

Empirical research on the correlation between rural divorce rates and male marriage costs

Junji Li*, Chengcheng Wang

School of Economics, Wuhan Polytechnic University, Wuhan, Hubei, 430048, China

**Corresponding author*

Keywords: Rural divorce rate, Cost of male marriage, Correlation analysis, Empirical research

Abstract: This research aimed at exploring the correlation between rural divorce rates and marriage costs for men and to reveal the influence of education level on this relationship. By collecting data from 36 rural samples, the data were processed and analyzed by descriptive statistical analysis, correlation analysis, differential analysis, regression analysis and sensitivity analysis. The results showed a significant negative correlation between rural divorce rates and male marriage costs, where areas with higher male marriage costs tend to be accompanied by lower rural divorce rates. Moreover, education level also has a significant impact on rural divorce rates, which are lower among higher educated individuals. The results of the regression analysis further verified the predicted effect of the male marriage cost on the rural divorce rate. The findings of this research are important for understanding and addressing rural marriage problems and provide an empirical basis for the development of relevant policies.

1. Introduction

In the rural areas of China, marriage stability has always been one of the focus of social attention. With the development of social economy and the change of cultural concepts, the rural divorce rate shows an increasing trend year by year, which brings challenges to the rural social stability and family happiness. At the same time, as an important factor in the rural marriage market, the male marriage cost plays an important role in the formation and maintenance of the marriage relationship. Therefore, it is of great theoretical and practical value to research the correlation between rural divorce rates and male marriage costs.

This research aimed at exploring the relationship between rural divorce rates and male marriage costs, and to further explore the possible mechanisms and influencing factors.

2. Literature Review

Since the beginning of the 21st century, the divorce rate in China has been rising, which has attracted wide attention from all sectors of society and academia. Among them, the relationship between male marriage cost and rural divorce rate has been highlighted in various research fields.

In the cost of marriage, from a macro perspective, scholars Gao Hanju and others believe that the

cost of male marriage includes physical economic costs and intangible social, cultural, political costs and other factors [1]. From a micro perspective, relevant scholars believe that the cost of male marriage is mainly affected by love expenses, marriage-related expenses, mobility experience, household registration matching, regional differences, and education level [1][2]. Some scholars detailed the cause analysis: the full support of family economy, the rise of prices, the change of marriage consumption concept, the psychological comparison and other factors lead to the rise of the cost of male marriage, increased the rural divorce rate [3].

Among the economic factors, a large number of scholars believe that the per capita GDP [4][5][6][7][8][9], the level of economic development [4][10][11] between different regions, the growth of housing price [6][8][9][12][13] and the influence of the purchase restriction policy on the rural divorce rate. Among them, scholar Fan Ziyang believes that the adoption of the purchase restriction policy will reduce the stability of marriage, leading to the increase of the divorce rate in rural areas.

Among the educational factors, many scholars believe that the educational level has an obvious effect on the rural divorce rate [9][10][11][14]. Relevant scholars all believe that the higher the educated and matched homogeneous marriage, the higher the couple satisfaction, the lower the rural divorce rate. The education model of "high wife and low husband" will lead to low inclusiveness of marriage, reduce marriage satisfaction and increase rural divorce rate; the education model of "high husband and low wife" will lead to high inclusiveness of marriage, which is conducive to the stable [15][16] of marriage quality. From the time eline, before 1960, the increase in educational level of rural women increased the risk of rural divorce rate, while men had the opposite; after 1980, the improvement in educational level of rural women did not increase the rural divorce rate, and men had [17]. After former scholars, some scholars believe that the late marriage situation of the educated floating groups will also have different effects on the divorce rate in rural areas. The high educated migrant groups have the greatest possibility of late marriage, but higher marriage quality and the least possibility of divorce; the opposite is true for the high school educated migrants, and the low educated migrants are less likely to marry later, especially for rural men with small divorce rate [18].

Among the social factors, we can divide the factors influencing the rural divorce rate into four levels.

(1) From the perspective of the impact of the development of The Times, relevant scholars believe that the Internet penetration rate [7][11][14][19], the per capita number of mobile phones [7], the proportion of female Internet users [9], all have an important impact on the rural divorce rate and increase the divorce rate in rural areas.

(2) From the perspective of urban and rural areas, urban scale [20], urbanization level, urban population proportion, unemployment rate [7][8][11], population mobility [6][21] are significantly related to the rural divorce rate, among which, the growth of unemployment rate and the increase of urban and rural income have a positive impact on the rural divorce rate, but not significant [7]. In addition, as for the factors of population mobility, some relevant scholars believe that rural labor mobility will lead to the increase of rural divorce rate [22]. They believe that whether the flow of husband and wife or the flow of unilateral, it will reduce the stability of marriage and increase the divorce rate [23], and the outflow of rural labor force will increase the divorce rate higher [24]. Scholar Peng Xiaohui believes that the two-way flow of rural labor force is the main reason for the rural divorce rate.

(3) From the perspective of family level, family structure [25], family form and children, women's independence consciousness [5], land resources, the number of minor children [21], all have a significant impact on the rural divorce rate. The family structure, especially the children, plays the greatest role in the stability of the parents' marriage relationship, which greatly reduces the

divorce rate in rural areas.

(4) On the individual level, changes in population age, gender structure and age-specific divorce rate also contributed to the rise in the divorce rate. Among them, the change of age divorce rate plays a major role in the divorce rate, and the impact of demographic structure change is also obvious, which should not be underestimated as [25][26].

Through the above analysis, we find that the cost of male marriage, whether from the macro perspective or the micro perspective, is most prominently affected by the tangible economic cost, while the intangible cost only accounts for the secondary factor. From the perspective of various influencing factors, we find that the growth of rural divorce rate affects the economic factors, especially the per capita GDP and housing price, which have been recognized by many scholars. Secondly, among the educational factors, scholars generally believe that higher female education than male education will lead to reduce the stability of marriage and increase the rural divorce rate, but also reduce the divorce rate in rural areas. Among the social factors, the Internet penetration rate and the urbanization level are the most important factors leading to the increase of the rural divorce rate.

3. Theoretical Framework

This research is based on an existing theoretical framework to explain the relationship between rural divorce rates and male marriage costs.

The theoretical explanation of the rural divorce rate and the cost of male marriage mainly involves the following aspects:

3.1. Marriage Market Theory

Marriage market theory believes that marriage is a decision-making process based on exchange. In rural settings, male marriage costs usually include wedding costs, the amount of bride price and other related costs. Higher male marriage costs may increase the financial burden of men and have an impact on the marital relationship of rural couples.

3.2. Socioeconomic Status Theory

Socioeconomic status theory points out that socioeconomic status has an important influence on marriage relations. Male marriage costs can be viewed as an indicator of male socioeconomic status. Higher marital costs for men may have a positive impact on marital stability, as men demonstrate higher financial capacity when assuming marital responsibilities.

3.3. Theory of Marriage Quality and Satisfaction

The theory of marriage quality and satisfaction holds that marriage quality is an important predictor of marital stability. The cost of male marriage may affect the marriage quality and satisfaction, and then affect the rural divorce rate. Higher male marriage costs may improve marriage quality and satisfaction and reduce the likelihood of divorce.

3.4. Cultural Concepts and Social Values

Cultural concepts and social values have an important impact on marriage stability in rural areas. The values of marriage may vary between different regions and social groups, which influences the relationship between male marriage costs and rural divorce rates.

Through the above theoretical framework, we will deeply explore the relationship between rural divorce rates and male marriage costs, and consider other potential mediating and moderating variables to fully understand the nature and mechanisms of this relationship. The theoretical framework will provide us with an effective analytical framework for interpreting the research results and further driving the development of related theories.

4. Research Technique

This research used empirical research to explore the correlation between rural divorce rates and the cost of marriage in men.

4.1. Data Sources

The data source for this research is a survey dataset of 36 rural samples. The dataset covers a sample of different rural areas, including variables including rural divorce rates, average marriage costs for men, average age, average annual household income and average level of education. The data collection methods included a questionnaire survey and field interviews.

4.2. Variable-Definition

Rural divorce rate: indicates the percentage of rural couples divorced in the survey sample, expressed as a percentage.

Average marriage cost for men: it means the average cost paid by men in the process of rural marriage, including the wedding expenses, the amount of bride price and other related expenses, etc., in ten thousand yuan.

Mean age: represents the average age of rural couples in the sample in years.

Average annual household income: it represents the average annual income of rural households in the sample, including agricultural income, non-agricultural income and other income, in the unit of ten thousand yuan.

Average education level: it indicates the average education level of rural residents in the sample, which is divided into four grades: below junior high school, junior high school, junior college and university.

4.3. Data Analysis Method

This research will use the following data analysis methods to explore the correlation between rural divorce rates and male marriage costs.

Descriptive statistical analysis:

Descriptive statistical analysis was performed on variables such as rural divorce rate, mean male marriage cost, mean age, mean annual household income, and average level of education, including calculating mean, standard deviation, minimum, maximum, and quantile.

Correlation analysis:

The linear relationship between rural divorce rates and male marriage costs was assessed by calculating the correlation coefficients and tested for significance.

Difference analysis:

Differences in rural divorce rates between different educational level groups and age groups were analyzed using independent sample t-tests or analysis of variance.

Regression analysis:

Linear regression model was developed to explore the relationship between rural divorce rate

and male marriage costs and consider other possible influencing factors.

Sensitivity analysis:

The robustness of the model results was tested by testing the robustness of the regression model.

5. Data Analysis Results and Discussion

This research explored the relationship between rural divorce rates and the cost of male marriage by analyzing data in rural samples, and further discusses the possible mechanisms and influencing factors.

First, based on the results of the descriptive statistical analysis, we can see that the mean value of the rural divorce rate is 10.4% with a standard deviation of 1.59, indicating that there is some variability in the rural divorce rate in the sample. Meanwhile, in the research, the mean cost of male marriage was 16.8 and the standard deviation was 3.32, indicating that the cost of male marriage also had some differences in rural areas. Furthermore, the average age in the sample was 34.8 years, and the average annual household income was 105,000 yuan. In terms of education level, the majority of the sample had an education level of high school or college.

Second, correlation analysis showed a significant inverse relationship between rural divorce rates and marriage costs for men ($r = -0.43$, $p < 0.05$). This suggests that areas with higher divorce rates in rural areas are often accompanied by lower male marriage costs. This may be because when the cost of male marriage is higher, families have higher expectations for the stability and happiness of marriage, so they pay more attention to the maintenance of marriage. On the other hand, when the cost of male marriage is low, the family has low expectations of marriage, and it is easy to produce low investment in marriage, thus increasing the possibility of divorce.

The results of the differential analysis showed that the rural divorce rate was significantly different among the different educational level groups ($F = 6.72$, $p < 0.05$). Specifically, the rural divorce rate in the high education group was significantly lower than the low education group. This may be because individuals with a higher education level have more marital awareness and marriage skills and are better able to cope with the problems and challenges in marriage, thus reducing the likelihood of divorce. However, individuals with low education level face greater marriage pressure due to the lack of marriage knowledge and skills to support, and the divorce rate is relatively high.

Moreover, according to the results of the regression analysis, the simple linear regression model showed a negative relationship between rural divorce rates and male marriage costs ($\beta = -0.31$, $p < 0.05$), indicating a certain association between the increased male marriage costs and the decline in rural divorce rates. The multiple linear regression model further controlled for other potential influencing factors, and the results showed that male marriage cost remained a significant predictor ($\beta = -0.27$, $p < 0.05$), indicating that the effect of male marriage cost on rural divorce rate still existed despite considering other factors.

For the sensitivity analysis, we performed the robustness test and the results showed good stability of the results of the regression model. This enhances the reliability of the findings and further supports the relationship between rural divorce rates and marriage costs for men.

6. Conclusion

Through empirical researches on the correlation between rural divorce rates and male marriage costs, we draw the following conclusions:

There is a significant negative correlation between rural divorce rates and male marriage costs. The findings suggest that areas with higher rural divorce rates are often accompanied by lower male marriage costs. This may be because when the cost of male marriage is higher, families have higher

expectations for the stability and happiness of marriage, so they pay more attention to the maintenance of marriage. However, when the cost of male marriage is low, the family's expectations of marriage are low, which is easy to produce low investment in marriage, thus increasing the possibility of divorce.

Education level has a significant impact on the rural divorce rate. The results showed that individuals with higher educational level had lower rural divorce rates, while individuals with lower educational level had relatively higher rural divorce rates. This may be because individuals with a higher education level have more marital awareness and marriage skills and are better able to cope with the problems and challenges in marriage, thus reducing the likelihood of divorce. However, individuals with low education level face greater marriage pressure due to the lack of marriage knowledge and skills to support, and the divorce rate is relatively high.

While controlling for other potentially contributing factors, male marriage costs remain a significant predictor of rural divorce rates. Through regression analysis, we found a negative correlation between male marriage costs and rural divorce rates, namely, between increasing male marriage costs and decreasing in rural divorce rates. This result highlights the important role of male marriage costs in the formation of rural divorce rates.

In conclusion, the conclusions of this research indicate that there is a negative correlation between rural divorce rates and male marriage costs, and that education level also has a significant effect on rural divorce rates. These findings have important practical implications for developing and optimizing marriage policies and promoting social stability and family happiness in rural areas. However, this research still has some limitations, such as the limited sample range and the cross-sectional design. Future researches could further explore the relationship between rural divorce rates and the cost of male marriage and their mechanisms of influence by expanding the sample size and adopting a longitudinal design.

References

- [1] Gao Hanju, Lu Chengwen. *The construction of marriage cost and its institutionalist analysis—based on Zhejiang survey [J]*. *Youth Exploration*, 2019(05):104-112. DOI:10. 13583/j. cnki. issn1004-3780. 2019. 05. 009.
- [2] Jin Xiaoyi, Duan Zhuqing. *What is the source of the bride price: a study on the cost of male marriage in rural China under urbanization [J]*. *Women's Studies*, 2019 (06): 18-31.
- [3] Zhu Kaojin, Yang Chunli. *Cost of marriage study for contemporary youth [J]*. *China Youth Study*, 2007(04): 18-20. DOI: 10. 19633/j. cnki. 11-2579/d. 2007. 04. 006.
- [4] Zhang Jun. *Female marriage age and marital stability: evidence from the CHNS [J]*. *The Beijing Social Sciences*, 2016(05):77-84. DOI:10. 13262/j. bjsshkxy. bjshkx. 160509.
- [5] Zhao Yan, Sun Hongbing. *Measurement analysis of the relationship between economic development and divorce rate in China—Based on VAR method [J]*. *Value Engineering*, 2013, 32(20):8-11. DOI:10. 14018/j. cnki. cn13-1085/n. 2013. 20. 001.
- [6] Zhang Liuwuyezhi, Wu Zhaoxiang. *Summary of the current research on marital stability in China [J]*. *The China market*, and 2016(24):255-257+275. DOI:10. 13939/j. cnki. zgsc. 2016. 24. 255.
- [7] Cheng Zhong. *Study on the influencing factors of the rising divorce rate in China—Space measurement empirical analysis based on the divorce rate data of 284 prefecture-level cities in China [J]*. *Research on Institutional Economics*, 2018 (02): 229-248.
- [8] Zhang Chong, Chen Yuxiu, Zheng Qian. *Change trend, influencing factors and countermeasures of divorce rate in China [J]*. *Journal of Xihua University (Philosophy and Social Sciences Edition)*, 2020, 39 (02): 41-49.
- [9] Xu Chang. *Study on the influencing factors of divorce rate under the rapid economic development in China [J]*. *Statistical Theory and Practice*, 2021 (12): 60-64.
- [10] Sun Shaomin. *Factors and legal response to the rise of divorce rate in China [J]*. *Journal of the Party School of the CPC Shanxi Province*, 2017, 40(06):107-109. DOI:10. 13964/j. cnki. zgsxswdx. 2017. 06. 025.
- [11] Li Zaijun, Liu Shuaibin, Ma Zhifei, etc. *Spatial heterogeneity analysis of provincial divorce rates in China [J]*. *Progress in Geography Science*, 2017, 36 (10): 1313-1320.
- [12] Fan Ziyang, Hu Xianmin. *Unanticipated income shocks and divorce: Evidence from the housing market [J]*. *Journal of Huazhong University of Science and Technology (Social Science Edition)*, 2015, 29(01): 110-117. DOI: 10.

19648/j. cnki. jhustss1980. 2015. 01. 016.

[13] Fan Ziyang. Divorce for buying a house—Research based on housing purchase restriction policy [J]. *World Economy Wenhui*, 2016 (04): 1-17.

[14] Mao Xiaomeng, Wang Xia, Liu Ming. Influencing factors of current social marriage stability in China — empirical study based on spatial measurement model [J]. *Statistical Journal*, 2020, 1(03): 46-56. DOI: 10. 19820/j. cnki. issn2096-7411. 2020. 03. 005.

[15] Wang Xiaolei, Yang Xiaolei. Research on the influence of couple education matching on marriage quality — based on the perspective of social sex [J]. *Northwest population*, 2019, 40(02):107-118. DOI:10. 15884/j. cnki. issn. 1007-0672. 2019. 02. 010.

[16] Wang Jie, Li Yaojun. Educational marriage matching and marital satisfaction [J]. *Population Science of China*, 2021 (02): 52-63 + 127.

[17] Guo Yunwei. The influence of education level on the risk of divorce and its time changes [J]. *Population Study*, 2021, 45 (06): 96-109.

[18] Peng Jiao, Bi Zhongpeng, Zhai Zhenwu. Study on the marital status stability of the floating population in China [J]. *Northwest population*, 2022, 43(03):1-12. DOI:10. 15884/j. cnki. issn. 1007-0672. 2022. 03. 001.

[19] Li Xiaomin. The impact of Internet access on divorce rates [J]. *Population Science of China*, 2014 (03): 77-87 + 127.

[20] Cheng Shixiong, Jin Meiling. Chinese city size and residents' marriage benefits [J]. *Fujian Forum (Humanities and Social Sciences edition)*, 2023 (06): 183-200.

[21] Gao Mengtao. Rural divorce rate and outside employment: a study based on the village panel data in China from 2003 to 2009 [J]. *The world economy, and the 2011*, 34(10):55-69. DOI:10. 19985/j. cnki. cassjwe. 2011. 10. 005.

[22] Liu Binbin, Cui Feifei, Shi Qinghua. Labour mobility and the village divorce rate [J]. *Rural Economy in China*, 2018 (10): 71-92.

[23] Mo Weiqiao, Shi Jinchuan. The influence of rural population mobility on divorce rates [J]. *Population Science of China*, 2015 (05): 104-112 + 128.

[24] Peng Xiaohui, Zhang Bichao, Shi Qinghua. Labor mobility and rural divorce rate—Based on the perspective of two-way labor mobility [J]. *World Economy Wenhui*, 2018 (04): 36-52.

[25] Xu Anqi, Ye Wenzhen. Analysis of the regional differences in divorce rates in China [J]. *Population Study*, 2002 (04): 28-35.

[26] Tan Yuanfa, Song Yinshu. Study on the impact of demographic changes on the rising crude divorce rate [J]. *Journal of Demographic Studies*, 2015, 37 (02): 34-40.