

On the Relationship Between the Marriage Squeeze and the Quality of Life of Rural Men in China

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Abstract

China is facing a male marriage squeeze, as there are more men in the marriage market than potential female partners. As a consequence, some men may fail to ever marry. However, while some studies have suggested that most unmarried men affected by the marriage squeeze in rural China feel a sense of failure, the quality of life of the men who remain unmarried against their will remains largely unexplored. Using data collected in rural Hanbin district of Ankang City (Shaanxi, China), this study analyzes the relationship between the marriage squeeze and the quality of life among rural men. Descriptive analyses indicate that the quality of life of unmarried men aged 28 years and older tends to be worse than for both younger unmarried men and married men. Also, the quality of life of men who perceive the marriage squeeze appears to be worse than that of those who do not. Regression analyses reveal that the perceived marriage squeeze and age independently have a significant negative relationship with the quality of life of rural men.

Keywords

marriage squeeze, gender imbalance, quality of life, rural men

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Introduction

A marriage squeeze refers to gender imbalance in the population of marriageable age; in the Chinese context, it specifically refers to more men in the marriage market than potential female mates (Attané, Zhang, Li, Yang, & Guilamoto, 2013; S. Li, Jiang, Attané, & Feldman, 2006). This gender imbalance is not a new phenomenon in China but has become worse in recent years (S. Li et al., 2006). Demographically, the marriage squeeze is not only a consequence of male-biased sex ratios at each age but is also a result of the Chinese social norm that favors men partnering with younger women. Partner availability, the proportion of men who are not married relative to women in the same broad age group, is further determined by the age structure of the population, which reflects shrinking cohorts as a result of the country's very rapid fertility transition (Goodkind, 2011; Merli & Hertog, 2010). Among adults aged 30 to 39 years at the last population census (2010), for instance, the sex ratio was 104.4 men to 100 women; but among those never married in this age group, it reached 278.3 at the national level (PCO, 2012).

It is now estimated that in China's population there are about 33 million surplus men (Xu & Li, 2015) who might face difficulty in finding a marriage partner (Das Gupta & Li, 1999; Z. Guo & Deng, 2000; S. Li et al., 2006). The consequences of the male marriage squeeze on individuals and society as a whole are a growing concern in China (S. Li, Jiang, & Feldman, 2014). In addition, women's practice of social status hypergamy¹ is exacerbating the male marriage squeeze in some parts of China (Liu, Jin, Jiang, & Li, 2009). Research indicates that men living in remote rural areas with lower social status and lacking social resources are more likely to be squeezed in the marriage market, as they are not very attractive to women who prefer men of higher socioeconomic status (Greenhalgh &

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Winkler, 2005; Y. Li et al., 2010; X. Y. Yang, Attané, Li, & Yang, 2012; X. Y. Yang, Attané, Li, & Zhang, 2012; X. Y. Yang, Li, Attané, & Feldman, 2015).

Assuming that there are more men than women looking for a partner of the opposite sex, the present study defines marriage-squeezed males as those of marriageable ages who have real or perceived difficulty in finding female partners to marry. This assumption is based on the fact that marriage is still a universal norm in China, meaning that people make every effort to get married, while those who fail to do so face social and family pressure (Attané et al., 2013; Y. Li & Li, 2008; C. Zhang & Zhong, 2005). Unlike people who voluntarily stay unmarried in Western countries (Crouse, 2012), most marriage-squeezed males in China do not choose to remain single (X. Y. Yang et al., 2015).

In China, unmarried people often feel a sense of failure (Attané et al., 2013; X. Zhou, Wang, & Hesketh, 2011). Their quality of life and well-being are thus likely to be impaired (Epel, Kaplan, & Moran, 2010; X. Y. Yang et al., 2015). Therefore, it is important to test the relationship between marital status and quality of life of rural men in China.

Literature Review

Quality of life is defined as the general well-being of individuals, including health, psychology, and social adaptation (Aarason, 1990). It also involves individuals' own perception of their position in life in a given system of norms and values according to which they shape their goals, expectations, standards, and concerns (WHOQOL Group, 1999). Quality of life is a broad concept affected in a complex way by an individual's physical health, psychological state, level of economic independence, social relationships, personal beliefs, and his or her environment (WHOQOL Group, 1999).

Among the characteristics used to measure the quality of life, the World Health Organization developed a quality-of-life scale (WHOQOL) that has been widely recognized and used. There are two versions. One is WHOQOL-100, which includes 100 items over six domains and 24 specific dimensions; the other is WHOQOL-BREF, which includes only 26 items covering four dimensions: physical health, psychological health, social relations, and environment. Due to its convenience and simplicity, the WHOQOL-BREF has been widely used and has proved to be reliable and valid in China for various population groups, including healthy people, aged people, college students, rural populations, and people with cancer (A. Guo, Weng, & Wu, 2002; Y. Jin & Zhao, 2006; Shu & He, 2004; Wang, Peng, & Xu, 2003; X. J. Yang, Qiu, & Li, 2005).

A general finding is that marriage can effectively improve health (Schoenborn, 2004) and quality of life

(Campbell, Converse, & Rodgers, 1976). A study in South Korea suggested that both single men and women had significantly worse quality of life than their married peers (Han, Park, Kim, Sun, & Park, 2014). Studies in China have also reported that marriage can improve the quality of life for both sexes (N. Li, Liu, Li, & Ren, 2001; Zong, Wang, Tang, & Tang, 2010). However, in most cases, the relationship between marital status and quality of life also depends on gender roles within the family or gender division of labor between spouses. Studies in Western countries suggest a much weaker positive relationship or even a negative relationship between being married and women's quality of life based on the gender role hypothesis; married women have to take primary responsibility for household chores even if they hold a job outside their home, and may suffer from work overload (Bernard, 1982; Kessler & McRae, 1981). Another study on South Korea indicated a negative relationship between being married and the quality of life of men, but a positive relationship between being married and women's quality of life due to a gender division of labor that is less favorable to men (Lee, 1998). From these mixed findings, it might be inferred that being unmarried due to a marriage squeeze might be negatively associated with the quality of life of rural men in China, since for the overwhelming majority of them, remaining single is not voluntary (X. Y. Yang et al., 2015).

To date, however, very few studies have addressed the quality of life of marriage-squeezed men, or the relationship between the male marriage squeeze and the quality of life of rural men. The purpose of this study is thus to measure the quality of life of rural men in the context of a marriage squeeze, and to explore differences in the quality of life between the marriage-squeezed men and those who are married or who do not perceive a marriage squeeze.

Existing research has reported that men who face poverty are more likely to be marriage squeezed, due to women's practice of social status hypergamy, as explained above. In turn, men lacking social and economic support brought about by marriage are more likely to remain in poverty, and thus to have a lower level of general well-being (X. Jin, Li, & Li, 2011; Y. Li et al., 2010; Wei, Jin, & Li, 2008). Studies on rural counties in China have reported that more than 40% of rural unmarried males older than 28 years have never had sexual intercourse, and that those who ever had sexual intercourse were likely to compensate for the absence of a stable sexual partner within marriage by having sex with sex workers (commercial sex) and with same-sex sexual partners without using condoms; this can increase the risk to health of marriage-squeezed males and thus impair their sexual well-being (X. Y. Yang, Attané, Li, & Yang, 2012; X. Y. Yang, Attané, Li, & Zhang, 2012; X. Y. Yang et al., 2015). From these findings, it can be expected that

Table 1. Original and Standardized Scores for WHOQOL-BREF.

Scales	Original scores		Standardized scores		Cronbach α
	M (SD)	Min/max	M (SD)	Min/max	
Physical health (7 items)	23.62 (4.85)	7/35	59.36 (17.33)	0/100	.79
Psychological health (6 items)	19.87 (4.04)	6/30	57.79 (16.84)	0/100	.78
Social relationships (3 items)	9.88 (2.03)	3/15	57.31 (16.93)	0/100	.70
Environment (8 items)	24.58 (5.15)	8/40	51.81 (16.11)	0/100	.80
General quality of life (1 item)	2.96 (0.82)	1/5	49.08 (20.55)	0/100	—
General health status (1 item)	3.27 (0.96)	1/5	556.82 (24.02)	0/100	—
Total scale (26 items)	83.94 (15.25)	28/130	54.85 (14.95)	0/100	.93

Note. Cronbach α coefficient for a one-item scale is meaningless.

quality of life among marriage-squeezed males should be lower than that of married men. Therefore, two hypotheses are proposed in this study:

Hypothesis 1: The quality of life of marriage-squeezed men is significantly lower than that of their peers who are married or who do not perceive a marriage squeeze.

Hypothesis 2: The quality of life of rural men in China is negatively associated with the marriage squeeze, including their unmarried status and their perceptions on marriage squeeze.

Method

Survey and Procedures

This study uses data from a survey on the quality of life of rural men conducted in August 2014 in Hanbin district of Ankang city, located in southeast Shaanxi. Ankang includes about 2.63 million permanent residents, with an overall sex ratio of 112, meaning that for every 112 men, there were 100 women in the total population. In Hanbin district, the number of permanent residents is about 0.87 million, with an overall sex ratio of 107.6 men for 100 women in the total population, but the sex ratio is higher among both the never married (158.3 men for 100 women) and the divorced (186.8 men per 100 women) population aged 15 years and older.

From the 30 townships in Hanbin District, 10 were selected according to their size, distribution of population, and geological features. A total of 120 married and unmarried men aged from 20 to 65 years were randomly selected in each township² using the name lists provided by the local family planning department, as the sample frame. More than 100 individuals in each township were finally sampled. Each randomly selected man was called by telephone the day before the survey to get his formal acceptance to participate. In case he declined, he was replaced by another qualified person randomly selected from the name list.

As in many other countries, especially in the developing world, the population could not be approached without the consent of the local authorities, who helped in the material organization of the survey by providing premises where interviews could take place. Before starting to administer the questionnaire, an interviewer read to each respondent the rules concerning personal data protection, explained that they were free to withdraw from the survey at any time, and asked them to sign their names on an informed consent form. Ultimately, 1,200 questionnaires were administered and 1,017 valid questionnaires were completed, among which, 15% were filled in by unmarried men (139), 85% by married men (826); 17% were aged 28 years and younger (169) and 83% older than 28 years (783).

Measurements

Quality of Life. The WHOQOL-BREF was adopted as the instrument for measuring the quality of life of the current sample of rural men. This scale includes 26 items and six subscales: physical health, psychological health, social relations, environment, a general assessment on quality of life, and a general assessment of health status.

According to the WHO's suggestions, the three negative items in this scale were transformed to positive items, and the score on each subscale was obtained by summing scores of all items in that subscale. In order to compare between different scores obtained from different scales, the original scores were transformed to percentile or standardized scores (see Table 1). In most existing research, standardized scores are obtained using linear interpolation (He, Gao, & Lou, 2001; Ma, 2000). The equations for the linear interpolation are as below:

$$x_{\text{std}} = \frac{x - x_{\text{min}}}{x_{\text{max}} - x_{\text{min}}} \quad (1)$$

where x_{std} is the standardized score of each respondent on the total scale or subscales, x is the original score obtained

by each respondent on the total scale or subscales, x_{\max} is the maximum score on the scales among samples, x_{\min} is the minimum score on the scales among samples.

Marriage Squeeze. A key methodological issue for the analysis of the relationship between the marriage squeeze and the quality of life of rural men concerns how the marriage squeeze can be measured at the individual level. Indeed, as a concept defined by demographers at the macro-level, the marriage squeeze can hardly be recognized at the individual level (X. Y. Yang, Attané, Li, & Yang, 2012; X. Y. Yang, Attané, Li, & Zhang, 2012; X. Y. Yang et al., 2015). However, social psychology provides a tool to transpose a macro-level concept to the individual level: Social cognitive theory; that is, an individual's knowledge acquisition can be directly related to observing his or her surrounding environment and others within the context of social interactions, experiences, and outside media influences. Therefore, a macro-level environment such as the marriage squeeze can be measured at the individual level by his or her cognition of the surrounding environment (Bandura, 1986). A study by Bloom, Smoot, Shore, and Shore (1992), for instance, used individual perceptions of policies to measure the effects of the relevant policy on smoking behavior at the individual level and validated a perceptual model mainly based on the social cognitive theory. Other studies by demographers define marriage-squeezed men as those who "perceive difficulties in getting married," which is a subjective indicator (X. Jin et al., 2011). Therefore, based on social cognitive theory and existing research, the present study included an indicator of "perceived marriage squeeze". In addition, in line with previous research suggesting that in rural China, a man's chance to marry decreases significantly with age, especially after age 28 (X. Jin, Guo, & Liu, 2012; Liu & Jin, 2011; X. Y. Yang, Attané, Li, & Yang, 2012; X. Y. Yang, Attané, Li, & Zhang, 2012), this study assumes that never-married men aged 28 years or older are subject to the marriage squeeze. In total, three indicators were adopted to measure the "marriage squeeze."

Marital status. Categorical variable, measured by 0 = "unmarried (including divorced and widowed)," 1 = "married or cohabiting."

Age. Categorical variable, measured by 0 = "20-28," 1 = "above 28."

Perceived marriage squeeze. Categorical variable, measured by 0 = "no," 1 = "yes" by asking the question to unmarried men: "Do you feel that it is difficult for you to get married?" and to married men: "Do you feel that it WAS difficult for you to get married?"

This question was designed for both married and unmarried men because they all might subjectively perceive difficulties they faced or are currently facing in finding a woman to marry.

In addition, two socioeconomic variables were included as control variables: education is a categorical variable, measured by 1 = "primary school and below," 2 = "junior high school," 3 = "senior high school" and annual income is a categorical variable; measured by 1 = "less than ¥10,000 (\$1,500)"; 2 = "¥10,000-¥20,000 (\$1,500-\$3,000)"; 3 = "more than ¥30,000 (\$4,500)."

Analysis Strategies

Based on the three variables for marriage squeeze (marital status, age, perceived marriage squeeze) at the individual level, two methods were adopted to test the relationship between the marriage squeeze and rural men's quality of life and well-being.

First, independent sample *t* tests were used to compare the mean scores obtained on each dimension and the total scale of the quality of life between men who perceive the marriage squeeze and those who do not, marital status (unmarried including divorced and widowed; married or cohabitating), and age (20-28 years; older than 28 years).

Second, a hierarchical linear regression was used and three models were constructed using the scores obtained from the total scale of quality of life as the dependent variable. Model 1 includes the perceived marriage squeeze to measure the subjective marriage squeeze as the independent variable. Model 2 adds two variables, marital status and age, to measure objective marriage squeeze to Model 1. Model 3 adds two socioeconomic variables, education and annual income, as control variables to Model 2.

Results

The extent of perceived marriage squeeze in different subgroups is displayed in Figure 1 using the crosstab method and a χ^2 test. It appears that the likelihood of perceiving the marriage squeeze is higher among men who are younger ($\chi^2 = 6.00, p = .014$), among those who are unmarried ($\chi^2 = 29.06, p = .000$), among those of lower educational level ($\chi^2 = 12.50, p = .001$), and among those with lower income level ($\chi^2 = 12.10, p = .002$). This is consistent with the lack of attractiveness to women of men with low socioeconomic status, due to women's practice of social status hypergamy in China (Qi & Niu, 2012).

Hypothesis 1 Tested

Using independent sample *t* tests, the scores obtained from the quality of life scale among men by age and marital status are presented in Figure 2. As shown in Figure 2, among

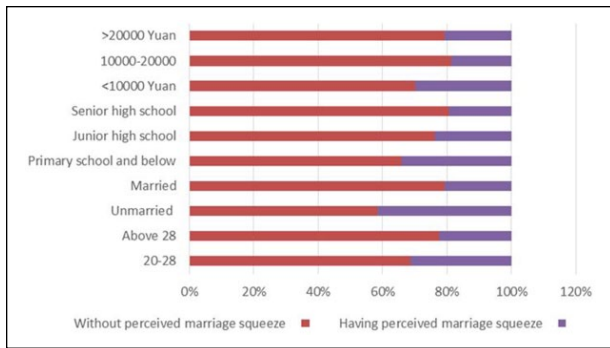


Figure 1. Perceived marriage squeeze by sociodemographic status.

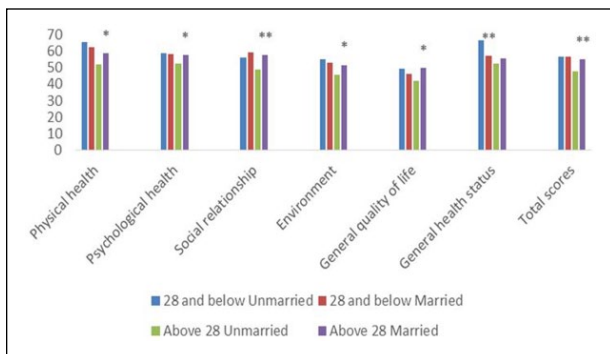


Figure 2. Mean scores for quality of life among men by age and marital status. * $p < .1$. * $p < .05$. ** $p < .01$. *** $p < .001$.

men aged 28 years and younger, only the scores for the general health status of the unmarried were significantly higher than among married men, while no difference was seen in psychological health, social relationship, environment, and the general quality of life between unmarried and married men. Among men older than 28 years, except for the general health difference between unmarried and married men, the scores from all other subscales and the total scale of quality of life among married men were significantly higher than among the unmarried. Among the four groups of men, the scores on all subscales and the total scale among unmarried men aged 28 years and older are apparently lower than that among the three other groups.

Using independent sample *t* tests, the scores on the quality of life scale among men by age and whether they perceived the marriage squeeze are presented in Figure 3. Among men younger than 28 years, the scores on physical health, psychological health, social relationship, environment, general quality of life, and the total scale among men who did not perceive the marriage squeeze were significantly higher than among men who did. However, no difference was seen in scores on general health status between the two groups. Among men older than 28 years,

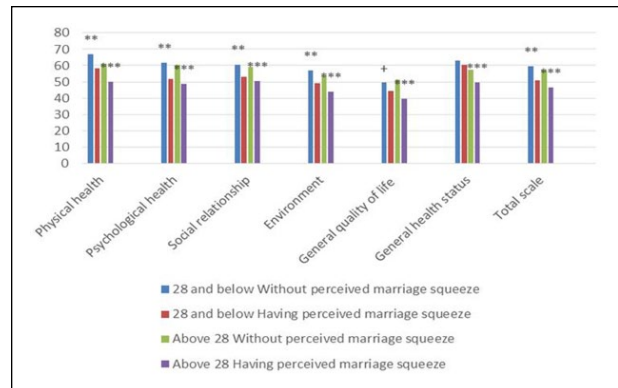


Figure 3. Mean scores for quality of life among men by age and whether they perceive a marriage squeeze. * $p < .1$. * $p < .05$. ** $p < .01$. *** $p < .001$.



Figure 4. Mean scores for quality of life among men by marital status and whether they perceive a marriage squeeze. * $p < .1$. * $p < .05$. ** $p < .01$. *** $p < .001$.

the scores on each subscale and the total scale among men who did not perceive a marriage squeeze were significantly higher than among the men who did. Among the four groups of men, the scores obtained on all subscales and total scales among men older than 28 years and who perceived a marriage squeeze are apparently lower than those among the other three groups.

Using independent sample *t* tests, the scores on the quality of life scale among men by marital status and perceptions of the marriage squeeze are presented in Figure 4. Whether men were unmarried or married, scores on each subscale and the total scale among those who did not perceive a marriage squeeze were all significantly higher than among men who perceived a marriage squeeze.

Hypothesis 2 Tested

The regression results of the marriage squeeze on quality of life among rural men are presented in Table 2. With

Table 2. Associations Between of Marriage Squeeze and Quality of Life Among Rural Men.

Perceived marriage squeeze (reference: without perceived marriage squeeze)	Model 1	Model 2	Model 3
Having marriage squeeze	-0.39***	-0.40***	-0.35***
Marital status (reference: unmarried)			
Married		0.02	0.02
Age (reference: 28 years and younger)			
Older than 28 years		-0.11**	-0.09*
Education (reference: primary school and below)			
Junior high school			0.08
Senior high school and above			0.14*
Annual income (reference: <¥10,000)			
¥10,000-¥20,000			0.01
>¥20,000			0.15***
df	746	730	708
Adjusted R ²	.15	.09	.12
F	136.03***	46.50***	23.30***

Note. df = degrees of freedom. All regression coefficients are reported in standardized values. + $p < .1$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Model 1, the variables that measure subjective marriage squeeze were significantly and negatively associated with quality of life among rural men; that is, scores of quality of life among men who perceived a marriage squeeze were higher than among men who did not (standardized $\beta = -0.39$, $p < .001$).

Two other variables for measuring objective marriage squeeze, marital status and age, were added to Model 1 to form Model 2. Compared with Model 1, the relationship between perceived marriage squeeze and quality of life remained almost unchanged in significance, direction and even regression coefficient (standardized $\beta = -0.40$, $p < .001$). However, age was significantly and negatively associated with the quality of life among rural men for men older than 28 years, who scored significantly higher than men aged 28 years and younger (standardized $\beta = -0.11$, $p < .01$).

Two socioeconomic variables, education and annual income, were added to Model 2 to make Model 3. Compared with Model 2, the relationship between the original variables for measuring marriage squeeze and quality of life remained almost unchanged in significance and direction, while the regression coefficient for the perceived marriage squeeze and age decreased to some extent (the perceived marriage squeeze: standardized $\beta = 0.35$, $p < .001$; age: standardized $\beta = 0.09$, $p < .05$). The added variables education and annual income were significantly and positively associated with the quality of life among rural men; that is, the scores for quality of life for men with senior high school and above were significantly higher than for men with primary school and below (standardized $\beta = 0.14$, $p < .05$), and the scores for men with annual income more than ¥20,000 (\$3,000) were

significantly higher than for men with annual income less than ¥10,000 (\$1,500; standardized $\beta = 0.15$, $p < .01$).

Discussion and Conclusions

China is facing a male marriage squeeze, as there are greater numbers of men in the marriage market than potential female mates. As a consequence, some men may fail to ever marry (Ebenstein & Sharygin, 2009). In line with studies that have suggested that most of the unmarried men affected by the marriage squeeze in rural China feel a sense of failure (Attané et al., 2013; X. Zhou et al., 2011), the present study tested the relationship between the male marriage squeeze and rural men's quality of life.

Figures 2 to 4 show that the mean scores on the quality of life scale for all groups of men were between 40 and 70, which is significantly lower than the national norm (60-70) reported in related studies (Lu & Yu, 2012). This indicates that the quality of life of rural men was worse than that of other Chinese men, consistent with existing literature (L. Zhang, Wang, & Wang, 2005; Zong et al., 2010). When cross-comparing scores on the quality of life scale among pairwise variables, including perceived marriage squeeze, marital status, and age, to measure the marriage squeeze, the quality of life scores among unmarried men older than 28 years were the lowest of all groups, and scores among men who perceived the marriage squeeze were still lower, no matter what their marital status or age. These results support the hypothesis proposed above, that the quality of life of the marriage-squeezed men is lower than that of their peers who were married or who did not perceive a marriage squeeze.

The regression results in Table 2 present the total and net relationship between the marriage squeeze and the quality of life of rural men. From Model 1, perceived marriage squeeze was significantly associated with quality of life among rural men in the expected direction, with the level of quality of life among men who perceived marriage squeeze being lower than among those who did not perceive the marriage squeeze. From Model 2, the relationship between perceived marital status and the quality of life among men remained almost unchanged when the two variables for measuring objective marriage squeeze were included. Of the two newly added variables, age was significantly associated with quality of life in the expected direction, with the quality of life among men older than 28 years lower than for those aged 28 years and younger. However, marital status had no apparent relationship with quality of life, which is somewhat unexpected. A possible reason for this finding is that the proportion of unmarried men in the current sample was very small among those older than 28 years. Another possible reason is suggested from further data analysis: 72.7% of unmarried men (101) still live with their parents or relatives so that their quality of life may not be affected much by bachelorhood. From Model 3, the relationship between the above three variables in measuring marriage squeeze and the quality of life among men remained almost unchanged when control variables were included, indicating an independent relationship between the three variables defining the marriage squeeze and quality of life among rural men (Z. Guo, 1999). Therefore, the results of the regression analysis support Hypothesis 2, namely that both the subjective (perceived) and objective marriage squeeze (aged older than 28 years and unmarried), are significantly associated with rural men's quality of life.

On one hand, the results obtained from both descriptive analysis and regression analysis are consistent with the findings of previous research in Korea and China, namely that marriage can improve the quality of life of men (Han et al., 2014; N. Li et al., 2001; Zong et al., 2010). On the other hand, the current results conflict with findings from Western countries and Korea, namely that there is a negative relationship between being married and quality of life among men and women (Bernard, 1982; Kessler & McRae, 1981; Lee, 1998), which suggests that it would be useful to explore the relationship between marital status and quality of life among different subgroups in China.

Besides marriage squeeze variables, educational level and annual income were also significantly associated with quality of life among rural men in the expected directions; namely, men with a lower educational level or lower annual income were more likely to have a worse quality of life, which is consistent with previous findings

(N. Li et al., 2001; L. Zhang et al., 2005; W. Zhou, Ji, & Chen, 2011).

In sum, it can be concluded that unmarried men older than 28 years and men who perceive the marriage squeeze have worse quality of life. The marriage squeeze has an independent and significantly negative relationship with the quality of life among rural men, namely the greater the extent of the marriage squeeze, the lower level of quality of life.

Limitations and Prospects

A first limitation lies in the fact that data were collected in rural Hanbin, located in southern Shaanxi, which may not necessarily be representative of other areas with gender imbalance. In addition, Hanbin faces a significant out-migration among young, healthy, and unmarried men, which leads to a biased sample including only 15% of unmarried men, thus possibly affecting the results. Also, using cross-sectional data rather than panel or longitudinal data, precludes any inference of a causal relationship.

A second limitation exists in the methods. Due to the biased sample structure, only relatively simple methods were used and few variables were included in the analyses. Inclusion of more demographic, economic, and social variables would be desirable. Although the perceived marriage squeeze at the individual level was measured by subjective and objective variables, there are some shortcomings in the validity of these measurements. For example, there are debates as to whether 28 is valid as the threshold age for measuring men's decreasing chances of getting married, or whether the marriage squeeze as a macro-level concept can be measured by the perceived marriage squeeze at the individual level. Finally, only the relationship between perceived marriage squeeze and the quality of life of rural men was examined, but other important factors that may be associated with quality of life, such as social support, are not addressed.

Future study will expand the survey to include areas from Eastern China, where there is gender imbalance, improve strategies for sampling and organization to ensure an unbiased sample structure, and analyze further the impacts of different types of social support on quality of life among rural men.

Declaration of Conflicting Interests

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Notes

1. Hypergamy (also described as the practice of “marrying up”) is a term used in social science to describe the practice of a woman marrying a man of a higher socioeconomic status than herself.
2. The project has been reviewed and approved by the academic committee of School of Public Policy and Administration at Xi’an Jiaotong University. Before the survey, all respondents were informed of their rights for privacy protection and cancellation at any time, and were asked to sign informed consent forms.

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