school-age and adult children were less likely to remarry, whereas Chinese men with pre-school children were more likely to remarry. However, the CGSS does not contain information on whether children were born with the current or previous spouse. The data limitation prevented us from controlling for the presence of children in our analysis.

we measured the time period of respondents' current marriage using four categories: 1979–1989 (reference), 1990–1999, 2000–2009, and 2010–2015. We also included a dummy variable distinguishing urban (1) and rural (0) residence, which was based on whether a given respondent resided in an area that fell under the jurisdiction of an urban neighborhood committee or a rural village committee at the time of survey. Lastly, we controlled for the combination of data source and survey year (referred to as data source hereafter for brevity) using seven dummy variables: 2010 CGSS (reference), 2011 CGSS, 2012 CGSS, 2013 CGSS, 2015 CGSS, 2010 CFPS, and 2012 CFPS.

3.5 Analytical strategy

Table 1 presents the statistical techniques that have been used to model assortative mating patterns, namely log-linear models and binary or multinomial logistic regression models. In the latter, depending on their research questions, researchers have distinctly used assortative mating as the dependent or independent variable. As detailed in Table 1, while researchers often used log-linear models to examine patterns of educational and age assortative mating (e.g., Han 2010; Qian and Qian 2014, 2017), control variables cannot be easily incorporated and interpreted in log-linear models (Hou and Myles 2013; Rosenfeld 2005; Schwartz and Graf 2009). The need to incorporate control variables in our analysis, particularly continuous ones, encouraged us to choose logistic regression models over log-linear models. This choice was also informed by the fact that log-linear models assume couple-dyads as the unit of analysis; yet, as discussed earlier, being unable to measure mixed-order marriage means that our analysis should necessarily take place at the individual level. Furthermore, as we aimed to simultaneously model educational and age assortative mating, we included educational and age assortative mating as independent variables in our models, following the precedents of Hou and Myles (2013) and Schwartz and Graf (2009). Marriage order was thus included as the dependent variable, and logistic regression models were used for our analysis.

Table 1:   **A summary of statistical techniques for the analysis of assortative mating**

Models	Strengths	Limitations	Examples
Log-linear model	Widely used to examine assortative mating patterns; Controls for marginal distributions of spouses' attributes.	"Inscrutable complexity" (Rosenfeld 2005: 1287); The inclusion of different orders of interaction terms renders parameter interpretation difficult (Hou and Myles 2013); Classification of continuous variables into categories may be arbitrary (Rosenfeld 2005).	Schwartz and Mare (2005): examining trends in educational assortative mating in the United States; Han (2010): examining trends in educational assortative mating in China; Qian (2017): examining trends in educational and income assortative mating in the United States.
Binary / Multinomial Logit model, using types of marriage as the dependent variable(s)	Ease of interpreting parameter (Hou and Myles 2013); Ease of incorporating control variables (Hou and Myles 2013).	Only applicable to examining differences in assortative mating across couple types.	Hou and Myles (2013), Schwartz and Graf (2009): predicting couple type as a function of partners' attributes and assortative mating. Jepsen and Jepsen (2002): predicting same-sex vs. different-sex couple type as a function of partners' assortative mating.
Binary / Multinomial Logit model, using assortative mating as the dependent variable(s)	Ease of interpreting parameter (Hou and Myles 2013); Ease of incorporating control variables (Hou and Myles 2013).	Usually only applicable to examining assortative mating on one characteristic (e.g., age or education).	Raymo and Iwasawa (2008): using pregnancy status at marriage to predict educational assortative mating (i.e., hypogamy, homogamy, and hypergamy).

Our models predicted the relative likelihood of an individual being in a remarriage as opposed to a first marriage (the reference category) conditional on the key predictors and control variables. The models were built in four steps. In Model 1 we included all the control variables and the single indicator for educational homogamy. In Model 2, to provide a more nuanced distinction within educational heterogamy, we distinguished educational homogamy, hypogamy, and hypergamy, and also included the educational distance measure. Expanding on Models 1 and 2, respectively, Models 3 and 4 further included the dummy variables indicating the husband–wife age gap.[9] As it was possible for multiple CFPS individual respondents to live in the same household, we estimated cluster-robust standard errors to account for within-household correlation (Cameron and Miller 2015). Furthermore, we conducted the variance-inflation-factor (VIF) test to ensure that the issue of multicollinearity did not affect the results of our key variables.

Separate models were fitted for men (Models A) and women (Models B). Gender differences in assortative mating patterns are well documented in research on first marriage (Gelissen 2004; Qian 2017; Qian and Qian 2014) and have also begun to be noted in recent studies on remarriage (Qian and Lichter 2018; Shafer 2013a). While the

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[9] Early in our data analysis, we also explored the possible exchange between educational and age assortative mating by including the interaction terms between the two in our models. Because including the interaction terms did not improve the overall model fit, we excluded them from the final analysis reported in this article.

"incompleteness" of institutionalized rules (Cherlin 2014), presence of social stigmas (Hu and To 2018; Qian and Lichter 2018), and structural constraints (Shafer 2013a, 2013b) have often been cited to explain why homogamous unions are less likely in higher-order marriages than in first marriages, it remains unclear whether and how these factors may affect women and men in different ways. Due to a lack of theoretical and empirical research comparing the role of marriage order in shaping women's assortative mating vis-à-vis that of men, we were unable to systematically develop a hypothesis; rather, we treat gender difference as an open empirical question by modeling men and women separately.

4. Results

4.1 Descriptive statistics

Table 2 presents the descriptive statistics by the respondents' gender and marriage order. The percentages of men and women who had the same level of education as their spouses were higher in first marriages than in remarriages (men: 54.29% vs. 48.48%; women: 55.65% vs. 54.27%). In line with previous research (Qian and Qian 2014), educational hypergamy was more prevalent than educational hypogamy in China. Additionally, both men and women in remarriages were less educated than their counterparts in first marriages. This is not surprising as remarried people tend to be older than first-married people and China's mass expansion of education was relatively recent (Treiman 2013). Although the descriptive results are in line with Hypothesis 1 in that educational homogamy was less common in remarriages than in first marriages, it is important to examine educational assortative mating net of the distributions of spouses' education and other control variables (Hou and Myles 2013; Kalmijn 2010).

Table 2: **Descriptive statistics for variables used in the analysis, by marriage order and gender**

Parameter	Men		Women	
	First marriage	Remarriage	First marriage	Remarriage
Spouses' relative education [a]				
Educational hypergamy (%)	32.19	32.94	29.68	27.93
Educational homogamy (%)	54.29	48.48	55.65	54.27
Educational hypogamy (%)	13.52	18.58	14.67	17.80
Educational distance between spouses [b]	1.18	1.24	1.18	1.18
	(0.42)	(0.47)	(0.41)	(0.42)

Table 2:   (Continued)

Parameter	Men		Women	
	First marriage	**Remarriage**	**First marriage**	**Remarriage**
Husband–wife age gap categories (%) [c]				
[–34, –3]	3.55	5.91	3.35	12.59
[–2, 2]	62.65	33.11	62.59	35.60
[3, 5]	24.25	19.09	24.12	21.71
[6, 10]	8.38	25.17	8.49	19.39
[11, 34]	1.17	16.72	1.45	10.71
Husband's education (%)				
< Junior high school	25.19	29.39	25.89	40.23
Junior high school	38.93	35.81	39.65	37.05
High school	21.25	23.82	20.39	14.91
College or above	14.63	10.98	14.07	7.81
Wife's education (%)				
< Junior high school	37.82	37.50	37.37	47.90
Junior high school	33.75	33.95	33.61	31.84
High school	17.12	19.26	16.98	14.62
College or above	11.30	9.29	12.03	5.64
Age at marriage	24.76	37.40	22.91	35.58
	(3.72)	(8.63)	(3.14)	(7.80)
Year of marriage (%)				
1979–1989	39.91	9.12	38.65	9.12
1990–1999	30.34	23.31	30.81	27.35
2000–2009	24.52	52.03	25.39	49.20
2010–2015	5.23	15.54	5.14	14.33
Urban residence (%)	54.89	64.86	55.07	54.27
N (individuals)	23,319	592	24,928	691

Note: [a] Educational hypergamy is marriage in which the husband is more educated than the wife. Educational homogamy is marriage in which two spouses share the same educational level. Educational hypogamy is marriage in which the wife is more educated than the husband. [b] This variable, ranging from 1 to 3, indicates the absolute value of the difference between spouses' education categories for those with different levels of education (see Schwartz and Han 2014: Note 8 on p. 626 for the same coding strategy). [c] Age gap was calculated by subtracting wife's age from husband's age. Standard deviations are in parentheses.
N = 49,530 [*N* (2010 CGSS) = 6,680; *N* (2011 CGSS) = 3,153; *N* (2012 CGSS) = 6,553; *N* (2013 CGSS) = 6,352; *N* (2015 CGSS) = 5,609; *N* (2010 CFPS) = 17,612; *N* (2012 CFPS) = 3,571].

On average, remarried men were 4.79 years older than their wives, and the corresponding age gap for first-married men was much smaller – only 1.82 years ($t = 23.38$, $p < .001$). Similarly, on average, remarried and first-married women were younger than husbands by 3.27 years and 1.89 years, respectively ($t = 11.35$, $p < .001$). After recoding the husband–wife age gap measure into five categories, we found that consistent with Hypothesis 2, the percentage of age homogamy (i.e., [–2, 2]) was much higher in first marriages than in remarriages, for both men (62.65% vs. 33.11%) and women (62.59% vs. 35.60%). By contrast, large spousal age gaps were more prevalent in higher-order marriages than in first marriages. For example, the proportion of remarried men who were older than their wives by 11 to 34 years (16.72%) was 14.3 times larger than that of first-married men (1.17%), and the proportion of remarried

women who were younger than their husbands by 11 to 34 years (10.71%) was 7.4 times larger than that of first-married women (1.45%).

Our results also confirm that first marriages and remarriages tended to take place at different life-course stages. For men, the average age at first marriage was around 24.8 years, whereas the mean age at remarriage was 37.4 years. Women's mean ages at first marriage and remarriage were 22.9 years and 35.6 years, respectively. As spousal age gap may vary by marital timing (England and McClintock 2009), it is crucial to control for age at marriage in order to estimate the net association between marriage order and spousal age gap.

4.2 Results of logistic regression models

Table 3 presents the results of logistic regression models estimating the relationships between marriage order and assortative mating on education and age. For model fit statistics, a less negative value of log-likelihood (LL) indicates a better model fit. The Akaike information criterion (AIC) penalizes the inclusion of "free parameters" that make little or no contribution to the overall model fit (Raftery 1986). A smaller value of AIC indicates a better and more parsimonious model fit.

Table 3: Logistic regression models predicting the log-odds of being remarried, by gender

Select parameter	Men (N = 23,911)				Women (N = 25,619)			
	M1A	M2A	M3A	M4A	M1B	M2B	M3B	M4B
Education homogamy	−0.17		−0.18		−0.29*		−0.28*	
	(0.11)		(0.11)		(0.12)		(0.12)	
Spouses' relative education[a] (ref.: Educational hypergamy)								
Educational homogamy		−0.60*		−0.59*		−0.34		−0.35
		(0.24)		(0.24)		(0.27)		(0.30)
Educational hypogamy		−1.11*		−1.05*		−0.16		−0.13
		(0.45)		(0.44)		(0.49)		(0.55)
Educational distance between spouses		0.50**		0.49**		0.14		0.01
		(0.17)		(0.17)		(0.19)		(0.22)
Husband–wife age gap categories (ref.: [−2, 2])								
[−34, −3]			0.94***	0.92***			−0.16	−0.16
			(0.26)	(0.26)			(0.22)	(0.22)
[3, 5]			−0.21	−0.21			0.77***	0.77***
			(0.14)	(0.14)			(0.15)	(0.15)
[6, 10]			0.06	0.05			1.37***	1.37***
			(0.15)	(0.15)			(0.17)	(0.17)
[11, 34]			−0.16	−0.16			2.18***	2.18***
			(0.23)	(0.23)			(0.30)	(0.30)

Table 3:   **(Continued)**

Select parameter	Men (*N* = 23,911)				Women (*N* = 25,619)			
	M1A	M2A	M3A	M4A	M1B	M2B	M3B	M4B
Husband's education (ref.: < Junior high school)								
Junior high school	–0.04	–0.46*	–0.01	–0.40	–0.23	–0.29	–0.14	–0.19
	(0.16)	(0.22)	(0.16)	(0.22)	(0.14)	(0.26)	(0.15)	(0.28)
High school	–0.20	–1.03**	–0.15	–0.94**	–0.70***	–0.83*	–0.75***	–0.85
	(0.18)	(0.36)	(0.18)	(0.36)	(0.20)	(0.42)	(0.21)	(0.48)
College or above	–0.63**	–1.89***	–0.59*	–1.78***	–0.72**	–0.92	–0.74**	–0.88
	(0.25)	(0.52)	(0.25)	(0.51)	(0.24)	(0.58)	(0.26)	(0.68)
Wife's education (ref.: < Junior high school)								
Junior high school	0.07	0.54*	0.09	0.55*	–0.11	–0.03	–0.03	0.03
	(0.14)	(0.22)	(0.15)	(0.22)	(0.14)	(0.25)	(0.14)	(0.29)
High school	0.00	0.87*	0.03	0.85*	–0.67***	–0.54	–0.61**	–0.51
	(0.17)	(0.35)	(0.17)	(0.35)	(0.20)	(0.42)	(0.21)	(0.48)
College or above	–0.50	0.70	–0.46	0.67	–1.11***	–0.93	–1.06***	–0.92
	(0.26)	(0.52)	(0.26)	(0.51)	(0.27)	(0.59)	(0.29)	(0.69)
Age at marriage	0.29***	0.29***	0.29***	0.29***	0.43***	0.43***	0.43***	0.43***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)
Year of marriage (ref.: 1979–1989)								
1990–1999	0.69***	0.70***	0.68***	0.68***	0.93***	0.93***	0.88***	0.88***
	(0.17)	(0.17)	(0.18)	(0.18)	(0.17)	(0.17)	(0.17)	(0.17)
2000–2009	1.07***	1.07***	1.06***	1.06***	1.07***	1.07***	0.94***	0.94***
	(0.17)	(0.17)	(0.17)	(0.17)	(0.16)	(0.16)	(0.17)	(0.17)
2010–2015	1.18***	1.19***	1.14***	1.15***	1.01***	1.01***	0.91***	0.91**
	(0.24)	(0.24)	(0.24)	(0.24)	(0.27)	(0.27)	(0.28)	(0.28)
Urban residence (ref.: rural)	0.23	0.23	0.22	0.22	–0.38**	–0.38**	–0.51***	–0.51***
	(0.13)	(0.13)	(0.13)	(0.13)	(0.14)	(0.14)	(0.14)	(0.14)
Constant	–12.79***	–12.91***	–12.85***	–12.99***	–15.37***	–15.45***	–15.93***	–15.87***
	(0.38)	(0.47)	(0.40)	(0.48)	(0.48)	(0.56)	(0.49)	(0.58)
AIC [3,204.3/2,833.6]	3,203.9	3,195.6	3,192.5	3,184.9	2,829.8	2,833.3	2,707.8	2,711.7
LL [–1,584.1/–1,398.8]	–1,582.9	–1,576.8	–1,573.3	–1,567.5	–1,395.9	–1,395.7	–1,330.9	–1,330.9

Note: [a] Educational hypergamy is marriage in which the husband is more educated than the wife. Educational homogamy is marriage in which two spouses share the same educational level. Educational hypogamy is marriage in which the wife is more educated than the husband. ref. = reference group. AIC = Akaike information criterion. LL = Log-likelihood. AIC and LL in brackets indicate the indices for models with only control variables for men and women, respectively. Robust standard errors are in parentheses. All models controlled for data source; we do not present their coefficients here, but full models are available in the replication files.
*** $p < .001$. ** $p < .01$. * $p < .05$.

Models 1A, 2A, 1B, and 2B examined educational assortative mating for men and women. We found that adding a single educational homogamy indicator (M1B) to the model that only included control variables improved the model fit for women (ΔAIC = –3.8; likelihood ratio [LR] $\chi^2(1)$ = 5.76, $p < .05$), whereas adding the educational homogamy, hypogamy, and distance parameters (M2A) improved the model fit for men (ΔAIC = –8.7; LR $\chi^2(3)$ = 14.74, $p < .01$). The results indicated that educational assortative mating patterns differed by marriage order for both men and women.

While model selection was not our main focus, our two specifications of educational assortative mating – one using a single homogamy indicator and the other using the homogamy and hypogamy dummies and a distance measure – supported Hypothesis 1 in indicating that the degree to which individuals married outside their own educational groups was higher in higher-order marriages than in first marriages. In Model 1A the results showed that compared with men in an educationally heterogamous marriage, men in an educationally homogamous union were 15.6% (1 – exp(–0.17)) less likely to be in a remarriage than in a first marriage, although the coefficient was not statistically significant at the 5% level. The results of Model 2A support Hypothesis 1: Compared with men who married a less-educated wife than themselves (i.e., educational hypergamy), men who married a similarly-educated wife were 45.1% (1 – exp(–0.60)) less likely to be in a remarriage than in a first marriage (p < .05). This is consistent with the results for the educational distance parameter: The larger the distance between the husband's and wife's educational levels, the more likely that the men were in a remarriage as opposed to a first marriage (b = 0.50, p < .01). Additionally, in Model 2A the result for the education hypogamy parameter indicates that remarried men were less likely than their first-married counterparts to marry up in education: Compared with men who married a less-educated wife than themselves, men who married a more-educated wife were 67.0% (1 – exp(–1.11)) less likely to be in a remarriage than in a first marriage (p < .05).

The results of Model 1B showed that compared with women in an educationally heterogamous marriage, women in an educationally homogamous union were 25.2% (1 – exp(–0.29)) less likely to be in a remarriage than in a first marriage (p < .05). In Model 2B, the results based on the detailed educational homogamy, hypergamy, hypogamy, and distance parameters indicated that compared with women who married a more-educated husband than themselves (i.e., hypergamy), women who married a similarly-educated husband (i.e., homogamy) or a less-educated husband (i.e., hypogamy) were both less likely to be in a remarriage than in a first marriage, although the coefficients were not statistically significant at the 5% level. Consistent with the results for men, the coefficient for women's educational distance variable, though not statistically significant, showed that the distance between two spouses' education was positively associated with women's odds of being in a remarriage.

In Models 3 and 4, adding age assortative mating measures further improved the model fit for men (Models 3A vs. 1A: ΔAIC = –11.4; LR χ^2(4) = 19.35, p < .001) and particularly for women (Models 3B vs. 1B: ΔAIC = –122.0; LR χ^2(4) = 130.03, p < .001). The results suggest that women's marital sorting on age is more sensitive to marriage order than that of men.

The results of age assortative mating parameters consistently lent support to Hypothesis 2, that age homogamy was less prevalent in remarriages than in first

marriages. Compared with men married to a similarly-aged spouse (i.e., a husband–wife age gap between –2 and 2), men married to a wife who was older than themselves by 3–34 years were 2.6 times more likely to be in a remarriage than in a first marriage (Model 3A: exp(0.94), $p < .001$; Model 4A: 2.5 times = exp(0.92), $p < .001$). Similarly, compared with women married to a similarly-aged husband, women married to a husband who was older than themselves were more likely to be in a remarriage as opposed to a first marriage. Specifically, in Models 3B and 4B, compared with women married to a husband within a 2-year age difference, women married to a husband who was older than themselves by 3–5 years, 6–10 years, and 11 years or more were 2.2 times (exp(0.77)), 3.9 times (exp(1.37)), and 8.8 times (exp(2.18)) more likely, respectively, to be in a remarriage as opposed to a first marriage (for all three, $p < .001$).[10]

Recall that according to Table 2, compared with first-married individuals, both the percentage marrying a spouse older than oneself and the percentage marrying a spouse younger than oneself were higher among remarried individuals. The results from our logistic regression models in Table 3, however, showed that the stronger presence of age heterogamy in higher-order marriages than in first marriages was driven by the tendency for remarried individuals (regardless of gender) to marry someone older than themselves. The discrepant findings were largely due to the inclusion of age at current marriage in our regression models. This is because individuals, particularly men, tend to marry further down in age (i.e., marry a much younger spouse than themselves) when they marry at later ages (England and McClintock 2009) and remarriages tend to take place much later in life than first marriages (as shown in Table 2). Indeed, our additional regression analysis presented in Table 4, which excluded the age at marriage variable, yielded similar findings to the descriptive results in Table 2. Therefore, our analysis indicates that when we compare first-married and remarried individuals who entered their current marriage at the same age, the latter, irrespective of gender, are consistently more likely to marry someone older than themselves. This underlines the importance of examining age assortative mating net of age at marriage.

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[10] In Table 3, although it is not the focus of this study, the coefficients for marriage cohorts revealed an increase in the odds of remarriage vis-à-vis first marriage across the marriage cohorts from 1979–1989 to 2010–2015. This result is consistent with national statistics on remarriage rates in China (cf. Figure 1).

Table 4: **Select parameters from logistic regression models predicting the log-odds of being remarried, without controlling for age at current marriage, by gender**

Select parameter	Men (*N* = 23,911)		Women (*N* = 25,619)	
	M3C	M4C	M3D	M4D
Educational homogamy	–0.28**		–0.23**	
	(0.09)		(0.08)	
Spouses' relative education (ref.: hypergamy)				
Educational homogamy		–0.51**		–0.21
		(0.19)		(0.22)
Educational hypogamy		–0.64		–0.01
		(0.37)		(0.41)
Educational distance between spouses		0.43**		0.14
		(0.14)		(0.16)
Husband–wife age gap categories (ref.: [–2, 2])				
[–34, –3]	1.16***	1.14***	1.67***	1.67***
	(0.19)	(0.19)	(0.13)	(0.13)
[3, 5]	0.30*	0.29*	0.38***	0.38***
	(0.12)	(0.12)	(0.11)	(0.11)
[6, 10]	1.54***	1.52***	1.21***	1.21***
	(0.12)	(0.12)	(0.11)	(0.11)
[11, 34]	2.94***	2.93***	2.27***	2.27***
	(0.16)	(0.16)	(0.16)	(0.16)

Note: ref. = reference group. Models controlled for all the control variables listed in Tables 2 and 3 as well as data source, except for age at current marriage. Robust standard errors are in parentheses.
*** $p < .001$. ** $p < .01$. * $p < .05$.

5. Discussion

The rapid and sizable increase in the number of remarriages has become a key feature of family and demographic changes in contemporary China (Raymo et al. 2015; Wang and Zhou 2010). However, little is known about assortative mating patterns in remarriage or how the patterns may differ from those observed in first marriage, apart from a few recent studies that focus on Western contexts (Choi and Tienda 2017; Gelissen 2004; Qian and Lichter 2018; Shafer 2013a, 2013b). As a result, a number of important questions are left unanswered. In China, is remarriage an "incomplete" institution (Cherlin 1978, 2004), which is regulated to a lesser extent by the norms that encourage homogamous pairings, such as "marriages of matching doors" (Hu 2016b; Ji 2015; Lui 2016)? If a lack of marital mobility reinforces socioeconomic inequality (Schwartz 2013), does assortative mating in remarriage help mitigate social inequality by reducing social boundaries, or exacerbate inequality by reinforcing socioeconomic segregation? Analyzing up-to-date data from nationally representative surveys in China,

we attempted to shed light on these questions by comparing patterns of educational and age assortative mating between first and higher-order marriages.

We found that in China, educational homogamy and age homogamy were less prevalent in remarriages than in first marriages. This finding is consistent with prior research on Western countries (Qian and Lichter 2018; Shafer 2013a, 2013b; Shehan et al. 1991), despite contextual and cultural differences between China and Western societies (Raymo et al. 2015). Although Cherlin's argument (1978, 2004) that remarriage is an "incomplete" institution applies mainly to differential behaviors and family interactions within first marriages and remarriages, our findings complement his argument by showing that remarriage is also incompletely institutionalized because the norms and conventions that encourage status homogamy in first marriage are less salient in configuring assortative mating patterns in remarriage. Additionally, we demonstrate that the differential assortative mating patterns by marriage order also differ between the education and age dimensions. While the pattern of educational pairing was more heterogeneous in remarriages than in first marriages, people were consistently more likely to marry a spouse older than themselves in remarriages than in first marriages. Thus, the results underscore the importance of considering assortative mating as plural processes in which the process of matching operates along multiple dimensions.

Specifically, for educational assortative mating our results suggest that education and individual life course (i.e., marital timing and marital history) jointly shape assortative mating patterns in first and higher-order marriages. As many previously-married people tend to be older than their never-married counterparts, it is less likely that the former met their remarriage partners in schools (Mare 1991). Whilst education signifies long-term economic potential in the first-marriage market (Oppenheimer 1988), in the remarriage market individuals' socioeconomic status may be more evident from their occupation, income, and wealth, rather than education (Qian 2017; Shafer 2013b). Furthermore, divorced and widowed people face a thin market for potential spouses, because most people of a similar age are already partnered (Rosenfeld and Thomas 2012: 538). Hence, compared with never-married individuals, previously-married people may be more likely to "cast a wider net" to secure a spouse by marrying outside their own educational group (Qian and Lichter 2018). With the rise of remarriage in China (cf. Figure 1; Wang and Zhou 2010), more people may remarry across educational boundaries, which may help reduce the social distance between educational groups and mitigate economic inequality arising from educational assortative mating (Choi and Tienda 2017; Hu and Qian 2015).

For age assortative mating, we found age homogamy to be prevalent in first marriages, which is consistent with previous research (Qian and Qian 2014). However, our results also suggest that marital sorting on age may have different operative

mechanisms in first and higher-order marriages. Prior research has showed that men tended to marry further down in age later in the life course, largely due to their preference for youth and the gendered double standard of aging (England and McClintock 2009; Gelissen 2004). We contribute to the scholarship by uncovering that, controlling for age at marriage, previously-married men were more likely than their never-married counterparts to marry a wife who was older than themselves but were not more likely to marry a wife who was younger than themselves. Thus, our results suggest that marital history plays a crucial role in determining the degree to which men can fulfill their preference for a young wife. As the negative stigmas attached to marital dissolution inhibit previously-married men from finding a younger woman to marry, they may have to marry someone older in order to secure a spouse.

Similarly, controlling for age at marriage, previously-married women are disadvantaged relative to their never-married counterparts, due to the social stigmas attached to divorce and widowhood (Hu and To 2018; Huang 2012). Women's younger age relative to their potential husbands' age is a valuable resource in the marriage market (England and McClintock 2009). Not surprisingly, we found that previously-married women were particularly likely to enter a remarriage with a man who was older than themselves, perhaps to compensate for their unfavorable marital history. Taken together, our results suggest that marriage order seems to be an advantage for the never married and a disadvantage for the previously married, for men and women alike.

Furthermore, our findings highlight the importance of controlling for age at marriage in the analysis of age assortative mating. Without accounting for age at marriage in Tables 2 and 4, remarried individuals were more likely than the first-married to be in a marriage with someone younger than themselves. This result, however, seems to be an artifact of remarriages occurring at older ages than first marriages. Individuals, especially men, who marry later in life are more likely than those marrying earlier to marry someone younger than themselves (England and McClintock 2009; Gelissen 2004). In fact, when we compared first-married and remarried people who entered their current marriage at the same age (i.e., by controlling for age at marriage) in Table 3, the latter were more likely to marry a spouse who was older than themselves. Unfortunately, age at marriage is often unaccounted for in prior research on age assortative mating (Shafer 2013a; Verbakel and Kalmijn 2014). We urge scholars to control for age at marriage when analyzing marital sorting on age, as both individual preferences and marriage market conditions may change over the life course (England and McClintock 2009; Rosenfeld and Thomas 2012; Qian and Preston 1993).

This study is subject to several limitations. First, due to the lack of data on spouses' marriage order, our definition of first marriage and remarriage was based on the marriage order of individual respondents rather than couple dyads. This means that

we were unable to distinguish mixed-order marriages, and thus underestimated the number of remarriages at the couple level. This data limitation also prevented us from testing whether never-married people may exchange their marriage order (i.e., the status of being never married) for favorable socioeconomic resources (e.g., education) when marrying a previously-married spouse, as Qian and Lichter (2018) report in their study of American couples. Second, divorce and widowhood entail different life-course dynamics and relational configurations with family members (Cherlin 1978; Hu and To 2018). Due to data limitations we were not able to differentiate between the two distinct pathways leading to remarriage, but this should be an important agenda for future research. Third, due to a lack of detailed information on spouses' traits such as income, occupation, wealth, and the presence of children at the time of marriage, our analysis necessarily focused on less time-sensitive traits such as education and spousal age gap. Lastly, our analysis compared assortative mating patterns between first-married and remarried people, but not between first and higher-order marriages experienced by the same individuals.

Despite its limitations, this is the first study to compare assortative mating patterns between first-married and remarried people in China. Given that the rise in the number of remarriages has become a major feature of family and demographic change in both the East and the West (Cherlin 2004; Raymo et al. 2015; Sweeney 2010), we highlight the need for systematic theoretical development and further empirical studies to better understand the distinctive nature of remarriage. Due to the scarcity of fine-grained data on remarried people in China, our empirical investigation had to rely on pooling seven waves of data from two large-scale national surveys. It is essential to collect rich longitudinal data from large samples of remarried couples in China. Such data will allow us to follow people through distinct life-course and marital trajectories and also to examine patterns and consequences of assortative mating on a broader range of attributes such as income, wealth, *hukou* status, and occupation.

6. Acknowledgments

authors are solely responsible for the analyses and interpretations presented in this article.

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