



Micro–Macro Interactions in Ethno-Religious Homogamy among Hui Muslims in Contemporary China: The Roles of Residential Concentration and Aging

Zheng Mu & Qing Lai

To cite this article: Zheng Mu & Qing Lai (2016): Micro–Macro Interactions in Ethno-Religious Homogamy among Hui Muslims in Contemporary China: The Roles of Residential Concentration and Aging, Journal of Muslim Minority Affairs, DOI: [10.1080/13602004.2016.1153823](https://doi.org/10.1080/13602004.2016.1153823)

To link to this article: <http://dx.doi.org/10.1080/13602004.2016.1153823>



Published online: 15 Mar 2016.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)

Micro–Macro Interactions in Ethno-Religious Homogamy among Hui Muslims in Contemporary China: The Roles of Residential Concentration and Aging

ZHENG MU and QING LAI

Abstract

Chinese Muslims have actively maintained religious endogamy. However, no research has assessed the role of local residential context in individual Muslims' marital choices, nor have sociologists examined the heterogeneity in individual Muslims' responses to such contextual influences. Using Chinese census data between 2000 and 2005, this paper offers a first investigation of such micro–macro interactions among the Hui, the largest Muslim ethnic group in China. Specifically, we test the effect of the Hui's residential concentration (at the prefecture level) on individual Hui's marital choices (exogamy/endogamy/singleness) and how this effect varies by gender and age. Several major findings emerge from our multi-level discrete-time competing-risk models, highlighting the impact of contextual factors, but also a level of individual resilience against aggregate-level cultural forces. While at younger ages, Hui can still afford to wait to contract an endogamous marriage; with aging, they started to choose exogamy to fulfill the expectation of universal marriage.

Introduction

It is a foundational sociological premise that individuals live in society and their behaviors are shaped by social context.¹ From a life course perspective, individual choices over the life course will be influenced by the opportunities and constraints of social structure and culture, specifically, historical time and place, and the social networks within which relationships are developed.² At the same time, however, individuals may respond to contextual influences in different ways. The impact of context will be moderated by the specific timing of events occurring in an individual's life, and individuals' own agency and their unique socio-demographic characteristics will also shape their life course.³

Arguably one of the most important life course decisions concerns marriage. This paper examines how Hui Muslims' marital choices respond to contextual influences, specifically, the varying prefecture-level Hui residential concentrations, and how those responses differ across gender and over the life course. Hui Muslim is one of 10 Muslim ethnic groups in China, but the only one that is Chinese-speaking.⁴ The Hui are also highly similar to the majority ethnic Han in physical appearance and culture. The most remarkable, if not the only, distinction between the Hui and the Han is their religious faith. Given this similarity notwithstanding religion, compared to other Muslim groups, the Hui have been subject to the most difficult struggle to maintain their own ethnic identity and gain acceptance within Han culture.⁵ Their residential

concentration shows a pattern of “national dispersion, local concentration”.⁶ The more religious Hui tend to live in places with higher Hui concentrations. Such areas offer better built and more frequently renovated mosques, restaurants that implement religious dietary restrictions more strictly, and more widespread religion education in public schools.⁷ That is, residential concentration may serve to facilitate religious practice and reinforce religious beliefs.⁸ Therefore, higher Hui concentration may not only improve structural opportunities for Hui to meet potential spouses within the Hui group, but also indicate a higher level of cultural pressure on Hui living in that area to make marital choices according to Islam.

According to Islam, marriage endogamy is of premium importance; all Muslims are expected to marry eventually and, more importantly, to marry another Muslim.⁹ What remains unclear, however, is what exactly Muslim individuals should do when they get older and find themselves caught between the pressure to marry and the taboo of exogamy. And how does this experience vary by gender? Muslim women are supposed to assume a subordinate status to men, and thus are subject to stronger cultural constraints,¹⁰ but we do not know whether the strength of contextual influences is different for Hui women than for Hui men. For the purposes of this study, we expect the local Hui concentration to influence Hui Muslims’ marital choices with heterogeneous patterns based on two major socio-demographic characteristics: age and gender. Specifically, we estimate multilevel multinomial models of the three-category marital outcomes—singleness, endogamy, and exogamy—using China 2000 census and 2005 1% inter-census survey (mini-census).

Theory and Hypotheses

Contextual Influence: Residential Concentration

An array of studies have focused on the contextual influences shaping individual marital choices.¹¹ Based on the main findings of this scholarship, social contexts are theorized to operate primarily through three pathways:

- (1) *Demographic availability*: Individuals have a tendency to marry within their group in terms of their major demographic traits, such as age, race, and ethnicity, especially when the supply of potential in-group marriage candidates is no less than the demand.¹² Therefore, how individuals get matched on demographic characteristics in marriage largely depends on the availability of individuals of the specific group. For example, in a place with more individuals of the same race, it would be easier for one to find a spouse within that racial group.
- (2) *Economic standing*: Aside from the preference for demographic homogamy, individuals also tend to marry “up” in terms of socioeconomic status, that is, social hypergamy.¹³ However, the prevalence of social hypergamy may largely depend on the availability of individuals with various economic standings.¹⁴ For instance, for a woman who earns a medium wage, “marrying up” to a richer man is more likely if there are more economically established men living in the same local area.
- (3) *Cultural norms*: Individual behaviors are not only determined by the structural conditions of the social context, they are also largely influenced by the surrounding cultural environment.¹⁵ Individuals’ preferences will be largely framed and changed by those of the people around them, especially those ideas and values

that dominate mainstream discourse.¹⁶ Through frequent interactions with other members in their local community, individuals may internalize elements of mainstream culture and form their preferences accordingly.¹⁷ Sometimes, in order to feel part of the local community and avoid conflicts with significant authoritative figures (e.g. parents, or other powerful members commanding obedience from subordinate residents), some individuals may even choose to conform to dominant local norms with which they do not actually agree.¹⁸ But regardless of whether community norms are internalized or enforced, in places with strong cultural norms vis-à-vis a specific marriage pattern, local individuals will tend to make their marital choices based on those norms.

In this paper, the outcome of interest is Hui Muslims' choices regarding marriage, and specifically, their choice of singleness, endogamy, or exogamy. Based on the above discussion, Hui Muslims' marital choices may be influenced by the availability of Hui population and the strength of cultural norms regarding marriage in the local area. Both the local availability of Hui and the strength of norms regarding marriage can be captured by Hui Muslim's residential concentration.

Hui Muslims are one of the 10 Muslim ethnic groups in China. Compared to other Muslim groups, Hui are the one closest to the majority Han group in both genetics and culture.¹⁹ Historically, Hui Muslims are the descendants of Arabic immigrants who intermarried with the Han Chinese, dating back to the Yuan dynasty since the late thirteenth century, and mostly concentrated in northwestern China.²⁰ The group's genetic constitution varies; some Hui may be descended from Arabs due to intermarriage, while others may be the descendants of Han Chinese who converted to Islam. But even for those with a genetically Arabian background, following generations of intermarriage with the ethnic Han, the Hui are almost culturally and physically indistinguishable from the Han, with the sole exception being the Islamic belief and practices. As a result, compared to other Muslim minority groups, Hui Muslims face the difficult challenge to retain their Islamic identity and in the meantime to avoid being completely assimilated into Han culture and discourse.²¹

This cultural struggle can be observed in Hui residential patterns. Among all of China's 55 ethnic minority groups, Hui are the most residentially dispersed.²² Specifically, their residential concentration shows a pattern of "national dispersion, local concentration".²³ Therefore, Hui are the ethnic group that is subject to the largest variation in residential conditions. Generally speaking, the more religious Hui are more likely to choose to live in Hui communities, which are more likely to offer a devout community ethos and more convenient conditions for religious practices.²⁴ In areas with higher level of Hui concentration, there are more and better mosques, and schools have more power to include religious education in regular instruction. Therefore, levels of Hui concentration, in terms of percent Hui population in a specific residential unit, can be read as reflecting the strength of Islamic belief—internalized or enforced—within the local residential unit.

According to Islam, Hui are expected to marry and, more specifically, to marry within the Hui group—the norms of universal marriage and endogamy, respectively.²⁵ With the norm of universal marriage, there is also an implicit norm that it is best to marry as early as possible. As discussed above, when the Hui's concentration in a given local area increases, not only may the availability of single Hui as potential marriage candidates increase, but these marriage-related norms may also get stronger. The contextual influences of demographic availability and cultural norms can also be related to life course theory: individuals' life course decisions—in our case, marital choices—are influenced

by the time and place in which the individuals are situated, in the form of the local demographic composition, as well as by mutual influences between people, as presented by the two cultural norms toward marriage. Thus our first hypothesis is as follows:

H1: Residential concentration matters. In places with higher residential concentration of Hui, the marriage rate will be higher, the age at first marriage will be younger, and the prevalence of exogamy will be lower.

Micro–Macro Interaction: Gender

Although structural constraints and cultural influences may further structure life course timelines through normative internalization or enforcement,²⁶ there are possible conflicts among the multiple contextual constraints. Hence, individuals may make decisions depending on the timing of the life event in their specific life stage and exercise their own agency according to their specific preferences and interests, which differ across individual socio-demographic characteristics.²⁷

Based on Islam's gendered doctrines, women should assume a subordinate position to men and be subject to stronger cultural constraints in their behaviors.²⁸ Therefore, we expect Hui residential concentration to influence Hui women to a larger extent. Here is our second hypothesis:

H2: Significant gender interaction. Residential concentration will influence men and women differently, with women subject to stronger effects.

Micro–Macro Interaction: Age

We further expect that age will affect the extent to which individuals are willing and/or able to exercise their agency in their response to contextual factors and cultural constraints. Specifically in our case, aging may influence the way individuals respond to Hui residential concentration. On the one hand, as individuals get older, they may become more conservative, and thus more likely to succumb to existing normative constraints.²⁹ As a result, they may become increasingly resistant to the choice of exogamy per their intensified intention to protect religious purity. On the other hand, as they age, they are also under stronger pressure to fulfill the expectation of universal marriage.³⁰ When individuals are caught between the taboo of exogamy and the pressure to marry, how they will exercise their individual agency will largely depend on the relative urgency and intensity of the two forces, which will differ across life course stages. It is possible that while younger individuals can still afford to wait for an endogamous marriage, older individuals may be more likely to succumb to the urgency of getting married, even if it means marrying outside of the group. Hence our third hypothesis:

H3: Significant age interaction. The effect of Hui residential concentration on the relative likelihood of exogamy over singleness will be negative at younger ages, and turn positive at older ages.

Data and Methods

Sample

This study is based on a random sample of the China 2005 1% inter-census survey (2005 mini-census). We first make the restriction to include only those Hui Muslims

aged 15–50, so as to exhaust the age range in which people generally get married. The China 2005 mini-census does not include information on place of marriage, so the resulting measures of local marriage market conditions based on the respondent's current place of residence may not reflect the contextual characteristics the individual was actually exposed to when getting married. Hence, we further restrict the dataset to those who lived within the province of residence five years ago (Year 2000). Then we restrict the sample to those who were still single in 2000 (they may remain single in 2005 or get married between 2000 and 2005) so as to include those who were most likely to be under the influence of the contextual conditions of 2000 in their places of residential registration as shown in the 2005 mini-census. This is a reasonable speculation as the local concentrations of Hui are relatively stable across a five-year time span and also because one's marital choices should be attributable to contextual conditions before their time of marriage. Accordingly, we calculate local concentrations of Hui based on the 2000 census data. Moreover, since the dataset only includes information on age at first marriage, we can only investigate the transition from singleness to first marriage. These restrictions leave us with 5082 observations, 2738 of whom are men and 2344 of whom are women. In order to capture the pool of eligible marriage candidates and to estimate the likelihood of marital choices accurately, we transform the dataset into a pseudo-longitudinal format with person-years being the basic units.³¹ The total amount of exposure is 31,389 person-years, 18,403 for men and 12,986 for women.

Furthermore, to examine the contextual influence on individual marital choices, we use the three-category dependent variable—singleness, endogamy, or exogamy—for the main pseudo-event history analysis, using discrete-time competing-risks models based on the multinomial logistic models. To capture the prefecture-level clustering effects, we use multilevel multinomial models with random intercepts at the prefecture level.

Dependent Variable

Marital choice. For the choice between singleness, endogamy, and exogamy, we use a 3-category variable with 1 = stay single, 2 = endogamy, and 3 = exogamy. Specifically, we compute odds of exogamy over endogamy to indicate the standardized strengths of the norm of endogamy, and calculate odds of exogamy over singleness to implicate on the relative strengths of the two norms, that is, the norm of endogamy and the norm of universal marriage.

Key Independent Variables

- (1) *Prefecture-level residential concentration of Hui.* We calculate Hui concentration as the percentage of Hui population over the total population in a given prefecture. Note that we compute the percentages at the prefecture level, an administrative unit small enough to ensure sufficient variability across units and large enough to reflect the scale of the “marriage market” that has actually influenced individual marital choices. We assume relative stability in local Hui concentration within a time span of five years. We also assume that one's marital choice is influenced by the contextual characteristics prior to the time of marriage, ensuring that the contextual conditions are sufficiently exogenous to the individual marital

choices. Correspondingly, we use the 2000 census data to compute contextual conditions that have influenced marital choices between 2000 and 2005.

- (2) *Age*. Our dependent variable is the transition into marriage, and we rely on a group of people who were still single in 2000 and track their marriage trajectories. That is, our sample covers a “marriage cohort” who got married between 2000 and 2005, plus those who still remain single across the same time span. Therefore, the sample may include people of varying ages, who may have different marital choices. In order to capture the age-effect on marital choices, we include the actual person-year-specific age. Aside from the main effect of age, we also include interaction between age and Hui concentration in separate models.
- (3) *Gender*. Men and women are highly diversified in their marital behaviors. This is especially true regarding the gendered norms based on Islam, whereby Muslim women are more strictly constrained by the norms. We include gender as a binary variable with 0 = men, and 1 = women. We also include the interaction between gender and concentration to indicate the differential contextual effects across gender.

Control Variables

- (1) *Education*. We include education as years of schooling completed. We recode the years of schooling by: illiterate = 3; primary school = 6; junior high = 9; senior high = 12; associate degree = 15; college and graduate school = 17.³² This serves as an indicator of one’s socioeconomic status.
- (2) *Rural/urban status*. We include this as a dummy variable with 0 = urban and 1 = rural. This is used to control for the salient rural-urban disparities in China.³³

Representative Sample

In order to accurately specify the population subject to contextual influence, as described above, we restrict the sample to a relatively immobile, young, and single-dominant population. However, we do not see this as a major challenge to the validity of the results. On the one hand, China is a country with tremendous internal migration, a large component of which is driven by economic incentives with high economic uncertainty.³⁴ Correspondingly, those immobile individuals who are reluctant to migrate and remain at their places of origins tend to be more conservative and, consequently, more likely to conform to existing norms.³⁵ Therefore, their immobility should lead to a higher prevalence of universal marriage and a lower likelihood of exogamy. On the other hand, young people are often more open to social changes and are also more likely to challenge existing rules and norms.³⁶ We thus expect the disproportionately higher percentage of young people in the population to predict lower marriage rates and higher levels of exogamy. Therefore, we expect these two forces of opposing directions to counteract one another to some extent.

Table 1 shows descriptive statistics based on the more general sample and the study sample, respectively. As the former is based only on the restriction to Hui Muslims aged 15–50, we refer to it to represent the general population. As can be seen, compared to the general population, for both genders, the average age is lower, and the average years of schooling are higher. Moreover, percentages of exogamy are consistently lower while percentages of singleness are universally higher. However, if we calculate percent exogamy among the married, for the general population, the percentages are 12.26%

Table 1. Descriptive statistics.

	Men		Women	
	General population (N = 5664)	Analytical sample (N = 2738)	General population (N = 5437)	Analytical sample (N = 2344)
Dependent variable:				
Marital choice				
Single	0.437 (0.496)	0.873 (0.333)	0.377 (0.485)	0.849 (0.359)
Endogamy	0.494 (0.500)	0.102 (0.303)	0.553 (0.497)	0.123 (0.328)
Exogamy	0.069 (0.253)	0.024 (0.155)	0.071 (0.256)	0.029 (0.167)
Independent variables:				
Hui residential concentration				
Categorical				
Concentration-low	0.496 (0.500)	0.508 (0.500)	0.489 (0.500)	0.506 (0.500)
Concentration-high	0.504 (0.500)	0.492 (0.500)	0.511 (0.500)	0.494 (0.500)
Age	30.065 (10.767)	21.088 (5.784)	29.930 (10.639)	19.990 (4.790)
Categorical				
<Age 30	0.492 (0.500)	0.914 (0.280)	0.490 (0.500)	0.953 (0.211)
≥Age 30	0.508 (0.500)	0.086 (0.280)	0.510 (0.500)	0.047 (0.211)
Control variables:				
Years of schooling	8.591 (3.870)	9.295 (3.494)	7.460 (4.751)	8.998 (4.170)
Registration of residence				
Rural	0.498 (0.500)	0.495 (0.500)	0.493 (0.500)	0.488 (0.500)
Urban	0.502 (0.500)	0.505 (0.500)	0.507 (0.500)	0.512 (0.500)

Source: China 2005 1% inter-census survey (2005 mini-census) and China 2000 census.

and 11.38% respectively for men and women. In the study sample, the percentages are 19.05% and 19.08%. This indicates that for married Hui, exogamy is more common in the study sample than in the general population. This, along with all the other discrepancies between the two samples, should mainly be driven by the disproportionately high proportion of younger people in the study sample, who are more liberal regarding their attitudes toward marriage norms, and have not yet completed their marital choice process.

Results

Descriptive Results

Table 2 shows the demographic profiles of Hui individuals who made different marital choices. This indirectly speaks to the mechanisms of how Hui concentration influenced individuals' marital choices.

- (1) *For Hui concentration*, we can see that for both genders, the patterns are highly similar. Individuals choosing exogamy tend to live in places with relatively lower Hui concentrations, with averages of Hui concentration at 5% for both men and women; those who chose endogamy tend to live in places with higher Hui concentrations, with averages of Hui concentration at 21% for both men and women. This is consistent with the expectation that in places with higher Hui concentrations, not only are there more marriageable Hui candidates, but the normative pressure to marry within the Hui is also getting stronger. The average Hui concentration for those who still remain single lies in between, with an average of 16% for men and 17% for women. This could be due to a combination of two scenarios. On the one hand, in places where the Hui concentration is not high enough to facilitate easy endogamy, those single individuals may remain single for a while and wait for the opportunity to meet a Hui spouse; on the other hand, in places where the Hui concentration is not low enough, the Hui singles cannot get married free of normative constraints and choose exogamy as they want.
- (2) *For average age at first marriage*, women in general are marrying at younger ages for both marriage types. This could also explain the younger average age for the single women, as women may not stay single as long as their male counterparts. Compared across marriage types, the patterns are similar for men and for women. Those who choose exogamy on average have an older age at first marriage. This could be due to the normative preference for endogamy, thus leading Hui Muslims to wait longer if they are unable, when younger, to find a Hui spouse.
- (3) *For average years of schooling*, except for those choosing exogamy, Hui women in general receive less education than Hui men, which may reflect Muslim women's inferior positions relative to men. However, exogamous women on average receive more education than their male counterparts. This could also be due to women's more constrained status that women should marry up and

Table 2. Demographic profiles of individuals of different marital choices.

Marital choices	Hui concentration	Age at marriage or age at 2005	Years of schooling	Rural (reference = urban)	N
Men					
Single	0.16 (0.17)	20.16 (5.42)	9.32 (3.43)	0.50 (0.50)	2391
Endogamy	0.21 (0.17)	24.06 (3.70)	8.47 (3.69)	0.50 (0.50)	
Exogamy	0.05 (0.10)	26.85 (3.41)	11.69 (3.67)	0.15 (0.36)	67
Women					
Single	0.17 (0.18)	19.02 (4.27)	9.08 (4.09)	0.50 (0.50)	1989
Endogamy	0.21 (0.17)	21.80 (3.28)	7.74 (4.45)	0.51 (0.50)	
Exogamy	0.05 (0.08)	25.31 (3.85)	11.93 (3.29)	0.13 (0.34)	67

Source: China 2005 1% inter-census survey (2005 mini-census) and China 2000 census.

be subordinate to their future husbands, making it harder for highly educated women to find partners within Hui. Comparing across marriage types, for both men and women, those choosing exogamy on average receive more education than those marrying within Hui. One possible explanation is that although there are gender differences in the education-marriage link, with higher education, in general, people may become more liberal regarding marriage norms.

- (4) *For the residential registration status*, the patterns are highly similar for both genders. Compared to exogamous Hui, endogamous Hui tend to live in rural areas. This could be due to the more conservative cultures in rural areas, as well as the high correlation between residential registration status and Hui concentration—that is, a disproportionately higher Hui concentration in rural areas than in urban areas.

Table 3 shows annualized probabilities of the marital choices by gender, age, and Hui concentration, which reflect the likelihoods of making specific marital choices based on the unit of analysis of person-years. As can be seen, there are major variations in the distribution of the marital choices across gender, age, and Hui concentrations. Generally, compared to younger people who are under age 30, the likelihood of staying single is lower for people older than 30. Specifically, for men, when Hui concentration is higher, for individuals of all ages, the percentage people who are single and the percentage of people choosing exogamy are lower, and the percentage choosing endogamy are higher. For women, the patterns are almost identical except that when Hui concentration gets higher, the percentage choosing exogamy among those older women *increases*, rather than decreases. This gender difference may demonstrate that, for women, the norm of universal marriage is more constraining than the norm of endogamy. Therefore, when women pass a certain age, the pressure to get married becomes so strong that they may become ready to choose exogamy just to fulfill the former expectation. Conversely, that pressure may not be as strong for Hui men.

Contextual Influences

It has been established that men and women are highly different in their marital behaviors.³⁷ In this study we conduct the analysis using two sets of models, one based on the full sample with gender variables included in the models, and the other one based on the subsamples of men and women. For both sets of models, we use multilevel multinomial models with the three-category variable of marital choices, comprised of singleness, endogamy, and exogamy. Moreover, we have two outcome variables, which are created by changing the reference categories of the multinomial models: exogamy vs. endogamy, and exogamy vs. singleness. Models based on the first outcome show the relative prevalence of exogamy, and those based on the second outcome show the predicament between the pressure to marry within the Hui group and the urgency to fulfill the norm of universal marriage.

Model 1 in Tables 4 and 5, respectively, estimates the main effects of the independent variables. As can be seen, when local Hui concentration is higher, both the odds of exogamy over endogamy and the odds of exogamy over singleness gets lower. That is, when the local context can structurally facilitate endogamy and culturally promote endo-

Table 3. Annualized probabilities by gender, age, and Hui concentration.

	<Age 30				≥Age 30			
	Singleness	Endogamy	Exogamy	N	Singleness	Endogamy	Exogamy	N
Men								
Hui concentration								
Low	98.71	0.81	0.48	8349	96.95	1.02	2.04	786
High	97.81	2.09	0.10	8966	93.71	5.63	0.66	302
Women								
Hui concentration								
Low	98.01	1.20	0.79	6088	97.05	1.31	1.64	305
High	96.66	3.19	0.15	6492	92.08	3.96	3.96	101

Source: China 2005 1% inter-census survey (2005 mini-census) and China 2000 census.

gamy, individuals within that context are more likely to make marriage choices in conformity with those norms.

When people get older, they are not necessarily more likely to choose exogamy over endogamy. This is reasonable considering the strong norm of endogamy for Hui people. However, note that when one ages, the relative likelihood of exogamy over singleness significantly increases. Compared to the insignificant coefficient for the relative likelihood of exogamy over endogamy, this may reflect the competition between the two norms, endogamy and universal marriage. That is, although exogamy is a prohibitive taboo for Hui Muslims, as the pressure to get married increases over the life course, Hui individuals would rather get married, even at the cost of choosing exogamy.

Moreover, higher education may increase both the relative likelihoods of exogamy over endogamy, and of exogamy over singleness. This could be due to the liberalizing effects of education, that when people receive more education, they may become more open to other cultural possibilities aside from Islam, and thus feel less constrained by its norms regarding marriage.

While holding rural residential status may increase the relative likelihood of exogamy over singleness, it does not have a significant effect on the relative likelihood of exogamy over endogamy. One possible explanation for the difference could be that whereas the choice between endogamy and exogamy is equally un-ambivalent for both urban and rural areas—that is, that they will always choose endogamy if possible, the choice between exogamy and singleness involves a competition between the two norms of marriage. Based on the results, it seems that compared to urban areas, in rural areas the relative urgency to fulfill universal marriage is weaker than that to get married within the Hui group.

Furthermore, Hui women have higher relative likelihood of exogamy over singleness, but they are not significantly more likely to prefer exogamy over endogamy. The rationale should be similar to that for the residential status. While both men and women have a clear-cut preference for exogamy over endogamy, women may be subject to heavier pressures regarding universal marriage in particular, even at the cost of choosing exogamy.

Table 4. Relative risk ratios (RRRs) from multilevel multinomial models predicting *exogamy over endogamy* ($n = 5082$, $N = 31,389$).

Independent variables	Model 1	Model 2	Model 3	Model 4
Local concentration	0.906***	0.910***	0.850***	0.846***
Age	0.987	0.987	0.994	0.994
Years of schooling	1.132***	1.132***	1.130***	1.130***
Rural residence (reference = urban)	0.769	0.769	0.757	0.757
Female (reference = male)	0.880	0.878	0.876	0.856
Female \times concentration		0.992		1.006
Age \times concentration			1.003*	1.003*
Constant	0.536	0.533	0.425	0.432
Chi-square	626.47	627.04	643.20	643.28
DF	10	12	12	14

Notes: These models compare the relative risk of a respondent's choice between singleness, endogamy and exogamy. Random intercepts are estimated at the prefecture level.

Source: China 2005 1% inter-census survey (2005 mini-census) and 2000 census.

* $p < .05$.

** $p < .01$.

*** $p < .001$ (two-tailed tests).

Table 5. RRR from multilevel multinomial models predicting *exogamy over singleness* ($n = 5082$, $N = 31389$).

Independent variables	Model 1	Model 2	Model 3	Model 4
Local concentration	0.964*	0.970	0.876**	0.880**
Age	1.210***	1.210***	1.184***	1.184***
Years of schooling	1.162***	1.161***	1.159***	1.159***
Rural residence (reference = urban)	0.554*	0.550*	0.545*	0.544*
Female (reference = male)	1.594*	1.743*	1.613**	1.647*
Female \times concentration		0.984		0.996
Age \times concentration			1.004**	1.004*
Constant	0.000***	0.000***	0.000***	0.000***
Chi-square	672.78	725.41	739.52	739.55
DF	10	12	12	14

Notes: These models compare the relative risk of a respondent's choice between singleness, endogamy and exogamy. Random intercepts are estimated at the prefecture level.

Source: China 2005 1% inter-census survey (2005 mini-census) and 2000 census.

* $p < .05$.

** $p < .01$.

*** $p < .001$ (two-tailed tests).

Given Hui women's subordinate status to men according to Islamic interpretations, we expect that women are under stronger normative constraints than men. Thus, in Model 2 we include the interaction between gender and Hui concentration, so as to examine whether the contextual effects differ across gender, and there seems to be no significant gender interaction effect.

Moreover, as we discussed in the theory section, although with aging, people may get more conservative, they may also face increasing pressure to fulfill the expectation of universal marriage. Therefore, we include the interaction between age and Hui concentration in Model 3. Based on the results, it seems that when people age, in places with higher Hui concentrations, they may be confronted with stronger pressure to choose exogamy, regardless of the reference categories. We include both gender-concentration and age-concentration interactions in Model 4, and the results are highly similar to those in Models 2 and 3.

Based on the above analyses using the full sample, it seems that there are no significant interaction effects between gender and Hui concentration. However, in reality and in theory, men and women may largely differ in their marital behaviors. Hence, for the purpose of illustration, we further run separate models based on gender-specific samples and present the results in Tables 6 and 7.

Model 1-M shows results based on models only including the main effects for men. It seems that while higher Hui concentration significantly predicts lower relative likelihood of exogamy over endogamy, the contextual effect on the relative likelihood of exogamy over singleness is insignificant. This echoes our earlier speculation that while the choice between exogamy and endogamy can be clear-cut, the choice between exogamy and singleness involves the double pressures to avoid exogamy and to fulfill universal marriage. This is further supported by the significant age effect on the relative likelihood of exogamy over singleness, that is, when one gets older, he or she is more likely to choose exogamy over singleness. The age effect on the relative likelihood of exogamy over endogamy, on the other hand, is insignificant.

In *Model 2-M*, we further include the interaction between age and Hui concentration for men. The interaction is insignificant, and the other coefficients are similar to those in

Table 6. Gender-specific RRRs from multilevel multinomial models predicting *exogamy over endogamy*.

Independent variables	Men		Women	
	Model 1-M	Model 2-M	Model 1-F	Model 2-F
Local concentration	0.924***	0.865**	0.923***	0.859*
Age	0.988	0.988	0.991	1.013
Years of schooling	1.162***	1.159***	1.124**	1.121**
Rural residence (reference = urban)	0.703	0.689	0.869	0.827
Age × concentration		1.003		1.003
Constant	0.260	0.257	0.250	0.147*
Observations	2738		2344	
Person-years	18,403		12,986	
Chi-square	343.86	349.34	277.52	296.16
DF	8	10	8	10

Source: China 2005 1% inter-census survey (2005 mini-census) and 2000 census.

Notes: These models compare the relative risk of a respondent's choice between singleness, endogamy, and exogamy. Random intercepts are estimated at the prefecture level.

* $p < .05$.

** $p < .01$.

*** $p < .001$ (two-tailed tests).

Model 1-M. The results indicate a consistent zero effect of Hui concentration on the relative likelihood of exogamy over singleness, and a consistent negative effect of Hui concentration on the relative likelihood of exogamy over endogamy for men.

In *Model 1-F*, we present results based on models only including the main effects for women. The results are rather different from those for men. For both outcomes, we get significant negative coefficients on Hui concentration. This indicates that in places with higher Hui concentration, Hui women are not only less likely to choose exogamy over endogamy, but also less likely to choose exogamy over singleness. Similar to men, the age coefficient is only significant for the outcome of exogamy over singleness. That

Table 7. Gender-specific RRRs from multilevel multinomial models predicting *exogamy over singleness*.

Independent variables	Men		Women	
	Model 1-M	Model 2-M	Model 1-F	Model 2-F
Local concentration	0.976	0.902	0.947**	0.833**
Age	1.221***	1.198***	1.201***	1.164***
Years of schooling	1.193***	1.191***	1.099*	1.101*
Rural residence (reference=urban)	0.486	0.477	0.651	0.692
Age × concentration		1.003		1.006*
Constant	0.000***	0.000***	0.000***	0.000***
Observations	2738		2344	
Person-years	18,403		12,986	
Chi-square	382.95	386.42	323.37	339.71
DF	8	10	8	10

Notes: These models compare the relative risk of a respondent's choice between singleness, endogamy and exogamy. Random intercepts are estimated at the prefecture level.

Source: China 2005 1% inter-census survey (2005 mini-census) and 2000 census.

* $p < .05$.

** $p < .01$.

*** $p < .001$ (two-tailed tests).



Figure 1. Influence of Hui's residential concentration on Hui's marital choices over the life course.

is, aging may result in more pressure to get married at all, even if they have to marry out of the Hui group.

In *Model 2-F*, we further include the interaction between age and Hui concentration for women. Different from men, the interaction is significantly positive, but only for the relative likelihood of exogamy over singleness. Combined with the significantly negative coefficient on Hui concentration, this indicates that while the contextual influence on the choice between exogamy and endogamy is consistently negative, the contextual influence on the choice between exogamy and singleness is age-dependent for women. Specifically, while at younger ages, the effect is negative, that is, Hui women can still afford to wait longer in order to ultimately marry endogamously; but as Hui women age, the necessity to get married at all becomes more urgent, and the contextual influence may eventually become positive.

To provide a clearer illustration of the interpretation based on the results in [Tables 6](#) and [7](#), we show how the effect of Hui concentration on marital choices changes with aging, separately for men and women, in [Figure 1](#). We indicate the concentration effects by the marginal change in logged odds of the outcome variables over Hui concentration. As can be seen, for both men and women, higher Hui concentration will be a depressing effect on the choice of exogamy over endogamy, and the effect is more negative for women. However, for the choice between exogamy and singleness, the patterns are even more gendered. While for men, the contextual influence remains zero consistently, Hui concentration may influence women differently over their life course. At younger ages, the concentration effects are negative, that is, women still want to wait longer to avoid the taboo of exogamy. But as Hui women get older, the depressing effect of Hui concentration keeps shrinking, until around 32 years of age, at which point, the balance tips and Hui women prioritize getting married over avoiding exogamy, and this promoting effect intensifies as women get older.

Discussion

This paper examines how Hui Muslims' marital choices between singleness, endogamy, and exogamy respond to the prefecture-level Hui residential concentration, and how

these responses differ across gender and over individual life course. In order to accommodate the three-category marital outcome, and the possible clustering effect at the prefecture level, we use multilevel multinomial models based on the China 2005 mini-census and 2000 census data.

First, our results show that in places with higher Hui concentrations, based on the full sample, Hui are less likely to choose exogamy, no matter whether looked at relative to endogamy or to singleness. However, if we conduct gender-specific analyses, the negative contextual effect on the relative likelihood of exogamy over singleness only holds for women. The findings indicate that individual life course outcomes are indeed subject to influences at the aggregate level.

However, this micro-macro link manifests in different ways according to key socio-demographic dimensions, specifically, gender and age. Although we do not find a significant gender main effect or interaction effect based on the full sample, when we conduct analyses using gender-specific samples, the contextual influence on the relative likelihood of exogamy over singleness disappeared for men. Moreover, based on the full sample, we find significantly positive interaction effects between age and Hui concentration. This finding implies that the aging process may increase the urgency to get married and fulfill the expectation of universal marriage, even at the cost of choosing exogamy. Specifically, after we further divide the analyses into subsamples of men and women, we find that the significant age interaction effects disappeared for men for both outcomes, and hold for women only for the relative likelihood of exogamy over singleness. This indicates that at younger ages, higher Hui concentration may prevent women from choosing exogamy; but after women reach around 32 years of age—arguably, the prime age for marriage—there is a promoting effect on exogamy for the older Hui women. The nuanced story behind this phenomenon demonstrates the interactions between contextual constraints and human agency.

The study does have some limitations, which usefully indicate directions for future research. First, as discussed earlier, our sample is composed of disproportionately higher percentages of young, single and immobile individuals. Although we do not think this is a problem, it would have been ideal to assess our research questions based on a more representative sample. At this time, however, easy solutions to this issue are not available given the small size of the Hui population and the intense levels of internal migration in China. Second, the specific type of exogamy, that is, exogamy with different ethnic groups may have varying links with contextual conditions. But again, this more nuanced analysis is not currently possible given data limitations. Finally, marital choices could be affected by multiple individual characteristics³⁸ and people may match on various traits with different priorities.³⁹ Thus, as a potential research direction, it would be interesting to study how other norms of assortative mating, aside from ethnicity, may influence the patterns of marriage formation.

Conclusion

This study makes important additions to the literature on individual-level intermarriage behaviors by examining the contextual influence on marital choices for this unique Chinese Muslim group. More importantly, it also speaks to the nuanced mechanisms through the micro-macro interaction along fundamental socio-demographic dimensions, such as gender and age. Research on this topic sheds crucial light on the religious and contextual influences on marital outcomes, life course norms of marital behaviors, and gender inequalities in various cultures.

NOTES

1. Peter M. Blau, *Inequality and Heterogeneity: A Primitive Theory of Social Structure*, New York: Free Press, 1977; Peter M. Blau and Joseph E. Schwartz, *Crosscutting Social Circles: Testing a Macrostructural Theory of Intergroup Relations*, New Brunswick: Transaction Publishers, 1997; Peter M. Blau, Terry C. Blum, and Joseph E. Schwartz, "Heterogeneity and Inter-marriage", *American Sociological Review*, Vol. 47, No. 1, 1982, pp. 45–62.
2. Duane F. Alwin and Ryan J. McCammon, "Generations, Cohorts, and Social Change", in *Handbook of the Life Course*, eds., Jeylan T. Mortimer and Michael J. Shanahan, New York: Kluwer Academic Publishers, 2002, pp. 23–50; Glen H. Jr. Elder, "The Life Course as Developmental Theory", *Child Development*, Vol. 69, No. 1, 1998, pp. 1–12.
3. Elder, "The Life Course", *op. cit.*, 1998; Viktor Gecas, "Self-Agency and the Life Course", in *Handbook of the Life Course*, eds. Jeylan T. Mortimer and Michael J. Shanahan, New York: Kluwer Academic Publishers, 2002, pp. 369–390; Richard A. Jr. Settersten, "Age Structuring and the Rhythm of the Life Course", in *Handbook of the Life Course*, eds. Jeylan T. Mortimer and Michael J. Shanahan, New York: Kluwer Academic Publishers, 2002, pp. 81–102.
4. Jonathan N. Lipman, *Familial Strangers: A History of Muslims in Northwest China*, Seattle: University of Washington Press, 1997.
5. *Ibid.*
6. Han Hai, "An Analysis on Causes of Hui's Population Dispersion [*qian xi hui zu ren kou fen bu guang fan de yuan yin*]" (in Chinese), *Legal System and Society* [Fa Zhi Yu She Hui], Vol. 14, No. 5, 2010, pp. 174–175; Jinbao Ma, "An Analysis of Features of Hui's Regional Distribution – Comparison with Several Other Nationalities [*hui zu ren kou fen bu de di yu te zheng jian xi – yu qi ta ji ge shao shu min zu de bi jiao*]" (in Chinese), *Journal of Hui Muslim Minority Studies* [Hui Zu Yan Jiu], Vol. 40, No. 4, 2000, pp. 9–14.
7. Rizvan Mamet, Cardell K. Jacobson, and Tim B. Heaton, "Ethnic Inter-marriage in Beijing and Xinjiang, China, 1990", *Journal of Comparative Family Studies*, Vol. 36, No. 2, 2005, pp. 187–204; Xiaowei Zang, "Hui Muslim – Han Chinese Differences in Perceptions on Endogamy in Urban China", *Asian Ethnicity*, Vol. 6, No. 1, 2005, pp. 51–68; Xiaowei Zang, "Ethnic Differences in Neighbourly Relations in Urban China", *Asian Ethnicity*, Vol. 7, No. 2, 2006, pp. 195–207; Xiaowei Zang, *Islam, Family Life, and Gender Inequality in Urban China*, London and New York: Routledge, 2012.
8. Matthijs Kalmijn, "Inter-marriage and Homogamy: Causes, Patterns, Trends", *Annual Review of Sociology*, Vol. 24, No. 1, 1998, pp. 395–421.
9. Mohammad Jalal Abbasi-Shavazi and Peter McDonald, "Family Change in Iran: Religion, Revolution, and the State", in *International Family Change: Ideational Perspectives*, eds. R. Jayakody, A. Thornton, and W. G. Axinn, New York: Lawrence Erlbaum Associates, 2008, pp. 177–198; S. Philip Morgan, Sharon Stash, Herbert L. Smith, and Karen Oppenheim Mason, "Muslim and Non-Muslim Differences in Female Autonomy and Fertility: Evidence from Four Asian Countries", *Population and Development Review*, Vol. 28, No. 3, 2002, pp. 515–537; Zang, "Hui Muslim – Han Chinese", *op. cit.*, 2005; Zang, "Ethnic Differences in Neighbourly Relations", *op. cit.*, 2006.
10. Abbasi-Shavazi and McDonald, "Family Change in Iran", *op. cit.*, pp. 177–198; Ma-il Khairabadi, *Status of Woman in Islamic Society*, Rampur, India: Maktaba Hijab, 1982; Fatima Mernissi, *Women's Rebellion and Islamic Memory*, London and New Jersey: Zed Books, 1996; Morgan, Stash, Smith, and Mason, "Muslim and Non-Muslim Differences", *op. cit.*, 2002; Zang, *Islam, Family Life*, *op. cit.*
11. Blau, Blum, and Schwartz, "Heterogeneity and Inter-marriage", *op. cit.*, 1982; David R. Harris and Hiromi Ono, "How Many Interracial Marriages Would There be if All Groups were of Equal Size in All Places? A New Look at National Estimates of Interracial Marriage", *Social Science Research*, Vol. 34, No. 1, 2005, pp. 236–251; Ruby Jo Reeves Kennedy, "Premarital Residential Proximity and Ethnic Endogamy", *American Journal of Sociology*, Vol. 48, No. 5, 1943, pp. 580–584; Susan K. Lewis and Valerie K. Oppenheimer, "Educational Assortative Mating across Marriage Markets: Non-Hispanic Whites in the United States", *Demography*, Vol. 37, No. 1, 2000, pp. 29–40; Daniel T. Lichter, Robert N. Anderson, and Mark D. Hayward, "Marriage Markets and Marital Choice", *Journal of Family Issues*, Vol. 16, No. 4, 1995, pp. 412–431; R. Kelly Raley, "A Shortage of Marriageable Men? A Note on the Role of Cohabitation in Black-White Differences in Marriage Rates", *American Sociological Review*, Vol. 61, No. 6, 1996, pp. 973–983; Robert Schoen and James R. Kluegel, "The Widening Gap in Black and White Marriage Rates: The Impact of Population Composition and Differential Marriage Propensities", *American Sociological Review*, Vol. 53, No. 6, 1988, pp. 895–907.

12. Blau, Blum, and Schwartz, "Heterogeneity and Inter-marriage", *op. cit.*, 1982; Harris and Ono, "How Many Interracial Marriages", *op. cit.*, 2005.
13. Bruce K. Eckland, "Assortative Mating: Theories of Mate Selection", *Biodemography and Social Biology*, Vol. 29, No. 1-2, 1982, pp. 7-21; Lewis and Oppenheimer, "Educational Assortative Mating", *op. cit.*, 2000.
14. Lewis and Oppenheimer, "Educational Assortative Mating", *op. cit.*, 2000; Lichter, Anderson, and Hayward, "Marriage Markets", *op. cit.*, 1995; Raley, "A Shortage of Marriageable Men", *op. cit.*, 1996.
15. Vincent K. Fu, "Racial Inter-marriage Pairings", *Demography*, Vol. 38, No. 2, 2001, pp. 147-159; Rukmalie Jayakody, Arland Thornton, and William G. Axinn, *International Family Change: Ideational Perspectives*, New York: Lawrence Erlbaum, 2008; Matthijs Kalmijn and F. Van Tubergen, "A Comparative Perspective on Inter-marriage: Explaining Differences among National-Origin Groups in the United States", *Demography*, Vol. 47, No. 2, 2010, pp. 459-479; Daniel T. Lichter, "Delayed Marriage, Marital Homogamy, and the Mate Selection Process among White Women", *Social Science Quarterly*, Vol. 71, No. 4, 1990, pp. 802-811; Arland Thornton, "The Developmental Paradigm, Reading History Sideways, and Family Change", *Demography*, Vol. 38, No. 4, 2001, pp. 449-465; Arland Thornton, *Reading History Sideways: The Fallacy and Enduring Impact of the Developmental Paradigm on Family Life*, Chicago, IL: University of Chicago Press, 2005.
16. Jennifer S. Barber, "Community Social Context and Individualistic Attitudes toward Marriage", *Social Psychology Quarterly*, Vol. 67, No. 3, 2004, pp. 236-256; Arunachalam Dharmalingam, "The Social Context of Family Size Preferences and Fertility Behavior in a South Indian Village", *Genus*, Vol. 52, No. 1/2, 1996, pp. 83-103; Elyse A. Jennings and Jennifer S. Barber, "The Influence of Neighbors' Family Size Preference on Progression to High Parity Births in Rural Nepal", *Studies in Family Planning*, Vol. 44, No. 1, 2013, pp. 67-84; Jennifer Katz, Thomas E. Joiner Jr., and Paul Kwon, "Membership in a Devalued Social Group and Emotional Well-being: Developing a Model of Personal Self-esteem, Collective Self-esteem, and Group Socialization", *Sex Roles*, Vol. 47, No. 9-10, 2002, pp. 419-431.
17. Barber, "Community Social Context", *op. cit.*, 2004; Dharmalingam, "Social Context of Family Size Preferences", *op. cit.*, 1996; Katz, Joiner Jr., and Kwon, "Membership in a Devalued Social Group", *op. cit.*, 2002.
18. James Coleman, *Foundations of Social Theory*, Cambridge: Harvard University Press, 1990; Martin Fishbein and Icek Ajzen, *Predicting and Changing Behavior: The Reasoned Action Approach*, New York: Psychology Press, 2010; Lisa Troyer and C. Wesley Younts, "Whose Expectations Matter? The Relative Power of First- and Second-order Expectations in Determining Social Influence", *American Journal of Sociology*, Vol. 103, No. 3, 1997, pp. 692-732.
19. Lipman, *Familiar Strangers*, *op. cit.*
20. *Ibid.*
21. Colin Mackerras, "Han-Muslim and Intra-Muslim Social Relations in Northwestern China", *Nationalism and Ethnic Politics*, Vol. 4, No. 1-2, 1998, pp. 28-46; Zang, "Hui Muslim - Han Chinese", *op. cit.*, 2005; Zang, "Ethnic Differences in Neighbourly Relations", *op. cit.*, 2006; Zang, *Islam, Family Life*, *op. cit.*
22. Hai, "Causes of Hui's Population Dispersion", *op. cit.*, 2010; Ma, "Features of Hui's Regional Distribution", *op. cit.*, 2000.
23. *Ibid.*
24. Kalmijn, "Inter-marriage and Homogamy", *op. cit.*, 1998; Mamet, Jacobson, and Heaton, "Ethnic Inter-marriage in Beijing and Xinjiang", *op. cit.*, 2005; Wei Xing, "Marital Assimilation between the Muslim Hui and the Han Majority in Contemporary Chinese Cities in the People's Republic of China", *Journal of Muslim Minority Affairs*, Vol. 34, No. 3, 2014, pp. 303-314.
25. Abbasi-Shavazi and McDonald, "Family Change in Iran", *op. cit.*, pp. 177-198; Khairabadi, *Status of Woman*, *op. cit.*; Mernissi, *Women's Rebellion*, *op. cit.*; Morgan, Stash, Smith, and Mason, "Muslim and Non-Muslim Differences", *op. cit.*, 2002; Zang, "Hui Muslim - Han Chinese", *op. cit.*, 2005; Zang, "Ethnic Differences in Neighbourly Relations", *op. cit.*, 2006.
26. Settersten, "Age Structuring", *op. cit.*, pp. 81-102.
27. Elder, "The Life Course", *op. cit.*, 1998; Gecas, "Self-Agency", *op. cit.*, pp. 369-390; Settersten, "Age Structuring", *op. cit.*, pp. 81-102.
28. Abbasi-Shavazi and McDonald, "Family Change in Iran", *op. cit.*, pp. 177-198; Khairabadi, *Status of Woman*, *op. cit.*

29. John T. Jost, Jack Glaser, Arie W. Kruglanski, and Frank J. Sulloway, "Political Conservatism as Motivated Social Cognition", *Psychological Bulletin*, Vol. 129, No. 3, 2003, pp. 339–375; Robert R. McCrae, Paul T. Costa, Jr., Margarida Pedroso de Lima, Antonio Simões, Fritz Ostendorf, Alois Angleitner, Iris Marusic, Denis Bratko, Gian Vittorio Caprara, Claudio Barbaranelli, and Joon-Ho Chae, "Age Differences in Personality across the Adult Life Span: Parallels in Five Cultures", *Developmental Psychology*, Vol. 35, No. 2, 1999, pp. 466–477; B. W. Roberts, K. E. Walton, and W. Viechtbauer, "Patterns of Mean-Level Change in Personality Traits across the Life Course: A Meta-Analysis of Longitudinal Studies", *Psychological Bulletin*, Vol. 132, No. 1, 2006, pp. 1–25; A. Van Hiel and L. Brebels, "Conservatism is Good for You: Cultural Conservatism Protects Self-Esteem in Older Adults", *Personality and Individual Differences*, Vol. 50, No. 1, 2011, pp. 120–123.
30. Ansley J. Coale, "Age Patterns of Marriage", *Population Studies*, Vol. 25, No. 2, 1971, pp. 193–214.
31. Emily Hannum, Meiyang Wang, and Jennifer Adams, "Urban-Rural Disparities in Access to Primary and Secondary Education under Market Reform", in *One Country, Two Societies? Rural-Urban Inequality in Contemporary China*, ed. Martin K. Whyte, Cambridge: Harvard University Press, 2008, pp. 125–146.
32. Yu Xie and Emily Hannum, "Regional Variation in Earnings Inequality in Reform-Era Urban China", *American Journal of Sociology*, Vol. 101, No. 4, 1996, pp. 950–992.
33. Xiaogang Wu and Donald Treiman, "The Household Registration System and Social Stratification in China, 1955–1996", *Demography*, Vol. 41, No. 2, 2004, pp. 363–384.
34. *Ibid.*
35. Markus Jokela, "Personality Predicts Migration within and between U.S. States", *Journal of Research in Personality*, Vol. 43, No. 1, 2009, pp. 79–83.
36. McCrae et al., "Age Differences in Personality", *op. cit.*, 1999.
37. Wendy Manning and Pamela J. Smock, "Why Marry? Race and the Transition to Marriage Among Cohabitors", *Demography*, Vol. 32, No. 2, 1995, pp. 509–520; Yu Xie, James Raymo, Kimberly Goyette, and Arland Thornton, "Economic Potential and Entry into Marriage and Cohabitation", *Demography* Vol. 40, No. 2, 2003, pp. 351–367.
38. Matthijs Kalmijn, "Shifting Boundaries: Trends in Religious and Educational Homogamy", *American Sociological Review*, Vol. 56, No. 6, 1991, pp. 786–800; Kalmijn, "Intermarriage and Homogamy", *op. cit.*, 1998.
39. See, for instance, Kingsley Davis, "Intermarriage in Caste Societies", *American Anthropologist*, Vol. 43, No. 3, 1941, pp. 376–395; Raymond Fishman, Sheena S. Iyengar, Emir Kamenica, and Itamar Simonson, "Racial Preferences in Dating", *The Review of Economic Studies*, Vol. 75, No. 1, 2008, pp. 117–132; Robert K. Merton, "Intermarriage and the Social Structure: Fact and Theory", *Psychiatry*, Vol. 4, No. 3, 1941, pp. 361–374; Michael J. Rosenfeld, "A Critique of Exchange Theory in Mate Selection", *American Journal of Sociology*, Vol. 110, No. 5, 2005, pp. 1284–1325; Michael J. Rosenfeld, "Racial, Educational and Religious Endogamy in the United States: A Comparative Historical Perspective", *Social Forces*, Vol. 87, No. 1, 2008, pp. 1–31; Robert Schoen and Yen-Hsin A. Cheng, "Partner Choice and the Differential Retreat from Marriage", *Journal of Marriage and Family*, Vol. 68, No. 1, 2006, pp. 1–10; Robert Schoen and John Wooldredge, "Marriage Choices in North Carolina and Virginia, 1969–71 and 1979–81", *Journal of Marriage and the Family*, Vol. 51, No. 2, 1989, pp. 465–481.