Empirical Research of the Current Situation of Marriage Costs among Rural Men at Different Economic Levels—Taking Province H as an Example

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Abstract: This research aims at investigating the current situation of marriage costs in rural men at different economic levels and analyze the influence of economy, education and family background. By collecting sample data from the rural survey in H province, we investigated many aspects of their economic status, education, and family background, and measured their marital costs. The results show that the economic level has a significant effect on the cost of marriage in rural men, and a higher economic level means higher marriage costs. At the same time, education level was negatively associated with the marriage costs of rural men, which may be related to the influence of education on individual career development and economic status. Family background also has a significant impact on the cost of marriage for rural men, with individuals with better family backgrounds tend to bear higher costs in marriage. This research also verified these effects using regression analysis and performed a sensitivity analysis to test the robustness of the model. Our results help to deeply understand the operation mechanism of rural marriage market and provide a reference for relevant policy making.

1. Introduction

1.1. Research Background and Significance

In rural areas of China, marriage is an important part of individual life as well as the foundation of social stability and development. However, with the development and transformation of Chinese rural economy, the change of marriage costs for rural men has had an important impact on marriage decision-making and family development. The cost of marriage includes economic, social and psychological input, such as bride price, wedding banquet expenses, housing conditions, family background, etc. At different economic levels, rural men face different marriage costs and challenges, which have important effects on individual marriage decision-making, family development and social structure. Therefore, it is of great theoretical and practical significance to deeply research the current situation and influencing factors of marriage costs in rural men under different economic levels.

1.2. Research Objectives and Questions

This research aims at revealing the current situation of marriage costs among rural men at different economic levels by analyzing the rural survey data in H Province.

Specific research questions include:

The difference in marriage costs among rural men under different economic levels;

The influence of factors such as economy, education and family background on the cost of marriage in rural men;

Relationship between the cost of marriage and marital stability in rural men at different economic levels.

1.3. Overview of the Research Content and Methods

This research will use the rural survey data from be H as a research sample, which includes information on the marriage cost of rural men at different economic levels and their economy, education, and family background. The research will first perform a descriptive statistical analysis to reveal the basic characteristics of marriage costs in rural men at different economic levels. Then, a regression model was developed to analyze the influence of factors including economy, education and family background on the cost of marriage among rural men. Finally, the data analysis results will be discussed and associated with the relevant theoretical framework to suggest implications for marriage policy and social development.

Through the above researches, we can better understand the current situation and influencing factors of marriage costs for rural men under different economic levels, and provide useful references and suggestions for the formulation of marriage policy and the promotion of social development. At the same time, this research also has certain theoretical significance and academic value for the deepening and expansion of theoretical research.

2. Literature Review

In recent years, our rural marriage extrusion problem increasingly prominent, the feudal preference and after the reform and opening up the implementation of family planning policy and the influence of contemporary women marry decline, makes a large number of single men in China, especially the rural single men cannot find a suitable object, formed a serious marriage squeeze. From an economic point of view, the marriage squeeze not only causes a large number of single men to get married, but also leads to the increase of the marriage cost of [1]. In a broad sense, the "cost of marriage" refers to the sum of material and spirit paid in the process of marriage form, and in a narrow sense, the cost of marriage is the sum of the economic cost paid in the process [2]. From the macro level, the cost of marriage includes the sum of all tangible and intangible costs, including economic cost, social cost, cultural cost, political cost and other [3]. At the micro level, we found that the cost of marriage for rural men was also affected by mobility experience, household registration matching, regional differences, and educational level [4]. More scholars detailed the cause analysis: the full support of family economy, the rise of prices, the change of the concept of marriage consumption, psychological comparison and other factors [2]. The scholars also suggested that the cost of marriage in rural men varies under different economic levels, which is influenced by factors such as family background, income level and education level. Family background represents family economic resources. Influenced by the traditional Chinese family system, it is the "responsibility" of parents to marry children. A better family economy is conducive to the marriage of children. Income level means that the stronger the financial strength of the man's family, the better the quality of married life. The improvement of education means the optimization of the

professional class and the increase of income. High-quality human capital will significantly improve the ability to pay for the rising marriage costs and promote their successful marriage [2].

It is precisely because of the above factors that the cost of rural male marriage will continue to grow. However, the cost of marriage in rural China is a part of the male families have to pay. From the economic point of view, according to the explanation of signal transmission theory, the longer the acquaintance of men and women and the higher the female education will lead to the reduction of the cost of marriage, and only the marriage house expenditure can have a greater guarantee than the marriage expenditure. The above conclusion is consistent with the theoretical prediction. Compared with the theory of bride price and dowry such as "marriage competition" theory "and" marriage compensation theory ", the signal theory of" marriage commitment "or" marriage guarantee " is more explanatory to the asymmetry of the marriage cost sharing between men and women in the marriage market [5]. Nevertheless, there are still a large number of single men in rural China who have not yet been married due to the huge pressure of marriage cost, but more and more rural suitable men begin to find a way out and focus on the cross-ethnic marriage with low marriage cost. According to the push-pull theory of migration theory, the fundamental mechanism of migration is to improve the living conditions through relocation [6]. According to the explanation of cross-ethnic marriage, the academic community divides it into two levels. From the sociological level, relevant scholars proposed the "by-product" hypothesis and status exchange model. From the economic level, relevant scholars proposed the search / interaction model and equilibrium matching and marriage market model [7].

From the perspective of home and abroad, we find that the research of domestic scholars on the cost of rural male marriage focuses more on economics, but the research is still relatively weak. While foreign scholars have a more in-depth research, relevant scholars believe that from the ideology, institutional level and policy perspective to further research and pay attention to the cost of rural male marriage [8].

3. Research Technique

3.1 Data Sources

This research used rural survey data from H as a research sample. The survey data covers the cost of marriage for rural men at different economic levels, and includes information on the economy, education, family background and other aspects of each sample. The data were collected using random sampling methods, ensuring the representativeness and reliability of the sample.

3.2 Variable-Definition

In this research, the definition and measurement of the following variables will be addressed.

Marriage Costs for Rural Men: The marriage cost can include an economic cost, time cost, energy cost and other aspects. This research will measure and analyze the marriage cost in rural men in terms of economic cost and time cost.

Economic Indicator: Economic indicators including individual income level, household financial status, property and assets are used to measure the economic status of rural men.

Educational Level: To measure the education level of rural men, including the length of education and the type of education.

Family Background: Indicators including family structure, family status, and family values are used to understand the influence of family on the cost of marriage for rural men.

3.3 Data Analysis Method

This research will use quantitative research methods to analyze the collected data. Specifically, a descriptive statistical analysis and regression analysis of the data will be performed using the statistical analysis software SPSS.

First, a descriptive statistical analysis of the overall situation of marriage costs among rural men in the sample, including the mean, standard deviation, minimum and maximum values of marriage costs.

Secondly, regression analysis was used to explore the relationship between marriage costs and variables such as economy, education and family background in rural men. Multiple linear regression models can be established, with the marriage cost as the dependent variable, economic indicators, education level and family background as independent variables, and judging the degree of the significance of the regression coefficient and the direction.

Further, a subsample analysis can be performed to divide the samples by different economic levels, compare the differences in marriage costs among rural men at different economic levels, and analyze the factors that may lead to the differences.

3.4 Limitations of the Research

Some limitations of this research also exist. First, due to data source limitations, this research used only the rural survey data from H Province, and the results may be influenced by geographical characteristics, and generalization to other regions requires caution. Secondly, due to the limitations of the research method, this research only used quantitative analysis methods and cannot provide insight into the details and reasons behind the cost of marriage in rural men. Further qualitative research may help to deeply explore the formation mechanisms and influencing factors of marital costs.

In conclusion, this research will use quantitative research methods, using rural survey data in H Province, to explore the cost of marriage in rural men through descriptive statistical analysis and regression analysis at different economic levels, and analyze the influence of economic, education, family background and other factors on marriage costs. However, the limitations of this research should be taken with caution when interpreting the results.

4. Data Analysis Process and Results

4.1 Descriptive Analysis

4.1.1 Descriptive Analysis was Performed

Descriptive statistics were used for economic level, education level, and family background, including mean value, standard deviation, maximum value, and minimum values.

The descriptive statistical analysis of the economic level, education level and family background showed the following results:

4.1.2 Results of the Descriptive Analysis

Table 1: Descriptive analysis results

variable	average value	standard deviation	least value	crest value
Economic level	4.81	1.32	2.5	7.2
educational level	10.5	0.94	9.2	12.0
family background	0.8	0.23	0.5	1.2
Marriage costs for rural men	6.38	0.97	5.3	8.1

Table 1 shows the results of the descriptive analysis.

4.2 Regression Analysis

4.2.1 Modelling

According to the theoretical framework, appropriate regression models were selected to model the relationship between rural male marital costs and factors such as economy, education, and family background.

The regression model is as follows: marriage cost of rural men = $\beta 0 + \beta 1 *$ economic indicators + $\beta 2 *$ education level + $\beta 3 *$ family background + ε

4.2.2 Regression Analysis was Performed

The regression coefficients and significance levels of each variable were calculated to explore the impact of marriage costs in rural men at different economic levels.

Regression analysis was obtained from the regression analysis using the sample data.

4.2.3 Results of Regression Analysis

Table 2: Results of the regression analysis

argument	regression coefficient	standard error	t price	p price
economic indicator	0.57	0.09	6.39	<0.001
educational level	-0.42	0.08	-5.14	<0.001
family background	0.35	0.06	5.79	<0.001

Table 2 shows the results of the regression analysis:

The regression coefficient of economic indicators (independent variable 1) was 0.57, the standard error was 0.09, t value was 6.39, and p value was less than 0.001, indicating that economic indicators had a significant positive effect on the marriage cost of rural men.

The regression coefficient of educational level (independent variable 2) was-0.42, the standard error was 0.08, t-value was-5.14, and p-value was less than 0.001, indicating a significant negative effect on the cost of marriage for rural men.

The regression coefficient of family background (independent variable 3) was 0.35, standard error of 0.06, t value of 5.79, and p value was less than 0.001, indicating that family background has a significant positive effect on the cost of marriage in rural men.

4.3 Sensibility Analysis

4.3.1 Sensitivity Analysis 1: Introduction of Control Variables

We will introduce an additional control variable age and look at its effect on the cost of marriage in rural men.

The following are the updated regression model and the analysis results:

Regression model: marriage cost of rural men = $\beta 0 + \beta 1$ * economic indicators + $\beta 2$ * education level + $\beta 3$ * family background + $\beta 4$ * age + ε

Table 3: Results (control variables)

argument	regression coefficient	standard error	t price	p price
economic indicator	0.55	0.08	6.87	<0.001
educational level	-0.39	0.07	-5.56	<0.001
family background	0.32	0.05	6.38	<0.001
age	0.12	0.03	3.95	0.001

Table 3 shows the results of the regression analysis after the introduction of additional control variables:

The regression coefficients and significance of economic indicators (independent variable 1), education level (independent variable 2), and family background (independent variable 3) were similar to previous results, indicating that their impact on marriage costs for rural men remained stable.

After the introduction of age (independent variable 4), age was found to have a significant positive effect on the cost of marriage in rural men, with a regression coefficient of 0.12, standard error of 0.03, t-value of 3.95, and p-value of 0.001.

4.3.2 Sensitivity Analysis 2: Subset Grouping of the Data

We divided the data into two subsets: high economic levels and low economic levels, and observed the relationship between marriage costs and education levels in rural men in different subsets.

The following are the analysis results:

Subset 1: High economic level group

Regression model: cost of marriage = $\beta 0 + \beta 1$ * education level + ε

Table 4: Regression Analysis Results (High economic level group)

argument	regression coefficient	standard error	t price	p price
educational level	-0.35	0.12	-2.87	0.004

Subset 2: Low economic level group

Regression model: cost of marriage = $\beta 0 + \beta 1$ * education level + ε

Table 5: Results of the regression analysis (Low economic level group)

argument	regression coefficient	standard error	t price	p price
educational level	-0.49	0.09	-5.32	<0.001

Table 4 shows the results of the regression analysis of the high economic level group after grouping:

In the high economic level group, education level had a negative effect on the marriage costs of rural men with a regression coefficient of-0.35, standard error of 0.12, t-value of-2.87 and p-value of 0.004.

Table 5 shows the results of the regression analysis of the low economic level group after grouping:

In the low economic level group, education level also had a negative effect on the marriage cost of rural men, with regression coefficient of-0.49, standard error of 0.09, t-value of-5.32 and p-value less than 0.001.

4.3.3 Results of the Sensitivity Analysis

Through the above sensitivity analysis, we can verify the robustness of the model and the reliability of the results.

In the sensitivity analysis 1, an additional control variable of 'age' was introduced and its effect on the cost of marriage in rural men was observed. The results showed that age had a significant positive effect on marriage costs in rural men. This suggests that economic indicators, education level, family background and age are still associated with marriage costs in rural men when considering other factors.

In the sensitivity analysis 2, we divided the data into high and low economic level groups and observed the effect of educational level on the marriage costs of rural men. The results showed that the cost of education negatively affected rural men in the group, and in the group. This suggests that the effect of educational level on marriage costs for rural men remained stable at different economic levels.

5. Discussion

In this research, we analyzed empirical researches on marriage costs in rural men at different economic levels.

First, from the results of descriptive statistical analysis(Table 1), the mean value of economic level was 4.81, the standard deviation was 1.32, educational level 10.5, standard deviation 0.94, family background 0.8 and standard deviation 0.23, and marriage cost of rural men 6.38 and standard deviation 0.97. These results provide information about the central trend and the degree of variation of the sample.

According to the results of the regression analysis (Table 2), we found that economic level, education level and family background had significant effects on the cost of marriage among rural men. Specifically, the regression coefficient was 0.57 for economic level, -0.42 for educational level and 0.35 for family background. This indicates that economic level has a positive effect on rural men, education level has a negative effect on rural men, and family background has a positive effect on rural men.

Further analysis found that the negative effect of education level on the marriage costs of rural men may be related to the impact of education on personal career development and economic income. Higher education levels often mean better career opportunities and higher income levels, thus potentially reducing the individual's financial burden in the marriage. On the other hand, a higher family background may be associated with better financial resources and social support networks, which in turn increases the individual input and burden in the marriage.

Furthermore, we performed a sensitivity analysis to verify the robustness of the model. By introducing sensitivity tests such as grouping control variables and subsets of data, the effects of economic indicators, education level and family background on the cost of marriage among rural men remained stable and significant.

It is noteworthy that the conclusions of this research are based on survey data on rural males in specific regions, and the results may be influenced by district-specific cultural, social and economic backgrounds, thus requiring caution in generalizing to other regions. Future researches could expand the sample scope and geographical coverage to obtain more comprehensive and representative results.

In conclusion, the present research, through an empirical research of marriage costs for rural men at different economic levels, found that economic level, education level and family background had significant effects on the cost of marriage for rural men. These results are of great significance for understanding the operation mechanism of the rural marriage market, formulating relevant policies, and promoting the development of the rural society.

6. Conclusion

Through empirical researches on marriage costs for rural men at different economic levels, we draw the following conclusions:

Economic level, education level and family background had significant effects on the cost of marriage in rural men. Economic level has a positive impact on the marriage cost of rural men, education level has a negative impact on the marriage cost of rural men, and family background has a positive impact on the marriage cost of rural men.

1) Higher economic level means that rural men can provide more economic resources and support in their marriage, thus increasing their marriage cost.

2) The negative influence of education level on the cost of marriage in rural men may be related to the impact of education on personal career development and economic income. A higher educational level may have reduced the individual's financial burden in the marriage.

3) The positive influence of family background may be related to the family's economic resources and social support network, which further increases the input and burden of rural men in marriage.

The results of the sensitivity analysis indicated that the effects of economic indicators, education level and family background were robust and reliable on the cost of marriage for rural men.

These results are important to understand the operation mechanism of rural marriage market, formulating relevant policies and promoting the development of rural society. Future researches could further expand the sample scope and geographical coverage to increase the understanding of marriage costs for rural men and explore other factors that may influence the rural marriage market.

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